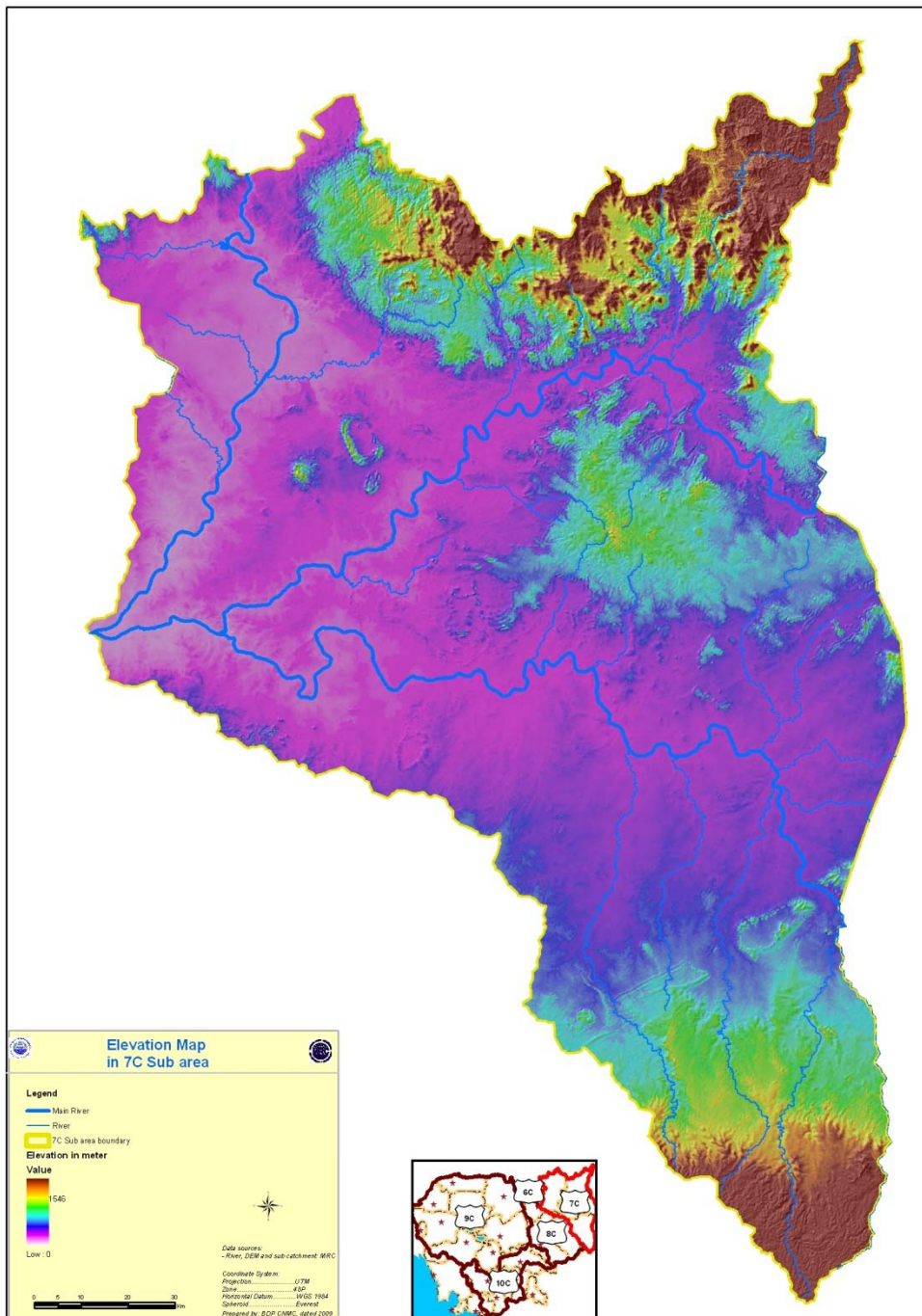


# LAND USE CHANGE IN SA-7C

IMPLICATION FOR POVERTY  
REDUCTION AND WATER AND  
RELATED RESOURCES  
DEVELOPMENT



**Total area:** 5475.72 km<sup>2</sup>

Three major rivers: Sekong, Se San and Sre Pok and some 25 major tributaries

**Population:**

Total: 193,031 people

Density: 35 persons/km<sup>2</sup>

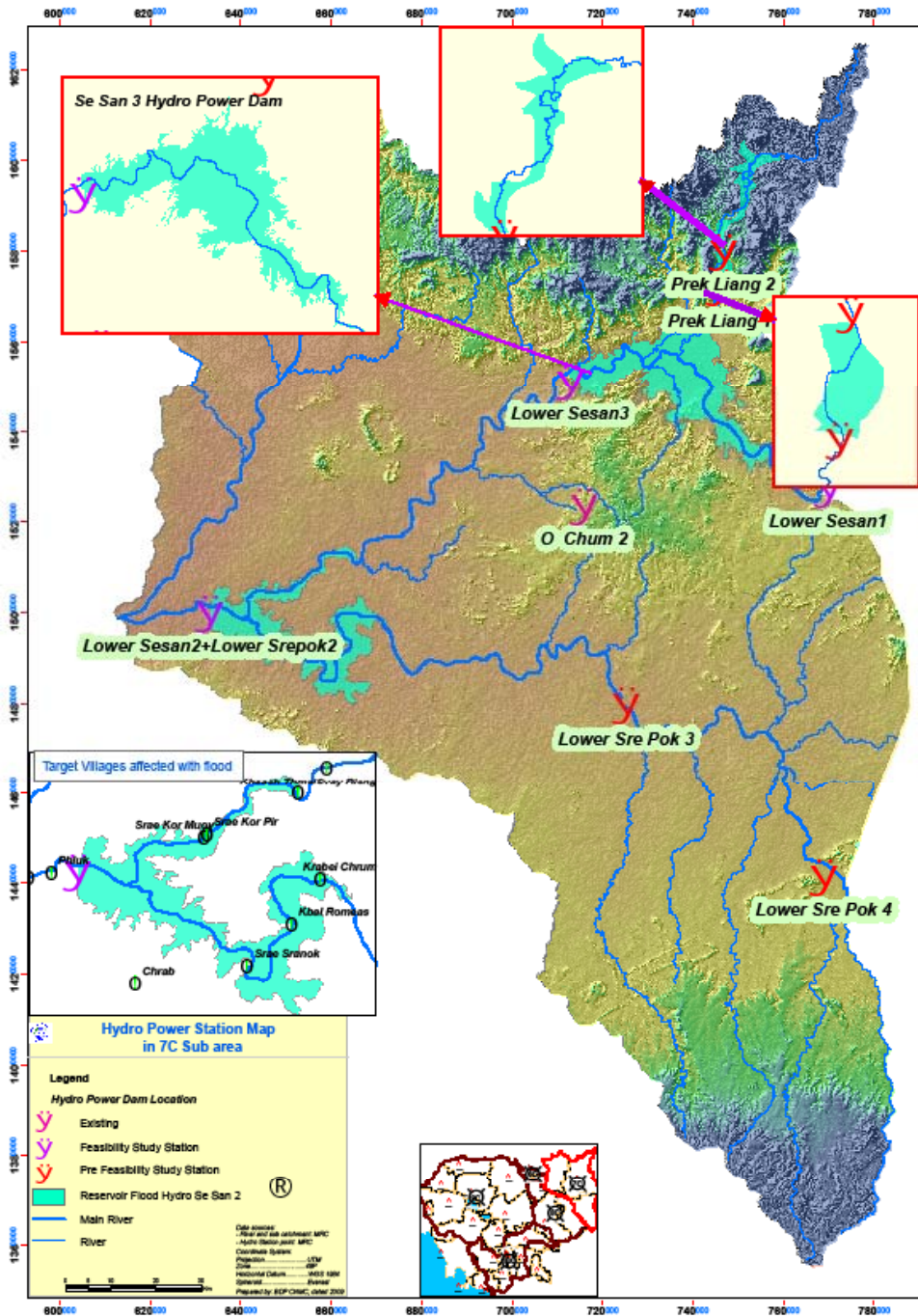
