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INDONESIA COUNTRY REPORT

GEOSS Related Activities in Indonesia

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Introduction

- **Interseting Facts about Indonesia**
  - Indonesia is known as one of the worlds largest archipelagic state. Indonesia comprises around 17,508 islands that extend 5,150 km all across, right from the east to the west. (**http://www.buzzle.com**)
  - Indonesia also has numerous active volcanoes and people out here also have to be prepared due to the frequent number of earthquakes. (**http://www.buzzle.com**)
  - Indonesia is home to thousands of different plant and animal species. It has the second highest level of biodiversity in the world. (**http://wanttoknowit.com**)
  - Rice is the staple food in Indonesia
- **Earth observation technologies are the most effective tools to help a country like Indonesia to manage its natural resources and disasters for the benefit of the society (end users)**

Activity related to AP-BON

- ***Plant Diversity Observation Along Altitudinal Gradients of Some Indonesian Mountains*.**
  - **Objective and concepts:**
    - The objective of this project is to quantitatively describe patterns and trends of plant diversity in Indonesia and contribute to its systematic conservation. This project has been developed through a series of discussion in GEO-BON and AP-BON including Indonesian plant scientists and will be carried out as a part of the strategic research project on Asian Biodiversity sponsored by MoE Japan from July 2011 to March 2016 (5 years).
  - **Methodology and location**
    - Methodology employed in this project include 1) transect survey in the field, 2) taxonomic and phylogenetic study, 3) niche modeling, 4) trait ecology and 5) trend analysis.

Activity related to AP-BON

- **Locations:**
  - Mt. Gede-Pangrango National Park (NP) and Mt. Halimun-Salak NP, West Java
  - Mt. Gadut, West Sumatra
  - Bantimurung-Bulusaraung NP, South Sulawesi.
- **Reults:**
  - Based on our first year implementation of AP-BON in Indonesia, the joint research activities is very interesting and effective tool. New transect method implemented in this along altitudinal gradient is very effective method in identification plant diversity in one type ecosystem. Almost 80 % of total plant species that has been described in the flora Mt. Gede-Pangrango NP can be recorded by using this method in a relatively very short time (only 9 days). Our short survey in two transect in Bantimurung Bulusaraung NP (BBNP) shows almost the same patterns. By using this method we expected the numbers of plant species in BBNP may be double or may be triple of the current species numbers.

Activity related to AP-BON

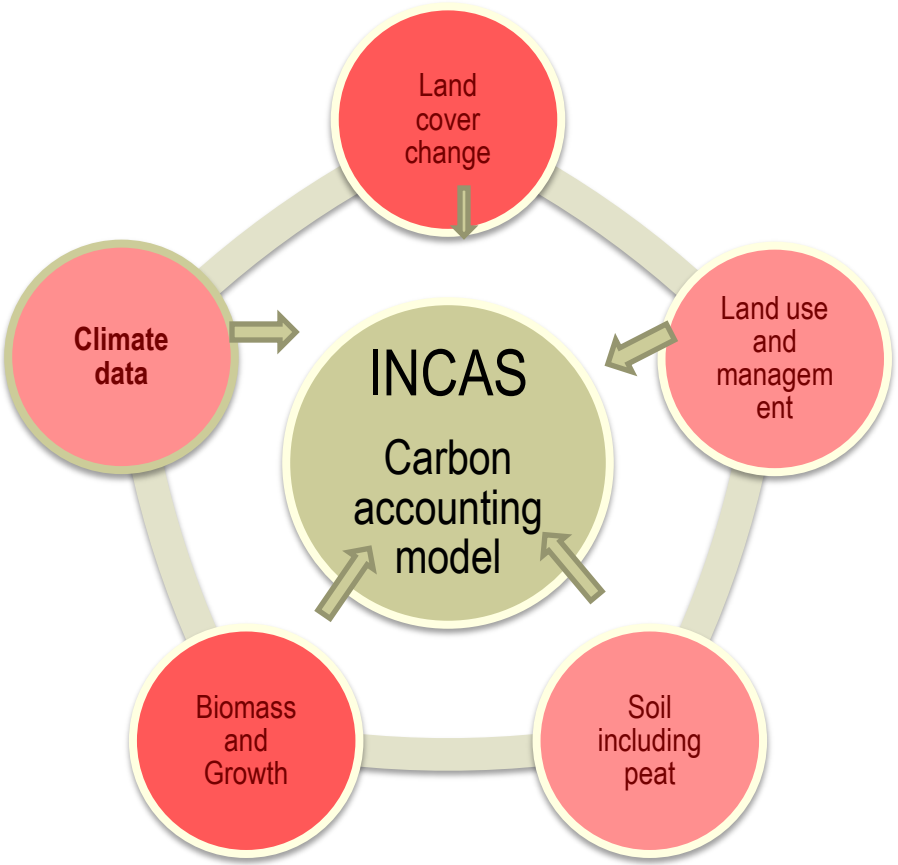
- **Reults:**
  - All data, maps, photos of plant species and plant distribution in national Park will be used as data-base and will be share and deposited in each National Park for their used. All important plant specimens will be deposted in Herbarium Bogoriense, RC Biology-LIPI for national references collection, and a local counterparts.
  - Therea re so many National Parks and protected areas in Indonesia do not have any complete Flora, due to the difficulty in documenting and identifications. This method can be adopted and impelemented for documenting any plant diversity in any protected area. However, experts and plant taxonomist on various plants groups are very important to participate in implementing this new methods.

