

JOINT SECTOR REVIEW

Uganda's National Forestry Monitoring System (NFMS) - Data Collection, Analysis and Sharing progress & Stakeholder aspects

By

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Summary of Uganda's progress against all REDD+ readiness sub-components

Sub-component	Progress rating	Progress Markers or features
R-PP Component 1: Readiness Organisation and Consultation		<ul style="list-style-type: none"> National REDD+ Management arrangements continue to function well (NCCAC, NTC & Taskforces supported by MWE Systems). REDD+ process continues to be inclusive, with engagement of stakeholders through Committees and consultations meetings supporting ongoing work under REDD+ Strategy revision, Safeguards frameworks (e.g. SESA and ESMF), NFMS and SIS preparations
R-PP Component 2: REDD+ Strategy Preparation		<ul style="list-style-type: none"> The national REDD+ Strategy and implementation frameworks is being reviewed to align with developments & Obligations requirements. Benefits Sharing Arrangements (BSA) and Feedback Grievance and Redress Mechanism were prepared and are ready for testing in the Emissions Reduction Program Areas. Revisions of SESA and ESMF and preparation of other safeguards frameworks is well underway and due for completion in September 2019 Two Emission Reduction Programs (ER-Programs) under preparation (they will cover the Albertine and Kyoga Water Management Zones (WMZ) areas
R-PP Component 3: Reference Emissions Level/Reference Levels		
Component 3: Reference Emissions Level/Reference Levels		Uganda aims to submit to UNFCCC updated FREL by end of 2020
R-PP Component 4: Monitoring Systems for Forests and Safeguards		
