

2020-2022 GEO Work Programme

Implementation Plan for the Global Forest Observations Initiative

1. Executive Summary

While the land sector is a significant source of global greenhouse gas (GHG) emissions, it also offers significant potential for reducing emissions and removing GHGs from the atmosphere. To inform national policy development, improve international reporting, and transparently track progress towards their GHG emissions reduction commitments, developing countries are working to establish self-sustained National Forest Monitoring Systems (NFMS) and associated emissions Measurement, Reporting and Verification (MRV) procedures. The need for NFMS is emphasized by the Paris Climate Change Agreement and associated decisions on guidance, transparency and MRV taken during the recent United Nations Framework Convention on Climate Change's (UNFCCC) 24th Conference of the Parties (COP 24) in Katowice, Poland.

The Global Forest Observations Initiative (GFOI) was established under the Group on Earth Observations (GEO) in 2011 as a forum to coordinate forest monitoring activities through the use of earth observation data. In 2015, GFOI was endorsed as one of the first GEO Flagships.

In 2016, GFOI partners commissioned a holistic external review of the Initiative. The review found that while GFOI had succeeded in achieving many of its initial goals, it needed to evolve to meet the changing global context, including supporting the implementation of the Paris Agreement, Sustainable Development Goals (SDGs) and the rapidly evolving information needs of developing countries. Subsequently, a second phase of GFOI was developed which reprioritizes the Initiative, expands its memberships and seeks to improve collaboration for the benefit of forested developing countries. GFOI Phase II is now in the early stages of implementation and is scheduled to run for the foreseeable future, including the period the GEO Work Programme 2020-2022 period.

GFOI constitutes an informal partnership of countries and institutions who collaboratively and consistently assist developing countries to operationalize or improve their NFMS. Together, GFOI provide a larger and more detailed package of support than any one partner could provide alone. GFOI's collaborative efforts seek to help developing countries to address multiple different needs, including establishing MRV procedures for REDD+¹, monitoring progress towards Nationally Determined Contributions (NDCs), the Global Stock Take process under the UNFCCC, confidence in performance based emissions reduction finances, supporting the Global Forest Resource Assessment (FRA), and informing national policy development and GHG inventories.

GFOI is the product of the collaborative actions of its partners. Under its second phase, the Initiative will facilitate the following key activities, which seek to help developing countries to accelerate progress in their NFMS:

^{1 1} Reducing emissions from deforestation, forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

- 35 a) Collaborative assessment of countries' needs, gaps and priorities
36 b) Coordinated work planning to address priority country needs for improving or operationalizing
37 NFMS and support their application to relevant reporting frameworks, including UNFCCC
38 c) Facilitate collaborative implementation of forest monitoring support
39 i. Complementary or consistent capacity building assistance delivered directly to developing
40 countries
41 ii. Development and dissemination of user friendly guidance for REDD+ that is IPCC and
42 UNFCCC compliant, and consistent with other international reporting requirements
43 iii. Coordinate and influence the availability, accessibility and capacity to use remote sensing
44 and other key datasets and tools
45 iv. Coordinate R&D activities to fill knowledge gaps, overcome obstacles to progress, align the
46 work of the research community with country needs, and enable continuous
47 improvements.
48 d) Other joint resources and mutually beneficial collaboration that provides targeted support and
49 deliver tangible benefits to developing countries.

50 The Initiative is guided by a Leads Group, currently comprising of the Governments of Australia,
51 Germany, Norway, the United Kingdom (UK) and the United States (US) as well as the international
52 Committee on Earth Observation Satellites (CEOS), the European Space Agency (ESA), the Food and
53 Agriculture Organization of the United Nations (FAO) and the World Bank. It is implemented in close
54 collaboration with developing countries and many other partners including the Intergovernmental Panel
55 on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC)
56 Secretariat, Non-government Organizations (NGOs), academia, the private sector, individual experts and
57 others.

58 GFOI partners coordinate the delivery of their forest monitoring assistance across four interlinked
59 components (i) capacity building, (ii) methods and guidance documentation (MGD), (iii) data and tool
60 (data) coordination and; (iv) research and development (R&D) coordination. Furthermore, through the
61 work of CEOS as a leading partner of the GFOI's Data Component, the Initiative is also working to
62 provide assured availability of annual wall-to-wall coverage of all the world's forested regions with
63 remote sensing data.

64 The GFOI Office provides day-to-day management and secretariat services for the Initiative on behalf of
65 the Leads Group and other GFOI partners. The Office is based at the FAO in Rome and can be contacted
66 via GFOI-Office@fao.org.

