

Activities and Research Priorities of the GFOI R&D Coordination Component

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The recent Paris Climate Agreement¹ emphasizes efforts for reducing emissions from deforestation and forest degradation and enhancing carbon stocks (REDD+) for mitigation of greenhouse gas emissions in developing countries. To help fulfil the monitoring and reporting needs, the Global Forest Observations Initiative² (GFOI) fosters actions toward operational national forest monitoring underpinning the Measuring, Reporting, and Verification of REDD+ activities.

Dedicated research and development (R&D) have been instrumental in developing technical solutions integrating remote sensing and ground based observations for national forest and GHG monitoring in both developed and developing countries³. While R&D activities are happening in their own right, impact for REDD+ countries is best achieved if R&D is embedded in the broader GFOI-set of activities and fed back into countries directly (Fig. 1). The coordination of R&D activities which is one of four components of GFOI focuses on:

- 1) **Assessing** country needs to define R&D priorities and stimulate dedicated research,
- 2) **Advocating** for a coordinated, multi-sensor data acquisition strategy to support GFOI related R&D,
- 2) **Synthesizing** research outcomes in regular updates of guidance documents such as the GFOI Methods and Guidance document (MGD) and the GOFC-GOLD REDD+ Sourcebook,
- 3) **Developing** REDD+ training materials and fostering their use in joint capacity building activities,
- 4) **Acting** as expert advisors, and as advocates for robust technologies and approaches, identifying their assets and limitations for REDD+ engagement.

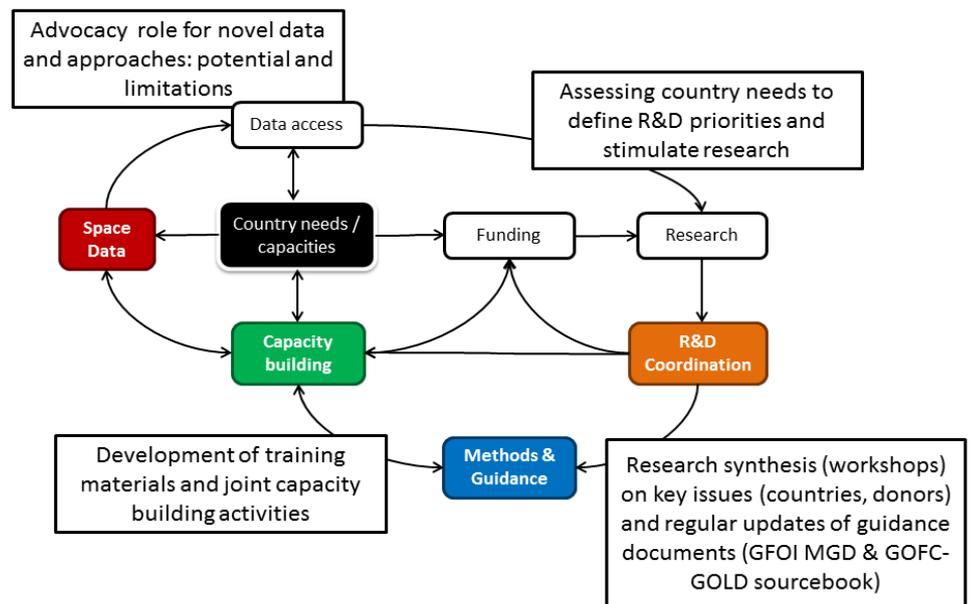


Figure 1: Embedding of R&D coordination within GFOI Components to stimulate research driven by country needs and feed research synthesis in the guidance materials and capacity development.

Figure 1 illustrates how the R&D Component is rooted to the evolving country needs and acts as a catalyst for R&D activities aimed at delivering practical solutions toward operational NFMS. The list of priority research topics is regularly revised to further facilitate research activities through interacting with stakeholders, facilitating remote sensing data access and fostering joint research activities. Dedicated expert workshops are aimed to provide a synthesis of state-of-the-art forest monitoring methods that can be incorporated into the MGD and capacity building materials. The R&D Coordination Component interacts closely with the other GFOI components and external partners engaged in capacity building activities. There is direct communication with space agencies and commercial data providers to facilitate data access to research groups

(SDCG Element-3).

The R&D efforts of the GFOI initiated seven years ago, have to be considered in a long-term perspective; such a timeframe being required for R&D practitioners to develop, experiment, and validate techniques that can support country needs for operational NFMS. In 2016, the Land Cover Project Office of the Global Observation of Forest Cover & Land Dynamics (GOFC-GOLD) took the lead of the GFOI R&D Component; thanks to the support of the European Space Agency. The 2017-2019 Work Plan of the R&D Coordination component aligns with the objectives of the GFOI as a whole, and previous achievements, bringing forward an updated list of priority R&D topics, and a Communication and Assessment Readiness Level (CARL) framework to monitor R&D progress.

1 <http://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf>

2 <http://www.gfoi.org/rd/>

3 http://www.cifor.org/publications/pdf_files/Books/BWijaya1201.pdf

