

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Terms of Reference

Name: Internship
Job Title: Internship on supporting monitoring systems in UN-REDD pilot countries (tree allometric equations and national forest inventories)
Division/Department: FOMD UN-REDD Programme
Programme/Project Number: UNJP/GLO/386/UNJ baby 02
Location: FAO HQ, Rome, Italy
Expected Start Date of Assignment: 01/04/2014 - 15/04/2014 Duration: 3 months
Reports to: Name: Jonckheere, Inge (FOM), Henry, Matieu (FOM) Title: Forestry Officer
Application guidelines: <u>http://www.fao.org/employment/opportunities-for-students-and-young-graduates/internship-programme/en/</u>
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Deadline for submission is 23 March 2014

GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED

<u>Background</u>

The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD Programme) is collaboration between FAO, UNDP and UNEP. It builds on the convening power of its participating UN agencies, their diverse expertise and vast networks, and "delivers as One UN". Within the partnership, FAO supports countries on technical issues related to forestry and the development of cost effective and reliable forest monitoring systems for emission reductions which may be helpful to the implementation of REDD+ after the negotiations reach a final decision on this issue. At the international level, the partnership fosters improved guidance on forest monitoring approaches, including consensus on principles and guidelines.

The United Nations Framework Convention on Climate Change (UNFCCC) agenda item on "Reducing emissions from deforestation in developing countries and approaches to stimulate action" was first introduced at the Conference of the Parties (COP11) in December 2005. The challenge was to establish a functioning international REDD+ finance mechanism that can be included in an agreed post-2012 global climate change framework. Progress has been made and the need to meet the challenge is now reflected in the Bali Action Plan and the COP13 Decision 2/CP.13. A Decision (4/CP.15) was adopted at COP 15 regarding "Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries".

The work of the internship falls within the framework of the development of national forest monitoring systems in

UN-REDD pilot countries with the support of the FAO Forestry department. The national forest monitoring system should be based on remote sensing data and ground field data. National forest inventory is the primary source of information for many countries to support national forest programmes. Field ground data are collected; data are entered into database systems and analyzed using a variety of software and tools. Assessment of forest carbon stocks in the tropical is based on measurement of dendrometric parameters and tree allometric equations. At current status the accessibility of the allometric models is very limited because they are mainly found in scientific articles, reports from private companies, hard copies in national libraries. The development of new allometric equations is time consuming and costly. In order to facilitate the identification of the gaps and accessibility of the existing models to the national institutions, it is important to inventory all existing volume and biomass allometric equation is being undertaken for several continents including Africa, Latin America, North America, South and South-East Asia. Tree models and field inventory data are used to calculate volume, biomass and carbon stocks.

<u>Tasks</u>

Under the direct supervision of the UN-REDD team leader and the thematic area coordinators for allometric equations and satellite land monitoring system, and the support from the other UN-REDD team members, the intern will:

- Support the country and regional allometric equation databases;
- Support the integration of field ground data and tree allometric equations;
- Support the development of R script to support the calculation of forest biomass and uncertainty;
- Support improvement of Globallometree web platform;
- Support the preparation of the materials for the conference workshop in South Asia;
- Perform preparation of databases and quality control procedures;
- Perform any other tasks as required.

Minimum requirements

- Bachelor, Master degree or PhD in Forestry, Environmental Sciences, Natural Resources Management or related field;
- Knowledge in the use of statistical software (good knowledge of R software is an asset);
- Good knowledge in methods for forest biomass assessment;
- Working knowledge of English (good knowledge of French or Spanish is an asset).

Expected Outputs:	
- Quality controlled database on allometric equations performed;	
 Endnote reference database for allometric equation updated; 	
 Review on wood density measurement prepared; 	
- Documentation of the work undertaken by the UN-REDD programm	ne on
biomass modeling;	
- Final report provided.	