

## **Mapping the forest cover extent and loss of the Republic of Cameroon from 2000-2015**

### **Context**

As part of the development of the National REDD+ Strategy, the Cameroon's Ministry of Environment, Nature Conservation and Sustainable Development (MINEPDED) is working in partnership with the United States Geological Survey (USGS), the US Forest Service (USFS) and the University of Maryland to support its REDD+ Technical Secretariat (ST-REDD+) in designing the National Forest Monitoring System (SNSF). The activity involves building the in-country capacity on mapping the forest cover and loss of Cameroon from 2000 to 2015, based on the official definition of the "forest" described by Momo et al., 2015. This capacity building, involving the Central African Forest Satellite Observatory (OSFAC), has been accompanied by the transfer of technology under the technical supervision and coordination of the *Global Land Analysis and Discovery (GLAD)* Team of the University of Maryland College Park.

### **Summary of activities**

The GLAD Lab at the University of Maryland carried out this activity into two (02) phases:

#### ***Phase 1: Validation of the existing Global Forest Change of Cameroon***

Based on randomly selected samples within the territory from the forest loss of Cameroon's Global Forest Change 2000-2015, the ST-REDD+ experts had the opportunity to exchange and discuss on divergence related to the understanding of Cameroon's forest estate with the main objective of estimating the unbiased area of loss with an associated error estimation. The statistics resulting from this phase were an asset to guide the mapping efforts that have been carried out during phase 2. This phase took place at the University of Maryland from **February 20 to March 11, 2017**.

#### ***Phase 2: Mapping of forest cover extent and loss in Cameroon***

The activity was held at the ST-REDD+ Office in Yaoundé, Cameroon from **July 16 to August 16, 2017**.

Prior to the mapping activity, a 3-day workshop was held at the ST-REDD+ Office where a larger group of REDD+ stakeholders including Universities were invited from July 19-21. During the workshop, the overall activity, the methodology and the results of Phase 1 were presented and discussed with the participants who appreciated the opportunity offered to the country and provided constructive feedback.

The experts then mapped the forest cover extent and loss in the light of the results obtained in phase 1 for 3.5 weeks, using the UMD methodology in collaboration with the Central African Forest Satellites Observatory (OSFAC).