67 2. Purpose

68 Rationale

69 With the Paris Climate Change Agreement now in place and a growing interest in using data to inform
70 decision-making, there is an ever-increasing need for developing countries to access credible
71 information about their forest resources and associated greenhouse gas (GHG) emissions, which are
72 believed to be a significant contributor to global climate change. However, in a sector where emissions
73 have traditionally been difficult to quantify, developing countries are seeking to develop national forest
74 monitoring systems (NFMS) to help inform their policy development, international reporting,
75 transparency measures and, ultimately their efforts to reduce GHG emissions.

76 Furthermore, this increased demand for improved information from forests has been coupled with a
77 boom in the supply of data, tools and other forms of international support available to developing
78 countries to help them improve their forest monitoring capabilities. Without global coordination and a
79 targeted effort to align the boom in both the demand for forest information and the supply of new
80 technology, developing countries would likely be inundated with different approaches and subsequently
81 the development of their NFMS would be at risk of paralysis.

82 The Global Forest Observations Initiative (GFOI) is a global partnership for coordinating the delivery of
83 international support in forest monitoring to developing countries. GFOI provides a forum for
84 collaboration and consistency for multiple different purposes. This includes but is not limited to
85 emissions measurement, reporting and verification (MRV) for REDD+², monitoring progress towards
86 Nationally Determined Contributions (NDCs), national inputs to the Global Stock Take under the United
87 Nations Framework Convention on Climate Change (UNFCCC), confidence in performance based
88 emissions reduction finances, supporting the Global Forest Resource Assessment (FRA), and informing
89 national policy development and GHG inventories. Through the collaborative action of its partners, GFOI
90 aims to facilitate a larger and more targeted package support to developing countries than any one
91 international partner could provide alone.

92 Policy mandate

93 Established in 2011 under the GEO umbrella, GFOI became one of the first GEO Flagships in 2015 and
94 has continued to be recognized as a Flagship ever since. With a global scope, extensive membership,
95 strong user connections, well established procedures and several years of operational experience, GFOI
96 is considered be a mature Initiative.

97 GFOI's primary goal is to assist developing countries to improve their forest monitoring capabilities to
98 support their efforts to reduce emissions from deforestation, forest degradation, the role of
99 conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+)
100 under the UNFCCC. GFOI support also seeks to help developing countries to generate credible national
101 data and address multiple other international reporting and transparency needs.

² Reducing emissions from deforestation, forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

102 GFOI has a strong global presence and is recognized by multiple international bodies and UN Agencies.
103 In particular, the UN FAO is a Lead Partner to GFOI, jointly manages the Capacity Building Component
104 and hosts the GFOI Office which provides secretariat services and day-to-day oversight of the Initiative
105 on behalf of the Leads Group. The GFOI Office is a formal FAO project and hence is recognized in official
106 documentation of a UN Agency.

107 Furthermore, GFOI's members include the World Bank as a Lead Partner, the United Nations Framework
108 Convention on Climate Change (UNFCCC) Secretariat as a member of the Advisory Group (AG), the
109 Intergovernmental Panel on Climate Change (IPCC) Secretariat also as a member of AG, UNDP as a
110 participating member and various other intergovernmental organizations.

111 The GFOI's technical standing in this field has recently been reflected in the strong role the Initiative has
112 played in supporting the 2019 Refinement of the 2006 IPCC Guidelines for National Greenhouse Gas
113 Inventories. Several GFOI representatives have played a leading role in drafting the land use chapters of
114 the Refinement where they have drawn on their experience in developing the GFOI's Methods and
115 Guidance Documentation (MGD) which is referenced heavily in late drafts of Refinement.

116 Outputs

117 With GFOI being a coordination partnership, the Initiative itself is a product of the collaborative efforts
118 of its partners. Ultimately, GFOI aims to facilitate effective international cooperation which leads to a
119 coherent global package of support for developing countries. A detailed list of deliverables is included in
120 the tables provided with this submission but in summary, the major outputs from GFOI's collaborative
121 efforts include:

- 122 1. Joint understanding of country needs for international support
- 123 2. Collaborative plans to address priority country needs for improving or operationalizing NFMS for
124 multiple different applications
- 125 3. User friendly methods and guidance for the development and operationalization of NFMS
- 126 4. Complementary or consistent capacity building activities delivered directly to developing
127 countries
- 128 5. Improved access to operational data, tools, and other technologies
- 129 6. Worked with the broader community of space-data providers to assure the availability of annual
130 wall-to-wall coverage of all the world's forested regions with remote sensing data
- 131 7. Targeted R&D to fill knowledge gaps and overcome to progress
- 132 8. Targeted communications and information exchange
- 133 9. A network of experts who can be assigned to assist countries and address challenges
- 134 10. A global Inventory of GFOI partner's forest monitoring support activities in developing countries
- 135 11. A registry of operational level tools that can be used for forest monitoring and associated MRV
136 procedures

137 Overall, GFOI seeks to facilitate efficient and effective international coordination in forest monitoring
138 that delivers tangible benefits to developing countries.