Activity related to Forest Carbon Tracking

INDONESIA'S NATIONAL CARBON ACCOUNTING SYSTEM (INCAS)

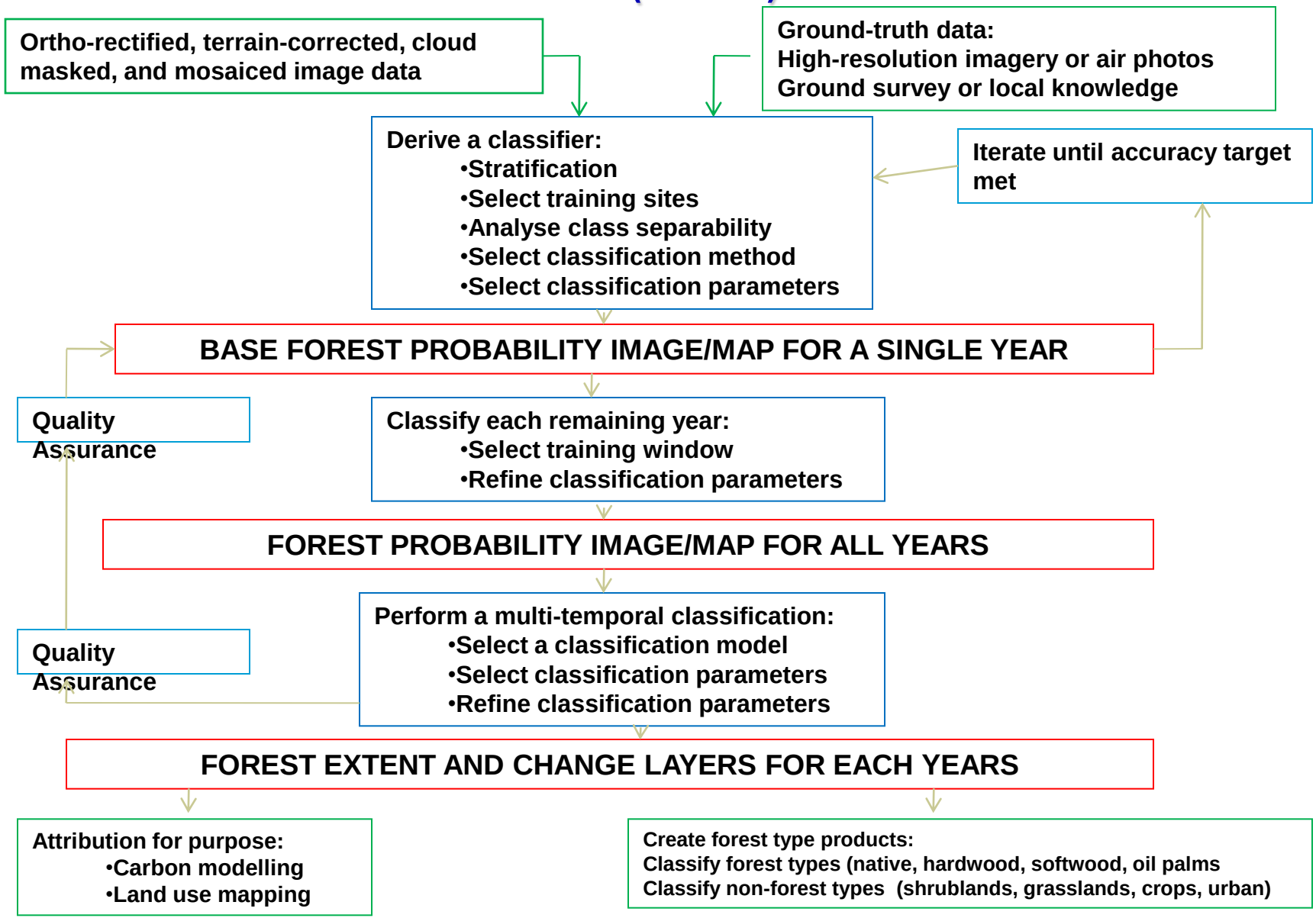
- The INCAS will provide a comprehensive and credible account of Indonesia's land based emissions profile and sinks capacity.

