

# A socio-economic analysis of livelihood strategies in rural forest depending communities in lowland Bolivia under a changing climate



Research Proposal

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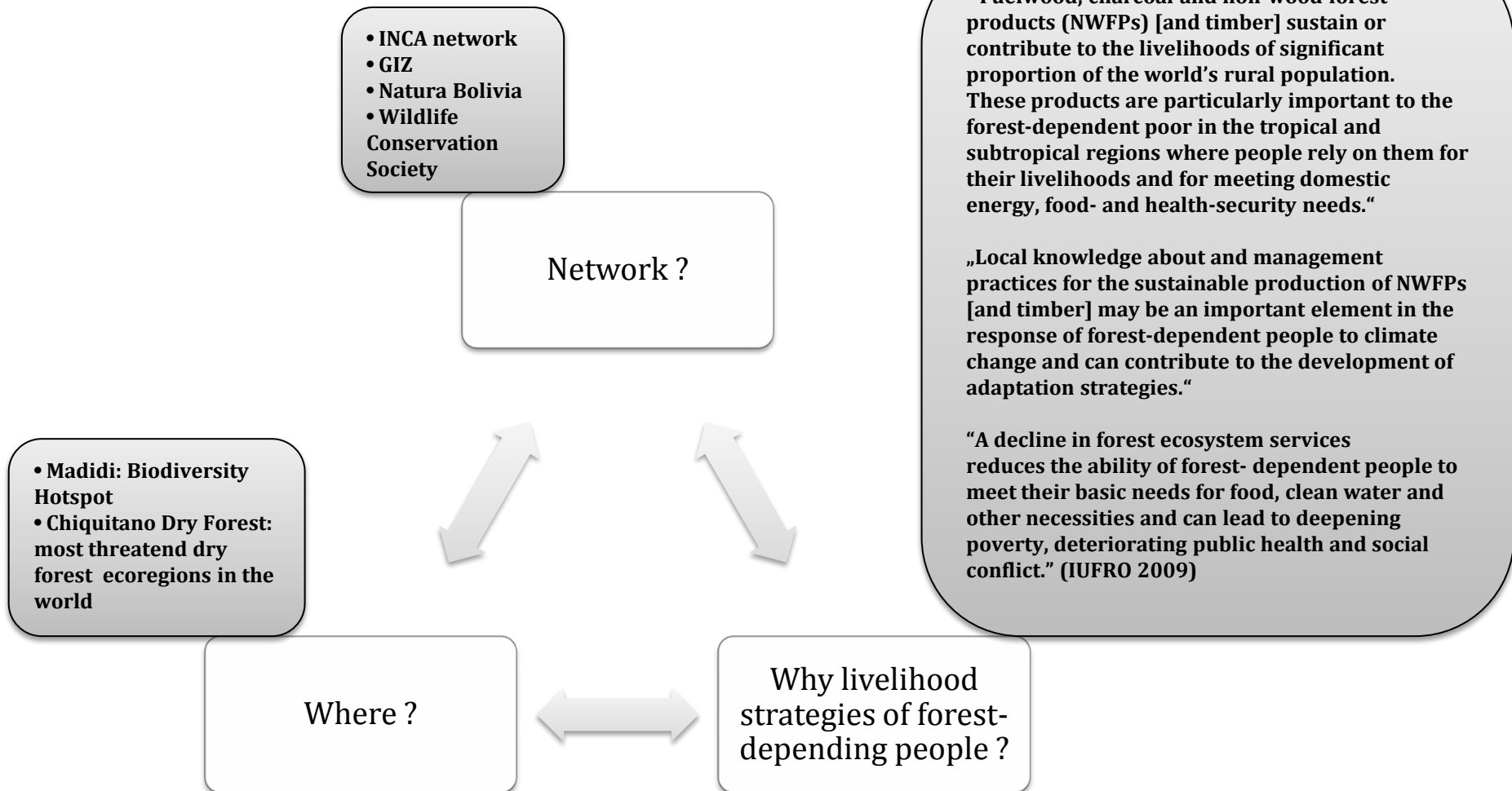
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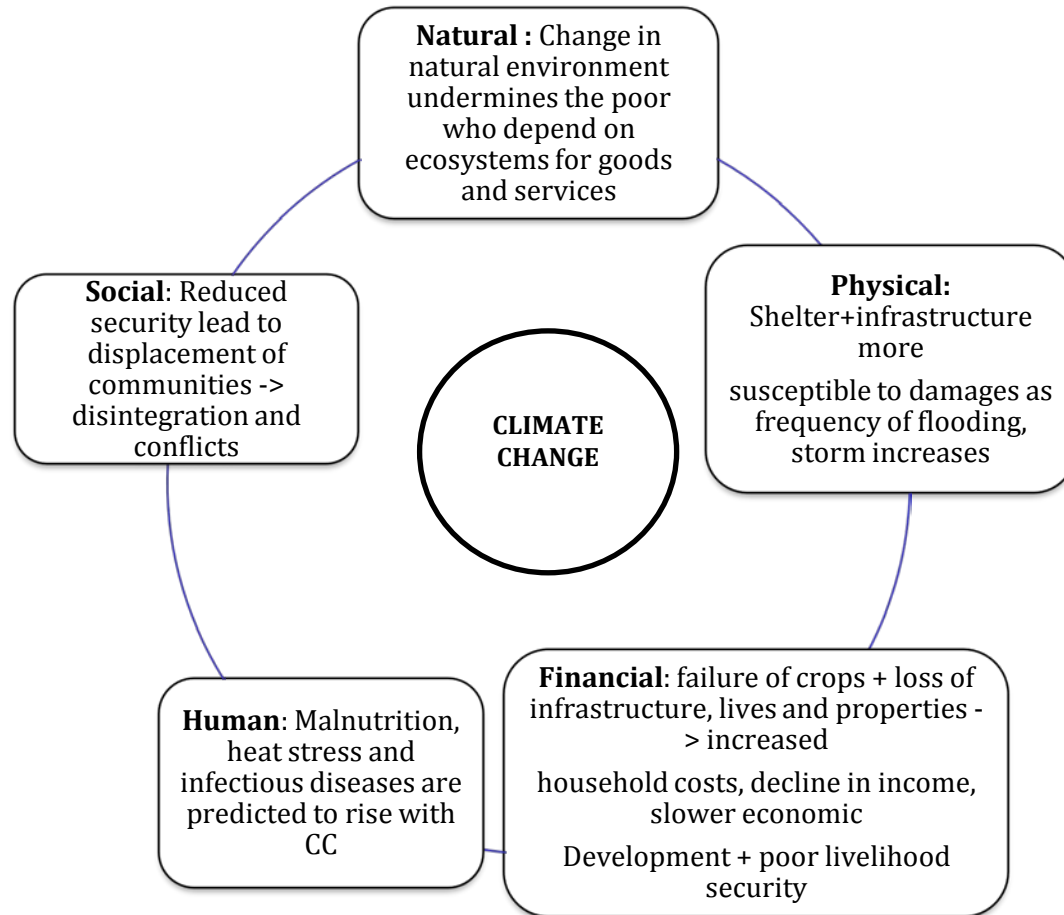


