

PROCEEDINGS OF THE FRA 2010
REGIONAL WORKSHOP FOR NATIONAL CORRESPONDENTS
FOR ANGLOPHONE AFRICA

NAIROBI, KENYA 7-9 OCTOBER 2008



December, 2008





The Global Forest Resources Assessment Programme

Sustainably managed forests have multiple environmental and socio-economic functions which are important at the global, national and local scales, and they play a vital part in sustainable development. Reliable and up-to-date information on the state of forest resources - not only on area and area change, but also on such variables as growing stock, wood and non-wood products, carbon, protected areas, use of forests for recreation and other services, biological diversity and forests' contribution to national economies - is crucial to support decision-making for policies and programmes in forestry and sustainable development at all levels.

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Global Forest Resources Assessment Programme. The Global Forest Resources Assessment 2010 (FRA 2010) has been requested by the FAO Committee on Forestry in 2007 and will be based on a comprehensive country reporting process, complemented by a global remote sensing survey. The assessment will cover all seven thematic elements of sustainable forest management, including variables related to the policy, legal and institutional framework. FRA 2010 is also aimed at providing information to facilitate the assessment of progress towards the Global Objectives on Forests of the United Nations Forum on Forests and the 2010 Biodiversity Target of the Convention on Biological Diversity. Results are expected to be published in 2010.

The Global Forest Resources Assessment programme is coordinated by the Forestry Department at FAO headquarters in Rome. The contact person is:

Mette Løyche Wilkie
Senior Forestry Officer
FAO Forestry Department
Viale delle Terme di Caracalla
Rome 00153, Italy

E-mail: Mette.LoycheWilkie@fao.org

Readers can also use the following e-mail address: fra@fao.org

More information on the Global Forest Resources Assessment programme can be found at:
www.fao.org/forestry/fra

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The FRA Working Paper Series provides an important forum for the rapid release of information related to the FRA programme. Should users find any errors in the documents or would like to provide comments for improving their quality they should contact fra@fao.org.

Forestry Department
Food and Agriculture Organization of the United Nations

Forest Resources Assessment Working Paper

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1 Preamble

During the Global Forest Resources Assessment 2010 (FRA 2010) meeting held in March 2008 in Rome, national correspondents participating at the event requested FAO to increase its support for capacity building at sub-regional and regional levels in forest resources assessment. To respond to this need, FAO has conducted a series of sub-regional and regional workshops as part of the preparatory work for the country reporting to FRA 2010. The Anglophone Africa workshop was one of the three sub-regional workshops held in Africa in the second half of 2008 (the other two being one for Central Africa and one for Francophone Africa).

The workshop was organized by FAO in collaboration with The World Agroforestry Centre-ICRAF.

The workshop took place at the ICRAF Conference Hall, Nairobi (Kenya) from 7 to 9 October 2008.

All countries participating in the workshop have an officially nominated FRA 2010 national correspondent. Most of the correspondents had attended the global FRA meeting in March 2008.

Prior to the workshop, national correspondents were requested to submit a first draft of their country report to the FRA 2010 Secretariat in Rome. Fourteen reports were received out of the 23 countries. All draft reports were reviewed and commented upon by the FRA 2010 focal point L. Russo.

Twenty three participants from 22 countries attended the workshop (see List of participants in Annex 1).

The workshops mainly focused on the contents of the 17 National Reporting Tables and, in parallel, discussed common data and information collection issues which were common to all the countries in the region. National Correspondents who were not able to attend the global meeting held in Rome, from March 3-7, 2008 were brought up to date on the FRA 2010 reporting process and the global remote sensing survey.

2 Workshop objectives

The objectives of the workshop were to:

- Provide technical assistance and guidance to the FRA correspondents in the sub-region in order to ensure high-quality reporting and to meet the specifications established for FRA 2010;
- Evaluate the progress made in preparing the country reports of the Global Forest Resources Assessment 2010,
- Identify problems and data gaps, if any, for each of the 17 tables in each participating country and suggesting ways to address these;
- Promote exchange of information and interest between the FRA correspondents and facilitate the establishment of a regional FRA network.

3 Content

The first day sessions were dedicated to introductory presentations on the workshop including organization of the workshop, self introduction by participants, presentation of the FRA 2010 reporting process and reporting methodology in order to give the participants a clear understanding of the workshop objectives and content, and to ensure their full participation. Following the introductory presentation the participants were briefed on the FRA 2010 remote sensing survey. The participants were invited to present the current status of their country report and identify problems or data gaps they were faced with.

The following technical sessions of the workshops were dedicated to clarification and discussion on the 17 national reporting tables and to addressing identified technical issues. Each of the 17 national reporting tables was introduced with a power point presentation highlighting the rationale of the table, and the main reporting aspects. The presentation was enriched by the real examples from the draft country reports received. Each session of presentation of the tables was followed by working group sessions. Three groups were formed (West Africa, Southern Africa, Eastern Africa).

All issues related to the reporting tables were clarified during the workshop. The background documents Guidelines for Country Reporting to FRA 2010 and Specifications of National Reporting Tables were consulted in detail during the working group discussions. The FRA 2010 website was presented to the participants and how to navigate in it to access the pre-filled country reports, the reference documents and how to link to FRA 2005 country reports.

