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Resilient Food Systems Programme

Monitoring & Evaluation plan

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Resilient Food Systems

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Acronyms

CI	Conservation International
DATAR	Diversity Assessment Tool for Agrobiodiversity and Resilience
ES	Ecosystem Services
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organisation of the United Nations
GEB	Global Environmental Benefit
GEF	Global Environment Facility
GHG	Greenhouse Gases
IAP	Integrated Approach Pilot
ICRAF	World Agroforestry
INRM	Integrated Natural Resource Management
LD	Land Degradation
LDSF	Land Degradation Surveillance Framework
M&A	Monitoring and Assessment
M&E	Monitoring and Evaluation
MEA	Multilateral Environmental Agreement
METT	Management Effectiveness Tracking Tool
NDVI	Normalised Difference Vegetation Index
NGO	Non-Governmental Organisation
PCU	Programme Coordination Unit
PDR	Project Design Report (for the Regional Hub)
PIR	Project Implementation Report
RAPTA	The Resilience, Adaptation Pathways and Transformation Assessment Framework
RFS	Resilient Food Systems Programme
RMF	RFS regional results monitoring framework (programme-level)
SDG	Sustainable Development Goals
SHARP	Self-evaluation and Holistic Assessment of climate Resilience of Farmers and Pastoralists
SLM	Sustainable Land Management
SSA	Sub-Saharan Africa
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WB	World Bank

1. Introduction

1.1 About the Resilient Food Systems monitoring and evaluation plan

The monitoring and evaluation (M&E) plan of the Resilient Food System (RFS) Programme is used to describe how the M&E system will work during execution and may be considered the M&E Standard Operating Procedure.

The plan identifies the overall architecture of the M&E system, which rests on two pillars, namely country-level M&E and programme-level M&E. The regional, programmatic M&E results framework emanates directly from the aggregation of results achieved at country-level, with some additional results stemming from the direct activities of the Regional Hub project, especially in terms of knowledge management and communications.

This plan outlines the Regional-level Results Framework matrix (the indicators that will be used to monitor the programme's progress), a logical framework, a description of reports and tools that will be used to assess progress, and a strategy for how information will be stored, documented and shared. It also spells out the responsibilities of the various partners in collecting and analysing the M&E data.

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1.2. Process underpinning the elaboration of the RFS M&E Plan

The elaboration of the RFS M&E Plan took place mostly between August 2019 and July 2020. Additional feedback and inputs were collected from all country project teams and Regional Hub partners throughout the second half of 2020, particularly on the transition to GEF-7 results framework, and were subsequently consolidated into this updated version of the plan. The steps followed to elaborate this plan were as follows:

1. Extensive **literature review** pertaining to the programme, with a specific focus on groundwork done in relation to M&E, including inter alia:

   - The Regional Hub Project Design Report - PDR (Cross-cutting capacity building, knowledge services and coordination project for the Food Security Integrated Approach Pilot Programme - GEF project 9140), which describes the project M&E process proposed at design. This includes a set of key indicators for Global Environmental Benefits (GEBs) and socio-economic indicators to be monitored at programme-level, reporting guidelines and indicative M&E budgets, in addition to outcome objectives (progress markers – ladder of change). This document also outlines the programme's logical framework. In addition, the Programme Framework Document (PFD) includes an indicative programme results framework for the RFS.
   - A matrix capturing the outcome of interviews conducted with country teams in February 2019, with basic information collected on M&E, among other topics.
   - A zero-draft results framework compiled from all 13 projects (based mostly on information available as per design documents).
   - The outcome mapping framework of key boundary partners of the Programme.
   - The regional-level Guidance for Monitoring of Ecosystem Services, Socio-economic Benefits, and Resilience of Food Security for Global Environment Facility Food Security Integrated Approach Pilot, compiled by Conservation International (CI) under the auspices of the TAG on M&A.
   - All minutes of the meetings of the Technical Advisory Group (TAG) on monitoring and assessment (M&A).

2. **Liaising with all country projects and all Hub partners to better understand gaps** and finalise their own sets of indicators and targets. This led to:

   A. A first country-level assessment, based on the analysis of country M&E strategies and telephone interviews, which sought to review all Indicators and targets at project-level, so as to assess the feasibility of aggregating targets at the regional-level.

   B. A regional-level assessment, which sought to identify baseline issues, as well as contradictory indicators and targets.

3. Subsequent to the first round of interviews held with the country M&E officers, which served as a preliminary assessment, country teams were contacted again and a **detailed questionnaire** relating to project M&E was administered to each of the 12 countries.

4. The **consolidated country-level data** was captured on a database, with country-level contributions to GEBs and other indicators being updated. This work also enabled updating the various monitoring tools used by countries and a consolidated list of support and training needs related to the use of specific "tools" was captured and shared with Hub partners.

5. Throughout this process, the Programme Coordination Unit (PCU) M&E officer worked jointly with the Service provider (Adalia Ltd./ SmartME), both contracted by ICRAF. An updated matrix of programme-level indicators (and country-level targets) formed the basis of the **primary development of the online M&E system**.

6. Building on this preparatory ground, a **regional M&E workshop** was held in Nairobi from 13-15 November 2019 (see Annex 7.2 for further details). During this workshop:

   A. ICRAF presented where the RFS stood in terms of reaching the targets set at the programme-level based on country aggregation.

   B. The "value-added", "process" and "collaborative" dimensions of the programme, as something worth monitoring, were discussed.

   C. Based on this stock-taking exercise, Hub partners were requested to take the lead (for the components they are responsible for) in refining indicators/setting additional ones and revising or setting targets through "country" and "Hub clinics".

   D. Hub partners were tasked with sharing an updated set of programme-level indicators.

   E. Country teams were tasked with preparing action plans outlining how they intended to amend their M&E plan (to refine indicators, address gaps and identify needed tools).

7. Subsequent to several additional consultations with Hub partners, an **advanced version of the RFS regional results monitoring framework** (RMF) was transcribed on the online staging version of the SmartME system (early March 2020).

8. This staging version of this framework was used to present it to all partners during a **Technical Advisory Group (TAG) meeting** held on 10 April 2020. Outstanding indicators and targets requiring the joint input of Hub partners were discussed and the latter were requested to share any final commentary to the RMF table within agreed deadlines.

   - On this occasion, partners were requested by GEF Secretariat to have the RFS results and monitoring framework reflect the transition to GEF-7.

   - The overall structure and core content of the proposed M&E Plan was approved by the TAG, pending updates resulting from this GEF-7 alignment work and potential revision of programme targets.

9. **The GEF-7 transition entailed a subsequent significant rework of the RMF**, as the Programme Coordination Unit (PCU) had to revert back to each country to assess how GEF-6 indicators should be carried over under GEF-7, as well as to cross-check assigned targets for core indicators for each country, and rework the framing of indicators for the regional matrix in consultation with Hub partners. During these engagements none of the countries the M&E officer engaged with indicated that their project had planned a transition to GEF-7.

2. The Resilient Food Systems programme

2.1 Overview

Resilient Food Systems (RFS) is one of the three Integrated Approach Pilots (IAPs) funded by the Global Environment Facility (GEF). Through RFS, GEF seeks to position the management of natural capital as a priority in ongoing efforts to transform the agricultural sector and ensure sustainable food production in sub-Saharan Africa. Implementation is led by the International Fund for Agricultural Development (IFAD), in collaboration with 12 African countries and several regional partners.

The programme comprises one cross-cutting regional-level project (the Regional Hub) and twelve country-level projects: Burkina Faso, Burundi, Eswatini, Ethiopia, Ghana, Kenya, Malawi, Niger, Nigeria, Senegal, Tanzania and Uganda. The Regional Hub, reflecting its primary function of linking the country projects to each other and to the external world, has been designed to help ensure that the programme will comprise more than a set of disconnected country projects.

An innovation of the GEF-6 replenishment cycle has therefore been the provision of additional funding for a cross-cutting project: IFAD is entrusted by the GEF to test this arrangement in the case of the Food Security IAP (the RFS programme), and this experience will be evaluated to inform the subsequent funding cycle in terms of this modality. Because of its integrated nature, the results of the Hub project can be influenced by the results of the country projects.

The Hub project and the overall programme are operationalised through a Programme Coordination Unit hosted by ICRAF in Nairobi. Under component 4 of the Hub results framework, ICRAF is responsible for the overall M&E of the programme.

2.2 Programme goals and objectives

The RFS seeks to tackle major drivers of environmental degradation by advancing a holistic approach to enhancing agricultural productivity in smallholder systems, where food security is directly tied to agriculture and – in the long term – to the health of the ecosystem of which the farm is a part. The programme builds on existing efforts at national and regional-level to address various barriers (policy, institutional, and knowledge) in order to catalyse a shift toward safeguarding the natural capital (soil, water, genetic resources) that underpin the resilience of agricultural livelihoods in the long term. The RFS is fully in line with the Sustainable Development Goals (SDGs 1, 2, 15 and 17).

The intention of this programme is to demonstrate how these principles can be applied in practice across a range of contexts in sub-Saharan Africa (SSA), with a focus on identifying proven multi-benefit practices which can be scaled up; while promoting an enabling environment via engagement of key decision makers at various scales.

At both the cross-cutting regional project at country-level, it employs a three-pronged approach and common components in every project:

1. Engaging stakeholders across the public and private sectors, and across the environmental and agricultural interests to generate awareness of the importance of and demand for integrated solutions;

2. Scaling up, diversifying and adapting proven practices which both enhance ecosystem health and improve productivity [70% of programme budget]; and

3. Developing and applying methods and tools to track impacts of project activities and general trends in terms of ecosystem and socio-economic resilience and feed these findings into decision making fora via the first component.

The assumption at design is that the programme will have an impact larger than that of the aggregated values of the indicators for the country projects alone, due to the expectation that the technical assistance provided throughout the programme will have broad influence on food security policy and climate resilience in the region. Therefore, the twelve countries in the RFS have now included in their project documents targets towards some of the regional-level impacts to which they expect to contribute.


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2.3 RFS theory of change

The RFS Regional Hub Project Design Report[1], dated 4 December 2017, includes an assessment that informs the development of the project's theory of change, which is linked to the RFS programme's overall objective to remove the barriers to sustainable intensification of agriculture in Sub-Saharan Africa through a tiered approach involving:

1. Strengthening of the enabling environment through coherent institutional frameworks and policies, and monitoring and assessment of INRM;
2. Behavioural change of institutions, individuals, groups, and business, through capacity development, knowledge management, effective communication, and south-south exchange of experiences, leading to an increase in investments in INRM; and
3. Achievement of impact and attainment of Programme goals for sustainability and resilience for food security in SSA through adoption and scaling up of gender-sensitive, multiple benefit practices for food value chains and food production systems.

The project' theory of change is visualised in Figure 1.

PROGRAMME APPROACH: ENGAGE – ACT – TRACK

Resilient Food Systems is founded on three guiding principles, which are reflected in the core components of each project. Through a coordinating regional hub and network of partners, the 12 countries are well-placed to harness good practices for long-term sustainability and resilience of food production by reducing land degradation and biodiversity loss, recovering natural vegetation and increasing soil carbon.

The integrated approach of Resilient Food Systems focuses on three areas:

ENGAGE

Engaging stakeholders in promoting collective action and coherent policies. GEF's convening power and catalytic role have been invaluable for engaging countries and mobilising diverse stakeholders to advance the integrated approach;

ACT

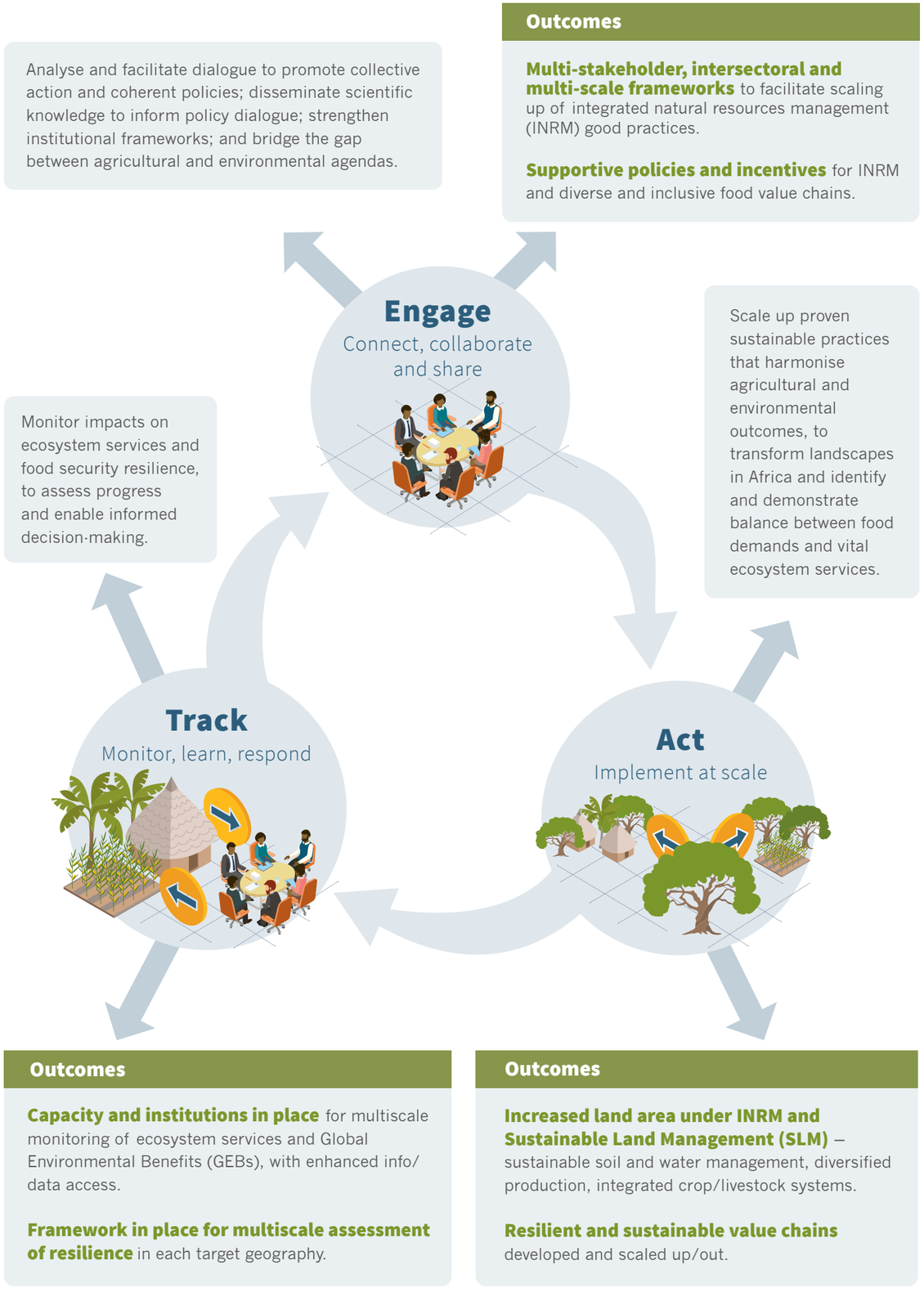
Intensifying, diversifying and adapting practices for a large-scale transformation of agro-ecosystems; and

TRACK

Monitoring and assessment to inform decision-making for sustainability and resilience in the agricultural sector.

[1] *Cross-cutting capacity building, knowledge services and coordination project for the Food Security Integrated Approach Pilot Programme - GEF project 9140 - Detailed design report.*

Figure 1: Engage-Act-Track: a three-pronged approach to address food security in SSA



3. Programme-level M&E plan

3.1 Indicators and measures to track performance at the programmatic regional-level

3.1.1 GLOBAL ENVIRONMENTAL BENEFITS AND CONTRIBUTIONS TO AGRO-BIODIVERSITY

The RFS Regional Hub Project Design Report indicates that Global Environmental Benefits (GEBs) will be achieved through the country projects and their associated baseline, as well as through a larger influence on the approach taken to achieving food security.

The regional coordination project acts as a catalyst to meet this larger outcome, in particular through the provision of technical assistance to country projects. Specific support is given on methodologies and tools to monitor sustainability, resilience and food security. This project was set up to facilitate the documentation of the achievement of GEBs in each project through a significantly enhanced baseline and subsequent M&E process, including outcome mapping and monitoring of behavioural change leading to long-term generation of GEBs.

As such, RFS projects adopt protocols, methodologies and metrics which are scientifically credible but also operationally applicable and comparable, in order to aggregate results up to programme-level impacts.

At design, the key indicators for GEBs to be monitored at Programme-level under GEF-6 were originally defined as below:

- Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society and contribute to GEF's corporate result 1 (GEB 1).
- Land under integrated management will be measured and contribute to GEF's corporate result 2 (GEB 2).
- Greenhouse Gas (GHG) emissions avoided in production landscapes will contribute to corporate result 4 (GEB 4).
- Two indicators on conservation of genetic diversity in production landscapes increased surface area of sustainably-managed genetic diversity measured by the number of species (richness) and frequencies (evenness) across the intervention area; and increased access to diverse planting and breeding materials across the intervention area.
- A land cover indicator for the UNCCD Strategic Objective 2 to improve the conditions of affected ecosystems using Normalised Difference Vegetation Index (NDVI) as a measure of photosynthetic capacity and for monitoring of trends in land cover and productivity of the land.
- Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks and contribute to GEF's corporate result 6 (GEB 6).

The RFS' contributions to biophysical GEBs were reflected under Impact area 3 of the GEF-6 programme results framework (see section 3.1.2) "Monitoring and assessment of ecosystem services, global environmental benefits and resilience" and the RFS' contribution to GEB 6 (related to the implementation of multilateral environmental agreements) are reflected in impacts 1 and 3 of the programme results framework.

3.1.2 SHIFT FROM GEF-6 GLOBAL ENVIRONMENTAL BENEFITS INDICATORS TO GEF-7 CORE INDICATORS

Pursuant to a change in GEF reporting requirements (of which TAG members were informed during a meeting held in April 2020), the RFS Regional Hub, undertook to shift from the RFS' key indicators for GEBs (originally approved during the GEF-6 period) to GEF-7 core indicators and sub-indicators. This is in line with the GEF-7 Results Guidelines[2], which states the following:

> *For projects approved during the GEF-6 period, July 1, 2014 to June 30, 2018, that have not yet been completed, Agencies shift to core indicators and sub-indicators at the next available opportunity in the project cycle and are no longer required to submit tracking tools. For full-sized projects and programmes that have received Council Approval during GEF-6, Agencies apply the core indicators and sub-indicators across any requests for CEO Endorsement submitted after July 1, 2018. For projects that have received CEO Endorsement/ Approval during GEF-6, Agencies apply the core indicators and sub-indicators at mid-term – if applicable – or project completion.*

Since this transition to core indicators and sub-indicators was initiated in the second quarter of 2020, the RFS Regional Hub will effectively be applying the core indicators and sub-indicators at programme mid-term (the mid-term, MTR, is scheduled to take place in the second quarter of 2021).

Pursuant to the GEF-7 policy recommendations, the original GEF-6 RMF based on GEBs was modified to align to the GEF-7 results architecture, which is based on a simplified results framework of eleven core indicators and associated sub-indicators that span all five focal areas (see Annex 7.1 for the full list of GEF indicators). The proposed core indicators, along with associated sub-indicators and methodologies, are expected to significantly enhance the GEF's ability to capture, monitor, analyze and report on results.

A key task performed by ICRAF in managing this transition consisted of ensuring that for each GEF-6 GEB, the corresponding GEF core indicator and sub-indicator were adequately identified and carried over. Therefore, the interpretation of country projects' contributions to these core indicators were systematically cross-checked with country M&E officers to ensure data accuracy.

ICRAF inquired with national-level M&E officers of country projects whether they would be shifting to GEF core indicators and sub-indicators at the next available opportunity. None of the projects seemed to be aware of this required transition and indicated that they would be discussing this internally. Nonetheless, the work performed subsequently by the PCU with country teams ensured the completion of the transition process at programme-level, with the finalisation of the revised RMF fully accounting for contributions from the country projects to regional-level RFS impacts.

