

# Hans H. Ruthenberg-Graduierten-Förderpreis 2012/

#### Hans H. Ruthenberg Award for Graduates 2012

Athena Birkenberg "Forest Access and Governance: A case study on Karen community forestry in Chiang Mai Province, Northern Thailand"

University of Hohenheim, 2012

Supervisor: Prof Dr. Manfred Zeller

**Summary** 

#### **Problem Statement**

Population growth along with rising living standards, keep pressure on Thailand's forest resources at a high level. Deforestation and biodiversity loss remain compelling policy concerns in Southeast Asia, where the highest relative rate of deforestation of any major tropical region is evidenced (Sodhi, et al-, 2004). Today, harvested forest products make about 1-5% of the country's GDP. This reflects a majority of indigenous and marginal people, occupying forested areas and still living in poverty although Thailand reached its MDG of halving the poverty headcount by 2015 ahead of schedule. Forestry and poverty reduction are, thus, of central importance in recent Thai policies. Recently the Royal Forest Department (RFD) transforms remaining forests into Protected Areas (PAs), in particular National Parks (NP). The debate on whether NPs restrict community development opportunities and increase poverty or whether they generate new income by attracting tourism, including infrastructure development, or increasing the flows of economically significant environmental Services has been poorly informed by the lack of rigorous empirical evidence (Sims, 2010). Ostrom, et al., 1999, suggest that users who largely depend on a resource for a major portion of their livelihood, and who autonomously design their own access and harvesting rules, are more likely than others to perceive benefits from their own restrictions. Community-based forest management in Thailand has a long tradition in rural communities. The villagers believe that they cannot maintain the subsistence livelihood if the forest is excluded or not taken care of. Yet, only about 20 years ago, Community Forestry (CF) was officially recognized in Thailand as a tool for sustainable forest management (Wichawutipong, 2005). Nevertheless, a proposed CF Bill has still not been approved which is the reason why CF legislation is not available in Thailand up to now. Literature has shown that understanding of existing diverse and complex Forest-Livelihood Systems in Northern Thailand is very limited, however addressing and improving such Social-Ecological-Systems (SES) is considered important to reduce poverty in rural Thailand.

## Aim of the study

This case study was conducted to investigate the role of self-governance and restricted access to forest resources in the case of four Karen villages, representing four SES's, in the uplands

of Northern Thailand and to evaluate the studied SES's regarding their social and ecological performance measures.

## Methodology

Village selection followed the criteria of location inside and outside of National Parks and the existence or absence of Community Forestry (CF). Thereby, official as well as unofficial CF projects were considered. To ensure comparability the selection aimed at similarities in ethnicity, remoteness, involvement of external institutions, altitude, forest type and village size. In each village 10 households were randomly selected to conduct structured interviews. For data collection the research used a combination of qualitative and quantitative socioeconomic research methods, such as Participatory Rural Appraisal, Net-Maps and a household survey with standardized questionnaires. As a conceptual framework and to evaluate the social and ecological performance of the four villages, Ostrom's (2009) framework for analyzing sustainability of SES's was used. A multidimensional poverty Index and the Normalized Differenced Vegetation Index (NDVI), describing species richness (Bawa et al., 2010) and Vegetation vitality served to analyze local well-being and forest conditions.

## **Results and Policy Recommendations**

Qualitative results show that recent development in Thai society and the emphasis on education create a generation gap that leads to a loss of Local Ecological Knowledge (LEK). By this it affects the way ecological Systems are treated and approached. Overall it was found, that the poorer households diversify more in their forest product collection patterns, indicating the forest function of a safety net Better off households prefer higher economically valuable products. Further, it was found that state control is still strong in Thailand's forestry, including official Community Forest Systems. Regardless of remaining top-down approaches, access to forest resources and the degree of self-governance as well as their interplay, are important influencing variables for the performance of forest conservation and local well-being. The results of this study indicate, that self-governance of natural forests has a potential to reduce user conflicts, tends to maintain or improve forest quality and maintain an adequate living standard. By this it supports the sustainability of the whole SES (see Figure 1). Forest health was observed to be best inside the National Park, and it was found that restricted access has a potential to protect natural forest resources, however it seems to challenge local existence.

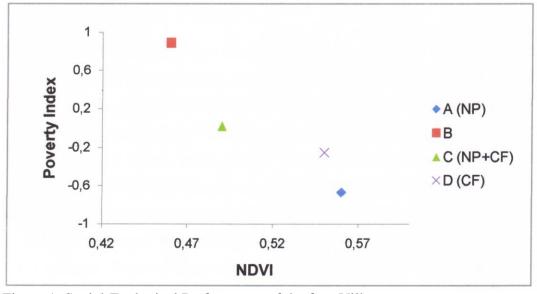


Figure 1: Social-Ecological Performance of the four Villages

Unclear and minor user rights as well as missing land tenure security of Karen minorities challenge local forest management. Additionally, the lack of trust and cooperation between the indigenous people and the government threatens the success of any political intervention and action. Thus, it is important to officially recognize CF as a forest management option in Thailand, where decision-making and monitoring is not mainly dominated by the Royal Forest Department, but rather a mutual process including academics as well as LEK. Building up trust could be supported by creating a clear regulatory framework (e.g. approve CF Bill, giving legal authority to the TAO¹) and strengthen indigenous people's rights but also by proving the willingness to protect forests from the people's side.

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