The workshop was concluded by a general plenary discussion on the FRA 2010 reporting and the outcomes of the workshop.

Individual reviews of draft country reports

After the closing of the workshop, the draft country reports received by the FRA Secretariat were reviewed briefly with the respective National Correspondents. Specific points were addressed and clarifications sought.

4 Results

The organisation of the workshops was timely and contributed well to enhancing the understanding and knowledge of the participants on the FRA 2010 process.

All FRA nominated correspondents of the Anglophone African countries attended the workshop – except the correspondent from the Seychelles - and participated actively in the discussions. More than half of the correspondents provided their draft report before the start of the workshop, the others being mainly those that had not attended the global meeting in March and were not enough informed.

As mentioned above, all issues raised by the participants were resolved during the workshop. Answers were often formulated by the FRA correspondents themselves based on their own experiences and the reference documents.

The workshop has certainly strengthen the already existing good regional network of FRA correspondents. Indications suggested that the workshop achieved its objective with most countries feeling quite confident that they will be able to complete their reports within the established timeframe.

5 Annexes

Annex 1 – List of Participants

BOTSWANA

Dr Mmasera Manthe-Tsuaneng
Director
Department of Forestry and Range
Resources
P.O. Box 00424
Gaborone
Mmanthe-tsuaneng@gov.bw
manthet@yahoo.co.uk

ERITREA

Mr Estifanos Bein
Director
Ministry of Agriculture
Environmental Quality Division
P.O. Box 1048
Asmara
estbein@moa.gov.er
Tel. 291-1-158840

ETHIOPIA

Mr Sileshi Getahun
Natural Resources Management
Department, Coordinator
Ministry of Agriculture and Rural
Development
P.O. Box 62347
Addis Ababa
gsleshi@yahoo.com
Tel: +251-115-507003
Mobile: +251-913-544628

GAMBIA

Mr Lamin Bojang
Deputy Director
Forestry Department
No.5 Marina Parade
Banjul
Laminhawa@hotmail.com
Mobile: +220 9869026

GHANA

Mr Kofi Affum Baffoe
Manager
Ghana Forestry Commission
Resource Management Support Centre
P.O. Box 1457
Kumasi
Kofi1964/ba/@hotmail.com

LIBERIA

Mr Edmond K. Zowulu
Manager
Forestry Development Authority
Statistics and Database Management
Kappa House
P.O. Box 103010
Monrovia 10
edmondkzowulu@yahoo.com

MAURITIUS

Mr Poojanraj Khurun
Ag. Deputy Conservator of Forests
Ministry of Agro-Industry and
Fisheries
Forestry Service
Botanical Gardens Street
P.O. Box 445
Curepipe
pkhurun@mail.gov.mu

MOZAMBIQUE

Ms Carla Cuambe
Ministry of Agriculture
Natural Resources Inventory
Av. Josina Machel No. 537
P.O. Box 288
Maputo
carlacuambe@hotmail.com

NAMIBIA

Ms Ndapanda Kanime
Acting Chief Forester
Ministry of Agriculture, Water and
Forestry
Directorate of Forestry
P/Bag 2144
Rundu
Kavango region
Namibia
Ndapanda10@hotmail.com
Tel. +26466-265452
Fax: +26466-255944

NIGERIA

Mr Adedoyin Oye Simon
Federal Department of Forestry
P.m.B 5011
Jericho, Ibadan
osadedoyin@yahoo.com
Tel: 0805-485-4006

SIERRA LEONE

Mr Gilbert Koker
Senior Assistant Conservator of
Forests
National commission on the
Environment and Forestry (NaCEF)
Youyi Building
Freetown
Gilbertkoker@yahoo.co.uk
Mobile: +232 76 634197

SOMALIA

Mr Jeylani Abdullahi Osman
Forestry Officer
Ministry of Livestock, Forestry and
Range
Mogadishu
Jeylani2000us@yahoo.com

SOUTH AFRICA

Mr Joel Matshate
Deputy Director
Department of Water Affairs and
Forestry
191 Schoeman Street
0001 Private Bag x 93
Pretoria
matshatej@dwaf.gov.za

Ms. Sindy Bogo
Assistant Director
Department of Water Affairs and
Forestry
191 Schoeman Street
0001 Private Bag x 93
Pretoria
Bogos@dwaf.gov.za

SUDAN

Mr Salah Yousif Mohammed
Director Technical Sector
Kordofan Region
Federal Ministry of Agriculture and
Forestry
Forests National Corporation
P.O. Box 658 Khartoum
Salahyousifnc@yahoo.com

SWAZILAND

Ms Futhi Felicity Magagula
Forestry Officer
Ministry of Agriculture and
Cooperatives
Forestry Section
P.O. Box 162
Mbabane
magagulaf@gov.sz
Tel. 00268-4042731-9 (w)
00268-6258079 (mob)

UGANDA

Mr David Odeke Elungat
Coordinator Inventory and Surveys
National Forestry Authority
10/210 Spring Road
P.O. Box 70863
Kampala
divide@nfa.org.ug

UNITED REPUBLIC OF TANZANIA

Mr Gerald Jones Kamwenda
Senior Forestry Officer – Team Leader
National Forest Assessments
Ministry of Natural Resources and
Tourism
TFCMP Ivory Room
Nyerere Road
P.O. Box 40832
Dar Es Salaam
tfcm@intafrica.com

