EVALUATION OF THE GEF FOCAL AREA STRATEGIES

TECHNICAL PAPER 6: SFM/REDD+

(UNEDITED)

(Prepared by the GEF Evaluation Office)

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1. INTRODUCTION

The *Evaluation of GEF Focal Area Strategies* is designed as a formative[1] evaluation emphasizing learning as its primary goal. Accordingly, the evaluation's main objective is to collect and assess information related to the GEF-5 Focal Area Strategies to gain a systematic understanding of the elements and causal links each strategy envisions. The evaluation encompasses the analysis of the following Focal Area Strategies: Biodiversity, Climate Change Mitigation, International Waters, Land Degradation, Chemicals, Sustainable Forest Management/REDD+, and Climate Change Adaptation (under LDCF/SCCF). The evaluation focuses on the most recent GEF-5 Focal Area Strategies and LDCF/SCCF Strategy covering the period from 2010 to 2014.

The *Evaluation of GEF Focal Area Strategies* focuses on the analysis of the GEF-5 Focal Area Strategies as they are formulated, emphasizing the strategies' intended rationale and internal logic. Using a theory-based approach, the evaluation takes a detailed look at the logic chains of causality that each strategy identifies to achieve its objectives. Based on the "theory of change" (TOC) analysis, the evaluation provides an assessment of the extent to which the causal pathways identified by the strategies reflect guidance provided to the GEF by the international conventions (UNFCCC, CBD, UNCCD and Stockholm Convention) as well as the current state of scientific knowledge on aspects relating to the strategies. The analysis provides the foundation for a subsequent assessment of the implementation of Focal Area Strategies in GEF projects, which will be conducted in the context of OPS5.

Aiming to improve the understanding of elements and causal links reflected in GEF Focal Area Strategies, the *Evaluation of GEF Focal Area Strategies* employs a four step approach:

a) **Construct the theories of change**: What are the elements, causal links and overall rationale reflected in each Focal Area Strategy? What are the identified causal pathways envisioned to lead to the achievement of the strategy's objectives?
b) **Review the relationship with convention guidance**: To what extent and in what way do the objectives formulated in the Focal Area Strategies relate to respective convention guidance?
c) **Assess the connection with scientific knowledge**: To what extend do the Focal Area Strategies correspond with current scientific knowledge?
d) **Make recommendations for future strategies**: Based on the findings of steps 1-3, what recommendations for the development of future GEF Strategies can be provided?

The Technical Papers 1-7, covering each of the Focal Area Strategies individually, present the findings from three separate processes of data collection and analysis conducted to answer the evaluation questions outlined above. They illustrate the construction of the Theory of Change for each Focal Area Strategy (chapter 2), present the review of convention guidance and the guidance-strategy mapping where applicable (chapter 3), and summarize the results of the Real-Time Delphi consultation that engages the scientific community in a discussion on the relationship between the Focal Area Strategies and the current state of scientific knowledge (chapter 4).

[1] The evaluation literature distinguishes between "summative" and "formative" evaluations. Summative evaluations focus on the assessment of performance and progress measured against expected targets and are used to evaluate accountability of a given system. In contrast, formative evaluations analyze evidence in order to learn from past experiences to inform improvements of a given system moving forward. See: Scriven, Michael (1967). "The methodology of evaluation". In Stake, R. E. Curriculum evaluation. Chicago: Rand McNally.

2. THEORY OF CHANGE FOR THE SFM/REDD+ FOCAL AREA

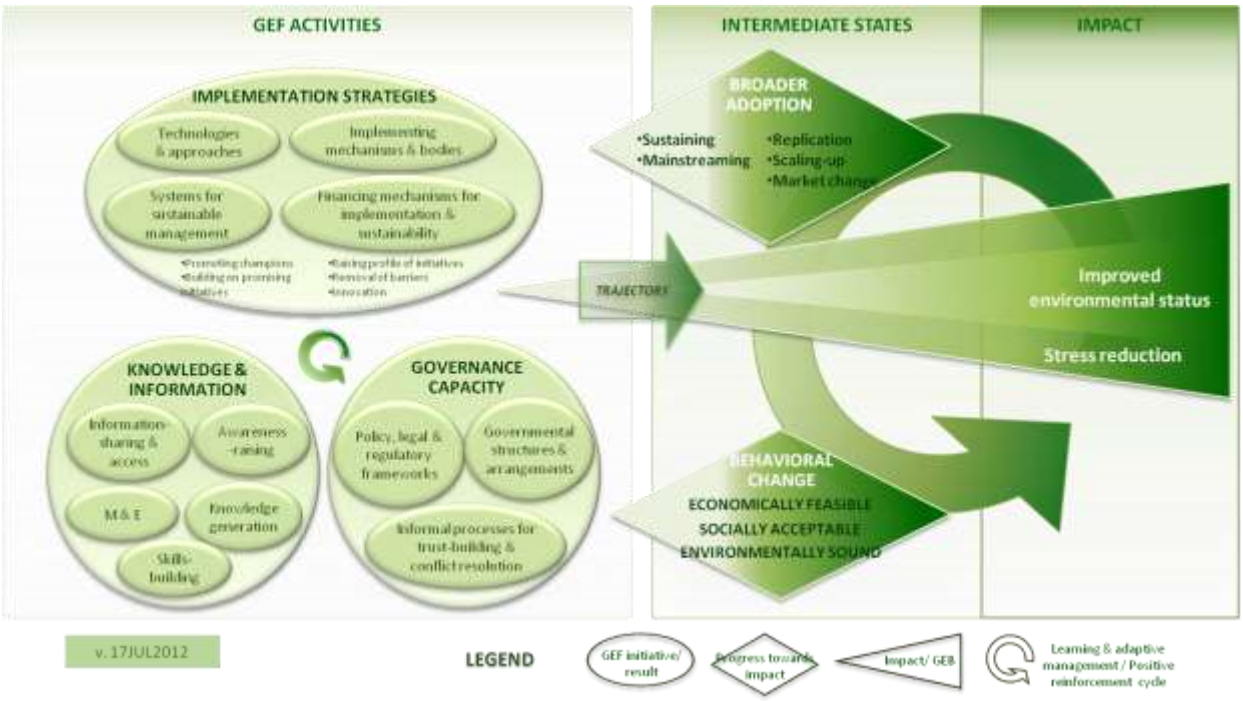
2.1 TOC Approach

A theory-based evaluation is designed around the "theory of change" (TOC) of an activity or strategy. The TOC systematically examines the elements and causal links that constitute the activity/strategy in order to understand and describe the logic of how the activity/strategy is expected to lead to the desired results (Fitz-Gibbon and Morris 1996, Weiss 1972). A theory of change may have been made explicit when the activity/strategy was designed; sometimes it is implicit, which requires the evaluators to reconstruct it. In the case of the GEF-5 Focal Area Strategies, the TOCs are mostly implicit and their reconstruction constitutes a major part of the *Evaluation of GEF Focal Area Strategies*.

