

# The FRA 2010 Remote Sensing Survey

## The Global Context

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## **Technical Partners**

**Joint Research Centre**

**Université Catholique de Louvain**

**South Dakota State University**

## **Validation Partners and National Experts**

**National Government Agencies**

**Non-governmental Organizations**

**Academic Institutions**



# Why a Remote Sensing Survey



- **FAO Remote Sensing Survey will provide**
  - more consistent global data on forest area and change
  - repeatable methods 1990, 2000, 2005, +++ to get *trends*
  
- AND will**
  - improve the forest reporting capacity of many countries
  
- **Results reported globally and by ecozone - not for individual countries**

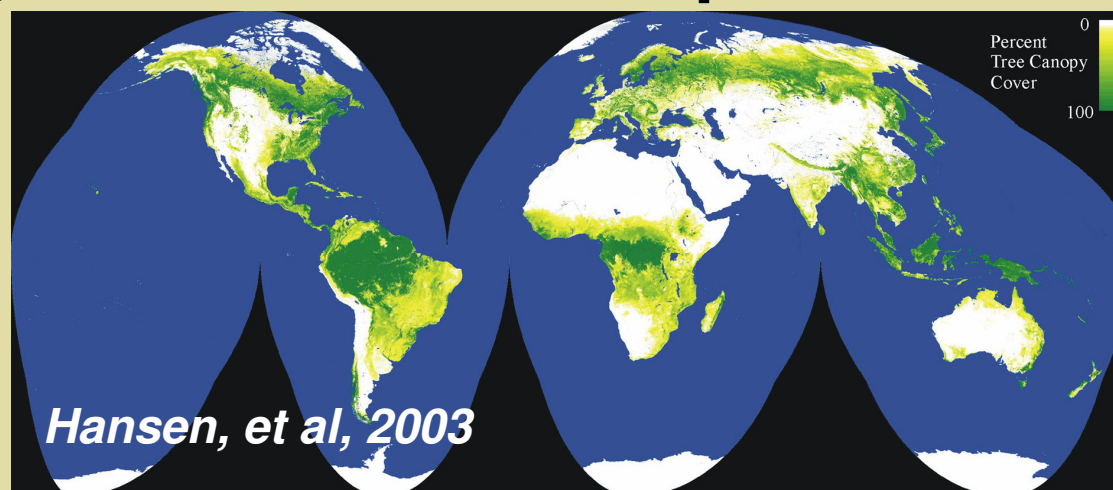
# Expected outputs – products



## 1. Global and regional *trends* in forest extent for 1990 – 2000 – 2005:

- **tree cover** and **forest** area and change
- other land use information for causes of change

## 2. New global tree cover maps (250 m resolution)



# Expected benefits



**A long-term, global monitoring framework for tree cover, forest and other land use**

(e.g. can contribute to REDD)

**Improved capacity to consistently monitor forest area and change over time, globally**

**Baseline data for research & modeling**

**A human network of technical experts, globally**

# Building on Capacity



- **Easy access to Landsat satellite images**
- **Free image viewing and labelling software**
- **15-20 regional workshops**