Table 1 presents the list of GEBs and the associated targets at design (GEF-6), as well as the new Core Indicators (GEF-7) that the RFS contributes to (captured here for comparative purposes). This "overlaying" of GEBs and core indicators reveals that matching both is not a straightforward exercise. Indeed, GEB 1 and GEB 2 are broken down into several sub-indicators, with:

- **GEB 1** being the sum of 2 indicators and 6 sub-indicators in total (GEF-7 Core Indicators 1 + 2 + 3.2 + 3.3 + 3.4 + 4.1 + 4.2 + 5.1). For the RFS, this translates into 4 sub-indicators as marine protected areas and marine habitats are excluded from RFS, i.e. sub-indicators 1.2 + 3.2 + 3.3 + 3.4.
- **GEB 2** being the sum of 2 indicators, namely the sum of GEF-7 sub-indicators 3.1 + 4.3.

As a result, matching regional indicators (original GEBs) with GEF-7 core indicators required renewed discussions between the PCU and country teams to analyze each country-level activity and identify how best its original contributions to GEBs could be carried over as contributions to core indicators. The RFS contributions to GEF-7 core indicators are summarised in Table 2.

[2] *GEF. Guidelines on Core Indicators and Sub-Indicators. Guidelines ME/GN/02 approved on June 30 2018.*


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Table 1. Correlating the Global Environmental Benefits with the core indicators that the RFS contributes to and, with aggregated target values reached.

GEBS (GEF-6)	TARGETS	CORE INDICATORS (GEF-7)	EQUIVALENT TARGET REACHED BASED ON AGGREGATED TARGETS FROM COUNTRIES
GEB 1. Landscapes and seascapes under improved management for biodiversity conservation (million hectares):	1.1 million ha (as per the GEF 2018 brochure)	RFS contributes to sub-indicators 1.2 + 3.2 + 3.3 + 3.4.	788,395 ha
GEB 2. Production landscapes under improved management (million hectares):	2.1 million ha million ha (GEF 2018 brochure) and 1,775,144 ha (PDR)	RFS contributes to 3.1 + 4.3.	803,514 ha
GEB 4. GHG emissions avoided and carbon sequestered (metric tons of CO2e):	59 million MTCO2eq (GEF 2018 brochure)	RFS contributes to sub-indicators 6.1, 6.2, 6.3, 6.4[3]	56,8 MtCO2eq
GEB 6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	10 countries	This GEB is not carried over as a core-indicator under GEF-7. Reference to MEA is made in the results matrix indicator "1.2.4) Sectoral planning frameworks are developed and integrate measurable targets drawn from the Multilateral Environmental Agreements MEAs"	1 country (TBC)

[3]*Note that all RFS countries, save for Nigeria, monitor GHG emissions avoided and carbon sequestrated; only Senegal contributes to 6.2, 6.3, 6.4.*

Table 2. RFS contributions to GEF-7 core indicators.

	GEF-7 CORE INDICATORS	DEFINITIONS	CORRESPONDING GEB (GEF-6)/ COMMENTS
Core indicator 1	Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares)	This indicator will be reported as the aggregate total of two Sub-Indicators (see below)	
Sub-indicator 1.2	Terrestrial protected areas under improved management effectiveness (hectares)	Number of hectares of protected area whose management has been improved. The main data source for this indicator is the Management Effectiveness Tracking Tool (METT) score, which is calculated using the GEF-7 BD tracking tool (**www.thegef.org/documents/gef-7- biodiversity-protected-area-tracking-tool**). The number of hectares of protected area should be counted only if the score increases over the life of the project.	Landscapes and seascapes under improved management for biodiversity conservation (million hectares) (GEB 1)
Core indicator 3	Area of land restored (hectares) (Ecological restoration)	This indicator will be reported as the aggregate total of four Sub-Indicators. To avoid double-counting, the hectares reported under each Sub-Indicator should not overlap. (see below). This indicator captures the total area of land undergoing restoration in terms of ecosystem function and/or ecology. Activities may include (i) ecosystem restoration that reduces the causes of decline and improves basic functions; and (ii) ecological restoration that enhances native habitats, sustains ecosystem resilience, and conserves biodiversity.	
Sub-indicator 3.1	Area of degraded agricultural lands restored (hectares)	This indicator captures the area of agricultural land in a degraded state that is being restored through GEF-funded interventions. These interventions include restoration practices to enhance soil and water conservation, erosion control, groundwater recharge, and improved vegetative cover. While not required, projects should ideally provide GIS files showing the extent of the degraded land being restored and also to indicate the relative state of the area prior to GEF activities.	Production landscapes under improved management (million hectares) (GEB 2)

	GEF-7 CORE INDICATORS	DEFINITIONS	CORRESPONDING GEB (GEF-6)/ COMMENTS
Sub-indicator 3.2	Area of forest and forest land restored (hectares)	This indicator captures the area of forest and forest land that is undergoing ecological restoration through GEF-funded interventions. Ex: creation of corridors between protected areas, targeted eradication, management or control of Invasive Alien Species.	Landscapes and seascapes under improved management for biodiversity conservation (million hectares) (GEB 1)
Sub-indicator 3.3	Area of natural grass and shrublands restored (hectares)	This indicator captures the area of natural grass and shrublands that is undergoing ecological restoration through GEF-funded interventions Ex: corridors between protected areas, targeted eradication, and management or control of Invasive Alien Species.	Landscapes and seascapes under improved management for biodiversity conservation (million hectares) (GEB 1)
Sub-indicator 3.4	Area of wetlands (incl. estuaries, mangroves) restored (hectares)	This indicator captures the area of wetlands, including estuaries and mangroves that is undergoing ecological restoration through GEF-funded interventions. ex. creation of corridors between protected areas, targeted eradication, management or control of Invasive Alien Species.	Landscapes and seascapes under improved management for biodiversity conservation (million hectares) (GEB 1)
Indicator 4	Area of landscapes under improved practices (hectares; excluding protected areas)	This indicator will be reported as the aggregate total of four Sub-Indicators (4.1, 4.2, 4.3, 4.4). To avoid double-counting, hectares reported under each Sub-Indicator must not overlap. This indicator captures the total area of landscapes under improved practices, including in production sectors (e.g., agriculture, rangeland, forestry, aquaculture, tourism, extractives [oil and gas]) that lead to improved environmental conditions and/or for which management plans have been prepared and endorsed and are under implementation. This indicator is directly related to Aichi Biodiversity Target 7 of the CBD and to Land Degradation Neutrality country targets under UNCCD.	
Sub-indicator 4.3	Area of landscapes under sustainable land management in production systems (hectares)	Area of landscapes under sustainable land management in production systems (hectares) This indicator captures the landscape area that is in production (e.g., agriculture, rangeland, and forests) and whose soil, air, and water are managed in a sustainable manner. The project should indicate the details of management practices. This Sub-Indicator is distinguished from Sub-Indicator 4.2 by capturing improved practices that benefit physical improvements in the environment (e.g., soil and soil carbon, nutrient recycling, diversity and functionality of vegetation cover, micro-climates, and water).	Production landscapes under improved management (million hectares) (GEB 2)

	GEF-7 CORE INDICATORS	DEFINITIONS	CORRESPONDING GEB (GEF-6)/ COMMENTS
Core indicator 6	Greenhouse gas emissions mitigated (metric tons of CO2e)		Greenhouse gas emissions mitigated (metric tons of CO2e) (GEB 4)
Sub-indicator 6.1	Above and below ground carbon sequestered and/or loss avoided (metric tons of CO2e)	Carbon sequestration is defined as the process of increasing the carbon content of a reservoir/ pool other than the atmosphere (IPCC, 2012). Avoided emissions refers to reduced emissions due to avoided deforestation or forest degradation, sustainable forest management, and improved practices on other land uses such as in agriculture. Regarding the Agriculture, Forestry, and Land Use Change Lifetime, the length of time is defined as 20 years, unless an alternative number of years is deemed appropriate. For emission or removal factors (tons of CO2e per hectare per annum), the defaults to be applied are those of the Intergovernmental Panel on Climate Change (IPCC) or country-specific factors. This includes i) lifetime direct project GHG emissions mitigated (during the project's supervised implementation period) and ii) lifetime direct post-project emissions mitigated (investments outside the project's supervised implementation period, but supported by financial facilities or regulatory interventions by the GEF project, totalled over the respective lifetime of the investments), and (iii) lifetime indirect GHG emissions mitigated (attributable to the long-term outcomes of GEF activities that remove barriers, such as capacity building, innovation, and catalytic action for replication).	n/a
Sub-indicator 6.2	Emissions avoided (metric tons of CO2e)	Emissions avoided as measured by countries through the EX-ACT tool	n/a
Sub-indicator 6.3	Energy saved (MWh)	This contextual Sub-Indicator should be used if a project aims to achieve energy savings. It is calculated as the amount of energy use avoided by the intervention over the lifetime of the investment.	n/a

	GEF-7 CORE INDICATORS	DEFINITIONS	CORRESPONDING GEB (GEF-6)/ COMMENTS
Sub-indicator 6.4	Increase in installed renewable energy capacity per technology (MW). Repeat for each technology	This Sub-Indicator should be reported on if a project aims to increase renewable energy generation or storage capacity. It refers to the rated capacity of a heat or power generating plant or the aggregate potential output of a collection of such. The Sub-Indicator will also account for projects that increase energy storage capacity of grid power for load shifting and variable renewable energy integration or storage of self-generated renewable power for later use. Among others, energy storage capacity may refer to pumped storage; home-, commercial- or grid-scale batteries; and thermal storage.	n/a
Core indicator 11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	This indicator captures the number of individual people who receive targeted support from a given GEF project/activity and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project/activity. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.	Previously captured in number of households under GEF-6

A few additional observations linked to this transitioning process are captured hereafter:

- **GHG emissions** avoided are still inventoried under GEF-7 and are broken down into different categories, with three values to be reported for the Core Indicator:
  1. Lifetime direct project GHG emissions mitigated (during the project's supervised implementation period)
  2. Lifetime direct post-project emissions mitigated (investments outside the project's supervised implementation period, but supported by financial facilities or regulatory interventions by the GEF project, totalled over the respective lifetime of the investments); and
  3. Lifetime indirect GHG emissions mitigated. (attributable to the long-term outcomes of GEF activities that remove barriers, such as capacity building, innovation, and catalytic action for replication).

- The GEF-7 results architecture does not make any explicit mention of **agro-biodiversity**. Consequently, it was decided to incorporate any agro-biodiversity-related activity that concerns land additional to recovery activities (core indicator 3) under the GEF-7 sub-indicator 4.3. This features under RFS indicator *2.1.3.1.1 Area of landscapes under sustainable land management in production systems (hectares) (GEF-7 sub- indicator 4.3)* of the RBM. Any agro-biodiversity activity that is carried out on land where recovery activities are already under way will fall under a separate indicator (namely 2.1.4.1 *Change in area (ha) already earmarked for recovery, which is also under sustainably-managed crop varieties and animal breeds)* to avoid double counting.

- **Contributions to MEAs do not feature in GEF-7** core indicators as explicitly as they do in GEF-6 (GEB 6). In GEF-7, the focus is rather to facilitate information disaggregation through the sub-indicators, so as to better capture data and results and report back on the MEAs. It was however decided to retain one indicators making explicit mention of MEAs, namely indicator *1.2.4) Sectoral planning frameworks are developed and integrate measurable targets drawn from the Multilateral Environmental Agreements MEAs*.[4] However, it was established that only one country (Burundi) might contribute to this indicator, calling for a potential revision of this indicator.

- The number of **direct beneficiaries** was not a GEB under GEF-6 (but was recognised as a key socio-economic indicator in the RFS previous RMF) and now features as a core indicator (indicator 11). However, it entails a switch from the number of beneficiary households to the number of individual beneficiaries disaggregated by gender. This transition poses a methodological challenge in terms of gender disaggregation, as countries keeping track of the number of beneficiary households (as opposed to the number of individuals) reached by their project would be able to provide gender-disaggregated information (in terms of women-led households) but "converting" to number of beneficiaries by simply multiplying the number of households by the average number of people per household will provide only estimates in terms of number of women or men reached by the programme.

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[4] *(GEF 7 aims to ensure) "Appropriate disaggregation to support analytical needs and accountability to multi-lateral environmental agreements (MEA): Unlike the equivalent indicators in GEF-6, the core indicators include a limited number of sub-indicators that allow for an appropriate level of disaggregation of information, as well as the capture of different metrics to facilitate portfolio-level analysis and reporting to the conferences of the parties to the MEAs that the GEF serves " (Updated results architecture for GEF-7 2018:5).*

3.2 Breakdown of the RFS results-based framework reflecting changes and improvements from the design document and the transition to GEF-7

3.2.1 KEY PROGRAMME-LEVEL CONTRIBUTIONS TO GEF CORE INDICATORS[5]

Table 3. Proposed new outputs, indicators and targets resulting from the GEF-7 transition.

GEF-6 GEB OR REGIONAL-LEVEL CONTRIBUTION	OUTPUT		INDICATOR		TARGET		GEF-7 CORE INDICATORS AND SUB-INDICATORS	CONTRIBUTING COUNTRIES/ COMMENTS
	Original output	New output[6]	Original indicator	New indicator	Original target	Proposed/New target		
GEB 1	Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.	2.1.1) Increased terrestrial protected areas created or under improved management for conservation and sustainable use (hectares) (GEF-7 core indicator 1).	Number of ha of land earmarked for protection of biodiversity and ecosystems goods and services.	2.1.1.1 Change in terrestrial protected areas under improved management effectiveness (GEF-7 sub-indicator 1.2).	Contributes to 1.1 million ha (as per the GEF 2018 brochure).	RFS contributes to sub-indicators 1.2 + 3.2 + 3.3 + 3.4. 788,395 ha [(the sum of 1.2 (692,000 ha) and 3.2 + 3.3 + 3.4 (96, 395 ha)] would be the real surface equivalent under GEF-6. However, under GEF-7, these elements are dissociated. Hence the need to consider these targets separately. The aggregated value for this target comes to **692,000 ha**.	sub-indicator 1.2	Ghana & Eswatini
GEB 2	Increased surface area under sustainable land management (SLM) in production systems (agriculture, rangeland and forest landscapes).	2.1.2) Increased surface area under sustainable land management in production systems (agriculture, rangeland, pastoral and forest landscapes).	Sustainable land management (SLM) resulting from change in land management, as reported by countries.	2.1.2.1 Change in area of land restored (hectares) (Ecological restoration) (GEF-7 core indicator 3).	Contributes to 2.1 million ha million ha (GEF 2018 brochure) and 1,775,144 ha (PDR).	GEB 2 is the equivalent sum of GEF-7 sub-Indicators 3.1 + 4.3 + 4.4. RFS contributes to 3.1 + 4.3. 803,514 ha [(the sum of 3.1 (580,454 ha) and 4.3 (223,060 ha)] would be the real surface equivalent under GEF-6. However, under GEF-7, these elements are dissociated. Hence the need to consider these targets separately. The aggregated value for indicator 2.1.2.1 therefore comes to **673,999 ha** (being the sum of the sub-indicators below)	core indicator 3	All 12 countries
			Previously not disaggregated.	2.1.2.1.1 Area of degraded agricultural lands restored (hectares), as reported by countries (GEF-7 sub-indicator 3.1).	NA	580,454 ha	sub-indicator 3.1	All 12 countries (no target specified by Ghana so value would be superior)
			Previously not disaggregated.	2.1.2.1.2 Area of forest and forest land restored, as reported by countries (hectares) (GEF-7 sub-indicator 3.2).	NA	8,345 ha	sub-indicator 3.2	Ghana, Malawi, Uganda. Kenya also contributes to this indicator but has not set a target (as per the project's logical framework).
			Previously not disaggregated.	2.1.2.1.3 Area of natural grass and shrublands restored (hectares), as reported by countries (GEF-7 sub-indicator 3.3).	NA	85,200 ha	sub-indicator 3.3	Burkina Faso, Eswatini, Ethiopia, Ghana, Niger, Tanzania, Uganda.
			Previously not disaggregated.	2.1.2.1.4 Area of wetlands (incl. estuaries, mangroves) restored (hectares), as reported by countries (GEF 7 sub-indicator 3.4)	NA	2,850 ha	sub-indicator 3.4	Senegal,Eswatini

[5] *Other biophysical indicators and agro-biodiversity are summarised as per Table 3.*
[6] *Note that the table isolates portions of the RFS RBM which exclusively pertain to GEF core indicators, which is why the numbering in the table begins at 2.1.1. The other elements of the RFS RBM are discussed hereafter. Refer to the SmartME platform to view the entire RFS RBM (see section 3.5.3).*

GEF-6 GEB OR REGIONAL-LEVEL CONTRIBUTION	OUTPUT		INDICATOR		TARGET		GEF-7 CORE INDICATORS AND SUB-INDICATORS	CONTRIBUTING COUNTRIES/ COMMENTS
	Original output	New output[6]	Original indicator	New indicator	Original target	Proposed/New target		
Contribution to SLM			NA	2.1.2.2 Change in land degradation monitored through remote sensing (tracking broad scale degradation) (% increment).	NA	**Target TBC**-targets to be determined by the projects and the hub partners managing projects.		All 12 countries
			Changes in Land Productivity_ unit: % surface area improved or total surface area (NDVI).	2.1.2.3 Changes in Land Productivity monitored through remote sensing (NDVI) (% increment).	10 – 20%	10 – 20% land area improved as measured by productivity - targets to be determined by the projects and the hub partners managing projects.		All 12 countries
	Changes in Land Productivity.	NA (features as sub-indicator of output 2.2.2).	% surface area improved based on Increased Normalised Difference Vegetation Index (NDVI) on site.	2.1.2.4 Changes in Land Cover as monitored through remote sensing (% change by cover class).	NA	NA (Positive % change by cover class- any improvement in land cover is positive).		All 12 countries
GEB 1	Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.	2.1.3) Increase in area of landscapes under improved practices (hectares; excluding protected areas).	NA	2.1.3.1 Area of landscapes under improved practices (hectares; excluding protected areas) (GEF-7 core indicator 4).	Contributes to 1.1 million ha (as per the GEF 2018 brochure).	The aggregated values for this target comes to 223,060 ha.	core indicator 4	4 countries (Burkina Faso, Malawi, Niger, Tanzania).
			NA	2.1.3.1.1 Area of landscapes under sustainable land management in production systems (hectares) (GEF-7 sub- indicator 4.3).	Contributes to 1.1 million ha (as per the GEF 2018 brochure).	[As above] The aggregated values for this target comes to 223,060 ha.	sub- indicator 4.3	4 countries (Burkina Faso, Malawi, Niger, Tanzania)
Contribution to increased agro-biodiversity.	Surface area under increased agro-biodiversity (ha/land).	2.1.4 Increased surface area (ha) of sustainably-managed genetic diversity measured by the number of species (richness) and frequencies (evenness) across the intervention area. 2.1.5 Increased access to diverse planting and breeding materials across the intervention area.		2.1.4.1 Change in area (ha) already earmarked for recovery, which is also under sustainably-managed crop varieties and animal breeds 2.1.4.2 Change in richness and evenness: change in number and frequencies of varieties of crops, breeds of animals. 2.1.5.1 Change in the diversity and number of seed suppliers/animal breeds. 2.1.5.2 Change in the number of local varieties, breeds supplied.	2,216,600 ha (PDR)	70,000 ha over the baseline (2% increment). Diversity: 2 new varieties or breed per crop/per breed per country - 76 new crop varieties across geographies. At least 70 suppliers across the 7 countries. At least 2 local varieties/breeds/strains supplied per country - 14 local varieties/breeds/strains supplied per country across geographies.		7 countries (Malawi, Burundi, Nigeria, Tanzania, Ethiopia, Uganda, Niger)

GEF-6 GEB OR REGIONAL-LEVEL CONTRIBUTION	OUTPUT		INDICATOR		TARGET		GEF-7 CORE INDICATORS AND SUB-INDICATORS	CONTRIBUTING COUNTRIES/ COMMENTS
	Original output	New output[6]	Original indicator	New indicator	Original target	Proposed/New target		
GEB 4	Greenhouse Gases (GHG) emissions avoided and carbon sequestered in the project area.	2.1.6) Increased Gases (GHG) emissions avoided and carbon sequestered in the project area.	Changes in Soil Organic Carbon.	2.1.6.1 Total Greenhouse gas emissions mitigated as measured by Trends Earth (regional-level remote sensing).	53,311,816 (PDR) 59 million MTCO2teq (GEF 2018 brochure)	Aggregated target value as of October 2020: **56,886,304 metric tons of CO2 eq**.	core indicator 6	(all 12 countries)[7]
			Previously not disaggregated.	2.1.6.2 Total Greenhouse gas emissions mitigated (metric tons of CO2e) as measured by countries through the EX-ACT tool.		This contributes to the same target as 2.1.6.1 and is a means to cross check the values from 2.1.6.1 from site-level information. All sub-indicators below (2.1.6.2.1 to 2.1.6.2.4) contribute to the overall target of 64.6 million metric tones.	core indicator 6	Ghana, Niger, Eswatini., Ethiopia, Burkina Faso, Kenya, Malawi, Burundi, Uganda, Tanzania and Senegal (all countries save Nigeria).
			Previously not disaggregated.	2.1.6.2.1 Above and below ground carbon sequestered and/ or loss avoided (GEF sub-indicator 6.1) as measured by countries through the EX-ACT tool.		As Above	sub indicator 6.1	Ghana, Niger, Eswatini., Ethiopia, Burkina Faso, Kenya, Malawi, Burundi, Uganda, Tanzania and Senegal (all countries save Nigeria).
			Previously not disaggregated.	2.1.6.2.2 Emissions avoided (GEF-7 sub-indicator 6.2) as measured by countries through the EX-ACT tool.		130.42 MTCO2eq offset by project end through solar and biogas programmes.	sub indicator 6.2	Senegal
			Previously not disaggregated.	2.1.6.2.3 Energy saved (MWh).		TBC by Senegal	sub indicator 6.3	Senegal
			Previously not disaggregated.	2.1.6.2.4 Increase in installed renewable energy capacity per technology (MW). Repeat for each technology.		0.0327 MW	sub indicator 6.4	Senegal

[7]Note: several countries are still relying on estimates based on their CEO endorsements letters and still haven't completed their baseline.

