

## Underlying Cause of Deforestation in Mount of Halimun Salak National Park, West Java Indonesia

Lilik Budi Prasetyo, Haryanto Yatab  
Harjanto, Yudi Setiawan, Perman, Tri Permadi



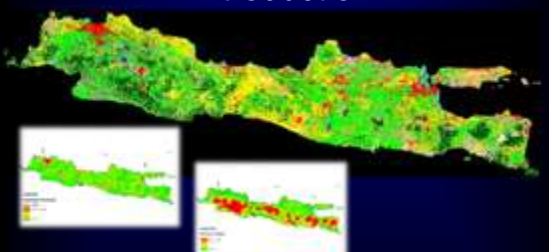


Supported by:

Department of Forestry, Indonesia
Japan International Cooperation Agency

FRIM-NIES-UPM Joint research project on tropical forest ecology and biodiversity  
Project progress presentation (seminar) & the 20<sup>th</sup> Steering Committee Meeting  
Tsukuba 24 -25 September 2010

## Introduction



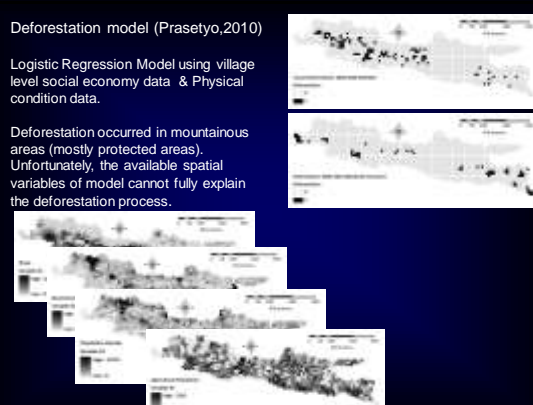
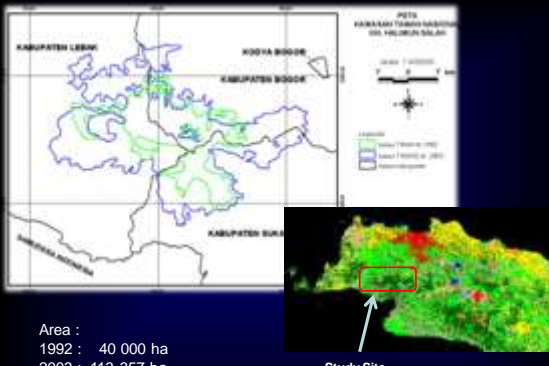
Java :

- Total population : 127 millions, 54% of Indonesia population (234 millions)
- Population density : 915 inhabitants / Sq.km.
- Deforestation in Java Island during 2000 – 2005 : 800 thousands ha

### Deforestation model (Prasetyo,2010)

Logistic Regression Model using village level social economy data & Physical condition data.

Deforestation occurred in mountainous areas (mostly protected areas). Unfortunately, the available spatial variables of model cannot fully explain the deforestation process.

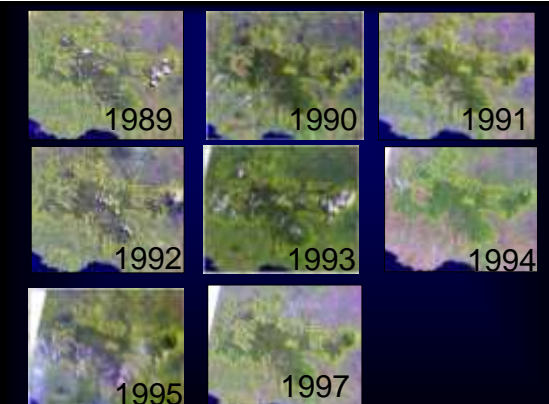
Area :

