

Agrarian land use transformation in Northern Laos

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Presentation outlines

- Objectives of the study
- Research question and Methodologies
- Main findings
- Discussion and future considerations for research

Objectives

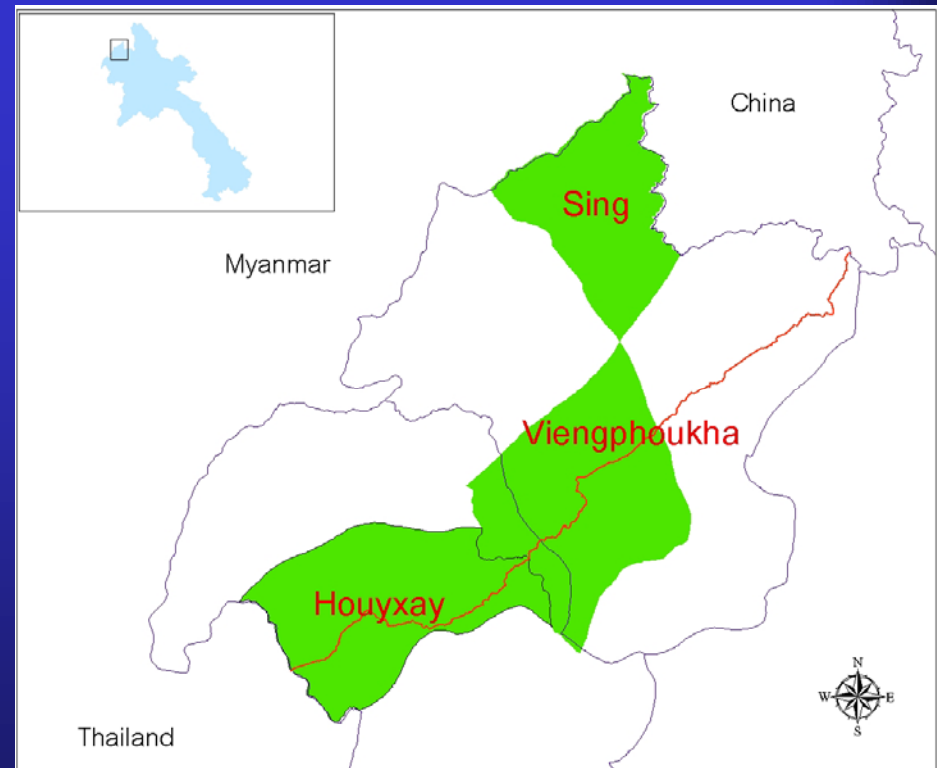
- Understand the impact of land use change on local resource tenure and local livelihood
- Investigate driving forces (i.e. government policies, population, economy)

Study Area



Background: northern Laos

- High poverty incidence among rural population
- Transition from subsistence to market economy
- Integration to regional economies



Background: northern Laos

- Implementation of government policies on
 - Land and forest allocation
 - shifting cultivation
 - Opium abolition



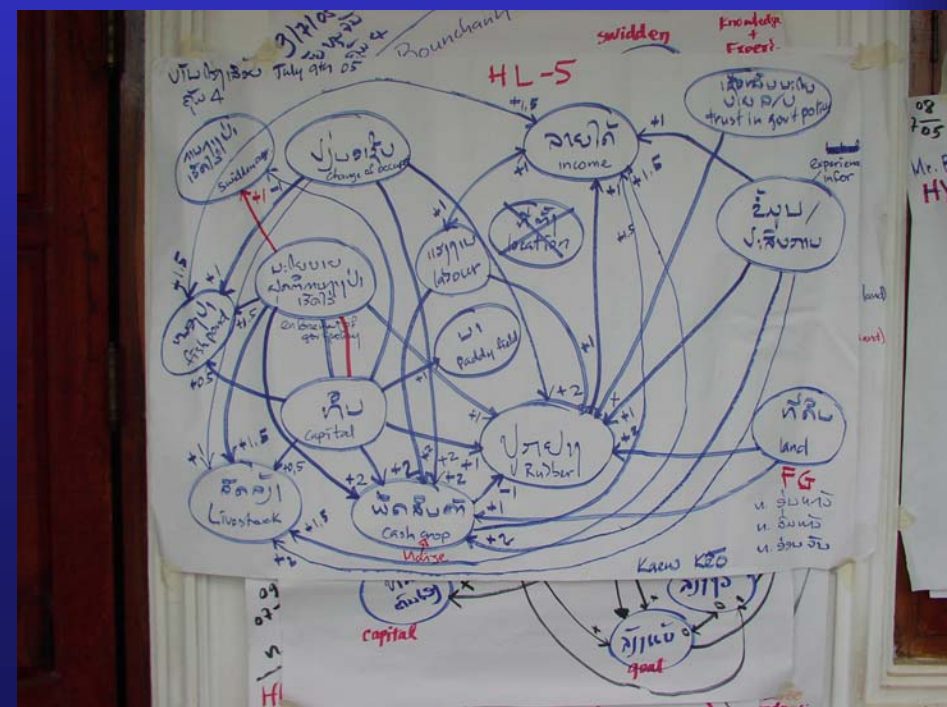
Research questions

- What is the current land use pattern along the new Economic Corridor?
- How does demographic change affect natural resources and land use?
- What are the driving forces of farmer's decisions on land use and farming system?