GEF-6 GEB OR REGIONAL-LEVEL CONTRIBUTION	OUTPUT		INDICATOR		TARGET		GEF-7 CORE INDICATORS AND SUB-INDICATORS	CONTRIBUTING COUNTRIES/ COMMENTS
	Original output	New output[6]	Original indicator	New indicator	Original target	Proposed/New target		
GEB 6	Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks.	1.2.4) Sectoral planning frameworks are developed and integrate measurable targets drawn from the Multilateral Environmental Agreements MEAs (UNEP).	Number of countries that have developed sectoral planning frameworks and integrated measurable targets drawn from the MEAs (GEB 6.1).	[Maintained:] 1.2.4.1 Number of countries that have developed sectoral planning frameworks and integrated measurable targets drawn from the MEAs.	10	6	NA	
		3.1.1) Multi-scale monitoring of ecosystem services and global environmental benefits (functional environmental information system) established in all participating countries (CI).	Number of countries that have developed multi-scale monitoring of ecosystem services and global environmental benefits (functional environmental information system) (GEB 6.2)	[In GEF-7, the focus is rather to facilitate information disaggregation through the sub-indicators, so as to better capture data and results and report back on the MEAs, but this linked to indicator 1.2.4) Sectoral planning frameworks are developed and integrate measurable targets drawn from the Multilateral Environmental Agreements MEAs].	All countries	One guiding framework for the Programme, available to all countries (12)		
Number of Households (HHs)	A critical mass of households across geographies directly benefit from project interventions.	5.1.1) Significant number of gender representative households benefit from project interventions.	Number of beneficiary households, disaggregated by gender.	5.1.1.1 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment.	2-3 million households.	Aggregation of country-level individual beneficiary target amounts to **4,200,258 individual beneficiaries**. NB: some countries are keeping track of indirect beneficiaries (Nigeria, Ghana and Kenya) i.e. farmers close to project intervention areas who have adopted recommended practices.	Core indicator 11	All 12 countries NB - This indicator did not feature as a GEB under GEF-6.

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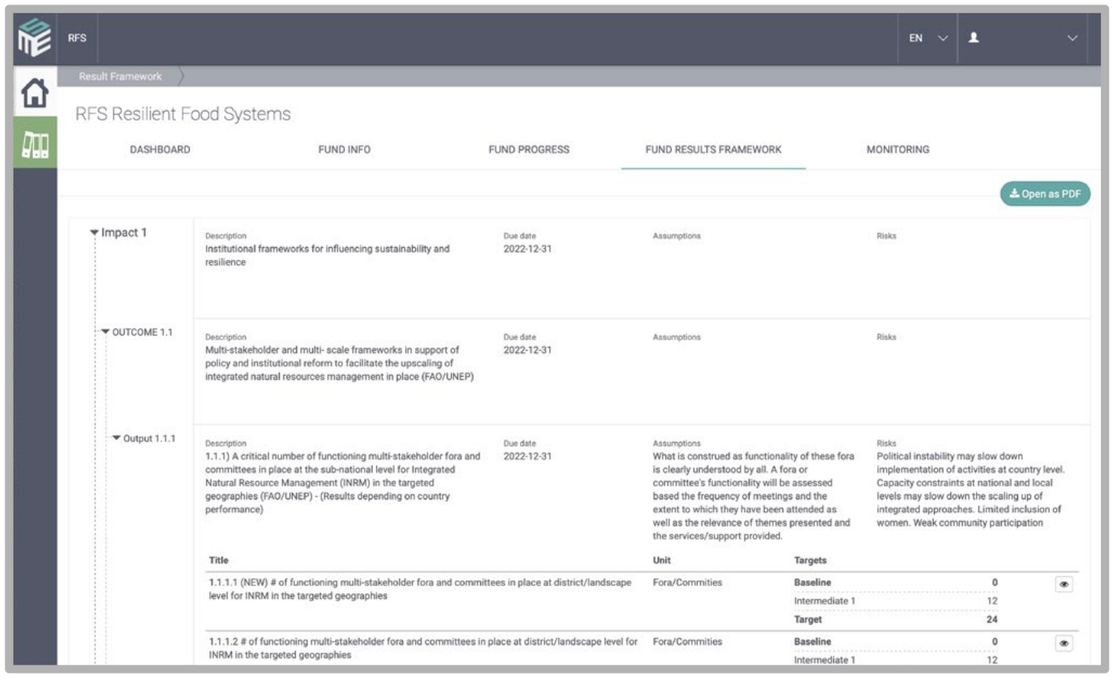
Note on Core Indicator 11. At design, the socio-economic benefits monitored at Programme-level included the number of beneficiary households and the improved food security of these beneficiary households, which informs the improved resilience of food systems connected to these households. This is complemented with data from country projects on sex-disaggregated number of individual beneficiaries.

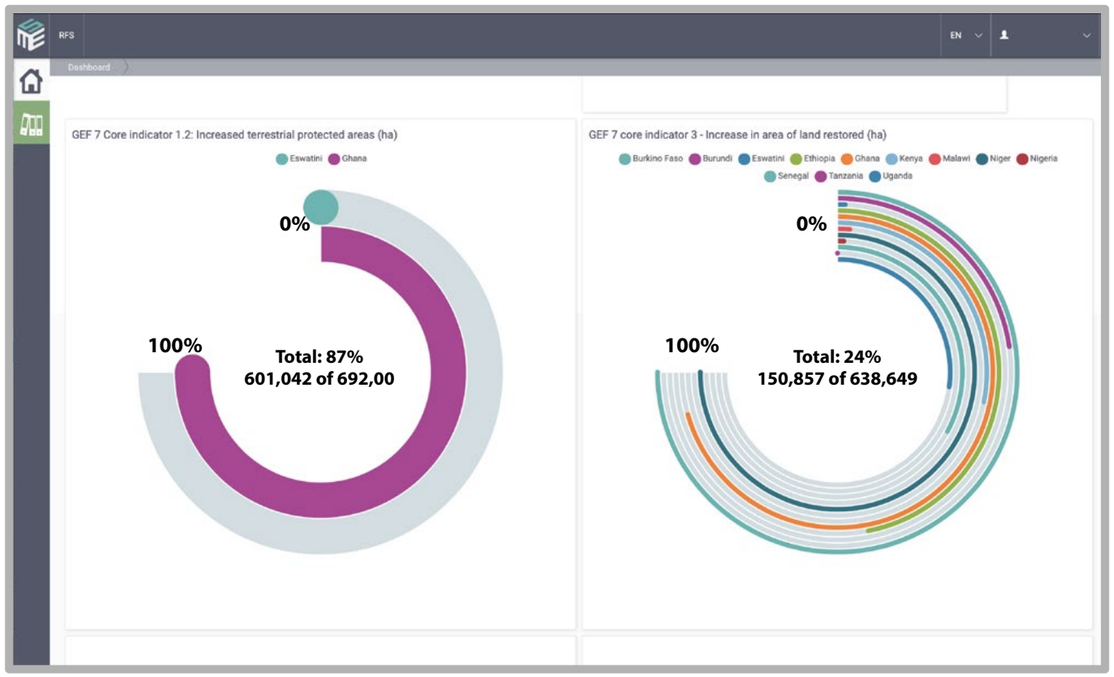
In GEF-7, core indicator 11 captures the number of individual people who receive targeted support from a GEF project. The main difference relating to this indicator is the transition from number of households to number of individuals. **Aggregation of country-level individual beneficiary target amounts to 4,200,258 individual beneficiaries**.

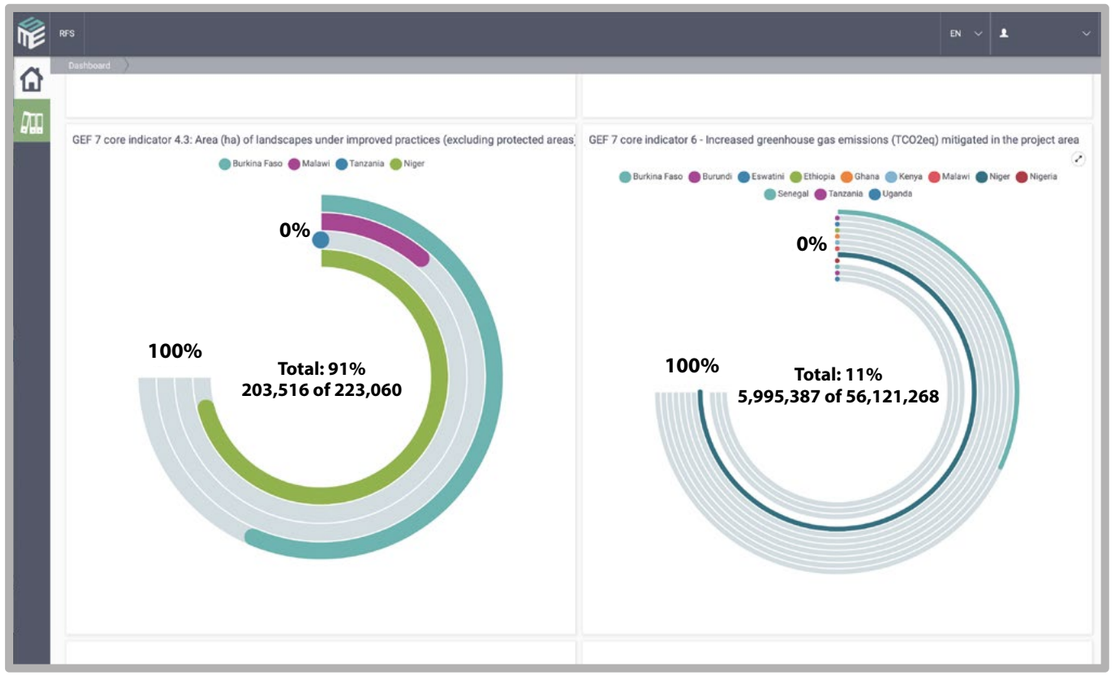
Support is defined as direct assistance from the project/activity. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources. Beneficiaries may receive monetary and non-monetary benefits.

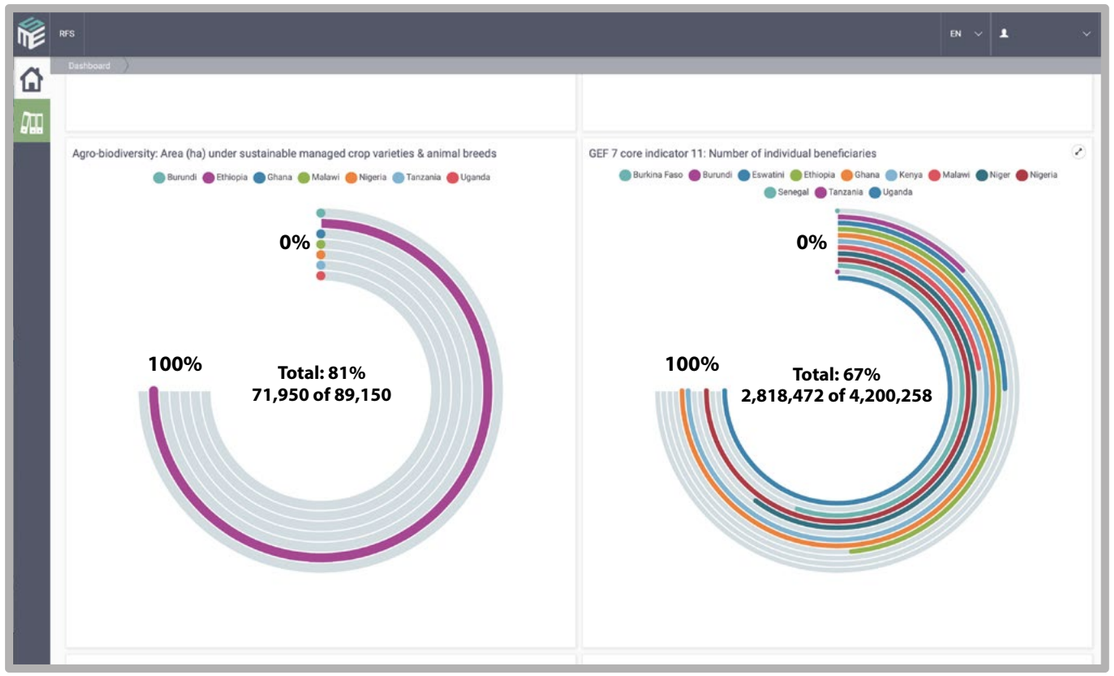
Programme results framework as featured on the programme's online M&E system



Dashboard view of the core programme indicators (June 2020 cumulative results)







3.2.2 RESILIENCE AND FOOD SECURITY (CAPTURED AS "SOCIO-ECONOMIC BENEFITS" AT DESIGN)

Table 4. Improvement in resilience of beneficiary households *

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
2.1.7) Improvement in resilience of beneficiary households based on SHARP.	None defined	2.1.7.1 Percentage increase in the number of households out of the low resilience threshold measured with the Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP) index across (scale out of 10) representative sample of project beneficiaries.	NA	At least 10% of households move out of the low-resilience threshold based on the technical/objective score, showing an improvement in resilience, particularly amongst the most vulnerable ones.
2.1.8) Improvement of food security of beneficiary households based on the FIES, HHDS and any other indexes.	None defined	2.1.8.1 Percentage decrease in the Food Insecurity Experience Scale (FIES) across representative sample of project beneficiaries (score/8).	NA	At least 10% decrease in average FIES score in participating countries (out of 8, with 1 representing the highest level of food security).
		2.1.8.2. Percentage increase in the Household Dietary Diversity Score (HDDS) across representative sample of project beneficiary average diversity of the 33 percent of households with the highest diversity (upper tercile of diversity).	NA	At least 10% increment in average HDDS score (% increment in score out of 12)· Target will be defined based on average diversity of the 33 percent of households with the highest diversity (upper tercile of diversity) in participating countries (score to be determined once baselines have been defined).
2.1.9) Improvement in resilience of beneficiary households based on other indicators, including Resilience Atlas.		2.1.9.1 Significant increase in selected resilience indicators (country specific) across representative sample of project beneficiaries.		This indicator captures a wide array of different indicators which differ greatly from one country to the other and which are not comparable – these will have to be rendered in a narrative form.

**Indicators (2.1.8 to 2.1.10) are measured at country-level (for participating countries).*

3.2.3 INFLUENCING AND IMPROVING INSTITUTIONAL AND LEGAL FRAMEWORKS FOR IMPROVED SUSTAINABILITY AND RESILIENCE

Table 5. Multi-stakeholder and multi-scale frameworks in support of policy and institutional reform to facilitate the upscaling of integrated natural resources management in place.

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
1.1.1) 24 functioning multi-stakeholder fora and committees in place at the sub-national-level for Integrated Natural Resource Management (INRM) in the targeted geographies.	Number of functioning multi-stakeholder frameworks in place at local/landscape scale for integrated management in the targeted geographies.	1.1.1.1 Number of functioning multi-stakeholder fora and committees in place at district/landscape level for INRM in the targeted geographies (including number of women participating).	10	24
	NA	1.1.1.2 Number of functioning multi-stakeholder fora and committees in place at local/village level for INRM in the targeted geographies (including number of women participating)	NA	To be confirmed
1.1.2) 10 functioning multi-stakeholder and committees in place at the national-level for Integrated Natural Resource Management (INRM) (across RFS partners).	Number of functioning multi-stakeholder frameworks in place at national-level.	1.1.2.1 Number of functioning multi-stakeholder and committees in place at the national-level for Integrated Natural Resource Management (INRM) (across RFS partners).	5	10
1.1.3) 3 functioning multi-stakeholder fora in place at regional-level enabling adaptive management and learning on INRM.	Number of functioning multi-stakeholder frameworks in place at regional-level for adaptive management and learning.	1.1.3.1. Number of functioning multi-stakeholder fora in place at regional-level enabling adaptive management and learning for INRM.	3	3

3.2.4 SUPPORTIVE POLICIES AND INCENTIVES TO SUPPORT SMALLHOLDER AGRICULTURE AND DIVERSE AND INCLUSIVE FOOD VALUE-CHAINS

Table 6. Supportive policies and incentives in place to support smallholder agriculture and diverse and inclusive food value-chains.