ZAMBIA

Mr Jackson M. Mukosha
Senior Extension Officer
Management and Planning
Forestry Department Headquarters
P.O. Box 50042
Lusaka
mukosha@alumni.itc.ni

ZIMBABWE

Mr Anthony S. Mvududu
Ministry of Environment and Tourism
Forestry Commission
1 Orange Grove Drive Highlands
HG 139 Highland
Harare
anthonymvududu@yahoo.co.uk
tony@frchigh.co.zw

FAO

Mr Foday Bojang
Senior Forestry Officer
Regional Office for Africa
Accra, Ghana
foday.bojang@fao.org

Mr Rene Czudek
Forestry Officer
Sub-regional Office for Southern
Africa
Harare, Zimbabwe
rene.czudek@fao.org

Mr Michel Laverdière
Forestry Officer
Sub-regional Office for Eastern Africa
Addis Ababa, Ethiopia
michel.laverdière@fao.org

Ms Laura Russo
Forestry Officer
FRA Secretariat
Forest Products and Industries Division
Forestry Department,
Rome, Italy
laura.russo@fao.org

Annex 2 – Agenda for the workshop

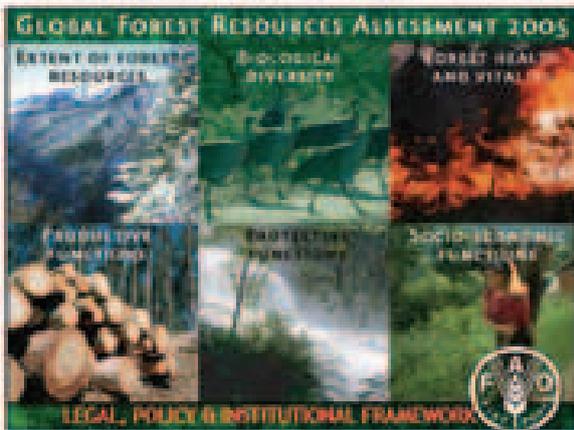
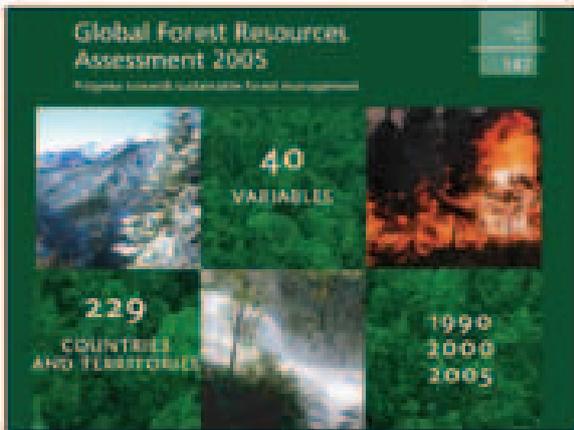
Tuesday 7 October 2008		
Time	Item	Agenda notes
09:00-09:20	Item 1	Opening session Welcome address Self introduction of participants
09:20-09:30	Item 2	Organization of workshop Presentation of workshop objectives and expected outputs Questions and clarifications
09:30-10:00	Item 3	Presentation of FRA 2010 Overview of FRA 2010 Remote sensing survey Review of methodology for country reporting
10:00-10:20	Tea – Coffee break	
10:20-12:30	Item 4	Status of country reports Presentations by National Correspondents on the status of their country reports and also highlight any problems or data gaps they are faced with.
12:30-13:30	Lunch break	
13:30-16:30	Item 5	Technical session 1 –Review of reporting tables <u>Presentation of national reporting tables 1-5</u> T1 Extent of Forest and Other wooded land T2 Ownership and management rights T3 Forest designation and management T4 Forest characteristics T5 Forest establishment and reforestation Review of the above tables in working groups
15:00-15:20	Tea – Coffee break	
15:20-16:30	Item 5 Cont.	Technical session 1 continued
18.30	Cocktail	

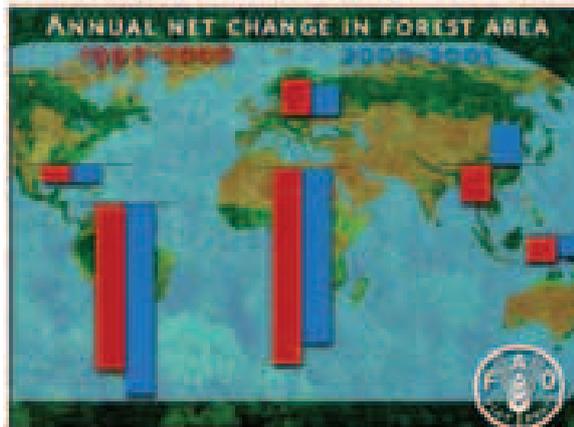
Wednesday 8 October 2008		
Time	Item	Agenda notes
09:00-12:30	Item 6	Technical session 2 –Review of reporting tables <u>Presentation of national reporting tables 6-10</u> T6 Growing stock T7 Biomass stock T8 Carbon stock T9 Forest fires T10 Other disturbance affecting forest health and vitality Review of the above tables in working groups
10:00-10:20	Tea – Coffee break	
10:20-12:30	Item 6 Cont.	Technical session 2 continued.
12:30-13:30	Lunch break	
PM	Item 7	Field trip