Ethnic minority: 26 ethnic groups

**Natural resources:**

- Forestry
- Water resources:
  - Potential for hydropower
  - Potential for irrigated agriculture
- Mine (bauxite, gold, gem stone, tin etc..)
- Tourist attraction sites
  - Volcanoes lakes, water fall, rapids, wild life

**Cultural heritage**

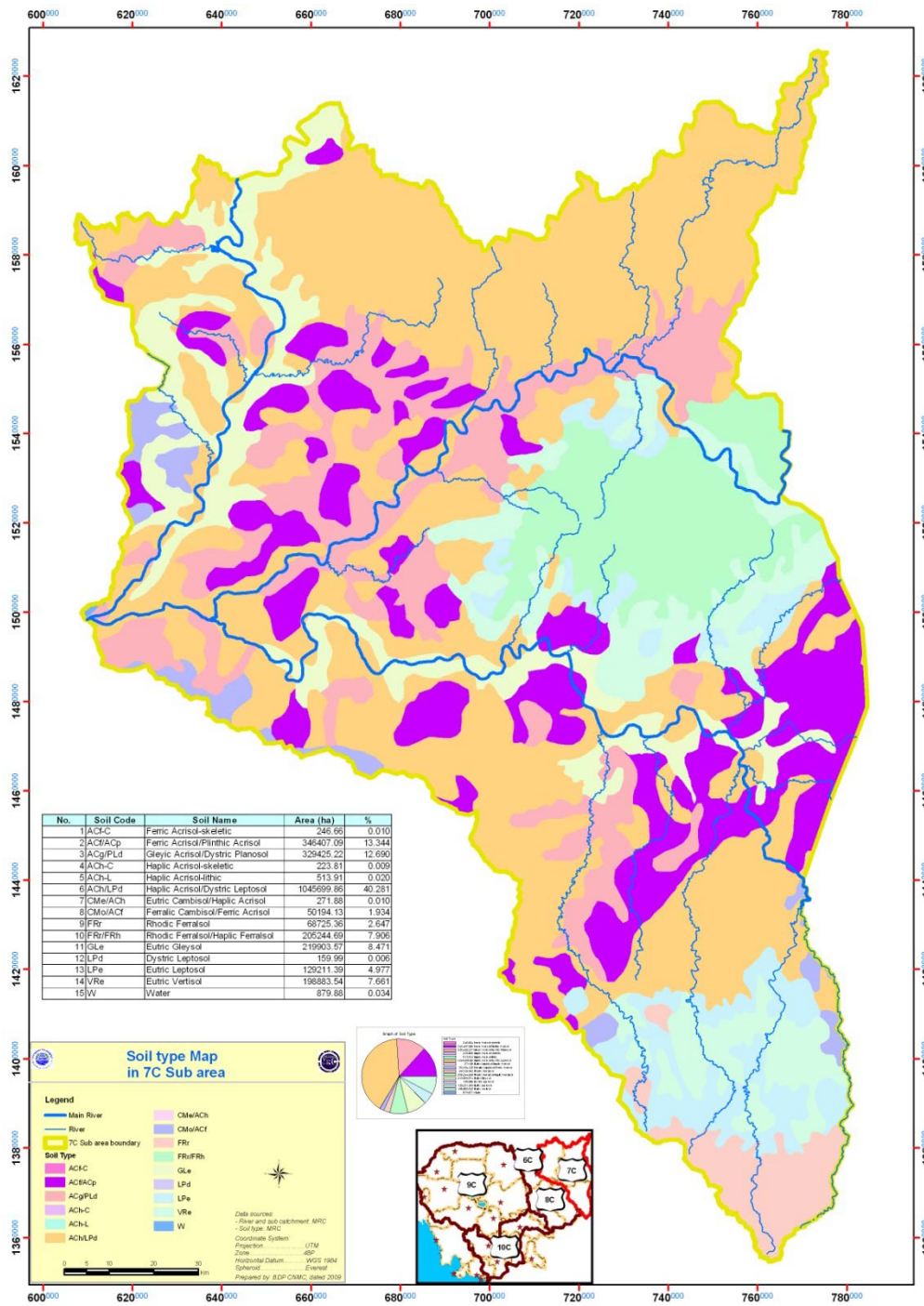
- 26 ethnic minorities (>80% of total population)