Research method

- Spatial analysis
 - Demographic change
 - Land use change
- Policy review
- Village land use history
- Village and household survey (i.e. cognitive mapping, interviews)





Data collection

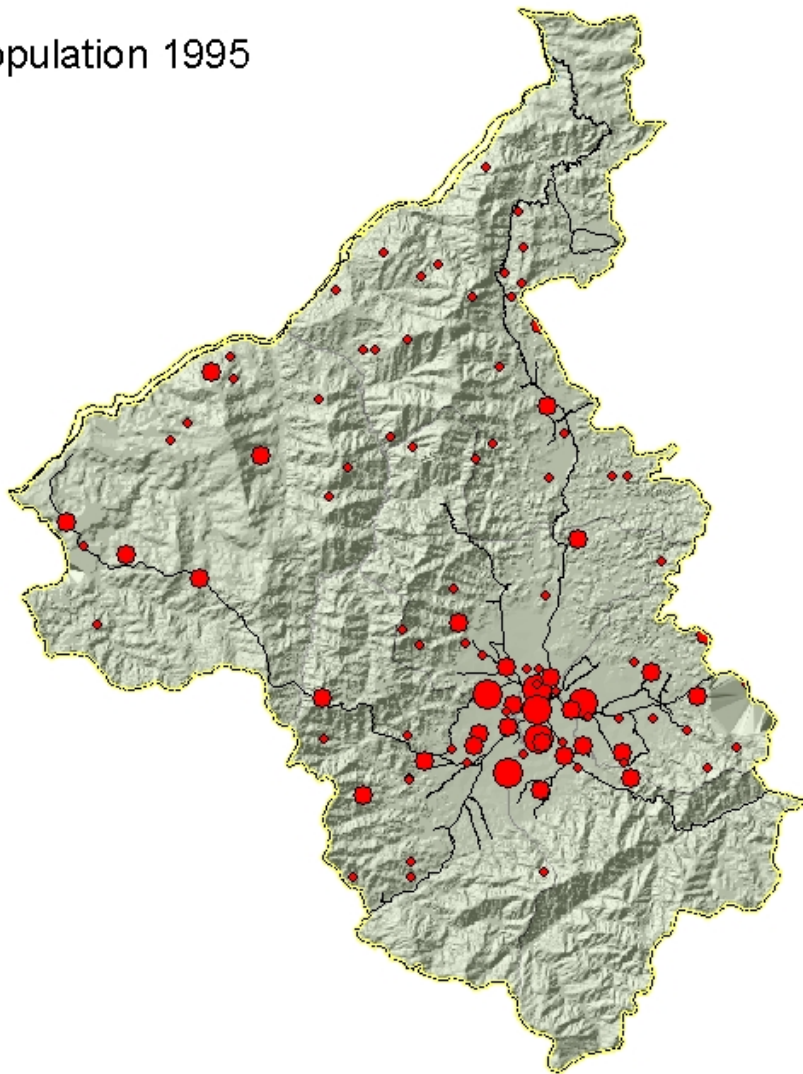
- Spatial data: Landsat, Aster, DEM, village location, Census data
- Agricultural statistic (e.g. NSC, MAF, PAFO, DAFEO)
- Village and household interviews
- Cognitive maps on factors that lead to planting rubber

