REDD+ FOR THE GUIANA SHIELD
5th Working Group Meeting

Analyzing and Modeling Deforestation

NOTE FOR PREPARATION BY COUNTRIES

1. Programs installation

WGM5 will focus on free and open source software. *QGis* will be used for GIS data manipulation and visualization. *R software* will be used for data processing, modeling and as a statistical tool.

These software and modules have to be installed prior to the working group and participants must ensure their operability.

- R can be downloaded on http://cran.rstudio.com

NB: R Studio requires R 2.11.1 (or higher).

- R studio is freely downloadable on http://www.rstudio.com/products/rstudio/download/

- Qgis software is freely available on: http://www2.qgis.org/fr/site/forusers/download.html

As an alternative, all those software are available on this URL: https://drive.google.com/a/onfinternational.org/file/d/0B6DIlA81_jYWZGh3U09CTU9mRkk/view?usp=sharing. For any question related to programs' installation, please contact Maxence Rageade (maxence.rageade@onfinternational.com).

2. Study sites

No new study site needs to be defined for the Working Group Meeting. Exercises will be performed directly on study sites that have already been shared with Maxence Rageade for his study on *Methods and Tools to Analyze Historical Deforestation – Characterization of landscape patterns of deforestation in the Guiana Shield* . See draft study sent by email.

In order to enable good analysis, participants are invited to come with spatial data they might have on deforestation factors in their study site, including if relevant:

- roads network;
- rivers, lakes and hydrological network,
- cities, villages and/or settlements;
- slopes, altitude,
- soil types
- etc.

In order to ensure results analysis, participants are also invited to come with information on deforestation dynamics – past and to come - in their study sites. The following questions can be considered:

- What is considered as the main causes of deforestation (human disturbance) on the study site?
- How those drivers explain the current land cover in the area?
- Which process (and why) best characterizes deforestation on the study site among the three followings:
    - *Single factor causation*, i.e. only one individual proximate factor leads deforestation.
    - *Chain-logical causation*, i.e. one or several driver(s) of deforestation result(s) in other drivers of deforestation.
    - *Concomitant occurrence*s, i.e. several drivers of deforestation occur independently in the same area and during the same period.
- Did deforestation dynamic changed in the past 10 years in the area (e.g. did it accelerate or decrease)? What is your explanation to this phenomenon (e.g. more people, arriving of migrants, issuance of mining concession, etc.)?
- Is there any extraordinary past phenomenon that can explain a sudden increase in deforestation in the past years (e.g. flooding of a dam)?
- Is deforestation expected to increase, decrease or remain stable in the coming years on the study site and how would you explain this foreseen trend (e.g. population will increase, accessibility will be improved, etc.)?

3. Country roundtables

In order to feed discussions, country roundtables will be organized during session 3 (on analyzing deforestation) and session 4 (on modeling deforestation). Countries are welcomed to make any presentation if they want to. Otherwise, the floor will be given to country representatives in order to answer the following questions:

- On analyzing deforestation:
    - Has your organization ever been involved in historical analyses of deforestation? For what purpose (e.g. in the preparation of RPP or project documents, for modeling purposes, in order to organize action to address drivers, before a protected area implementation, etc.) and using which methodology, tools and data (e.g. qualitative analysis only or quantitative ones, using GIS tools or not, social review, etc.)?
    - Should your organization be involved in such process in the future? For what purpose?
    - What are your expectations from this WGM5 in terms of "historical analysis of deforestation"?
- On modeling future deforestation:
    - Has your organization ever used modeling tools to produce future deforestation model?

- What is your level of knowledge and capacities on existing tools to model deforestation?
- Should your organization be involved in the future on modeling future deforestation processes? For what purpose (e.g. baseline scenario for REDD+) and using which tools?
- What are your needs and expectations related to modeling future deforestation during this Working Group Meeting?

4. Study on

A draft study on *Methods and Tools to Analyze Historical Deforestation – Characterization of landscape patterns of deforestation in the Guiana Shield* has been shared with you.

During the Working Group Meeting, this study will be presented and discussed with partners with the ambition to improve the study with participants' comments and knowledge on their study sites. Following the discussion, it will be offered to participants to reach a joint publication, based on the draft study complemented with their comments.