# 1. THEORETICAL FRAMEWORK (1)

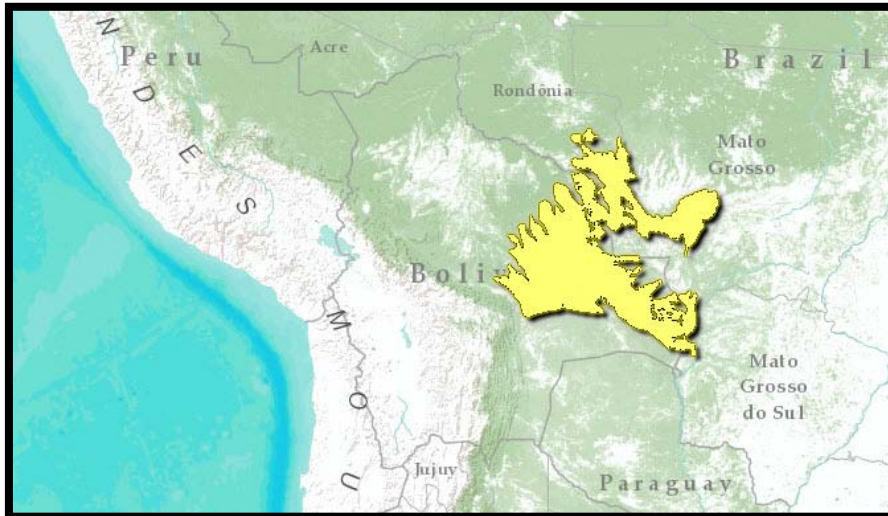


# 1. THEORETICAL FRAMEWORK (2)

## Effects of climate change on the livelihood assets:



## 2. STUDY AREA I



### CHIQUITANO DRY FOREST (San Ignacio de Velasco, Santa Cruz)

#### Climate change effects:

- more rain -> floodings
- soil erosion
- more intense periods of drought -> desertification
- increasing rate of forest fires