Sub-component 4a: National Forest Monitoring System		The task of completing design of the National Forest Information Monitoring system is well underway
Sub-component 4b: Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards		The design of Uganda's SIS is well underway

Characteristics of Uganda's National Forest Monitoring System (NFMS)

Uganda is building a robust National Forest Monitoring System that will:

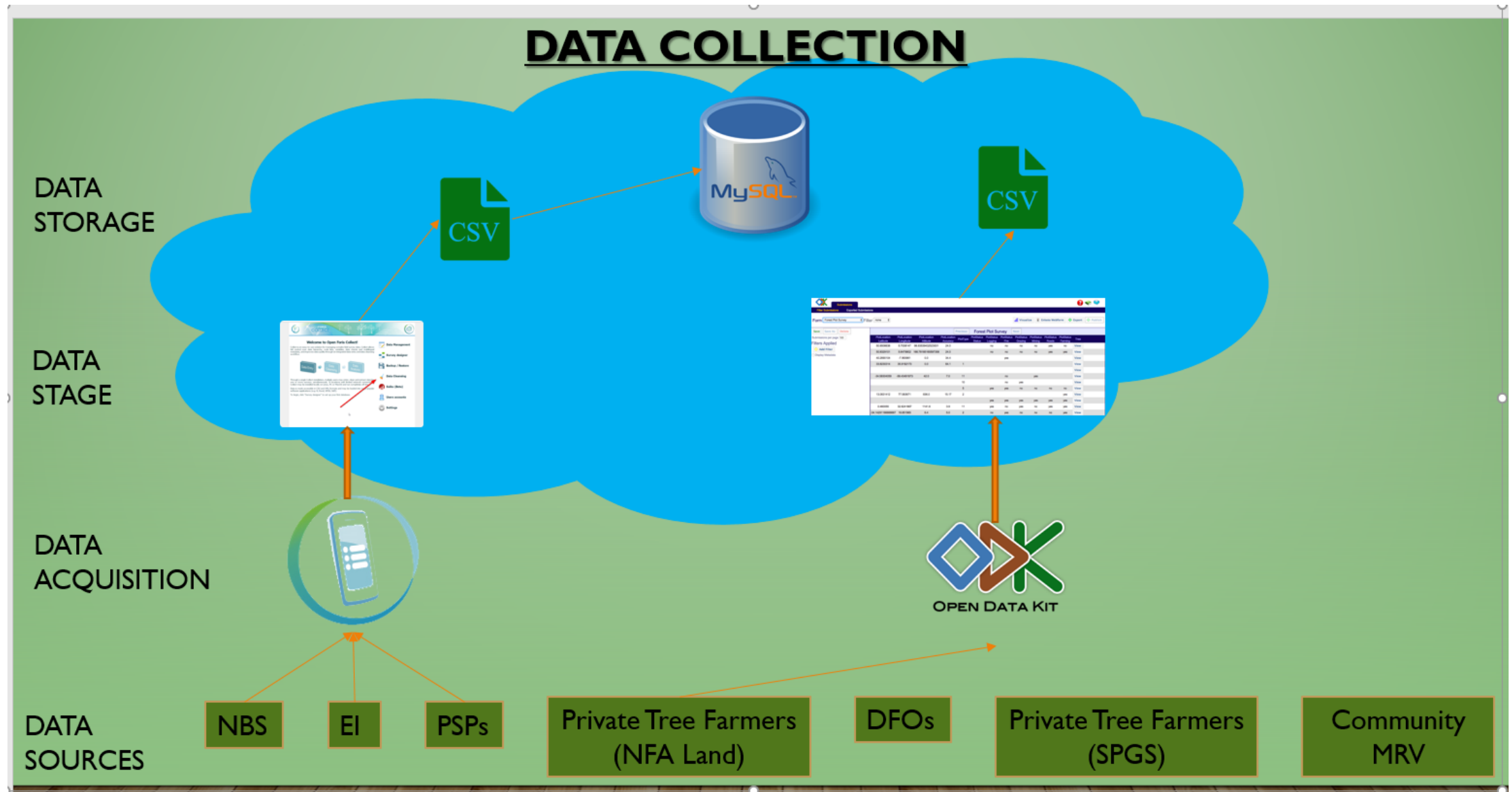
- Support all the Measurement, Reporting and Verification (MRV) functions related to REDD+ activities, including:
 - Collection and assessment, over time, of forest area and forest area change (Activity Data (AD));
 - Undertaking of regular National Forest Inventories (NFI) to, collect information on forest carbon stocks and carbon stock changes, relevant for estimating emissions and removals and to provide emissions factors (EF);
 - Undertaking regular national forest GHG Inventories to support the sector reporting on anthropogenic forest-related GHG emissions by sources and removals by sinks to the to the CCD that then reports to the UNFCCC Secretariat;
- Support the monitoring functions of the NFMS under national, regional and international requirements and obligations and able to:
 - Monitoring the performance of implementation of REDD+ activities;
 - Monitoring of the performance of national results-based actions that should be fully measured, reported and verified;
 - Monitoring the performance of policies and measures from other sectors which have implications for REDD+
- Support *institutionalisation* of NFMS and MRV functions and their capacities (e.g. policy and governance institutions, MRV institutions, management of processes, development of methods and tools)

