



EVALUATION OF THE GEF FOCAL AREA STRATEGIES

TECHNICAL PAPER 3: INTERNATIONAL WATERS (UNEDITED)

(Prepared by the GEF Evaluation Office)

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1. INTRODUCTION

The *Evaluation of GEF Focal Area Strategies* is designed as a formative¹ 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 extent 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 INTERNATIONAL WATERS FOCAL AREA

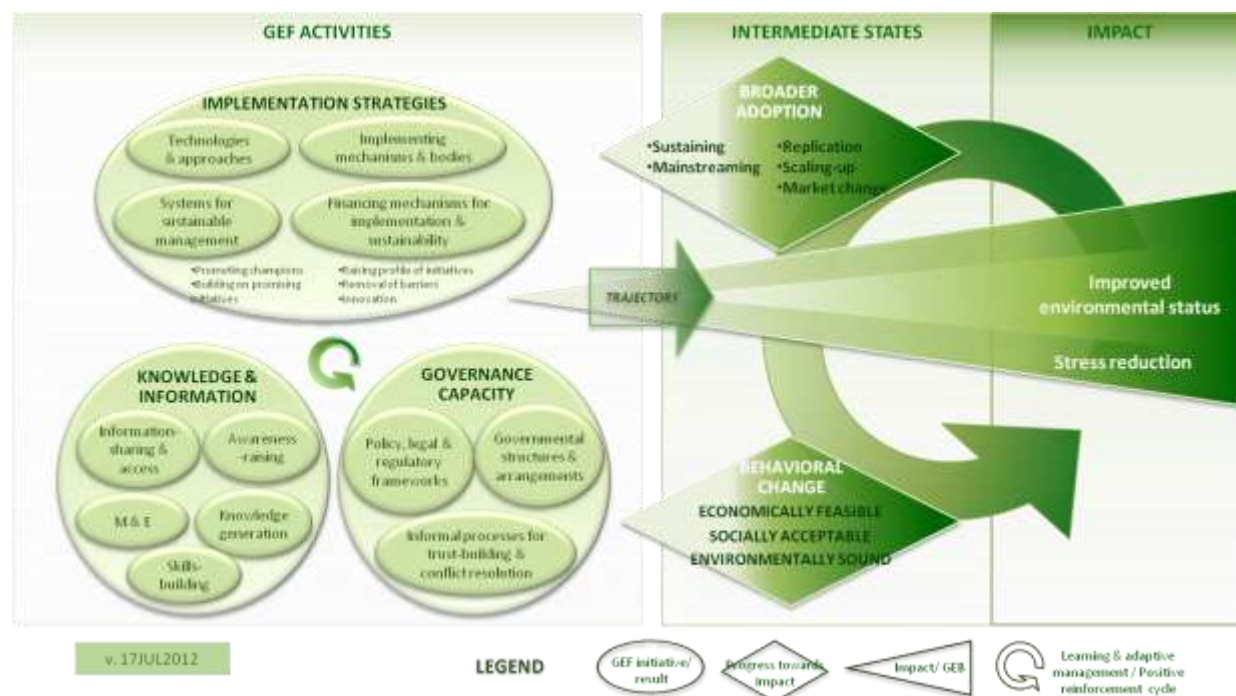
2.1 TOC Approach

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 LDCE/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.

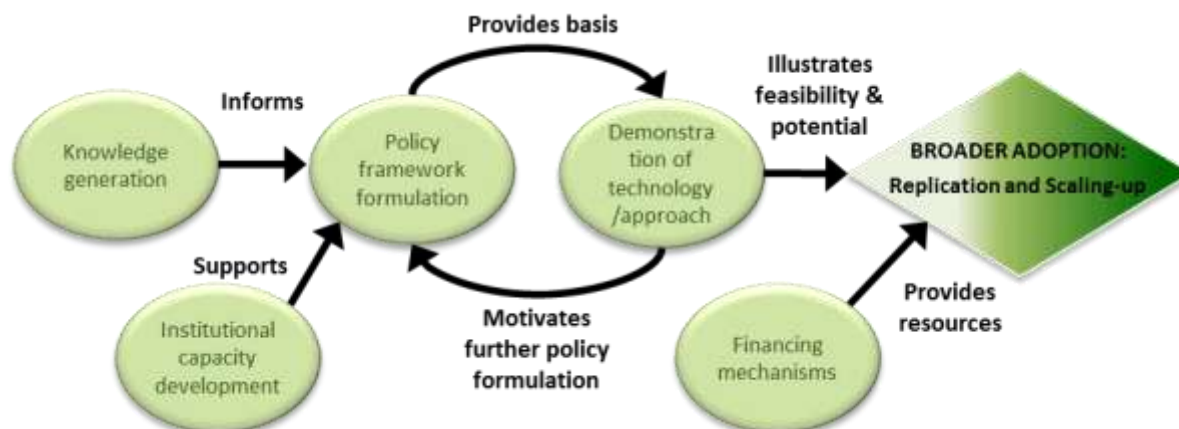
The construction of the TOCs proceeded in two steps. First, each strategy is disaggregated into its objectives in order to systematically identify different GEF activities articulated by the strategy, to assess the causal links between elements and to recognize the underlying assumptions these causal 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 IW Focal Area Strategy TOC

Overview of IW Focal Area Strategy objectives

Table 1 presents an overview of IW 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

International Waters Focal Area		
Goal	Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	
Objectives	Indicative allocation	Approved resources (as of 30 June 2012)
Objective 1: Catalyze multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins while considering climatic variability and change	\$130m / 31.0%	\$15m / 12.7%
Objective 2: Catalyze multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change	\$180m / 42.9%	\$61m / 51.7%
Objective 3: Support foundational capacity building, portfolio learning, and targeted research needs for joint, ecosystem-based management of trans-boundary water systems	\$90m / 21.4%	\$ 15m/ 12.7%
Objective 4: Promote effective management of Marine Areas Beyond National Jurisdiction (ABNJ)	\$20m / 4.8%	\$27m / 22.9%
Total	\$420m / 100%	\$118m / 100%

Note: NA – not available.

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

IW-1: Catalyze multi-state cooperation to balance conflicting water uses in trans-boundary surface and groundwater basins while considering climatic variability and change

Table 2: IW-1 results framework

Objective	Key Expected Outcomes	Key Targets	Core Outputs
IW-1	• Outcome 1.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates transboundary IWRM principles (including environment and groundwater) and policy/ legal/institutional reforms into national/local plans Indicator 1.1: <i>Implementation of national/local reforms; functioning of national inter-ministry committees</i> • Outcome 1.2: Transboundary institutions for joint ecosystem-based and adaptive management demonstrate sustainability Indicator 1.2: <i>Cooperation frameworks adopted and states contribute to financial sustainability</i> • Outcome 1.3: Innovative solutions implemented for reduced pollution, improved water use efficiency, sustainable fisheries with rights-based management, IWRM, water supply protection in SIDS, and aquifer and catchment protection Indicator 1.3: <i>Measurable water-related results from local demonstrations</i> • Outcome 1.4: Climatic variability and change as well as groundwater capacity incorporated into updated SAP to reflect adaptive management Indicator 1.4: <i>Updated SAP and capacity development surveys</i>	Co-financing ratio of 1:2 Multi-state- co-operation results in: adoption /implementation of national/local reforms in 50% of States and successful demonstration results in at least 50 % of States in 6-7 transboundary water systems	National and local policy and legal reforms adopted Cooperation frameworks agreed with sustainable financing identified Types of technologies and measures implemented in local demonstrations and investments Enhanced capacity for issues of climatic variability and change and groundwater management

