EVALUATION OF THE GEF FOCAL AREA STRATEGIES

TECHNICAL PAPER 4: LAND DEGRADATION

(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 LAND DEGRADATION FOCAL AREA

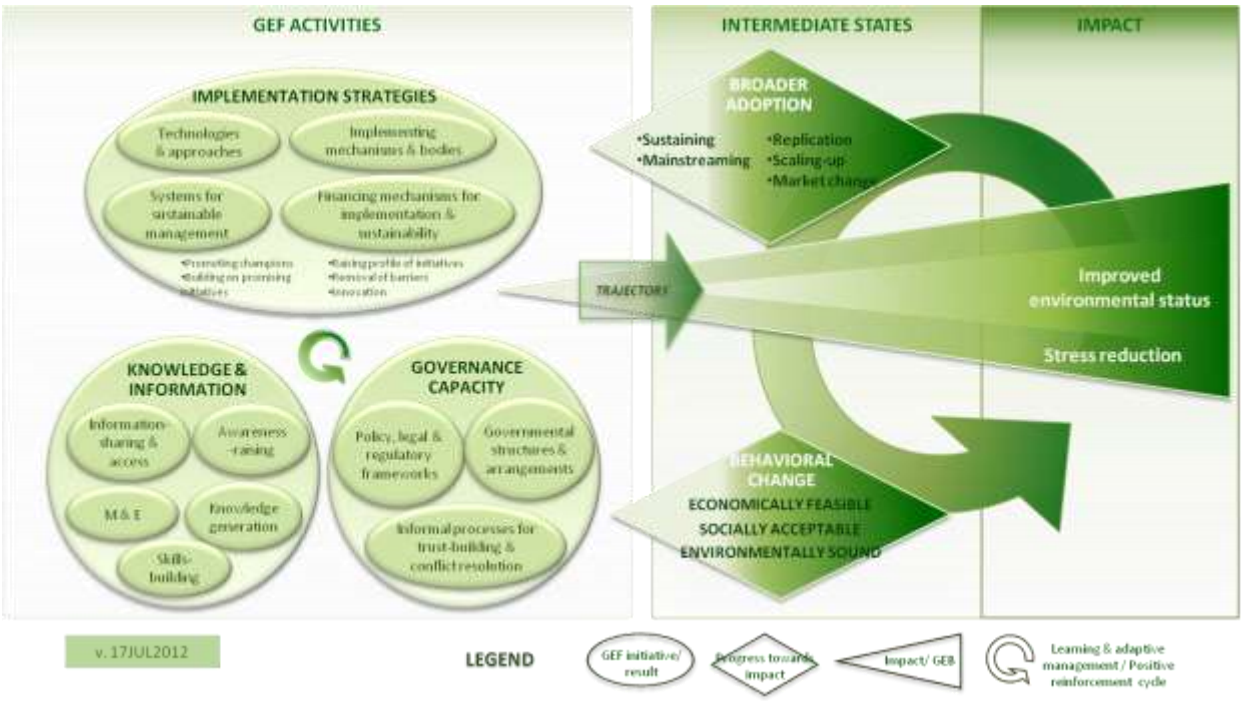
2.1 TOC Approach

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.

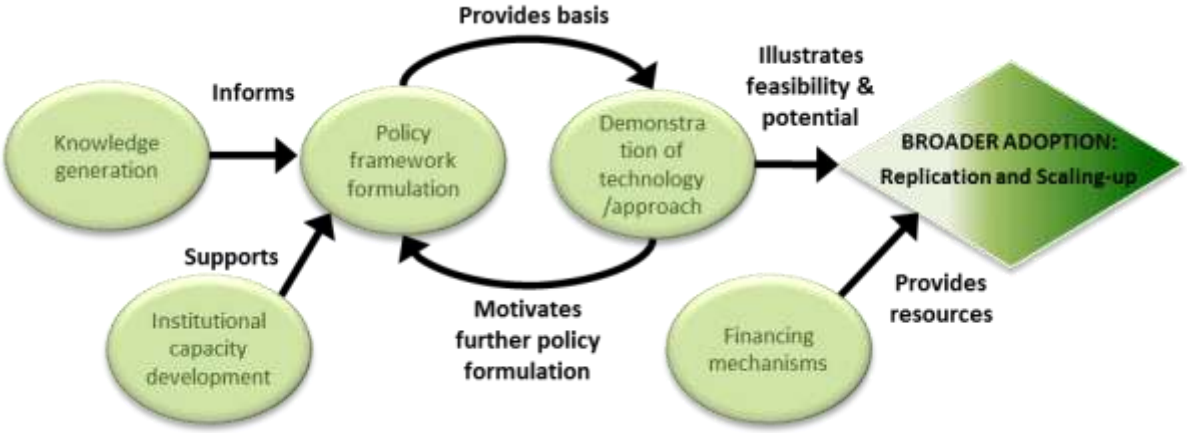
The purpose of the Focal Area Strategies TOCs, serving to establish the foundation for a subsequent evaluative effort on the implementation of GEF Focal Area Strategies, is to gain a better understanding of the elements, causal links and assumptions underlying the GEF-5 Focal Area Strategies as initially 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 documents 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 LD Focal Area Strategy TOC

Overview of LD Focal Area Strategy objectives

Table 1 presents an overview of LD 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

Land Degradation Focal Area		
Goal	To contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation	
Objectives	Indicative allocation	Approved resources (as of 30 June 2012)
Objective 1: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities	$200m / 50%	$41m / 30.6%
Objective 2: Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependent people	$30m / 7.9%	$6m / 4.5%
Objective 3: Reduce pressures on natural resources from competing land uses in the wider landscape	$135m / 35.5%	$84m / 62.7%
Objective 4: Increase capacity to apply adaptive management tools in SLM/SFM/INRM by GEF and UNCCD Parties	$15m / 3.9%	$3m / 2.2%
Total	$480m / 100%	$134m / 100%

Note: NA – not available.

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

LD-1: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities

Table 2: LD-1 results framework

Objective	Expected Outcomes and Indicators	Core Outputs
LD-1	**Outcome 1.1:** An enhanced enabling environment within the agricultural sector ***Indicator 1.1:*** *Agricultural policies support smallholder and community tenure security* **Outcome 1.2:** Improved agricultural management ***Indicator 1.2:*** *Increased land area with sustained productivity and reduced vulnerability of communities to climate variability* **Outcome 1.3:** Sustained flow of services in agro-ecosystems ***Indicator 1.3:*** *Maintained/increased flow of services in agro-ecosystems* **Outcome 1.4:** Increased investments in SLM ***Indicator 1.4:*** *Increased resources flowing to SLM from diverse sources*	**Output 1.1:** National policies that guarantee smallholder and community tenure security **Output 1.2:** Types of Innovative SL/WM practices introduced at field level **Output 1.3:** Suitable SL/WM interventions to increase vegetative cover in agro-ecosystems **Output 1.4:** Appropriate actions to diversify the financial resource base **Output 1.5:** Information on SLM technologies and good practice guidelines disseminated

Elements and chain of causality

LD-1, envisioned to receive the largest part of the GEF-5 resource allocation, focuses on the maintenance and improvement of **agro-ecosystem services**. The objective aims at the **removal of barriers to sustainable agricultural practices**, contributing to the prevention of human-induced soil degradation. LD-1 identifies three types of barriers and envisions support for corresponding barrier removal activities:

a) Policy, legal and regulatory environment;
b) Human and institutional capacity;
c) Access to knowledge and technology.

The LD strategy across objectives follows an integrated approach that takes into account the interactions of different land uses and sectors in the wider landscape (see especially LD-3). In this context, the LD strategy also highlights opportunities for **synergies with other GEF focal areas**: LD-1 activities incorporate the decrease of GHG emissions from agriculture, management of climate change impacts on agriculture as well as maintenance of habitats in agricultural landscapes. Consequently, LD-1 activities offer extensive opportunities for synergies with other focal areas, namely CCM, CCA, and BD.

Institutional capacity

The development of policy, legal and regulatory frameworks combined with the improvement of institutional capacity to implement, monitor and enforce these frameworks provides the basis for LD-1 activities. In particular, legal and regulatory provisions support changes in incentive structures and establishment of corresponding financing mechanisms in two ways:

a) **Direct incentives:** Legal and regulatory stipulations can institute direct (i.e. mandated) changes to the incentive structure regarding agricultural practices, for example through subsidies or, conversely, the ban or limitation of certain approaches.

b) **Basis for incentive schemes:** The governance framework also provides the policy support as well as legal/regulatory basis for the development of market-based incentive schemes (e.g. PES) and establishment of corresponding financing mechanisms.