- The INCAS will support Indonesia's reporting requirements under the UNFCCC and a post-2012 climate change agreement . It will also support entry to carbon markets and the overall MRV system.

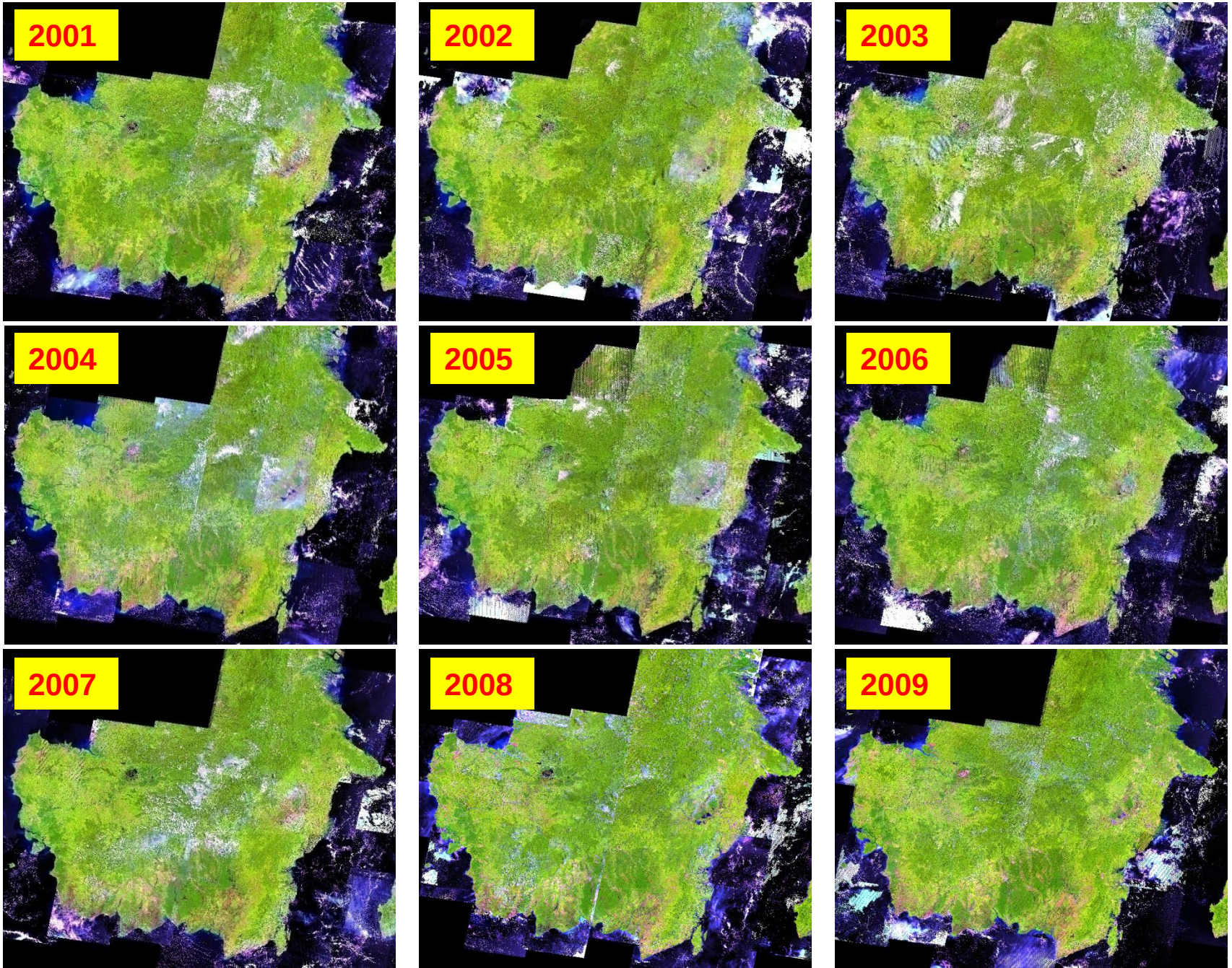