Elements and chain of causality

IW-1, focusing on **interventions in cross-border surface and groundwater basins**, directly builds on the long-term process of GEF's past and ongoing (see also IW-3) support for foundational capacity development that resulted in the creation of multi-state cooperative structures as well as the formulation of agreed Strategic Action Programmes (SAP). Most IW-1 activities relate to GEF assistance for the implementation of interventions agreed upon in the existing SAPs. Given the level of funding allocated for the IW focal area for the GEF-5 period (low replenishment scenario), IW-1 support primarily focuses on catalyzing and ensuring the sustainability of multi-state cooperation by further strengthening legal and institutional capacity, policy reforms and management frameworks. Demonstration activities are expected to be limited to a modest scale at local levels.

Governance capacity

The further development of governance frameworks for multi-state cooperation necessary to implement agreed SAPs is a core concern of GEF support under IW-1. Building on the regional cooperation and agreements reached under the SAPs, GEF activities will facilitate the further development of **regional policies and joint legal and institutional frameworks**, providing the basis for successful multi-state collaborative action necessary to implement the SAP measures in the long-term. In the context of IW-1, the IW strategy particularly highlights the use of **Integrated Water Resources Management (IWRM) plans/policies** as a proven and effective tool for balancing conflicting water uses at the basin level. Consequently, GEF activities are envisioned to support the formulation and establishment of IWRM plans/policies building on the agreed SAPs.

In order to further strengthen the capacity for the implementation of SAPs and IWRM plans/policies, IW-1 includes GEF support for **policy, legislative and institutional reform at the national and local level** in participating states as well as assistance for development and formulation of national policies. **Nation inter-ministry committees** to enhance policy cooperation are highlighted as one effective instrument for facilitating national reforms. GEF support aims to create an enabling environment for SAP/IWRM development and implementation as well as to increase recipient countries' capacity to negotiate further regional treaties and policy frameworks addressing surface/groundwater basins.

Knowledge & Information

The GEF-5 IW strategy across objectives supports the refinement of approaches and instruments, including **updates of the SAPs**, based on the newest knowledge and information. In the context of IW-1, the strategy highlights two aspects in accordance with WSSD targets:

- a) **Climatic variability and change:** GEF activities are envisioned to support the integration of climatic considerations, especially implications for floods and droughts, into IWRM plans and policies.
- b) **Surface- and groundwater management:** GEF support under IW-1 includes the incorporation of new knowledge and improvements in management of surface and groundwater into IWRM plans and policies.

Implementation strategies

Within the limits of its resource allocation, IW-1 envisions support for the implementation of concrete measures identified in the SAPs and IWRM plans. In particular, the strategy highlights GEF assistance for demonstrating innovative measures and approaches to water quantity and quality concerns such as pollution reduction, improvements in water-use efficiency, sustainability of fisheries through rights-based management, water supply protection in SIDS, and aquifer and catchment protection.

Broader adoption and behavioral change

GEF support under IW-1 is aimed at catalyzing multi-state cooperation and increasing the **stability and sustainability** of regional arrangements for collaborative action. Support for governance capacity at the regional, national and local level is envisioned to create a solid basis for long-

term cooperation on transboundary issues. Regional arrangements and joint implementation are envisioned to facilitate fundamental behavioral changes in terms of trust-building, tension reduction and overall regional integration. In turn, trust-building and integration facilitates long-term sustainability of cooperation frameworks. In addition, demonstrating the effectiveness of SAP and IWRM measures through pilot initiatives is envisioned to trigger **replication and scaling-up** of concrete interventions within the established regional cooperative frameworks. Ultimately, IW-1 envisions creating favorable conditions for previously negotiated regional cooperation to take full effect and remain stable and functional over time.

Key Assumptions underlying IW-1:

- Activities under IW-1 build directly on prior foundational activities during earlier GEF replenishment periods that are continued under IW-3
- The SAPs or comparable regional agreements, including the broader framework of trust- and confidence as well as coordination mechanisms between states, provide a solid basis for the implementation of collaborative action
- Building the foundation necessary for sustainable multi-state cooperative action requires long-term processes and corresponding long-term GEF support
- Further strengthening of policy, legal and institutional frameworks and capacity, building on existing agreements, can enhance the stability, sustainability and effectiveness of multi-state cooperative frameworks
- Demonstration of cooperative action and concrete measures can further catalyze multi-state cooperation on surface/groundwater management and trigger replication and scaling-up
- Transboundary cooperation on surface and groundwater resources contributes to broader regional political and economic integration and stability
- Long-term sustainability of cooperative structures becomes especially important in light of increasing pressure due to climate change and variability
- Current knowledge on climatic variability and change needs to be integrated into IW-1 activities to ensure the long-term effectiveness of GEF support

IW-2: Catalyze multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change

Table 3: IW-2 results framework

Objective	Key Expected Outcomes	Key Targets	Core Outputs
IW-2	• Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/ institutional reforms into national/local plans Indicator 2.1: <i>Implementation of national/local reforms; functioning of national inter-ministry committees</i> • Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability Indicator 2.2: <i>Cooperation frameworks adopted & include sustainable financing</i> • Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results Indicator 2.3: <i>Measurable results for reducing land-based pollution, habitat, and sustainable fisheries from local demonstrations</i> • Outcome 2.4: Climatic variability and change at coasts and in LMEs incorporated into updated SAP to reflect adaptive management and ICM principles (including protection of “blue forests”) Indicator 2.4: <i>Updated SAPs and capacity development surveys</i>	1:2 co-financing ratio Multi-state co-operation results in: adoption/ implementation of national/local reforms in 50% of States and successful demonstrations results for at least 50 % of States in 5-6 LMEs	National and local policy/legal/institutional reforms adopted Agreed commitments to sustainable ICM and LME cooperation frameworks Types of technologies and measures implemented in local demonstrations and investments Enhanced capacity for issues of climatic variability and change

Elements and chain of causality

IW-2, focusing its efforts on **marine fisheries, coastal zones and large marine ecosystems** (LMEs), largely applies the same causal chain described for IW-1: support for SPA implementation through further strengthening legal and institutional capacity, policy reforms and management frameworks accompanied by demonstration of innovative solutions within given funding constraints. Integrated Coastal Management (ICM) and ecosystem-based approaches provide guiding principles and practices for GEF supported activities.

Governance capacity

Building on long-term foundation building and agreed SAPs, IW-2 supports the further improvement and strengthening of governance frameworks. IW-2 prioritizes **policy, legal and institutional reforms** as well as the establishment of **multi-agency strategic partnerships**, especially for recovering and sustaining fish stocks. Capacity development efforts include the development and formulation of corresponding legal frameworks on the regional and national level. For the implementation of national and local level reforms, inter-ministry committees are highlighted as an effective instrument.