Reversely, the implementation of on-the-ground activities also supports the formulation and refinement of governance frameworks by demonstrating the benefits of sustainable agriculture, thereby increasing political decision makers' ability and motivation to create and/or improve corresponding policies, legal and regulatory provisions. The formulation of governance frameworks is further informed and supported by knowledge and information-sharing activities (see below).

Knowledge & Information

Connected to GEF supported efforts to develop sound LD governance frameworks for agriculture, LD-1 envisions targeted skill building to "improve decision-making in management of production landscapes to ensure maintenance of ecosystem services important for the global environment and for peoples' livelihoods." These activities are tied to and supported by the broader institutional capacity development activities described above. Skill building for decision making removes capacity and knowledge barriers to the implementation of integrated approaches to NR management in agriculture (see below). A subset of technical skill development particularly stressed by the strategy is the ability to **monitor and assess GHG emissions** from agriculture as the prerequisite for the reduction of GHG emissions from agriculture.

The role of the technology is generally stressed by LD-1, but corresponding activities are not specifically elaborated on.

Implementation strategies

Based on governance framework and human and institutional capacity development, LD-1 envisions catalyzing broader adoption of sustainable agricultural practices by supporting concrete implementation of activities primarily in two areas:

a) **Incentives and financing:** LD-1 supports the establishment of **market-based incentives and corresponding financing mechanisms** based on the valuation of environmental services as an instrument to capture the true value of sustainable agriculture (internalization of externalities). Market-based instruments employ different ways to monetize the full value of environmental services and translate them into economic profits to be used as incentives for land users to adopt sustainable practices. These instruments are envisioned to fundamentally change given economic incentive structures in favor of sustainable practices, effecting broader adoption and behavioral change. LD-1 highlights **Payments for Ecosystem Services (PES)** as an effective and efficient instrument. The strategy precludes, however, direct GEF financial backing of the implementation of market-based mechanisms.

b) **Implementation and management**: The second area of GEF supported activities is the implementation of improved, sustainable practices and integrated landscape approaches to **natural resource management in agriculture** (crop and livestock). Application of improved practices under LD-1 covers a broad spectrum of specific issues from rangeland

management and protection of habitats to GHG mitigation and adaptation to climate change impacts on agriculture (synergies with BD, CCA, CCM focal areas). The activities are facilitated by the corresponding capacity development and knowledge creation described above. The importance of **community-based approaches** to agricultural management is particularly highlighted by the strategy.

Broader adoption and behavioral change

Changes in economic incentive structures as well as the establishment of corresponding financial resources are core elements to achieve broader adoption of sustainable agriculture and induce behavioral change among farmers and local communities. Changed incentives can however only be translated into changed behavior if the necessary capacity to adopt new practices exists. Therefore, LD-1 combines changes in incentive and financing structures with GEF supported activities to promote sustainable NRM management approaches in agriculture. In this regard, demonstration effects are a particularly important aspect of the causal chain: demonstrating the feasibility of and benefits from sustainable agricultural practices is envisioned to facilitate broader adoption by farmers.

Key Assumptions underlying LD-1:

- Prioritization: Unsustainable agricultural practices represent a significant cause of land degradation and can be effectively and efficiently address through GEF supported activities
- Incentives: Market-oriented incentives and financing based on the valuation of environmental services can facilitate behavioral change of farmers/local communities and induce the broad adoption of sustainable agriculture practices
- Practices: A SLM approach in agriculture provides a suitable framework for prevention and control of land degradation; community-based implementation of NRM is particularly effective
- Synergies: Sustainable agricultural management is highly compatible with the creation of other GEBs, including GHG emission reductions and habitat preservation, opening opportunities for synergies with other focal areas

LD-2: Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependent people

Table 3: LD-2 results framework

Objective	Expected Outcomes and Indicators	Core Outputs
LD-2	**Outcome 2.1:** An enhanced enabling environment within the forest sector in dryland dominated countries ***Indicator 2.1:*** *Forestry policies support smallholder and community tenure security* **Outcome 2.2:** Improved forest management in drylands ***Indicator 2.2:*** *Increased land area under sustainable forest management practices* **Outcome 2.3:** Sustained flow of services in forest ecosystems in drylands ***Indicator 2.3:*** *Increased quantity and quality of forests in dryland ecosystems* **Outcome 2.4:** Increased investments in SFM in dryland forests ecosystems ***Indicator 2.4:*** *Increased resources flowing to SFM from diverse sources (e.g. PES, small credit schemes, voluntary carbon market)*	**Output 2.1:** National policies that guarantee smallholder and community tenure security **Output 2.2:** Types of innovative SFM practices introduced at field level **Output 2.3:** Suitable SFM interventions to increase/maintain natural forest cover in dryland production landscapes **Output 2.4:** Appropriate actions to diversify the financial resource base **Output 2.5:** Information on SFM technologies and good practice guidelines disseminated

Elements and chain of causality

LD-2 envisions a largely identical causal chains as LD-1 (see above), applied to forest ecosystems and sustainable forest management (SFM). LD-2 also combines support for market-based incentive and financing mechanisms with activities to implement and demonstrate improved forest management practices, including afforestation efforts. Activities under LD-2 are closely linked to the GEF-5 Sustainable Forest Management (SFM)/REDD+ Strategy in terms of objectives and instruments as well as through an incentive funding mechanisms that matches LD-2 activities with additional resources at a ration of 3:1.

Institutional capacity

LD-2 supports the development of policy, legal and regulatory frameworks combined with the enhancement of institutional capacity as the basis for the broad adoption of SFM practices and prevention of deforestation. Regarding favorable incentive structures and financing mechanisms, the two functions of an improved governance framework are the same as under LD-1: formulation of directly mandated incentives like subsidies and bans/limitations; and provision of the basis for the implementation of market-based incentive schemes like PES. The reverse causal linkage of on-the-ground activities supporting the formulation of governance frameworks through demonstration effects applies to LD-2 as well. Knowledge and information-sharing activities are not explicitly elaborated under LD-2.

Implementation strategies

As LD-1 (see above), LD-2 directly supports the development and establishment of market-based incentives and financing as well as activities to promote and improve the implementation of sustainable practices regarding forest management. These two areas of LD-2 activities are envisioned to yield:

a) Net gains in forest area through reforestation and prevention of deforestation as a result of changed incentive structures;

b) Improved functionality and enhanced forest ecosystem services as a result of sustainable forest management practices.

The improvement of forest ecosystem services provides opportunities to create GEBs relating to other GEF focal areas, especially in terms of GHG emission reductions (CCM) and habitat protection (BD).

Broader adoption and behavioral change

See LD-1

Key Assumptions underlying LD-2:

- Prioritization: Unsustainable forest management represents a significant threat to the prevention and control of land degradation and can be effectively and efficiently address through GEF supported activities
- Incentives: Market-oriented incentives and financing based on the valuation of environmental services can facilitate behavioral change of land/forest users and induce the broad adoption of sustainable forest management practices
- Practices: SFM combined with reforestation provides a suitable framework for prevention/control of LD relating to forests
- Synergies: Sustainable forest management is highly compatible with the creation of other GEBs, including GHG emission reductions and habitat preservation, opening opportunities for synergies with other focal areas

LD-3: Reduce pressures on natural resources from competing land uses in the wider landscape

Table 4: LD-3 results framework

Objective	Expected Outcomes and Indicators	Core Outputs
LD-3	**Outcome 3.1:** Enhanced cross-sector enabling environment for integrated landscape management ***Indicator 3.1:*** *Policies support integration of agriculture, rangeland, forest, and other land uses* **Outcome 3.2:** Integrated landscape management practices adopted by local communities ***Indicator 3.2:*** *Application of integrated natural resource management (INRM) practices in wider landscapes* **Outcome 3.3:** Increased investments in integrated landscape management ***Indicator 3.3:*** *Increased resources flowing to INRM and other land uses from divers sources*	**Output 3.1:** Integrated land management plans developed and implemented **Output 3.2:** INRM tools and methodologies developed and tested **Output 3.3:** Appropriate actions to diversify the financial resource base **Output 3.4:** Information on INRM technologies and good practice guidelines disseminated

Elements and chain of causality

The LD strategy is based on an **integrated landscape approach**, highlighting the interplay of different competing land uses in the wider landscape. While LD-1 and LD-2 present the targeted responses with regard to the two main land uses addressed by the LD focal area, agro-ecosystems and forest ecosystems, LD-3 reinforces the integrated approach by targeting **cross-sectoral pressures on natural resources from competing land use in the wider landscape**. LD-3 examples for competing land uses include "extending the agricultural frontier into forest lands, extractive industry destroying forests, urbanization of rural areas". The main instruments of LD-3 to provide integrated solutions for reducing pressures from competing land uses are **"cross-sector harmonization and integration of sustainable land management (SLM)."**

Institutional capacity

LD-3 focuses on the harmonization of policies, legal and regulatory provisions across different sectors to reduce the pressure of competing land uses and to avoid negative trade-offs. The emphasis on coordination of actions related to land use under LD-3 includes the establishment of **organizational structures** for enhanced cooperation for a) institutions and administrative entities, and b) different groups of land users. Improving coordination and information-sharing among institutional actors is envisioned to facilitate the effective formulation and implementation of coordinated governance frameworks that take into account inter-sectoral connections and trade-offs. Enhancing collaboration between land users is sought to produce balanced and widely accepted land use arrangements that are feasible across relevant economic sectors.