Thursday 9 October 2008		
Time	Item	Agenda notes
09:00-11:00	Item 8	Technical session 3 –Review of reporting tables <u>Presentation of national reporting tables 11-17</u> T11 Wood removals T12 Non-wood forest products removals and value of removals T13 Employment in forestry T14 Policy legal framework T15 Institutional framework T16 Education and research T17 Public revenue collection and expenditure
10:00-10:20	Tea – Coffee break	
11:00-12:30	Item10	Individual meetings with national correspondents to review draft country reports
12:30-13:00	Item 11	Closing of the workshop Concluding discussion Summary of outcome and findings of the workshop

Annex 3 – Presentations

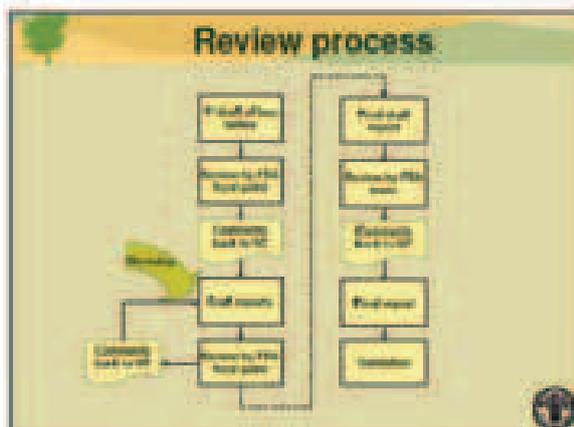
Please note that presentations made by countries can be forwarded on demand. For a copy please send a message to Laura.Russo@fao.org





Country Reports

T 1	Extent of forest and other wooded land	T 10	Other disturbances affecting forest health and vitality
T 2	Forest ownership and management rights	T 11	Wood removal and value of removal
T 3	Forest designation and management	T 12	WFPD removal and value of removal
T 4	Forest characteristics	T 13	Employment
T 4a	Forest composition and composition	T 14	Policy and legal framework
T 4b	Forestry stock	T 15	International cooperation
T 7	Business status	T 16	Education and research
T 8	Carbon stock	T 17	Public awareness, media and communication
T 9	Forest fires		



Getting started...

- Start early
- Organize the team
- Identify and locate focal points for other reporting processes
- Start with the key tables (T1, T3a, T4a, T6) and send in a draft report with these tables as soon as possible
- Consult with FRA focal point if in doubt or if you need advice

Milestones for FRA 2010

- Regional workshops April 2008 – December 2008
- Dead line for submission of Country reports March 2009
- Deadline for submission of final country reports May 2009
- Validation of final country reports July-August 2009



Next steps

- FRA 2010 was officially launched 3-7 March 2008
- 2008-2009: Regional workshops (country reports and remote sensing) and bulk of work for countries
- 2010: Release of Key Findings; Report preparation & dissemination
- 2011: Final report from global remote sensing survey



Methodology for country reporting to FRA 2010

1. Documentation of national data and data sources
 2. Analysis of national data
 - Calibration
 - Estimation and forecasting
 - Reclassification
- ⇒ Output National data according to FRA Specifications and reporting years

1. National data and data sources

1. Identify potentially useful data sources
2. Evaluate: content, completeness, quality and compliance with FRA definitions
3. Documentation of data sources
4. Documentation of national definitions and original data

2. Analysis of national data

Calibration
Estimation and forecasting
Reclassification

Example on calibration

National data	FRA definition
Forest	1000
Shrubland	1000
Agriculture	1000
Grassland	500
Urban land	500
Other	500
TOTAL	5000

Calculating the calibration factor
 Forest and agriculture = 2000/5000 = 0.4
 Shrubland = 1000/5000 = 0.2

Calibrated national data	FRA definition
Forest	400
Shrubland	200
Agriculture	400
Grassland	250
Urban land	250
Other	250
TOTAL	2000

Estimation and forecasting

- Interpolation and/or extrapolation of data to requested reporting years (1990, 2000, 2005 and 2010)

Example estimation and forecasting

National class	National data			Estimated/forecasted data			
	1990	2000	2005	1990	2000	2005	2010
Forest	700	1000	1000	700	1000	1000	1000
Shrubland	200	2000	2000	2000	2000	2000	2000
Agriculture	200	2000	2000	2000	2000	2000	2000
Grassland	500	500	500	500	500	500	500
Urban land	100	100	100	100	100	100	100
Other	500	500	500	500	500	500	500
TOTAL	2000	2000	2000	2000	2000	2000	2000

In this example,
 there is interpolation for 1990 and there is extrapolation for 2005, 2000 and 2010

Reclassification

- Transform data according to national classes to correspond to FRA 2010 categories
- Reclassification matrix

Example on reclassification

National class	FRA 2010 Categories			Total
	Forest	OWL	Other land	
Forest	100%			100%
Shrubland	20%	80%		100%
Agriculture			100%	100%
Swamp			100%	100%
Urban land			100%	100%
Other			100%	100%

Analysis of national data

Suggested order of application

1. Calibration
 2. Estimation and forecasting
 3. Reclassification
- Ensures documentation of trends according to the national classes