General Framework for GEF TOC

In preparation for OPS5, the GEF Evaluation Office has developed a General Framework for the GEF TOC drawing on a large amount of evaluative evidence gathered over the years. The *Evaluation of GEF Focal Area Strategies* uses the General Framework to guide the construction of Focal Area Strategy TOCs. The purposes of the General Framework for GEF's TOC framework are to classify GEF activities and locate them within the intended causality chain towards the generation of GEBs; establish links between different elements of GEF support as well as between GEF activities and contributions of other actors; assess GEF contribution to progress towards GEBs, including the GEF's interaction with other actors; and identify constraints on further GEF contributions to progress towards GEBs.

Figure 1: General Framework for GEF Theory of Change



The framework classifies GEF support into three categories that are interdependent and in most cases realize their full potential through their interaction with each other. A specific GEF project often features a combination of elements from different categories:

a) **Knowledge and information**, including activities to support the generation and sharing of pertinent knowledge and information, awareness-raising activities, improvement of technical skills, as well as monitoring and evaluation.
b) **Governance capacity**, encompassing support for the development and formulation of policy, legal and regulatory frameworks at the appropriate scales of intervention, assistance for the improvement of governmental structures and processes, as well as support for informal mechanisms for trust-building and conflict resolution.
c) **Implementation strategies**, covering a broad range of activities including investments in physical assets, establishment of financing mechanisms and organizational arrangements, as well as improvements of sustainable management approaches, among many others. This category entails the testing and demonstration of new technologies, instruments and approaches, as well as efforts to support broader deployment of proven strategies.

Changes directly linked to GEF activities are referred to as GEF outputs and outcomes. In working towards envisioned outputs and outcomes, the different elements within a GEF project are often designed to complement each other and interact with contributions of other actors. GEF projects are usually conducted within the context of previous and ongoing initiatives carried out in part by non-GEF actors (national governments, international organizations, CSOs, private sector). GEF projects often build on and/or supplement contributions of other actors. In addition, GEF activities are implemented under national circumstances that influence the initiative and are largely outside GEF control. The General Framework helps to assess the interactions of GEF activities with contextual factors.

GEF support is typically envisioned to catalyze progress towards impact at a broader level including the broader adoption of technologies, approaches and instruments. The nature of GEF involvement in catalyzing broader adoption is different between individual projects and across Focal Areas. In a number of cases, GEF activities include direct support for the facilitation of broader adoption in collaboration with other actors, turning broader adoption into a direct GEF project outcome as described above. In these cases, broader adoption is directly integrated in the design of the GEF activity. In other cases, broader adoption is following the example of GEF activities, but emerges without direct GEF support which puts broader adoption beyond the scope of implementation of the GEF project itself. Under both approaches, the GEF aims at developing initiatives to trigger a broad range of stakeholders to use the projects' results beyond their direct objectives. The General Framework identifies five general categories of ways towards broader adoption within or beyond the limits of direct GEF influence:

a) **Sustaining:** Technologies/approaches originally supported through the GEF activity continue to be implemented beyond actual project duration through integration into the regular activities and budget of the government and/or other stakeholders.
b) **Mainstreaming:** Information, lessons, or aspects of a GEF initiative are incorporated into a broader initiative such as policies, institutional reforms, and behavioral transformations.
c) **Replication:** Results of GEF activities are reproduced at a comparable scale, often in different geographical areas or regions.

d) **Scaling-up:** Results of GEF activities are expanded to address concerns at larger geographical, ecological or administrative scales.
e) **Market change:** GEF activity catalyzes market transformation, which might encompass technological changes, policy and regulatory reforms, and financial instruments that increase demand for goods and services likely to contribute to global environmental benefits.

Broader adoption goes hand in hand with behavioral change, meaning sustained and significant changes in stakeholder choices towards more environment-friendly actions. The TOC framework highlights the reinforcing interactions between broader adoption, behavioral change and environmental improvements.

TOC construction for GEF-5 Focal Area Strategies

The *Evaluation of GEF Focal Area Strategies* applies the general framework to each of the GEF-5 Focal Areas as well as the LDCF/SCCF Strategy. The resulting TOCs map out the strategies' elements and causal links, depicting the means-ends linkages envisioned explicitly or implicitly in the strategy and thereby identifying the logical chain of actions that are supposed to lead to the achievement of the strategies' objectives.

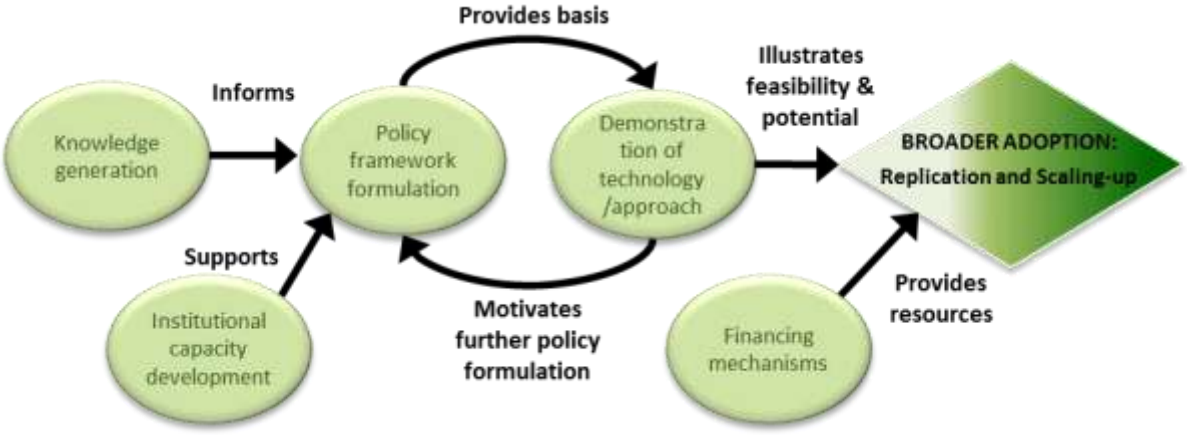
The purpose of the Focal Area Strategies TOCs, serving to establish the foundation for a subsequent evaluative effort on the implementation of GEF Focal Area Strategies, is to gain a better understanding of the elements, causal links and assumptions underlying the GEF-5 Focal Area Strategies as initially formulated, without incorporating the evolution of the strategy that occurred during its implementation. The implementation of the strategies through GEF-5 projects including the evolution since the formulation will be analyzed as part of OPS5. Accordingly, the current TOC reflects the information as provided in the actual text of the GEF-5 focal area strategy document and results framework. While additional reports have been consulted to provide contextual information, this document strictly presents the TOC of the strategy itself, meaning that it is solely based on the strategy text plus documents that the strategy directly references.

The construction of the TOCs proceeded in two steps. First, each strategy is disaggregated into its objectives in order to systematically identify different GEF activities articulated by the strategy, to assess the causal links between elements and to recognize the underlying assumptions these causal chains are based on. Second, the identified elements and causal links are consolidated in one overarching Focal Area Strategy TOC, illustrating the causal pathways the strategy envisions and the underlying assumptions the pathways are based on. Throughout the TOC process, the evaluation team consulted with the respective GEF Secretariat teams to ensure correct interpretation of the strategy documents and establish agreement on the central aspects of the TOC.

