

# Challenges of designing a PES-Scheme in south-western Madagascar



Cottbus Brandenburg University of Technology

Regina Neudert, Melanie Mewes, Frank Wätzold & Johanna Götter



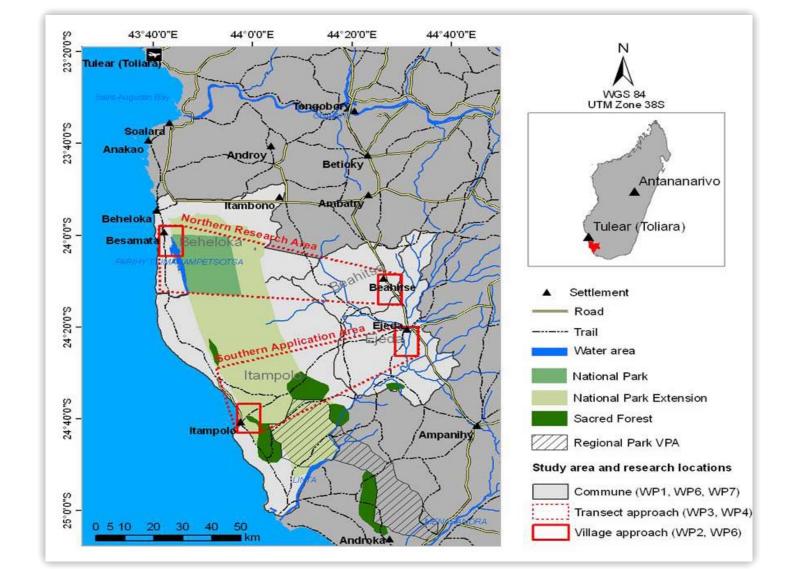
## OBJECTIVES

In the Mahafaly region in south-western Madagascar, decisions about land-use are ceded mainly to the local users. Their short-term economic considerations are drivers for non-sustainable practices of land-use, like slash-and-burn agriculture. These practices diminish the supply of ecosystem functions and services which are valuable for local people and on a global scale. Economic development and the provision of ecosystem services could go hand in hand if local users were adequately rewarded for practices providing ecosystem services. The aim of this project is to design a locally accepted and costeffective system of 'Payments for ecosystem services' (PES) for the Mahafaly.

1 Participartory research of the SuLaMa-Team in the Mahafaly region.

#### STUDY AREA

The Mahafaly region is characterised by low and variable precipitation. Many endemic species exist in the dry spiny forest, e.g. the highly endangered radiated tortoise. A small part of the forest is protected by a National Park, while it is mostly degraded elsewhere.



Study area: Mahafaly region in south-western Madagascar

## **KEY QUESTIONS**

The following research questions will be addressed during the project:

- What are the **drivers and motivation** of local people for their current behaviour (like cultural norms, monetary incentives, land property rights)?
- What is the relation between the criteria of **cost-effectiveness and equity** for a PES-scheme? What kind of compromise between the two criteria generates a locally accepted PES-scheme?
- Which relevant **formal and informal institutions** might hinder and which



might support the implementation of PES? What institutional change is necessary and possible for the successful implementation?

2 The National Park Tsimanampetsotsa protects endemic dry spiny forest and a salt lake.



3 Participatory mapping in one study village.

## CHALLENGES

• **Strong internal community rules** require a careful and participatory design of PES-rules.

• The **prevalence of subsistence agriculture** requires a careful analysis of household dynamics and may be an argument for the inclusion of non-monetary rewards in the PES-scheme.

• Unclear land property rights can lead to an unequal distribution of costs and benefits of the PES-Scheme.



4 Slash and burn agriculture provides easy income, but leaves burned landscapes.

## LAND USE IN THE MAHAFALY REGION











5 On permanent fields grow manioc & sweet potato.



6 Zebu are predominantly savings and cultural symbols.

7 Water access is difficult.

#### 8 Products not needed for subsistence are marketed.

#### SPONSORED BY THE



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#### Contact: neudert@tu-cottbus.de

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