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## Role Playing Games in Land Use Research: Experiences from the Mahafaly Plateau in Madagascar

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## Abstract

Over the last decades, researchers and practitioners subsequently realised that natural resources can neither be analysed nor managed without considering the human factor. The participation of resource users and other stakeholders is an important feature in managing natural resources, producing scientific knowledge and developing land use innovations. In this conference contribution the participatory method Role Playing Games (RPG) is presented as one promising approach to include socio-economic factors in transdisciplinary communication and research. This simulation exercise with stakeholders seeks to foster mutual understanding and to validate science-based knowledge. To illustrate the use of RPG, the case of Mahafaly Plateau in south western Madagascar is presented. In this economically marginalised but ecologically rich region, RPG has been designed and tested to understand household decisions. A series of workshops were held by a Malagasy team over a period of four weeks in July 2014, both in the littoral and in the plateau region. A total number of 96 resource users in all four villages participated in the workshops. The methodology "Livelihood Game" was developed by scientists based on preceding research on household structures. Within the RPG, villagers assume the roles of fictive household types and simulate their annual subsistence decisions and social activities on maps. According to their endowments, the households can choose where and how they cultivate their fields and practice additional activities such as livestock keeping, producing charcoal, using natural resources or sending children to school. The game covers "good" years and drought years. To visualise their decisions, participants use maps of their familiar surroundings, pictured cards, and beans as symbols. The experiences show that villagers were well-interested and perfectly capable of taking part in the simulations. Participants of different age, gender and lignage contributed their knowledge on resources, land and activities. Thus, researchers and villagers learned to see the local reality from different households' perspectives. The approach may be useful for various purposes such as common planning, joint resource management and conflict resolution, and thus calls for further research and development.

Keywords: Land management, Madagascar, participation, role playing games, SuLaMa/Lama

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