As part of comprehensive policy, legal and institutional reforms, IW-2 includes assistance for incorporating **ICM principles** into governance frameworks on all levels to guide spatial planning and management of coastal areas and, where appropriate, adjacent freshwater basins (linking IW-1 and IW-2). In the same way, IW-2 includes support for the development and integration of **ecosystem based approaches** in policies, legal and institutional arrangements relating to LMEs.

Knowledge & Information

IW-2 highlights GEF support for the incorporation of new information and knowledge on **climatic variability and change** into the entire spectrum of supported activities, including corresponding SAP updates.

Implementation strategies

Demonstration activities under IW-2 are envisioned to follow the measures agreed on in the SAPs, building on strengthened governance capacity and incorporating ICM principles as well as ecosystem based approaches to LMEs. IW-2 makes explicit reference to pilot investments in the following areas:

- a) Habitat restoration and limited use designations (MPAs, “fish refugia”, “blue forests”)
- b) Sustainable alternative livelihood methods (sustainable mariculture)
- c) Promotion of less destructive gear/approaches
- d) Port management

Broader adoption and behavioral change

In parallel to GEF support under IW-1, IW-2 activities are also aimed at catalyzing multi-state cooperation and increasing the **stability and sustainability** of regional arrangements for collaborative action. Support for governance capacity at the regional, national and local level is envisioned to create a solid basis for long-term cooperation on marine fisheries, coastal zones and LMEs. Regional arrangements and joint implementation are envisioned to facilitate fundamental behavioral changes in terms of trust-building, tension reduction and overall regional integration. In turn, trust-building and integration facilitates long-term sustainability of cooperation frameworks. Demonstration of the feasibility and effectiveness of SAP measures through pilot initiatives, following ICM principles/practices as well as ecosystem-based approaches, is envisioned to trigger **replication and scaling-up**. As under IW-1, IW-2 envisions aims at creating favorable conditions for regional cooperation to remain stable and effective over time.

Key Assumptions underlying IW-2:

- Activities under IW-2 build directly on prior foundational activities during earlier GEF replenishment periods that are continued under IW-3
- The SAPs or comparable regional agreements, including the broader framework of trust- and confidence as well as coordination mechanisms between states, provide a solid basis for the implementation of collaborative action
- Building the foundation necessary for sustainable multi-state cooperative action requires long-term processes and corresponding long-term GEF support
- Further strengthening of policy, legal and institutional frameworks and capacity, building on existing agreements, can enhance the stability, sustainability and effectiveness of multi-state cooperative frameworks
- Demonstration of cooperative action and concrete measures can further catalyze multi-state cooperation on marine fisheries, coasts and LMEs
- Current knowledge on climatic variability and change needs to be integrated into IW-2 activities to ensure the long-term effectiveness of GEF support

IW-3: Support foundational capacity building, portfolio learning, and targeted research needs for joint, ecosystem-based management of trans-boundary water systems

Table 4: IW-3 results framework

Objective	Key Expected Outcomes	Key Targets	Core Outputs
IW-3	• Outcome 3.1: Political commitment, shared vision, and institutional capacity demonstrated for joint, ecosystem-based management of water-bodies and local ICM principles Indicator 3.1: <i>Agreed SAPs at ministerial level with considerations for climatic variability and change; functioning national inter-ministry committees; agreed ICM plans</i> • Outcome 3.2: On-the-ground modest actions implemented in water quality, quantity (including basins draining areas of melting ice), fisheries, and coastal habitat demonstrations for “blue forests” to protect carbon Indicator 3.2: <i>Measurable results contributed at demo scale</i> • Outcome 3.3: IW portfolio capacity and performance enhanced from active learning/KM/experience sharing Indicator 3.3: <i>GEF-5 performance improved over GEF 4 per data from IW Tracking Tool; capacity surveys</i> • Outcome 3.4: Targeted research networks fill gaps Indicator 3.4: <i>Coral reef and nutrient reduction research results incorporated into new agency and GEF IW projects</i> • Outcome 3.5: Political agreements on Arctic LMEs help contribute to prevention of further depletion/degradation Indicator 3.5: <i>Agreements signed; AMAP monitoring shows no further depletion/ degradation of the Arctic LMEs supported by GEF</i>	Multi-state agreement on commitments to joint, ecosystem-based action in Strategic Action Programmes for 7-8 new transboundary water bodies with modest demonstrations 85% IW projects demonstrate active GEF portfolio experience sharing/learning	National inter-ministry committees established; Transboundary Diagnostic Analyses & Strategic Action Programmes; local IWRM or ICM plans Demo-scale local action implemented, including in basins with melting ice and to restore/protect coastal “blue forests” Active experience/sharing/learning practiced in the IW portfolio Arctic LMEs addressed with partners

Elements and chain of causality

While IW-1 and IW-2 focus on the improvement and strengthening of previously established frameworks for multi-state cooperation in order to facilitate SAP implementation, IW-3 provides the basis for these activities by providing continued support for long-term foundational capacity development as well as connected knowledge creation and sharing. Existing SAPs and regional agreements need continuous support and adjustments. At the same time, other regions are still in

the process towards regional cooperation and agreed SAPs and therefore require foundational support to be provided under IW-3.

Governance capacity

At the core of IW-3 is support for the emergence of structures/mechanisms for multi-state cooperation and the formulation of new SAPs. Building on the achievements of the past, IW-3 envisions support for capacity development as well as trust and consensus building among stakeholders. Instruments include stakeholder coordination, negotiation facilitation, and trust- and confidence building measures on the regional level as well as facilitating the translation of regional agreements on the national level, for example through national inter-ministerial committees.

The arrangements for multi-state cooperation on trans-boundary water systems (i.e. water systems covered under IW-1 as well IW-2) are envisioned to incorporate effective management approaches (ecosystem-based management, ICM, IWRM) and include newest information and knowledge on climatic variability and change, aquifer management, and gender mainstreaming. Consequently, IW-3 efforts are informed and supported by corresponding knowledge and information activities (see below).

Knowledge & Information

In order to ensure that IW-3 efforts on foundational capacity development (see above) reflect the most current state of knowledge and the best available information on specific regional conditions, IW-3 includes GEF support for a number of knowledge creation and sharing measures.

At the center of these efforts are the Transboundary Diagnostic Analyses which directly inform the development and formulation of SAPs. Support for limited targeted research to fill knowledge gaps is also included under IW-3. With regards to portfolio learning and sharing of knowledge and information, IW-3 explicitly mentions two mechanisms for knowledge exchange and best practice identification to be supported under the W strategy: South-South dialogues and Communities of Practice.

The strategy highlights the challenge of incorporating changing ecological conditions, especially driven by climatic variability and change, into existing and emerging governance and management frameworks, in particular “shifting currents and changes in distribution, abundance, and life cycles of marine resources as well as coastal storm vulnerability and sea-level rise.”

Implementation strategies

Under IW-3, limited local pilot activities are envisioned to demonstrate sustainable management approaches to transboundary water challenges. These local demonstrations are on the one hand aimed at demonstrating feasibility and effectiveness of concrete measures to be employed as part of emerging regional agreements. On the other hand, demonstration pilots can strengthen stakeholder participation and commitment, supporting the foundational efforts described above (see “governance capacity”).

