

# GEO FCT experience and lessons learnt - TANZANIA

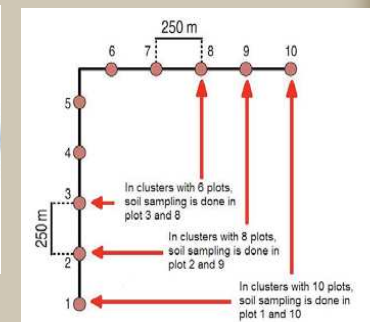
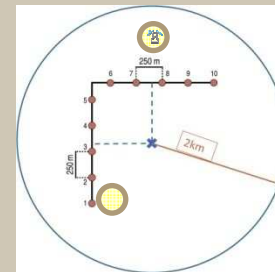
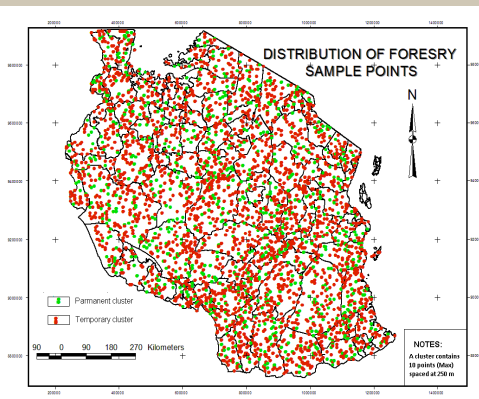


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GEO-FCT Side event- Durban SA  
Friday December 2, 2011



# Background

Since May 2009 Tanzania mainland embarked on a very ambitious forest inventory project (NAFORMA ) aiming at collecting Biophysical, Socio-economic, Soil and other forest related information.



**Biophysical:** about 3400 Sample Clusters out of which 850 are PSC

**Socio-economic:** about 5000 HH interviews  
Emphasizes people living in or near forests

**However,** before embarking to the real collection of the field data Tanzania, conducted stakeholder's information need analysis: Two issues featured were that NAFORMA should provide:

1. Information that can be used by District administration;
2. Data useful to the REDD+ mechanism

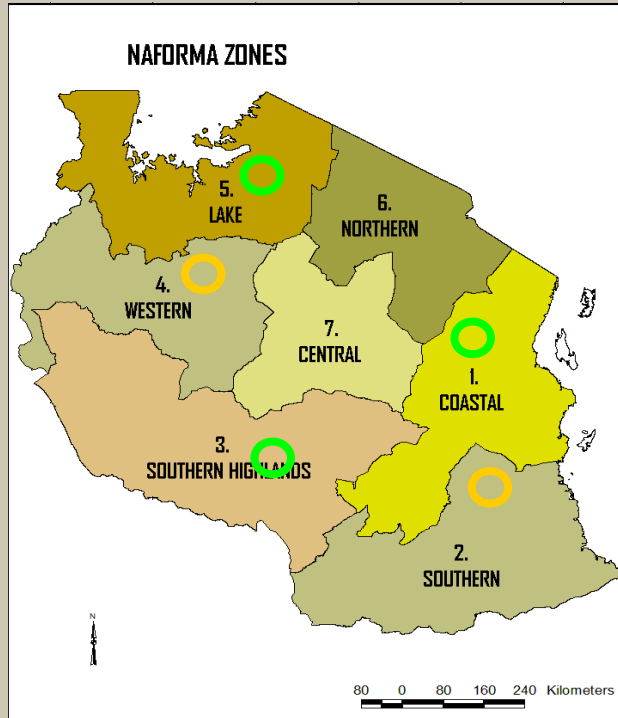
This Justified the need to review the standard FAO sampling design and methodology ([www.mnrt.go.tz](http://www.mnrt.go.tz) or [www.fao/forestry/17847/en/tza](http://www.fao/forestry/17847/en/tza))

# Objectives of NAFORMA



- 1 Establish broad consensus** at the national level on the process and approach to NAFORMA in Tanzania, taking into account national users' information requirements for planning and sustainable management of the forestry resources and country's obligations of reporting to the international processes including GHG reporting and expected REDD+ MRV.
- 2 Strengthen the capability of FBD/TFS** to collect, analyse, update and manage the needed information on forests and TOF for planning and sustainable management of the forestry resources and REDD+ MRV.
- 3 Develop a national database** and information system on Forests and TOF.
- 4 Prepare national maps** of forests and land uses based on harmonised classification and forest related definitions.
- 5 Undertake a national assessment** of the forest and TOF resources with the aim to create an information base according to national and international requirements and to set up a long term monitoring system of the resources.
- 6 Define long term monitoring programme** of the forestry resources, design specific and management oriented inventory in priority areas and formulate projects.
- 7 Develop Tools and methods for integration of REDD+ MRV** to NFMA methodology.