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
1.2.1) Value chains integrate sustainable production systems approaches, including consideration of post-harvest losses.	Value chains integrate sustainable production systems approaches, including consideration of post-harvest losses (Number and type).	1.2.1 Number and types of value chains that integrate sustainable production systems approaches, including consideration of post-harvest losses.	NA	20
1.2.2) Relevant policies and/or policy instruments and/or regulatory frameworks are reviewed to integrate Integrated Natural Resource Management (INRM).	Supportive policies and incentives for integrated approaches at national-level (Number and types).	1.2.2.1 Number of policies and/or policy instruments and/or regulatory frameworks reviewed to integrate INRM as well as harmonisation of relevant policies at local and national-level.	NA	6
1.2.3) A significant number of countries have developed INRM policy or/and policy instruments or/and regulatory frameworks through regional dialogue.		1.2.3.1 Number of countries that have developed INRM policy or/ and policy instruments or/ and regulatory frameworks through regional dialogue.	NA	6
1.2.4) Sectoral planning frameworks are developed and integrate measurable targets drawn from the Multilateral Environmental Agreements MEAs.		1.2.4.1 Number of countries that have developed Sectoral planning frameworks and integrated measurable targets drawn from the MEAs.	NA	6 (subject to revision)
1.2.5) Value chain greening results in better capacitated CSOs, farmer cooperatives and private sector players in order to help smallholder farmers to adopt and scale up good practices in INRM.	Strengthened involvement of CSOs, farmer cooperatives and private sector in pro-poor and pro-environment value chains to help smallholder farmers to scale up good practices in INRM (Number and type).	1.2.5.1 Number and type of capacity strengthening workshops organised by UNDP-AGRA targeting CSOs, farmer cooperatives and private sector.	NA	5

3.2.5 INCREASES IN SOCIO-ECONOMIC BENEFITS RESULTING FROM THE UPTAKE OF GREEN VALUE CHAIN PRACTICES AND NEW PARTNERSHIPS AND INNOVATIVE BUSINESS MODELS

Table 7. Uptake of green value chain practices and new partnerships and innovative business models

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
2.2.1) Increased number of market players buying commodity from farmers.	Value chains integrate sustainable production systems approaches, including consideration of post-harvest losses (Number and type).	2.2.1.1 Increment in the number of sales contracts between community/ farmer-based organisations and buyers.	None specified	*TBC by MTR*
2.2.2) Improved crop and livestock output (<10%) as a result of value chain greening initiative.	Supportive policies and incentives for integrated approaches at national-level (Number and types).	2.2.2.1 Number of farmers reporting increment in yields or animal production equal or above 10% as a result of green value chain development.	None specified	*TBC by MTR*
2.2.3) New innovative business models adopted along the green value chains across the 12 countries.		2.2.3.1 Number of localised innovative technologies and operation models used within the target greening value chains at the country-level.		*TBC by MTR*
		2.2.3.2 Number of new innovative business models adopted along the green value chains (in the first year).	10	*TBC by MTR*
2.2.4) A significant number of value chain actors (including farmers and farmer trainers) are exposed to VC greening concepts through training offered by AGRA and UNDP.	Strengthened involvement of CSOs, farmer cooperatives and private sector in pro-poor and pro-environment value chains to help smallholder farmers to scale up good practices in INRM (Number and type).	2.2.4.1 Number of value chain actors (farmers and farmer trainers) who received training in value chain greening concept from AGRA and UNDP.	NA	*TBC by MTR*
2.2.5) Increased number or % of farmers participating in commodity marketing through the VC incentivised by the project.		2.2.5.1 % increase in number of farmers participating in commodity marketing after receiving value chain greening training.		*TBC by MTR*

3.2.6 MONITORING AND ASSESSMENT OF ECOSYSTEM SERVICES, CORE INDICATORS AND RESILIENCE

The monitoring and assessment of ecosystem services, core indicators and resilience is supported by tools and frameworks that are discussed in detail in section 3.4.

Table 8. Capacity and institutions in place to monitor ecosystem services to enable more informed decision-making on agriculture and food security at multiple scales.

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
3.1.1) Multi-scale monitoring of ecosystem services (functional environmental information system) established in all participating countries.	Multi-scale monitoring of ecosystem services and global environmental benefits established in all participating countries (Number and types at local, national and regional-levels).	3.1.1.1 Development of a single conceptual framework in place for multi-scale M&A of ecosystem services and socio-economic benefits (Indicators framework).	None specified	1
		3.1.1.2 Total number of adoptions of Hub M&A tools by RFS country projects to monitor ecosystem services, socioeconomic benefits, and resilience of food security for enhancement of information accessibility	NA	36
		3.1.1.3 Number of agencies at the national and sub-national-level making use of the recommended tools in each country project.		8
3.1.2) Training workshops are conducted to strengthen institutional and technical capacity for multi-scale monitoring and assessment of ecosystem services and core indicators.	Institutional and technical capacity strengthened for multi-scale monitoring and assessment of ecosystem services and global environmental benefits (Number, types).	3.1.2.1 Number of regional and national actors trained in each of the 12 RFS countries on the tools recommended by CI.	None specified	200
3.1.3) Integrated, open access data and information systems in place for enhancement of information accessibility.	Integrated, open access data and information systems in place for enhancement of information accessibility (Number, types).	3.1.3.1 A functional open access data and information system in place for enhancement of information accessibility.	None specified	1

Table 9. Framework in place for multi-scale assessment, monitoring and integration of resilience in production landscapes.

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
3.2.1) Operational framework in place for GEF core indicators in all target geographies.	Framework for monitoring of resilience established for each target geography.	3.2.1.1 Number of knowledge products developed to operationalise the framework.	None specified	30

Table 10. Capacity development for applying appropriate tools and practices for monitoring agro-biodiversity and resilience at multiple scales.

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
3.3.1) Training conducted to ensure that capacity is in place to apply appropriate tools and practices for monitoring agro-biodiversity and resilience at multiple scales, in support of multi-scale monitoring of ecosystem services and global environmental benefits established in all participating countries.	Institutional and technical capacity in place to incorporate appropriate tools and practices for monitoring resilience at multiple scales in all participating countries.	3.3.1.1 Number of training/ support interactions for countries to develop the expertise in the use a diagnostic framework to assess contributions of traditional crop varieties and animal breeds to resilience of agricultural productivity to climate variability and shocks.	None specified	12

Table 11. Capacity is in place for multi-scale assessment, monitoring of food security

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
3.3.1) Training conducted to ensure that capacity is in place to apply appropriate tools and practices for monitoring agro-biodiversity and resilience at multiple scale, in support of multi-scale monitoring of ecosystem services and global environmental benefits established in all participating countries.	None specified	3.4.1.1 Number of countries receiving support and developing expertise in running Household Dietary Diversity Score (HDDS)	None specified	5 countries
		3.4.1.2 Number of countries receiving support and developing expertise in running the Food Insecurity Experience Scale (FIES)	NA	6 countries
		3.4.1.3 Number of countries receiving support and developing expertise in running the Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP)		6 countries

3.2.7 KNOWLEDGE MANAGEMENT, COMMUNICATIONS AND CAPACITY DEVELOPMENT

Table 12. Knowledge is exchanged across RFS countries at multiple scales and knowledge products created, shared and broadly disseminated; communication products are shared and stakeholders benefit from extensive capacity development

NEW OUTPUT	INDICATOR		TARGET	
	Original indicator	Proposed/New indicator	Original target	Proposed/ New target
4.1.1) Vibrant knowledge exchange events are organised/attended at multiples scales and knowledge products created, shared with the PCU and broadly disseminated	None	4.1.1.1 Number of knowledge products generated and shared with the PCU.	NA	15
		4.1.1.2 Number of learning exchanges intra-country (within a RFS country).		120
		4.1.1.3 Number of South/South exchanges between different Resilient Food Systems country projects.		5
		4.1.1.4 Number of S/S exchanges that have translated in the uptake of innovative practices.		4
4.2.1) A wealth of RFS communication products are created, shared with the PCU and broadly disseminated.	None	4.2.1 Number of RFS communication products created, shared with the PCU and broadly disseminated.	NA	475
4.3.1) Extensive capacity development events are organised/attended and a wealth of training products are created, shared with the PCU and broadly disseminated.	None	4.3.1.1 Number of capacity development events organised/ attended and shared with the PCU and broadly disseminated. Breakdown to be provided by number of participants, disaggregated by gender and age (whether youth or not).	NA	130
		4.3.1.2 Number of training products created, shared with the PCU and broadly disseminated.		39
4.3.2) A critical mass of Farmer Field Schools or Agro-Pastoral Field Schools are established.	None	4.3.2.1 Number of Farmer Field Schools or Agro-Pastoral Field Schools setup.	NA	TBC
		4.3.2.2 Number of farmers or agro-pastoralists benefitting from FFS and APF set up.		
		4.3.2.3 Number of farmers or agro-pastoralists trained through FFS		

3.3 Generation of baseline and targets

Baseline information is captured by the PCU in the programme-level results framework and in the Hub-level results framework.

Conservation International (CI) is involved in assessing environmental conditions through remote sensing and possibly compare with the aggregate results from countries. At the time of publishing this M&E Plan, the baselines for most of the environmental indicators at national and subnational levels had been established through the Resilience Atlas, Google Earth engine and Trends.Earth. The information still needed to be validated on the ground by country projects as a basis to assess the real contribution from project activities.

Data on socioeconomic indicators are collected by the country projects and will vary due to differences in contexts and the tools used to collect the data. CI is in the process of collecting some of the socioeconomic information to upload on to the Resilience Atlas to provide the countries with a platform to assess the interplay between socioeconomic and environmental conditions in their project sites. Currently, CI is not involved in any country assessment.

Baseline information is important, as it can inform the (possible) revision of targets at country-level. As in the case of the regional component, several countries have overestimated targets (or set high aspirational targets). It is following the mid-term review (MTR) that countries can possibly revise targets (with approval by the Implementing Agency for the country and GEF). At the time of formulating the present M&E plan, all countries save for Tanzania, Malawi and Burkina Faso had completed their mid-term reviews. In the case of Kenya, the MTR revealed that the SLM target needed to be revised.

Subsequent to the review of all project M&E frameworks, engagement sessions with country teams and partners, as well as the M&E workshop held from September to November 2019, it became clear that the original targets set for these indicators – as defined in the PDR - needed to be downscaled. This was especially true for targets related to Sustainable Land Management (SLM), as some country partners lowered their SLM ambitions during the implementation of the project.

In the case of Kenya, the MTR revealed the SLM target needed to be revised. The country's original target for SLM was 337,000 ha for direct SLM and 636,000 ha for the surface area to be influenced, i.e. close to 1 million ha. However, following the MTR, these targets were reduced, as the project targets 21,000 HHs and their average surface area is 2 acres, which was deemed to be a very ambitious design. The new targets proposed were approved by the Ministry of Environment and Forestry and the GEF Focal Point in October 2019: 45,000 ha under SLM and 90,000 ha "influenced to adopt SLM (i.e., neighbour or farmer to adopt some if not all)". This significant reduction in Kenya's overall SLM target will impact the programme-level performance. Uganda also revised its SLM target downwards (from 4,920 in the CEO endorsement letter down to 1,230 ha) and so has Malawi (the country's tracking tools reports a total figure of 35,000 ha under SLM whereas the country's logical framework reflects 12,500 ha under SLM). These downward revisions are only partially offset by Burkina Faso's upward revision of its SLM target, from 8,500 ha to 12,505 ha.

The GEF Formative Review of the Integrated Approach Pilot Programmes (2017) recognises that PDRs are not a reliable source for GEB targets and that these targets are overestimated in the case of the RFS - at least for some country projects and thus for the RFS programme as a whole. This review further calls for assessing whether and when these GEB targets are meant as aspirational goals or as hard targets and how aspirational GEB goals will be measured at the programme-level: "Even if these were meant as aspirational goals, there should be a unified approach in tracking progress toward such aspirations". The RFS' programme results monitoring framework endeavors precisely to unify these approaches.

Importantly, as GEF projects are made up of both GEF financing as well as co-financing, the Results Framework seeks to capture core indicator and sub-indicator values to which the GEF projects have contributed. Nonetheless, projects are not mandated to determine the portion of results attributed to GEF financing (GEF-7 Results Guidelines).

3.4 Tools and frameworks for monitoring and assessing project impacts

This section explains the conceptual framework underpinning the elaboration of the indicators adopted for assessing ecosystem services, socioeconomic benefits, and resilience of food security (section 3.4.2), before providing a detailed description of the datasets and tools offered by the Regional Hub for monitoring them (3.4.3).

3.4.1 RATIONALE FOR DIVERSITY OF TOOLS AND FRAMEWORKS USED TO MONITOR AND ASSESS PROJECT IMPACTS

Through Component 3 (Monitoring and assessment of global environmental benefits and agro-ecosystem resilience) of the RFS Regional Hub project, Conservation International (CI), through its Vital Signs Programme, and in partnership with other members of the Regional Hub project, led the development of a conceptual framework for multi-scale monitoring and assessment of ecosystem services and socio economic benefits of the programme.

Assessing ecosystem services, socio-economic benefits, resilience of food security, and in particular those specific elements expected to be impacted as a result of project activities, requires a range of indicators to be assessed, from the project-scale through the programme-level.

The programme was not designed with the view of prescribing countries to adopt specific and uniform tools for monitoring these aspects. As much as Hub partners may wish to encourage and support countries in adopting specific methodologies, these can therefore only be adopted to the discretion of countries and the fact that countries will adopt diverse tools will translate in heterogenous transcriptions and interpretation of indicators, especially for monitoring resilience for food security. Measuring ecosystem services, socio-economic benefits, resilience of food security indicators has therefore translated in the adoption of hybrid approaches and composite indicators. Despite the hybrid approach, the PCU will collect and collate the information from countries and present it in an aggregated manner, where possible.

Indicators for assessing ecosystem services, socio-economic benefits, and resilience of food security, as well as information on potential data sources that might be used for monitoring these indicators are described in detail in a specific note[8] providing guidance on these indicators. Section 3.4.2 provides a summary of these.

3.4.2 BACKGROUND ON INDICATORS FOR ASSESSING ECOSYSTEM SERVICES, SOCIOECONOMIC BENEFITS, AND RESILIENCE OF FOOD SECURITY

A. Indicators will vary by tier

The data that is available for monitoring ecosystem services, socioeconomic benefits, and resilience of food security will vary by country project as a function of factors including the project activities (and therefore the appropriate indicators necessary to assess impact) and budget, availability of existing data, and the expertise of the project team and partners.

To account for this variability among projects, the Regional Hub advocates a tiered monitoring approach, such that projects make use of the best-available information for each indicator, consistent with the objectives, expected impacts, and available budget for that project. Tier 1 indicators (which will be applied at the regional level) will in most cases use primarily public datasets broadly available across the region, while Tier 2 indicators will take advantage of more detailed analysis or data collection taking place across a large number of the individual country projects. Tier 3 indicators will not only draw on project-specific datasets, but also on more specialized indicators that may not be commonly collected by the country projects. In the tables below the tier at which each indicator applies will be noted. Some indicators apply across multiple tiers.

B. Assessing ecosystem services

To assess project impact on ecosystem services, establishing a baseline of ecosystem services prior to the initiation of project activities, and monitoring of these services throughout the project duration is necessary. There are various approaches for monitoring ecosystem services. The most direct approach is to use modelling tools that allow direct modelling and valuation of the ecosystem services provided by an area. While this approach is useful in quantifying services provisioning, it does generally require specialized datasets and modelling experience.

As an alternative to modelling, indicators can be used. Indicators are values "derived from measures", that can be used to indicate the level of services provisioning in the absence of direct measurement (Egoh et al. 2012). For example, forest cover as derived from satellite imagery might be used as an indicator of carbon sequestration (a provisioning service provided by ecosystems).

While projects should consider the potential of using modelling tools to assess ecosystem services, in case they do not have access to expertise in the application of these tools, the Hub project recommends that indicators be used.

A list of suggested ecosystem services indicators to be monitored at each tier suggested on Table 13. Given the regional scale monitoring required by the Hub project, the majority of the ecosystem services indicators will be monitored using Earth observation, supplemented with national-level data from country projects where available. At minimum, ecosystem services indicators should be assessed at baseline and in year five for each project.

Table 13. Potential ecosystem services indicators to be monitored at each tier. Modified from Egoh et al. (2012) and Brown et al. (2014).

SERVICE TYPE	SERVICE	INDICATOR	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Provisioning *(products obtained from ecosystems)*	Fodder production	Productivity of grassland areas	250 m	Earth observation	X	X	X
	Fodder production	Grassland area	30 m	Earth observation	X	X	X
	Crop production	Productivity of agricultural land	250 m	Earth observation	X	X	X
	Crop production	Agricultural land area	~ 30 m	Earth observation	X	X	X
	Water provision	Surface water availability		Modelling		X	X
	Water provision	Ground water availability		Modelling		X	X
	Water provision	Evapotranspiration		Earth observation	X	X	X
Regulating (benefits from regulation of ecosystem processes)	Climate regulation	Change in soil carbon	300 m	Modelling	X	X	X
	Climate regulation	Aboveground biomass	~ 30 m	Earth observation	X	X	X
	Climate regulation	Belowground biomass		Earth observation	X	X	X
	Erosion prevention	Potential soil erosion		Modelling		X	X
	Water flow regulation	Soil characteristics		Modelling		X	X
	Water flow regulation	Nutrient retention		Modelling		X	X
Cultural (non-material benefits from ecosystems)	Tourism	Visitor numbers to natural features	Per park	Logs, proxies like Flickr		X	X
	Aesthetic value	Area of natural land cover types	~ 30 m	Earth observation	X	X	X
	Tourism	Accessibility of natural areas	~ 30 m	Earth observation	X	X	X

[8] *Conservation International. 2019. Guidance for Monitoring of Ecosystem Services, Socio-economic Benefits, and Resilience of Food Security for Global Environment Facility Food Security Integrated Approach Pilot (FS-IAP). March, 2019.* **Guidance for Monitoring of Ecosystem Services, Socioeconomic Benefits, and Resilience of Food Security for Global Environment Facility Food Security Integrated Approach Pilot (FS-IAP), March, 2019.**

C. Assessing socio-economic benefits

Across all country projects the Hub project will assess the number of individual beneficiaries, as well as gender-disaggregated data collected by country projects, and the food security of households.

Food security of households will be determined according to two recommended indicators. Improvement in food security of beneficiary households is to be established based on either:

1. A significant increase in the **Food Insecurity Experience Scale** (FIES) and developing expertise in running it autonomously across representative sample of project beneficiaries; or/and
2. A significant increase in the **Household Dietary Diversity Score** (HDDS) score across representative sample of project beneficiaries.

Countries could use other (composite) indicators, which they will need to share in detail.

In addition to these broad indicators, the Hub project recommends that projects collect additional data (disaggregated by gender where applicable), in order to characterise project socio-economic impacts in more detail.

The information required to assess the socio-economic benefits of projects generally must be collected using household surveys. Above the project-level (at national-regional scales), publicly available datasets based on census or large sample surveys carried out by international organisations can be useful, however some expertise in data analysis and statistical modelling is required in order to calculate meaningful indicators from these datasets.

Table 14. Potential indicators of socio-economic benefits to be monitored at each tier (see also gender mainstreaming framework on sub-section E). *Indicates an indicator that should be disaggregated by gender.

INDICATOR	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Income*	Individual (household if not available)	Social surveys		X	X
Land area under integrated management	Household	Social surveys		X	X
Membership in co-ops, farmers organisations, and advisory networks*	Individual	Social surveys		X	X
Employment (status, occupation, type, broken down by age and gender)*	Individual	Social surveys	X	X	X
Richness of traditional crop varieties and animal breeds	Household	DATAR		X	X

D. Assessing resilience of food security

The programme-level indicators are not designed to capture changes in the resilience of food security per se. Given the aims of the programme as a whole, it is useful to ensure that indicators relevant to assessing resilience of food security are adopted. While there are varied definitions of "resilience" throughout the literature, the RAPTA Framework (O'Connell et al. 2016), provides a definition that is particularly useful in the context of GEF project design. **The RAPTA Framework defines resilience as:**

"The capacity of a social–ecological system to absorb shocks and trends (e.g. like drought) and to reorganise so as to retain the same functions, structure, and feedbacks (i.e. the same identity)"

Borrowing from the RAPTA definition, and from Bullock et al., (2017) resilient food security can be defined as follows:

A system with resilient food security is able to maintain food access, availability, and utilisation in the face of chronic and acute stresses and shocks.

Resilience is generally recognised as arising from the combination of three factors: **absorptive capacity** (ability to absorb a stressor or shock without loss of function or change in structure), **adaptive capacity** (ability of to learn and adjust), and **transformative capacity** (ability to transition to a new system) (Béné et al. 2012, Douxchamps et al. 2017). These three capacities, and their interactions, cannot be assessed directly. Therefore, practitioners must instead monitor indicators that can be more directly measured and are associated with these three capacities.

A number of tools have been developed specifically for the assessment of resilience, and FAO will provide technical support to countries willing to adopt the **Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP)** (described in Table 19).

Data from the SHARP survey related to socio-economic and biophysical aspects of resilience have been collected as part of GEF projects in a number of RFS countries (Uganda, Burundi, Burkina Faso, Senegal). The SHARP survey also provides information on priorities to strengthen resilience at household-level.