## Hydropower:

- Se San2: 400 MW planned (2010)
- Se San 3: 180 MW exploring stage
- Se San 1: 96 MW
- Prek Liang 1: 64MW
- Prek Liang 2: 64 MW

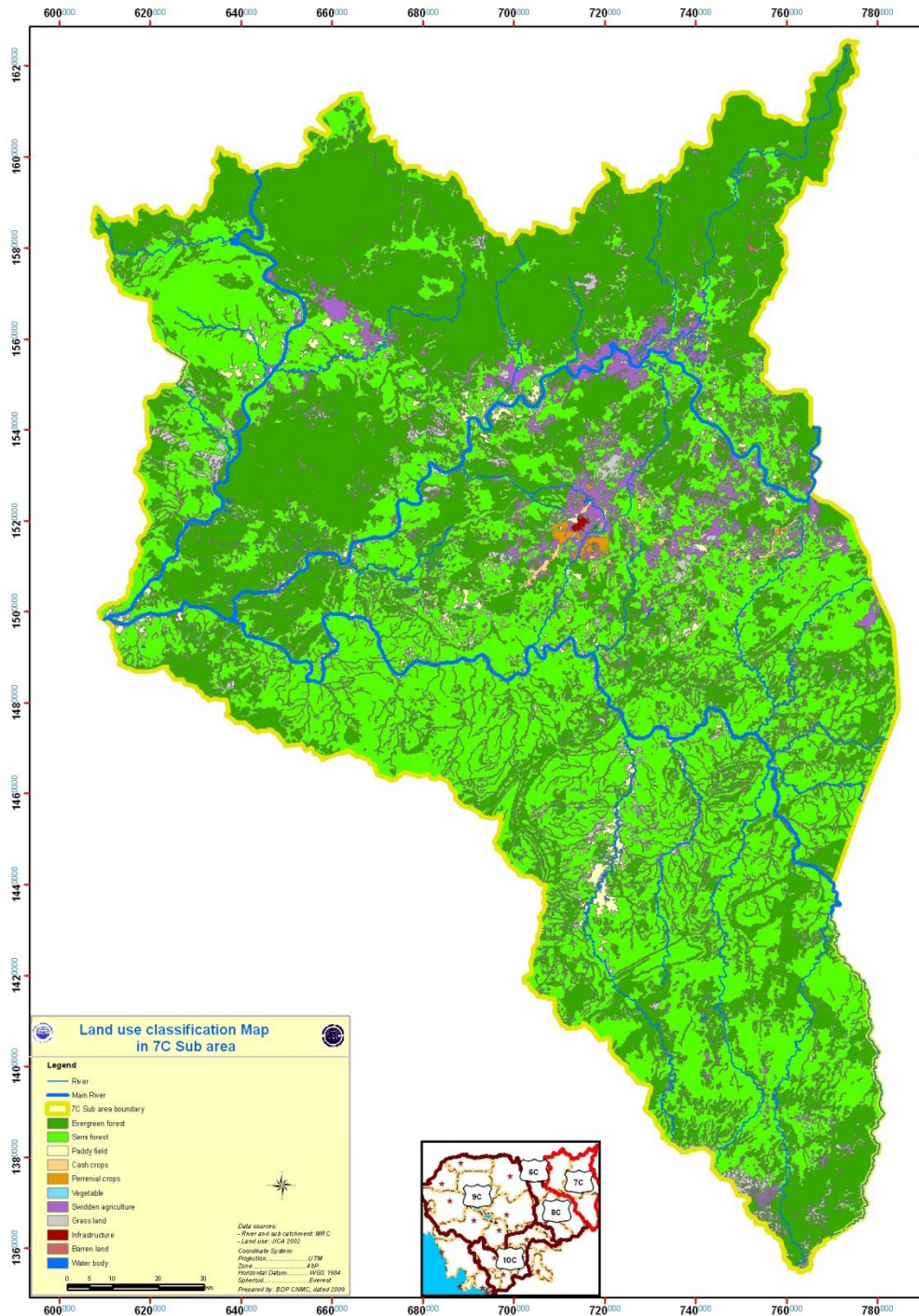




## Land resources:

Dominated by:

- Acrisol (poor soil only suitable for forest conservation);
- All red soil suitable for commercial agriculture are used (around Ban Lung and around Mondulkiri)
- Land suitable for rice cultivation are in flood prone area ( along the main tributaries)



## Land use: Rattanakiri

Agriculture (Ban Lung & along Se San River)