Figures 2 shows examples for the relationship between the general categories of GEF activities as proposed by the General Framework and concrete activities described in GEF-5 Focal Area Strategies. Figure 3 presents an example for a causal chain implicit in several GEF-5 Strategies.

Figure 2: Categories of elements of GEF and examples from GEF-5 Focal Area Strategies

Figure 3: Example for frequent chain of causality implicit in several Focal Area Strategies



2.2 Construction of SFM/REDD+ Focal Area Strategy TOC

Overview of SFM/REDD+ Focal Area Strategy objectives

Table 1 presents an overview of SFM/REDD+ Focal Area Strategy objectives including the indicative GEF-5 allocation as approved by the GEF Council as part of the GEF-5 Focal Area Strategies. The indicative allocations are compared to the resources programmed for GEF activities under the respective objectives as of 30 June 2012.

Table 1: Overview of objectives and resource allocations

SFM/REDD+ Focal Area		
Goal	To achieve multiple environmental benefits from improved management of all types of forests	
Objectives	Indicative allocation	Resources approved (as of 30 June 2012)
Objective 1: Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services		$65m / 97%
Objective 2: Strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities		$2m / 3%
Total allocation for GEF-5 SFM/REDD+ incentive mechanism (Set-asides for BD-5 - $130m; CC-5 - 100m; and LD-2 - $20m)	$250m	$67m / 100%

Note: NA – not available.

Source: Indicative allocations from GEF/C.37/3; Approved resources are estimates from the GEF Secretariat.

SFM-1: Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services

Table 2: SFM-1 results framework

Objective	Expected Outcomes	Outcome Indicators	Core Outputs
SFM-1	• **Outcome 1.1:** Enhanced enabling environment within the forest sector and across sectors • **Outcome 1.2:** Good management practices applied in existing forests • **Outcome 1.3:** Good management practices adopted by relevant economic actors	1.1: Effectiveness of policies that integrate SFM principles (score as recorded by tracking tool) 1.2 (a): Forest area under FSC certification measured in hectares 1.2 (b): Enhanced carbon sinks from reduced forest degradation 1.3 (a): Services generated in forests 1.3 (b): Services generated in the wider landscape	Payment for ecosystem services (PES) systems established (number) Forest area (hectares) under sustainable management, separated by forest type Types and quantity of services generated through SFM

Elements and chain of causality

Continued degradation of forest ecosystems diminishes forest ecosystem services (habitat services, regulation services, and productive services) and exhausts forest-based livelihood opportunities for forest-depending communities. Reacting to this cross-focal area challenge, SFM-1 supports activities envisioned to reduce the pressures on forest resources and to make forest ecosystem services sustainable in the long term. Central to these efforts is the internalization of the multiple positive externalities that arise from forest ecosystems and the services they provide as public commons. SFM-1 supports mechanisms and instruments that acknowledge and fully take into account the multiple benefits to be gained from forests that are mostly undervalued by stakeholders and therefore not fully reflected in their political as well as economic decision-making.

Reflecting its cross-cutting character, the SFM/REDD+ Strategy highlights the necessity to manage the multiple functions of forest ecosystems in an integrated way, taking advantage of the multiple benefits and enhancing their long-term sustainability. Accordingly, the corresponding causal chains envisioned by the SFM/REDD+ strategy comprise a combination of elements included under the Biodiversity, Climate Change Mitigation and/or Land Degradation Focal Areas (see "Background" on pages 2-3 for further explanation of the cross-focal area funding arrangements).

The SFM/REDD+ strategy identifies short-term decision making as one of the main barriers for the adoption of SFM practices and the long-term sustainability of multiple benefits which forests provide. The lack of a long-term vision is rooted in a knowledge gap and failure to fully value the multiple benefits from forest ecosystem services. Consequently, the causal chain envisioned

by SFM-1 starts with the improvement of knowledge levels and valuation systems leading to full valuation of forest benefits and facilitating the development of enabling policy, legal and regulatory frameworks, which in turn provides the basis for concrete measures to facilitate the implementation of SFM practices.

Knowledge & Information

SFM-1 identifies the prioritization of short-term economic gains in forest related decision-making as one of the main obstacles for the adoption of SFM practices. In order to remove this barrier, SFM-1 supports analytical efforts that generate and share knowledge on the real, long-term value of forest ecosystem services. These activities include analyses of reforestation potentials as well as mid- and long-term trade-off analyses. The generation of detailed knowledge on the actual benefits of forest ecosystems is envisioned to inform and improve political decision-making on forests, contribute to the development of a long term vision and to catalyze the emergence of an enabling environment for sustainable forest policy planning and management.

Analytical efforts to close the "knowledge gap" represent the first step of a comprehensive causal chain to support the full valuation and sustainable utilization of the multifaceted economic value of forest ecosystems (incl. timber and non-timber forest products, water etc). The successful implementation of market-based financial mechanisms and systems described in more detail under "Implementation Strategies" requires the capability for economic valuation of forest ecosystem services. Valuating forest ecosystem services in a specific local situation and context is a complex task that requires adequate tools and methodologies as well as human capacity and institutional frameworks. Building on analytical work, the SFM/REDD+ includes support for the development and implementation of corresponding valuation instruments and capabilities. These in turn enable the implementation of market-based mechanisms to utilize the multiple economic benefits from forest ecosystems in a sustainable way (see "Implementation Strategies"). While the elements of the causal chain supporting economic valuation and utilization are included in the SFM/REDD+ strategy, the causal chain and strategic implications are not systematically and comprehensively elaborated in the strategy text itself.[2]

Governance capacity

Building on an improved knowledge base (see "Knowledge & Information"), SFM-1 envisions support for the development and formulation of an enabling governance environment for SFM. Long-term policy planning and decision-making in combination with GEF supported improvements of human and institutional capacity are sought to facilitate the development and formulation of improved forest policies and related legal and regulatory frameworks. In this context, the importance of legal provisions and forest law enforcement and government (FLEG) is mentioned by SFM-1. Linked to the support for FLEG, SFM-1 includes financing of mechanisms for conflict resolution with regard to disputes over land tenure and use. Conflict resolution mechanisms represent the only mentioning of the issue of land tenure in the SFM/REDD+ strategy even though questions of tenure rights and enforcement represent one of the fundamental prerequisites for the successful implementation of SFM/REDD+ measures.

[2] Subsequent publications provide further information on this issue. See for example the SFM Fact Sheet series published under the Collaborative Partnership on Forests (CPF), specifically "Sustainable Forest Management (SFM) and the multiple functions of forests", http://www.cpfweb.org/32819-045ba23e53cbb67809cef3b724bef9cd0.pdf.

Given the special character of the SFM/REDD+ Strategy as linking and coordinating efforts from three different Focal Areas towards forest related objectives, it can be assumed that SFM-1 efforts regarding the development of governance frameworks will emphasize coordination and streamlining activities. The exact role of SFM/REDD+ supported activities in this context is not elaborated in the SFM/REDD+ Strategy text itself.