Missing or incomplete data

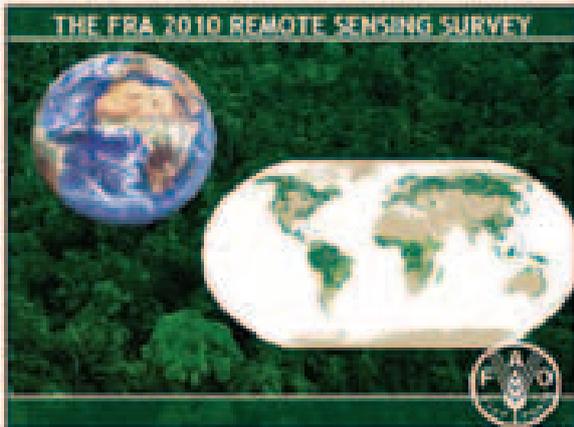
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Expert estimates
Use "n.a." not available

Comment fields

1. Comments related to data and definitions
2. Comments on reported trend
3. Other general comments

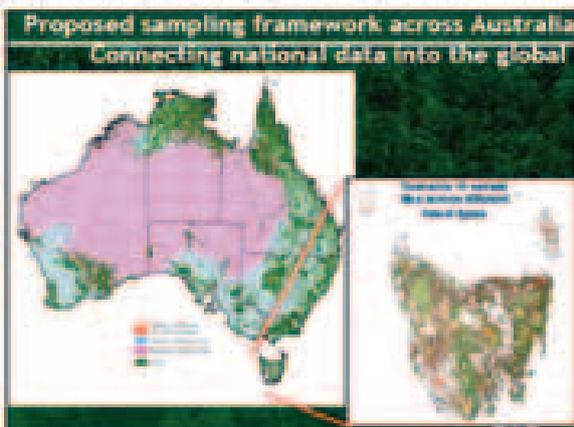
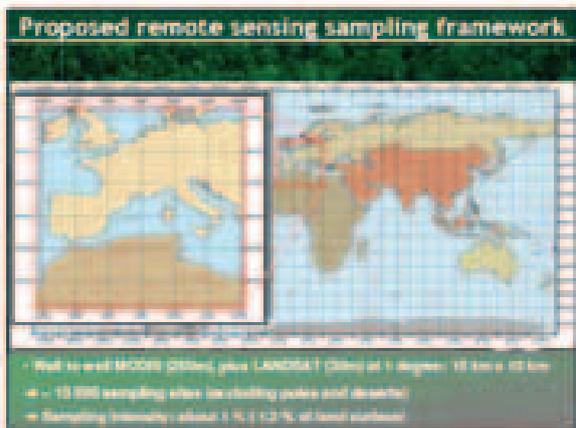
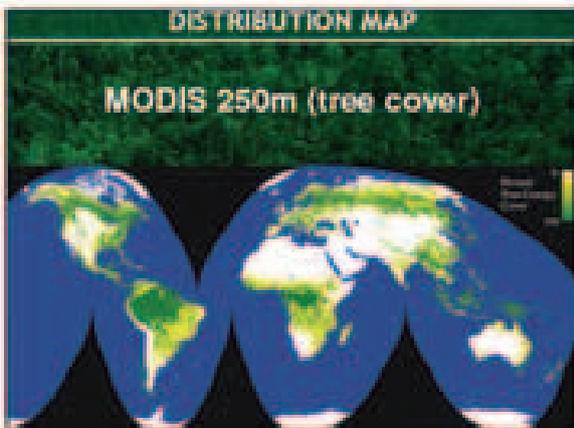
Concluding remark

