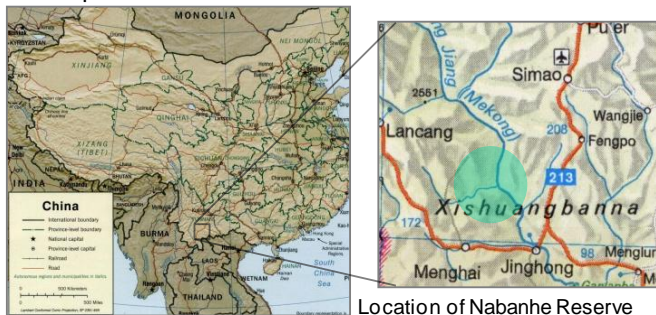




## Conservation of cultural landscapes through diversification of resource use in Xishuangbanna

### Study area

Nabanhe National Nature Reserve is part of the Mekong river watershed, located in the Dai Autonomous Prefecture of Xishuangbanna, Yunnan. The area is a biodiversity hot spot and hosts a wide scope of land-use systems due to its complex topography and the multitude of ethnic communities. The Greater Mekong Subregion is experiencing rapid economic growth and infrastructural development.



Location of Nabanhe Reserve



Land preparation for the establishment of a tea plantation in Menghai County, Xishuangbanna

### Approach

Economic, socio-cultural and ecological contexts will be analyzed in their relation to land use with a geographical information system (GIS). Findings will be integrated in a GIS-based model to be used to simulate scenarios of land-use cover change and their consequences on economy, society and environment.

### Partners in research

- University of Hohenheim
- Leibniz University Hannover
- University of Passau
- University of Kassel
- Humboldt-University Berlin
- Justus-Liebig University Giessen
- DITSL GmbH
- Xishuangbanna Trop. Bot. Garden, Chinese Academy of Sciences
- China Agricultural University
- Nanjing Agriculture University
- Yunnan Agricultural University
- Yunnan Academy of Social Sciences
- Nabanhe National Nature Reserve

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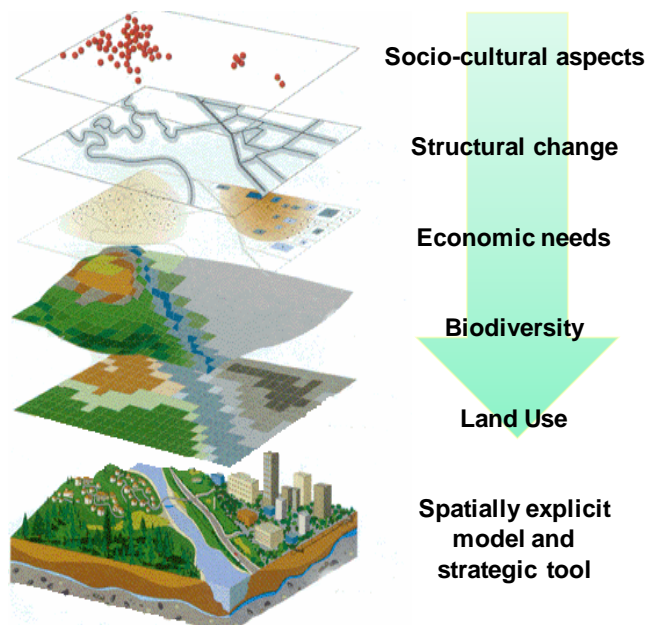


Dai village with paddy rice fields and rubber plantation

### Challenge and goal

The challenge is to achieve economic development and simultaneously protect the unique biological and cultural diversity of Xishuangbanna. Since interactions of society, economy and environment at landscape level are highly complex, multi-dimensional planning is difficult to implement.

The overarching goal of the project is therefore to provide a **strategic tool** enabling decision makers to anticipate and analyse potential **impacts** of land-use related decisions on **society, economy and environment** at landscape level.



Multiple research topics combined into one model (picture provided by ESRI)

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