Preliminary findings

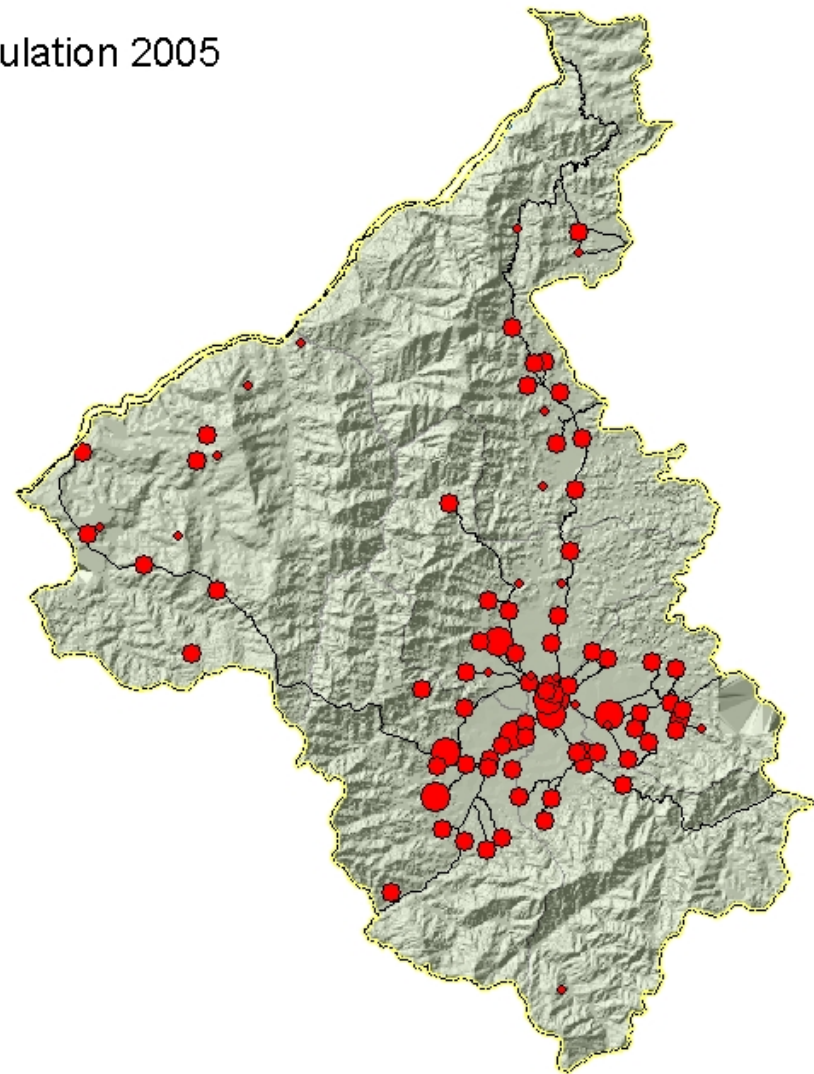
Demographic change

Sing District

Population 1995



Population 2005



POPULATION

• < 200 • 201 - 500 • 501 - 1000 • > 1000

OTHER FEATURES

□ District boundary — Road network

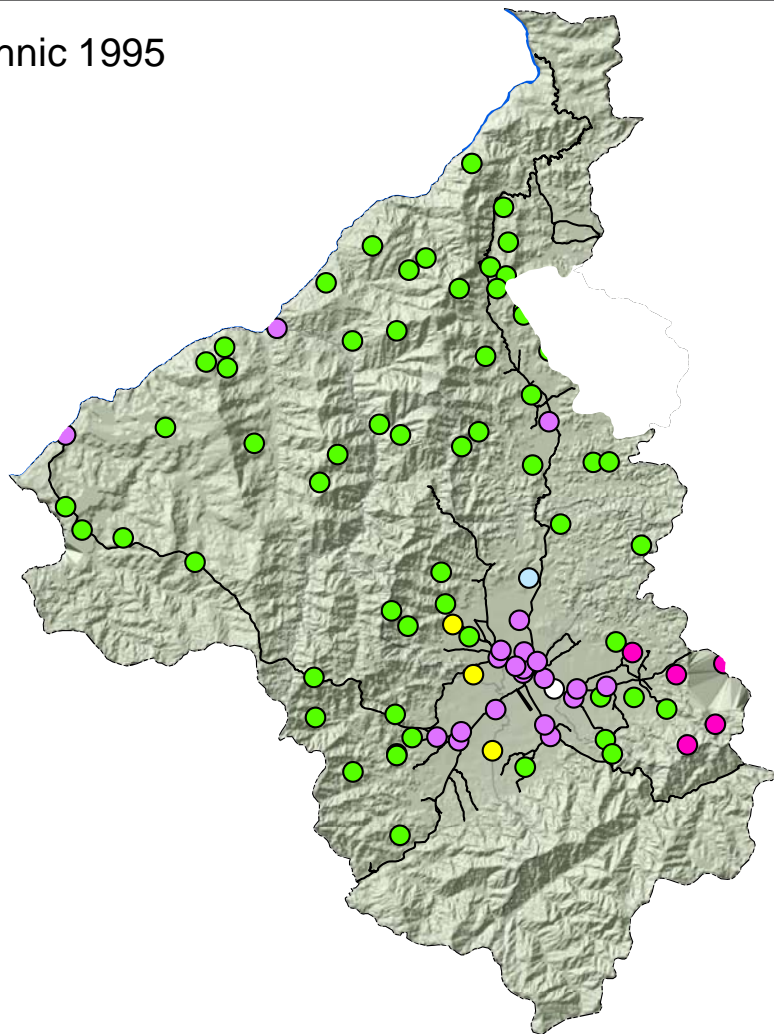


0 5 10 20 KM

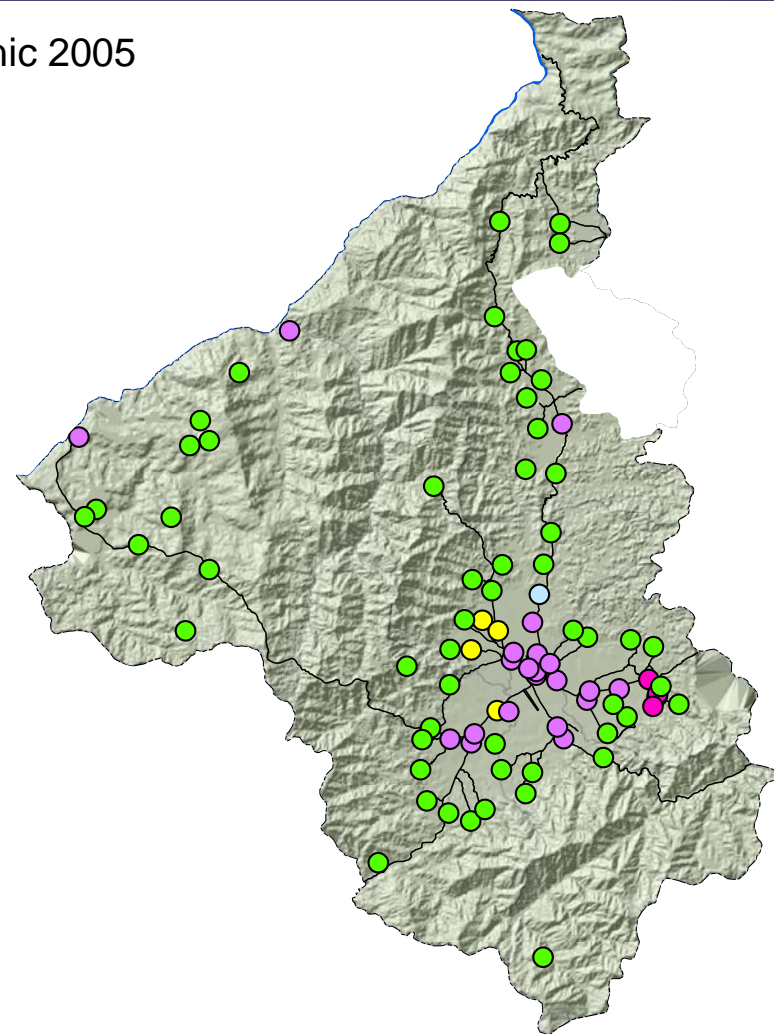
Ethnic distribution

Sing District

Ethnic 1995



Ethnic 2005

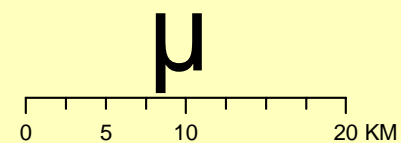


ETHNIC GROUP

- | | | | |
|------|-----------|-------|------|
| Akha | Dam Phuni | Hmong | Khmu |
| Lahu | Lue, Nua | Nua | Men |

