

GFOI R&D Component Discussions

Monday, 8. May 2023

Organized by the Data, R&D, MGD and Capacity Building Components preceding the GFOI Plenary 9-11. May 2023 at FAO HQ in Rome

Background

To encourage collaboration among components, a joint Components meeting was organized by the GFOI Data, R&D, MGD and Capacity Building Components on the theme of the combination of National Forest Inventories (NFIs) with space-based biomass estimation. The goals of this meeting were to:

- Foster collaboration among GFOI components so that they can work more effectively together.
- Exchange on recent progress, discuss plans and gather feedback from countries and GFOI partners to increase the effectiveness of the component's efforts.
- Explore pathways forward to disseminate new data, science or implementation advice through the GFOI Family of Resources

More specifically, the R&D Component reflected on the current and ongoing demonstrations of different approaches and tools for better space-based and NFI data integration in several country circumstances. During the morning meeting, the R&D Component presented its progress and started discussing on future plans, discussing it with the other components. This meeting was followed by individual component meetings, in which each component refined their plans on the years to come. This document summarizes the afternoon discussions by the R&D Component.

Participants of the R&D Discussions

- Martin Herold, GFZ Potsdam
- Frank Martin Seiffert, ESA
- Andy Hudak, US Forest Service
- Chad Babcock, University of Minnesota
- Natalia Málaga, Wageningen University
- Neha Hunka, University of Maryland
- Aurélie Shapiro, FAO
- Robert Kennedy, Oregon State University
- Daniela Requena Suarez, Wageningen University
- Javier Garcia-Perez, FAO

Summary of afternoon R&D Discussions

Topic	Discussion	Action point	Responsible
Agencies' role in R&D	<p>Agencies such as FAO that are not research institutions are becoming more embedded into country supporting through R&D. It may be a good idea to discuss the integration of agencies into the R&D component, specifically on this topic.</p> <p>Through the Aim4Forest projects, there are ongoing communications between FAO and countries. There is already an agreement on research from FAO's side with about 20 active working countries (not selected yet). One of the activities is to facilitate the process of data management, maybe a consolidated, agency-organized effort into reaching out for country participation can be followed. This should be discussed with Julian Fox.</p>	Discuss how FAO can be integrated into R&D efforts	Martin, Javier
R&D perspective	From the R&D perspective, the focus is on things that are tested but not operational. The degree of operationality can be assessed through the CALM framework.	None	-
Compilation of Existing efforts	Compile existing efforts to show what has currently been done in this topic, and what is currently in the works. This was already started through the Biomass Harmonization activity. Neha can update and share the list of this activities if needed	Send the existing list of studies/topics and main points of contact	Neha, Daniela
R&D country requirements	R&D requirements from countries can be channeled to research groups and agencies (i.e. CEOS and FAO) to draft an expression of interest for collaboration with countries	Express country needs to CEOS body & RS-product developers	Martin, Frank Martin, Neha, Daniela, Natalia

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	<p>The aforementioned two-pager should have benefits of countries might help establish collaborations. In the end, we want to stress that our long-term objective is to provide country the capacities to do their own analyses and to independently uptake space-based products.</p> <p>The two-pager should include the desire to understand country needs.</p>	and draft two-pager	
Data ownership	<p>One of the things that FAO pitches is data ownership (keeping and using their own data in the system). There is a big jumping success when you facilitate the country having the data in their service. This is a point to keep in mind for the future.</p>	None	-
Expert workshop	<p>There is an interest in an expert workshop that brings together statisticians, biomass product developers. Methodological agreements still need to be made, particularly before contacting countries with the two-pager.</p> <p>Currently Neha is organizing a meeting, location tbc (east US or EU) on October 11-13. There was high interest in this group to organize this event before contacting countries.</p> <p>One topic of interest is the ways in which uncertainties can be estimated. This is particularly crucial for the uptake of space-based biomass within the carbon market. Currently, In the pixel</p>	Move forward with organization of biomass/EF expert workshop	<p>Neha for organization of event.</p> <p>Everyone for discussions and drafting the two-pager</p>

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	<p>level, uncertainties are too large. Our responsibility is to convey those limitations.</p> <p>A CALM assessment can be done for each of the existing methods of integration.</p>		
Provision of MGD guidance	Guidance is elaborated as a response to a direct request of the MGD component. For the moment let's keep focused on the technical work, and the guidance can be developed on the synthesis of country-specific efforts.	None	-
Country calculations of national-level aggregates of biomass	There is a need for better space-based biomass data accessibility for countries. Currently, simple calculations of national estimates using the Biomass products are not accessible for the calculation of national level estimates, if agreed, MAAP can be used platform as a potential solution.	Discuss whether this can be implemented, and where	CEOS?

Additional topics of discussed:

- A GFOI R&D Summit was not seen as an ideal solution for communication. But perhaps regular (once every 2-3 months) online meetings on specific priorities would be of interest.
- Another option can be the organisation of side sessions in conferences, or special issues.
- The topic of degradation and regrowth (particularly removal estimates) is timely and many gaps remain.
- Regarding country needs, the RELs can be checked to update the R&D priorities directly based on the country needs section.
- Preparation for upcoming sensors and datasets that could enrich the data, such as BIOMASS, NISAR and GEDI v2.0.