Other indicators that could be used to provide an assessment of resilience include:

- **Resilience Index Measurement and Analysis (RIMA)**;
- **RIMA-II** (FAO 2016);
- **Community-Based Resilience Analysis (CoBRA)**.

In addition to these frameworks focused directly on resilience, social survey and qualitative analysis frameworks designed to assess other aspects of land systems can also provide useful information and guidance on design of questions to capture key indicators associated with resilience. For example, the **Multidimensional Poverty Assessment Tool (MPAT)** (designed to assess poverty), and **Women's Empowerment in Agriculture Index (WEAI)** (designed to assess women's empowerment), provide detailed guidance on assessing each of these key areas.

Indicators for assessing resilience can in general be broken down into a number of categories (borrowing from Douxchamps et al. 2017): assets and capacities; stressors and shocks; and contextual factors. Indicators of assets and capacities are related to the unit of analysis (a household, village, or other unit, depending on the project), and include assets, uses of these assets, and capacity to learn. Indicators of stressors and trends assess the magnitude, frequency, and type of these influences, while contextual factors are associated with institutions, natural resources, and ecosystem function. Assets, use of assets, and capacities are all associated with the unit of interest itself (for example the household), while indicators of stressors and trends and contextual factors are associated with broader scales.

The subsequent tables in this section list a number of examples of indicators that might be used to assess resilience within these three categories of indicators. Note the Regional Hub does not expect every country project to assess the full list of indicators contained in the tables within this section. The appropriate indicators for each country project should be chosen with consideration for the type of project that is being implemented. It is recommended, however, that country projects attempt to collect at least several relevant indicators from within each of the categories of indicators listed below, and at minimum that they be collected both at project initiation and completion, such that each category of resilience can be assessed prior to and after project activities.

Assessing assets, uses of assets, and capacities

Guidance on potential indicators for assessing assets, uses of assets, and capacities at the household-level are listed in Table 15. Note that the particular indicators to be assessed will vary by country project, and the choice of indicators should be informed by an analysis of which assets, capacities, and uses of assets are most likely to be effective in building resilience to the particular stressors and shocks that are identified as affecting the site (Constas et al. 2014).

Table 15. Potential project-level indicators for assessment of assets and capacities at each tier (modified from Cabell and Oelofse, 2012). *Indicates an indicator that should be disaggregated by gender.

CATEGORY	EXAMPLE	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Assets (resources associated with unit of analysis, access to information on sustainable agriculture, INRM, weather info (e.g. early warning systems, seasonal forecasts)	Income*	Individual (household if not available)	Social surveys		X	X
	Food Insecurity Experience Scale (FIES).*	Individual	Social surveys, following FIES			X
	Land area (per household)	Household	Social surveys		X	X
	Household size (number of people).	Household	Social surveys		X	X
	Gender of household members.	Individual	Social surveys			X
	Age of household members.	Individual	Social surveys			X
	Health (stunting, infant mortality rate, etc.).*	Regional	Social surveys	X	X	X
	Evenness of crop varieties and animal breeds.	Household	DATAR		X	X
	Effective population size (animals only).	Household	DATAR		X	X
	Richness of traditional crop varieties and animal breeds.	Household	DATAR		X	X
	Access to time and labour-saving technologies (min tillage, water pans, irrigation kits, efficient stoves, etc.).*	Household	Social surveys			X
	Time spent in sourcing for resources like firewood or water.	Household	Social surveys			X
Uses of assets (how assets support livelihoods)	Access to agricultural advisory or inputs.*	Individual	Social surveys		X	X
	Access to small grants, saving, and borrowing services.*	Individual	Social surveys		X	X
	Membership in economic organisations (co-ops, farmers organisations, and advisory networks).*	Individual	Social surveys		X	X
	Leadership of economic organisations (co-ops, farmers organisations, and advisory networks).*	Group-level	Social surveys		X	X
	Membership in non-economic organisations (natural resources management, community and social infrastructure).*	Individual	Social surveys		X	X
	Leadership of non-economic organisations (natural resources management, community and social infrastructure).*	Group-level	Social surveys		X	X
	Schooling (e.g. literacy-levels, access to training programmes).*	Regional (tier 1) or individual (tiers 2 and 3).	Social surveys	X	X	X
	Land management (crop rotations, soil and water management).	Household	Social surveys		X	X

CATEGORY	EXAMPLE	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Uses of assets (how assets support livelihoods)	Area of traditional crop varieties and number of animal breeds per hectare.	Household	DATAR		X	X
	Trends in population size of breeds and of crop varieties.	Household	DATAR		X	X
	Knowledge management (sharing between farmers, record keeping, baseline knowledge of agroecosystem, etc.).	Household	Social surveys			X
	Level of mutual decision-making.*	Household	Social surveys			X
	Distribution of tasks across members of the family.*	Household	Social surveys			X
Capacities (to cope, adapt, and learn)	Coping strategies.*	Household	Social surveys			X
	Employment (status, occupation, type, broken down by age and gender).*	Individual	Social surveys	X	X	X
	Use of new technologies (e.g. improved seed/breed varieties, water harvesting, small-scale irrigation, organic fertilizers, etc.).*	Individual (household if not possible)	Social surveys			X
	Exposure to mass media.*	Individual	Social surveys	X	X	X
	Behavioural change after shocks and to complement coping strategies (i.e. not only to respond but also to transform).*	Individual	Social surveys			X
	Literacy.*	Individual	Social surveys	X	X	X

Monitoring stressors

Potential indicators for monitoring stressors and shocks are listed in Table 16. Not all of these indicators will be relevant for each country project. As with the indicators for assets, uses of assets, and capacities, the indicators chosen to assess stressors and shocks will vary by country project depending on the project activities and local context.

Table 16. Potential project-level indicators for assessment of stressors and trends at each tier. Adapted from Constas et al. 2014 (2014) and Douxchamps et al. (2017). *Note that these indicators will vary greatly among projects depending on the project activities and agroecological system under consideration. Projects should choose indicators relevant to the particular stresses and shocks likely to be encountered by households in the project area.*

CATEGORY	EXAMPLE	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Climate	Trend of number of rainy days per year.	1 – 10 km	Earth observation, and/or station data.	X	X	X
	Trend of wettest quarter precipitation.	1 – 10 km	Earth observation, and/or station data.	X	X	X
	Trend of wettest quarter precipitation.	1 – 10 km	Earth observation, and/or station data.	X	X	X

CATEGORY	EXAMPLE	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Climate	Rate of change of maximum daily temperature.	1 – 10 km	Earth observation, and/or station data.	X	X	X
	Rate of change of minimum temperatures.	1 – 10 km	Earth observation, and/or station data.	X	X	X
Degradation	Trend of productivity.	10 – 100 m	Earth observation.	X	X	X
	Change in land cover.	10 – 100 m	Earth observation.	X	X	X
	Change in soil carbon.	10 – 100 m	Earth observation, direct observation.	X	X	X
Conflict	Political conflict.	Local · regional	Qualitative sources.		X	X
Disease	Pest and disease outbreak.	Local – regional	Earth observation, direct reports.		X	X
Markets	Volatility of food and commodity market pricing.	Local – regional	Statistical and survey data		X	X

Monitoring context

A number of examples of indicators that might be used by country projects to monitor context are listed in Table 17. These indicators capture those factors that are not determined at the household-scale, but that might shape resilience within project areas, and the capacity of households to respond to stressors and shocks (Constas et al. 2014).

Table 17. Potential project-level indicators for assessment of contextual factors at each tier, adapted from Douxchamps et al. (2017).

CATEGORY	EXAMPLE	SCALE	SOURCE	TIER 1	TIER 2	TIER 3
Social	Infrastructure access	Local · regional	National data, gridded data		X	X
	Market access	Local	National data, gridded data, Social surveys		X	X
	Social networks (e.g. community-based organisations)	Local	Social surveys, qualitative data			X
	Strength of local institutions (formal and informal)	Local · national	Social surveys, qualitative data		X	X
Ecological	Climate (annual precipitation, mean temperatures, agroecological variables)	1 – 10 km	Earth observation	X	X	X
	Number of growing seasons	Regional	Earth observation	X	X	X
	Agricultural suitability, agro-climatic potential yields	Regional	Earth observation, modelling	X	X	X
	Landscape features	Regional	Earth observation	X	X	X

E. Mainstreaming gender

At design, RFS made provision for new and improved gender and age-sensitive decision-support tools for INRM that take into consideration:

1. Economic empowerment of women and youth, including access to knowledge as well as credit;
2. Decision-making power and representation of women and membership in non- economic and economic groups; and
3. Equitable workload balance. This gave rise to the "7-outcome" framework for monitoring that rests on economic empowerment (see detail page 23 of the Programme Framework Document).

At implementation, the PCU proposed going beyond this "7-outcome" framework for monitoring, as it was mainly focused on increasing women's participation and access but offered little information on how men and women were actually benefitting from project activities. As the diversity and scope of activities and approaches to address gender as well as the tools to monitor progress varied widely across country projects, the Hub endeavoured to develop a wide enough framework that could also serve as a best practice 'model' that would also help teams to distinguish between reaching women with project interventions and realising benefits for women as a result of those interventions, following IFPRI's reach/benefit/empower framework that was introduced to countries during the RFS Launch Workshop held in Addis Ababa in mid-2017.

The newly finalised framework to track contributions to women empowerment in the RFS, which will feature on the online M&E system, includes the following specific indicators:

1. Number of farmers benefitting from processes of formalisation of land rights and/or more secure rights to access water or forests (disaggregated by sex/age).
2. Proportion of women (and youth) with increased income; participation in markets.
3. Access to financial services; business/financial literacy.
4. Proportion of women attending trainings/receiving extension advice.
5. Improved attitudes towards women's participation in markets/economic activities.
6. Number of women and youth members and leaders in projects' groups and committees.
7. Reduced time spent in sourcing for resources like firewood or water.
8. Number of farmers benefitting from labour/time saving technologies (by sex/age).

Dashboard view of the programme's gender dimension (Online M&E system)

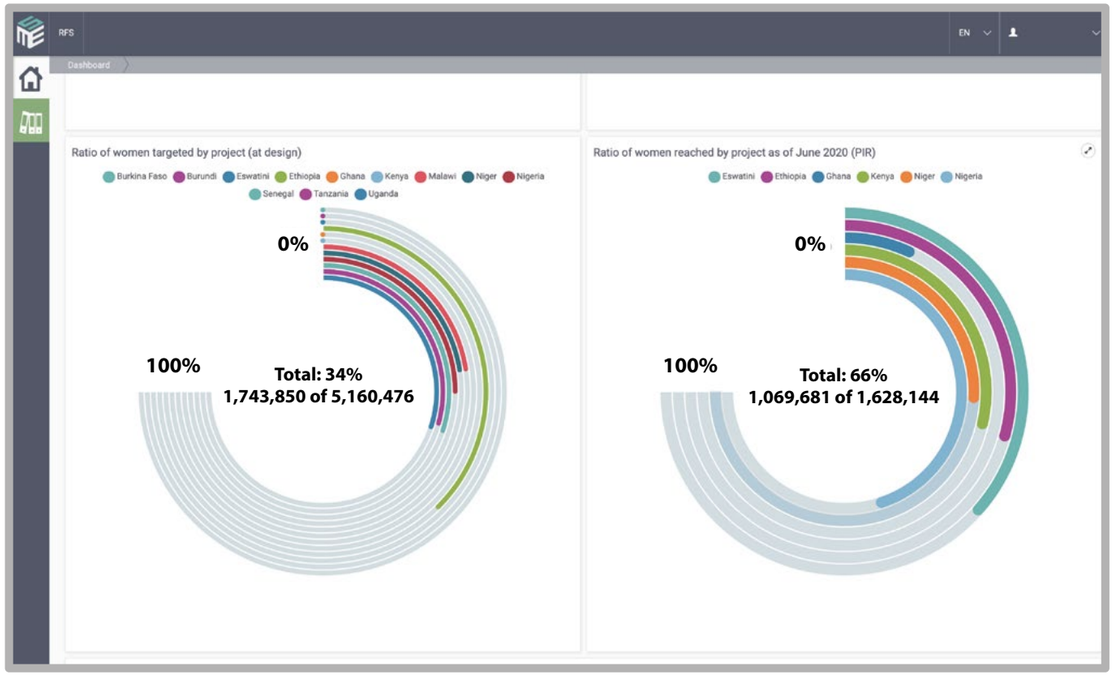


Table 18. Gender indicators of the RFS programme and country-level contributions

PROPOSED INDICATORS	COUNTRIES	PROPOSED INDICATOR AT COUNTRY-LEVEL
G.1. No. of farmers benefitting from processes of formalisation of land rights and/or more secure rights to access water or forests (disaggregated by sex/age)	Uganda	Number of multi-stakeholder platforms established supporting INRM per district, 30 % women, 20% youth, and 10% indigenous people (when relevant) are represented (G5).
		No of women with formal land rights documentation of access.
		No of women and men accessing protected water points.
	Tanzania	No of landscape-level intervillage NRM committees functioning meeting at least twice per year and solving any emerging conflicts over resources use (%women in leading positions).
	Ethiopia	Gender disaggregated data on land ownership of land under integrated land management.
G2. Proportion of women (and youth) with increased: i. Income; ii. Participation in markets; iii. Access to financial services; iv. Business/financial literacy	Eswatini	No of female youth in youth enterprises (185).
	Uganda	Number of women using marketing information system (650).
	Ghana	% women participating in alternative livelihoods schemes.
	Ethiopia	% women actively involved in groups receiving small grants addressing SLM/INRM.
	Tanzania	No of women in each section of the value chains.
	Senegal	No of women accessing financial services.
	Niger	% women supported with Beekeeping and shea-nut processing under the CREMA.
	Burkina	% women engaged on strengthened value chains.
	Nigeria	Number of groups operating tree nurseries and practicing woodland management (% women and % youth participating).
		% of women involved in VC development activities (the development of four agricultural value chains integrates a resilient integrated approach).
G3. Proportion of women attending trainings/ receiving extension advice	Niger	% women and youth trained on community management.
		No of women benefitting from women granaries.
		No of women and youth receiving literacy training (target: 320).
	Uganda	% women trained on INRM and SLM practices.
	Ghana	% women participating in trainings on SLWM practices.
		% women supported with farm inputs.
	Tanzania	No of district staff, village staff and community members trained (% women, % youth) .
		No of FFS operating and number of farmers participating(% women and % youth).
		No of groups operating tree nurseries and practicing woodland management (% women and % youth participating) (G2).
	Nigeria	No of women attending training.

PROPOSED INDICATORS	COUNTRIES	PROPOSED INDICATOR AT COUNTRY-LEVEL
G3. Proportion of women attending trainings/ receiving extension advice	Burundi	% of women targeted in FFS.
	Ethiopia	% of total beneficiaries for training (250,000).
	Burkina Faso	No of men and women attending training on rights.
	Senegal	% of women trained as part of the capacity strengthening on NSIF-SLM at the national, regional and local-levels.
G4. Improved attitudes towards women's participation in markets/ economic activities	Uganda	No of women investing in productive segments of the value chains.
		No of men that easily allow women to participate in market.
		No of women playing critical roles in the market.
G5. No. of women and youth members and leaders in projects' groups and committees	Eswatini	% of women in decision making committees at community-level* (NRM, water groups, erosion control groups).
	Malawi	% of women and youth participating in resources management committees (VNRMC).
		% of women in leadership position.
	Uganda	No of multi-stakeholder platforms established supporting INRM per district, 30 % women, 20% youth, and 10% indigenous people (when relevant) are represented.
	Tanzania	No of landscape-level intervillage NRM committees functioning meeting at least twice per year and solving any emerging conflicts over resources use (%women in leading positions).
	Senegal	% women in supported farmer organisations.
	Ethiopia	No of women in leadership position (in farmer organisation and in enterprises).
		No of girls involved in Environment school club and number as leaders in these school clubs.
	Ghana	% women participating on community watershed planning/% women participating in water management committee/REMA committee.
G7. Reduced time spent in sourcing for resources like firewood or water	Eswatini	Reduced time spent travelling to/from water source* (Rain water harvesting).
	Senegal	Number women who benefit from biogas technologies, solar pumping systems
	Malawi	Reduced time spent in collecting fuelwood* (Promotion of fuel efficient cook-stoves - Establishment of woodlots and village forests areas)
G8. No. of farmers benefitting from labour/ time saving technologies (by sex/age)	Kenya	No of households reached with labour and time saving technologies (i.e. min tillage, water pans, irrigation kits)
	Ethiopia	No of HH accessing innovative energy saving technologies (>60% women) (ICS, biogas, solar)
	Uganda	No. of HH that have fuel saving stoves
		No of women and men planting woodlots in their compound
	Burundi	No of households using energy efficient stoves (virtually all female)

3.4.3 DATASETS AND TOOLS OFFERED BY THE REGIONAL HUB FOR ASSESSMENT OF ECOSYSTEM SERVICES, SOCIO-ECONOMIC BENEFITS, AND RESILIENCE OF FOOD SECURITY

A range of tools developed by Hub partners is available to support data collection and calculation of indicators by the country projects, as well as by the Hub project. Table 19 below provides background information on each tool offered by the RFS programme[9] and Table 20 gives an overview of which tools are used at country-level.

