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Local People’s Knowledge about Land Use Activities in the Mahafaly Plateau Region, Southwest Madagascar

NADINE FRITZ-VIETTA¹, HÉMERY STONE TAHIRINDRAZA², SUSANNE STOLL-KLEEMANN¹

¹*University of Greifswald, Sustainability Science and Applied Geography, Germany*

²*University of Tuléar, Department of History, Madagascar*

Abstract

The aim of the presented research is to identify local people’s knowledge about land use activities that exists in the Mahafaly plateau region, southwest Madagascar. The purpose is to present current knowledge systems in order to depict possible links between scientific and local (traditional) knowledge on land use practices. Local people in Madagascar are people who live in rural areas of the country. These rural areas are remote and often marginalised, i.e. without sanitation and access to electricity. In the southwest of Madagascar food insecurity is prevalent in times of rain shortfall next to limited water availability. Due to these pressures natural resources become increasingly degraded. People are largely dependent on natural resources in their vicinity and mainly constitute their livelihoods from subsistence agriculture. This and other activities determine their daily life and form people’s environmental perception and knowledge. To allow for a concise picture of complex structures a qualitative social science approach is chosen. Analysis focuses on 90 interviews conducted in 2011, 2012 and 2015 with local people living in the Mahafaly plateau region. The content of the interviews deals with land use activities, taboos, rituals and natural spirits. Analysis shows that knowledge systems subdivide into four categories: (1) ecological knowledge, (2) knowledge about the use of natural resources, (3) denominations, and (4) a knowledge-belief interlinkage. Ecological knowledge is closely related to the land use activities agriculture and livestock keeping as well as environmental signs and signals. The knowledge about the use of natural resources relates to house building and fencing, traditional healing, food for humans and animals, and the fabrication of tools. It is noticeable that people in Madagascar use diverse denominations for natural resources, places and water holes. Most of the denominations have a particular meaning and provide a special picture of the object. There is also a close relation between people’s knowledge and their beliefs in god, the ancestors, and supernatural spirits. Belief in rituals and taboos shape people’s knowledge systems. These scientific insights into existing knowledge systems are relevant for a better understanding of people’s adaptive capacities to ongoing regional pressures such as food insecurity.

Keywords: Knowledge systems, land use activities, Madagascar, Mahafaly Plateau