







NFMS Monitoring Function

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Outline





- Introduction: the NFMS monitoring function
- Safeguards Information Systems
- Republic of Congo examples of monitoring tools:
 - NFI's monitoring functions
 - CNREDD's Environmental, social and strategic monitoring and evaluation cell











NFMS monitoring function



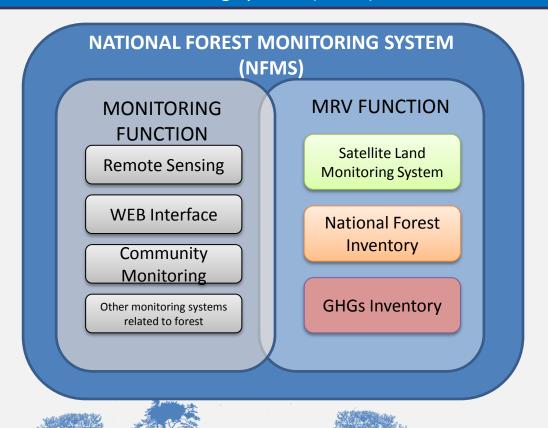






UNREDD approach to NFMS and MRV for REDD+

Through the UN-REDD Programme, FAO published a guidance document on REDD+ National Forest Monitoring Systems (NFMS) in 2013*



^{*} http://www.un-redd.org/UNREDDProgramme/InternationalSupport/MeasurementReportingandVerification/tabid/1050/language/en-US/Default.aspx





Monitoring functions of the NFMS

NATIONAL FOREST MONITORING SYSTEM (NFMS)

FOREST MONITORING (M)

FOREST CARBON MONITORING
(MRV)

Satellite Land Monitoring System

Web Interface

Community Monitoring

Other Forest-Related Monitoring Systems National Forest Inventory

GHG Inventory

For assessing national area change over time (Activity Data)

System to provide information on Safeguards (SIS)

For monitoring

and reporting on

REDD+ activities







The Monitoring function

- There is no specific definition of the monitoring concept of the NFMS (in contrast to MRV) under the UNFCCC
- Generates information that is necessary for good forest management, regardless of REDD+. Well managed and regulated forest sectors already generate such information
- Monitoring is crucial to establishing what particular activities (policies/measures) are effective at addressing drivers of deforestation and degradation
- Draws on a variety of methods and serves a number of different purposes, depending on national circumstances
 - Satellite Land Monitoring System
 - Forest inventories (National, community forests, commercial forests)
 - Records of use/sale of forest products and services
 - Social, economic and biodiversity assessments

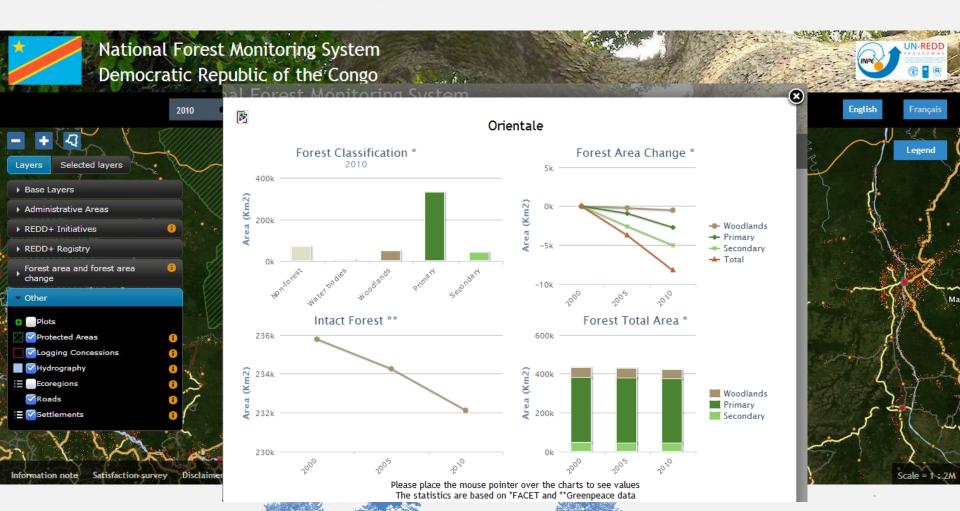


Democratic Republic of Congo (DRC Info system)