Implementation Strategies

SFM-1 support for activities to facilitate the implementation of SFM practices directly builds on the elements described in the previous sections: The knowledge and information activities, including support for economic valuation systems, inform the design of concrete measures and the enabling policy, legal and regulatory framework facilitates their implementation. On this basis, SFM-1 identifies several general categories of activities envisioned to facilitate SFM implementation. In addition, the strategy provides a number of examples for concrete measures in order to illustrate the broader range of available options that goes well beyond the instruments explicitly mentioned in the strategy itself:

a) **Market-based mechanisms:** SFM-1 includes support for the development and implementation of **market-based financial mechanisms** to translate the real value of forest ecosystem services into economic benefits. Corresponding mechanisms are based on the tools, methodologies and systems for economic valuation described above (see Knowledge & Information):
   - Market-based measures that aim to incentivize specific SFM practices and principles like **Payments for Ecosystem Services;**
   - Instruments to provide sustainable financing for the broad implementation of SFM practices like the development of **certification and verification of timber supply chains**. Certification is based on the assumption that consumers are willing to pay a premium on environment friendly products, increasing producers' profits from sustainable practices.

b) **Sustainable Technologies:** SFM-1 puts emphasis on supporting the adoption of technologies that reduce pressure on forests. The strategy particularly highlights two types of technologies that contribute to pressure reduction:
   - **Energy efficiency** as well as **alternative fuel technologies** and practices reduce the use of firewood as a source of energy;
   - **Sustainable harvest technologies** and practices minimize negative effects from agricultural production on forest ecosystems.

c) **Management/Practices:** Improved approaches and systems for managing threats to forest ecosystems and/or increase the value of their ecosystem services play an important role under SFM-1. The strategy provides examples for both aspects:
   - Pressures reduction: SFM-1 supports **forest fire management** systems to reduce this particular threat to forest ecosystems.
   - Increase eco-service value: SFM-1 envisions activities to "increase ecological connectivity and improve forest biodiversity values at landscape level", for example through **buffer zone management, protected area corridors**, etc.

   In addition, SFM-1 highlights support for the implementation of sustainable forest management and practices in **community and small-holder forestry.**

Broader Adoption and Behavioral Change

SFM-1 follows a clear causal chain to catalyze broader adoption and behavioral change towards SFM: knowledge generation on forest ecosystem benefits in combination with increased capability for economic valuation creates incentives for SFM practices and opens opportunities for sustainable financing of these practices. At the same time, closing the knowledge gap improves policy decision-making which creates an enabling policy, legal and regulatory environment to support and facilitate SFM implementation. The design and implementation of pilot activities is informed by these knowledge and capacity development activities, facilitating the development of market-based financial mechanisms, sustainable technologies, and management practices. Overall, SFM-1 aims at making SFM **sustainable** in the long-term by creating conducive governance structures, by **changing market** incentives and increase availability of financing through market-based financial mechanisms, as well as by catalyzing **replication and scaling-up** through demonstrating the feasibility and effectiveness of concrete SFM practices.

Key Assumptions underlying SFM-1:

- Forest degradation cannot be solved by forest management and forest-related incentive mechanisms alone, especially since pressure on forests primarily originates from (agricultural) land-use change; approaches to forests therefore need to be **cross-focal area**
- It is necessity to manage the multiple functions of forest ecosystems in an integrated way in order to take advantage of the multiple benefits from forest ecosystems; the systematic bundling of multiple forests benefits is necessary to illustrate the full value of forest ecosystems and effectively support market-based incentive mechanisms based on these benefits
- Forest ecosystem services are generally undervalued and the translation of forest ecosystem benefits into economic value is a challenge *(absence of economic valuation systems*)
- Failure to internalize the full range of benefits from forest ecosystems, due to lack of knowledge and capability, leads to unsustainable policy decision-making prioritizing short-term economic gains
- Increase of knowledge levels and establish/pilot effective economic valuation systems can change market incentives and policy decision-making
- Market-based financial mechanisms, translating the real ecosystem value into economic benefits, can change forestry practices at the national as well as local level through provision of a) economic incentives, and b) sustainable financing sources
- Consumers are willing to pay a premium on certified forest products from sustainable supply chains
- Weak forest governance including enforcement capacity undermine SFM/REDD+ activities by creating tenure and rights uncertainties and allowing for illegal activities that reduce the attractiveness of incentive structures described above (this aspect is mentioned by but not comprehensively integrated in the current SFM/REDD+ strategy)
- Buffer zones and corridors between protected areas can protect/increase the BD value of forest ecosystems; the success of forest management in PAs is dependent on and therefore needs to be closely harmonized with sustainable management of non-PA areas as supported by CCM, BD and LD Focal Area activities (also see assumption 1)

SFM-2: Strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities

Table 3: SFM-2 results framework

Objective	Key Expected Outcomes	Key Targets	Core Outputs
SFM-2	• **Outcome 2.1:** Enhanced institutional capacity to account for GHG emission reduction and increase in carbon stocks • **Outcome 2.2:** New revenue for SFM created through engaging in the carbon market	2.1: Capacity to certify forest derived carbon credits (score as recorded by tracking tool). 2.2: Total revenue from carbon market ($ at country level).	National institutions certifying carbon credits (number) National forest carbon monitoring systems in place (number) Innovative financing mechanisms established (number) Carbon credits generated (number)

Elements and chain of causality

SFM-2 envisions utilizing the value created by the regulation service of forest ecosystem in their capacity as carbon sinks while reducing the corresponding negative effect of GHG emissions through deforestation and forest degradation. Incorporation of Land-use, Land-use change and Forestry (LULUCF) activities as a source of revenue on the international carbon market opens opportunities to provide additional financing for sustainable LULUCF practices. SFM-2 aims at facilitating favorable and enabling conditions for using this financing channel. SFM-2 identifies the insufficient levels of knowledge and information on national and local LULUCF potential as well as lack of technical and institutional GHG monitoring and accounting capacity to implement LULUCF policies and translate them into carbon market revenues as the main barriers to be addressed by GEF supported activities.

Knowledge & Information

Paralleling similar efforts under SFM-1, SFM-2 supports analytical work to provide the basis for sustainable LULUCF activities and to inform the design and implementation of concrete measures to reduce GHG emissions, e.g. from competition for land use and land-use changes (e.g. from food and biofuels production). Analytical activities include land use potential/suitability analyses and corresponding trade-off analyses that take into account the mid- and long-term costs and benefits of different LULUCF practices. Knowledge and information activities under SFM-2 include knowledge generation and sharing on tools and methodologies for monitoring emission reductions and carbon sinks, which represents a prerequisite for implementing related measures and generate carbon market revenues.

Furthermore, SFM-2 envisions supporting the development of the necessary capacity to put knowledge and information to practice and to employ said tools and methodologies for monitoring GHG emissions and emission reductions from LULUCF. Explicitly, the SFM/REDD+ strategy refers to “estimating and monitoring associated emissions and changes in forest carbon

stocks, national forest inventories; improved access to country-based data for monitoring and modeling of forest production potential and carbon stock trends." These activities tie in closely with corresponding activities to increase GHG monitoring capacity under the **Land Degradation and Climate Change Mitigation Focal Area Strategies**.