- Reported data should be traceable back to the original data and data source



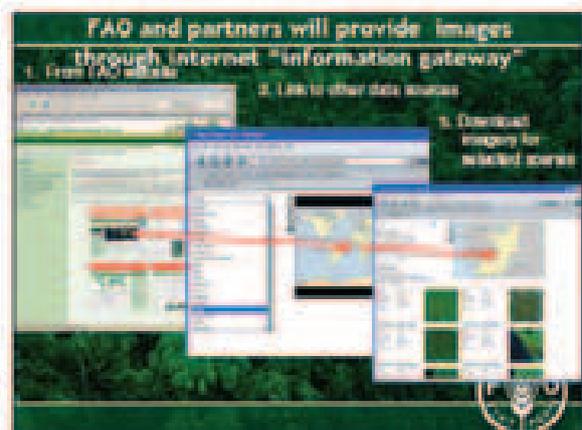
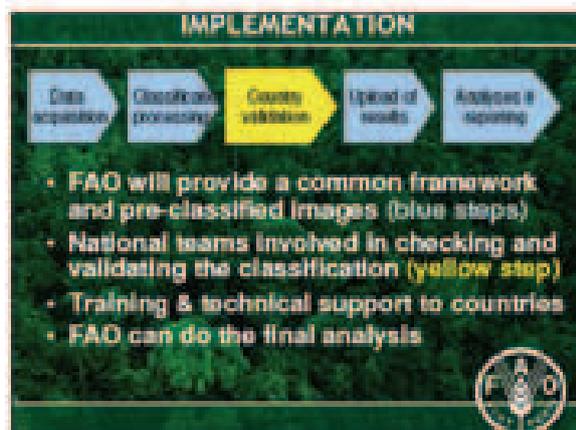
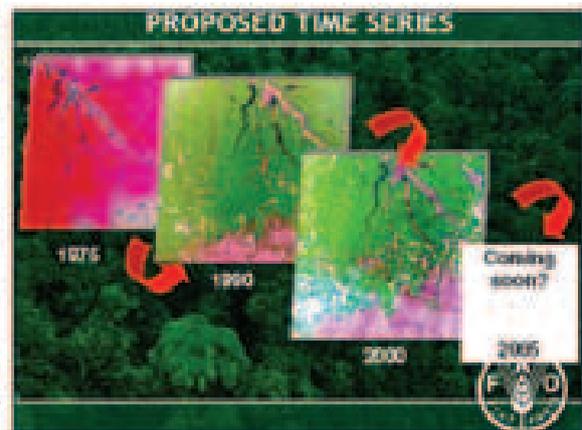
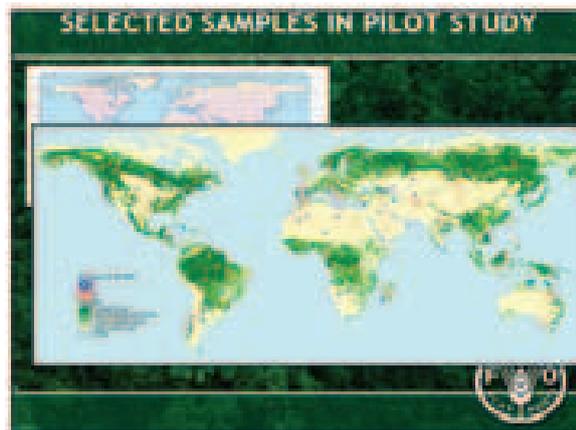
Why are we doing a REMOTE SENSING SURVEY?

1. Complement (not replace) National data
2. Global and regional maps of tree cover
3. Get TRENDS from more consistent data = show where changes are located
 - deforestation and
 - + afforestation



Pilot study to test the process

- The initial step will be to undertake a Pilot study to test and refine the process before global application
- 20 countries covering wide range of forest types participating in Task Force and Pilot
- using a subset of the global scenes selected across varied biomes



- ### EXPECTED OUTPUTS
1. Global and regional tree cover maps
- (not intended to be used at national scale)
 2. Trends in regional, biome and global tree cover from 1975 (if poss.), 1990-2000 and to 2005
 - area change statistics
 - information on tree cover and dynamics
 3. Improved technical skills through capacity building
 4. A framework to support monitoring of forests, land use & environment
 5. Baseline data for further research & modeling
- FAO

- ### Partners to add expertise and value
- Countries: national agencies, regional hubs
 - FAO
 - Joint Research Centre (Italy)
 - Universities (SOSU, UMC, Jena, Boston, Mississippi)
 - USGS/EROS data center
 - NASA
 - Helmholtz Center (JRC)
 - World Bank
 - UNEP
 - World Resources Institute, CI
 - GDFC-GOED
 - GED Secretariat
 - Open to others
- FAO

NEXT STEPS

- Finalise preparations for the remote sensing survey
- RSS Task Force set up to refine methods, advise & test the process
- 2008-2009: most of the work
 - Hold regional workshops, training etc
- 2010: Data analysis and prepare drafts
- 2011: Final report and maps



THANK YOU

More information is available from:

www.fao.org/fra

fra@fao.org



T1 Extent of Forest and Other wooded land

Rationale:

- Core table for FRA 2010
- Important for assessing state and trends of forest resources
- Widely used in various international reporting processes and conventions

Reporting

- No changes in relation to FRA 2005
- Pre-filled country reports 1990, 2000 & 2005
- Data sources
 - National forest inventory data
 - Forest maps
 - Vegetation and land use maps

T1 Extent of Forest and Other wooded land

FRA categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Forest				
Other wooded land				
Other land				
... of which with tree cover				
Island water bodies				
TOTAL				

T2 Forest ownership and management rights

Rationale:

- Control over and rights to use the forest resources
- Policy, institutional and management issues

Reporting

- Changes in relation to FRA 2005
 - Ownership now refers to the forest resource (the trees) and **not** the land
 - Private ownership has been further sub-divided into several sub-categories
 - Information on management rights of public forests has been added
- Two parts
 - ownership
 - management rights

T2a Forest ownership

FRA 2010 Categories	Forest area (1000 hectares)		
	2000	2005	2010
Public ownership			
Private ownership			
... of which owned by individuals			
... of which owned by private business entities and institutions			
... of which owned by local communities			
... of which owned by indigenous/ tribal communities			
Other types of ownership			
TOTAL			

T2b Holder of management rights of public forests

FRA Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration			
Individuals			
Private corporations and institutions			
Communities			
Other			
TOTAL			

T3 Forest designation and management

Rationale:

- Information on how the forests are intended to be managed
- Relates to reporting to other organizations and arrangements (CBD, UNFF, MCPFE, ITTO, etc.)
- Essential for planning and monitoring of impacts of policy measures

Reporting

- Changes in relation to FRA 2005
 - Only covers forest area
 - "Total area with function" has been removed
 - A table on "special categories of designation and management" has been added (T3b)
- T3a – Primary Designated Function is prefilled for 1990, 2000 and 2005