139 Users

140 GFOI aims to facilitate effective collaboration between international partners, so that their support can
141 be efficiently and effectively delivered to developing countries and avoid the risks of duplications,
142 overlap and inconsistency of approaches. Developing countries with ambitions to reduce GHG emissions
143 through the reduction of deforestation and degradation and increased forest restoration are the
144 primary target beneficiaries of GFOI.

145 Outcomes

146 Through the effective implementation of the GFOI, developing countries will receive streamlined and
147 targeted support, which allows them to accelerate development of their NFMS, which in turns helps
148 them to generate information to support a range of different needs. This includes but is not limited to;
149 MRV for REDD+³, monitoring progress towards Nationally Determined Contributions (NDCs), potential
150 support of the Global Stock Take, confidence in performance based emissions reduction finances,
151 supporting the Global Forest Resource Assessment (FRA), and informing national policy development
152 and GHG inventories.

153 Impact

154 Through GFOI support, developing countries can produce improved information on national forest
155 resources, as well as improve reporting to the UNFCCC and related forums on GHG emissions and
156 removals from the atmosphere. This information will aid in transparent and evidence-based policy
157 formulation and decision-making for improved forest management and reduced GHG emissions in
158 accordance with their own national circumstances and goals.

159 Beneficiaries

160 The primary beneficiaries of GFOI will be developing countries working to improve forest and other land
161 use management and reduce GHG emissions. Citizens of these countries will also have improved
162 information and resources to engage in sustainable land use activities and improved livelihoods. This
163 includes land owners and minority communities living in and depending on forest lands.

164 3. Background and Previous Achievements

165 The GFOI was founded in 2011 under GEO and follows the pilot of GEO-Forest Carbon Track tasks (GEO-
166 FCT), which was founded in 2008. In facilitating global coordination on forest monitoring, GFOI partners
167 have achieved the following:

- 168 a) Built technical capacity in developing countries and provided operational guidance to support
169 countries to meet their international reporting requirements, including to the UNFCCC and
170 under multilateral initiatives such as the World Bank's Forest Carbon Partnership Facility (FCPF)
171 b) Published methods and guidance on MRV for REDD+ which is IPCC compliant and supports
172 countries to design and develop systems and procedures that meet their national reporting
173 requirements, in particular to the UNFCCC
174 c) Worked with the broader community of space-data providers to assure the availability of annual
175 wall-to-wall coverage for all the world's forested regions with multiple remote sensing data
176 sources in support of reporting by countries
177 d) Contributed to the development of scientific best practices, and enabled scientific institutions to
178 address necessary scientific advancements identified by developing countries and capacity
179 developers.

³ Reducing emissions from deforestation, forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

180 In 2016, the GFOI Leads commissioned a holistic review of the Initiative. The review found that while
181 GFOI has succeeded in achieving many of its initial goals, it needed to evolve to meet the changing
182 global context and streamline collaboration between partners. Subsequently, a second phase of GFOI
183 was developed which takes a greater focus on identifying and addressing country needs, and
184 incorporates more structured mechanisms of coordination between GFOI partners. GFOI Phase II is
185 anticipated to continue through until the end of 2022 at the earliest.

186 GFOI's Capacity Building partners provide the interface for the rest of the GFOI community's support to
187 developing countries. For example, the US SilvaCarbon Programme, in close partnership with other GFOI
188 partners has supported:

- 189 • 24 countries with accurate and sustainable national forest inventory methods
- 190 • 18 countries with upgraded cost-efficient remote sensing tools and 16 countries with capacity in
191 place to manage them
- 192 • 13 countries that have increased the tier for their GHG reporting (moved from Tier 1 to Tier 2)
- 193 • 13 countries that have presented their Forest Reference Emission Levels (FRELs)

194 Furthermore, FAO has supported 70% of developing countries who have submitted their FRELs to the
195 UNFCCC.

196 4. Relationship to GEO Engagement Priorities and to other Work Programme Activities

197 GFOI aims to support developing countries to establish their own sovereign NFMS to generate credible
198 information about their forests which can be used for a range of different purposes, including but not
199 limited to decision making, policy development and international reporting.