Governance capacity

Building on the policy, legal and regulatory frameworks for SFM as supported through SFM-1, SFM-2 aims at assisting recipient countries with the integration of LULUCF activities, including generation of carbon market revenues, into SFM governance frameworks. The strategy envisions enabling countries to embed LULUCF in the "wider agenda of SFM which strives for conserving multiple environmental and livelihood benefits forest ecosystems provide."

Implementation Strategies

Based on the knowledge and capacity generated with GEF support, SFM-2 envisions assisting the testing and adoption of approaches to the generation of revenues from the carbon market from LULCF activities.

Broader Adoption and Behavioral Change

The causal chain of SFM-2 includes knowledge generation and capacity development to establish the theoretical basis and practical capabilities necessary for the successful integration of LULUCF activities into a broader SFM framework and to generate carbon revues as one source of financing for SFM activities. Through this chain of causality, SFM-2 aims at enabling the broad adoption of sustainable LULUCF practices while at the same time creating a lasting capacity within the recipient country to generate a continuous revenues stream securing the **financial sustainability of LULUCF practices**. In addition, the testing of approaches to generating revenues is envisioned to illustrate the economic opportunities of LULUCF and thereby trigger **replication and scaling-up**.

Key Assumptions underlying SFM-2:

- Carbon markets will provide revenues for GHG emission reductions from LULUCF in the future
- Lack of capacity to monitor GHG emission reductions, create national forest inventories, and provide adequate data to justify emission reduction estimates represents an important barrier for the generation of LULUCF revenues from carbon markets
- GEF support can make a sizable contribution to developing this capacity

2.3 Overall TOC for GEF-5 Focal Area Strategy on SFM/REDD+

In order to reach its goal of making a contribution **"to achieve multiple environmental benefits from improved management of all types of forests"**, the SFM/REDD+ strategy combines and links forest-related elements from three different focal areas: Biodiversity, Climate Change Mitigation, and Land Degradation. The chains of causality described in the TOC thus consist of elements that can also be found under the corresponding objectives of one or more of the three Focal Areas mentioned. Reflecting this cross-cutting character, the SFM/REDD+ Strategy highlights the necessity to manage the multiple functions of forest ecosystems in an integrated way, taking advantage of the multiple benefits and enhancing their long-term sustainability. The resulting GEF supported activities on SFM/REDD+ can be classified in three overarching causal pathways.

Causal pathway 1: Closing the knowledge gap

The strategy identifies the lack of information and knowledge on the real value of forest ecosystem services as one of the barriers to the adoption of SFM/REDD+ practices. This "knowledge gap" is the first barrier hindering the **identification, valuation and internalization of externalities arising from the use of forests and forest goods and services** (incl. timber and non-timber forest products, water resources, etc). The knowledge gap is followed by the absence of valuation methods/tools (addressed by Causal pathway 2) and the lack of financial mechanisms to practically realize economic valuation of ecosystem benefits (addressed by Causal pathway 3). As a whole, undervaluing the long-term benefits of forest resources leads to prioritization of short-term economic gains in forest-related policy decision making and prevents the emergence of a long-term vision on forests.

The SFM/REDD+ strategy envisions contributing to closing the knowledge gap on the value of forest resources including the role of forests as a source of revenue from carbon markets. By supporting analytical activities to assess the true value of existing and potential forest ecosystem services, the SFM/REDD+ strategy aims at fundamentally changing political decision-makers attitude and behavior towards forests and forest policy planning. Through this behavioral change, the SFM/REDD+ strategy contributes to the creation of a solid basis for establishing a favorable and enabling policy, legal and regulatory environment that SFM/REDD+ activities need to be rooted in to be sustainable over time.

Causal pathway 2: Creating conditions for implementation

On the basis of knowledge and information activities, the SFM/REDD+ strategy supports the development, formulation and enforcement of enabling policy, legal and regulatory frameworks, including FLEG measures as well as the incorporation of LULUCF activities aimed at generating carbon credits into the wider SFM policy agenda. SFM/REDD+ strategy support includes human and institutional capacity development to facilitate the emergence of an enabling environment for SFM/REDD+. Given the special character of the SFM/REDD+ Strategy as linking and coordinating efforts from three different Focal Areas towards forest related objectives, it can be assumed that efforts regarding the development of governance frameworks will emphasize coordi-

nation and streamlining activities. The exact role of SFM/REDD+ supported activities in this context is not elaborated by the SFM/REDD+ Strategy.

Furthermore, the SFM/REDD+ strategy recognizes that an enabling policy, legal and regulatory system is necessary but not sufficient for the successful implementation of SFM/REDD+ measures. Implementation of forest-related initiatives requires specialized tools and methodologies as well as the corresponding knowledge and capabilities to employ these tools. Especially the establishment of financial mechanisms like PES, product certification, or generation of carbon market revenues, requires complex processes of economic valuation and verification informed by adequate monitoring and estimation of changes in forest carbon stocks and corresponding emissions and emission reductions; national forest inventories; access to country-based data for monitoring and modeling of forest production potential and carbon stock trends, etc. Building on the knowledge creation activities described above, the SFM/REDD+ includes support for the development and implementation of corresponding valuation instruments and capabilities. These in turn enable the implementation of market-based mechanisms to utilize the multiple economic benefits from forest ecosystems in a sustainable way (see Causal pathway 3). While the elements of the causal chain supporting economic valuation and utilization are included in the SFM/REDD+ strategy, the causal chain and strategic implications are not systematically and comprehensively elaborated in the strategy text itself.

Causal pathway 3: Demonstrating effectiveness and feasibility

The SFM/REDD+ strategy includes the demonstration and piloting of SFM/REDD+ activities. By illustrating the effectiveness, feasibility and long-term benefits of sustainable practices, the strategy aims at facilitating broader adoption through replication and scaling-up. Implementation of activities builds directly on the elements described in the previous sections. Activities to increase the knowledge and capacity on monitoring, verification, etc provide the necessary tools and methodologies for designing and implementing SFM and/or REDD+ measures. At the same time, knowledge and information activities are envisioned to facilitate the emergence of a favorable governance framework, which in turn provides the policy, legal and regulatory basis for the broader adoption of demonstration activities through replication and scaling-up.

The implementation strategies included in the SFM/REDD+ strategy can be classified in three categories:

a) Incentive mechanisms: The SFM/REDD+ strategy includes support for the development and implementation of **market-based financial mechanisms** to translate the real value of forest ecosystem services into economic benefits and thereby change economic incentives in favor of sustainable practices (*internalization of externalities*). Corresponding mechanisms are based on the tools and methodologies for economic valuation described under Causal Pathway 2. Supported instruments include:
   - Market-based measures that aim to incentivize specific SFM practices and principles like **Payments for Ecosystem Services;**
   - Instruments to provide sustainable financing for the broad implementation of SFM practices like the development of **certification and verification of timber supply chains**. Certification is based on the assumption that consumers are willing to pay a premium on environment friendly products, increasing producers' profits from sustainable practices.