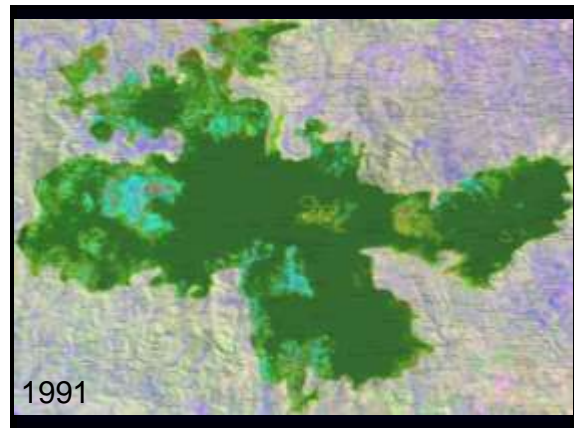
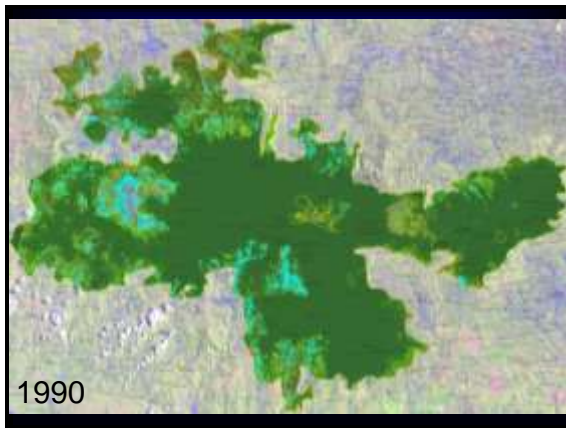
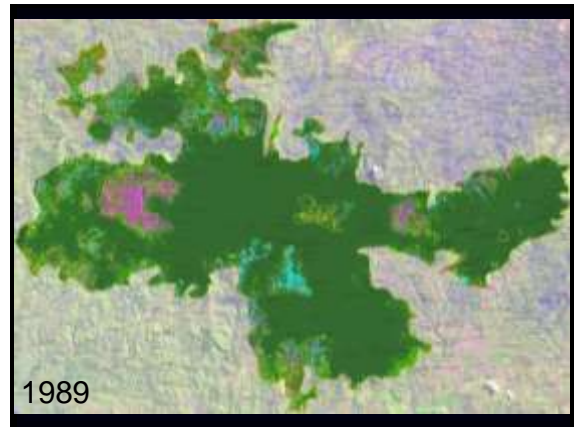
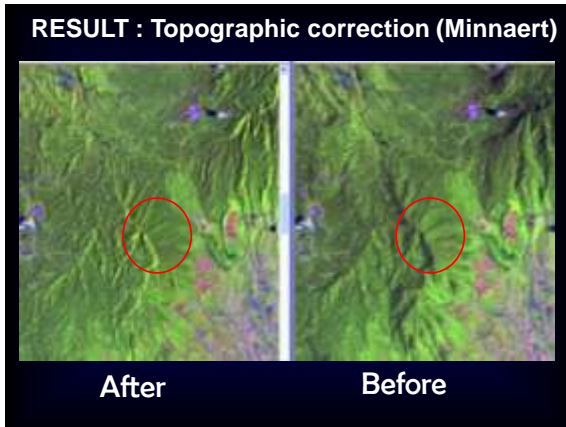
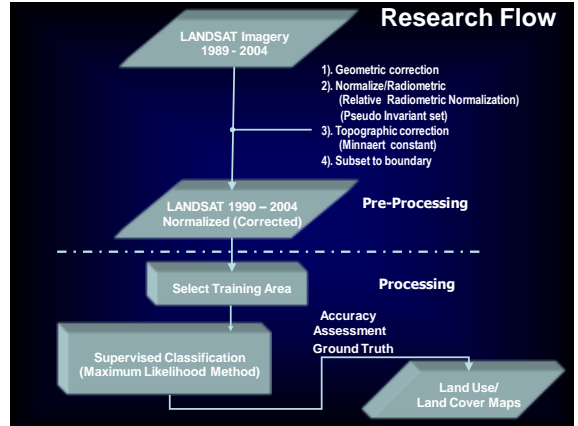
- 1992 : 40 000 ha
- 2003 : 113 357 ha