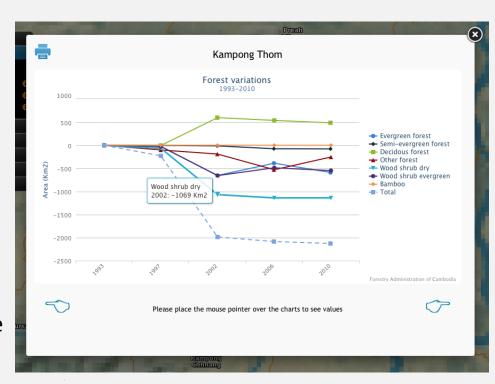


Web portal monitoring functions

The portal is customisable to country needs and priorities

Examples of information:

- forest area change over time
- relevant layers for the country/project
 - Protected areas
 - REDD+ projects and initiatives
 - Logging concessions
 - Forest plots
- other data available for the country
 - REDD+ project documents
 - Drivers of deforestation by province
 - Forest plots with related pictures
- deforestation statistics by forest types









Key UNFCCC decision (most recent)

2013. COP 19, Warsaw. Decision 11/CP.19

National forest monitoring systems

- should be built on existing systems, as appropriate
- assess different types of forest
- be flexible and allow for improvement
- reflect the phased approach for REDD+
- may provide information on how safeguards are addressed and respected









Safeguards and Safeguards information systems









UNREDD safeguards approach

 Common vision defined through the UN-REDD Safeguards Coordination Group & <u>UN-REDD</u> <u>Framework for Supporting the Development</u> <u>of Country Approaches to Safeguards</u>









What are REDD+ safeguards?

Cancun decision (2/CP/16): Issues covered by REDD+ Safeguards (1)

- Transparent and effective national forest governance structures
- Consistency with objectives of national forest programmes and relevant international conventions and agreements
- Respect for the knowledge and rights of indigenous peoples and members of local communities













What are REDD+ safeguards?

Cancun decision (2/CP/16): Issues covered by REDD+ Safeguards (2)

- Full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities
- Conservation of natural forests and biological diversity and enhancement of other social and environmental benefits
- Risks of reversals
- Displacement of emissions













What is a Safeguards Information System (SIS)?

Safeguard Information System (Cancun decision (2/CP/16):

A system for providing information on how the safeguards are being addressed and respected throughout the implementation of the REDD+ activities.

A SIS ... should (Durban decision (12/CP.17):

- Be consistent with Cancun guidance;
- Provide **transparent and consistent information** that is accessible by all relevant stakeholders and updated on a regular basis;
- Be transparent and flexible to **allow for improvements over time**;
- Provide information on how all of the safeguards are being addressed and respected;
- Be country-driven and implemented at the national level;
- Build upon **existing syst**ems, as appropriate.

Further guidance on SIS is expected at SBSTA 41 in December 2014









Republic of Congo: existing monitoring provisions





National Forest Inventory expected results

- Better knowledge and management of forest resources and biodiversity
- 2. Land-use planning and zoning
- Actualisation of forest policy (laws and measures)
- 4. Contribution of forests and trees to food security
- 5. Distribution of ecological and phytogeographic zones
- Quantification of forest carbon and payments for ecosystem services





National Forest Inventory monitoring function

- Permanent plots: monitoring over time
- Systematic plot distribution: covering forest and non-forest areas
- Biophysical and socioeconomic information (40 variables)
 - Biomass and carbon
 - Biological diversity (fauna and flora)
 - Land use
 - Use, users and beneficiaries of forest products
- Established FAO methodology regional continuity and comparativity



Indicators and forest inventories







Example information collected as part of the forest inventory	Potential example use as an indicator as part of a Safeguard Information System
Plant species	The presence or absence of rare/ endangered/invasive/pest tree species could be used as an indicator of biodiversity or of forest quality
Household surveys (use, users, beneficiaries)	Could be used as source of indicators of pressure on forest resources/resource use trends/livelihoods
Indicator species or Species diversity	The presence or absence of certain insects/pests/diseases/invasive /threatened species or wildlife abundance could be used as in indicator of biodiversity or forest quality
Non-timber forest products (NTFPs)	Presence or absence could be used as an indicator of access to forest resources or as the potential for enhancing local livelihoods
Land use and land cover	Could indicate conversion trends from one land use to another and the extent of the conversion process