Progress of developing Uganda's National Forest Monitoring System (NFMS)

On Measurement, Estimation and Estimation:

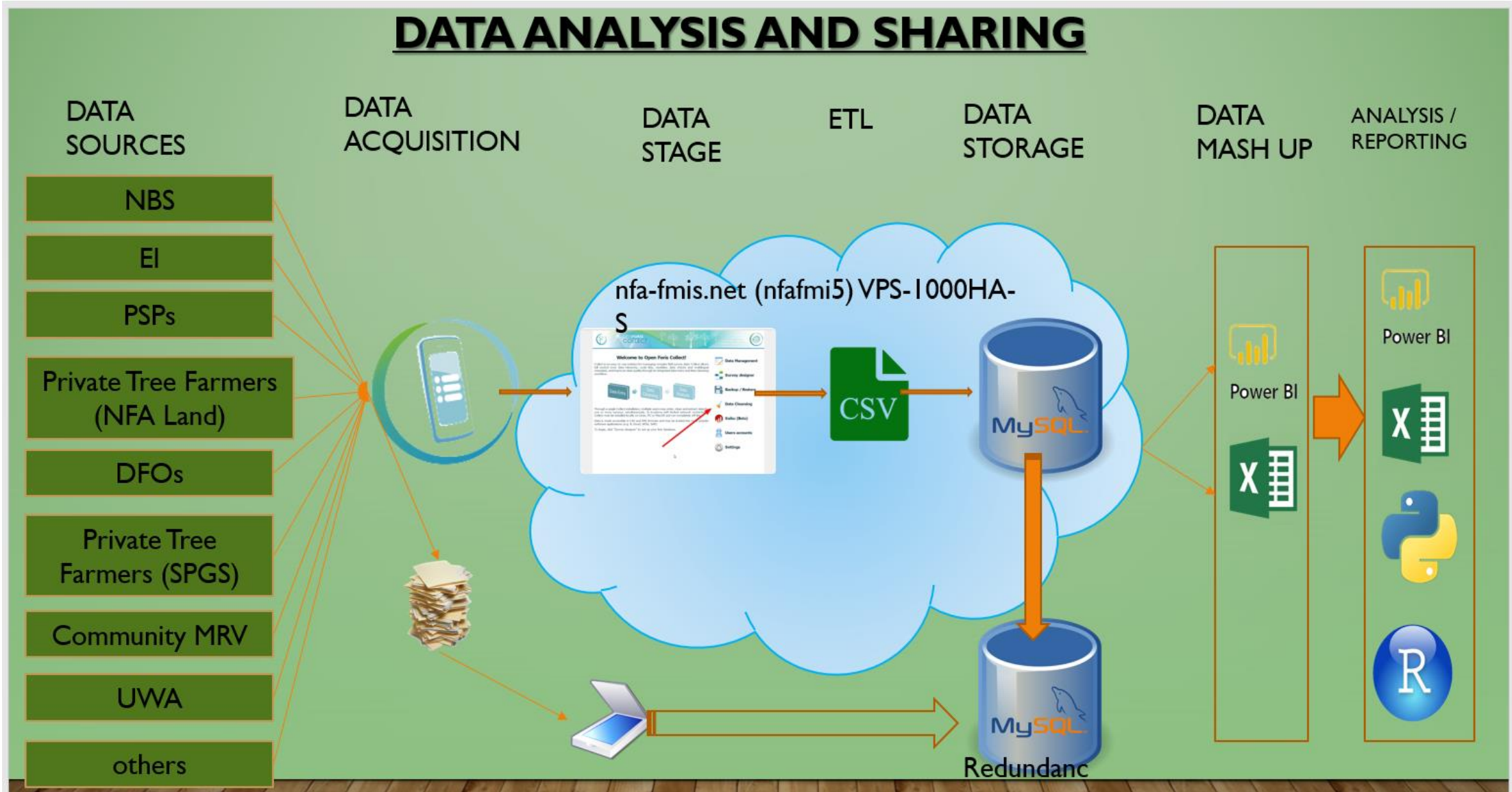
- Land Use Land Cover Data (for forest area and forest areas change) has been collected and 6 LULC maps developed for periods - 1990, 2000, 2005, 2010, 2015 and 2017
- Recent advances in technology are helping on framing the Forest degradation, making it possible for forest degradation to potentially be included in the next Forest Reference Level submission (2020)
- **National Forest Inventory (NFI):** is organised as “Exploratory inventory” (In central forest reserves) and National Biomass Survey for all the other land categories. The data included in the current analysis comes from data collected since 2003 to 2019 (from the National Forest Authority) covering 75% of the country (central, western and eastern and part but not all of the northern). Analysis of this data is ongoing.
- **Soil Organic Carbon:** A soil inventory is being conducted by a national institution (NARO/Kawanda). A database containing the soil organic carbon estimates by LULC and LU change containing Countrywide data is being implemented.
- **National and international reporting:** The data generated was used to support the preparation of the green house inventory for the land use, land use change and forestry (LULUCF) for the 2nd national communication, the first bi-annual report (BUR1) and the current development of the 3rd national communication; and Uganda Forest Reference Level.

Data collection for Uganda's National Forest Monitoring System (NFMS)



Data Analysis for Uganda's National Forest Monitoring System (NFMS)

DATA ANALYSIS AND SHARING



Institutionalization

All the data is collected by the Ugandan institutions and hosted in institutional servers.

The local institutions includes:

Ministry of Water and Environment

- (Forestry Sector Support Department (FSSD): for the coordination and
- Climate Change Department (CCD): for international reporting)