Knowledge & Information

Parallel to skill building for improved decision making as described in LD-1, a similar element with an emphasis on integrated NRM and coordinated cross-sectoral SLM practices is envisioned under LD-3.

Implementation strategies

LD-3 intends to reinforce the two channels of intervention applied under LD-1 and LD-2 (development of market-based incentives and financing mechanisms and promotion of sustainable practices in relevant sectors). LD-3 is geared towards the integration of strategies and approaches in the wider landscape, harmonizing incentive structures and financing mechanisms across competing sectors and demonstrating integration of SLM practices to take into account the interrelations and trade-offs between sectors and land uses.

Broader adoption and behavioral change

The harmonization of governance frameworks is intended to facilitate the broader adoption of coordinated action between sectors related to land use. Taking into account trade-offs in the wider landscape is envisioned to inform governance stipulations that reduce pressures on natural resources from competing land uses more effectively than sector-specific governance frameworks in isolation. Based on the harmonization of governance frameworks, LD-3 activities are meant to also demonstrate the benefits from coordinating incentives/financing and sustainable management practices across sectors and thereby to facilitate broader adoption and behavioral change.

Key Assumptions underlying LD-3:

- Taking into account interactions and trade-offs between competing land uses in the wider landscape will lead to more effective solutions to reduce pressures on natural resources than sector-specific approaches in isolation
- Harmonized governance frameworks and improved coordination capability of stakeholders provides the basis for coordinated action on land use and land use changes
- The successful demonstration of integrated SLM/NRM practices, following the landscape approach, facilitates broader adoption and behavioral change

LD-4: Increase capacity to apply adaptive management tools in SLM/SFM/INRM by GEF and UNCCD Parties

Table 5: LD-4 results framework

Objective	Expected Outcomes and Indicators	Core Outputs
LD-4	**Outcome 4.1:** Increased capacities of countries to fulfill obligations in accordance with the provisions provided in the UNCCD. ***Indicator 4.1:*** *Improved quality and timeliness of reporting compliance by countries*	**Output 4.1:** At least 50 countries implementing UNCCD priorities with improved monitoring of impacts at national level **Output 4.1:** All country investments in LD Objectives 1-3 are linked to UNCCD action programs and national reporting process

Elements and chain of causality

LD-4 entails the GEF support for enabling activities related to the obligations of the Parties to the UNCCD, including "national monitoring and reporting to UNCCD in the context of supporting the national and regional SLM agenda". Furthermore, LD-4 emphasizes support for the "development of new tools and methods for better addressing the root causes and impacts of land degradation."

Institutional capacity

LD-4 activities are primarily focused on providing support for the formulation of national reporting to the UNCCD, which is informed by GEF supported results monitoring tailored to monitor the national implementation of UNCCD Action Plans. In addition, LD-4 lends support to institutional capacity development to improve national capacity to fulfill reporting requirements and other obligations to the UNCCD.

Knowledge & Information

In comparison with other FA's objectives covering enabling activities, LD-4 features a more encompassing focus on the development of new or improved tools to be applied in LD-1, 2, and 3. These activities are envisioned to be reciprocally connected to the implementation strategies of other LD objectives: The results of applied research components of past LD 1-3 projects are to inform the development of new tools and methodologies. In turn, these tools are envisioned to be applied in future LD 1-3 project and to improve their effectiveness. These efforts will be accompanied by GEF support for strengthening the "scientific basis for effective monitoring and assessment in the LD Focal Areas."

2.3 Overall TOC for GEF-5 Focal Area Strategy on Land Degradation

The elements and chains of causality under each of the LD objectives presented above can be summarized in three closely interrelated causal pathways working towards "**arresting and reversing current global trends in land degradation, specifically desertification and deforestation".**

Causal pathway 1: Governance framework

The policies, legal and regulatory frameworks to be supported by GEF activities under the LD strategy are envisioned to take effect through two main causal linkages:

a) **Direct changes to incentive structures:** Through policy incentives and regulatory stipulations (including subsidies or tax incentives supporting SLM practices; establishment of conservation areas; limitations to productive sector expansions etc.), the governance framework can directly influence the incentive structure in favor of sustainable land use, facilitating behavioral change.

b) **Provision of political and legal basis for other activities/mechanisms:** Efforts to improve SLM implementation and especially to develop market-based incentive schemes and financing mechanisms like PES are contingent on a supportive policy environment as well as the necessary legal provisions.

In addition, the GEF supported development of institutional and administrative capacity creates a positive reinforcement cycle with the formulation and adaptive improvement of governance frameworks. At the same time, improved institutional capacity lowers capacity barriers to the implementation of on-the-ground activities (enhanced practices; incentive mechanisms). These broader efforts of institutional capacity development are closely tied to and mutually reinforcing with more targeted skill building activities to improve decision making in landscape management.

The reciprocal causal link of governance frameworks and market-based incentive mechanisms is especially pronounced: governance frameworks provide the basis for the establishment of these mechanisms; in turn, the successful implementation of these mechanisms motivates and informs the further expansion and refinement of policy, legal and regulatory provisions.

Of specific importance for the LD strategy, which highlights an integrated approach to the wider landscape, is the harmonization of governance frameworks across different sectors and land uses in order to reduce pressures on natural resources from competing land uses. Efforts to strengthen cooperation and collaboration between stakeholders, political decision makers as well as land users, are envisioned to improve the effectiveness of the overall LD governance structure and simultaneously to contribute to the improvement of general institutional and administrative capacity.

Causal pathway 2: Changed incentive structures and establishment of corresponding financing mechanisms

The LD strategy puts the development and establishment of market-based incentive structures and corresponding financing mechanisms at the center of GEF supported activities. Market-based mechanism are envisioned by the strategy to function in close causal connection to the policy incentives and regulatory approaches described above in order to change the overall incentive structure relating to land use in favor of sustainable practices. The application of market-based mechanisms is intended to reach across LD objectives and to be used with regard to preventing LD in agro-ecosystems as well as forest ecosystems.

The mechanisms are intended to be based on the valuation of ecosystem services to capture the true value of sustainable agriculture (internalization of externalities), monetize the full value of environmental services and translate them into economic profits to be used as incentives for land users to adopt sustainable practices. These instruments are envisioned to fundamentally change given economic incentive structures in favor of sustainable practices, effecting broader adoption and behavioral change. LD-1 highlights **Payments for Ecosystem Services (PES)** as an effective and efficient instrument. The strategy precludes, however, direct GEF financial backing of the implementation of market-based mechanisms.

The causal links between governance frameworks, institutional capacity and market-based mechanisms are described under Causal pathway 1. In addition, The Causal Pathway 2 also entails an element of harmonization and coordination supported under LD-3. The efforts aim at ensuring the compatibility of the spectrum of different market-based mechanisms in different sectors and land uses, avoiding trade-offs.

Causal pathway 3: Enhanced implementation and management

Causal pathway 3 focuses on the improvement of sustainable forest/land management and the promotion of new and enhanced practices across different landscapes. This includes practices that are envisioned to yield significant synergetic benefits with other GEF focal areas, for example GHG emission reductions (CCM), increased resilience to climate change impacts (CCA), and habitat protection (BD).