Key components of the INCAS

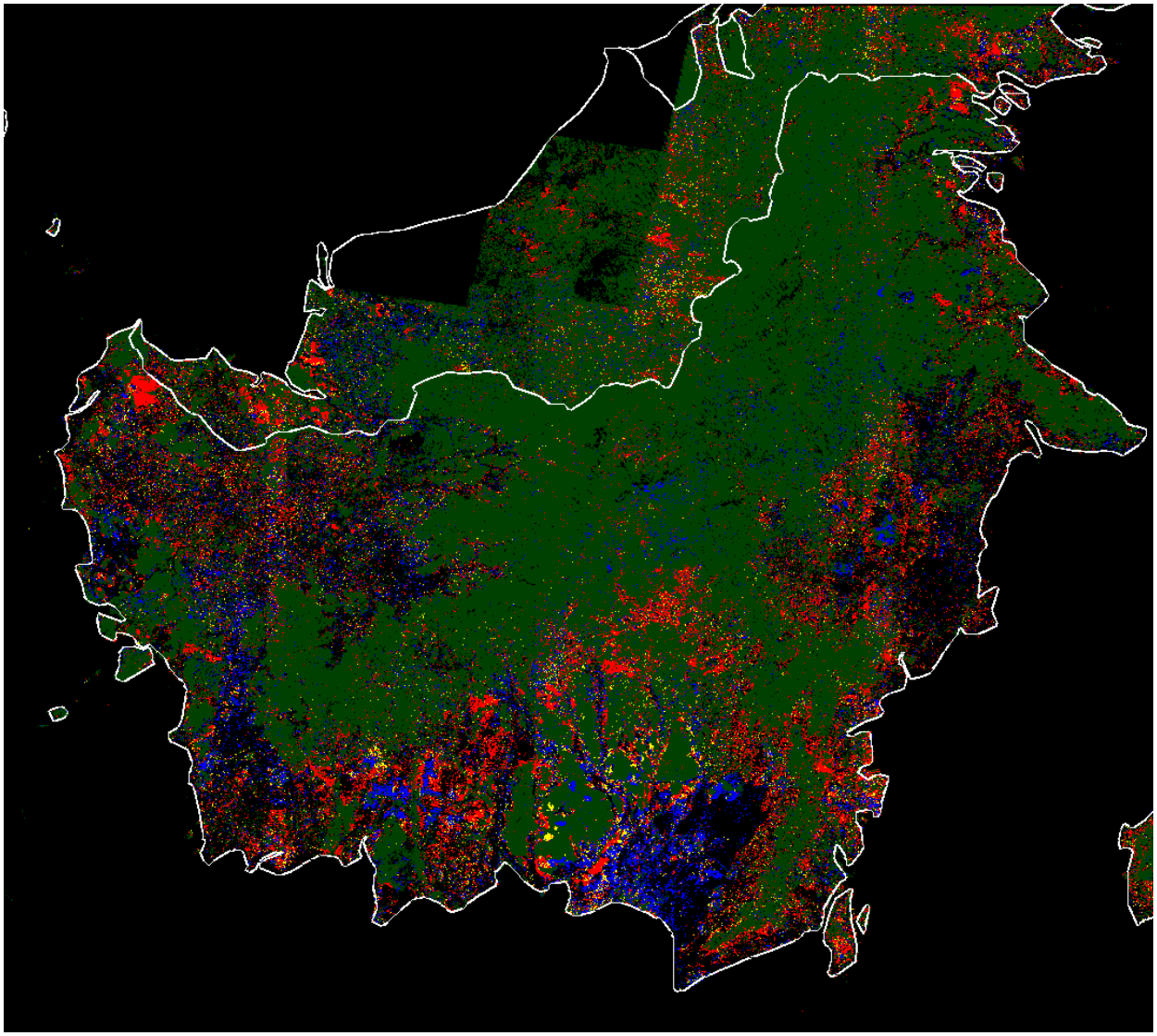
FOREST CLASSIFICATION PROCESSINGS (Landsat-based) TO SUPPORT INDONESIA'S NATIONAL CARBON ACCOUNTING SYSTEM (INCAS)



RESULT (ANNUAL MOSAIC OF KALIMANTAN)



FOR THE WHOLE OF KALIMANTAN ….



