

TERMS OF REFERENCE

To produce “Good Practice Guidance” on deriving a national, regional and global indicator on carbon stocks, above and below ground

Consultancy reference number: CCD/16/STI/25

BACKGROUND

The objective of the United Nations Convention to Combat Desertification (UNCCD) is to combat desertification and land degradation, and to mitigate the effects of drought in affected countries around the world, particularly in Africa, through effective action at all levels. This is supported by international cooperation and partnership arrangements, in the framework of an integrated approach consistent with Agenda 21, with a view to contributing to the achievement of sustainable development.

The UNCCD, in collaboration with FAO, UNSD, UNFCCC, UNEP, CBD, GEF-STAP and other key partners, is developing a widely applicable methodology and data options to assist countries with monitoring and reporting on SDG indicator 15.3.1 which is the “**Proportion of land that is degraded over total land area**”. Three sub-indicators will be utilized to derive the spatial extent and thus the percentage of total land that is degraded, namely i) land cover and land cover change, ii) land productivity, and iii) carbon stocks, above and below ground. An appropriate methodology for qualifying the identified areas in terms of land degradation will then be applied.

CONSULTANT’S TASKS AND DELIVERABLES

Under the overall supervision of the coordinator of the Science, Technology and Implementation (STI), in collaboration with the External Relations, Policy and Advocacy (ERPA) and other units in the UNCCD, and subject to review by the Inter-Agency Advisory Group (IAAG) on SDG indicator 15.3.1, and under the direct supervision of an assigned Officer, the consultant will prepare a “Good Practice Guidance” (GPG) for deriving and reporting an **indicator on carbon stocks, above and below ground**, hereafter considered as one of the three sub-indicators of SDG indicator 15.3.1. Building on the extensive work already undertaken and the advanced level of development on this sub-indicator, the consultant will follow the general direction provided in the “Framework and Guiding Principles for a Land Degradation Indicator” document which can be found here: <http://www.unccd.int/Lists/SiteDocumentLibrary/Rio+20/LDN%202016/Framework%20and%20Guiding%20Principles%20for%20a%20Land%20Degradation%20Indicator.pdf>

In producing this GPG on the sub-indicator for carbon stocks, above and below ground, the following issues must be fully addressed:

1. Definition and Concepts

- Definition: Precise definition of the sub-indicator, including references to statistical and other standards and classifications, relying on international agreed definitions with particular

attention given to the definition of “land degradation”. The sub-indicator definition should be unambiguous and expressed in universally applicable terms and units of measurement.

- Concepts: Precise definition of all the concepts and terms associated with the sub-indicator, also including reference to any associated classifications.

2. Method of Computation

The IPCC provides a systematic approach for estimating carbon stock changes and associated emissions and removals of CO₂. This section will repackage the methods contained 2006 IPCC Guidelines for National Greenhouse Gas Inventories with a particular focus on its relevance to land and ecosystem degradation processes, including:

- Explanation of how the sub-indicator is calculated, including mathematical formulas and descriptive information of computations made on the source data to produce the sub-indicator (including adjustments and weighting). This explanation should also highlight cases in which data from multiple sources are used or where the calculation has changed over the time (i.e., discontinuities in the series).
- Review of different approaches for computing the sub-indicator from tier 1 (the default method) to tier 3 (the most detailed method) including the standards for existing carbon stocks accounting systems.
- Description of the methodology employed for producing estimates for the sub-indicator when country data are not available, including any mathematical formulas and description of additional variables used as input into the estimation process.
- Description of how missing values for individual countries or areas are imputed or otherwise estimated by international agencies to derive regional or global aggregates of the indicator.

3. Rational and Interpretation

- Description of the purpose and rational behind the sub-indicator, as well as examples and guidance on its correct interpretation and meaning.

4. Sources and Data Collection

- Description of all actual (existing) and recommended sources of data (both remote and *in situ*), identification of the best data available, as well of the methods used for data acquisition and processing. This description should include, when applicable, information about spatial and temporal resolution, accuracy and validation, consistency and availability over time, and data release policy. It should also take into account the work on the sub-indicator on forest carbon stocks being proposed for SDG indicator 15.2.1.

5. Comments and Limitations

- Comments on the feasibility, suitability, relevance and limitations of the sub-indicator as it stands alone and in relation to other two sub-indicators and in light of the general definitions pertaining to SDG target 15.3. This would include data comparability issues,

presence of wide confidence intervals and further details on additional indicators commonly used together with the sub-indicator.

6. Sources of differences between global and national figures

- Explanation on the differences and gaps between country-produced and internationally estimated data on the sub-indicator, highlighting and summarizing the main sources of differences.

7. Regional and global estimates & data collection for global monitoring

- Description of the methodology, including any mathematical formulas, used for the calculation of the regional/global aggregates from the country values. Description of the weighting structure used for aggregating country sub-indicator values to regional and global levels.
- Additional methodological details describing how the data from countries is assembled by international agencies to provide regional and global aggregates. This is distinct from the method of computation section (point 2) which refers to how the sub-indicator is compiled at a national level.

CONTRACTUAL TERMS

- The consultancy will be carried out by an individual or team with an expected total of 60 work days over a four month period, starting from **15 July 2016**;
- The consultant or team will prepare an overall work plan for the entire contract period at the beginning of the assignment, which will be discussed and agreed with the supervisors at the UNCCD in consultation with the IAAG.

QUALIFICATIONS

- A Master's or PhD degree in environmental or biophysical indicators, remote sensing, carbon stocks monitoring or any related field relevant for the consultancy;
- Research or publishing on carbon stocks indicators;
- Experience in transdisciplinary work and an understanding of global indicator work;
- Ability to communicate effectively in English with demonstrated writing skills.

SUBMISSION OF APPLICATION

Applications should be submitted by e-mail to staffing@unccd.int specifying the position **CCD/16/STI/25** in the subject line. Please attach a CV and cover letter with a brief work plan and milestones as well as expectations for remuneration based on 60 full-time work days.

The deadline for applications is **30 June 2016**. Only applications submitted by the deadline will be considered. No telephone calls will be returned. Please address your application as indicated above and do not address or copy your application to an individual at the Secretariat of the UNCCD.

Date of issuance: **30 May 2016**