GEF support for the implementation of SFM/SLM/INRM practices is envisioned to facilitate broader adoption and behavioral change through two causal effects:

a) **Demonstration effects:** The successful demonstration of the feasibility of and benefits from SFM/SLM/INRM practices is envisioned to increase land users interest in replicating and scaling up these practices as well as intensify political decision makers' motivation to engage in the development of corresponding governance frameworks. Again, the implementation of on-the-ground projects is intended to form a reciprocal reinforcement cycle with the development of policies, legal and regulatory provisions.

b) **Removal of capacity & knowledge barriers:** Furthermore, implementation of SFM/SLM/INRM practices intended to increase local capacity and knowledge to apply these practices. In this context, the importance of community-based approaches as an in-

strument to facilitate broader adoption and behavioral change is highlighted by the LD strategy.

Elements to improve specific skills for decision making and integrated management of production landscapes within and across sectors play an important role in the causal chain of pathway 3, contributing to the removal of capacity and knowledge barriers and thereby enabling the implementation of GEF activities as well as the subsequent replication and scaling up. Reversely, the implementation of GEF activities can also feed back into the design of skill building efforts. Closely connected, the LD strategy under LD-4 explicitly elaborates a positive reinforcement cycle between GEF supported implementation of SFM/SLM/INRM practices and the development of new and/or improved tools and methods in this area: The results of applied research components of past LD 1-3 projects are to inform the development of new tools and methodologies. In turn, these tools are envisioned to be applied in future LD 1-3 project and to improve their effectiveness.

Key Assumptions underlying the GEF-5 LD Focal Area Strategy:

- Prioritization: Unsustainable land management, particularly in agro-ecosystems and forest ecosystems, represents a significant threat to the prevention and control of land degradation and can be effectively and efficiently address through GEF supported activities
- Incentives: Market-based incentive schemes and corresponding financing mechanisms based on the valuation of environmental services can facilitate behavioral change of land users across sectors/land uses, induce the broad adoption of SFM/SLM/INRM practices, and reduce pressures from competing land use
- Practices: SFM/SLM/INRM practices, embedded in an integrated landscape approach, provides a suitable framework for prevention and control of land degradation; community-based implementation of these practices is particularly effective
- Demonstration: The successful demonstration of integrated SFM/SLM/NRM practices, following the landscape approach, facilitates broader adoption and behavioral change
- Synergies: GEF supported practices under the LD strategy are highly compatible with the creation of GEBs in other GEF focal areas, including GHG emission reductions (CCM), increased resilience to climate change impacts (CCA), and habitat protection (BD).
- Landscape approach: Taking into account interactions and trade-offs between competing land uses in the wider landscape will lead to more effective solutions to reduce pressures on natural resources than sector-specific approaches in isolation
- Governance harmonization: Harmonized governance frameworks and improved coordination capability of stakeholders provides the basis for coordinated action on land use and land use change