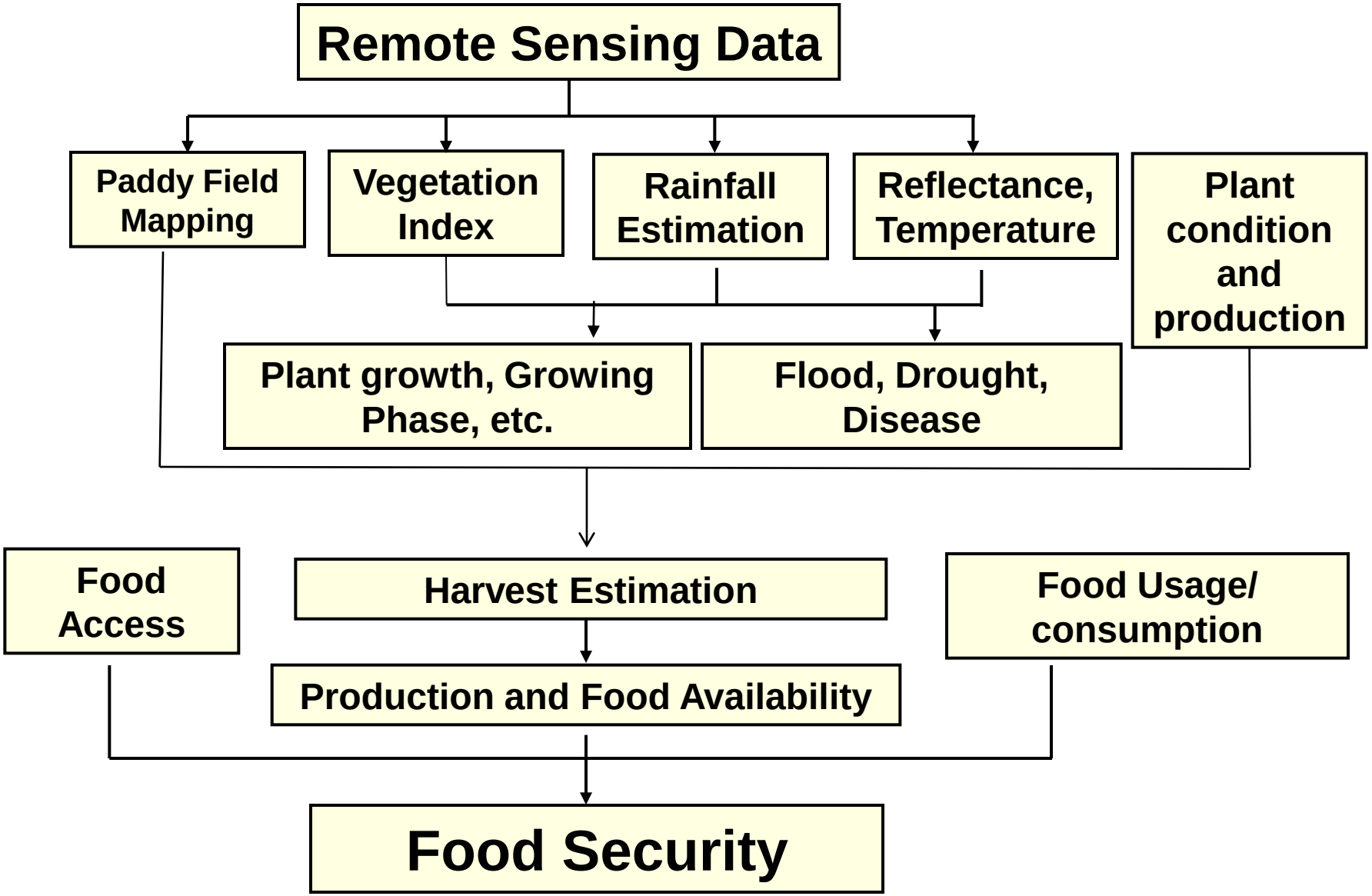
Forest in 2000

Forest Loss (Clearing) 2000-2009

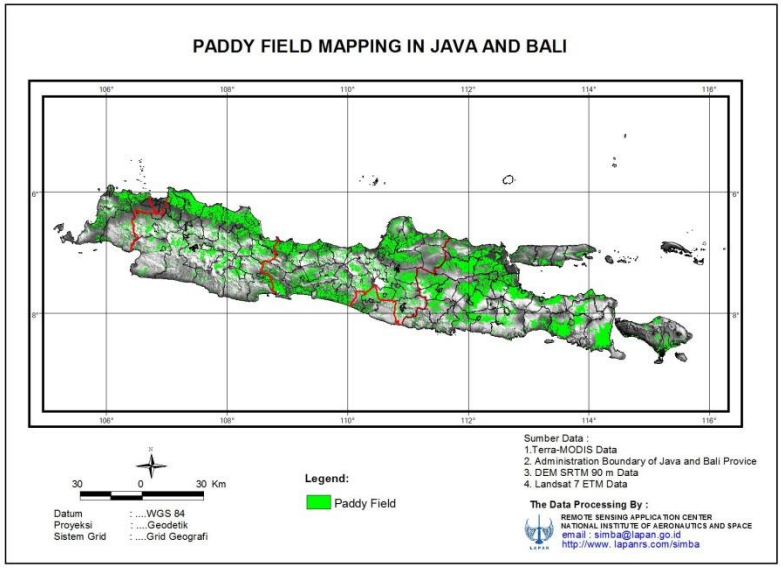
Forest Gain 2000-2009