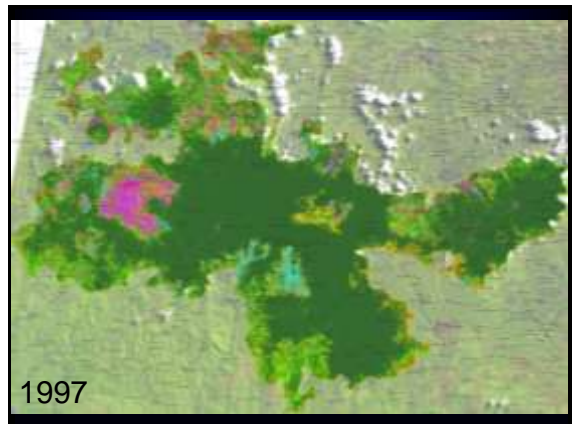
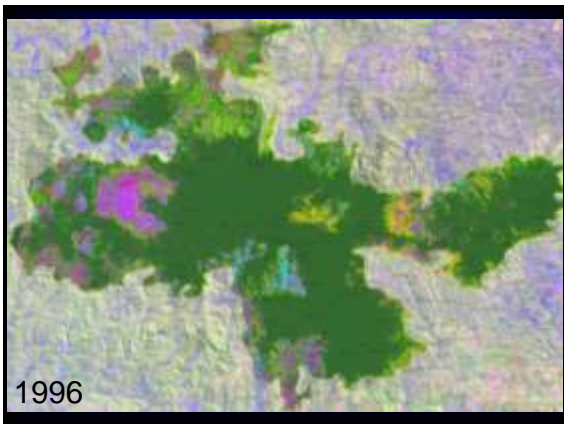
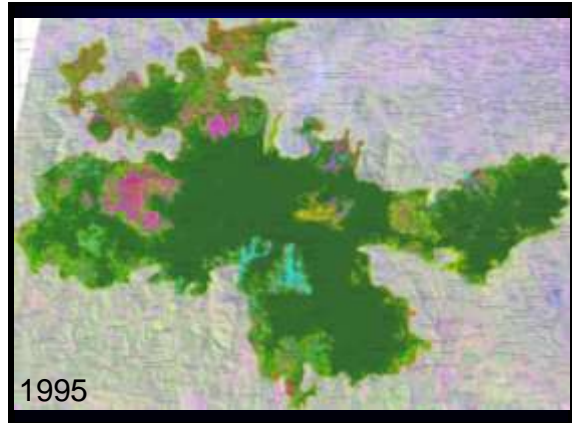
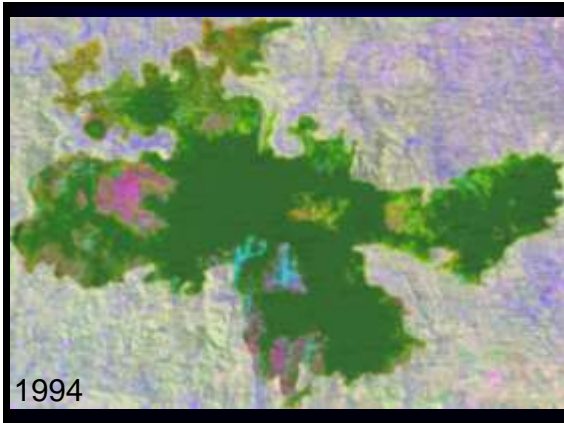
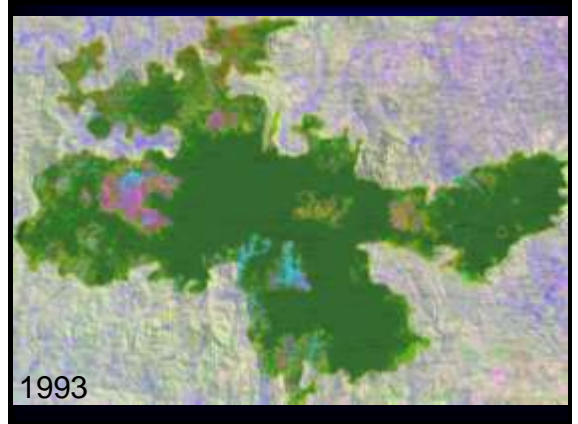
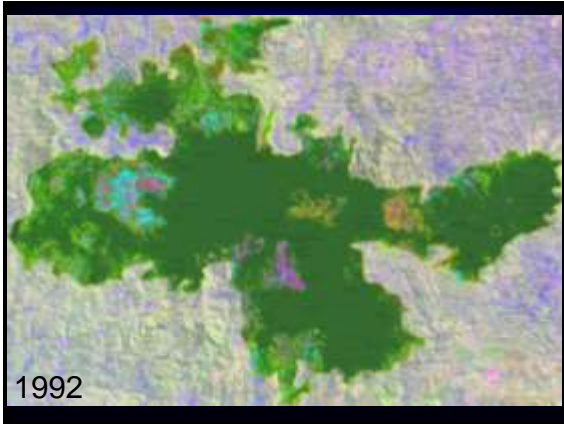
Study Site