2.4 Framework diagrams for TOC construction

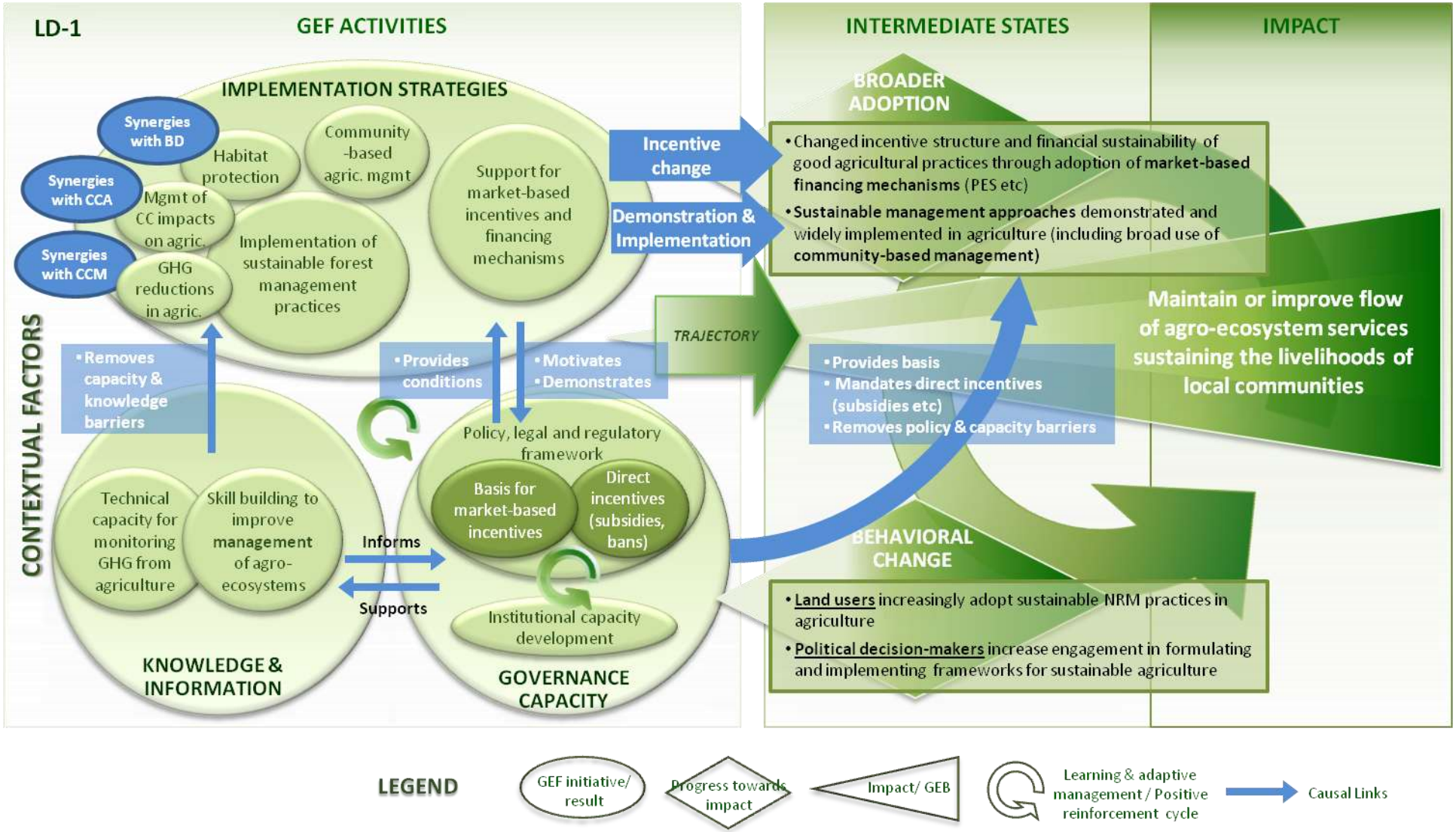


Figure 4: Elements and causal links of LD-1

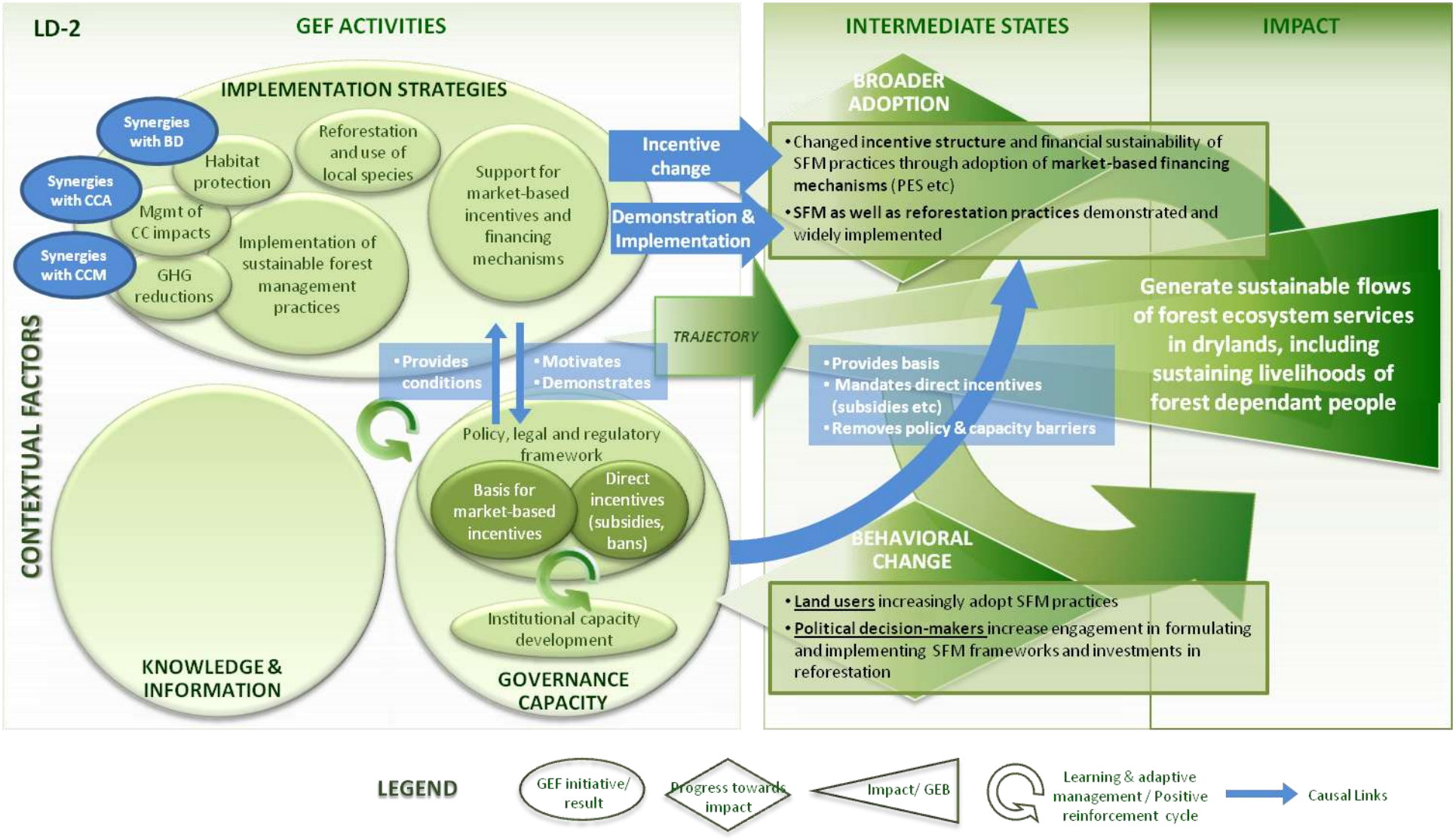


Figure 5: Elements and causal links of LD-2

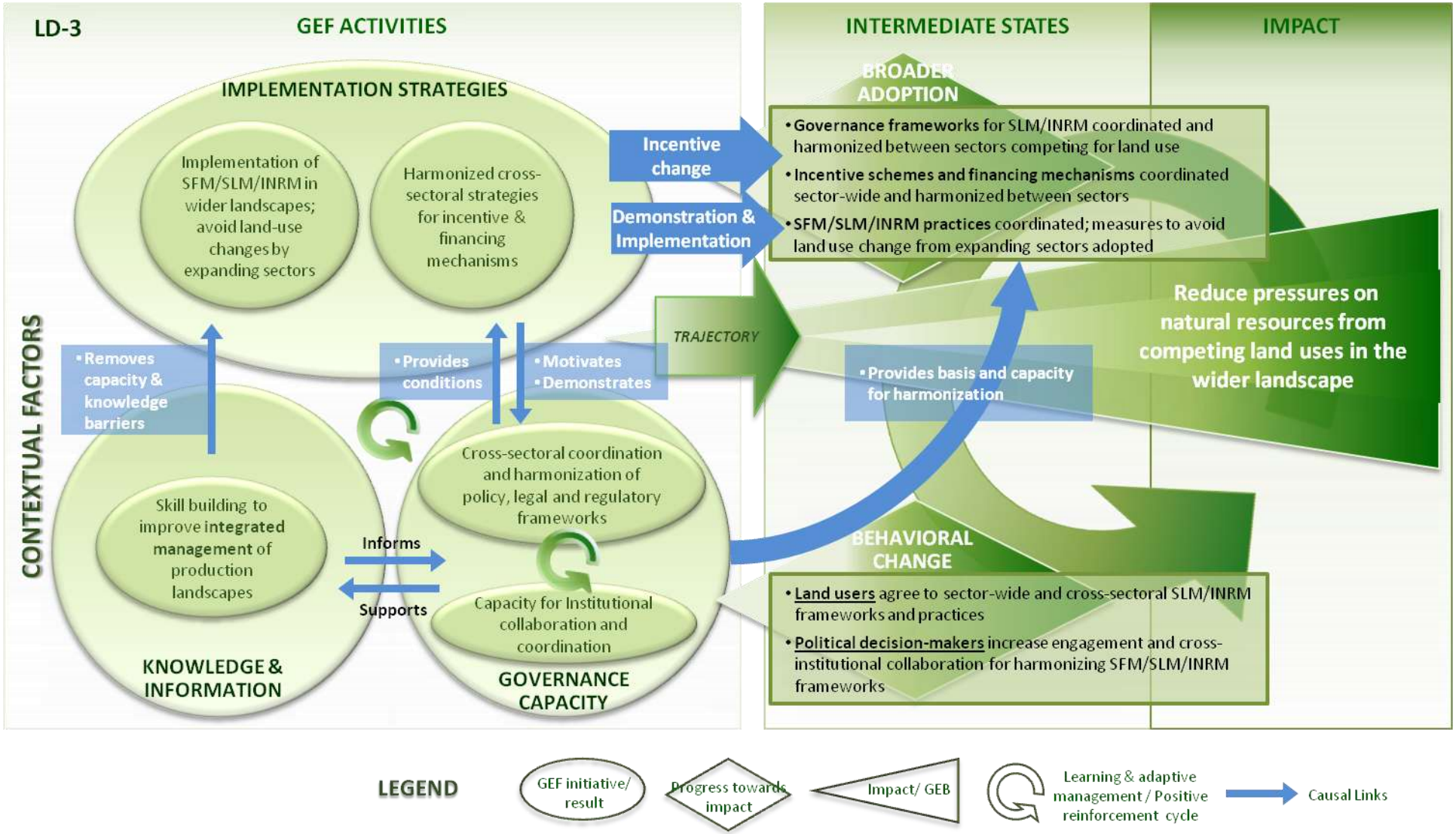


Figure 6: Elements and causal links of LD-3

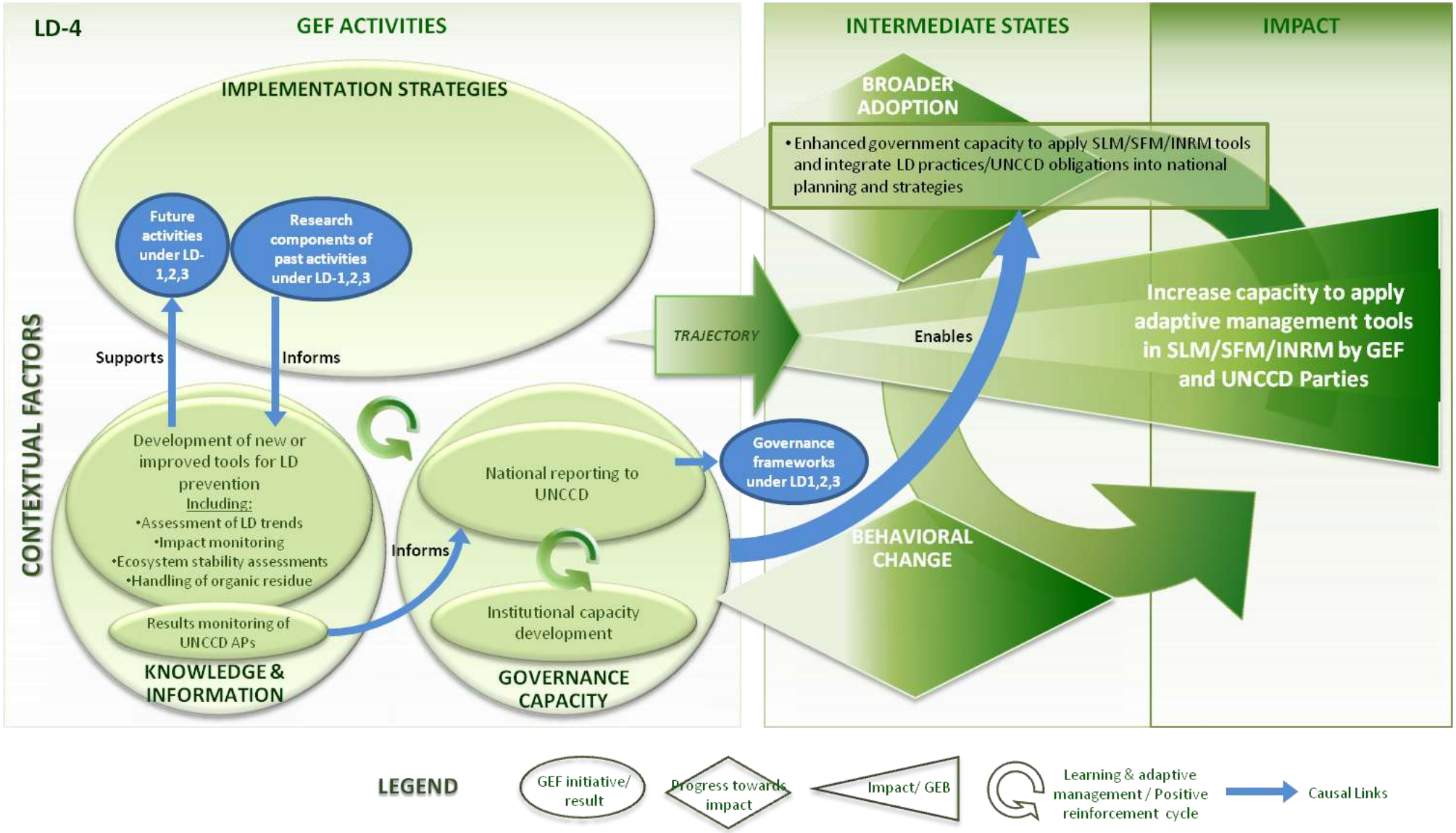


Figure 7: Elements and causal links of LD-4

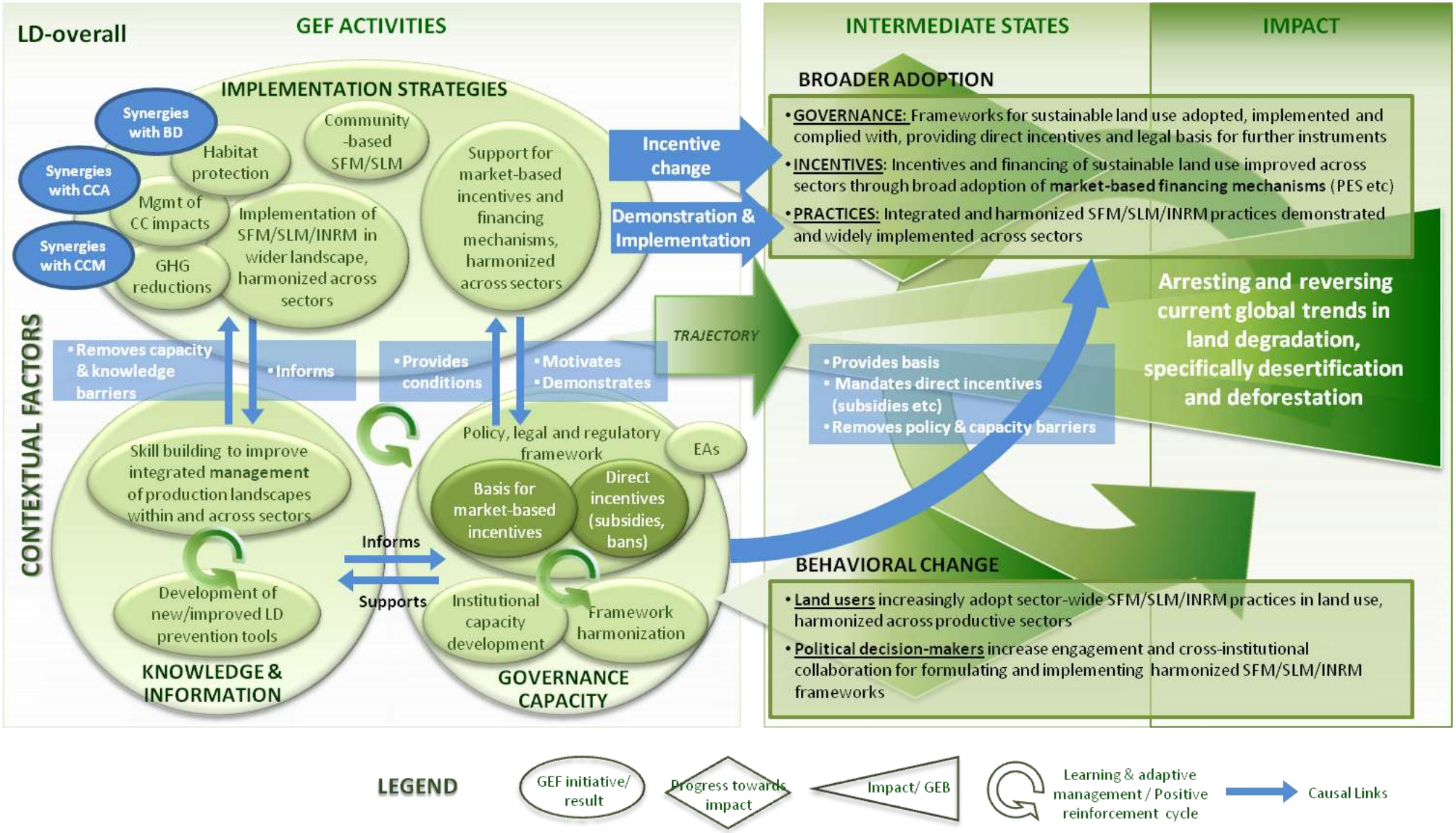


Figure 8: Elements and causal links of GEF-5 Strategy for Land Degradation

3. ANALYSIS OF CONVENTION GUIDANCE

3.1 Approach to convention guidance

One factor that influences the characteristics of the GEF Focal Area Strategies is the guidance the GEF receives from the Conference of the Party (COP) of international conventions. The influence of convention guidance on the GEF Focal Area Strategies is particularly important in the context of international conventions the GEF serves as financial mechanisms, namely the CBD, UNFCCC, UNCCD and the Stockholm Convention. Accordingly, the analysis of convention guidance primarily focuses on GEF support in the areas of Biodiversity, Climate Change, Land Degradation and Chemicals. In order to assess the way in which Focal Area Strategies reflect convention guidance the *Evaluation of GEF Focal Area Strategies* conducted a full review of convention guidance issued by the COPs. The review includes the identification of guidance relevant to the GEF, a quantitative analysis of guidance over time, and a qualitative classification of each individual item of COP guidance. The full compilation of COP guidance can be found in Technical Paper 8.