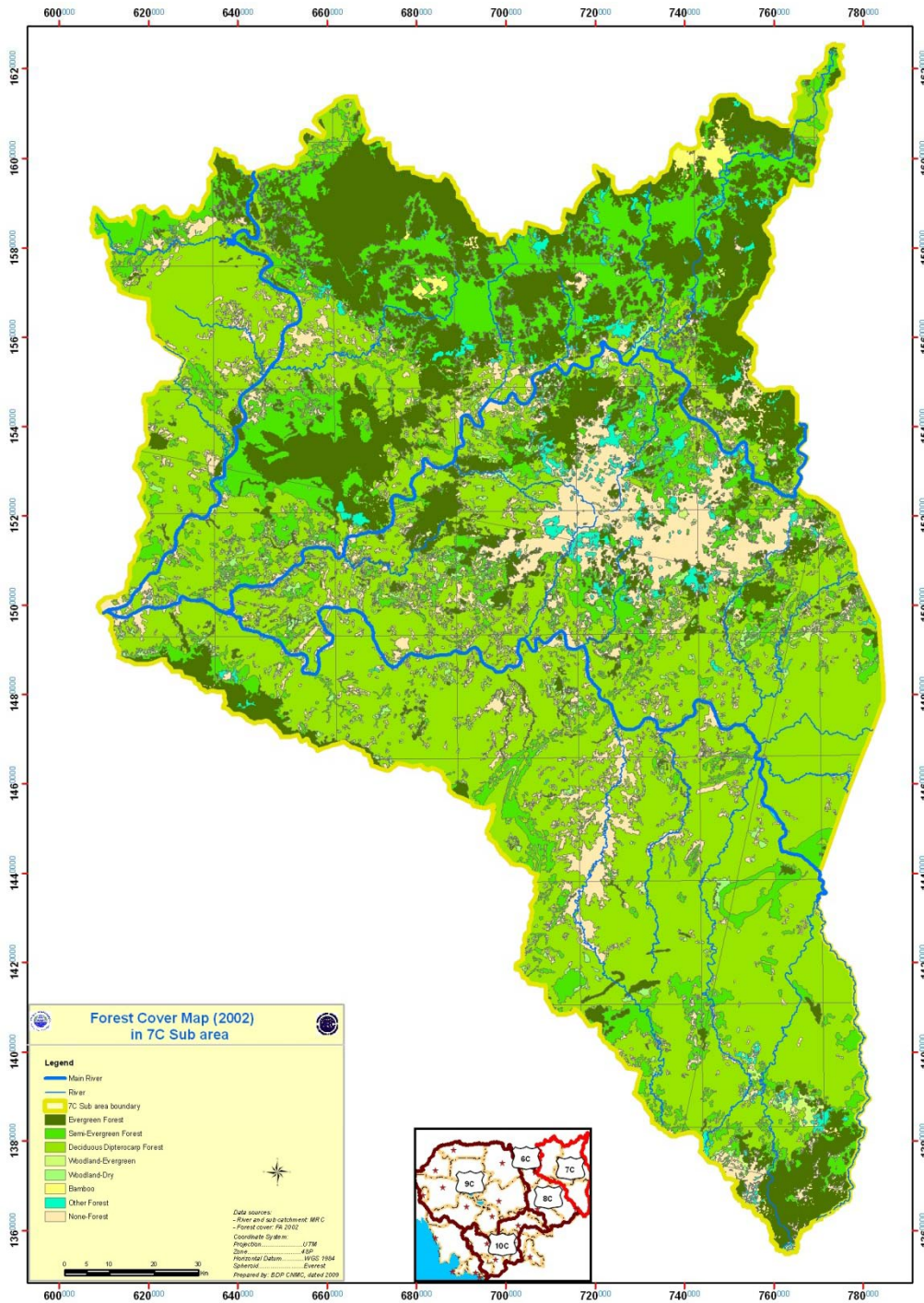
- Rubber plantation (on red soil)
- Swidden agriculture;
- Cashew nuts
- Soy bean
- Forestry ( national park, wild life sanctuary, forest concession)
- New land concession (paper pulp, rubber);
- Mining : from fam. Scale to commercial scale (New)

## Mondul Kiri

Agriculture (along Lower Prek Chbar and along Sre Pok)

- Low land and upland rice;
- New land concession: resin, and paper pulp;
- Mining (New)