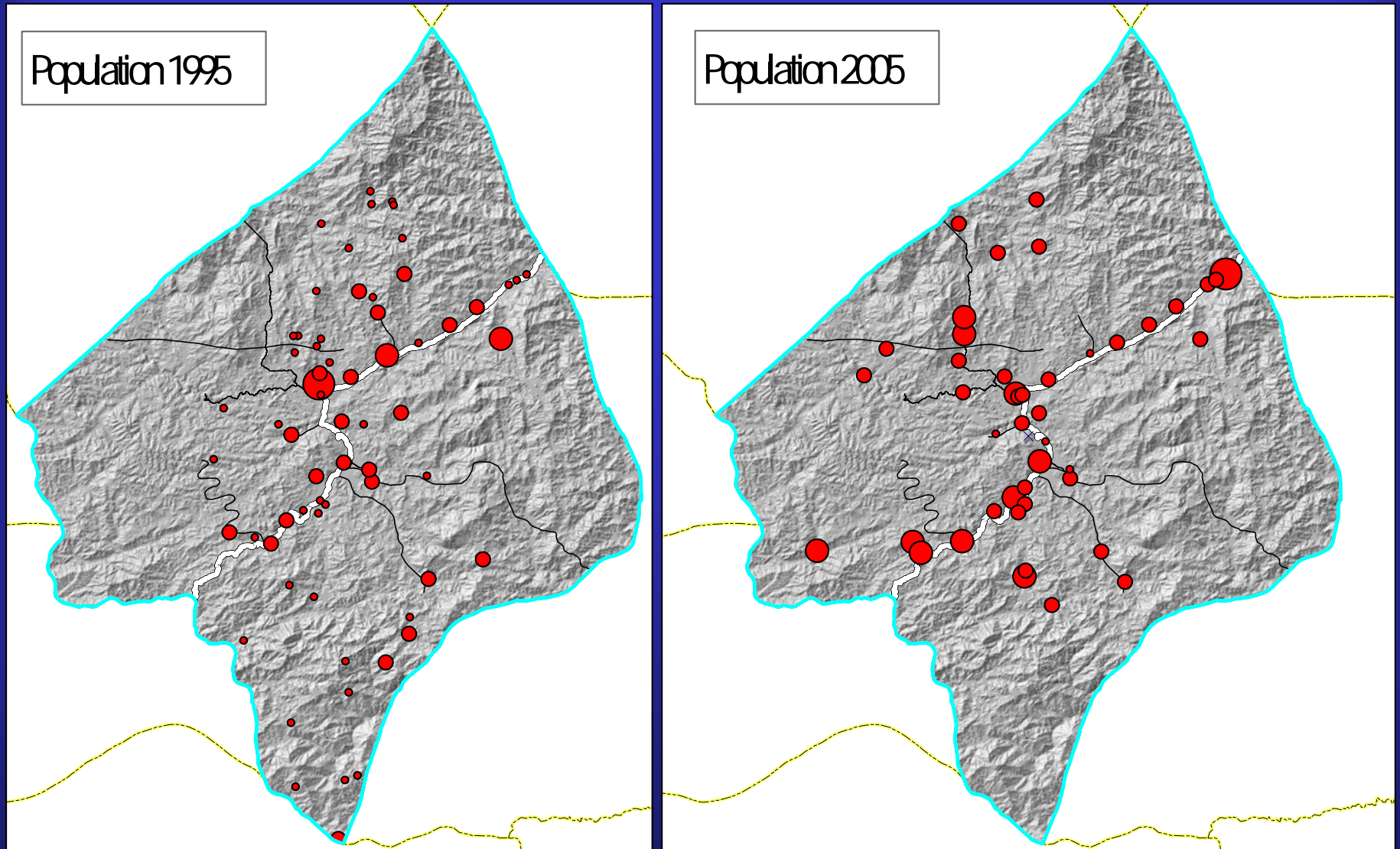
OTHER FEATURES

- | | |
|-------------------|--------------|
| District boundary | Mekong River |
| Road network | |