# What has so far been done



## Forest Inventory

App 2300 out of 3400 sample clusters measured (65%).

The rest to be done by early 2012

## Mapping

We are now editing the 2<sup>nd</sup> draft of the LULC map of 2010

## Data entry and analysis

- 70% of the collected cluster information entered in the database

- Primary analysis done for Rufiji District



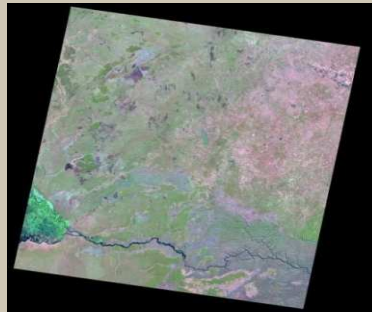
# Expected output



Field Data



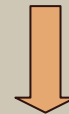
Remote Sensing



Maps



Socioeconomic data

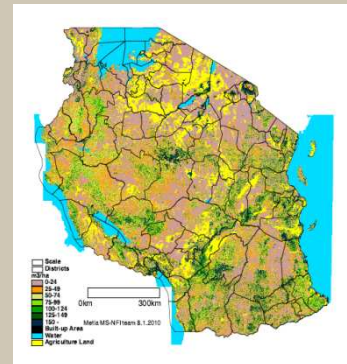


**PROCESSING**

Statistics



Thematic Maps



LU/LC map



# NAFORMA COLLABORANTS



National level

## NAFORMA

Info on Forest and TOF  
(Biophysical Socioeconomic  
and soils)