# 1 degree lat-long sampling grid



**13 000 + sites globally**

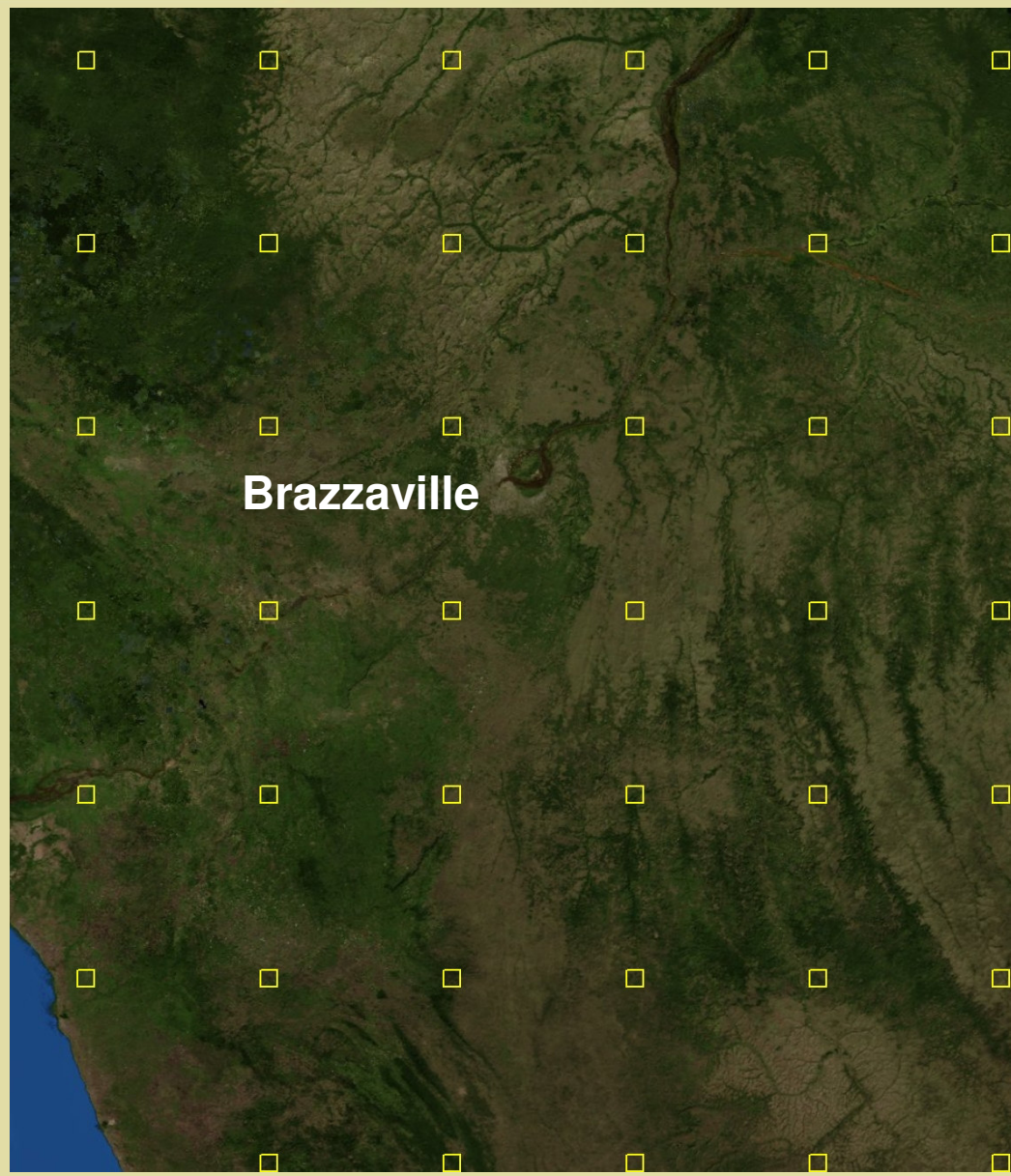
**52 000 + image samples from  
1990-2000-2005**