“...it [the Chiquitano Dry Forest] plays **a key role in mitigating the negative effects of climate change** on the continent.”  
(UNESCO 2011)

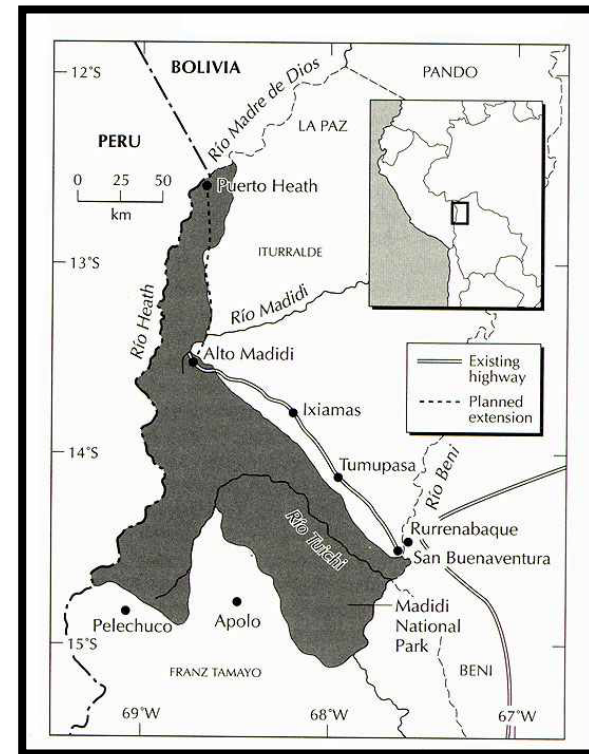
“On the periphery of the Amazon Basin these forests are expected to be particularly **vulnerable to replacement by savanna** due to seasonal drought and high flammability (Hutyra et al. 2005), as well as **documented sensitivity to climate change** (Mayle et al. 2000).” (Williams 2010)

## 2. STUDY AREA II

### MADIDI NATIONAL PARK

#### Climate Change effects

- drastic increase of forest fires (“focos de calor”)
- Floods



## 3. TENTATIVE OBJECTIVES

### Overall objective

To understand and describe livelihood portfolios of households in selected forest depending in two different ecoregions in lowland Bolivia with respect to climate change interrelated and influencing factors

- To describe past climatic conditions (precipitation, temperature) and evaluate future scenarios (A1B,B2) for the selected research areas
- To investigate the local experience with climate change and climate change impacts on selected communities
- To describe livelihood portfolios of households in selected forest depending communities