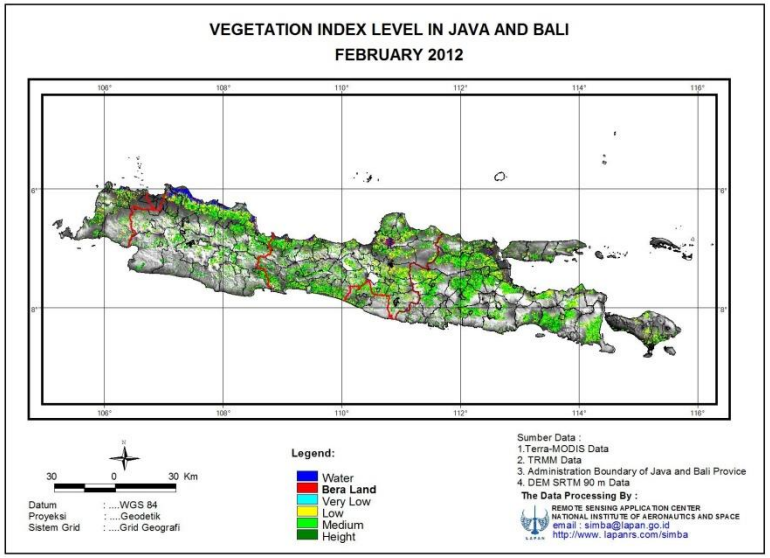
Loss and Gain

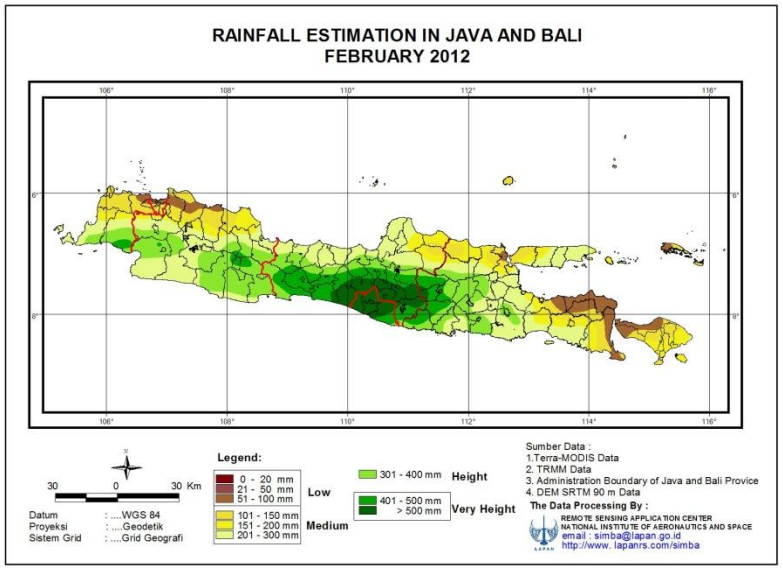
Activity related to Agriculture and Food Security

