

Tropentag, October 9-11, 2007, Witzenhausen

"Utilisation of diversity in land use systems: Sustainable and organic approaches to meet human needs"

## Success Factors of Biodiversity Governance

Marion Mehring<sup>1</sup>, Susanne Stoll-Kleemann<sup>1</sup>, Nadine Fritz-Vietta<sup>1</sup>, Monika Bertzky<sup>1</sup>, Rainer Schliep<sup>2</sup>, Martin Hirschnitz<sup>3</sup>

<sup>1</sup>Humboldt-Universität zu Berlin, Institute of Agricultural Economics and Social Sciences (IWSL), Germany

<sup>2</sup>WWF Germany, Species Conservation Section, Germany

<sup>3</sup>Potsdam Institute for Climate Impact Research, Global Change & Natural Systems, Germany

## Abstract

Biodiversity faces many threats to its ecological integrity and cultural significance. With international conventions and agreements, such as the Convention on Biological Diversity and the Millennium Development Goals, it is internationally tried to tackle both the phenomenon of biodiversity loss and the challenge to improve human well-being on a global scale. The World Conservation Union defines a Protected Area (PA) as an area of land and/or sea dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources. Especially in the face of global change PAs are a valuable instrument to safeguard biodiversity and support sustainable resource use. This paper presents results from the interdisciplinary research project Governance of Biodiversity (GoBi), which evaluates the success or failure for implementing biodiversity related policies.

A global survey on UNESCO Biosphere Reserve (BR) management was performed (n=213). Amongst others, professionals were asked to rank four different external threats (illegal activities, invasive alien species, climate change, pollution) according to their severity within the BR. The survey covered 78 out of 102 countries with an overall response rate of 42%. About half of the accomplished interviews are from developing and transition countries in Eastern Europe, Africa, Asia and Latin America.

Statistical analysis revealed regional differences with regard to the threats of highest relevance. One remarkable result is the exceptional position of non-high-income countries, mainly located in the Tropics, where illegal activities seem to be of highest relevance (59% of interviewees ranked with highest relevance) whereas global change aspects, such as climate change (11%), are less relevant. While in high-income countries invasive alien species (34%) are seen as most important external threat, followed by climate change (29%) and illegal activities (7%) are ranked as the endmost.

The results show that concerning global change management there is a big gap between high-income and non-high-income countries. The empirical material raised shows correlations between singular success and failure factors and allows for deriving cause-effect relations. Adaptable institutional arrangements including responsive leadership, capacity building and environmental education are necessary to manage biodiversity and ecosystems that have complex social, political, cultural and ecological dimensions.

Keywords: Biodiversity, governance, success and failure factors

Contact Address: Marion Mehring, Humboldt-Universität zu Berlin, Institute of Agricultural Economics and Social Sciences (IWSL), Luisenstr. 53, 10099 Berlin, Germany, e-mail: marion.mehring@staff.hu-berlin.de