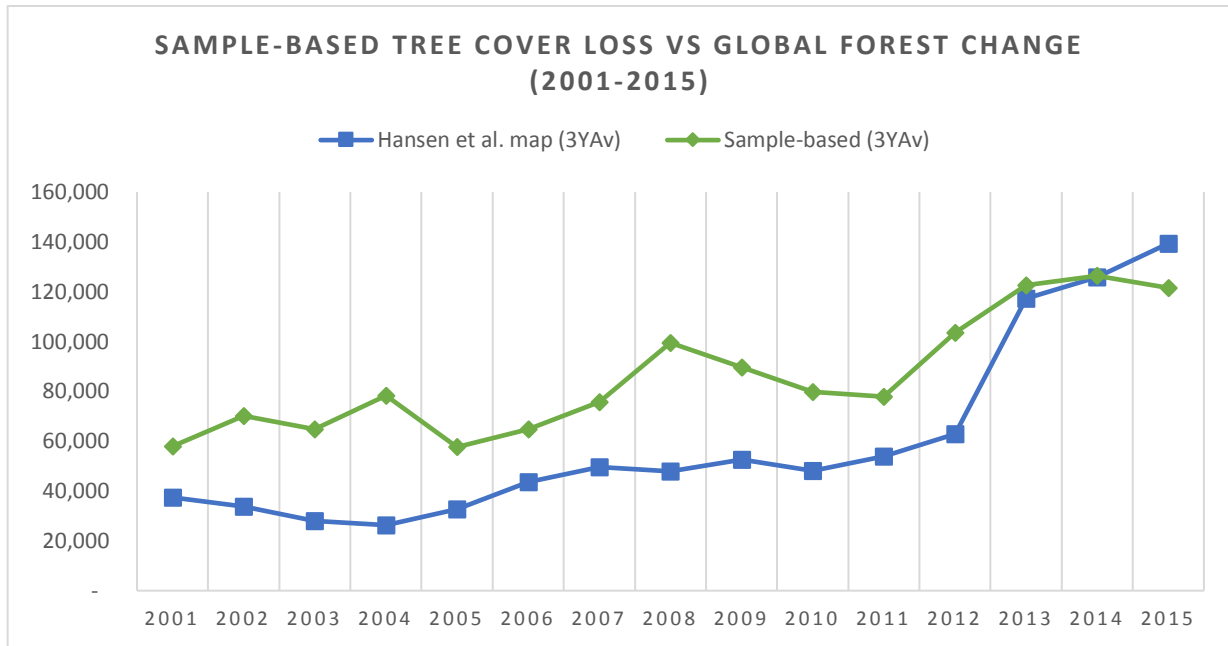
### **Results**

Despite the complexity of the landscape of the country, the team successfully achieved the objectives of the activity: for the first time at the national scale, the team mapped the forest cover extent and loss of Cameroon from 2000 to 2015 as the outcome of the capacity building training. The resulting map provides a total forest area estimated at 33 million ha (compared to 31 million ha from statistics) in 2000 and the forest loss area at 1.399 million ha (compared to 1.29 million ha  $\pm$  90,000 ha from statistics) from 2000 to 2015. See key results in annexes 1 and 2.

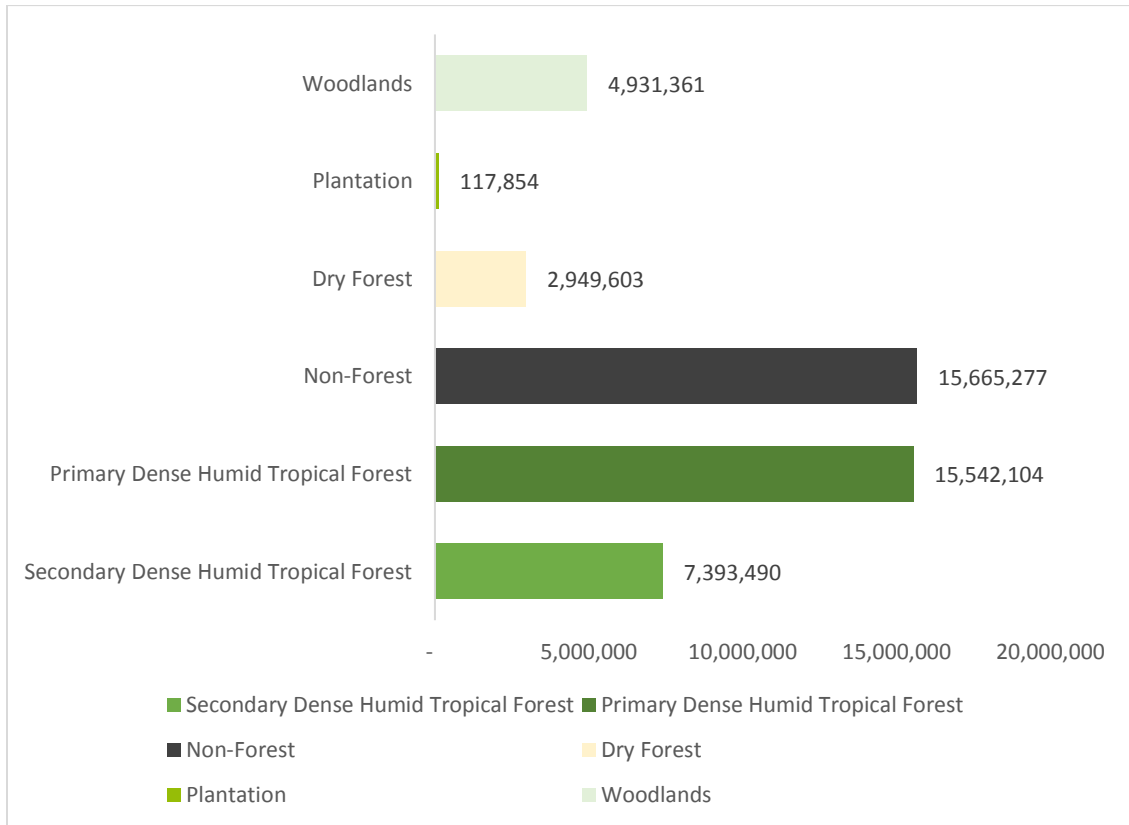
**List of participants:**

- Tatiana NANA – ST-REDD+ (Phase 1 and Phase 2)
- Socrates BIANRA – ST-REDD+ (Phase 1 and Phase 2)
- Fabrice OTTOU MBIDA – MINFOF (Ministry of Forests and Wildlife) (Phase 2)
- André Mazinga – OSFAC (Phase 1 and Phase 2)