Demographic change

Viengphoukha District

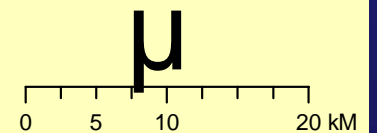


POPULATION

- <200
- 201 - 500
- 501 - 1000
- >1000

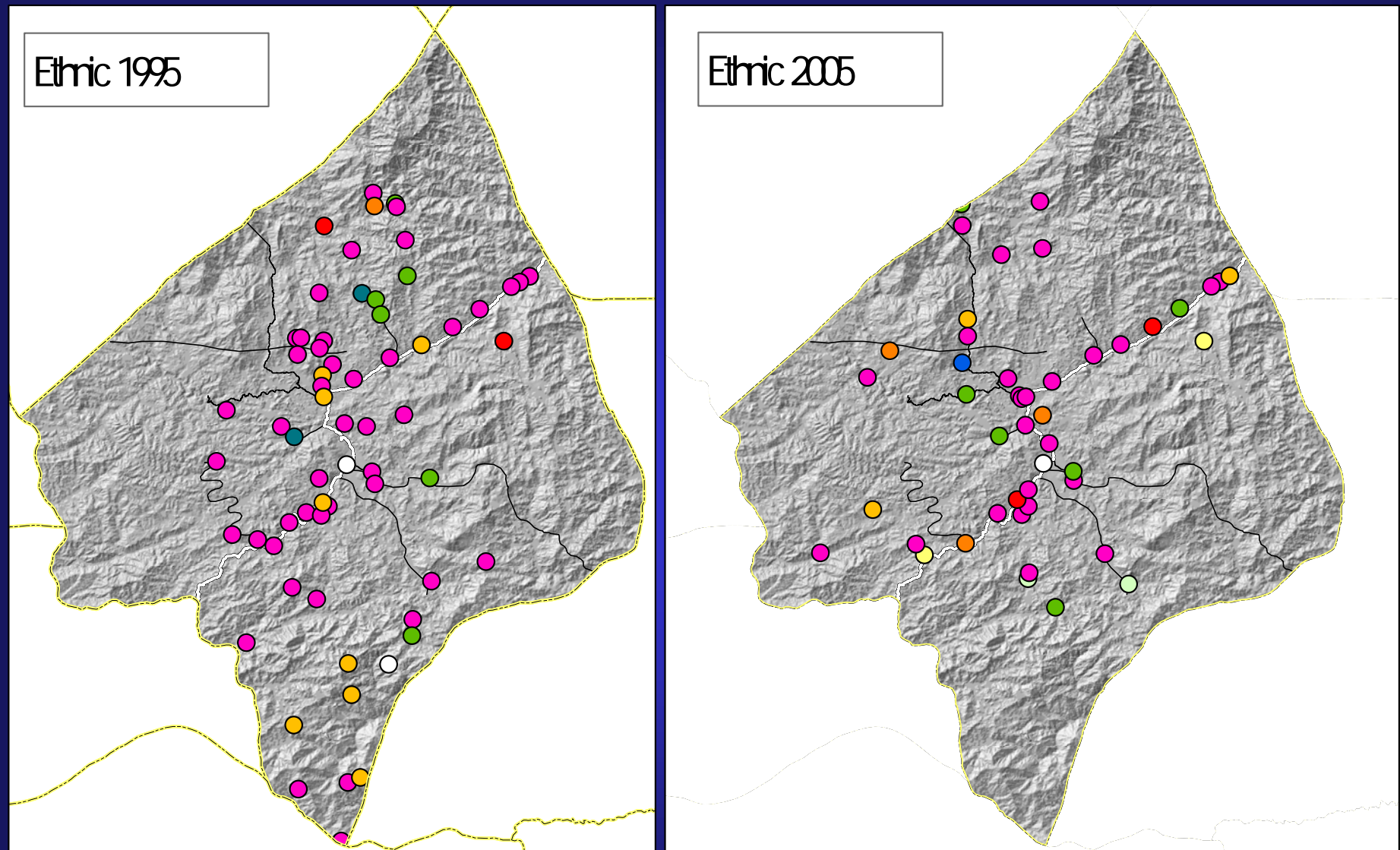
OTHER FEATURES

- District boundary
- National highway
- Road network



Ethnic distribution

Viengphoukha District

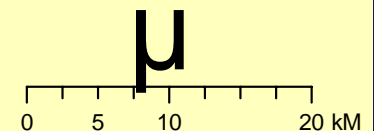


ETHNIC

- Hmong ● Kmu ● Kui ○ Yang
- Akha ○ Kmu and Kui ● Leu ● Mx ● Leu and Kui