Table 19. Key monitoring tools and resources

Collect Earth	**Background:** Collect Earth is a tool that enables data collection through Google Earth. In conjunction with Google Earth, Bing Maps and Google Earth Engine, users can analyse high and very high-resolution satellite imagery for a wide variety of purposes, including: ● Support multi-phase National Forest Inventories ● Land Use, Land Use Change and Forestry (LULUCF) assessments ● Monitoring agricultural land and urban areas ● Validation of existing maps ● Collection of spatially explicit socio-economic data ● Quantifying deforestation, reforestation and desertification Its user friendliness and smooth learning curve make it a perfect tool for performing fast, accurate and cost-effective assessments. It is highly customisable for the specific data collection needs and methodologies. The data gathered through Collect Earth is exportable to commonly used formats and can also be exported to Saiku, a tool that facilitates data analysis. Lead partner: Conservation International. **Lead partner:** Conservation International
DATAR	**Background:** Developed by the **Platform for Agrobiodiversity Research** for the Resilient Food Systems programme, the Diversity Assessment Tool for Agrobiodiversity and Resilience (**DATAR**) is a new open-source pilot software platform with a web interface, the DATAR Web Portal, and an Android App that will allow the integration of diverse crop varieties, livestock breeds, and aquatic farmed-types into decision-making plans. Food systems, agricultural development, and climate resilience planning usually stop at the SPECIES-level, deciding which crop, livestock or aquatic animal would be best suited to improve local livelihoods. DATAR goes one step further to be a tool that allows the user to harness the tremendous amount of INTRA-SPECIFIC DIVERSITY maintained locally and worldwide as diverse sets of crop VARIETIES, livestock BREEDS and aquatic FARMED-TYPES into programmes to feed and restore our planet. DATAR supports users to: (1) Assess information on crop varieties, livestock breeds, and aquatic farmed-types and their functional traits; (2) Identify and describe genetic material providers who supply crop seeds, animal breeds, and aquatic farmed types: from local communities to public and private companies; (3) Assess management, market, policy and institutional constraints encountered by crop, livestock and aquatic food producers to benefit from the use of their own local crop and animal biodiversity; and (4) Provide age and gender sensitive actions and interventions to use this diversity to meet the goals of improving productivity, diversifying income and nutritional sources, reducing migration, and adapting to climate change. **Lead partner:** Platform for Agrobiodiversity Research and Bioversity International

[9] *As it is clear from Table 17's content, not all tools recommended by the Regional Hub have been developed by Hub partners. In some cases (e.g. WOCAT-LADA and WEAI), the indicated lead partners are not themselves experts on the tool but can certainly connect country teams with the appropriate external specialists.*

EO4SD	**Background:** The RFS is one of the target programmes of the EO4SD (Earth Observation for Sustainable Development) "Agriculture and Rural Development Cluster" - a European Space Agency (ESA) initiative which aims at mainstreaming the use of Earth Observation (EO) information products and services at large scale for international development projects. The objective of the EO4SD is to support and complement key aspects of the IAP Regional Hub, including Conservation International and its programme Vital Signs, with EO services and capacity for land monitoring and assessment at both IAP country project and regional-levels. These services can provide independent and authoritative environmental variables in order to build up a stronger Indicator Framework that can demonstrate how different IAP programmes investments are addressing drivers of environmental degradation and agro-ecosystem resilience, delivering food security outcomes and generating global environmental benefits. **Lead partner:** European Space Agency (ESA)
FIES	**Background:** The FIES-SM questions refer to the experiences of the individual respondent or of the respondent's household as a whole. The questions focus on self-reported food-related behaviours and experiences associated with increasing difficulties in accessing food due to resource constraints. If the raw score < 4, Food secure or mild food insecure. If the raw score = 4, 5 or 6, Moderately insecure; if the raw score = 7 or 8, severe food insecure. **Lead partner:** FAO
HDDS	**Background:** The Household dietary diversity Score (HDDS) is a qualitative measure of food consumption that reflects household access to a variety of foods. The household dietary diversity score described in the guideline consists of a simple count of food groups that a household has consumed over the preceding 24 hours. An increase in the average number of different food groups consumed provides a quantifiable measure of improved household food access. During baseline the HDDS score is calculated (range 0-12) and then the is target based on distribution of diversity based on the average diversity of the 33 percent of households with the highest diversity (upper tercile of diversity). **Lead partner:** FAO
IPC	**Background:** The Integrated Food Security Phase Classification (IPC) is an innovative multi-partner initiative for improving food security and nutrition analysis and decision-making. The main goal of the IPC is to provide decision-makers with a rigorous, evidence- and consensus-based analysis of food insecurity and acute malnutrition situations, to inform emergency responses as well as medium- and long-term policy and programming. **Lead partner:** FAO
LDSF	**Background:** The Land Degradation Surveillance Framework (LDSF) was developed as a response to a lack of methods for systematic landscape-level assessment of soil and ecosystem health. The methodology is designed to provide a biophysical baseline at landscape-level, and a monitoring and evaluation framework for assessing processes of land degradation and the effectiveness of rehabilitation measures (recovery) over time. **Lead partner:** ICRAF
MPAT	**Background:** MPAT was developed by IFAD. It is designed to produce targeted data on rural poverty at household and village-level. It can be combined with IFAD's Results and Impact Management System (RIMS). When combined the indicators provide an overview of 11 interconnected basic dimensions, such as food security and nutrition, exposure and resilience to shocks, and farmers' assets. A standard questionnaire is used so that results can be compared between households, villages, projects and countries, as well as within a given project over time. **Lead partner:** IFAD

METT	**Background:** METT has been designed to track and monitor progress towards worldwide protected area management effectiveness. The methodology is a rapid assessment based on a scorecard questionnaire. The scorecard includes all six elements of management identified in the IUCN-WCPA Framework (context, planning, inputs, process, outputs and outcomes), but has an emphasis on context, planning, inputs and processes. It is basic and simple to use and provides a mechanism for monitoring progress towards more effective management over time. It is used to enable park managers and donors to identify needs, constraints and priority actions to improve the effectiveness of protected area management. **Lead partner:** No designated agency
RAPTA	**Background:** The Resilience, Adaptation Pathways and Transformation Assessment Framework (RAPTA) provides a tool to align approaches and monitoring towards common objectives, contribute to integrated strategies, and pursue synergies in reporting between the Rio Conventions. Developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in partnership with GEF Scientific and Technical Advisory Panel (GEF STAP), the RAPTA guidelines give practical guidance on the application of RAPTA in project design. They are targeted at practitioners working with local stakeholders to devise effective development projects that build resilience to shocks, stresses, and major external change. **Lead partner:** GEF STAP
Resilience Atlas	**Background:** RESILIENCE ATLAS is an interactive analytical tool for building: 1. Understanding of the extent and severity of some of the key stressors and shocks that are affecting rural livelihoods, production systems, and ecosystems in the Sahel, Horn of Africa and South and Southeast Asia; and 2. Insights into the ways that different types of wealth and assets (i.e., natural capital, human capital, social capital, financial capital and manufactured capital) – and combinations among these – impact resilience in particular contexts. The RESILIENCE ATLAS database was created by integrating and analysing more than 12 terabytes of data from over 60 of the best available datasets related to resilience, and summarising the output in the form of easy to understand maps that can shift focus from regional to national and, where the availability and resolution of the data permit, to local scales. **Lead partner:** Conservation International
RIMA	**Background:** The Resilience Index Measurement and Analysis (RIMA) model is a quantitative approach that enables a rigorous analysis of how households cope with shocks and stressors. Comparisons can be made between different types of households (for example, male-headed versus female-headed or urban versus rural) in a given country or area. Resilience analysis using RIMA provides the necessary evidence to more effectively design, deliver, monitor and evaluate assistance to vulnerable populations, based on what they need most. **Note:** There is a second iteration of the tool RIMA II which uses both direct and indirect measures of resilience. RIMA II uses the Resilience Capacity Index (RCI), which can be employed to predict food security and the Resilience Structure Matrix (RSM). The indirect approach looks at the determinants of food security loss and recovery. RIMA II is not being used in the RFS projects. **Lead partner**: FAO
ORMS	**Background:** ORMS is a comprehensive system for measuring and reporting on the results and impact of IFAD-supported investment projects. The Operational and Results Management System (ORMS) provides information on three-levels of results: - First-level results refer to project activities and outputs - Second-level results relate to project outcomes and reflect changes in beneficiaries' behaviour, improved performance and sustainability of groups, institutions and infrastructure - Third-level results are associated with project impact on economic mobility, improved production, improved marked access, improved resilience and improved nutrition. Guidance is available on indicators definitions and their use in baseline, mid-term, terminal evaluation and impact studies and beneficiary surveys. **Lead partner:** IFAD

SHARP	**Background:** The Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP) tool is designed as an instrument to assess the resilience of farmer and pastoralist households to climate change. Following a survey-based evaluation of households' climate resilience (Phase 1), gaps and weaknesses in the response of farmers and institutions to climate variability are analysed (Phase 2). Finally, information gathered through the first two phases is integrated with broader-level climatic data, with the aim of assisting farmers in prioritising actions to build the resilience of their agro-ecosystems – as well as orienting institutions towards the best possible policy approaches to strengthen climate resilience (Phase 3). **Lead partner:** FAO
Trends Earth	**Background:** Trends.Earth is a platform from Conservation International for monitoring land change using earth observations in an innovative desktop and cloud-based system. The three sub-indicators for monitoring achievement of Land Degradation Neutrality (LDN, Sustainable Development Goal (SDG) Target 15.3), are supported by Trends Earth productivity, land cover, and soil organic carbon. The tool also supports countries in analysing data to prepare for their reporting commitments to the United Nations Convention to Combat Desertification (UNCCD). Trends.Earth allows users to plot time series of key indicators of land change (including degradation and improvement), to produce maps and other graphics that can support monitoring and reporting, and to track the impact of sustainable land management or other projects. **Lead partner:** Conservation International
Vital Signs	**Background:** Launched in Africa with a grant from the Bill & Melinda Gates Foundation to Conservation International, Vital Signs provides near real-time data and diagnostic tools to leaders around the world to help inform agricultural decisions and monitor their outcomes. This programme is led by CI in partnership with the Earth Institute at Columbia University and the Council for Scientific and Industrial Research in South Africa. **Lead partner:** Conservation International
WOCAT-LADA	**Background:** WOCAT has developed a well-accepted framework for documentation, monitoring, evaluation and dissemination of SLM knowledge, covering all steps from data collection, to a database and to using the information for decision support. WOCAT tools provide a unique, widely accepted and standardised method of application. The Land Degradation Assessment in Drylands project (LADA) was a five-year project developed by FAO, UNEP and GEF. The WOCAT Network and its database and publications fed into the LADA process by providing numerous examples of these "bright spots" or "green spots". The follow-up project to LADA is the Decision Support in Sustainable Land Management (DS-SLM) project of FAO and GEF. **Lead partner:** FAO
WEAI	**Background:** The Women's Empowerment in Agriculture Index (WEAI) measures the empowerment, agency, and inclusion of women in the agriculture sector in an effort to identify ways to overcome those obstacles and constraints. **Lead partner:** ICRAF can provide guidance on this tool, although it was primarily developed by another CGIAR centre (IFPRI)

Table 20. Matrix of tools used by countries (as of March 2020)

Name	Burkina Faso	Burundi	Eswatini	Ethiopia	Ghana	Kenya	Malawi	Niger	Nigeria	Senegal	Tanzania	Uganda	Project
Diversity Assessment Tool for Agrobiodiversity and Resilience (DATAR)		X		X	X		X		X		X	X	7
Earth Observation for Sustainable Development (EO4SD)	X			Substituted						Trained but not used		X	1
Collect Earth (Ndvi)	X		X		X								5
Trends Earth					X							X	1
EX-Ante Carbon Balance Tool (EX-ACT)	Tbc	X	X	X		X	X					Tbc	9
Integrated Food Security Phase Classification (IPC)	X											X	3
Land Degradation Assessment in Drylands Mapping Tool (WOCAT-LADA)	X								X			X	2
Land Degradation Surveillance Framework (LDSF)	X								X			X	5
Management Effectiveness Tool (METT)											X		2
Multidimensional Poverty Assessment Tool (MPAT)	X												6
Resilience, Adaptation Pathways and Transformation Assessment (RAPTA)	X											X	3
RESILIENCE ATLAS										?			2
Resilience Index Measurement and Analysis (RIMA) model									X		X	X	1
Results and Management Impact System (RIMS)									X		X	X	3
Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP); HH-BAT				X			X	X		X			7
FIES					X							X	9
HHDS				X			X	X		X		X	7
Vital Signs monitoring framework				X						?	X	X	4
Women's Empowerment in Agriculture Index (WEAI)	X								X		X	X	5

Note: HDDS data will be collected through the SHARP tool as it is a core module of the questionnaire for resilience assessment. Thus, all the countries conducting SHARP will be automatically recording information on the HDDS.

- Currently using
- Currently using but not to "full capacity"
- Future use intended
- Would like to use but not able for lack of capacity/ needing more information
- Had been using but discontinued/or adapted the tool
- X Training support requested/or training planned

3.4.4 OUTCOME MAPPING

Outcome Mapping is a flexible methodology developed by the International Development Research Centre (IDRC) that expands the scope of monitoring and evaluation to focus not only on evaluating outputs, but also on evaluating outcomes and impacts beyond the project cycle.

Traditional evaluation tends to assess the success of a project based on outputs that are within the direct control of the project: the number of farmers who attended a training session, the number of trees planted, the increase in crop yield, etc. These traditional indicators measure a change in the state of a system; however, they do not necessarily correlate with long-term impact. To help RFS country projects achieve long-term impact, Outcome Mapping shifts the focus of evaluation to the primary agents of transformational change—people. Outcoming Mapping measures progress through changes in the behaviours, relationships, actions or activities of the key stakeholders identified within each country project.

Led by the Regional Hub through ICRAF, in partnership with Bangor University and IFAD, the Resilient Food Systems programme is supporting country project teams in utilising the Outcome Mapping methodology to assess project contributions to institutional and behaviour change and development.

At the 2019 RFS Annual Workshop in Bolgatanga, Ghana, the Outcome Mapping team introduced RFS country projects and partners to major concepts associated with Outcome Mapping and facilitated a participatory exercise through which country project teams assessed the level of intentional design within their evaluation frameworks. Later in the year, on the occasion of the RFS M&E Workshop held in November 2019, country teams were once again sensitised about the advantages of utilising Outcome Mapping.

In order to further strengthen Outcome Mapping capacity development and tailor training to different country project needs, in mid-2020 the Regional Hub held a series of virtual training sessions for each of the four RFS country projects that demonstrated interest in adopting the methodology: **Nigeria, Uganda, Senegal and Niger**. The objective of the training series was to help RFS country project teams build the skills necessary to integrate Outcoming Mapping into their monitoring and evaluation plans and activities. Additional follow-up support to these countries will be provided by the Hub throughout programme implementation.

3.5 Technical and financial reporting requirements at the regional-level

3.5.1 ROLES AND RESPONSIBILITIES

Roles and responsibilities in M&E data collection, analysis, and/or reporting are explained in this section and summarised on Figure 2 below. At the regional-level, M&E responsibilities are a joint collaboration between the Programme Coordination Unit and Hub partners. The M&E work at the programme-level also ties with that of country-level M&E officers, as targets at the programme-level are directly affected by national contributions.

A. Responsibilities of Regional Hub partners

Hub partners (all grant and sub-grant recipients) have the responsibility of providing detailed technical and financial reporting to the PCU.

The main reporting outputs from the grantee institutions to IFAD via the PCU Coordinator will be:

- Annual progress reports (covering the reporting period of July – June), including lessons learned, best practices and results on M&E indicators
- Brief progress reports (covering especially the reporting period of July - December)
- Inputs for preparation of the annual Regional Hub PIR[10], as required by the PCU (annual)
- AWPBs (annual)
- Financial reports (biannual)
- A final report 3 months before the closure of the Hub project.

The progress reports should present the main achievements, issues and constraints of the reporting period, information on financial and physical achievements in comparison with targets set in AWPBs as well as possible impact and outreach. The reports should highlight the implementation strategy and indicate challenges and the underlying factors of those challenges. Specific reference should be made to recommendations by supervision missions.

[10] *This exercise is a self-assessment of the individual project grant's implementation progress and likelihood of achieving project objectives which were set and endorsed by the GEF and approved by IFAD within the fiscal year. Submission of PIR is part of the Annual Monitoring Review (AMR), the principle instrument for reporting to the GEF Secretariat.*

The primary recipients of grants specifically tasked with helping deliver the Hub project will have a higher and more direct responsibility to provide detailed technical and fiduciary reporting to the PCU.

The grant progress reports must follow specific templates developed by IFAD, which aim to answer, among others, the following main questions:

1. How is the project performing? - How much funds have been utilised for the agreed activities/ components to date and what is the actual financial performance compared to the planned targets? What is being achieved with the used resources and is the project reaching its objectives?
2. Is the project meeting its fiduciary responsibility: What expenditures were incurred, by whom and how were these financed? – Any ineligible expenditures, over/under spending or reallocation needed?
3. Is there value for money? What expenditures were incurred under the activities and what were the achieved outputs for each activity and component.

Grantee institutions are expected, when requested, to provide inputs to the M&E system and the knowledge management platform through their respective PCU staff.

They also contribute to the RFS through sharing their Integrated Resource Management (IRM) practices, experiences and lessons learned with other national projects and peer projects within the RFS. These projects will be the direct beneficiaries of the knowledge management services provided by the Hub project.

B. Responsibility of the Programme Coordination Unit

Hosted by ICRAF and comprising members from all Hub partners, the PCU is responsible to aggregate results of the country projects to monitor national-level contributions to the core indicators and sub-indicators, in addition to socio-economic benefits, improvements to institutional and legal frameworks for influencing sustainability and resilience, the greening of value chains, as well as knowledge management and capacity development at programme-level.

Assuming not all countries will switch over to GEF-7 reporting requirements, it is likely that some country projects will remain using the GEF-6 IAP Food Security Tracking Tool[11] to report on GEBs. The PCU will, as part of this aggregation calculation, ensure that the information captured by countries for the GEBs is consistent with annual reports (these will be the values used to consolidate programme-level data) and then carry over this information into GEF-7 core indicator and sub-indicators.

The PCU Coordinator prepares and submits annually to the RFS Task Manager at IFAD the following documents:

- Aggregated AWPB
- Regional Hub PIR
- Programme report with progress highlights (annual)

As part of its responsibilities under component 4, the PCU manages the overall M&E of the programme and, in this capacity, is responsible for the following:

- Contracting the services of a firm to develop an online M&E system;
- Co-designing this online platform (see section 3.5.3); and
- Overseeing the operationalisation and ongoing maintenance of this online system, including aggregation where possible from country projects and regional-level data and liaising with country projects' M&E focal points.

ICRAF is the main administrator of the system (through its PCU M&E Officer and with the support of the service provider).

If required to do so, all data and information on expected and achieved results across the GEF-7 core indicators and sub-indicators will be uploaded to the GEF Portal, the GEF's new IT platform.[12]

C. Responsibility of the Programme Lead Agency (IFAD)

Implementing Agencies for the RFS country projects have a reporting requirement to the donor. Once reports

[11] The GEF-6 IAP Food Security Tracking Tool (TT) is an important instrument to track GEBs in line with GEF Programme and Focal Area objectives, and to roll up indicators from the individual project-level to the portfolio-level and to track overall IAP Programme performance and its contribution to the specific focal areas.

[12] GEF. 2018. 54th GEF Council Meeting. UPDATED RESULTS ARCHITECTURE FOR GEF-7. GEF/C.54/11/Rev.02

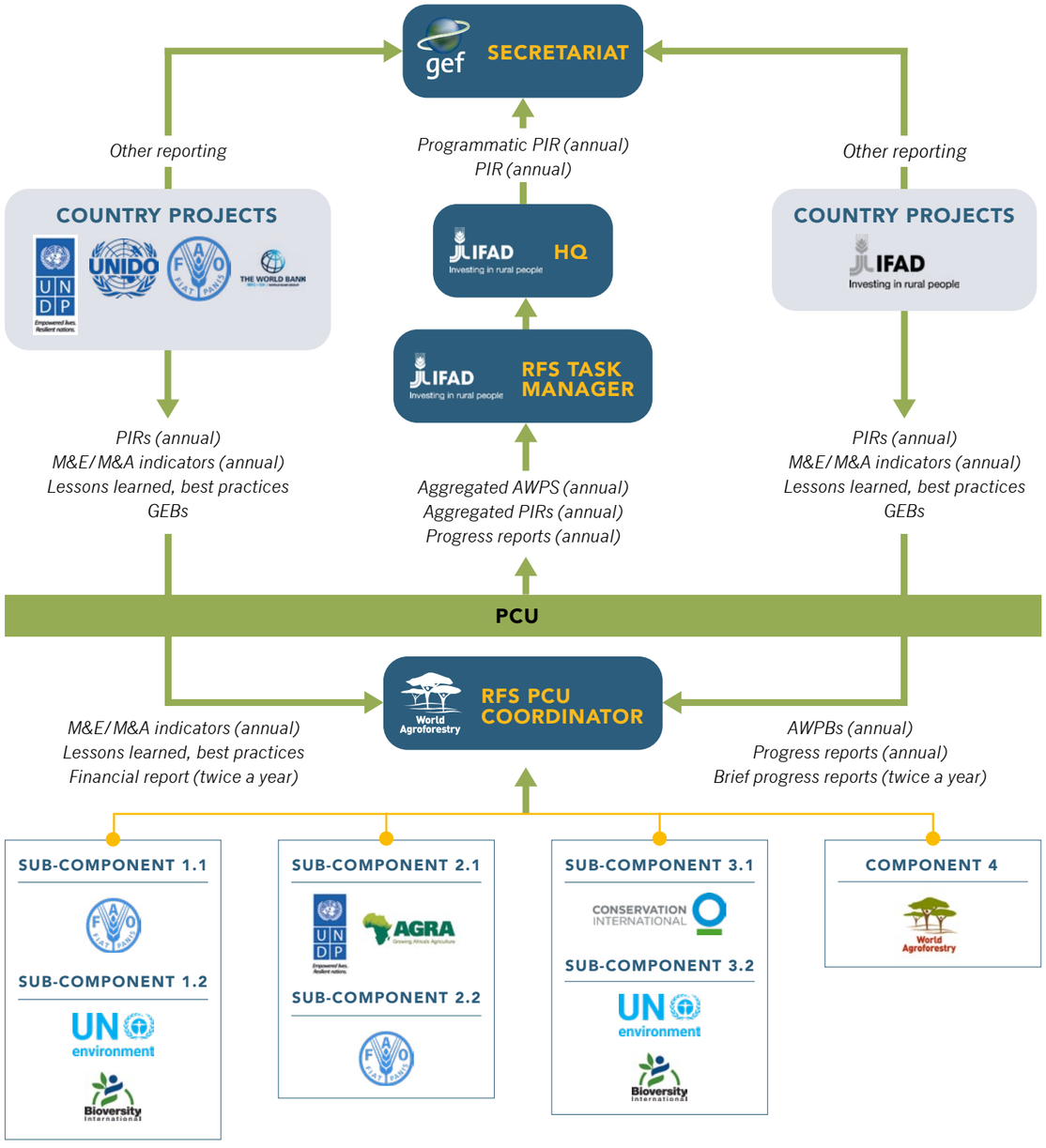
have been approved by GEF, IFAD is responsible for amalgamating this reporting to the GEF in so far as it relates to overall programme-level concerns.