Alignment of Congo's NFI with UNFCCC principles

- Based on existing systems
- Provides safeguards information
- Country-driven approach
- Priorities and objectives of national planning
- Sustainable development and poverty reduction
- Sustainable management of forests
- Advantages not linked to carbon
- Future developments, impacts and adaptation

UNFCC Reference documents (COP and SBSTA): FCCC/SBSTA/2013/L.12/Add.1
FCCC/CP/2010/7/Add.1*, FCCC/SBSTA/2013/L.12









Congo's REDD+ « social, environmental, and strategic monitoring and evaluation » (SESA) cell

- One of the six technical cells of the National REDD+ Coordination,
- Analysis of strategic REDD+ options for their environmental and social effects, their inclusion and mitigation in the national REDD+ framework
- Analysis of existing national principles, criteria, indicators and verification (PCIV) frameworks, for harmonisation and integration with new tools
 - ITTO
 - National Sustainable Development
 - Sustainable management and forest certification
 - UN-REDD Framework for Supporting the Development of Country Approaches to Safeguards
 - World Bank FCPF SESA guidelines









Thank You

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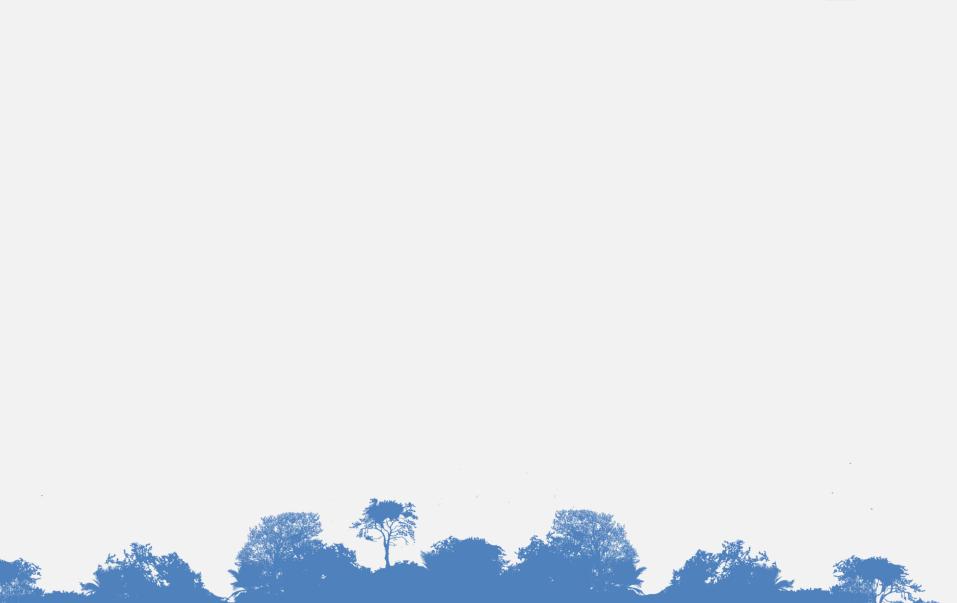
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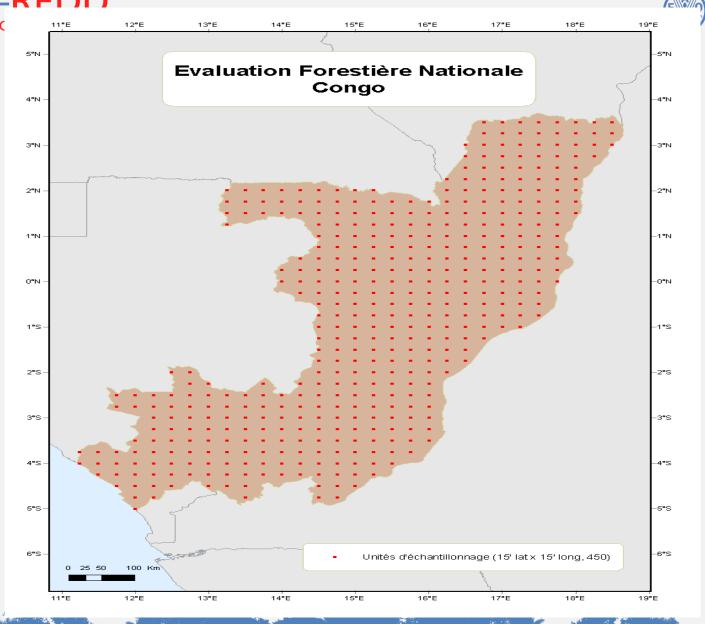