Based on field work

+ Land Cover Mapping

International level

### RS Initiatives

- GEO fct
- LiDAR
- Google EO
- FRA RSS
- NCAS-T
- ESA

Subnational level

SNU 1

SNU 2

SNU 3

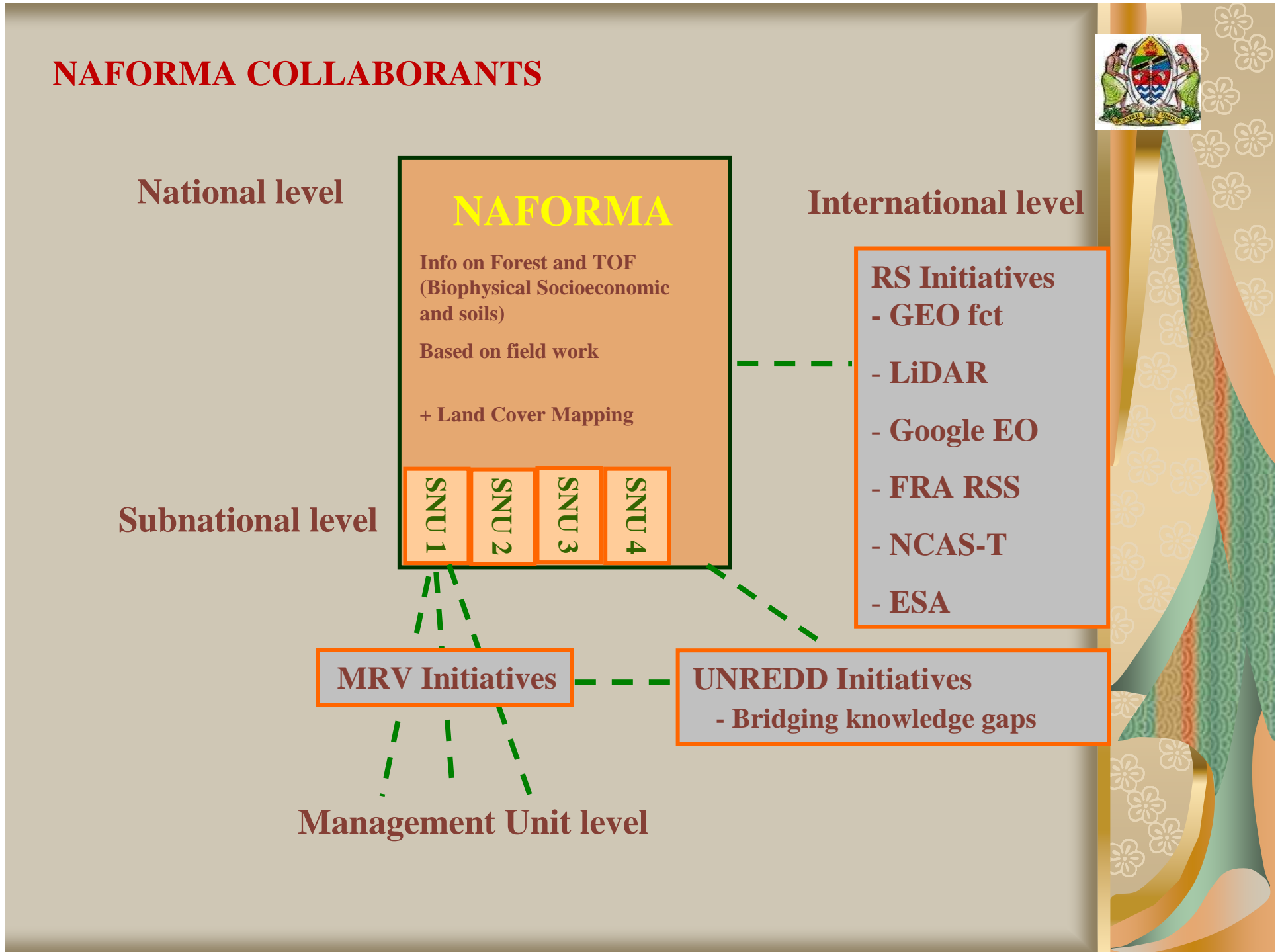
SNU 4

### MRV Initiatives

### UNREDD Initiatives

- Bridging knowledge gaps

Management Unit level





## GEO-FCT SUPPORT TO NAFORMA

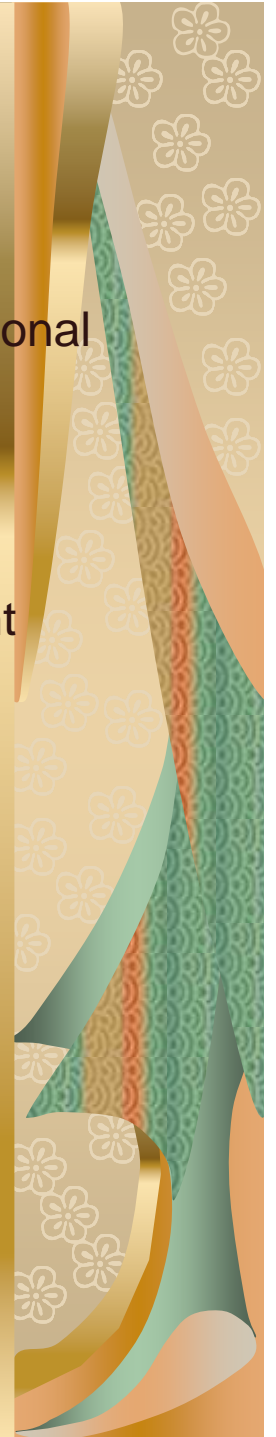
GEO-FCT supports NAFORMA IN THE FOLLOWING ASPECTS:

- Capacity building in terms of:
  - Satellite images acquisition,
  - processing techniques,
  - Acquisition of equipment and
  - Training at PhD and MSc levels
- Setting up of a robust and transparent national forest monitoring systems applicable even at the sub-national level
- Sharing information owned/generated by collaborating institutions;
- Testing of new approaches like LiDAR on continuous forest inventories and carbon accounting systems and forest cover change assessment;

## Conclusion

The NAFORMA process is very complex and requires inputs from both national and international stakeholders

The inputs from various partners including GEO-FCT will to a greater extent required in order to make NAFORMA a reality





**Thanks for being attentive**