Based on the guidance review, the *Evaluation of GEF Focal Area Strategies* conducted a "Guidance-Strategy-Mapping" identifying the links between guidance and Focal Area Strategies. The mapping illustrates how topics raised by the convention are reflected in the strategies and how the strategies in turn are shaped by different kinds of guidance. Stakeholder interviews, especially with the GEF Secretariat and convention secretariats, provided additional information for the analysis of the relationship between Focal Area Strategies and convention guidance.

3.2 Quantitative summary of UNCCD guidance

Note: One "item" of guidance is defined as a distinguishable piece of information within a COP decision, usually a paragraph or sub-paragraph.[2]

Classification of UNCCD guidance to the GEF by themes

Table 6: UNCCD COP guidance to the GEF

Theme/COP	1	2	3	4	5	6	7	8	9	10	TOTAL
I. OVERALL											
General							1				1
Designation as Focal Area					2						2
Strategy Alignment/Focal Area Strategy							1	2		1	4

[2] On counting COP guidance: The table summarizing convention guidance to the GEF presented in OPS4 counts the number of Articles in COP Decisions directed to the GEF. The numbers presented in figure 7, which will also be used for OPS5, count all items of guidance defined as a "distinguishable piece of information within a COP decision" (usually a paragraph or sub-paragraph). Accordingly, the reported number is significantly higher than in OPS4.