200 Paris Agreement

201 The primary forum that GFOI seeks to support is the UNFCCC, including helping to countries to
202 implement the commitments they've made under the Paris Agreement. The role of forests features
203 prominently in the Paris Agreement. Recognizing this, GFOI seeks to help developing countries to
204 monitor changes in their forests and resultant GHG emissions, so they can develop interventions to
205 reduce their emissions and track progress towards their NDCs. The Initiative contributes to three pillars
206 of the Paris Agreement, as follows:

207 1. Capacity Building / Technology Transfer:

- 208 ○ All GFOI activities ultimately seek to build sovereign capacity in forest monitoring and
 209 associated MRV procedures in developing countries.
- 210 ■ Specifically, GFOI's Capacity Building Component seeks to coordinate the delivery of
 211 capacity building assistance in to a targeted and coherent package
- 212 ○ The primary goal of GFOI's Data Component is to streamline the availability and useability of
 213 data and tools for use in countries NFMS and associated MRV procedures

214 2. National Reporting / Global Stocktake:

- 215 ○ The policy mandate of the GFOI is completely aligned with the UNFCCC Framework for
 216 Transparency.
- 217 ○ Interactions with countries seek to support countries to achieve their NDCs
- 218 ○ A major feature of GFOI's methodological support is sustainability and sovereignty,
 219 therefore allowing countries to operationalise their own systems and use these to deliver
 220 regular reports to the UNFCCC, including for future global stocktakes.

221 3. Mitigation:

- 222 ○ In supporting developing countries to establish their own NFMS, GFOI is helping to
 223 empower them with information to make informed decisions on the development,
 224 implementation and monitoring of mitigation policies and programs in the forest sector.

225 Sustainable Development Goals

226 GFOI activities and outputs directly or indirectly support developing countries to create their own
 227 credible forest and GHG data sets, which can be used for tracking progress against multiple Sustainable
 228 Development Goals (SDGs).

- 229 • As a forest monitoring Initiative, GFOI contributes to the delivery of **SDG 15.1, SDG 15.2 and**
 230 **SDG 15.3** for improved forestland management.
- 231 • The GFOI, specifically its Capacity Building Component, is entirely focused on the delivery of
 232 **SDG 13.3** for climate change capacity building.
- 233 • The GFOI is a global partnership aimed at ensuring efficient and effective technology exchange as
 234 defined under **SDG 17.6, SDG17.7 and SDG 17.9** for technology transfer.

235 Furthermore, GFOI maintains a close connection to the Global Forest Resources Assessment (FRA), as
 236 facilitated by FAO as a GFOI Lead partner, joint manager of the Capacity Building Component and host of
 237 the GFOI Office. FRA is used to monitor and report on two of the three forest-related SDG indicators:

- 238 • 15.1.1: Forest area in proportion of land area;
 239 • 15.2.1: Progress towards sustainable forest management.

240 Sendai Framework

241 GFOI has also played a central role in establishing an Early Warning Working Group (EWWG) to explore
 242 opportunities for coordinated international assistance to developing countries on technologies for
 243 promptly detecting the destruction or illegal use of forest resources. This technology should also be
 244 capable of detecting other landscape changes that could be of use for implementing Disaster Risk
 245 Reduction policies.

246 Other GEO activities

247 Over the course of this forward workplan, GFOI will explore opportunities for working more closely with
248 other GEO activities where mutually benefits can be achieved. Specific collaborations will need to be
249 further considered, however opportunity is working with GEOGlam to ensure the consistent use
250 methodologies and complementary support across GEO Flagships, to help map the transition between
251 forest and agricultural land uses in developing countries.

252 5. Stakeholder Engagement and Capacity Building

253 GFOI has a broad and diverse network of stakeholders. This includes but is not limited to international
254 development partners, developing countries, donors, academia, NGOs, the private sector and individual
255 experts. The major contributors to the Initiative all hold a position on the GFOI Leads Group. Lead
256 partners are also responsible for nominating Component Managers for each of the Initiative's four
257 components.

258 All of GFOI's activities seek to improve the global package of capacity building support that forested
259 developing countries receive from international partners and thus improve their capacity in forest
260 monitoring and associated MRV capabilities. Conscious of the need to ensure international support is
261 targeted at the needs of developing countries whilst also well-coordinated between international
262 partners, GFOI is in the process of developing a systematic Country Needs Assessment (CNA) process.
263 This includes a holistic self-evaluation by developing countries to identify their own tangible needs for
264 improving or operationalizing their NFMS and communicating these to GFOI's international
265 development partners where support is needed. Priority needs will be captured as discrete 'work
266 packages' and considered during coordinated work planning between GFOI partners. Where resources
267 are available, these work packages will form the basis for GFOI's collaborative capacity building
268 activities. As a result, GFOI's support will be targeted at tangible needs, which will vary from country to
269 country and include individual, organizational or institutional capacity building or a combination thereof,
270 which can ultimately help the country to operationalize or improve their NFMS.

