



Tropentag, October 7-9, 2008, Hohenheim

“Competition for Resources in a Changing World:
New Drive for Rural Development”

Constraints and Potentials for Environmental Protection in the Agro-Pastoral Land Use Systems of the Hawf Protected Area, Yemen

DIANA QUIROZ¹, SCHOLTE PAUL², AL-OKAISHI ABDULRAQEB², EVA SCHLECHT³, ANDREAS
BUERKERT¹

¹University of Kassel, Organic Plant Production and Agroecosystems Research in the Tropics and Subtropics, Germany

²Socotra Conservation and Development Programme/ Leiden University, Institute of Environmental Sciences, Yemen

³University of Kassel / University of Göttingen, Animal Husbandry in the Tropics and Subtropics, Germany

Abstract

Little is known about the agro-ecological conditions of the Hawf Protected Area in South-East Yemen, a unique *Anogeissus dhofarica* seasonal cloud forest on the Arabian Peninsula. To contribute to efforts geared towards conservation of this unique ecosystem, this study examines local agro-pastoral knowledge and crop cultivation with particular emphasis on resource users' willingness to abandon shifting cultivation practices. Semi-structured interviews were conducted to unravel what farmers perceived as the most pertinent problems in securing livelihoods in general as well as problems in livestock and crop husbandry. Farmers were further asked how these problems are related to environmental factors and how they might be addressed so as to meet the conservation goals of the protected area. Crop husbandry was characterised according to four parameters important for the farming system: (i) use intensity of single components; (ii) increase/decrease of productive elements; (iii) use of water and land; and (iv) variations in per hectare yields through use of inputs, which emerged as an often neglected aspect and was evidenced by the management measures taken on cultivated land holdings. Also investigated were the production and consumption patterns of farm households.

The results show that the major constraint to environmental protection in the Hawf area is not a lack of local knowledge manifesting itself in an adherence to detrimental traditional cultivation practices. Rather, changes in pastoral practices do not allow for the regeneration of the original forest cover in fallowed land. Wood extraction for construction purposes, requiring as many as 100–150 trees for a single house, is the main agent of deforestation. Moreover, the loss of traditional knowledge about crop husbandry and its increasing marginalisation reduces the dietary diversity of the local population with expected negative consequences for people's health.

Keywords: Agro-pastoral knowledge, conservation, crop production, Yemen