II. FUNDING PRIORITIES											
Funding priorities (general)						1		1	1		3
Capacity Development							2			2	4
National reporting & Action Plans							3	1	2	2	8
Support to GM		1									1
Special initiatives							1			1	2
III. OPERATIONAL ISSUES											
GEF reporting	1						2	2	4		9
Resource mobilization	1			1	1			1			4
Resource allocation									1	1	2
Resource approval and disbursement procedures							1	2	1	1	5
Incremental costs							1				1
Institutional cooperation			1			1	3				5
Memorandum of Understanding							2				2
TOTAL	**2**	**1**	**1**	**1**	**3**	**2**	**17**	**9**	**9**	**8**	**53**

Overall amount of guidance

Figure 9: Overall amount of guidance to the GEF by UNCCD COP

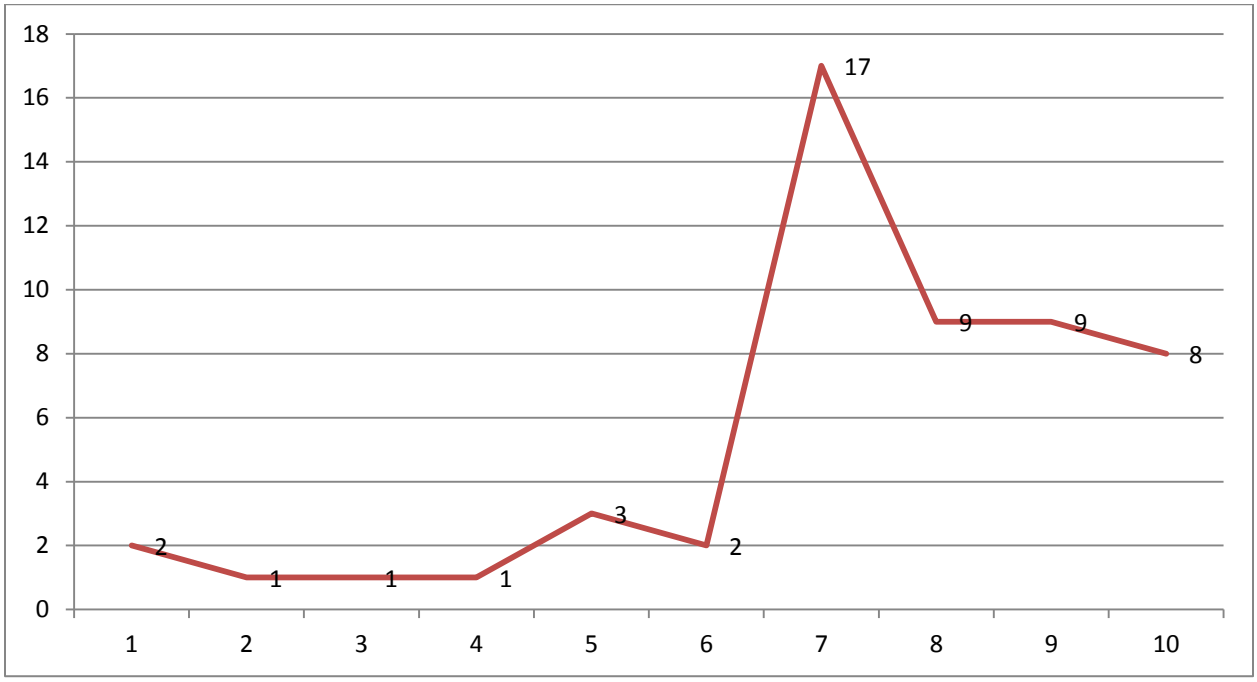
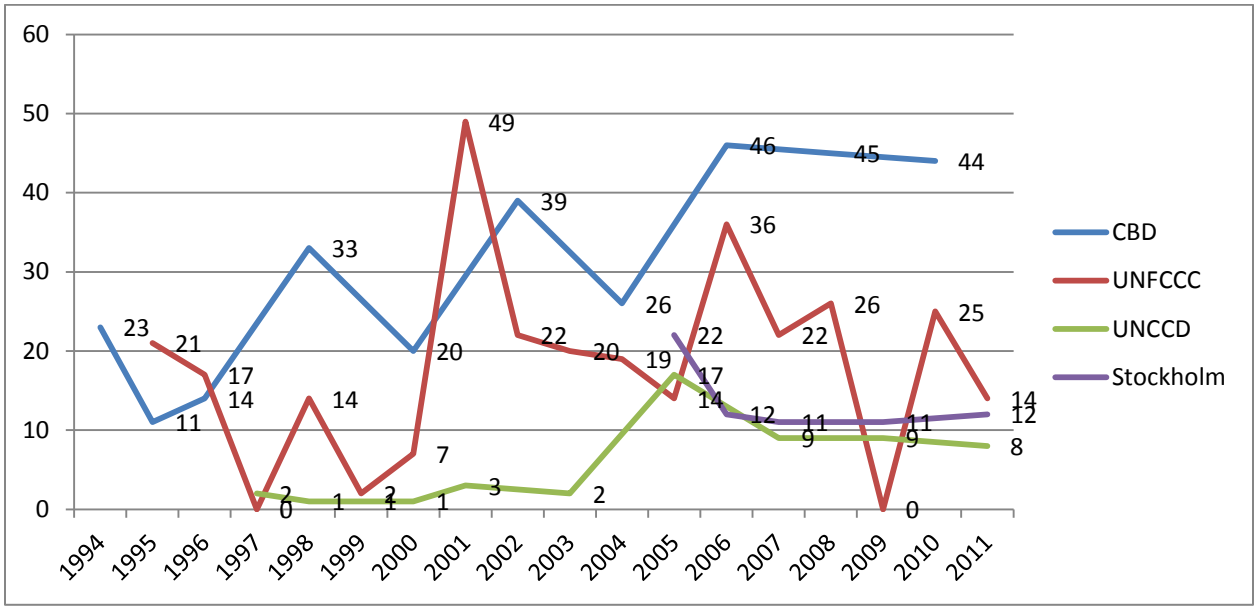


Figure 10: Overall amount of UNCCD guidance in comparison with other conventions



Convention	CBD	UNFCCC	UNCCD	Stockholm
Time period	1994-2010	1995-2011	1997-2011	2005-2011
Cumulative items of Guidance	301	308	53	68

First COP mentioning of different program priorities

Table 7: Chronology of UNCCD COP guidance to the GEF

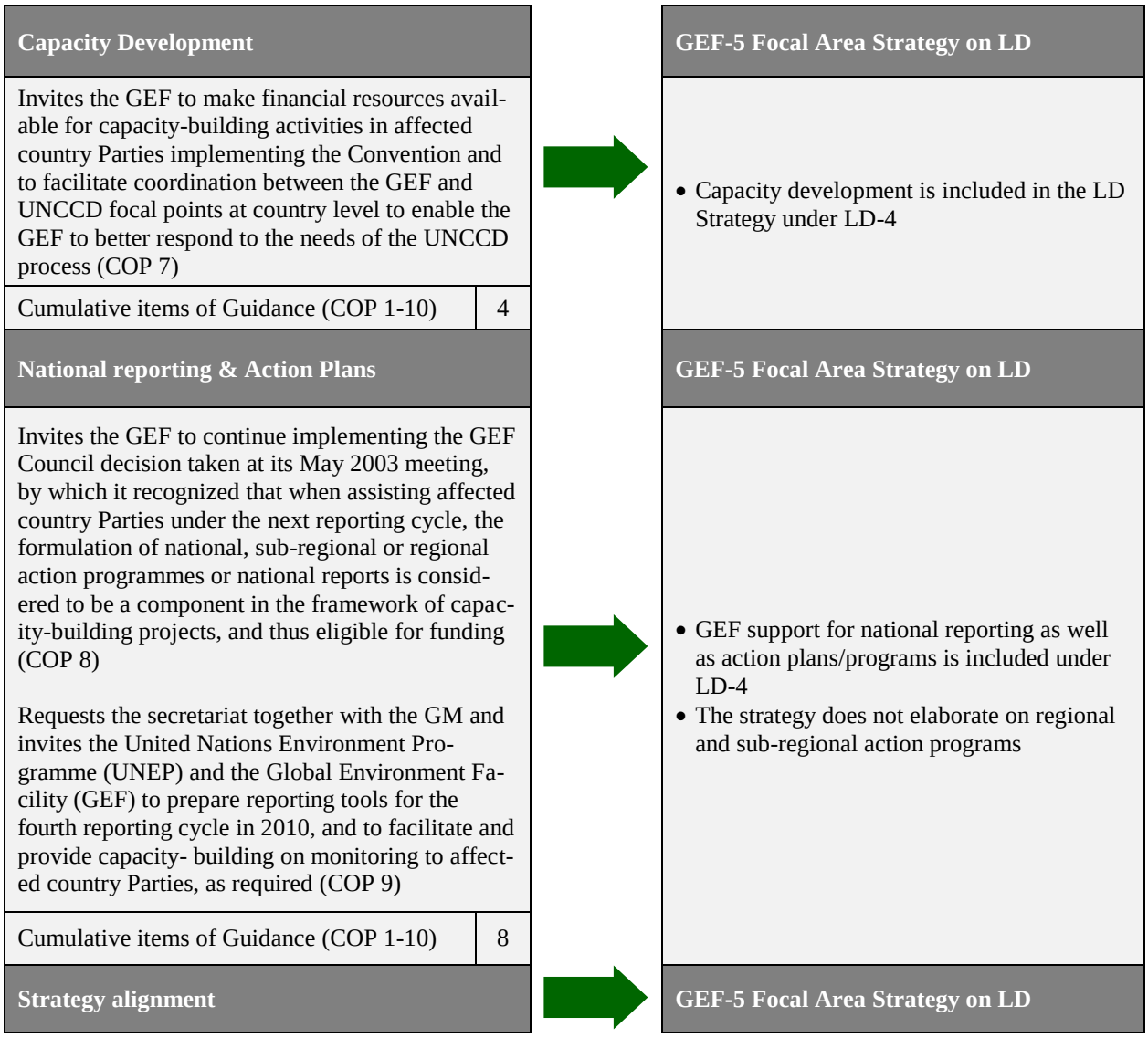
Theme/COP	1	2	3	4	5	6	7	8	9	10
GEF reporting	X									
Resource mobilization	X									
Support to GM		X								
Institutional cooperation			X							
Designation as Focal Area					X					
Funding priorities (general)						X				
General							X			
Strategy Alignment/Focal							X			
Capacity Development							X			
National reporting & Action							X			
Special initiatives							X			
Resource approval and dis-							X			
Incremental costs							X			
Memorandum of Under-							X			
Resource allocation									X	