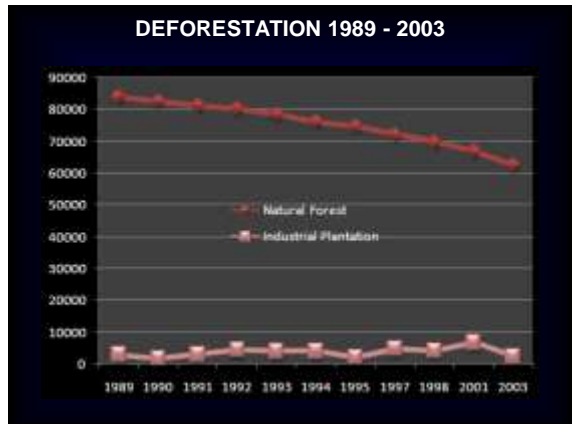
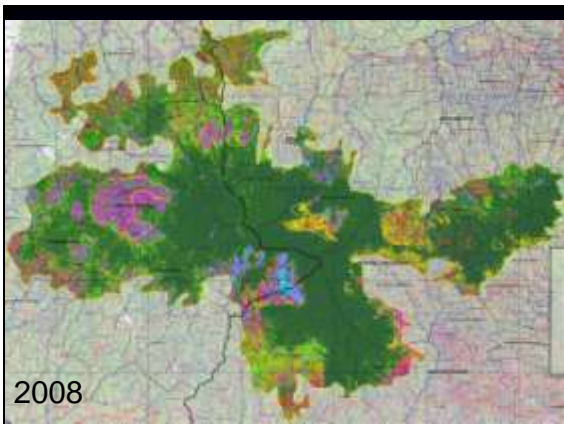
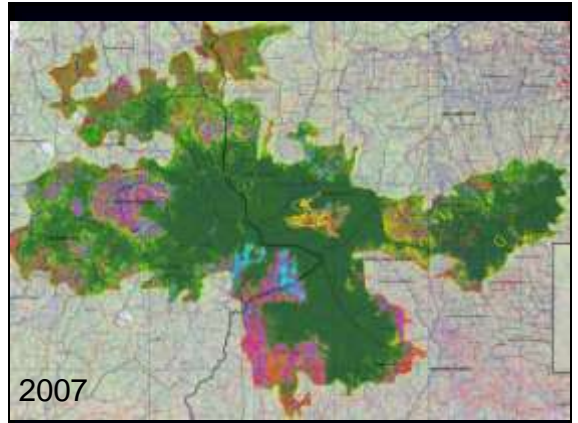
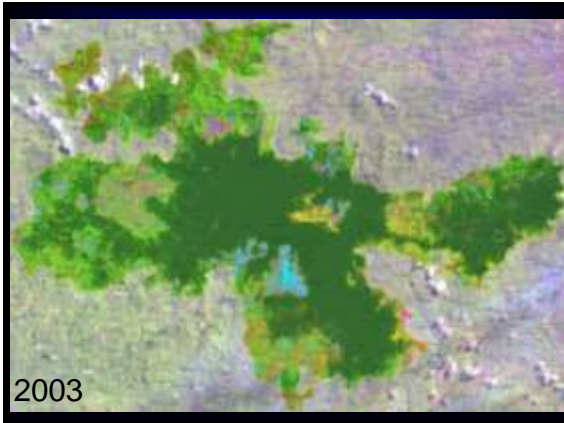
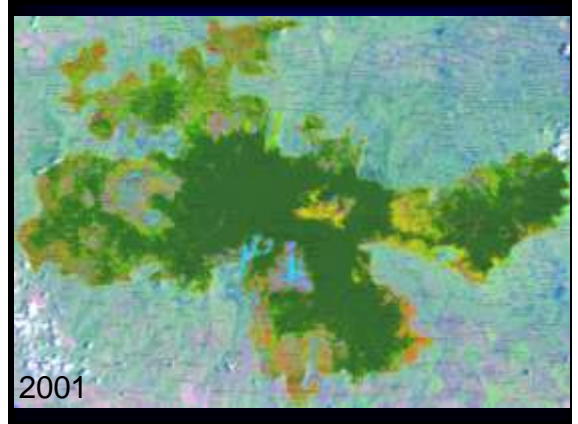
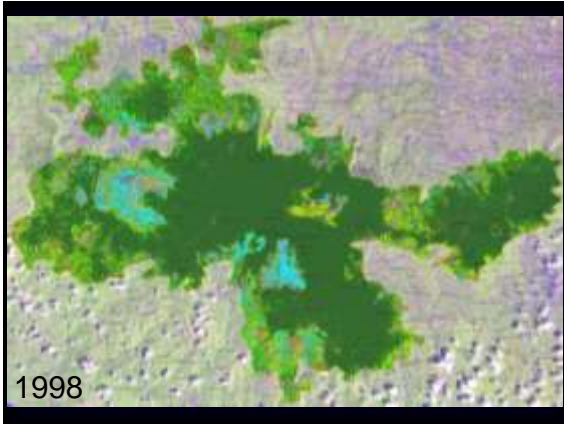
## Objectives