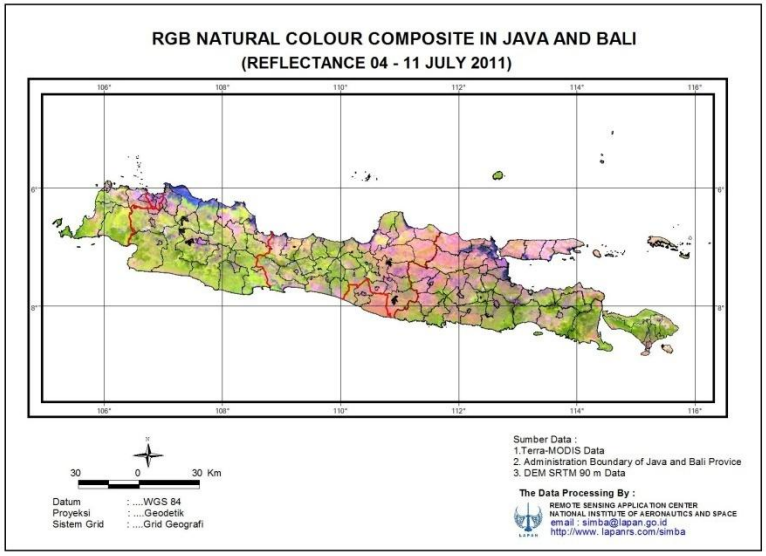


Agriculture and Food Security



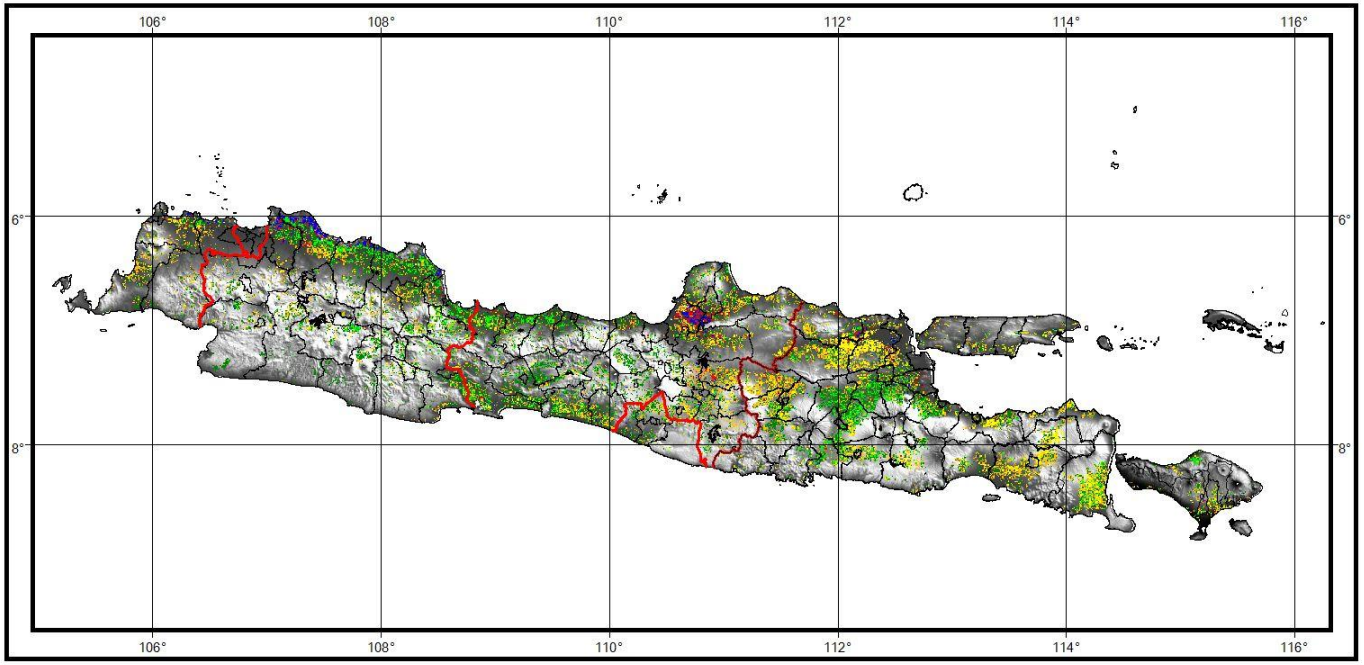






Growing Phase

GROWING PHASE OF PADDY FIELD IN JAVA AND BALI
18 - 25 FEBRUARY 2012



30 0 30 Km

Datum : ....WGS 84
Proyeksi : ....Geodetik
Sistem Grid : ....Grid Geografi

Legend:

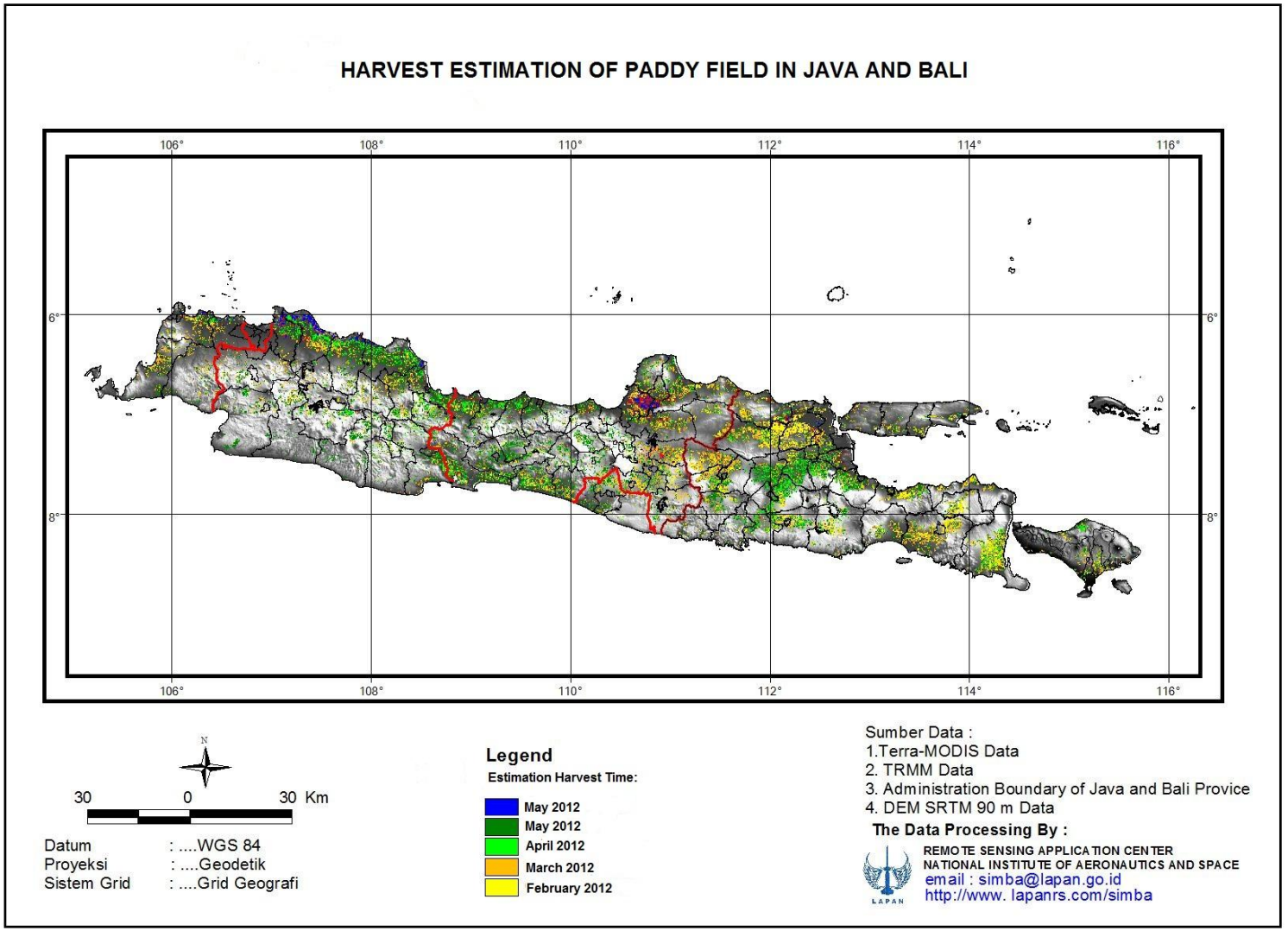
1. Water
2. Bare Land
3. Vegetative 1
4. Vegetative 2
5. Generative 1
6. Generative 2

Sumber Data :
1.Terra-MODIS Data
2. TRMM Data
3. Administration Boundary of Java and Bali Provice
4. DEM SRTM 90 m Data

The Data Processing By :

REMOTE SENSING APPLICATION CENTER
NATIONAL INSTITUTE OF AERONAUTICS AND SPACE
email : simba@lapan.go.id
http://www. lapanrs.com/simba

Harvest Estimation



THANK YOU VERY MUCH

T E R I M A K A S I H