**10 km x 10 km size**

**Land Cover and Land Use**

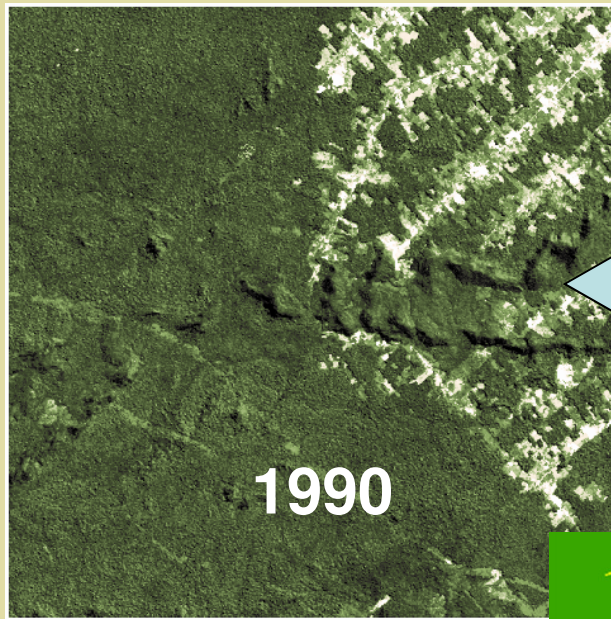


# 1 degree lat-long sampling grid



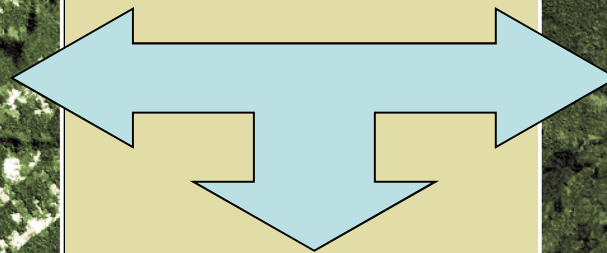


# Change detection

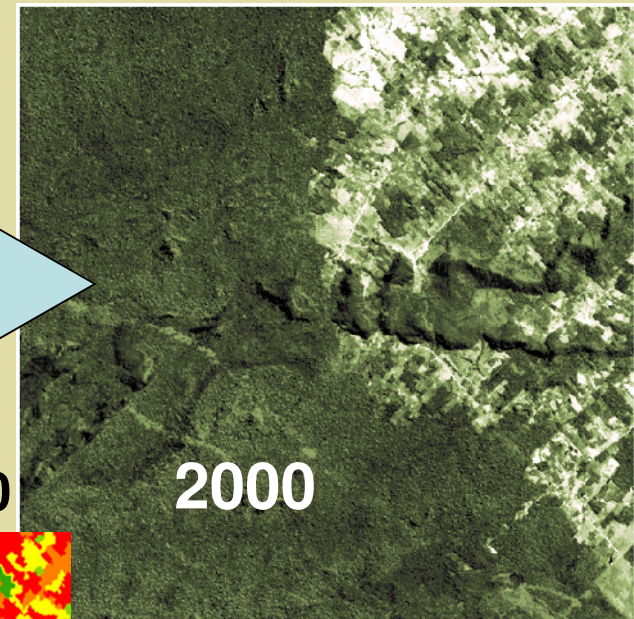