3.3 Guidance-Strategy Mapping

In the following mapping of convention guidance to the GEF-5 Strategy, only convention guidance is included that was issued before the GEF-5 Strategies went into effect on 1 July 2010. The mapping includes all topics of convention guidance that are to be addressed by the Focal Area Strategies. Operational issues concerning the overall procedures of the GEF (project cycle, co-financing, resource allocation etc.) as well as topics addressed by special GEF policies (gender, private sector engagement etc.) are addressed through channels other than the FA Strategies and are therefore not included in the Guidance-Strategy Mapping.

Since the GEF has become the financial mechanisms of the UNCCD comparably recently, the amount of substantive guidance relevant to the formulation of the Focal Area Strategy is still limited.

Figure 11: Guidance-Strategy Mapping for GEF-5 FA Strategy on Land Degradation



Invites the GEF to take The Strategy into account when planning and programming for the next replenishment period, in order to facilitate the effective implementation of the Convention (COP 8)	
Cumulative items of Guidance (COP 1-10)	4

- LD-4 includes support for "Alignment of national reporting with revised UNCCD action programs in the context of the UNCCD 10-year strategy"

Guidance issued after GEF-5 Strategy came into effect

Capacity development (access to resources)	
Invites the Global Environment Facility, in further enhancing resource allocation during future replenishments, to consider increasing allocations to the land degradation focal area, depending on the availability of resources (COP 10)	
Cumulative items of Guidance (COP 1-10)	4

GEF-5 Focal Area Strategy on LD

- Guidance issued after GEF-5 Strategy came into effect

4. RESULTS OF REAL-TIME DELPHI PROCESS

4.1 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 Land Degradation

Question 1

Goal and objectives: To what extent do the four objectives of the LD 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?

Include considerations on the extent to which two major specified ways to effectively combat land degradation (stabilize ecosystem services and reduce livelihood vulnerability of rural populations) are supported by the latest scientific understanding?

Question 2

LD1 - Livelihoods of local communities: To what extent does current scientific understanding support the strategy's focus on the flow of agro-ecosystem services to sustaining the livelihoods of local communities as a means of controlling DLDD[3] [Objective 1]?

Consider if/how the expected "key expected outcomes and indicators" [Results Frame-work, p. 67-69] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

[3] DLDD = "Desertification, Land Degradation and Drought" [meaning as used in the UNCCD's Operational Objective No.3]

Question 3

LD2 – Marine fisheries, coasts and LMEs: To what extent does current scientific understanding support the strategy's focus on sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependent people [Objective 2]? Consider if/how the expected "key expected outcomes and indicators" [Results Framework, p. 67-69] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

Question 4

LD3 - Competing land uses: To what extent does current scientific understanding support the strategy's focus on reducing pressures on natural resources from competing land uses in the wider landscape as a means of controlling DLDD [Objective 3]? Consider if/how the expected "key expected outcomes and indicators" [Results Frame-work, p. 67-69] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

Question 5

LD4 - Adaptive management tools for SLM: To what extent does current scientific understanding support the strategy's focus on the need for adaptive management tools in SLM [Objective 4]? Consider if/how the expected "key expected outcomes and indicators" [Results Frame-work, p. 67-69] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

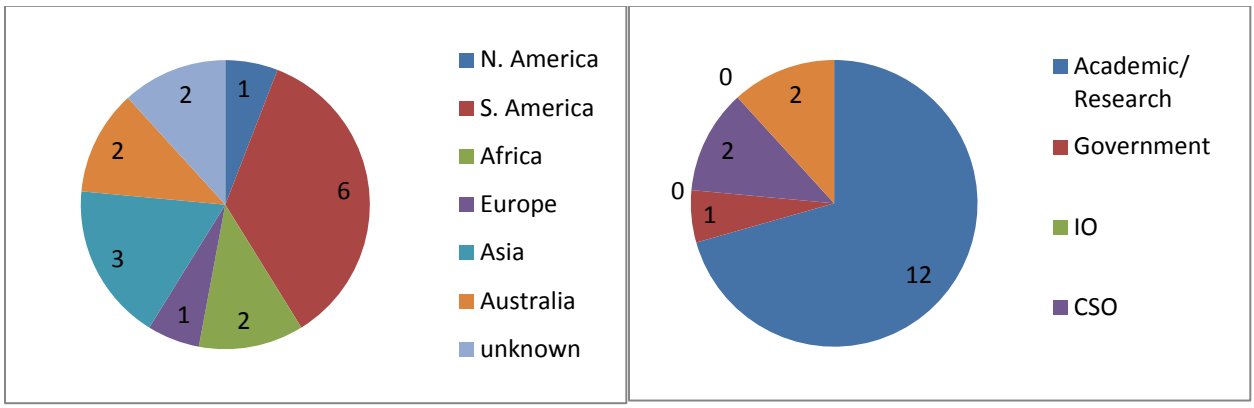
Question 6

FA partnership - forest ecosystem services in drylands: To what extent is the partnership with Biodiversity and Climate Change focal are-as to support Sustainable Forest Management and specifically the flows of forest ecosystem services in drylands as a means of controlling DLDD supported by the current scientific understanding? Is this more or less a scientifically backed priority than other issues that could have been included for FA partnerships? Please specify which issues could have been more important.

Question 7

What other issues not covered by the previous questions could be addressed by the LD Focal Area Strategy to better reflect and utilize current scientific understanding?

Demographic information on participants in LD RTD



4.2 Summary of quantitative results from RTD on Land Degradation

A major caveat to the quantitative responses presented in table 8 is the low number of experts that provided input on the Focal Area questionnaires for Land Degradation. The quantitative data 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 8: Quantitative results from RTD on Land Degradation

Land Degradation Focal Area Strategy – RTD quantitative responses				**Participants: 17**	
Question #	Mean	Min	Max	Median	Std. Dev.
#1 Overall goal and objectives	6.14	4	8	6	0.55
#2 Objective 1: "Agro-ecosystems"	5.71	5	9	5	0.523
#3 Objective 2: "Forest ecosystems"	7.14	5	9	7	0.55
#4 Objective 3: "Competing land uses"	5.85	3	9	5	0.867
#5 Objective 4: "SLM Adaptive Management"	6.16	2	10	5.5	1.09
#6 FA partnership on SFM	7.14	5	10	7	0.652

4.3 Summary of qualitative results from RTD on Land Degradation

As a consequence of the low number of participants in the RT Delphi process for Land Degradation, expert discussion among the participants was limited. The central issues raised in the qualitative answers were the high importance of considering trade-offs between productive land use and flows of ecosystem services. Especially, the issue of potential trade-offs between SLM and food and water provision to local communities was mentioned. Overall, the participants considered the provisions of the LD Strategy adequate in this respect. An issue that several participants proposed to strengthen in the strategy was the understanding of and approach to cultural barriers to the adoption of SLM practices. In addition, the central importance of land tenure rights was discussed during the Delphi.