271 GFOI uses its annual Plenary and associated side-meetings to bring together its partners to reflect on
272 recent progress and plan for the foreseeable future. All GFOI stakeholders are welcome to participate in
273 this event to help shape the priorities for the Initiative. Developing country participation in the Plenary is
274 supported by the GFOI Office and capacity building partners.

275 6. Governance

276 GFOI is guided by a Leads Group, currently comprising of the Governments of Australia, Germany,
277 Norway, the United Kingdom (UK) and the United States (US) as well as the international Committee on
278 Earth Observation Satellites (CEOS), the European Space Agency (ESA), the Food and Agriculture
279 Organization of the United Nations (FAO) and the World Bank. Membership of the Leads Group is based
280 on partners who make significant financial or in-kind contributions and/or those who seek to coordinate
281 large scale activities through the Initiative. The Leads Group is open to new members from partners who
282 make substantial contributions in either of these categories.

283 The Leads Group sets the strategic direction for the Initiative, identifies new opportunities, assesses
284 progress against deliverables, and oversees activities and funding. Each member of the Leads Group is
285 responsible for ensuring that their organization actively participates in the coordination activities of the
286 Initiative and seek to deliver a harmonized package of support with other partners to developing
287 countries. The Leads Group meets in-person twice per year and monthly by teleconference.

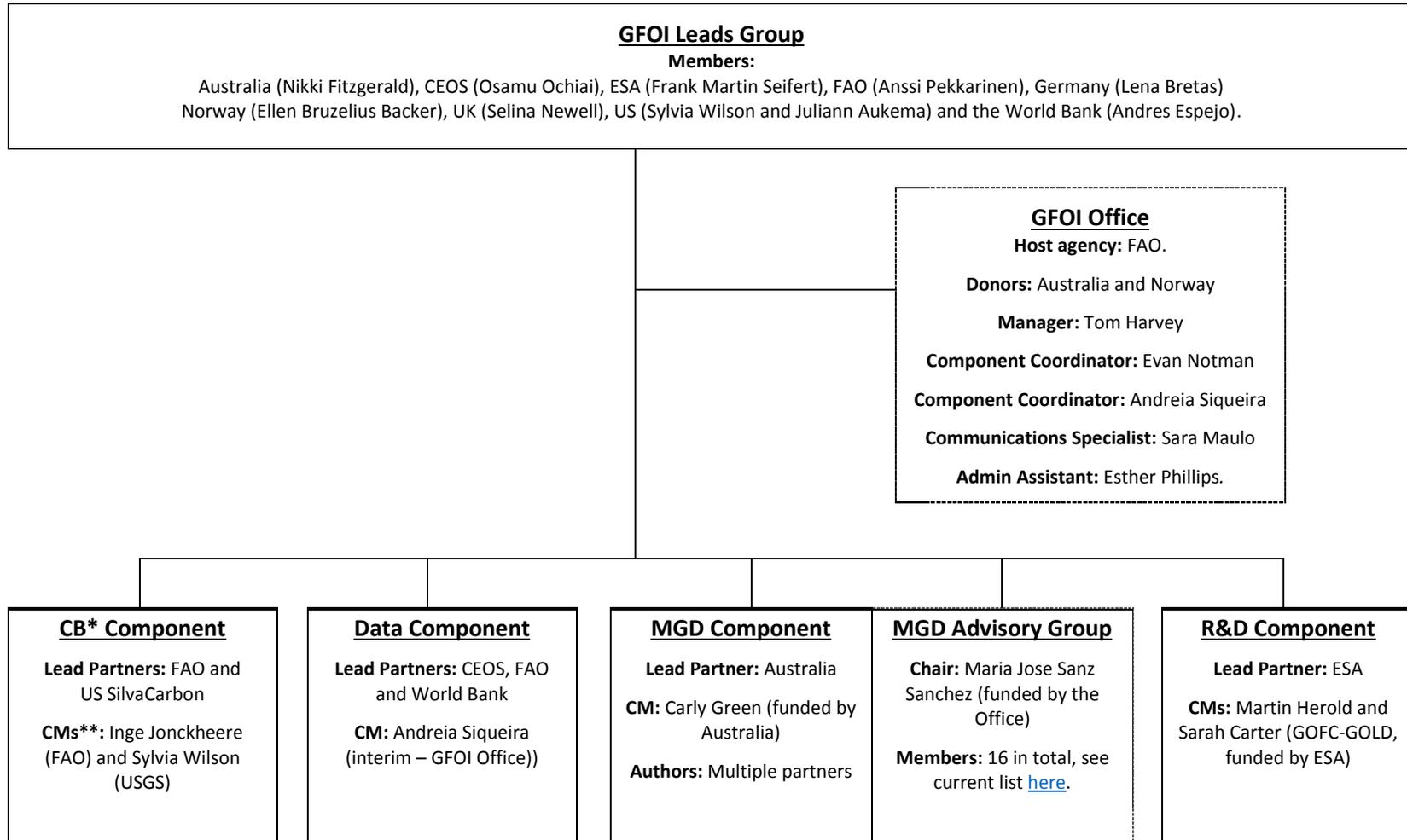
288 The Leads also appoint managers of each of GFOI's four components. The Component Managers are
289 responsible for the planning, delivery and reporting of component activities. Representatives from FAO
290 and SilvaCarbon jointly manage the Capacity Building Component, a member of the GFOI Office is
291 currently acting as the manager of the Data Component, Australia funds the MGD Component Manager
292 and GOFC-GOLD manages the R&D Component with funding from ESA.