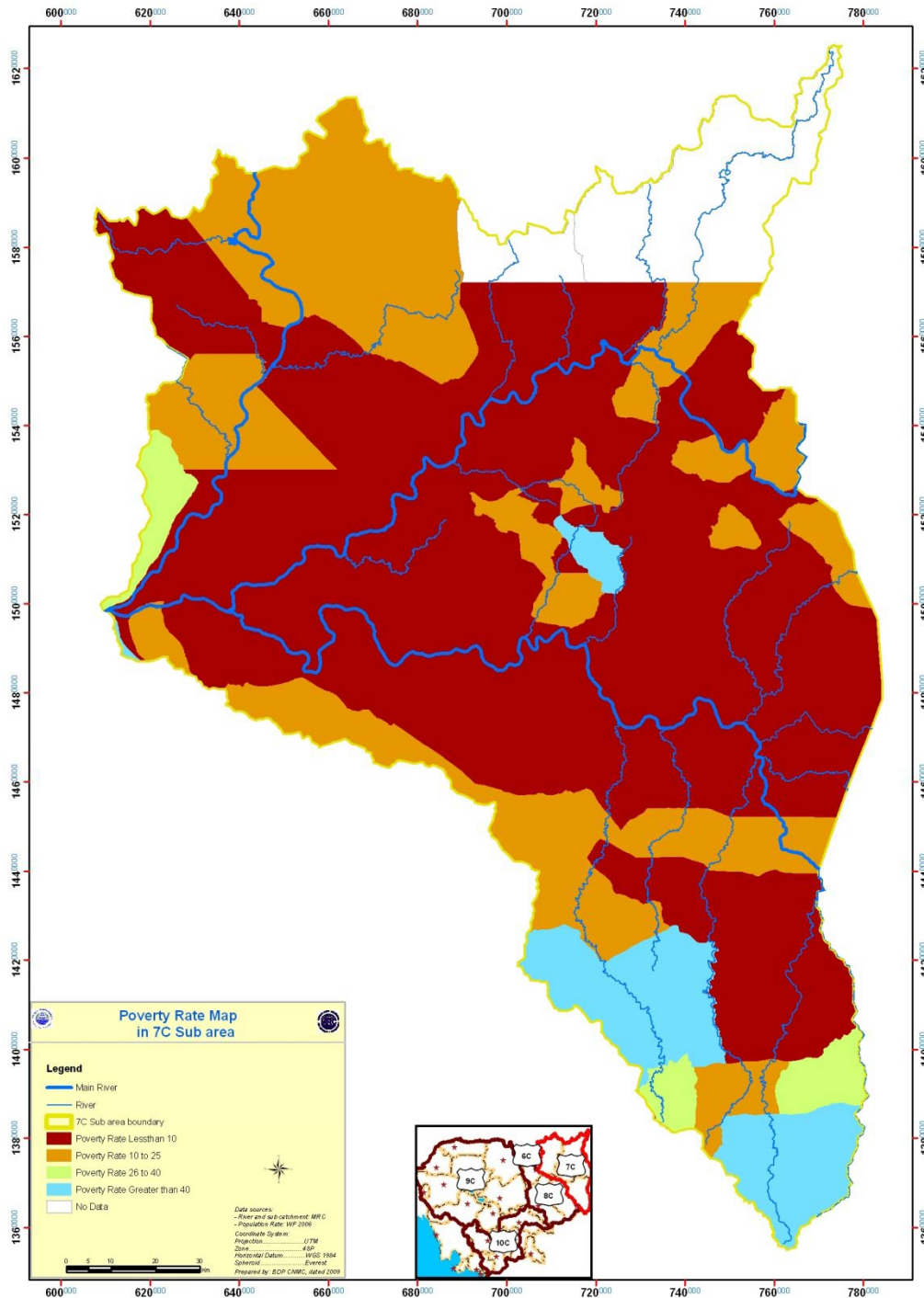




## Forest cover:

Significant and rapid depletion of forest cover after the banning of logging in late 1990 s.

Illegal logging is stilcontinuing in remaining forest



## Poverty

Poorest region in the country with highest level of illiteracy;

- under nourishment up to 11.3%
- poverty rate as high as 87% in some commune (Dakdam district)

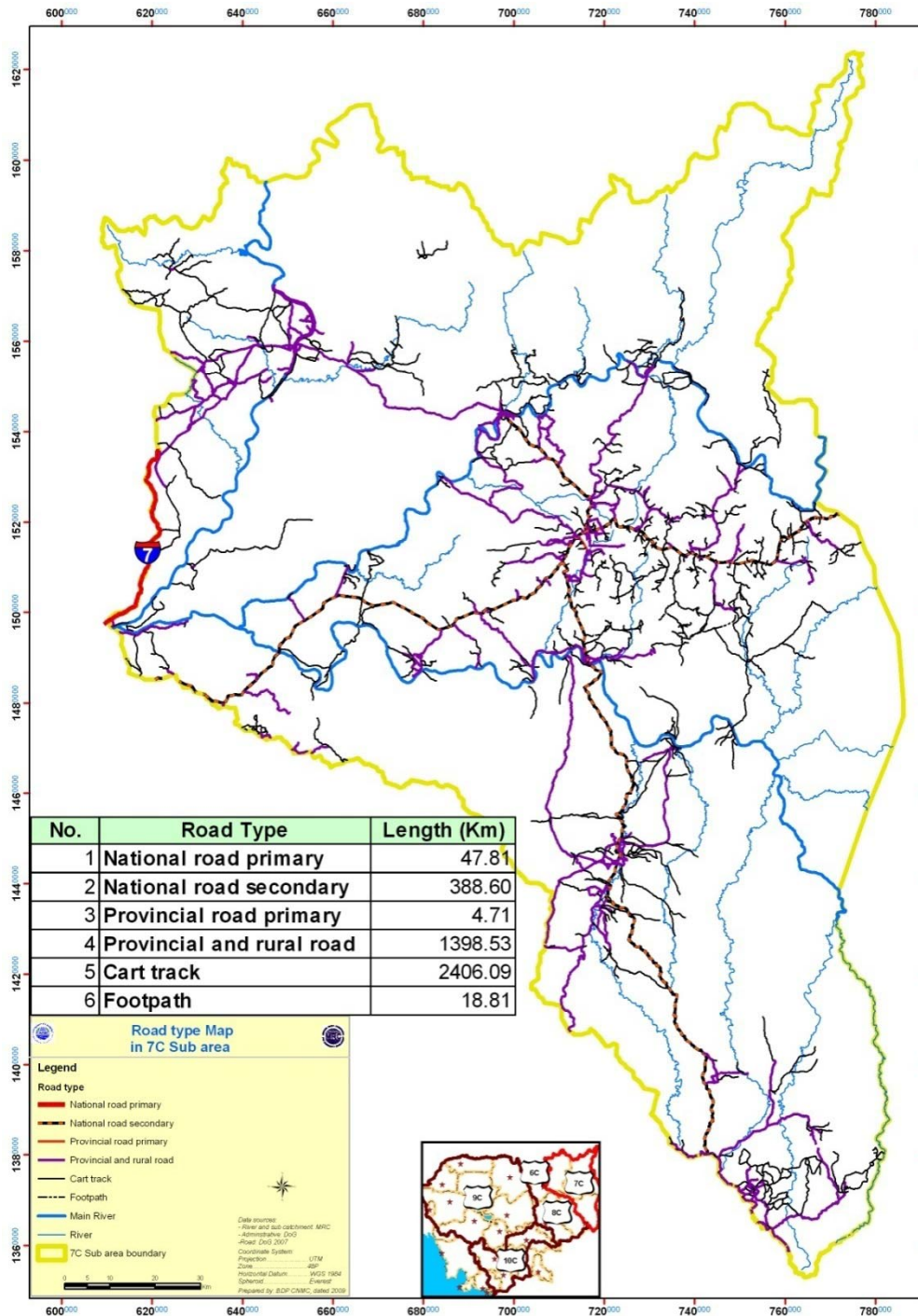
Annual milled rice production:

- Annual surplus of Sekong and Sre Pok 6,600t/y;
- Se San deficit about: 7,000 t/y

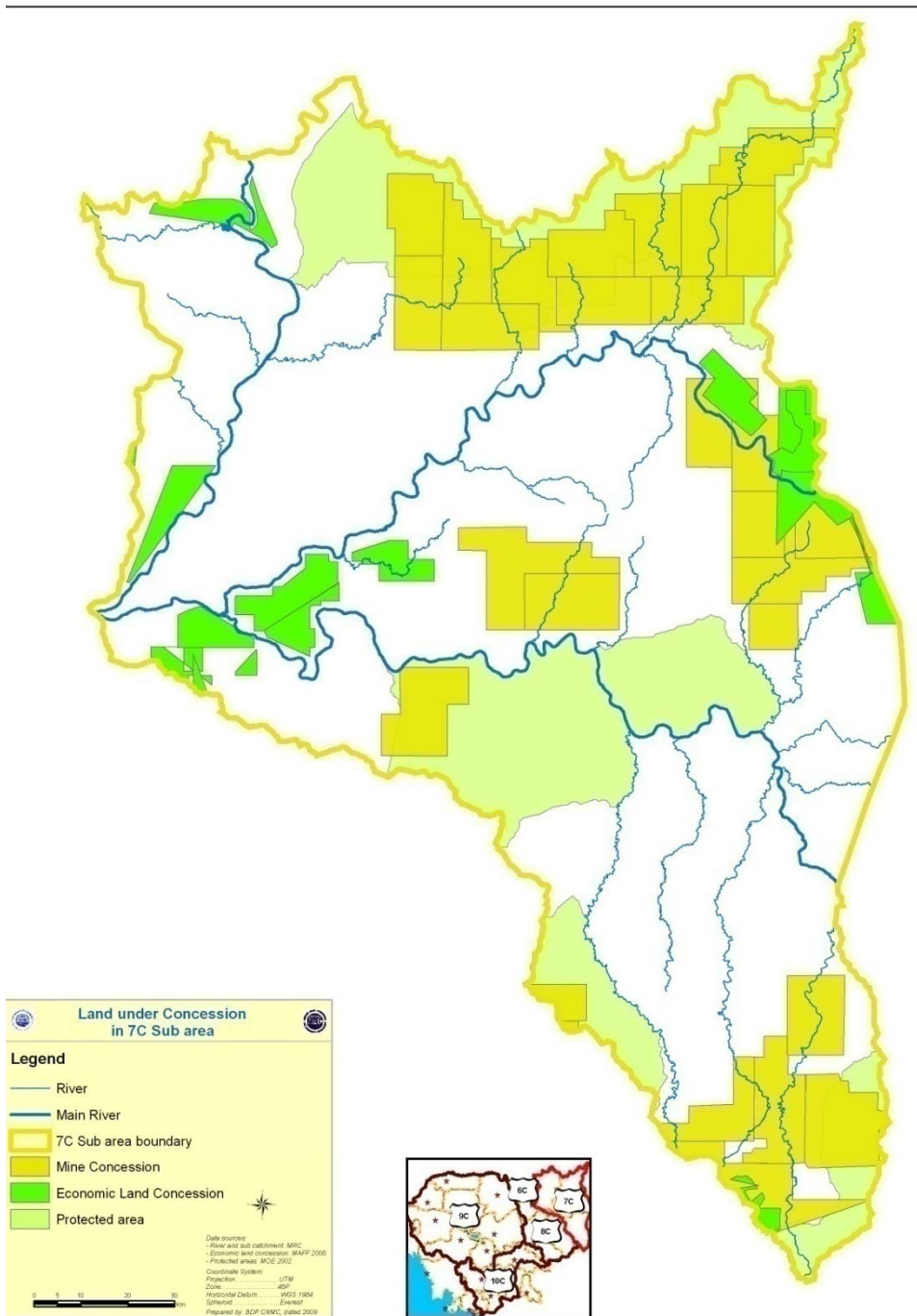
# Infrastructures

## Transport:

- The most isolated and poorest part of the country
- No paved access road
- **Navigation:** only accessible for small boats







## Land Concession types and issues:

1. Economic Land Concession
2. Social Land Concession

### 1.1. Agricultural land concession

- under development process

#### - Difficulties:

- Transparency in the process;
- Tend to overlap with protected area, and land belong to ethnic minority groups

### 1.2. Mining concession

- Explorative phase but has many controversy: overlap: protected area/ethnic minority land