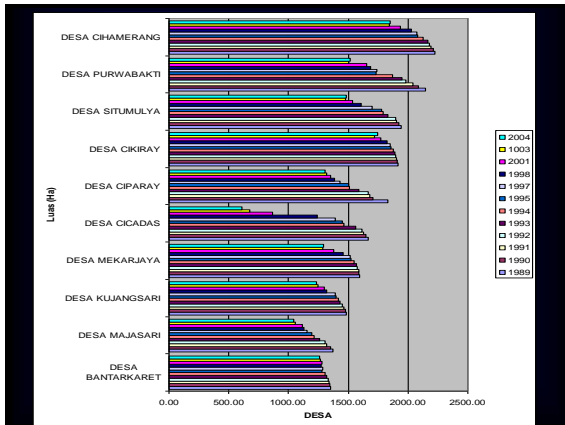
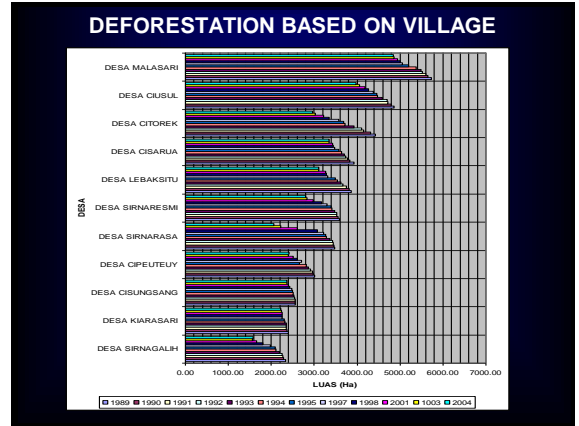
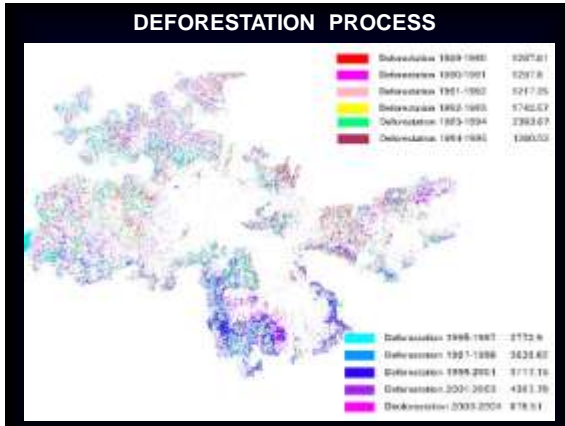
1. Look for appropriate data processing for longterm land use-land cover change in mountainous/hilly areas (1989-2008) (Prasetyo, Yudi, Permana)
2. Investigate underlying cause of deforestation within period of 1989 – 2004 (Yatab, Harjanto & Prasetyo)











### Villages Sample Selection

Sample selection based on :

- Traditional & Non Traditional
- Enclave & non Enclave

Interview/Questioner /secondary data:

- Demography
- Economic Activity
- Relation with forest resources
- Welfare (income, agric.land ownership etc)

Statistical Analysis : Regression  
 Dependent variables : Deforestation,  
 Independent variables : Secondary data & interview

## Conclusion

- Topographic correction is applicable for low to medium slope, but over corrected for steep slope.
- Significance Factor contributed to deforestation : population density, population growth, land ownership size, settlement and agricultural expansion.
- In case of non traditional villages & non-enclave, deforestation was influenced by :
  - Population growth rate, land owbership size.
  - Population density, settlement expansion
- In case of traditional dan non-enclave village : Deforestation was influenced by expansion of settlement