1. In addition, the SFM/REDD+ strategy includes testing and demonstration of approaches to generate REDD+ related revenues from the carbon market, representing another market-based financial mechanism. Overall, these incentive mechanisms as a source of financial resources are envisioned to increase the financial sustainability of SFM/REDD+ activities.

b) Sustainable Technologies: The SFM/REDD+ strategy puts emphasis on supporting the adoption of **technologies that reduce pressure on forests**. The strategy particularly highlights two types of technologies that contribute to pressure reduction:
   - Energy efficiency as well as alternative fuel technologies and practices reduce the use of firewood as a source of energy;
   - Sustainable harvest technologies and practices minimize negative effects from agricultural production on forest ecosystems.

c) Management/Practices: Improved approaches and **systems for managing threats to forest ecosystems and/or increase the value of their ecosystem services** play an important role in the SFM/REDD+ strategy. The strategy provides examples for both aspects:
   - Pressures reduction: The strategy supports forest fire management systems to reduce this threat to forest ecosystems.
   - Increase eco-service value: The strategy envisions activities to "increase ecological connectivity and improve forest biodiversity values at landscape level", for example through buffer zone management, protected area corridors, etc. In addition, SFM-1 highlights support for the implementation of sustainable forest management and practices in community and small-holder forestry.

Key Assumptions underlying the GEF-5 SFM/REDD+ Focal Area Strategy:

- Forest degradation cannot be solved by forest management and forest-related incentive mechanisms alone, especially since pressure on forests primarily originates from (agricultural) land-use change; approaches to forests need to be **cross-focal area**
- It is necessity to manage the multiple functions of forest ecosystems in an integrated way in order to take advantage of the multiple benefits from forest ecosystems; the systematic bundling of multiple forests benefits is necessary to illustrate the full value of forest ecosystems and effectively support market-based incentive mechanisms based on these benefits
- Forest ecosystem services are generally undervalued and the translation of forest ecosystem benefits into economic value is a challenge *(absence of economic valuation systems*)
- Failure to internalize the full range of benefits from forest ecosystems, due to lack of knowledge and capability, leads to unsustainable policy decision-making prioritizing short-term economic gains
- Market-based financial mechanisms, translating the real ecosystem value into economic benefits, can change forestry practices at the national as well as local level and increase financial sustainability of SFM/REDD+ activities
- The translation of forest ecosystem benefits into economic value remains a difficult challenge for many recipient countries *(absence of economic valuation systems*)
- Increase of knowledge levels and establish/pilot effective economic valuation systems can change market incentives and policy decision-making
- Consumers are willing to pay a premium on certified forest products from sustainable supply chains
- Buffer zones and corridors between protected areas can protect/increase the BD value of forest ecosystems
- Weak forest governance including enforcement capacity undermine SFM/REDD+ activities by creating tenure and rights uncertainties and allowing for illegal activities that reduce the attractiveness of incentive structures described above (this aspect is mentioned by but not comprehensively integrated in the current SFM/REDD+ strategy)
- Buffer zones and corridors between protected areas can protect/increase the BD value of forest ecosystems; the success of forest management in PAs is dependent on and therefore needs to be closely harmonized with sustainable management of non-PA areas as supported by CCM, BD and LD Focal Area activities (also see assumption 1)
- Carbon markets will provide a certain level of revenues for GHG emission reductions from LULUCF in the future
- Lack of capacity to monitor GHG emission reductions, create national forest inventories, and provide adequate data to justify emission reduction estimates represents an important barrier for the generation of LULUCF revenues from carbon markets