IFAD will advise the GEF if respective Implementing Agencies are not providing IFAD with the correct type, level or timeliness of information for IFAD to discharge this collective progress reporting duty.

On the basis of the information provided by the PCU, IFAD Headquarters submits to the GEF Secretariat:

- A Programmatic report (annual) covering the reporting period from July (previous year) to June (current year) for each year of project implementation.

Figure 2. RFS Programme Reporting Organigram
(source: Programme-level monitoring and evaluation -Table 16, p132 of PDR)



3.5.2 REPORTING AND EVALUATION MILESTONES AND TIMELINE

Reporting and evaluation milestones are captured according to activities, actors responsible, frequency and deadlines in table 21below.

Table 21. Frequency and deadlines for RFS M&E activities

Type of activity & Party concerned	M&E Activity	Frequency	Deadlines
Reporting requirements for IFAD'S Hub grantees	Brief progress report	Biannual	15 July & 15 January
	Financial report	Biannual	Within 45 days of the end of the progress reporting period
	Consolidated progress report	Annual	31 May
	Grant completing report	Once off	No later than six months after Project Completion Date
	Regional cross-cutting PIR	Annual	15 July
Reporting requirements for GEF Implementing Agencies	IFAD Country project's PIR	Annual	15 July
	Non-IFAD Country project's PIR	Annual	30 September
	Aggregated PIRs	Annual	30 October
	Programme progress report	Annual	30 November
Workshops at programme-level (IFAD & ICRAF)	Inception workshop	Once off	2017
	Annual workshops (for overall exchange of knowledge and lessons learnt between programme stakeholders, as well as assessment of progress)	Once off	2018, 2019, 2020[13], 2021
	Dedicated M&E workshop for harmonising indicators and targets: Country and Hub partners engagement	Once off	2019
	Final workshop	Once off	2022
Programme-level M&E activities	Capacity needs assessment for monitoring GEBs & resilience at multiple scales	Periodically, as per Hub project log frame	NA
	Training & exchange of experiences in M&A for monitoring GEBs & resilience at multiple scales	Periodically, as per Hub project log frame	NA
	M&A of GEBs & resilience & agro-ecosystems resilience	Periodically, as per Hub project log frame	NA
	Programme – periodic supervision and programme progress reporting to GEF SEC (consolidated PIR programme)	Annual basis	NA
	Quality assessment review report – Project PIRs, MTR, TER and progress reporting to GEF SEC	Annual basis	NA
	Mid-Term Reviews/Evaluations (both at project and programme-levels)	Once off	2020/2021
	Terminal Evaluations (both at project and programme-levels)	Once off	2022/2023

[13]*The 2020 annual workshop was originally scheduled for March 2020 but ended up being replaced by virtual webinars due to the corona virus pandemic.*

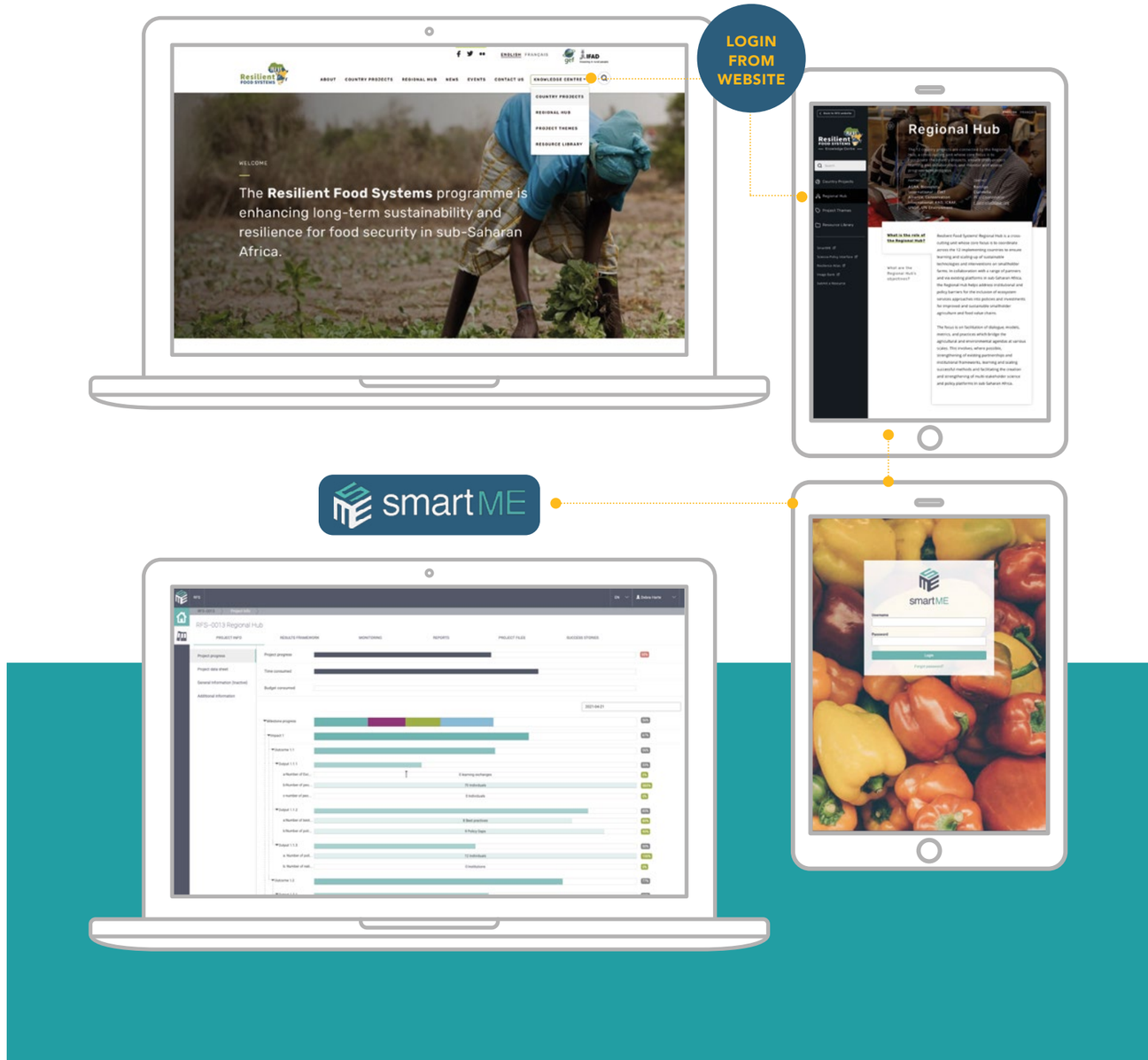
3.5.3 DATA STORAGE AND DISSEMINATION: THE RESILIENT FOOD SYSTEMS ONLINE M&E PLATFORM

A variety of systems and tools will be used for documenting, storing and sharing products associated with monitoring and evaluation, including (inter alia):

- An excel document for the programme results framework;
- An excel sheet for the programme logical framework;
- A OneDrive shared folder used as a **repository** of all documents.

In addition to these, an online M&E software platform hosted at **smartme.adalia.fi/** was designed to host all core M&E data for the RFS, bringing together online all stakeholders. This M&E platform can also be accessed through the **Resilient Food Systems website**, in particular the **RFS Knowledge Centre**. Both platforms complement each other, with the Knowledge Centre being the central point for sharing of information and knowledge management of public RFS data and materials, while the M&E platform is primarily intended for internal use from donors, Implementing Agencies and Executing Partners, country project management teams and external evaluators. The SmartME platform constitutes the main means through which programme monitoring data is disseminated internally.

The following diagram provides a brief overview demonstrating the core configuration of the online SmartME platform.



3.5.3.1 DEFINING THE ONLINE PLATFORM'S KEY USERS

Taking into consideration the various stakeholders within RFS, three core roles and interfaces have been defined for the online M&E platform: **Programme Observer; M&E Officer/Country Project Manager**; and **Admin**.

The user types and related role/access rights are defined hereafter:

Programme Observer View

Programme Observer role allows users to gain access and view progress and developments on a programme-level as well as on an individual country-level in a transparent fashion. All programme stakeholders can access the platform as observers to view the data within the online M&E platform.

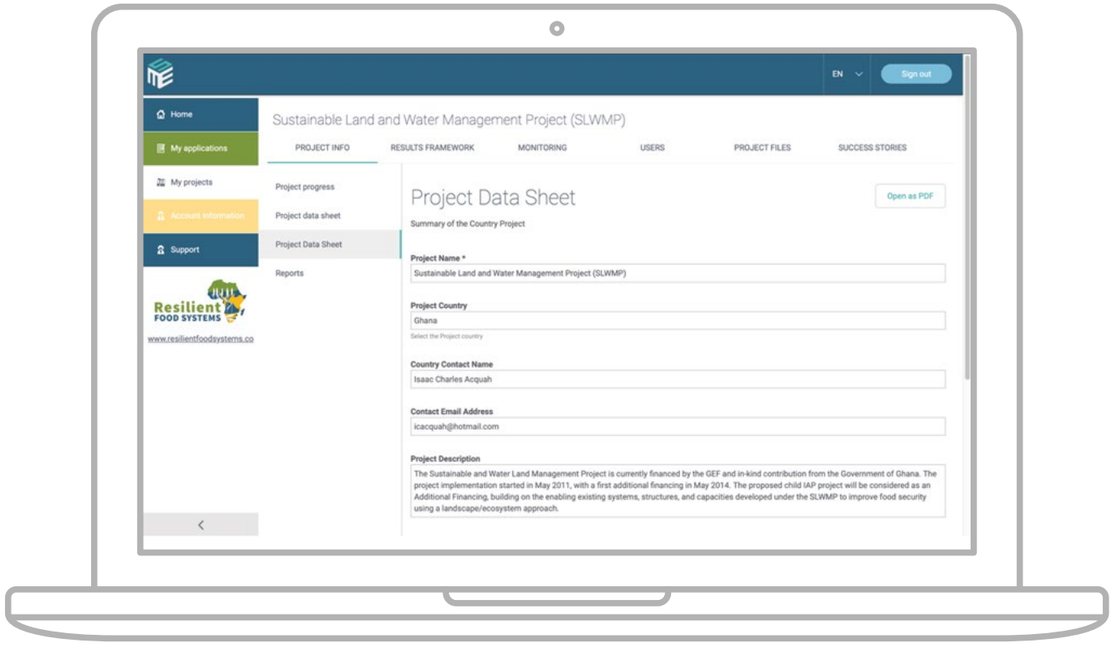
The programme observer view contains the homepage module which consists of the following tabs/sections:

- Programme dashboard: contains core results and metrics aggregated at programme-level, with key widgets displaying relevant data from the system. The dashboard shall be configured by the admin users of the online platform.
- Fund results framework: where the programme's digital results framework is configured and kept up to date.
- Fund progress section: where progress against programme-level targets and indicators can be seen.
- The Monitoring section: where all the programme indicators and detailed results can be seen.

The Programme Observer view also contains the **Project Portfolio** module, where the 13 project-level results frameworks for all country projects and the Hub can be found.

Programme Observers can explore the whole RFS portfolio, looking into each country project and reviewing the country-level digital results framework, country project progress, country project users and project files shared by country M&E officers.

M&E officer/Country project leader role and view

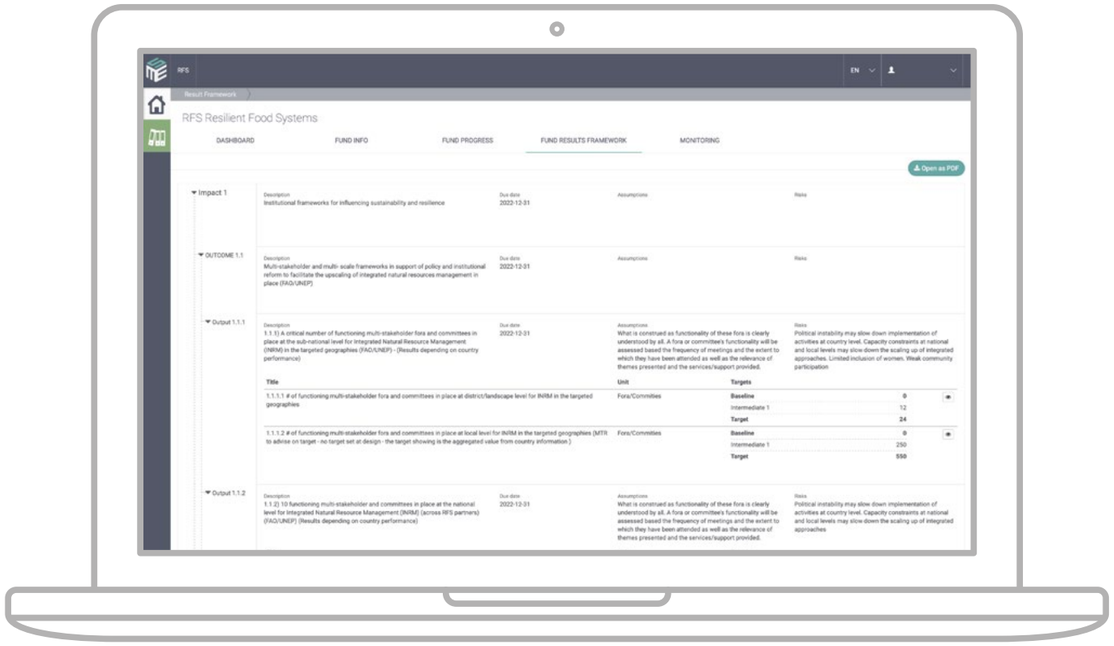


The M&E officer/Country project leader view and role allow M&E officers/focal points or leaders from interested RFS country projects to access and configure, modify and update data related to their own project. The core purpose of this tailored interface is to allow interested country project staff to directly provide information on their project to all programme stakeholders via customised digital forms, inputting data against the pre-defined indicators for the project.

Representatives from RFS country projects interested in using the online M&E system to monitor progress of their own projects are encouraged to manifest such interest to the PCU. In such cases, training and adequate access rights can be provided by ICRAF at cost to allow the users to upload and update their country-level digital results framework. These authorised country officers shall report against indicators built in the digital results framework, and they can easily upload project files to be shared with Programme Observers. They can also invite other colleagues from their project teams to participate in such effort. Furthermore, this view contains a support section whereby country users can be supported by the administration users of the online platform.

For projects that do not demonstrate interest in playing such an active role in curating their project results within the M&E platform, the PCU will still aim to ensure core project results are updated annually at the system, as per the PIRs received and any direct requests for information. These will focus, though, on indicators contributing to aggregation of results at programme-level. In any case, **it remains the responsibility of management teams and Implementing Agencies for each RFS project to access this online platform regularly (even as Programme Observers) and check whether the data displayed for their respective projects are accurate, reporting any errors or required updates to the PCU**.

The administrator View



The admin view and role allow the user to fully configure the online M&E platform. ICRAF shall serve as the main administrator of the system (with the support of the service provider and an M&E officer), coordinating the updates of the login page.

The admin view allows the user to configure the dashboard for relevant users, access all content, add and set user rights, add and manage users. The admin is also able to utilise tools within the platform to notify relevant users via bulk messaging features, as well as to directly support Country M&E officers via the Support function and FAQ section for Country M&E Officers.

Additionally, the admin users at ICRAF will have the ability to configure the programme-level digital results framework and link project-level indicators to it, as well as to send forms to country projects to collect information for ad-hoc needs.

3.5.4 MONITORING & EVALUATION BUDGET

This section outlines the resources that have been allocated to monitoring activities, as well as ongoing assessments of risks and any new research or innovations relating to monitoring and assessment of GEBs and resilience & agro-ecosystems resilience that could potentially alter the projects, strategies or chances of success.

During the programme-level workshop planned after the mid-term review (MTR), the Regional Hub should include a reflection session to review project progress to inform project decision making (i.e., refining Theory of Change, informing new annual work plans). This may include assessing whether changes to the project strategy are needed, and, if so, to plan for these adjustments.

Table 22. Financial resource for RFS M&E

Type of activity	M&E Activities	Party Responsible	Timeframes	Indicative budget (USD)
Baselines	Establishment of environment baseline (for tier 1 and 2 indicators)	CI	2019	90,000
Workshops programme-level	Inception workshop: preliminary design & selection of M&E systems (year 1)	IFAD & ICRAF	6-8 June 2017	100,000
	Harmonising indicators workshop: country and hub partners engagement (year 2)	ICRAF	2019	35,000
	Mid-term workshops (lessons learnt, part of annual workshop year 3)	IFAD	Programme mid-term: 2021	100,000
	Final workshop (lessons learnt, part of annual workshop year 5)	IFAD	Within 6 months before or after programme completion (2022 /2023)	100,000
Programme-level M&E activities	Capacity needs assessment for monitoring GEBs & resilience at multiple scales	CI, UNEP, Bioversity International, ICRAF	Periodically, as per Hub project log frame	100,000
	Training & exchange of experiences in M&A for monitoring GEBs & resilience at multiple scales	CI, UNEP, Bioversity International, ICRAF	Periodically, as per Hub project log frame	200,000
	M&A of GEBs & resilience & agro-ecosystems resilience	CI, UNEP, Bioversity International, ICRAF	Periodically, as per Hub project log frame	200,000
	Periodic supervision and programme progress reporting to GEF SEC (consolidated PIRs and programme reports)	IFAD	Annual basis	GEF fees
	Quality assessment review report – Project PIRs, MTR, TER and progress reporting to GEF SEC	IFAD	Annual basis	GEF fees
	Mid-Term Reviews (MTRs): for the overall programme and the Regional Hub project	IFAD & ICRAF – independent reviewer	March-June 2021	26,000
	Terminal Evaluations	IFAD & ICRAF – independent reviewer	Within 6 months before or after programme completion (2022 /2023)	26,000

4. Monitoring and evaluation at country-level

4.1 How country-level indicators feed into regional-level indicators

At the country-level, M&E responsibilities are a joint collaboration between the M&E officer, field staff, project manager and consultants. Each country has developed its own M&E plan, which describes how the M&E system will work during execution (country-level information can be accessed via the SmartME platform, under "**project Portfolio**" (then click on the country of interest and navigate to "project files")

In these plans, the 12 countries have also included targets relating to how they expect to contribute to these sets of indicators described above (GEBS, socio-eco indicators, institutional and legal frameworks for influencing sustainability and resilience, greening value chains, knowledge management and capacity development). The country-level contributions to these regional indicators are aggregated and compared with measurements at the regional-level (conducted by the Hub) to demonstrate programmatic impact at scale.