T3a Primary designated function

FRA categories	Forest area (1000 hectares)			
	1990	2000	2005	2005
Production				
Protection of soil and water				
Conservation of biodiversity				
Social services				
Multiple use				
Other category				
No / Unknown				
TOTAL				

T3b Designation and management

FRA categories	Forest area (1000 hectares)			
	1990	2000	2005	2005
Area of protected forest sites				
Forest area with protected areas				
Forest area under controlled forest management				
Forest area with management plan				

T4 Forest characteristics

Rationale:

- Degree of human impact
- Monitor forest ecosystems

Reporting

- Changes in relation to FRA 2005
 - Planted forest instead of Plantations
 - Modified natural and Semi-natural merged into Other naturally regenerated forest
 - A table with specific categories of forest types added (T4b)
- T4a – Characteristics – area of primary forest is prefilled for 1990, 2000 and 2005

T4a Characteristics

FRA categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Primary forest				
Other naturally regenerated forest				
...of which of introduced species				
Planted forest				
...of which of introduced species				
TOTAL				

T4b Special categories

FRA categories	Area (1000 hectares)			
	1990	2000	2005	2010
Bamboo plantations (Forest)				
Mangroves (Forest and MFL)				
Swamps (Forest and MFL)				

T5 Forest establishment and reforestation

Rationale:

- Monitor progress towards SFM
- Global objectives on forests (UNFF)

T5 Forest establishment and reforestation

FRA categories	Natural forest establishment (ha/year)			...of which of introduced species (ha/year)		
	1990	2000	2005	1990	2000	2005
Reforestation						
Subsidiary						
...of which of species previously planted						
Natural species of forest						

T6 Growing stock T7 Biomass stock T8 Carbon stock

- Strongly interrelated
- Consistence between tables
- Consistence between reporting to FRA and to UNFCCC and the Kyoto Protocol

T6 Growing stock

Rationale:

- Productive capacity of the forests
- Planning and monitoring sustainable use
- Basis for biomass and carbon estimates

Reporting

- Commercial Growing stock replaced with Growing stock of commercial species
- Three parts
 - Total growing stock and growing stock of commercial species
 - Composition of growing stock
 - Specification of thresholds
- Trends – need for better information on growing stock per hectare

T6a Growing stock

FAO category	Volume (million cubic meters over bark)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Total growing stock								
...of which commercial								
...of which threshold of								
Growing stock of commercial species								

T6b Growing stock of the 10 most common species

FAO category/species name	Growing stock in forest (million m ³ over bark)		
	Subtotal forest	Commercial forest	
Rank	1990	2000	2010
1*			
2*			
3*			
...			
10*			
Remaining			
TOTAL			

T6c Specification of threshold values

Item	Value	Complementary information
Minimum diameter (cm) or breast height at base included in growing stock (D)		
Minimum diameter (cm) at the top end of stem for calculation of growing stock (T)		
Minimum diameter (cm) of branches included in growing stock (B)		
Volume (m ³) to "store growth" (AG) or "store decay" (AD)		

T7 Biomass stock

Rationale:

- Basis for estimating carbon and emissions
- Wood energy

Reporting

- Same categories and definitions as IPCC
- Default conversion factors from 2006 IPCC Guidelines – improved since FRA 2005
- General methodological aspects
 - Biomass conversion and expansion factors
 - No default values for dead wood

T7 Biomass stock

FRA category	Biomass (million metric tonnes) (metric weight)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Above-ground biomass								
Below-ground biomass								
Dead wood								
TOTAL								

T8 Carbon stock

Rationale:

- Monitor greenhouse gas emissions
- REDD

Reporting

- National data, when available
- Apply default carbon fraction from 2006 IPCC Guidelines (0.47)

T8 Carbon stock

FRA category	Carbon (million metric tonnes)					
	Forest					TOTAL
	1990	2000	2005	2010	...	
Carbon in above-ground biomass						
Carbon in below-ground biomass						
Carbon in dead wood						
Carbon in litter						
Carbon in dead wood and litter						
Net carbon						
TOTAL						

T9 (Forest) fires

Rationale:

- Planning & monitoring of fire management measures
- Climate change & carbon emission calculations

Reporting

- New table
- Two parts
 - area and number of fires
 - proportion wildfires / planned fire
- Thematic study "Fire management – global assessment 2006"
- Five-year average for reporting

T9a Area and number of fires

FRA category)	Annual average for 5-year period					
	2000		2005		2010	
	area ha	n of fires	area ha	n of fires	area ha	n of fires
Total area affected by fire						
... of which wildfire						
... of which no other wooded land						
... of which no other forest						

T9b Proportion of planned fires and wildfires in forest

FRA category	Proportion of forest area affected by fire (%)		
	2000	2005	2010
Wildfire			
Planned fire			

T10 Other disturbances affecting forest health and vitality

Rationale:

- Forest health and vitality
- Control and mitigate impact

Reporting

- Three parts
 - Disturbances
 - Major outbreaks of insects and diseases
 - Woody invasive species

T10a Disturbances

FRA category	Affected forest area (1000 hectares)		
	2000	2005	2010
Disturbance by insects			
Disturbance by diseases			
Disturbance by other biotic agents			
Disturbance caused by abiotic factors			
Total area affected by disturbances			