Broader adoption and behavioral change

GEF supported efforts under IW-3 are envisioned to create the necessary level of trust, shared goals and visions as well as knowledge & information to lead towards political agreements and

commitments for multilateral joint actions and cooperation structures. IW-3 activities also aim to ensure that emerging cooperative structures incorporate proven and effective practices and principles (ICM, IWRM, ecosystem-based approaches, etc.). The new or improved SAPs resulting from IW-3 activities then become the basis for further efforts supported under IW-1 and IW-2.

Key Assumptions underlying IW-3:

- Multi-state cooperation is key for effective management of transboundary water-systems
- Building the foundation necessary for sustainable multi-state cooperative action requires long-term processes and corresponding long-term GEF support
- IW-3 continues comprehensive foundational activities during earlier GEF periods that created the basis for GEF support under IW-1 and IW-2
- GEF support can play an effective role in facilitating the emergence of a shared vision among stakeholders through trust-building, capacity development, organizational and coordination assistance etc.

IW-4: Promote effective management of Marine Areas Beyond National Jurisdiction (ABNJ)

Table 5: IW-4 results framework

Objective	Key Expected Outcomes	Key Targets	Core Outputs
IW-4	• Outcome 4.1: ABNJ (including deep-sea fisheries, oceans areas, and seamounts) under sustainable management and protection (including MPAs) Indicator 4.1: <i>ABNJ demo plans implemented; improved flag and port state enforcement of practices</i> • Outcome 4.2: Plans and institutional frameworks for pilot cases of ABNJ have catalytic effect on global discussions Indicator 4.2: <i>Increased emphasis on ABNJ in agencies/organizations compared to GEF 4</i>	50 % of demonstrations sustainable within institutions	Demonstration for management measures in ABNJ, (including deep-sea fisheries, ocean areas) with institutions

Elements and chain of causality

IW-4 addresses the specific challenge of managing marine Areas beyond National Jurisdiction (ABNJ) that continue to lack legal instruments and management options and therefore cannot be adequately addressed through GEF supported activities under IW 1-3. However, increasing attention to the challenge of ABNJ in the international arena (UN, CBD) provides momentum for addressing high seas issues through the GEF IW Focal Area. Consequently, ABNJ was included in the GEF-5 IW strategy even though it was originally envisioned to be addressed only under a high IW replenishment scenario. GEF activities under IW-4 will support the testing and piloting of approaches and technologies, contributing to the emergence of innovative solutions to the special challenges of ABNJ management. ABNJ issues are also addressed through a partnership between the IW and the Biodiversity Focal Areas, including a \$25 million Focal Area Set-Aside under the BD strategy focused on the protection of marine biodiversity in ABNJ. **Fisheries are identified by IW-4 as the “primary and most widespread threat to ecosystems in ABNJ/open oceans”.** Consequently, GEF support under IW-4 especially focuses on the reduction of the harmful effects from increasing pelagic fishing and bottom trawling.

Governance capacity

For strengthening the legal and institutional frameworks for protection of ABNJ under IW-4, **regional fisheries management organizations (RFMOs)** play a particularly important role as a facilitator of legal innovation, private-public partnerships, and stakeholder collaboration including fisheries industry and conservation groups. GEF support under IW-4 aims at strengthening the role of RFMOs by increasing their capacity and assisting them in fulfilling their important coordinative functions. In addition to RFMOs, GEF support under IW-4 builds on a spectrum of existing legal instruments (Regional Seas Agreements, IMO Special Areas/PSSAs, International Seabed Authority, etc.) to create **favorable conditions for the emergence of effective ABNJ**

management frameworks. GEF support strives to ensure that the frameworks and mechanisms of stakeholder cooperation follow best management practices and ecosystem-based approaches in the application of conservation tools such as Marine Protected Areas, spatial management, etc. The combination of all these measures creates the basis for testing concrete approaches to ABNJ management described in the following section.

Implementation strategies

Building on the efforts to strengthen stakeholder cooperation and governance capability with regard to ABNJ, IW-4 envisions supporting the **testing of concrete measures and approaches** for ABNJ management. Pilots are drawing on expertise from IW as well as BD focal areas and aim at holistic approaches to the ABNJ challenge of sustainable fisheries and conservation. Activities are to be implemented jointly and collaboratively through cooperative stakeholder arrangements that include industry as well as NGOs. The IW strategy mentions a number of instruments and technologies to be tested and further developed under IW-4 in order to make them applicable to ABNJs:

- a) Marine Protected Areas (MPAs) & Benthic Protected Areas (BPAs)
- b) Spatial Management
- c) Flag-state and port-state monitoring
- d) Promotion of less destructive gear/approaches
- e) Control of fishing practices

Broader adoption and behavioral change

GEF support to capacity development, governance frameworks and stakeholder coordination and collaboration with regard to ABNJ is aimed at creating fisheries mechanisms and institutions that are effective in implementing conservation policies and **sustainable over time**. These efforts on creating model institutional frameworks for ABNJ management are accompanied by pilot implementation of corresponding mechanisms aimed at demonstrating their feasibility and effectiveness, triggering **replication and scaling up** as well as creating additional incentives for stakeholders to engage in cooperative frameworks. Ultimately, IW-4 through its contribution to innovation explicitly envisions exerting a catalytic effect on the broader global discussions and action on ABNJ, increasing the emphasis on ABNJ issues in agencies and organizations.

Key Assumptions underlying IW-4:

- Regional fisheries organizations can play a key role in developing and implementing cooperative frameworks for joint management of ABNJ
- GEF can make a significant contribution to the emergence of innovative approaches to ABNJ management through support of testing/pilot activities

2.3 Overall TOC for GEF-5 Focal Area Strategy on International Water

GEF support under the IW Focal Area Strategy during GEF-5 is based on IW achievements during previous replenishment periods with regard to regional trust and confidence building, creation of legal and institutional frameworks and mechanisms for multi-state cooperation. The GEF-5 strategy envisions to continuing these foundational efforts (causal pathway 1) and to move forward into facilitating the implementation of concrete measures identified in previously agreed upon Strategic Action Programmes (causal pathway 2). In addition, the IW strategy includes the exploration of ABNJ management as a new area for GEF support (causal pathway 3).

Causal pathway 1: Laying the foundation

Following the successful example of GEF support during previous replenishment periods, the GEF-5 IW strategy envisions further GEF support to a spectrum of foundational activities that facilitate the emergence of stable cooperative structures between states and promote the establishment of regional Strategic Action Programmes (SAP). These activities are primarily supported under objective 3 of the IW strategy and create the basis for GEF activities under IW-1 and IW-2. In comparison to earlier GEF IW Strategies and Operational Programs, activities under IW-1 and IW-2 have a greater emphasis under the GEF-5 strategy due to the substantive foundational activities already implemented in previous GEF periods that formed the basis for the implementation of cooperative action now supported under the GEF-5 Strategy.