## 2. Social concession land:

- provided to landless groups

#### -Difficulties:

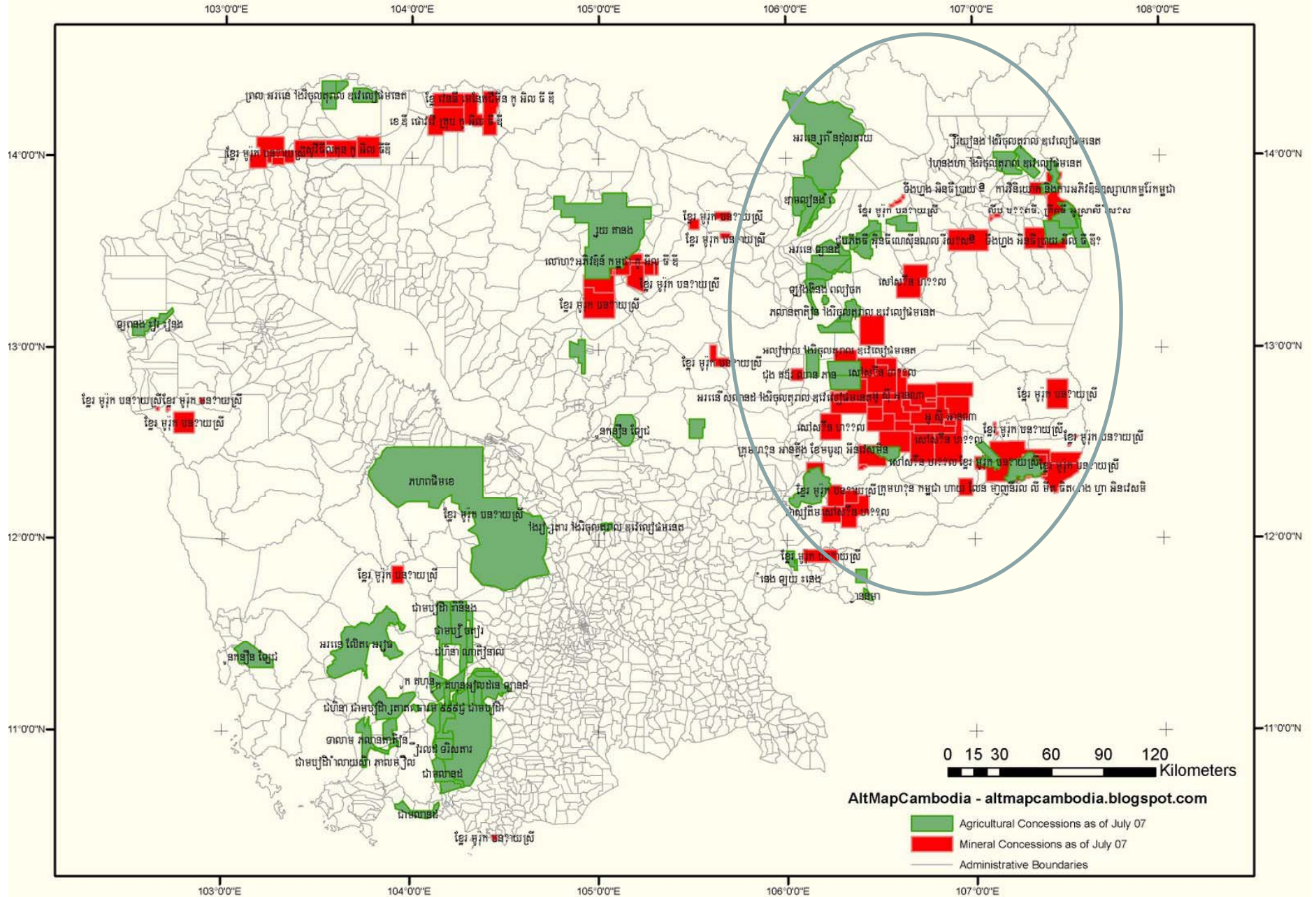
Only land that nobody want are available for distribution





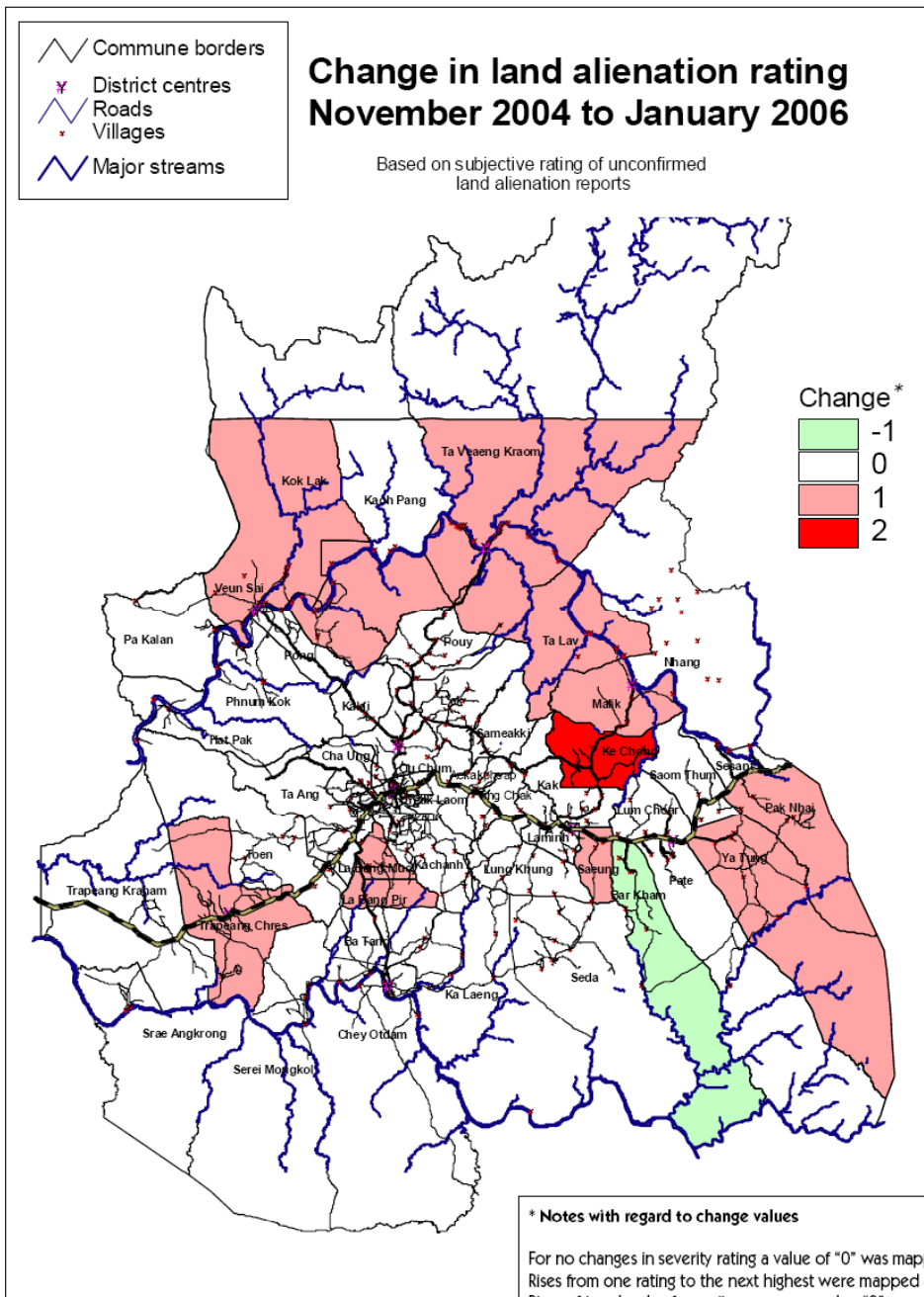


# Known Agriculture and Mineral Concessions in Cambodia



AltMapCambodia - altmapcambodia.blogspot.com

- Agricultural Concessions as of July 07
- Mineral Concessions as of July 07
- Administrative Boundaries