T10b Major outbreaks of insects and diseases affecting forest health and vitality

Description/ name	Type species or groups affected (include Latin names)	Type(s) of forest affected	Area affected (1000 ha)	If multi- year, state years
Disease 1				
Disease 2				
Disease 3				
..				
Disease 10				

T10c Area of forest affected by woody invasive species

Separate rows of woody invasive species	Forest area affected 2005 (1000 hectares)
Sp. 1	
Sp. 2	
Sp. 3	
Sp. 4	
Sp. 5	
Total forest area affected by woody invasive species	

T11 Wood removals and value of removals

Rationale:

- Contribution of forest sector to the national economy

Reporting

- Removals ≠ felling
- Joint Forest Sector Questionnaire (JFSQ) (EUROSTAT / FAO / ITTO / UNECE)
- Volume over bark (o.b.)
- Five-year average

T11 Wood removals

FRA category	Industrial roundwood removals			Wooded removals		
	year	2000	2005	year	2000	2005
Total volume (1000 m ³ o.b.)						
.. of which from forest						
Total value (local currency / 10 ⁶ o.b.)						
Total value (1000 local currency)						

Note: of local currency: 1990, 2000 & 2005

Estimation of value



T12 Non-wood forest products removals and value of removals

Rationale:

- Show the importance of NWFPs, both for economy and livelihood of rural people

Reporting

- FRA 2005 table redesigned (Quantity and value of 10 most important NWFPs)
- Data availability an issue
- Focus on commercial products
- Only removals from forest

T12 Non-wood forest products removals and value of removals

Rank	Name of product / Bot. species	Unit	NWFP removals, 2005		NWFP category
			Quantity	Value (1000 US\$)	
1st					
2nd					
...					
10th					
	All other plant products				
	All other animal products				
	TOTAL				

T13 Employment

Rationale:

- Socio-economic importance
- Government policies
- Industry development
- etc.

Reporting

- Changes in relation to FRA 2005
 - Self-employment included in primary production of goods
 - "Management of protected areas" has replaced "Provision of services"
- Compatible with national labour statistics

T13 Employment

FRA category	Employment (1000 years FTE)		
	2005	2006	2007
Employment in primary production of goods			
... of which paid employment			
... of which self-employment			
Employment in management of protected areas			

T14 Policy and legal framework

Rationale:

- Fundamental basis for SPM
- Integration of forest sector into society

Reporting

- New table in FRA 2010
- Yes/No questions with some complementary information
- rfp-updates
- FAOLEX (<http://faolex.fao.org>)

T14a Policies and Laws (2008)

Forest policy statement with national scope	Yes/No
If Yes above, provide: <u>Text of statement</u> and <u>Reference to document</u>	
National forest programme (NFP)	Yes/No
If Yes above, provide: <u>Text of NFP</u> , <u>Current status</u> , and <u>Reference to document</u>	
Law (act or codes) on forest with national scope	Yes/No
If Yes above, provide: <u>Text of statement</u> , <u>Text of latest amendment</u> and <u>Reference to document</u>	
Sub-national forest policy statement	Yes/No
If Yes above, indicate number of regions/territories with forest policy statements	
Sub-national law (act or codes) on forest	Yes/No
If Yes above, indicate number of regions/territories with law on forest	

T15 Institutional framework

Rationale:

- Institutions responsible for
 - Policy formulation and implementation
 - Law enforcement
- Technical capacities of institutions

T15a Institutions

FRA category	2008
Ministry responsible for forest policy formulation	
Level of subordination of Ministry of Forestry with to the Ministry	Subordinate to Ministry 1 st level 2 nd level 3 rd or lower level
Other public forest agencies at national level	
Institutions responsible for forest law enforcement	

T15b Human resources

FRA category	Human resources within public forest institutions					
	2008		2007		2006	
	#	% Forests	#	% Forests	#	% Forests
Total staff						
...of which with university degree or equivalent						

T16 Education and research

Rationale:

- Capacity for education and research
- Capacity to implement SPM

T16 Education and research

FRA category	Contribution of students to forest-related education					
	2008		2009		2010	
	#	%	#	%	#	%
Master's degree (MSc) in agriculture						
Master's degree (MSc) in forestry						
Total (see comment 1) diploma						
FRA category	Funding made to carry on projects (in thousands of euros)					
	2008		2009		2010	
	#	%	#	%	#	%
Doctor's degree (PhD)						
Master's degree (MSc) in agriculture						
Master's degree (MSc) in forestry						

T17 Public revenue collection and expenditure

Rationale:

- Forest sector contribution to government finances
- Government support to the forest sector

Reporting

- New table in FRA 2010
- Two parts
 - government revenues
 - government expenditures

T17 Public revenues and expenditures

FRA category	Revenues (1000 local currency)		
	2008	2009	
Forest revenue			
FRA category	Expenditure (1000 local currency)		
	Domestic	External	Total
Operational expenditure			
Transfer payments			
Total public expenditure			

- ☐ Agriculture
- ☐ Forestry
- ☐ Forest inventory and/or planning
- ☐ Investment of forest landowners
- ☐ Protection of soil and water
- ☐ Forest stand improvement
- ☐ Subsidies or maintenance of private lands
- ☐ Other activities

Thank you for your attention!