OTHER FEATURES

- District boundary
- National highway
- Road network



Forestcover change

Sing District

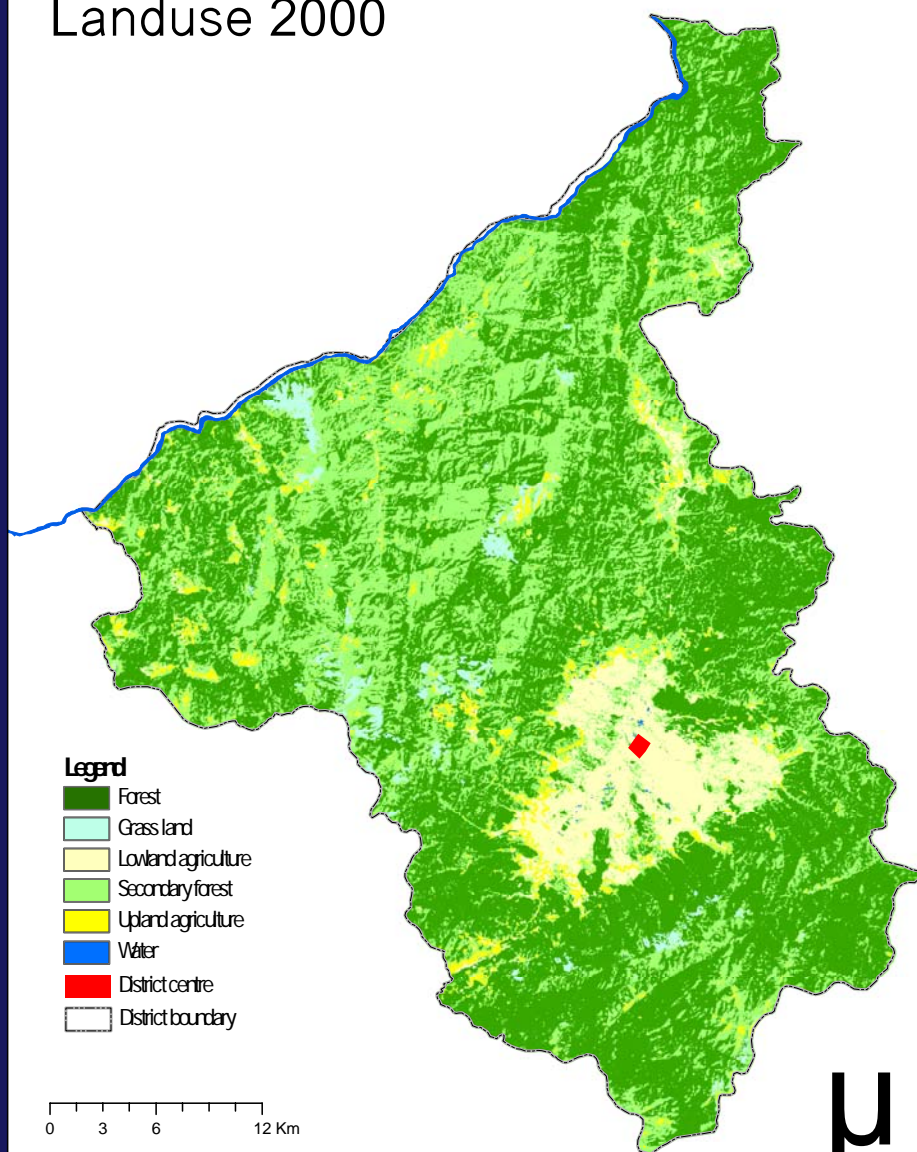




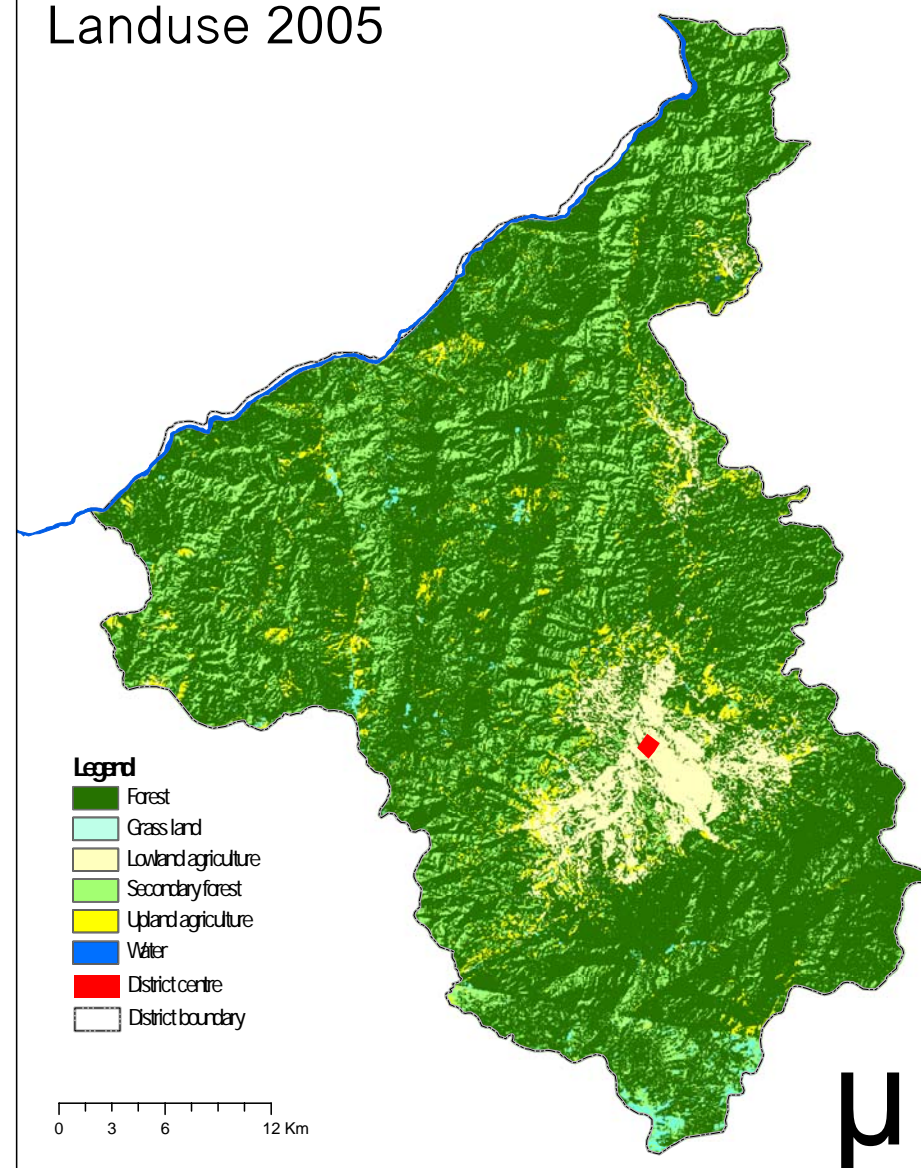
Landuse change

Sing District

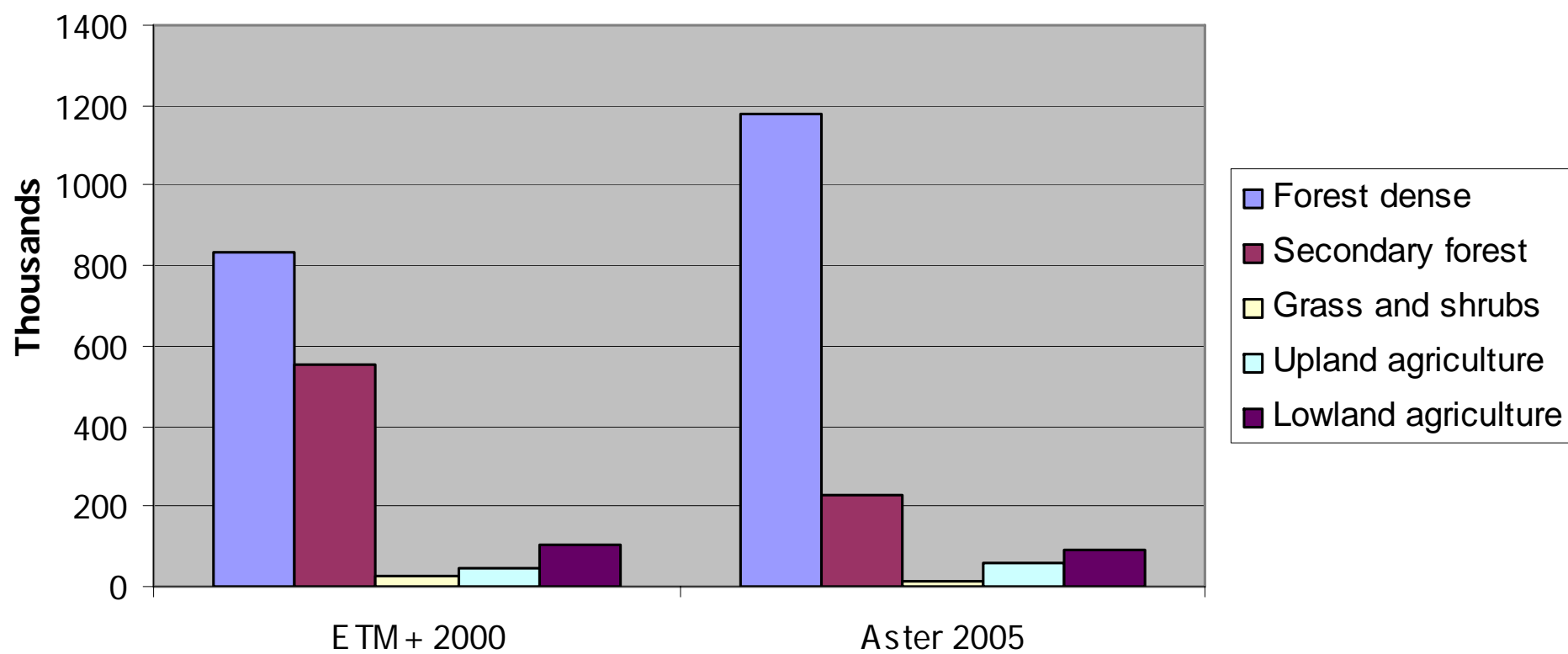
Landuse 2000



Landuse 2005



Landuse Change

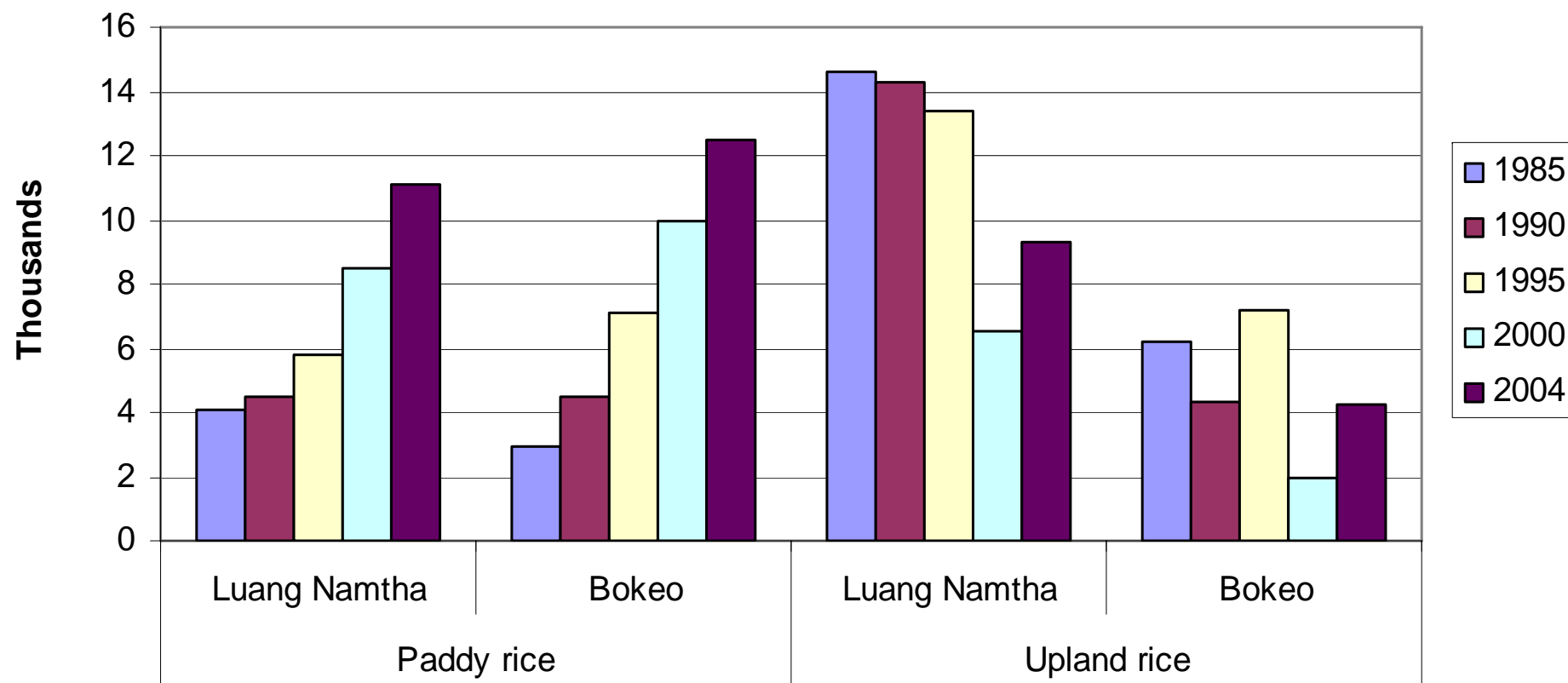






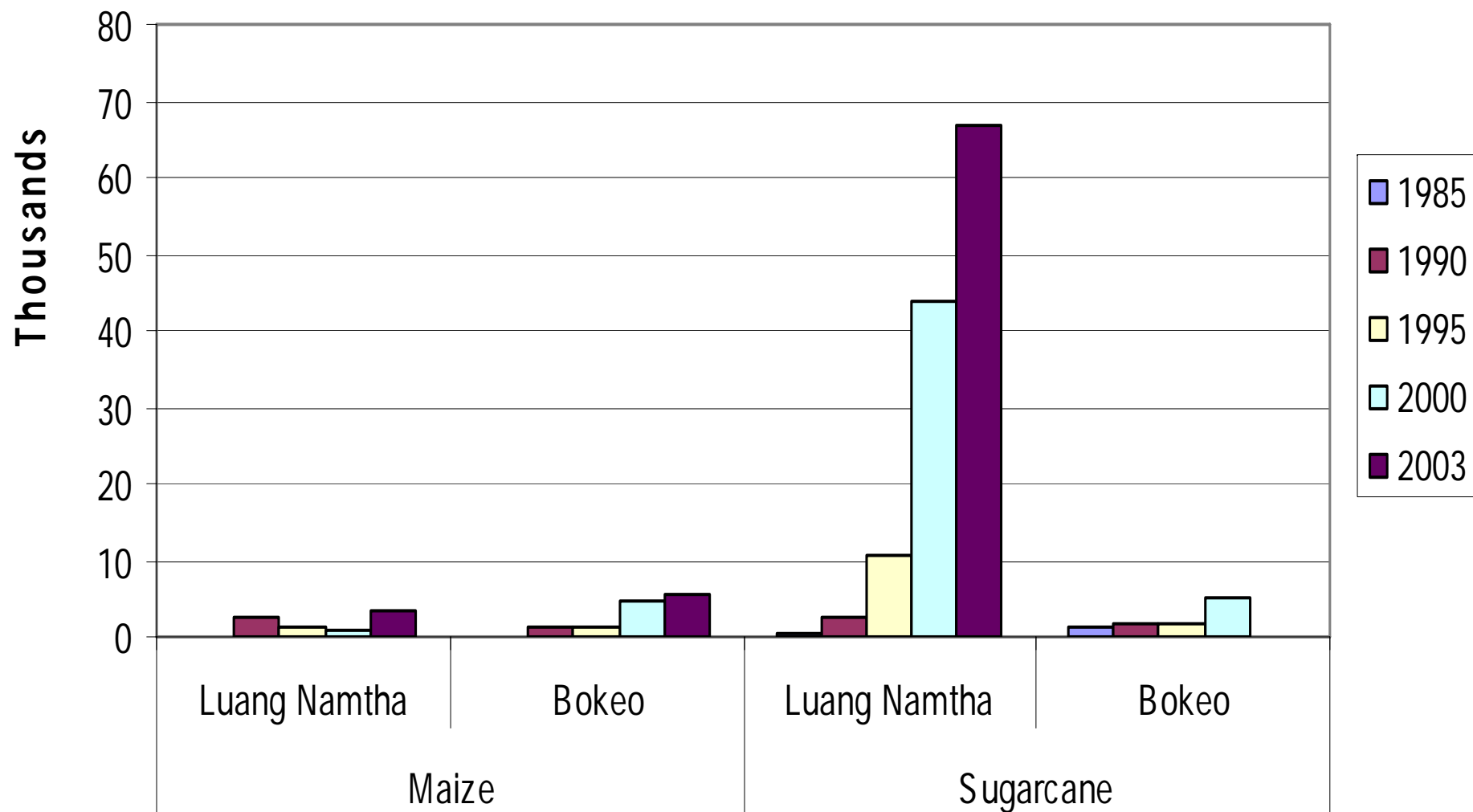