1990

Landsat 1990



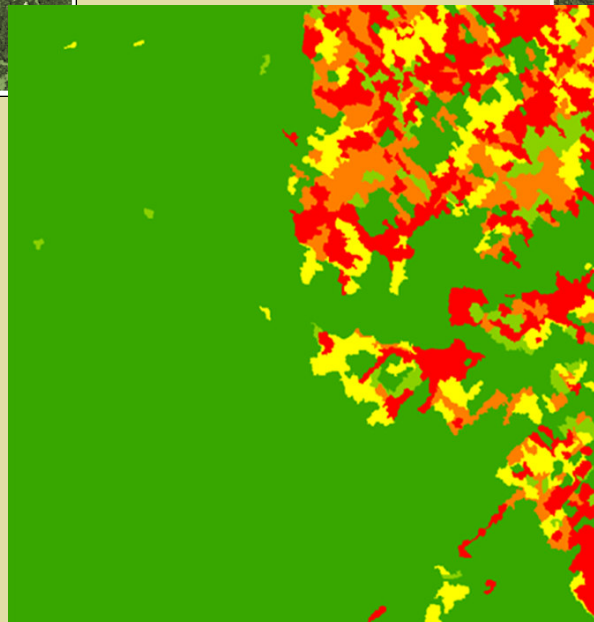
change 1990-2000



2000

Landsat 2000

**Brazil, SA**



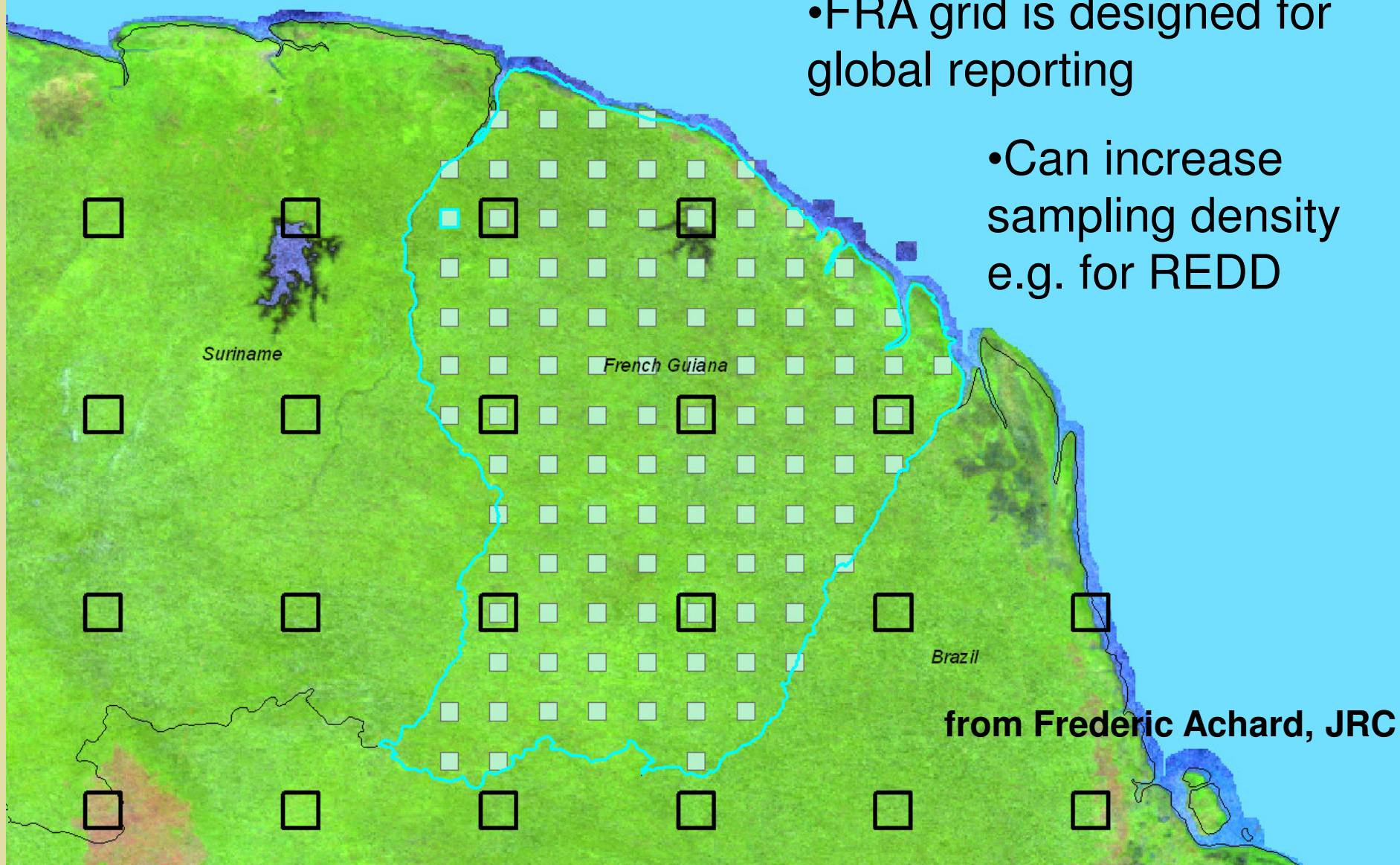
Change detection  
showing possible  
deforestation areas