As assessing the relative impact of project activities in particular requires indicators more closely linked to the actual on-the-ground interventions and policy changes instituted by the projects, the Regional Hub recommends tracking more detailed information on three sets of indicators (in addition to those outlined in section 3.1), namely:

1. Ecosystem services;
2. Socio-economic benefits, and
3. Resilience of food security.

The data that is available for monitoring ecosystem services, socio-economic benefits, and resilience of food security will vary by country project as a function of factors including the project activities (and therefore the appropriate indicators necessary to assess impact) and budget, availability of existing data, and the expertise of the project team and partners. To account for this variability among projects, the Hub advocates a tiered monitoring approach, such that projects make use of the best-available information for each indicator, consistent with the objectives, expected impacts, and available budget for that project. This is described in detail on section 3.4, as well as in the **guidance note developed by CI**.[14]

4.2 Reporting requirements for countries

The country projects will be closely linked to the Hub project throughout the life of this Programme, through a supply and demand driven approach. The reporting templates adopted and recommended by the RFS Lead Agency to be used for RFS projects can be found in section 7.3. The GEF Implementing Agencies responsible for each country project shall report both to GEF, IFAD and the PCU the following elements:

1. PIRs (annual): covering the reporting period of July (previous year) to June (current year) for each year of project implementation. The project leader will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.
2. Contributions to regional indicators (annual) (note this is embedded into the PIR)
   - GEF-7 Core indicators
   - Resilience and food security indicators
   - Improvements to institutional and legal frameworks for influencing sustainability and resilience
   - Greening value chains
   - Knowledge management and capacity development

[14] *Guidance for Monitoring of Ecosystem Services, Socio-economic Benefits, and Resilience of Food Security for Global Environment Facility Food Security Integrated Approach Pilot (FS-IAP), March, 2019.*

3. (Any changes to) M&E/M&A indicators (annual)
4. Lessons learned & best practices: results from the project will be shared with the PCU and disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.
5. Countries which do not operate their transition to the GEF-7 by their MTR will still need to submit their GEF Focal Area Tracking Tools: the GEF-6 Food Security ITT[15] is used to monitor global environmental benefit results. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) is/are to be updated by the Project Manager/Team and shared with the MTR consultants and TE consultants before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) is/are to be submitted to GEF along with the completed Mid-Term Review report.
6. However, as the programme is required to transition to a GEF-7 reporting modality, countries will have to adopt another reporting tool, ideally for their MTR, but compulsorily for their Terminal Evaluation (TE), which is the **GEF-7 Core Indicator Worksheet** to be submitted to GEF along with the completed TE Review report.

It is understood that there will be reporting from the country projects and PCU staff also to the hiring institutions.

Table 23. Timeline for RFS M&E activities at project-level

Type of activity & Party concerned	M&E Activity	Frequency	Deadlines
Country - reporting requirements	PIR (including contributions to regional targets)	Annual	30 September
	Lessons learned & best practices	As and when requested by Hub	As and when requested by Hub
	GEF Focal Area Tracking Tools/GEF-7 Core Indicator Worksheet	3 times throughout the project life	Prior to GEF approval, at mid-term and at project end.

Table 24. M&E milestones for country projects

Type of activity	M&E Activities	Party Responsible	Timeframes	Indicative budget (US$)	Budget source
Baselines	Establishment of environment and socio-eco baselines (for Tier 3 indicators)	Country project teams	Year 1 Q2	Country-specific	Country budget
Project-level	Periodic supervision & progress reporting to GEC SEC (PIR)		Annual basis	Country-specific	Country budget
	MTR (Inc. GEF-7 M&E work sheet & co-financing reports)		Mid-term	Country-specific	Country budget
	Terminal Evaluation (Inc. GEF-7 Core Indicator Worksheet & co-financing reports)		Within 6 months before or after programme completion	Country-specific	Country budget

[15] *The TT consists of four sheets: 1) Context and Beneficiaries, 2) Agro-ecosystem context; 3) Land Degradation, 4) Biodiversity, 5) Climate Change Mitigation. According to the GEF M&E Policy, it will be filled out in excel, three times during the life of the project, i.e. prior to GEF approval, at mid-term and at project end.*

Photo: ©Food Security, Adamawa (UNDP)

5. Resilient Food Systems Programme Logical Framework

The RFS logical framework is composed of three sub-components, namely:

1. The Programme-level results framework, in which GEF-7 core indicators and sub-indicators are accounted for, with each Hub partner being responsible for overseeing a specific programmatic area.
2. The Hub-level results framework, which outlines detailed outputs for which Hub partners are responsible to provide technical guidance. This features as a "project" alongside the 12 country projects under the "Project portfolio" of the online M&E system.
3. The 12 country results frameworks.

5.1 Programme-level results framework

The RFS programme-level results framework is available on the SmartME system **here**.

5.2 Regional Hub results framework

The Regional Hub project results framework is available on the RFS M&E online platform, **here**.

5.3 Country-level results frameworks

All data pertaining to country-level results which affect the programme-level performance can be accessed by logging in onto the RFS M&E online platform, **here**.

6. References

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Photo: ©Food Security, Adamawa (UNDP)

7. Annexure

7.1 GEF-7 core indicators and sub-indicators

Core Indicator 1

Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares).

- **1.1** Terrestrial protected areas newly created.
- **1.2** Terrestrial protected areas under improved management effectiveness.

Core Indicator 2

Marine protected areas created or under improved management for conservation and sustainable use (hectares).

- **2.1** Marine protected areas newly created.
- **2.2** Marine protected areas under improved management effectiveness.

Core Indicator 3

Area of land restored (hectares).

- **3.1** Area of degraded agricultural lands restored.
- **3.2** Area of forest and forest land restored.
- **3.3** Area of natural grass and shrublands restored.
- **3.4** Area of wetlands (including estuaries and mangroves) restored.

Core Indicator 4

Area of land restored (hectares).

- **4.1** Area of landscapes under improved management to benefit biodiversity (qualitative assessment, non-certified).
- **4.2** Area of landscapes that meet national or international third-party certification and that incorporates biodiversity considerations.
- **4.3** Area of landscapes under sustainable land management in production systems.
- **4.4** Area of High Conservation Value forest loss avoided.

Core Indicator 5

Area of marine habitat under improved practices to benefit biodiversity (hectares; excluding protected areas).

- **5.1** Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations.
- **5.2** Number of Large Marine Ecosystems with reduced pollution and hypoxia.
- **5.3** Amount of Marine Litter Avoided.

Core Indicator 6

Greenhouse gas emissions mitigated (metric tons of carbon dioxide equivalent).

- **6.1** Carbon sequestered, or emissions avoided in the sector of Agriculture, Forestry and Other Land Use.
- **6.2** Emissions avoided outside Agriculture, Forestry and Other Land Use (AFOLU) sector Contextual Sub-Indicators:
- **6.3** Energy saved.
- **6.4** Increase in installed renewable energy capacity per technology.

Core Indicator 7

Number of shared water ecosystems (fresh or marine) under new or improved cooperative management.

- **7.1** Level of Transboundary Diagnostic Analysis and Strategic Action Programme formulation and implementation.
- **7.2** Level of regional legal agreements and regional management institution(s) to support its implementation.
- **7.3** Level of national/local reforms and active participation of Inter-Ministerial Committees.
- **7.4** Level of engagement in IW:LEARN through participation and delivery of key products.

Core Indicator 8

Globally over-exploited fisheries moved to more sustainable levels (metric tons).

Core Indicator 9

Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials, and products (metric tons of toxic chemicals reduced)

- **9.1** Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type).
- **9.2** Quantity of mercury reduced.
- **9.3** Hydrochlorofluorocarbons reduced/phased out.
- **9.4** Number of countries with legislation and policy implemented to control chemicals and waste.
- **9.5** Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing, and cities.
- **9.6** Quantity of products/materials containing POPs/Mercury directly avoided.

Core Indicator 10

Reduction, avoidance of emissions of POPS to air from point and non-point sources (grams of toxic equivalent gTEQ).

- **10.1** Number of countries with legislation and policies implemented to control emissions of POPs to air.
- **10.2** Number of emission control technologies/ practices implemented.

Core Indicator11

Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment.

Photo: Regional Hub partners and country project M&E officers gathered in Nairobi to participate in an M&E workshop to align monitoring approaches and frameworks across the entire programme. © Sheila Murithi, ICRAF.

7.2 Summary of the RFS M&E workshop – Nairobi, 13-15 November 2019

The workshop was structured to achieve the following:

1. Trigger critical thinking in terms of what constituted the value-add of the RFS approach.

2. Present where the RFS stood in terms of reaching the targets set at the programme-level based on country aggregation.

3. Based on this stock taking exercise, Hub partners were requested to take the lead (for the components for which they are responsible) in refining indicators/setting additional ones and revising or setting targets.

4. This was made possible through "Hub clinics" during which partners were given the opportunity to engage with country teams and better sense what countries were doing so as to inform programme-level indicators => Hub partners were tasked with sharing an updated set of programme-level indicators to the M&E officer before the end of the workshop.

5. Country projects were in turn given the opportunity to exchange with the Hub partners to address any outstanding issue in their work plans, address data gaps, refine indicators, and possibly adopt new tools or methodologies backed by the Hub to enhance their project activities => country partners were tasked with preparing an "action plan" unpacking what had changed in their M&E plan that partners should be aware of, how they intended on taking on the learning from the workshop to refine indicators, address gaps, and whether they wished to make use of additional tools/methodologies offered by the regional component to enhance project activities.

6. Provide training on GIS and remote sensing technologies for setting baseline on land use/land cover and soil organic carbon.

7. Provide initial training and user feedback on the intranet system.

The slide presentations used during the workshop and available at the **shared folder** of the programmatic online. They provide details of the ground covered during the workshop. Additional highlights are available at the **RFS website**.

7.3 Reporting templates

Below is the Project Implementation Report template currently adopted and recommended by the RFS Lead Agency (IFAD). Indicators and targets for each project change according to each project's results framework.

Each template is backed by a customised excel sheet for each country, where specific information relating to regional-level indicators is to be completed. Other agencies have their own reporting template.

A. PROJECT GENERAL INFORMATION	
Country	
Region	
Grant Title	
Associated GEF Programme or Framework	
Grant Type	
Reference numbers	
PIR Number (1st, 2nd,3rd,4th, Final)	
GEF ID Number	
IFAD Grant Agreement	
IFAD ID Number (LGS)	
GEF Focal Area and Programme	
GEF Focal Area	
GEF OP or SP	
Critical milestones	
GEF Approval date	
IFAD Approval date	
Date of Project Effectiveness	
Date of Last Supervision	
Mid-term Evaluation	
Grant start up (launched)	
Final Evaluation date	
Estimated closing date	
Grant Financing (USD)	
GEF PPG Amount	
GEF Grant Amount:	
Total Grant GEF Cost:	
GEF Grant Disbursed	
Proposed Co-financing	
Actual Co-financing secured	
Actual co-financing spent	
Amount Disbursed	
Amount spent	
Date of first disbursement	
Reporting tools used for the reporting period	
List of reports[16]	
Tracking tools[17]	
Project contact	
Name	
Email	

[16] *Please list any relevant documentation being used as a reference to this report – if applicable.*
[17] *Please list and attached to this report relevant tracking tool (s) – if applicable.*

B. CONTRIBUTIONS TO INNOVATION and LESSONS LEARNED *Please briefly illustrate current and emerging initiatives – if applicable*[18]	
1. Institutional and policy dialogue processes influenced and/or improved	
2. Communications and Knowledge Management products developed, including traditional knowledge (based on the knowledge management approach approved at CEO endorsement/ approval)	
3. Engagement in partnerships (including public-private)	
4. Engagement of Gender and/Indigenous Peoples mainstreaming, including information on progress on gender-responsive measures, indicators and intermediate results (as documented at CEO endorsement/approval in the gender action plan or equivalent)	
5. Information on progress, challenges and outcomes on stakeholder engagement (based on the description of the stakeholder engagement plan included at CEO endorsement/approval)	
6. Innovations and scaling – up successful approaches and technologies	
7. Contributions towards GEF Focal Areas[19]	
8. Monitoring tools used for the reporting period[20]	
9. Others	

C. CRITICAL OPERATIONS BOTTLENECKS *Please briefly provide any update of current or potential challenges that impede the correct project implementation – if applicable. Please include also brief recommendations for follow up*	
Recommendations to follow up	
IFAD's comments	

D. GEF - OVERALL PROJECT RATINGS[21] *Please indicate overall rate for IP , DO and Risk following tables 1 and 2 on following page*	
Implementation Progress (IP) Based on progress made for the given reporting period (HS/S/MS/ MU/U or HU)	
Development Progress (DO) Based on the likelihood that by the end of the project, implementation will achieve its stated objectives (HS/S/MS/MU/U or HU)	
Risk Based on the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives (H/S/M o L)	

[18] *If necessary, please expand to1 or 2 additional pages.*

[19] *For projects in the Climate Change Focal Area, please provide an overview table with numeric results for the appropriate indicators (provided in the tracking tool). In other words, for all projects there should be a column stating amount of CO2 reductions achieved, for energy efficiency projects a column with numbers for energy saved, etc.*

[20] *Please briefly mention: i) how core indicators are measured, ii) how project indicators are measured – and how national GEF focal point is involved in M&E – if applicable.*

[21] *As per* **GEF- SEC Results Based Management Reporting Guidelines for GEF Trust Fund and LDCF/SCCF.**

TABLE 1 IMPLEMENTATION PROGRESS AND DEVELOPMENT OBJECTIVE - RATING CRITERIA		
	IMPLEMENTATION PROGRESS (IP)	**DEVELOPMENT OBJECTIVE (DO)**
Highly Satisfactory (HS)	Implementation of **all** components is in substantial compliance with the original/ formally revised implementation plan for the project. The project can be presented as "good practice".	Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice".
Satisfactory (S)	Implementation of **most** components is in substantial compliance with the original/ formally revised plan except for only a few that is subject to remedial action.	Project is expected to achieve **most** of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings.
Marginally Satisfactory (MS)	Implementation of **some** components is in substantial compliance with the original/formally revised plan with **some** components requiring remedial action.	Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield **some** of the expected global environment benefits.
Marginally Unsatisfactory (MU)	Implementation of **some** components is not in substantial compliance with the original/formally revised plan with **most** components requiring remedial action.	Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only **some** of its major global environmental objectives.
Unsatisfactory (U)	Implementation of **most** components is not in substantial compliance with the original/formally revised plan.	Project is expected **not** to achieve **most** of its major global environment objectives or to yield any satisfactory global environmental benefits.
Highly Unsatisfactory (HU)	Implementation of **none** of the components is in substantial compliance with the original/formally revised plan.	The project has failed to achieve, and is not expected to achieve, **any** of its major global environment objectives with no worthwhile benefits.

TABLE 2	
High Risk (H)	There is a probability of greater than 75% that assumptions may fail to hold or materialise, and/or the project may face high risks.
Substantial Risk (S)	There is a probability of between 51% and 75% that assumptions may fail to hold and/ or the project may face substantial risks.
Modest Risk (M)	There is a probability of between 26% and 50% that assumptions may fail to hold or materialise, and/or the project may face only modest risks
Lowest Risk (L)	There is a probability of up to 25% that assumptions may fail to hold or materialise, and/or the project may face only modest risks.

E. MEASURING PERFORMANCE *Please briefly provide narrative justification for the previous GEF Overall Project Ratings*[22]	
Implementation Progress (IP) *Achievements and impact to date – if applicable*	
Recommendations to improve IP	
Development Progress (DO) *Achievements and impact to date – if applicable*	
Recommendations to improve DO	
Risk-level *List key risks and measures implemented to resolve it*	
Recommendations to reduce risk-level	

F. MEASURING for RESULTS *As defined to the Annual Work Plan (AWP)*					
Main indicators	**Target in the previous year's AWP**	**Results (previous year)**	**Target current year AWP**	**Results (current year)**	**Cumulative results to date**

RFS project teams are reminded to specify contributions not only to project-specific indicators, but also to the regional (programme-level) indicators the project contributes to, including GEF-7 core indicators (unless the GEF-7 Core Indicator Worksheet is updated and submitted to the PCU in parallel), as well as indicators related to resilience and food security, improvements to institutional and legal frameworks, greening value chains, knowledge management and capacity development, gender and others - as per the RFS regional results monitoring framework.

[22] *If necessary, please expand to1 or 2 additional pages.*

GEF-7 Core Indicator Worksheet

Core Indicator 1	**Terrestrial protected areas created or under improved management for conservation and sustainable use**					**(Hectares)**
			Hectares (1.1+1.2)			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 1.1	**Terrestrial protected areas newly created**					
Name of Protected Area	WDPA ID	IUCN category	*Hectares*			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				

Indicator 1.2	**Terrestrial protected areas newly created**						
Name of Protected Area	WDPA ID	IUCN category	Hectares	*Hectares*			
				Baseline		*Achieved*	
					Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					

Core Indicator 2	**Marine protected areas created or under improved management for conservation and sustainable use**					**(Hectares)**
			Hectares (2.1+2.2)			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 2.1	**Marine protected areas newly created**					
Name of Protected Area	WDPA ID	IUCN category	*Hectares*			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				

Indicator 2.2	Marine protected areas under improved management effectiveness						
Name of Protected Area	WDPA ID	IUCN category	Hectares	*Hectares*			
				Baseline		*Achieved*	
					Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					

Core Indicator 3	Area of land restored				(Hectares)
		Hectares (3.1+3.2+3.3+3.4)			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE

Indicator 3.1	Area of degraded agricultural land restored					
			Hectares			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 3.2	Area of forest and forest land restored					
			Hectares			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Core Indicator 4	Area of landscapes under improved practices (hectares; excluding protected areas)				(Hectares)
		Hectares (4.1+4.2+4.3+4.4)			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE

Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		*Hectares*			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE

Indicator 4.3	Area of landscapes under sustainable land management in production systems					
			Hectares			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided				
Include documentation that justifies HCVF		*Hectares*			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE

Core Indicator 5	Area of marine habitat under improved practices to benefit biodiversity				(Hectares)
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		*Number*			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE

Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial					
			Number			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 5.3	Amount of Marine Litter Avoided					
			Metric Tons			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Core Indicator 6	Greenhouse gas emission mitigated				Metric tons of CO_2e
		Expected metric tons of CO_2e (6.1+6.2)			
		PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)				
	Expected CO2e (indirect)				

Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector				
		Expected metric tons of CO_2e			
		PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)				
	Expected CO2e (indirect)				
	Anticipated start year of accounting				
	Duration of accounting				

Indicator 6.2	Emissions avoided Outside AFOLU				
		Expected metric tons of CO_2e			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)				
	Expected CO2e (indirect)				
	Anticipated start year of accounting				
	Duration of accounting				

Indicator 6.3	Energy saved				
		MJ			
		Expected		*Achieved*	
		PIF stage	Endorsement	MTR	TE

Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	*Capacity (MW)*			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				

Core Indicator 7	Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	Number

Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	*Rating (scale 1-4)*			
			PIF stage	Endorsement	MTR	TE

Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation					
		Shared water ecosystem	*Rating (scale 1-4)*			
			PIF stage	Endorsement	MTR	TE

Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	*Rating (scale 1-4)*			
			PIF stage	Endorsement	MTR	TE

Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	*Rating (scale 1-4)*			
			Rating		*Rating*	
			PIF stage	Endorsement	MTR	TE

Core Indicator 8	Globally over-exploited fisheries Moved to more sustainable levels				Metric Tons
Fishery Details		*Metric Tons*			
		PIF stage	Endorsement	MTR	TE

Core Indicator 9	Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products					Metric Tons
			Metric Tons (9.1+9.2+9.3)			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 9.1	**Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)**					
POPs type			*Metric Tons*			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	(select)				
(select)	(select)	(select)				
(select)	(select)	(select)				
Indicator 9.2	**Quantity of mercury reduced**					
			Metric Tons			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	**Hydrochloroflurocarbons (HCFC) Reduced/Phased out**					
			Metric Tons			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	**Number of countries with legislation and policy implemented to control chemicals and waste**					
			Number of Countries			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 9.5	**Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities**					
		Technology	*Number*			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE

Indicator 9.6	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
			Metric Tons			
			Expected		*Achieved*	
			PIF stage	Endorsement	PIF stage	Endorsement
Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					**grams of toxic equivalent gTEQ**
Indicator 10.1	**Number of countries with legislation and policy implemented to control emissions of POPs to air**					
			Number of Countries			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	**Number of emission control technologies/practices implemented**					
			Number			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					**Number**
			Number			
			Expected		*Achieved*	
			PIF stage	Endorsement	MTR	TE
		Female				
		Male				
		Total				

The work sheet is accessible **HERE**.

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In partnership with: AGRA, Bioversity International, Conservation International, FAO, The World Bank, UNDP, UN environment programme, UNIDO, World Agroforestry