The long-term, continuous process that is envisioned to gradually lead towards a shared vision among states and an agreement on areas and mechanisms for cooperation is supported by a range of GEF activities from initial tension reductions and trust building to support of organizational processes and structures facilitating coordination and consensus building at the regional as well as national level (e.g. National Inter Ministry Committees). A shared vision is envisioned to underpin the formulation of SAPs. Furthermore, GEF activities also include direct technical assistance for the implementation of Transboundary Diagnostic Analyses (TDAs) and the development and formulation of SAPs as well as support for building adequate institutional and legal capacity within the participating states necessary to translate regional agreements into national policy, legal and regulatory frameworks.

One additional aspect highlighted in this causal pathway is GEF support to advance and share the information and knowledge relevant to multi-lateral action on transboundary water systems, especially through TDAs. Mechanisms like TDAs for knowledge creation and South-South Dialogue or Communities of Practice for information sharing aim at providing the best possible common knowledge base for the development of SAPs as well as corresponding implementation mechanisms. In sum, the long-standing GEF support for foundational capacity development that is continued under IW-3 lays the foundation for activities supported under IW-1 and IW-2.

Causal pathway 2: Supporting implementation

The second causal pathway, primarily reflected in IW-1 and IW-2, builds on previous foundational IW work and addresses the implementation of existing regional agreements, in particular the SAPs. Activities focus on two main areas: *balancing conflicting water uses in transboundary*

surface and groundwater basins (IW-1) and rebuilding marine fisheries and reducing pollution of coasts and Large Marine Ecosystems (IW-2). While concrete instruments obviously differ, the fundamental causal chain is largely identical for both objectives.

The causal chain puts emphasis on the strengthening and further development of existing legal and institutional frameworks to aid policy implementation. These efforts include assistance to the translation of regional agreements on the national level through national policy reforms and institutional capacity development as well as the development of concrete mechanisms and instruments for the implementation of measures identified and agreed on in SAPs and other forms of regional agreements. These efforts are accompanied by demonstrational investments in the implementation of concrete measures to illustrate the feasibility and effectiveness of initiatives and prepare the ground for replication and scaling up. However, given the funding constraints of the IW focal area, demonstrational elements are envisioned to be limited to a small scale on the local level.

Paralleling the information and knowledge efforts described under causal pathway 1, the second causal pathway also highlights the necessity to incorporate new knowledge and information as well as best management practices for the implementation of agreed measures. Sustainable management approaches, namely IWRM, ICM and ecosystem approaches, are to guide the development of legal and institutional frameworks as well as the implementation of concrete initiatives. In addition, continuous incorporation of newly emerging knowledge is highlighted by the IW strategy, in particular with regard to the adjustment of frameworks and practices to changing climatic conditions due to climate variability and change.

Causal pathway 3: Breaking new ground on ABNJ

Reflecting the growing international attention on the special challenges of Areas Beyond National Jurisdiction, the GEF-5 IW strategy under objective IW-4 envisions support for exploring instruments and mechanisms of effective ABNJ management. The strategy includes support for creating the necessary governance framework for coordinated action, paying special attention to the role of regional fisheries management organizations. In addition, the strategy envisions GEF support for the testing and demonstration of concrete ABNJ management measures and instruments in order to catalyze stakeholder participation and illustrate feasibility of existing solutions. GEF support under IW-4 therefore aims at breaking new ground regarding the challenging area of ABNJ management and hopes to facilitate the intensification of the global discussion on the issue.

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

- Multi-state cooperation is key for effective management of transboundary water-systems
- GEF support can play an effective role in facilitating the emergence of a shared vision among stakeholders through trust-building, capacity development, organizational and coordination assistance etc.
- Building the foundation necessary for sustainable multi-state cooperative action requires long-term processes and corresponding long-term GEF support
- Activities under IW-2 build directly on prior foundational activities during earlier GEF replenishment periods that are continued under IW-3
- The SAPs or comparable regional agreements, including the broader framework of trust- and confidence as well as coordination mechanisms between states, provide a solid basis for the implementation of collaborative action
- Further strengthening of policy, legal and institutional frameworks and capacity, building on existing agreements, can enhance the stability, sustainability and effectiveness of multi-state cooperative frameworks
- Demonstration of cooperative action and concrete measures can further catalyze multi-state cooperation on surface/groundwater management and trigger replication and scaling-up
- Transboundary cooperation on surface and groundwater resources contributes to broader regional political and economic integration and stability
- Long-term sustainability of cooperative structures becomes especially important in light of increasing pressure due to climate change and variability
- Current knowledge on climatic variability and change needs to be integrated into IW frameworks and implementation instruments to ensure the long-term effectiveness of GEF support
- Regional fisheries organizations can play a key role in developing and implementing cooperative frameworks for joint management of ABNJ
- GEF can make a significant contribution to the emergence of innovative approaches to ABNJ management through support of testing/pilot activities