**Annex 1: Key results of Phase 1**

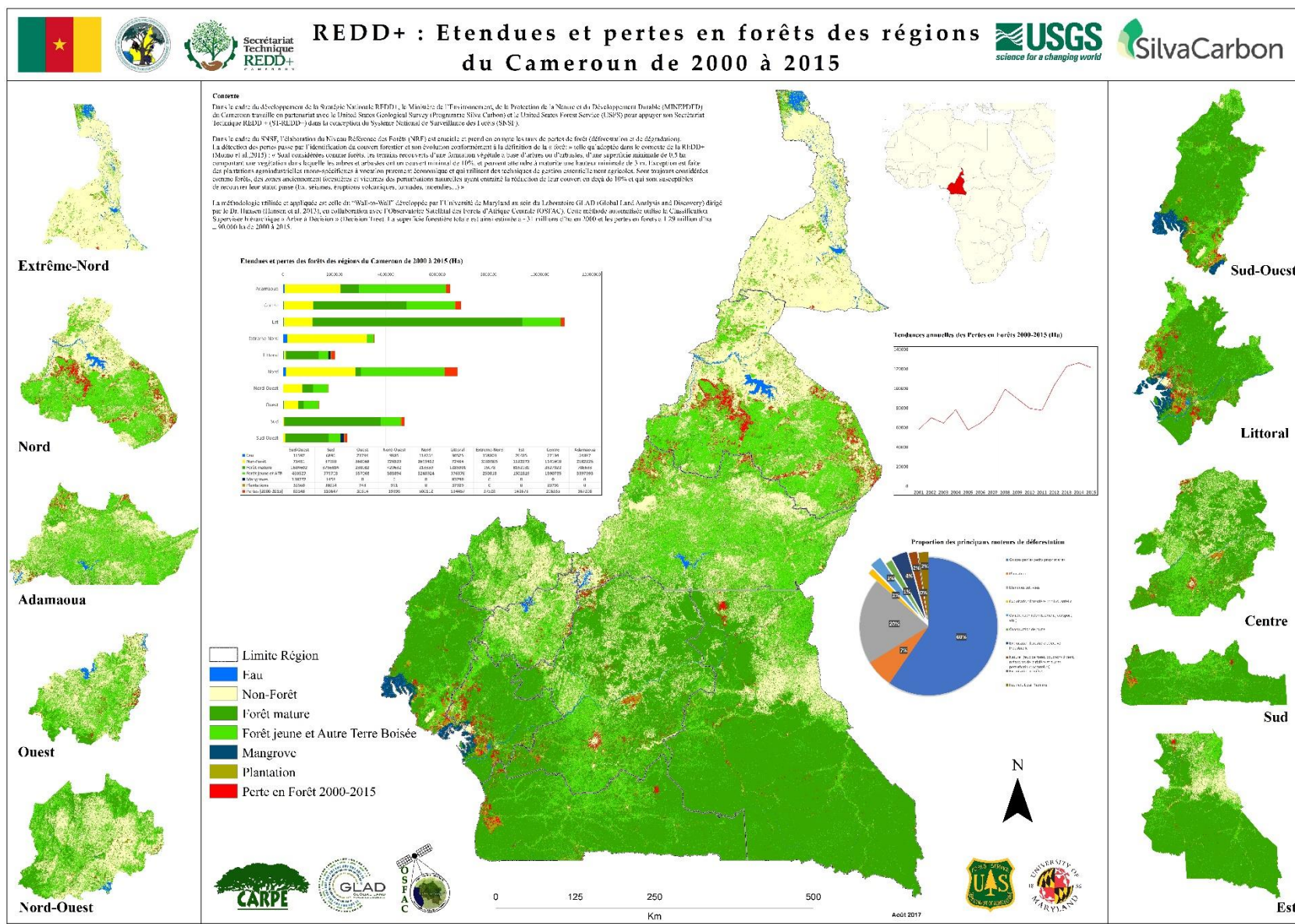


**Graph 1. Global Forest Change and Sample-based yearly estimates of forest cover loss 2000-2015**



**Graph 2. Forest cover extent in 2000 (ha)**

## Annex 2: Map of the Forest cover extent and loss of the Republic of Cameroon (Phase 2)



**Extrême-Nord**

**Nord**

**Adamaoua**

**Ouest**

**Nord-Ouest**

**Sud-Ouest**

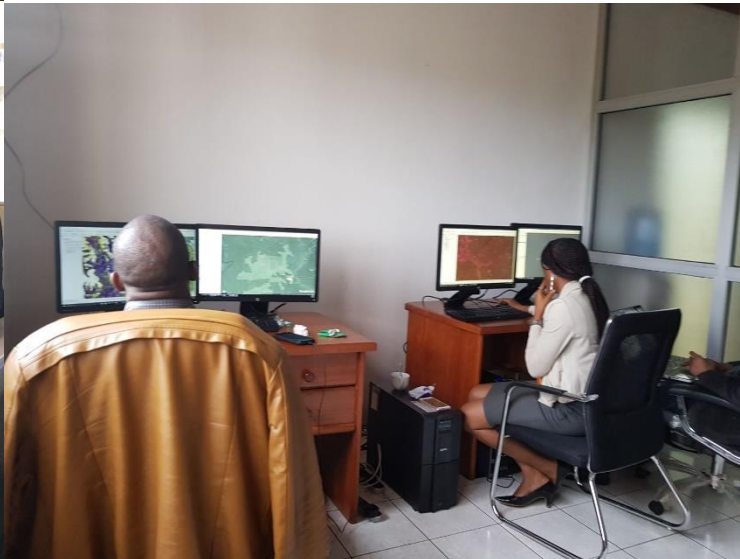
