



A submission to the UNFCCC Secretariat on methodological guidance for activities relating to REDD+, in answer to the invitation of paragraph 31 of Decision FCCC/SBSTA/2011/2

In response to the invitation of the Subsidiary Body for Scientific and Technological Advice (SBSTA) to submit views on the issues identified in paragraphs 28–30 of Decision FCCC/SBSTA/2011/2, the Food and Agriculture Organization of the United Nations (FAO) herein submits its views on:

- guidance relating to a system for providing information on how safeguards referred to in appendix I to Decision 1/CP.16 are being addressed and respected throughout the implementation of the activities referred to in paragraph 70 of Decision 1/CP.16;
- modalities relating to forest reference emission levels and / or forest reference levels;
- modalities for measuring, reporting and verifying anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area changes resulting from the implementation of the activities referred to in paragraph 70 of Decision 1/CP.16.

1. General perspectives on monitoring and information provision in relation to Safeguards, REL/RL and MRV

FAO offers the following key considerations:

- FAO considers the concept “national forest monitoring system” (nfms) to be relevant for each of the three areas addressed in this submission and to be a comprehensive approach for forest related information. An nfms may include a variety of methodologies for data collection and analyses, and incorporate information derived from monitoring systems in other sectors;
- Monitoring and information needs for REDD+ overlap with requirements for other policy areas related to, *inter alia*, forests, land use, land tenure, food security, biodiversity and rural livelihoods, including reporting to conventions and international arrangements for these policy areas. For efficiency reasons, the nfms and related institutions should therefore be developed to serve multiple purposes, and synergies in data collection and analyses should be sought;
- The nfms is a long-term effort that needs a strong institutional base and that should build on existing institutions in light of the cross-cutting needs in order to help ensure continuity over several decades;
- Each nfms must consider the social, economic, environmental and governance situation specific to its country context. The systems therefore need to be nationally specific while ensuring compatibility with international reporting requirements. It is indeed not possible or desirable to develop fixed blueprint approaches to national level monitoring. At the same time, there are several key functions of monitoring systems where capacities or resources at the national level are insufficient, but where international efforts can bring together a critical mass to fill in the gaps.

This includes research and development of common methods and models to collect and process field-measured data, provision of remote sensing data, and education and capacity development.

- The design and implementation of the nfms must include full and effective participation, as well as capacity development, of all relevant stakeholders;
- The nfms should provide accessibility, transparency and timely delivery of all relevant data and information to all relevant stakeholders;
- The National Forest Inventory concept is a proven approach to national forest monitoring in a wide range of countries and should be considered as a key component within the nfms. The National Forest Inventory is understood as a process that encompasses the institutions, science, field data collection, remote sensing applications, data analysis and reporting of forest related data to national and international levels. It builds on a country-wide sample of field plots, complemented with remote sensing data and designed according to national circumstances, and collection of biophysical as well as socio-economic data. Annex I countries predominantly use National Forest Inventory data in their national communications. Increasingly, REDD+ countries are developing National Forest Inventories, some in collaboration with FAO, and it is expected that these will have a major role in REDD+ related policy analyses and reporting.
- The information generated by the nfms would serve a range of purposes, including to:
 - o Facilitate the improvement of national REDD+ strategies and action plans;
 - o Demonstrate progress towards national development goals;
 - o Help ensure accountability to domestic stakeholders;
 - o Provide information to the UNFCCC on a regular basis, and demonstrate credibility and legitimacy;
 - o Report to donors and investors on the use of finance and the impacts of REDD+ activities;

2. Views on guidance relating to a system for providing information on how safeguards referred to in appendix I to Decision 1/CP.16 are being addressed and respected throughout the implementation of activities referred to in paragraph 70 of Decision 1/CP.16

FAO offers the following key considerations:

- As per the above section, FAO considers the collection and provision of information on REDD+ safeguards to be an integral part of a nfms that addresses social, economic, environmental and governance issues.
- The nfms should be able to provide complete information. The UNFCCC safeguards cover a range of environmental, socio-economic (including rights) and governance issues, requiring different means of collecting, analyzing and reviewing data. Similarly, evidence of a safeguard being respected will differ from information on how it is being addressed. A national system should generate and compile all the information needed to demonstrate how *all* the safeguards are being addressed *and* respected.

- The nfms should draw from existing datasets, information systems and processes relevant to REDD+¹.
- In order to provide information on how the safeguards are addressed and respected throughout the implementation of REDD+ mitigation activities, it will be necessary to observe progress over time. Thus, a national system must provide information on a regular basis and in a consistent manner. Generic guidance and a framework for indicators developed at international level would help to ensure consistency over time and across REDD+ countries. Country-specific indicators would then need to be developed through inclusive, participatory processes at national level. Existing processes and frameworks can be drawn on for the development of generic guidance and a framework for indicators at international level.²

3. Views on modalities relating to forest reference emission levels and / or forest reference levels

FAO offers the following key considerations:

- There is a need to clarify the definitions and intended use of the concepts of forest reference emission level (REL) and forest reference level (RL);
- In the context of REDD+, RELs/RLs have two main functions:
 - o help to ensure the environmental integrity of mitigation actions under REDD+;
 - o provide key inputs to accounting within the expected financial mechanism that will support REDD+ implementation;
- There is a clear distinction between two elements of RELs/RLs:
 - o Firstly, an element that uses historical data and existing scientific methods to estimate historical situations and trends. These estimates can be verified scientifically and will therefore be valuable over time for ensuring the environmental integrity of REDD+ actions;
 - o Secondly, an element that applies estimates of historical situations and trends combined with national circumstances and assumptions to establish RELs/RLs, taking into consideration the need for conservative approaches;
- Over time, the accuracy of estimates of historical situations and trends is likely to improve, following investments in and strengthened capacities of nfms's. In particular, the increased application of field sample measurements combined with remote sensing data within National Forest Inventory processes can improve accuracy in the medium and long-term;
- However, it should be recognized that current lack of available data in most REDD+ countries is a constraint for accurately estimating historical situations and trends. In many cases, time series observations are restricted to remote sensing data with around 30 meter, or less, ground resolution. This limits data to indications of area and area changes of forests (with additional

¹ Relevant datasets, information systems and processes include *inter alia* the European Union's Forest Law Enforcement, Governance and Trade (FLEGT) legality assurance systems (LAS), Global Forest Resources Assessment (FRA) and domestic collection of social statistics, etc.

² One example is the Framework for Assessing and Monitoring Forest Governance developed by FAO and the World Bank, which provides an analytical framework and detailed advice for the development of indicators tailored to national needs and circumstances.

challenges in drier ecosystems and mosaic landscapes), proxies that may not be well correlated with actual RELs/RLs;

- As a consequence, estimates of historical situations and trends may, in the near term, provide inputs of limited quality, a circumstance which should be considered when establishing the modalities for RELs/RLs;
 - Further, in the near term, national level data may not be sufficient to help ensure the environmental integrity of REDD+ actions. Accordingly, international efforts, such as the Global Forest Resources Assessment led by FAO and partners, may serve as a useful complement, in particular through its Remote Sensing Survey which involves national expertise to establish situations and trends in land cover and land use at regional and global levels;
- The periodicity of establishing RELs/RLs should take into account the current data situation, the relatively long-term prospect of improving national forest monitoring systems, as well as experience concerning the design and implementation of existing forest monitoring systems. This suggests a minimum periodicity of 5 years between revisions of RELs/RLs.

4. Views on modalities for measuring, reporting and verifying anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area changes resulting from the implementation of the activities referred to in paragraph 70 of Decision 1/CP.16

FAO offers the following key considerations:

- Measuring, reporting and verifying anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area changes (here abbreviated as C-MRV) should, for reasons of efficiency and informing cross-sectoral policy, be carried out within broader nfms as proposed in the General Perspectives section above. FAO proposes that C-MRV functions should:
 - be developed within a multi-purpose methodological approach, so that a country may use it to address monitoring and reporting needs related to other relevant national or international processes;
 - build on existing monitoring systems or system elements in countries, in particular National Forest Inventory processes;
 - be developed in order to become an operational and permanent monitoring system that is an integral part of the mandates of technical country institutions to ensure its sustainability and independent long-term functioning.
- Paragraph 71 of Decision 1/CP.16 requests developing country Parties aiming to undertake the activities referred to in paragraph 70 of that Decision to develop a set of specific elements. These are to be undertaken in accordance with national circumstances and respective capabilities and the provision of adequate and predictable support (including financial resources and technical and technological support to developing country Parties). One of these elements¹ is the development of a robust and transparent national forest monitoring system for the monitoring and reporting of the activities referred to in paragraph 70, with, if appropriate, sub-national monitoring and

¹ Decision 1/CP.16 paragraph 71 (c)

reporting as an interim measure, and in accordance with the provisions¹ contained in Decision 4/CP.15. As per Decision 4/CP.15, such a system should, *inter alia*, use a combination of remote sensing and ground-based forest carbon inventory approaches² (e.g. National Forest Inventory processes). FAO proposes that:

- the reference to nfms is interpreted in line with the views provided above in the General Perspectives section, i.e. that the C-MRV functions are seen as part of a broader approach to national forest monitoring;
 - in light of the breadth of mitigation actions identified in paragraph 70 of Decision 1/CP.16, the role of ground-based measurements within the framework of a National Forest Inventory process is highlighted. While remote sensing data may complement ground-based measurements to make monitoring approaches more efficient, it is necessary to have ground-based samples to establish emissions and removals across the identified mitigation actions. The specific design of ground-based measurements depends on national circumstances;
 - clear distinction is made between, on one hand, the specification of requirements for national (or sub-national) level C-MRV functions vis-à-vis the UNFCCC, and, on the other, requirements for verifying domestic/local implementation and performance of REDD+ policies and projects. While the former is defined by the UNFCCC process, the latter should be defined domestically, according to local circumstances and stakeholder needs, and may for reasons of efficiency or comprehensiveness take other policy areas into account in defining reporting requirements and performance proxies;
- In accordance with Appendix II of Decision 1/CP.16, REDD+ MRV modalities should be “*consistent with any guidance on measuring, reporting and verifying nationally appropriate mitigation actions by developing country Parties agreed by the COP, taking into account methodological guidance in accordance with decision 4/CP.15, for consideration by the COP at its seventeenth session*”. In recognition of the content of paragraph 60 of Decision 1/CP.16, FAO recommends that countries develop their nfms in such a way that it could simultaneously (i) serve as the monitoring system for any forest related and/or land based Nationally Appropriate Mitigation Actions (NAMAs) and (ii) fulfil MRV functions and the monitoring of actions for REDD+.

¹ In particular paragraph 1 (d) (i) – (iii) Decision 4/CP.15

² Decision 4/CP.15 paragraph 1 (d) (i)