2.4 Framework diagrams for TOC construction

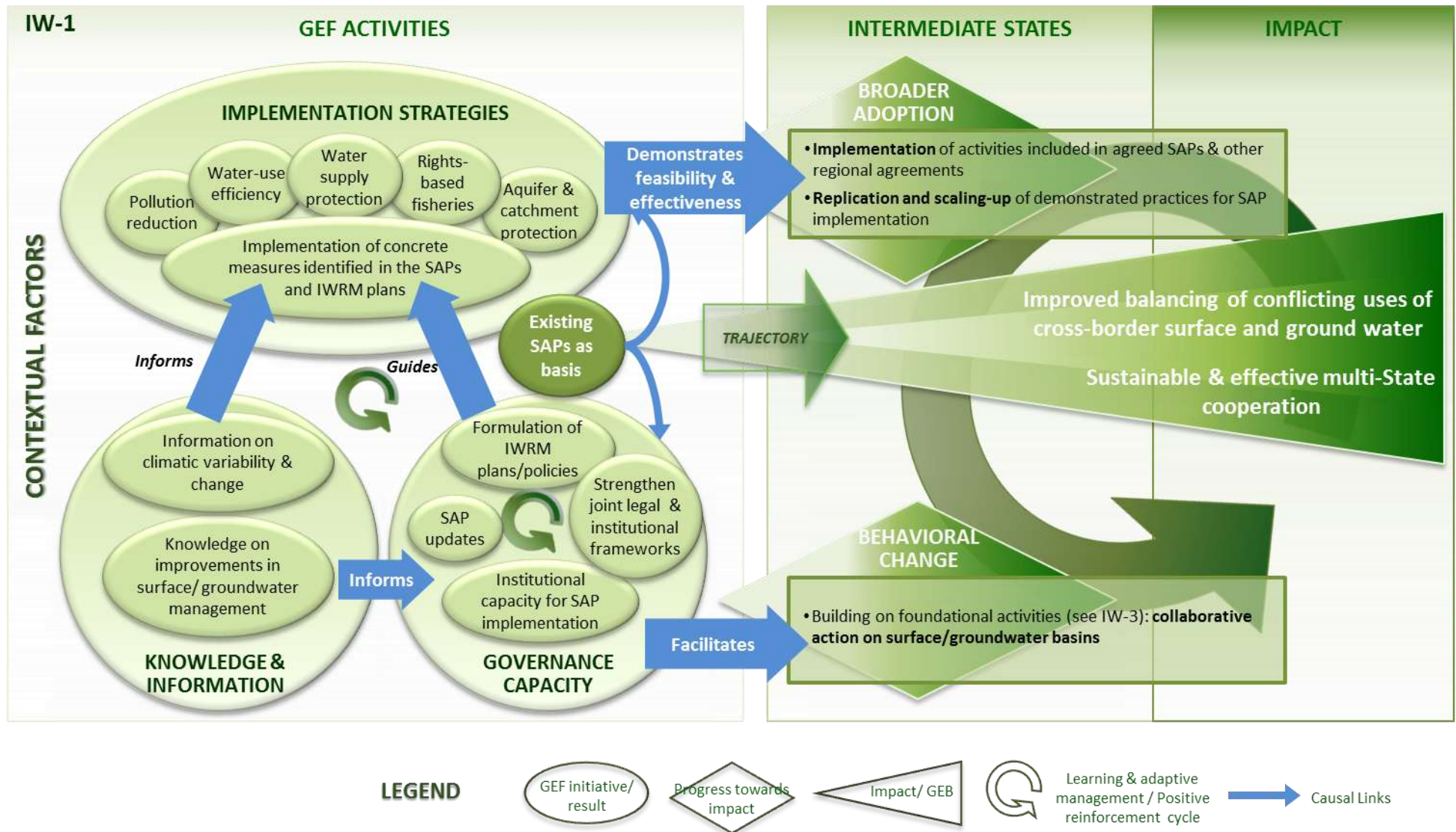


Figure 4: Elements and causal links of IW-1

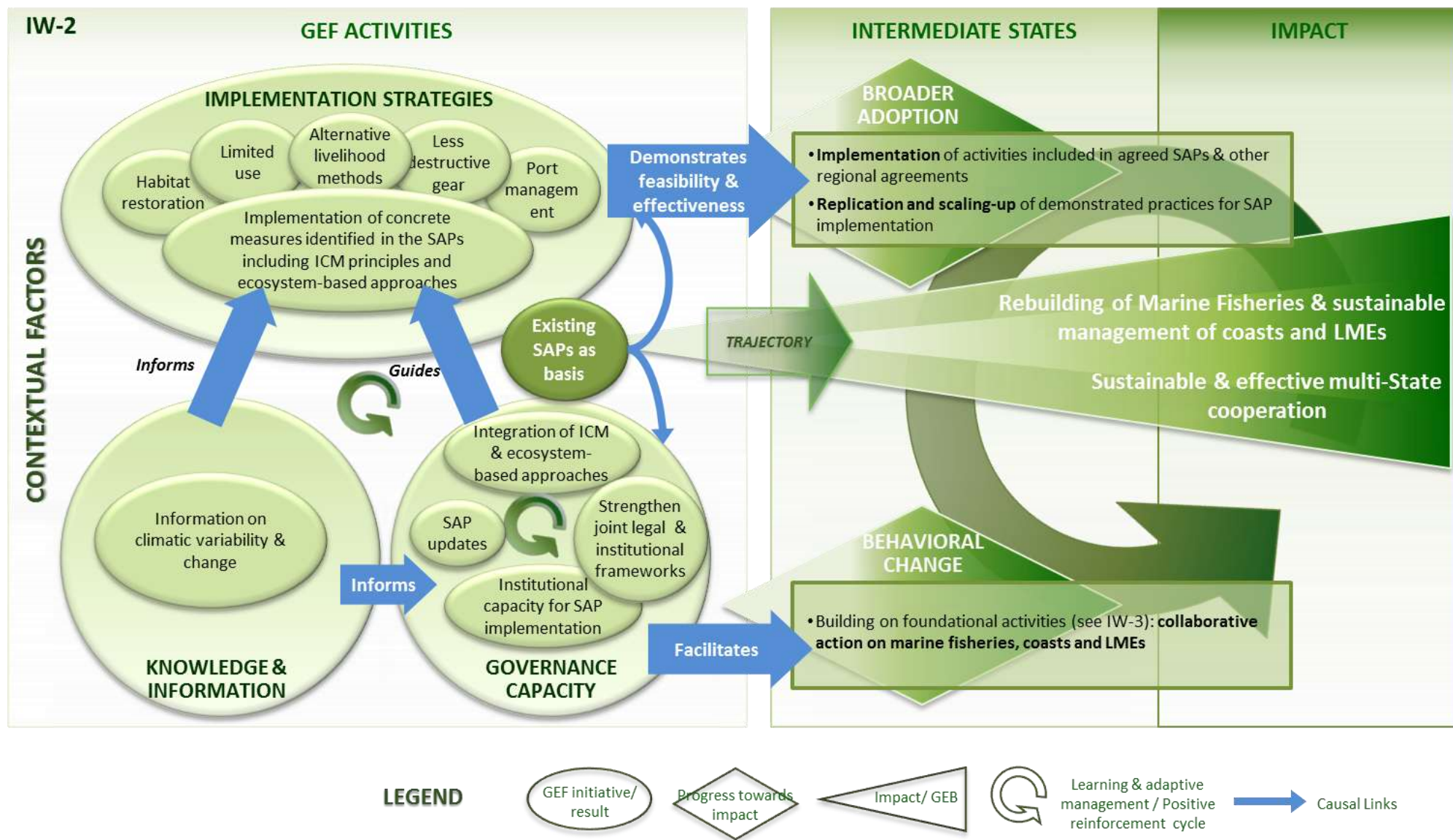


Figure 5: Elements and causal links of IW-2

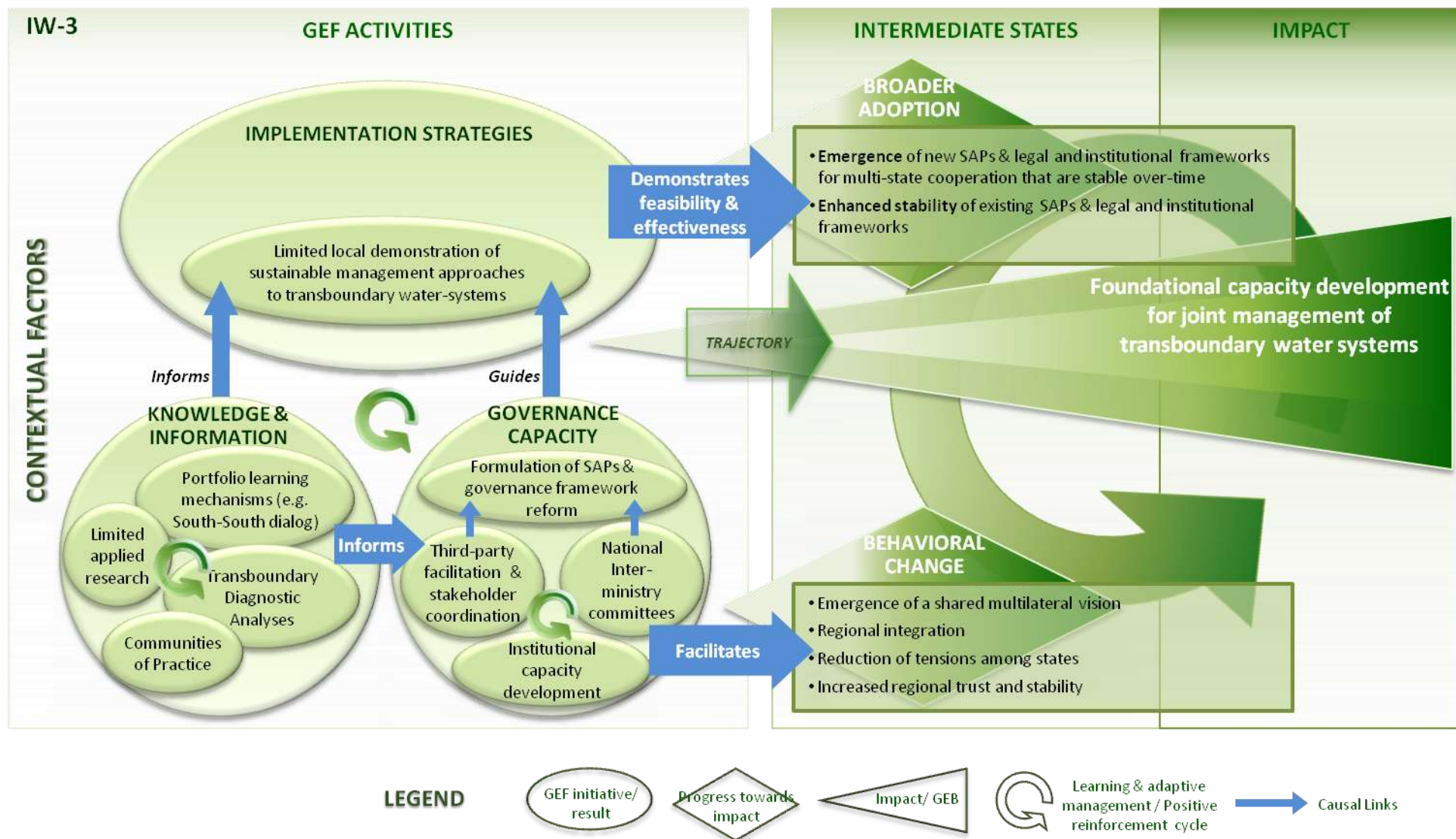


Figure 6: Elements and causal links of IW-3

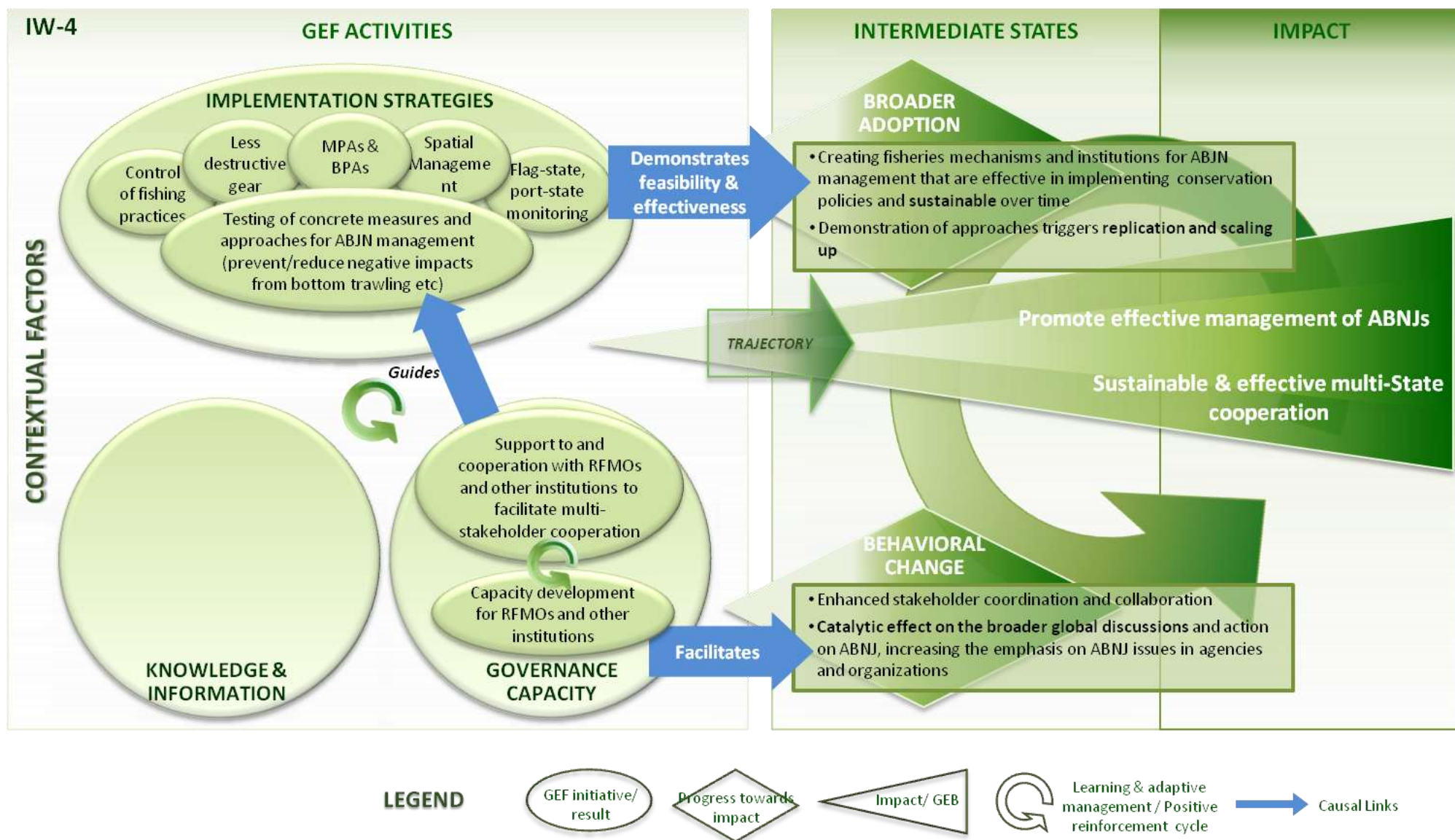


Figure 7: Elements and causal links of IW-4

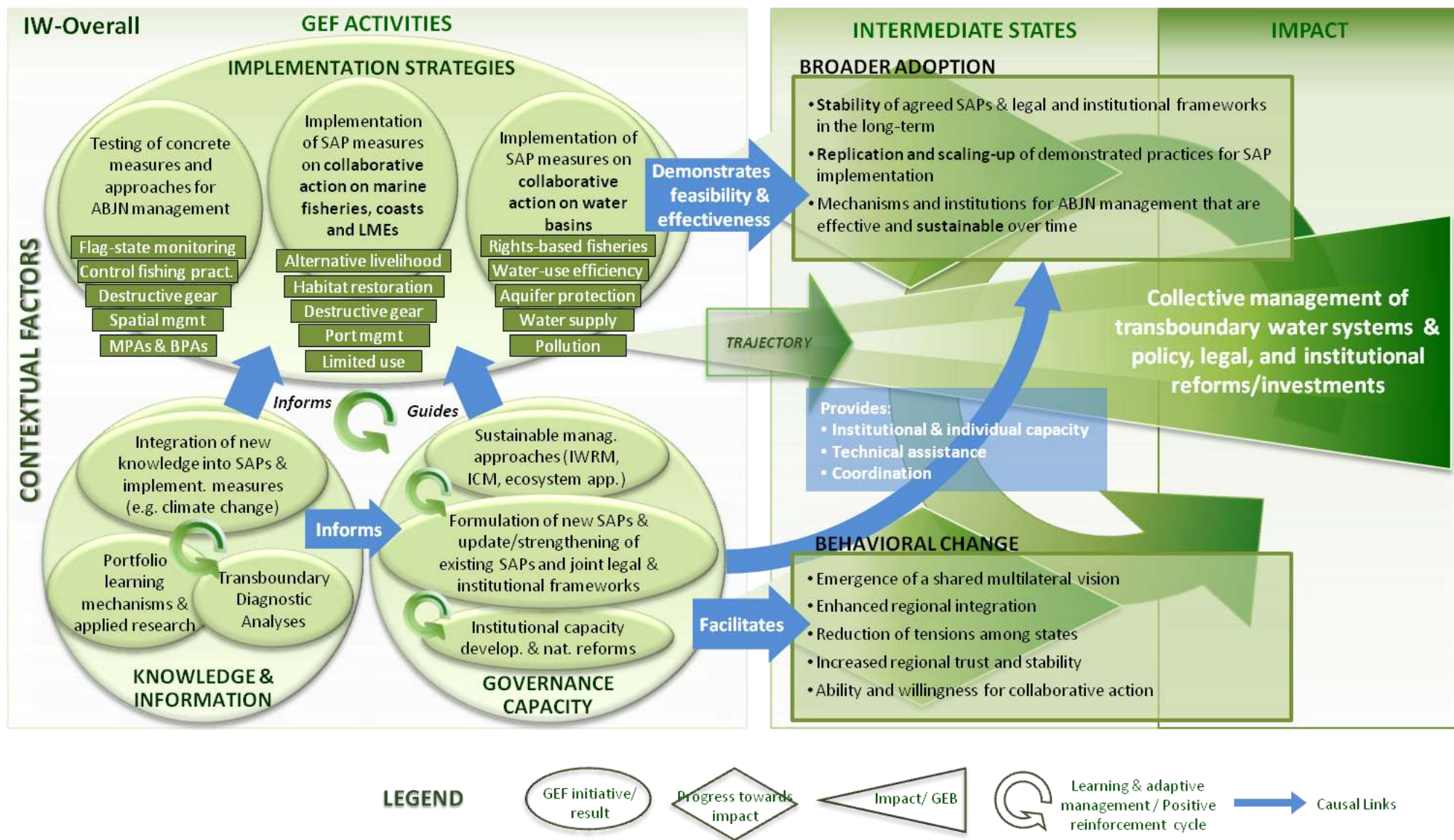


Figure 8: Elements and causal links of GEF-5 Strategy on International Waters

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 International Waters

Question 1

Goal and objectives: To what extent do the four objectives of the IW 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? Especially given the restricted funding allocated to this Focal Area, is the selection of objectives to be addressed sound from a scientific perspective?

Include considerations on the extent to which the goal and objectives reflect the demand for IW support by the countries engaged or to be engaged in transboundary waters collaboration, e.g. support to countries to work together in reaching the scales of action appropriate to the problems being tackled.

Question 2