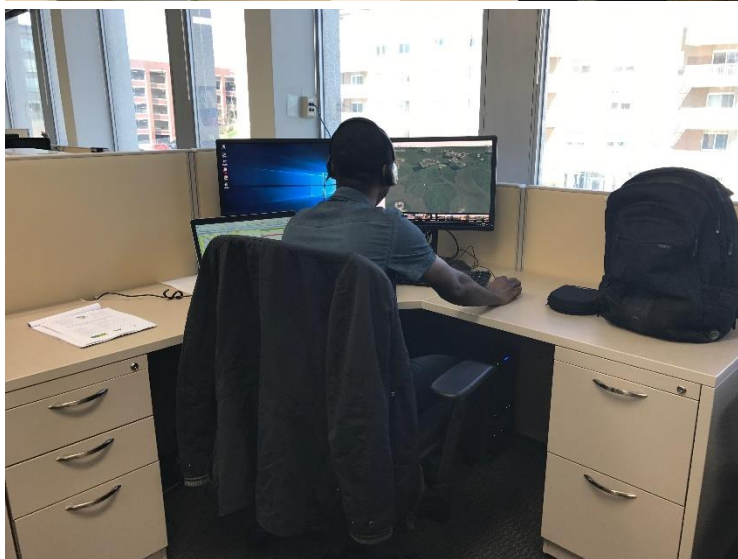
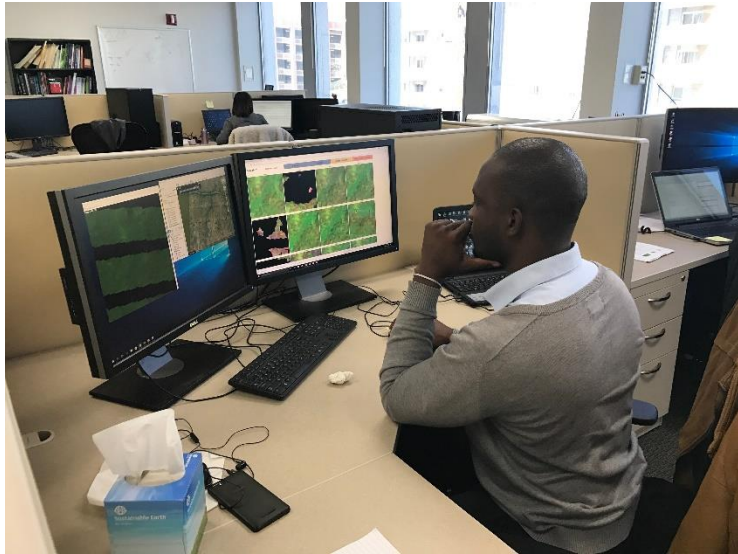
**Littoral**

**Centre**

**Sud**

**Est**





Socrates BIANRA (top left), Tatiana NANA (top right), Andre Mazinga (bottom left) and ST-REDD+ Team (bottom right)



From left to right: Fabrice Ottou Mbida (MINFOF), André Mazinga (OSFAC), Tatiana NANA (ST-REDD+) and Patrick Lola Amani (UMD)



Participants to the 3-day workshop