293 The GFOI Office provides day-to-day management and secretariat services for the Initiative on behalf of
294 the Leads. It supports the Leads Group, Components, and partners to deliver on the objectives of the
295 GFOI. The Office oversees GFOI-specific activities, facilitates coordination between partners, and
296 supports developing country involvement in events and manages the annual GFOI Plenary. The Office is
297 based at the FAO in Rome and staffed with a team of project managers and content specialists.

298 Collectively the Leads Group, Component Managers and GFOI Office are responsible for the main
299 operations of GFOI and constitute the three management layers. Facilitated by the GFOI Office, the
300 Leads Group meets monthly via teleconference and twice yearly for face-to-face meetings to progress
301 the strategic direction of the Initiative and take management decisions as needed. The Component
302 Managers and the GFOI Office also convene teleconferences and meetings to plan and progress the
303 collaborative activities of the Initiative. These teleconferences will become monthly in 2019 and be
304 accompanied by at least two face-to-face meetings as well. These stakeholders also meet frequently to
305 pursue the collaborative activities of the Initiative.

306 GFOI also entails the MGD Advisory Group, which is structured as an independent body for providing
307 expert advice and guidance to GFOI. Specifically, the Advisory Group directs the development of the
308 MGD and related materials. The Group ensures that the MGD continues to align with the priorities of
309 developing countries and provides guidance on operational methods and approaches in support of GFOI
310 activities. The Group consists of a broad range international experts from both developing and
311 developed countries as well international organization and individual experts. It is chaired by a senior
312 expert appointed by the Leads and supported administratively by the MGD Component Manager.

313 See Figure 1 below for the GFOI's organization chart.



*CB – Capacity Building
**CM – Component Manager

Figure 1. GFOI Organization Chart as of May 2019.

314 Communications

315 To date, GFOI's communications have been conducted in a somewhat ad hoc manner. However, in 2019
316 the GFOI Office recruited a communications specialist to oversee a scale-up in the nature and frequency
317 of GFOI's communications. This will include targeted communications between partners as a key pillar of
318 GFOI's own internal coordination efforts, as well as external communications to promote the Initiative
319 and forest monitoring more broadly. A new GFOI Communications strategy is under development,
320 however the Initiative is expected to utilize a range of different communications techniques and
321 platforms. This includes but is not limited to, the newly developed [GFOI website](#), social media, the GFOI
322 Inventory of Activities, news posts, short videos, factsheets and targeted communications around GFOI
323 events.

324 GFOI has found that face-to-face interactions is the most effective form of communication and
325 coordination. For this reason, GFOI focus a lot of efforts on facilitating constructive, interesting and
326 enjoyable events for its partners. The major GFOI event is the annual GFOI Plenary, complemented by
327 frequent component meetings, training workshops, capacity building summits, expert workshops and
328 other events to progress GFOI activities. The GFOI Plenary is attended by 100 to 150 people from across
329 the forest monitoring sector and provides an opportunity to foster the global network of practitioners,
330 connect international development partners with developing countries implementing partners, identify
331 opportunities for new collaborations, reflect on recent progress and plan for the year ahead. The
332 attendance and participants feedback from the Plenary is growing year on year, with the event now a
333 major feature in the international calendar for the forest monitoring sector.