Area of rice production

Unit: ha

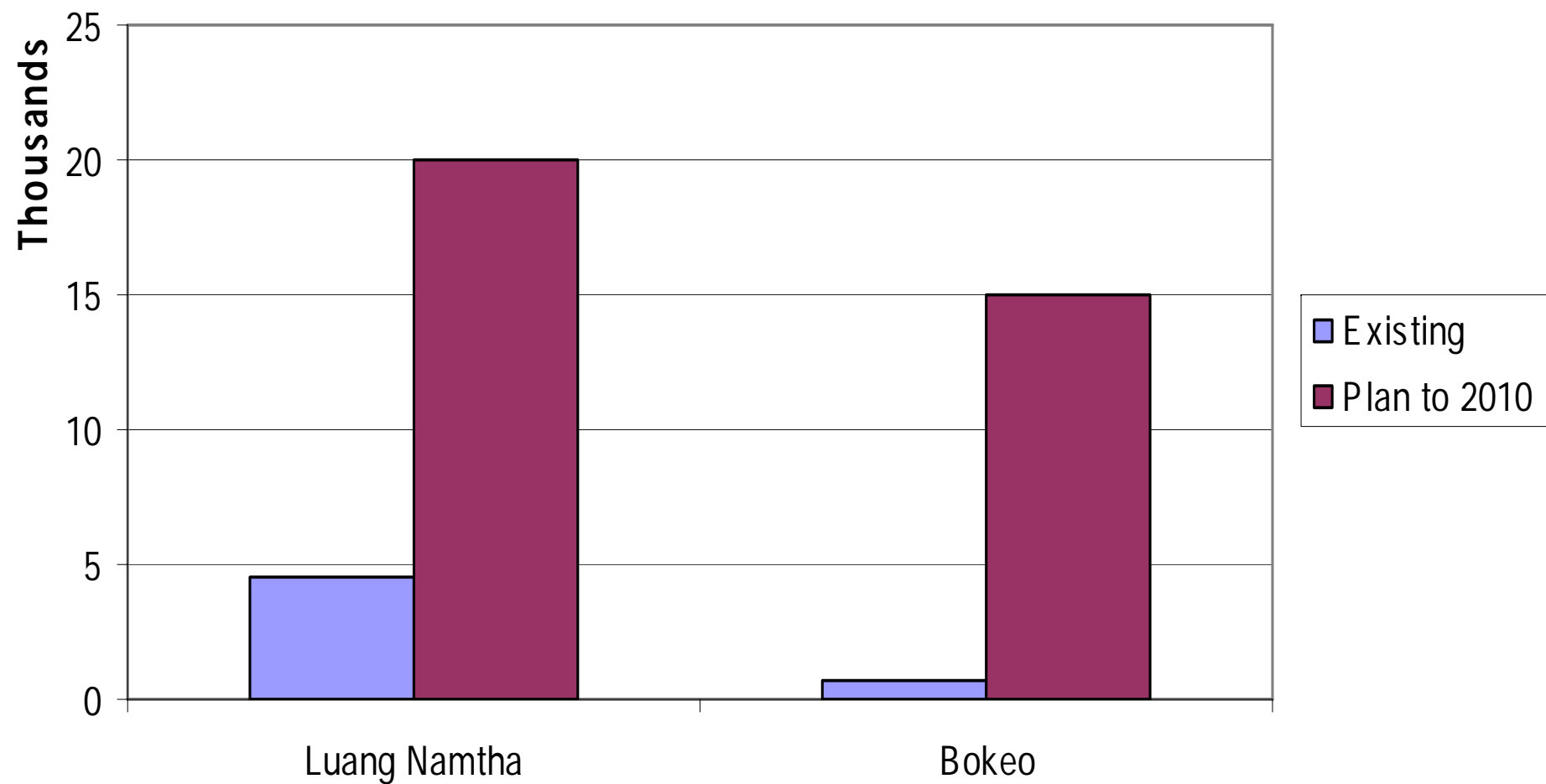


Maize and sugarcane production

Unit: ton



Rubber plantation [ha]









Discussion: observed trend

- Concentration of population along the road in lower elevation
- Conversion of swidden and fallow forest to permanent agricultural land
- Increased privatization of resources, and competition over land
- From multiple livelihood options to selecting key livelihood activities

Challenges for future research

- Impact of agricultural commercialization in uplands on forest and watershed
- Impact of agricultural commercialization and privatization of land on communal resource management practice
- Changing patterns of livelihood basis
- Gaps of information and policy implementation
- Cross border trade issues

Thanks for your kind attention