## Other driving forces:

- Land speculation taking advantage of the country weak governance framework

## POTENTIAL CONTRIBUTION TO ECONOMIC GROWTH AND POVERTY REDUCTION

### Expectation:

Transform idle land into economic land

Land lease, tax, creating job, export

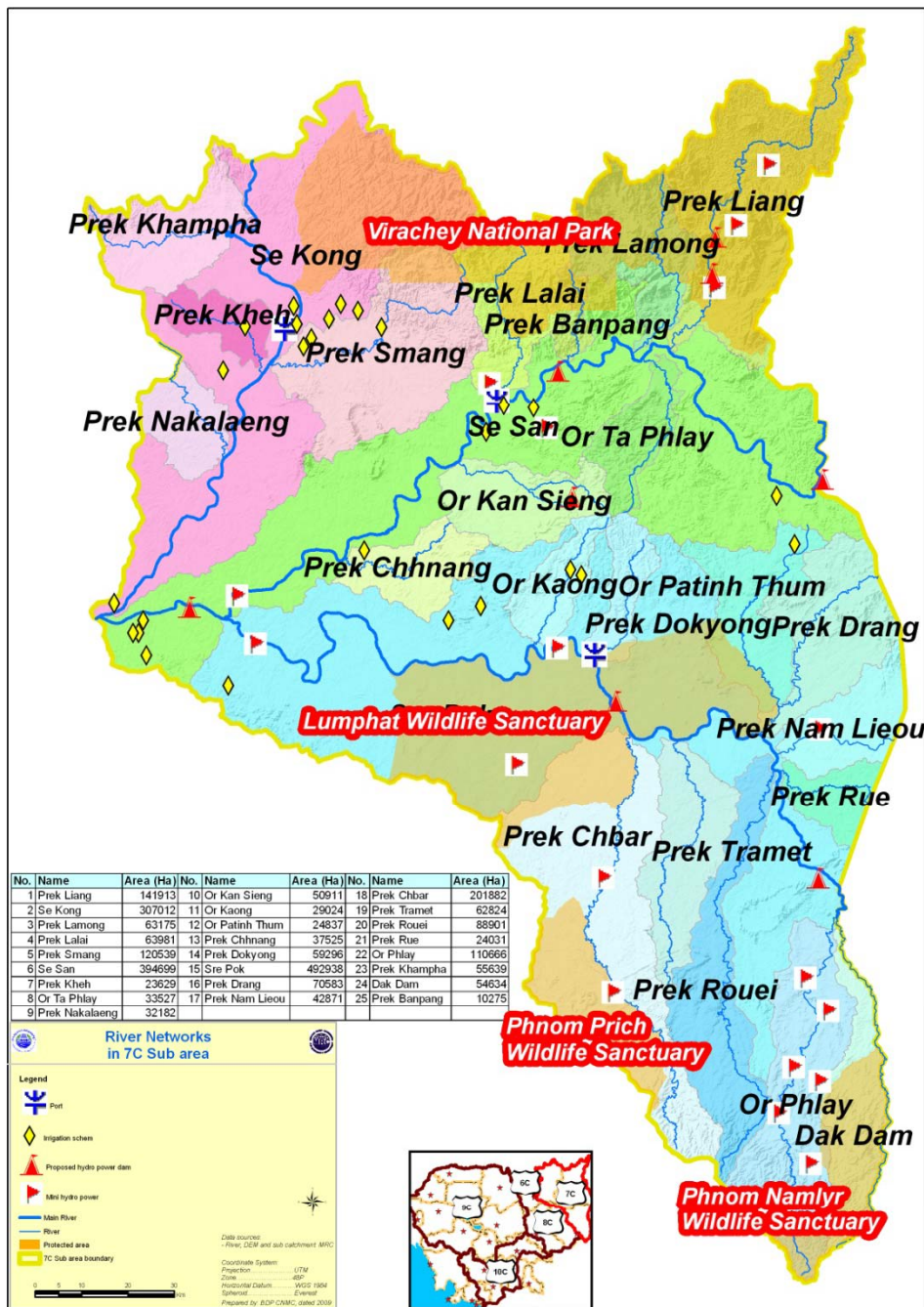
Exploit economic value of mining resources

Export  
Industry

### Cost:

Communities fragmentation,  
Environment degradation, ecological fragmentation, mistrust, confrontation





## Cost continued:

There is very limited number of developed and planned infrastructures for water resources management in the SA

-Uncoordinated development leads to:

- Inefficient use of resources;
- Disturbing river basin management planning process
- Discourage stakeholder participation in the coordinated development process;
- Lost of opportunity to better developed other sectors:

- high value crops, eco tourism, conservation

- Social frictions between communities/investors/local authorities/upstream/downstream
- Communities and ecology fragmentation

- HOPE FOR POVERTY REDUCTION MIGHT BE DIFFICULT





**The challenge: Are we able to improve their future**



# Thank You



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Pointer 13°43'59.17" N 107°00'29.65" E elev 274 m

Streaming ||||| 100%

Eye alt 6.55 km