2.4 Framework diagrams for TOC construction

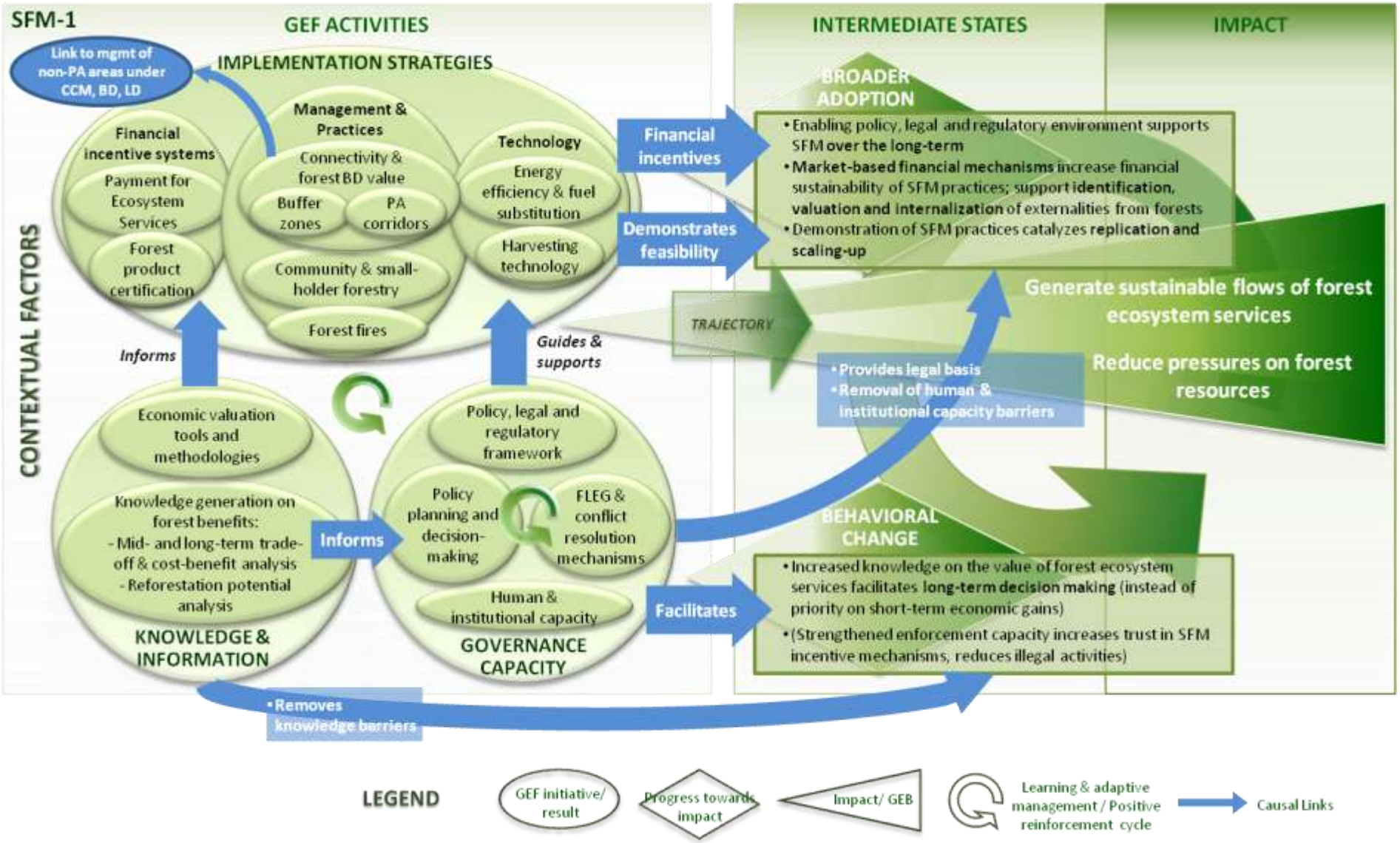


Figure 4: Elements and causal links of SFM-1

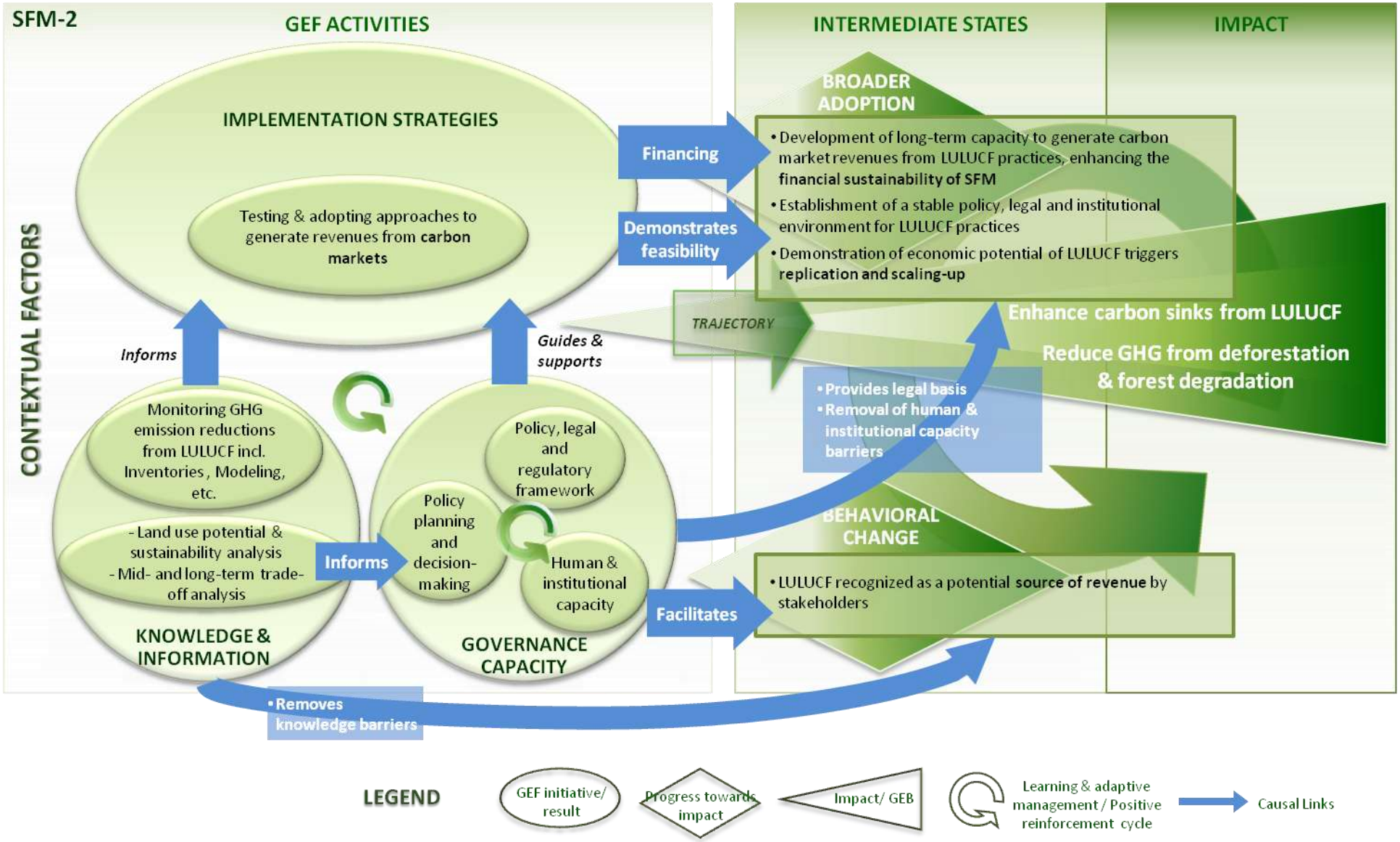


Figure 5: Elements and causal links of SFM-2

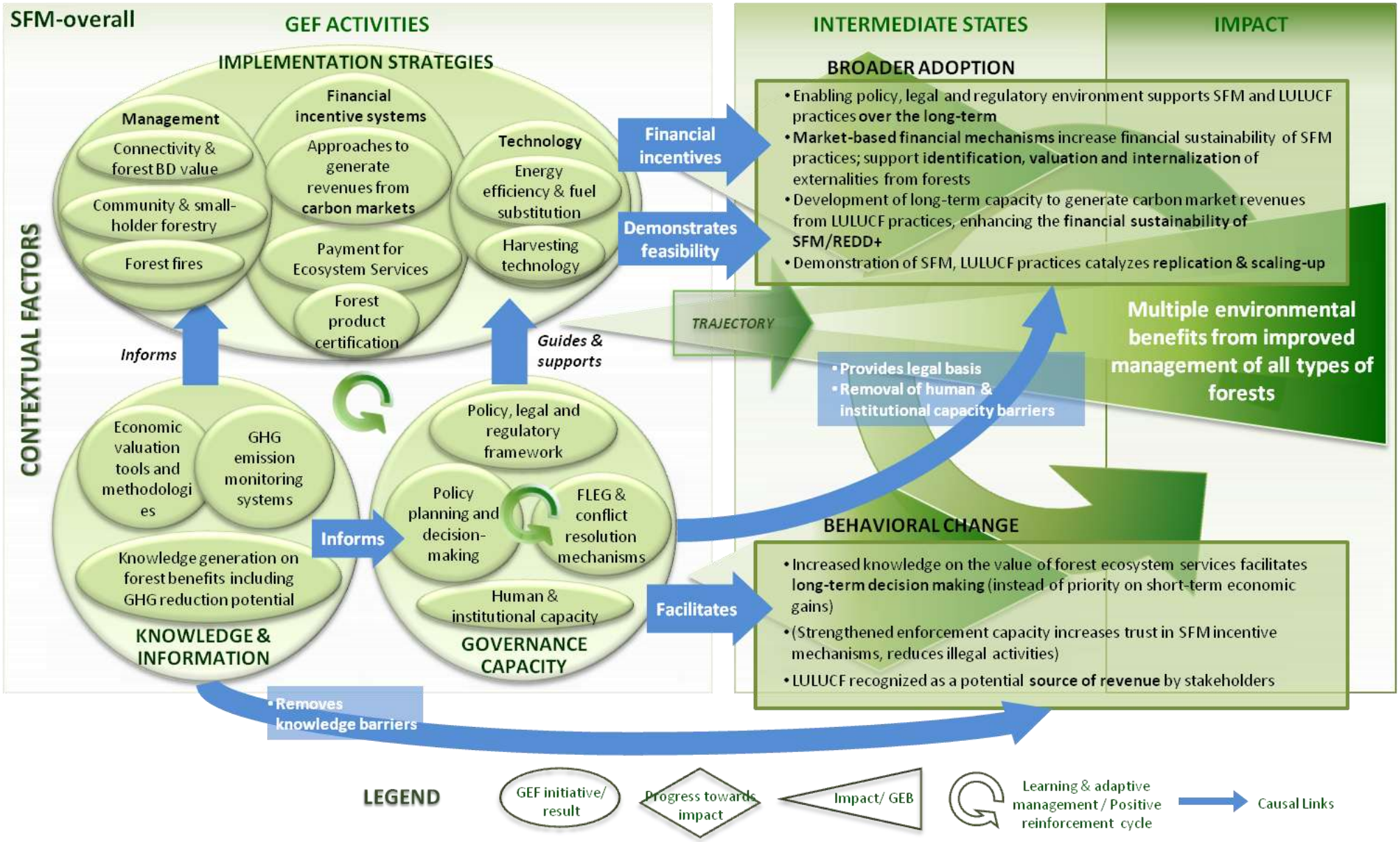


Figure 6: Elements and causal links of GEF-5 Strategy on SFM/REDD+

3. RESULTS OF REAL-TIME DELPHI PROCESS

3.1 Real-Time Delphi approach

The Delphi method was originally developed at the RAND Corporation in the late 1950's as a method for collecting and synthesizing expert judgments. The Delphi methodology has since become a widely recognized technique of expert consultation. The Delphi methodology requires anonymity of participants to ensure equal weight of each participant's responses and reduce the bias caused by perceived authority of renowned experts. The original Delphi process features repeated rounds of responses from experts on a questionnaire with each expert receiving feedback on her/his peers' responses between rounds. This time-intensive method was further developed into a "round-less", online-based process that allows for asynchronous input and makes expert answers available to the entire group in real time eliminating the need for round-to-round feedback. Thereby communication time is considerably shortened. This form of a Delphi process is called Real-Time Delphi (RTD).

Seven online questionnaires, one for each Focal Area Strategy, were formulated by the Evaluation Team with extensive input from the Scientific and Technical Advisory Panel and embedded into a RTD online platform. Each question required a quantitative as well as qualitative response covering the central aspects of each Focal Area Strategy. The invitation to participate in the RTD process was distributed widely among environmental scientist using the international network of the International Council for Science and other scientific networks. Efforts to mobilize participants were implemented throughout the process.

RTD Questionnaire for Focal Area Strategy on SFM/REDD+

Question 1

Goal and objectives: To what extent do the two objectives of the SFM/REDD+ Focal Area Strategy adequately and sufficiently address the strategy's goal in a way that corresponds to current scientific understanding of how the goal can best be achieved?

Question 2

SFM1 (first part) - Reduced pressure on forest resources: To what extent does current scientific understanding support the strategy's focus reducing pressure on forest resources as a means of delivering SFM/REDD+ [first part of Objective 1]? Consider if/how the "expected outcomes and outcome indicators" [Results Framework, p. 98] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