### Expected outcomes

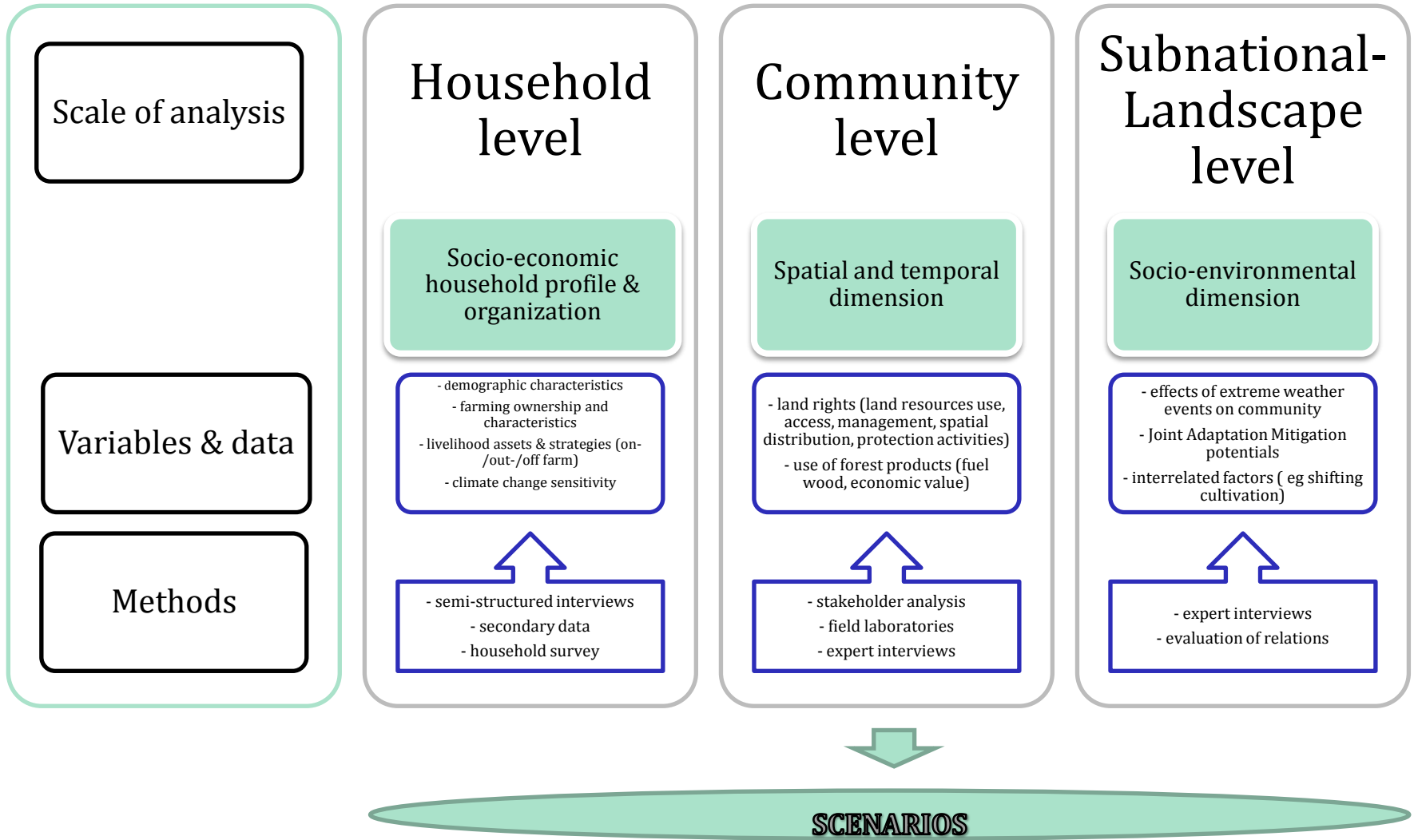
- livelihood portfolios of households in selected forest depending communities
- interrelated constraints and opportunities to and for joint adaptation-mitigation activities
- scenarios including more sustainable alternatives towards climate change adaptation/mitigation

## 4. SIGNIFICANCE & PURPOSE OF THE STUDY

- understand livelihood strategies of local people in forest depending communities in two ecological regions in lowland Bolivia under a changing climate
- point out linkages between effects of climate change, adaptation and mitigation activities, human well being and interrelated constraints and opportunities of livelihood strategies
- will conclude the outcomes in different scenarios and thereby contribute to an improved understanding of opportunities and hindrances towards climate change adaptation / mitigation and sustainable livelihood strategies



# 5. METHODOLOGY



## 6. PLANNING

Time planned	Objective	Tool
July – September 2012 Tharandt	<ul style="list-style-type: none"> <li>– Literature study</li> <li>– Formulation of tentative objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Review of secondary data</li> <li>• Contact of local NGOs/institutions</li> </ul>
October – December 2012 Bolivia	<ul style="list-style-type: none"> <li>- Provide orientation for the research</li> <li>- Indicator selection</li> <li>- Collection of secondary data</li> </ul>	<ul style="list-style-type: none"> <li>• Visit of three communities</li> <li>• preparatory meetings with households and municipality representatives</li> <li>• reconnaissance (and “listening”) survey</li> <li>• Stakeholder analysis</li> </ul>
January – June 2013 Tharandt	<ul style="list-style-type: none"> <li>-Survey preparation</li> </ul>	<ul style="list-style-type: none"> <li>• adaption of questionnaires</li> <li>• preparation of field laboratories</li> </ul>
July – December 2013	<ul style="list-style-type: none"> <li>- Conduction of household surveys</li> <li>- Field laboratories</li> </ul>	<ul style="list-style-type: none"> <li>• Investigation in 2-3 communities</li> </ul>
2014 Bolivia + Tharandt	<ul style="list-style-type: none"> <li>-Data processing</li> <li>- Scenario development</li> </ul>	<ul style="list-style-type: none"> <li>• Multivariate analysis</li> </ul>
2015 Tharandt	<ul style="list-style-type: none"> <li>- Writing up</li> </ul>	

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QUESTIONS ?

REMARKS ?

RECOMMENDATIONS?

THANK YOU – MUCHAS GRACIAS