# Increase sampling for National need



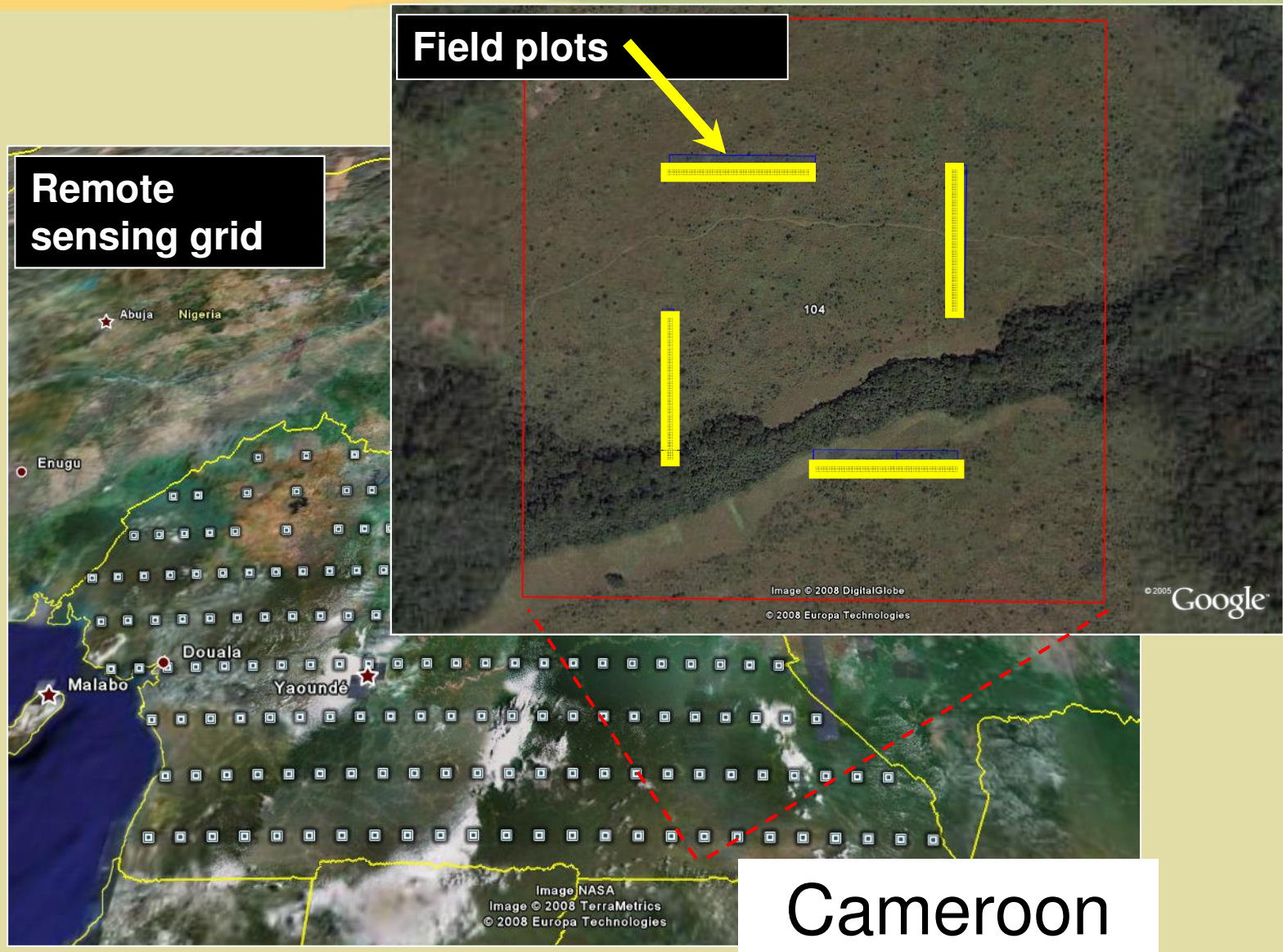
- FRA grid is designed for global reporting

- Can increase sampling density e.g. for REDD



from Frederic Achard, JRC

# Linking with ground surveys



# Linking with ground surveys



**Angola**

# Timetable



- **March – June 2009 - 22 countries Task Force to test and refine methods**
- **2009 and 2010: work with 175 countries**
  - Hold 15-20 regional workshops, training etc
- **2010: Report preparation**
- **2011: Final report**

# Conclusions



- 1. Robust design, partnerships with countries and quality technical support**
- 2. Global framework with strong country engagement**
- 3. Data and tools to improve forest area and change estimates**
- 4. Building on capacity to improve future forest monitoring**

# More Information



[www.fao.org/forestry/fra2010-remotesensing/en/](http://www.fao.org/forestry/fra2010-remotesensing/en/)