Question 3

SFM1 (second part) - Sustainable flows of forest ecosystem services: To what extent does current scientific understanding support the strategy's focus on sustainable flows of forest ecosystem services as a means of delivering SFM/REDD+ [second part of Objective 1]?

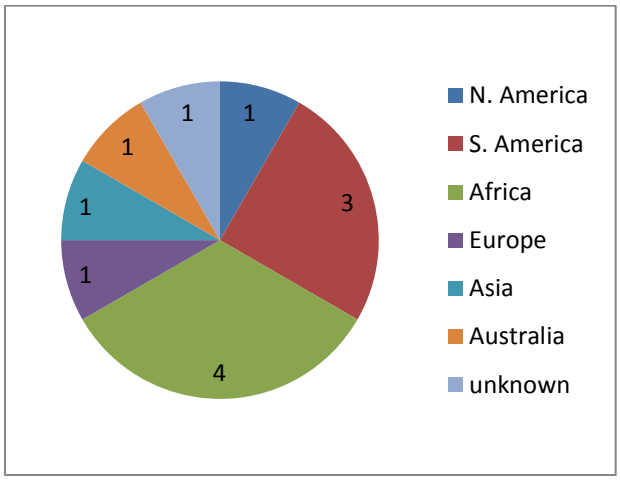
Consider if/how the "expected outcomes and outcome indicators" [Results Framework, p. 98] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

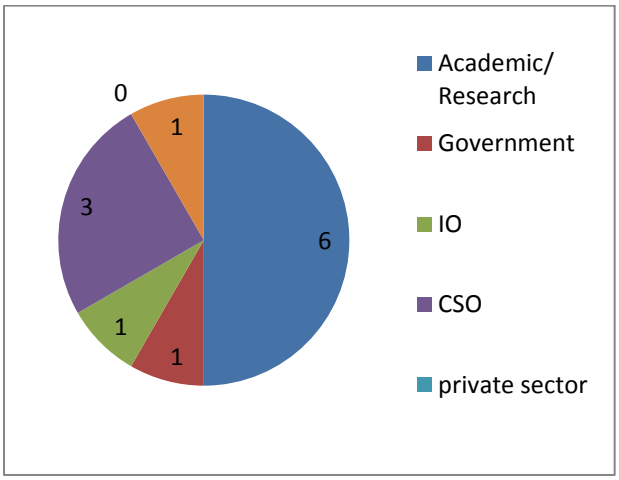
Question 4

SFM2 - GHG emission reductions – carbon markets: To what extent is the focus on strengthening the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhancing carbon sinks from LULUCF activities [Objective 2] supported by the current state of scientific understanding?

Include considerations on the extent to which the intention to generate revenues for the carbon market represents a valid scientifically-backed priority more than other issues that could have been included in the Strategy? Please specify which issues could have been more important.

Demographic information on participants in SFM/REDD+ RTD





3.2 Summary of quantitative results from RTD on SFM/REDD+

A major caveat to the quantitative responses presented in table 4 is the low number of experts that provided input on the Focal Area questionnaires for SFM/REDD+. The quantitative data therefore needs to be interpreted with caution and **does not constitute a sufficient basis for conclusions**.

Rating scale: 1 to 10, where 1=not at all; 2=hardly; 3=slightly; 4=partly; 5=somewhat; 6=fairly; 7=considerably; 8=very; 9=highly; 10=fully (use "0" for "no answer").

Table 4: Quantitative summary of RTD on SFM/REDD+

SFM/REDD+ Strategy – RTD quantitative responses				**Participants: 12**	
Question #	Mean	Min	Max	Median	Std. Dev.
#1 Overall goal and objectives	6.16	5	8	6	0.435
#2 Objective 1: "Reducing pressure on forests"	7.66	6	9	8	0.72
#3 Objective 2: "Forest ecosystem services"	7.33	6	8	8	0.544
#4 Objective 3: "GHG emissions and carbon markets"	4.66	1	8	5	1.655
#5 FA partnership with BD, CCM, LD	6.66	5	8	7	0.72

3.3 Summary of qualitative results from RTD on SFM/REDD+

As a consequence of the low number of participants in the RT Delphi process for SFM/REDD+, expert discussion among the participants was limited. Several participants voiced skepticism about the instrument of REDD+ as an adequate and effective mechanism for forest conservation.