Supporting slides

IV - Approche méthodologique (Dispositif d'échantillonnage)













IV - Résolutions attendues

- Meilleure connaissance et gestion de la ressource et de la biodiversité
- 2. Plan d'affectation des terres et d'aménagement du territoire (identification du zonage);
- Actualisation de la politique forestière (législation et mesures)
- 4. Contribution de la forêt et des arbres à la sécurité alimentaire
- 5. Répartition des zones écologiques et phytogéographique
- 6. Quantification du carbone forestier et paiement des services de l'écosystème



Organisation du suivi écologique permanent







- 1. Sur la base d'un zonage des pôles à fort dynamisme anthropique
- 2. Sélectionner les Unités d'échantillonnage représentatives
- 3. Réaliser à période répétée des mesures biophysiques et socioéconomiques
- Procéder par comparaison successive pour déduire les changements quantitatifs et qualitatifs survenus au cours de la période
- Croiser les observations de terrain aux résultats d'interprétation des images satellitaires récentes







FAO and its role in REDD+

- ☐ FAO's key role in REDD+ readiness is to help countries develop, implement and operationalize their National Forest Monitoring System (NFMS)
- ☐ FAO also assists countries in the enhancement of national governance systems (incl. the development of policies and measures) for REDD+ implementation

Key principles of FAO's support

- National ownership
- Alignment with the UNFCCC process
- Step-wise approach that allows for improvement over time
- > Builds upon existing capacities, available data and systems in place
- Use of open-source, freely available data and tools as much as possible
- Strengthening of national capacities (learning-by-doing)



Definition of monitoring







There is **no specific definition** of the monitoring concept under the UNFCCC

A working definition for "monitoring" is: the need for periodic information on the results obtained through national policies and measures, as per Article 4.2, paragraphs a) and b) of the Convention:

"In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources and removals by sinks of greenhouse gases".

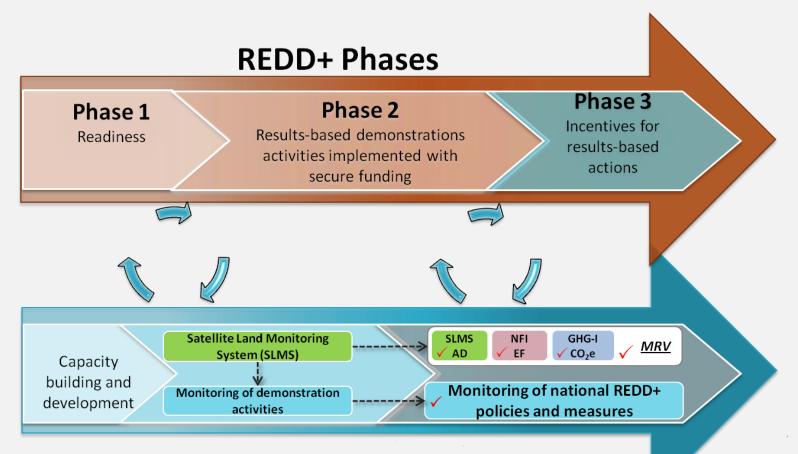








Phased implementation of the NFMS



Monitoring and MRV Phases





UN-REDD PROGRAMME Key UNFCCC decisions







Copenhagen, 2009. Decision 4/CP.15

paragraph 1(d) "Requests" Parties to:

"...establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems as part of national forest monitoring systems that:

i. Use a combination of **remote sensing** and **ground-based** forest carbon inventory approaches for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes

ii. Provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties, taking into account national capabilities and capacities;

iii. Are transparent and their results are available and suitable for review as agreed by the Conference of the Parties;"









Key UNFCCC decisions(cont'd)

2010, Cancun. COP.16

1/CP.16 paragraph 71 "Requests" developing country Parties Parties to develop:

- (c) A **robust and transparent national forest monitoring system** for the monitoring and reporting of the activities referred to in paragraph 70 above, with, if appropriate, subnational monitoring and reporting as an interim measure, in accordance with national circumstances, and with the provisions contained in decision 4/CP.15, and with any further elaboration of those provisions agreed by the Conference of the Parties;
- (d) A system for providing information on how the safeguards referred to in appendix I to this decision are being addressed and respected throughout the implementation