334 M&E

335 Given the voluntary nature of the Initiative, GFOI has sought to minimize any additional M&E burden on
336 its partners. Instead the GFOI Leads have adopted a basic process for setting key performance indicators
337 (KPIs) each year and assessing progress against these at the end of each calendar year. Furthermore, the
338 GFOI Office maintains its own M&E procedures as part of its funding arrangements with its donors. This
339 is complemented by GFOI partners' own monitoring procedures, which are often conducted in
340 partnership with other GFOI partners and the results shared across the Initiative. However, in 2019 GFOI
341 is seeking to strengthen its M&E procedures. The exact nature of which is still under consideration,
342 however a focus will be placed on developing some key indicators of success, failure and delay, whilst
343 minimizing the transaction costs for partners.

344 Risk management

345 GFOI faces a range of different risks that could threaten the successful implementation of the Initiative.
346 With risk being the product of likelihood by severity, the overall risks to this project are considered low.
347 This includes but is not limited to the following:

- 348 1. Partners are unable to make sufficient in-kind contributions to the core activities of the
349 Initiative.
- 350 2. Countries are not willing to assess their needs and/or communicate these to international
351 partners.
- 352 3. Partners work plans are not sufficiently flexible to be aligned with the plans of other partners.
- 353 4. Countries are not willing to help test open-source tools in full.

354 5. International policy changes impacting obligations under REDD+ and other reporting forums.

Figure 2 below outlines the identified risks to the project, their score and mitigation actions.

Risk description	Worst case consequence for the project	Risk Score		Mitigating action	Action owner
		Impact	Likelihood		
1. Partners are unable to make in-kind contributions to the core activities of the Initiative	Difficult to align international support with country needs and reduced ability to coordinate	Major	Unlikely	1. Conduct targeted communications on the importance of needs assessments and targeted work planning 2. Ensure needs assessments are conducted collaboratively to allow partners to see value and utilize outputs 3. Ensure partners receive appropriate recognition for their contributions, including through targeted communication conducted by the GFOI Office	Leads Group and GFOI Office
2. Countries not willing to assess their needs and/or communicate these to international partners	Difficult to align international support with country needs and reduced ability to coordinate	Moderate	Unlikely	1. Conduct targeted communications on the benefits of needs assessments 2. Emphasize that CNA is a country led process, with guidance available from GFOI experts when requested 3. Offer communication support to promote needs	Leads Group, Component Managers and GFOI Office
3. Change in international reporting obligations relevant to REDD+	Loss of motivation by countries results in	Moderate	Unlikely	1. Promote multiple benefits of forest monitoring and GHG	Leads Group, Component

Risk description	Worst case consequence for the project	Risk Score		Mitigating action	Action owner
activities	disengagement in GFOI Office activities			accounting 2. Work with REDD+ forums (UNFCCC, FCPF and GCF, etc.) to align assistance with REDD+ MRV requirements	Managers and GFOI Office
4. GFOI partners' work plans are not sufficiently flexible to be able to respond to identified country needs and align with other partner's work programmes	Coordination efforts are not fully utilized	Moderate	Unlikely	1. Ensure all partners are aware of GFOI procedures, so they can factor these in to their long term planning 2. Ensure all partners are either involved in country needs assessments and harmonized work planning, or are made aware of the outputs	Leads Group, Component Managers and GFOI Office

Figure 2. GFOI risk management.

352 7. Resources

353 GFOI operates on a combination of direct and in-kind contributions. Direct contributions include
354 financial assistance to core GFOI functions, such as funding for the GFOI Office, Component
355 Management, funding for GFOI events and secondments etc. In-kind contributions include staff time,
356 alignment of existing programs, sharing of resources and any other costs incurred by partners as part of
357 their participation in GFOI.

358 The scope and nature of GFOI's total resources are too large and diverse to quantify, and hence the
359 Initiative does not collect these figures. As a voluntary partnership, GFOI relies on its partners to
360 provide, deliver and report on their own funding resources as per the internal procedures of their own
361 organizations. The GFOI Leads Group is ultimately responsible for ensuring the Initiative is sufficient
362 resourced to meet its operational requirements.

363 The nature of GFOI as being the product of collaboration between its partners, means the Initiative itself
364 does not require a large central budget. Instead, the Initiative draws upon the existing resources of its
365 partners and seeks to provide additional value for these partners through constructive collaboration
366 with others, such as facilitating access to additional resources, specialist expertise, existing in-country
367 relationships and networks and minimized waste through avoided duplication of effort. By facilitating
368 structured coordination, GFOI aims to make cooperation between its partners easier to attain and
369 extract net benefit from.