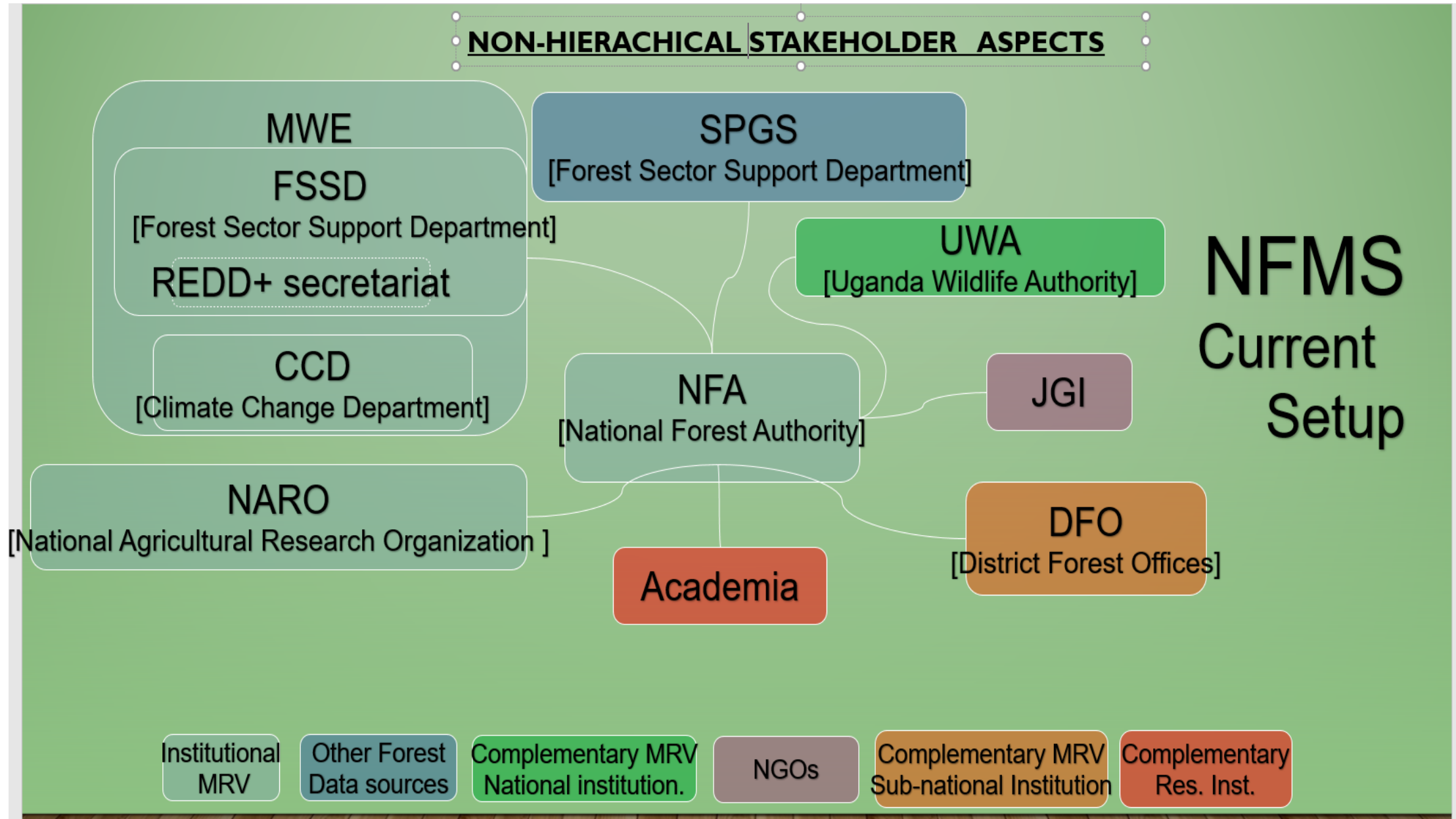
National Forest Authority (NFA): for the technical aspects of data collection, analysis and technical report.

NARO: For the soil Organic Carbon estimates

External partners: Jane Goodall Initiative for pilot a District Forest Service inclusion in the NFMS (decentralization)

Technical support: FAO

Progress of institutionalisation of Uganda's NFMS



Key Messages

- Uganda's Nationally Determined Contributions (NDCs) offers a strong opportunity to mainstream REDD+ into national planning processes, which will be important for the success and fulfilment of the Paris Agreement and Sustainable Development Goals
- This contribution will be supported and measured through a “robust National Forest Monitoring System (NFMS)” that is yet to completed and made functional.
- Still required includes:
 - **Planning and Design**
 - Completing the NFMS as part of the REDD+ implementation activity
 - Frameworks capacities and gaps in existing data sources
 - Forest monitoring system driven by UNFCCC reporting requirements
 - **Monitoring + or with measurement**
 - Regular / Annual Forest area change assessment (activity data)
 - Changes in carbon stocks (emission factors)
 - Emissions from biomass burning
 - Accuracy assessment and national verification
 - **Analysis & reporting**
 - National GHG information system
 - Analysis of drivers and factors of forest change
 - Establishment of reference emission level and regular updating
 - National and international reporting
 - Registry