370 In recent years, GFOI has sought to highlight the unique nature of the Initiative as being small budget
371 and relying on in-kind contributions which delivers additional value for partners. This has proven a
372 successful strategy for GFOI with the membership of the Leads Group, as the major contributors to the
373 Initiative, doubling in the past two years.

374 More specifically, the development of the GFOI's systematic Country Needs Assessment (CNA) process
375 will also be key to helping GFOI partners to identify appropriate levels of funding and target this at clear
376 needs for operationalizing or improving forest monitoring systems in developing countries. This holistic
377 country led process in close consultation with international partners should help to build strong
378 justification for the allocation of new funds to address remaining gaps, improve traceability, confirm
379 value for money and effectively monitor progress and expenditure.

380 Finally, while GFOI's target audience is developing country governments, and its major contributors are
381 donors, international organizations, academia and NGOs, the Initiative also interacts with the private
382 sector. This includes commercial providers of satellite data, consulting firms and other experts. GFOI
383 does not currently have a specific strategy for engaging the private sector but instead welcomes them to
384 participate in the same way the Initiative is open to all partners who have a mutually beneficial
385 contribution to make.

386 8. Technical Synopsis

387 GFOI has developed the Methods and Guidance Documentation (MGD) to provide the best available
388 guidance on scientifically sound and operational technology for developing countries to design, build
389 and deliver their NFMS focused on meeting MRV requirements of the UNFCCC. The MGD is globally
390 recognized as an authoritative resource for helping developing countries to meet their international
391 GHG reporting obligations compliant with the IPCC Good Practice Guidance and UNFCCC rules,
392 specifically for REDD+ activities. The MGD, which is available in English, French and Spanish, is used by
393 all GFOI partners to guide their assistance to countries in a coherently and complimentary manner.

394 The MGD Component of GFOI has also developed the REDDcompass platform, which seeks to make the
395 content of the MGD available in a user-friendly format. REDDcompass also links the guidance to other
396 supporting resources, training materials and tools of GFOI partners within a systematic framework.

397 GFOI supports developing countries to use the best available data in their NFMS. This is predominantly
398 biophysical data and a combination of remote sensing data and ground data. The most commonly used
399 remote sensing data is medium resolution optical data that is cost effectively or freely available, which
400 currently predominantly from Landsat and Sentinel. To complement these data, many countries also use
401 high-resolution data which are generally acquired from commercial sources either with funding from
402 international support partners, their own resources or other arrangements. Ground data, often depends
403 largely on what data already exists for each country, and can include national forest inventory, research,
404 soil, rainfall, elevation, production and/or any other data set that characterizes the extent and condition
405 of the forest and how it changes. In many countries, ground data availability is still a real obstacle to
406 progress. In which case, default data provided by the IPCC and other mandated authorities are often
407 used.

408 GFOI's R&D Coordination Component is responsible for considering solutions to address scientific or
409 technical challenges. The Component fosters a network of experts who can be assigned to help address
410 these challenges through targeted literature reviews, expert workshop and/or commissioning new
411 research where it is needed. If the Component believes it has identified a suitable solution to a
412 challenge, it then submits its findings to the MGD Advisory Group for consideration. The Advisory Group
413 consists of a broad range of independent international experts. If endorsed by the Advisory Group, the
414 solution can then drafted in a new MGD module, FAQ or other resource and published on the
415 REDDcompass platform for use by capacity building partners and ultimately developing countries.

416 9. Data Policy

417 GFOI does not generate or provide data itself and as such, it does need its own data policy. Nonetheless,
418 as a GEO Flagship, GFOI will advocate for the GEOSS Data Sharing and Data Management Principles
419 wherever possible.

420 In seeking to support developing countries' participation in the Paris Agreement and related UNFCCC
421 decisions, GFOI partners support countries to conduct their international reporting in a manner, which is
422 consistent with the IPCC's Principles of Transparency, Accuracy, Completeness, Consistency, and
423 Comparability (TACCC). Adherence to the TACCC Principles is seen a key principles for countries to
424 following in preparing and reporting GHG inventories and are also internationally recognized as
425 indicators of inventory quality.

426 The major outputs from GFOI are all accessible via the GFOI website (www.gfoi.org). This site is hosted
427 by FAO, as the host agency for the GFOI Office. Therefore, the preservation of the information is
428 supported by FAO's own international systems and web management policies. GFOI also maintains the
429 REDDcompass platform (www.reddcompass.org) as a central repository for GFOI's methods, guidance,
430 training materials, tools and other resources. This platform is supported by the Australian Government
431 as a direct contribution to GFOI.