IW1 - Multi-state cooperation to balance conflicting water uses: To what extent does current scientific understanding support the strategy's focus on conflicting water uses in trans-boundary surface and groundwater basins while considering climatic variability and change as a means of protecting international waters [Objective 1]? Consider if/how the expected "key expected outcomes and key targets" [Results Framework, p. 50-53] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

Question 3

IW2 - Marine fisheries, coasts and LMEs: To what extent does current scientific understanding support the strategy's focus on multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems [Objective 2]? Consider if/how the expected "key expected outcomes and key targets" [Results Framework, p. 50-53] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective. For example joint ecosystem-based and adaptive management frameworks for LMEs; innovative solutions for pollution reduction; prioritizing "blue forests" etc.

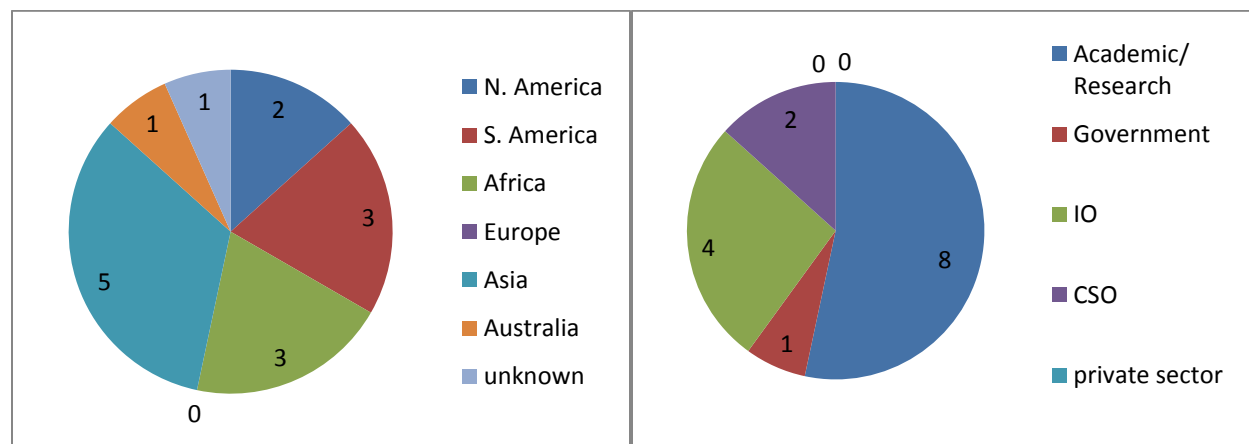
Question 4

IW3 - Foundational capacity building portfolio learning and targeted research: To what extent does current scientific understanding support the strategy's focus on foundational capacity building, portfolio learning, and targeted research for joint, ecosystem-based management of trans-boundary water systems [Objective 3]? Consider if/how the expected "key expected outcomes and key targets" [Results Framework, p. 50-53] reflect what current scientific understanding suggests regarding appropriate measures towards the achievement of the objective.

Question 5

IW4 - FA partnerships –Marine ABNJ: To what extent is the partnership with the Biodiversity focal area to protect marine ABNJ supported by the current scientific understanding? Is this more or less a scientifically backed priority than other issues that could have been included for cross-focal area arrangements? Please specify alternative issues.

Demographic information on participants in IW RTD



3.2 Summary of quantitative results from RTD on International Waters

A major caveat to the quantitative responses presented in table 6 is the low number of experts that provided input on the Focal Area questionnaires for International Waters. 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 6: Quantitative summary of RTD on IW

IW Focal Area Strategy– RTD quantitative responses				Participants: 15	
Question #	Mean	Min	Max	Median	Std. Dev.
#1 Overall goal and objectives	6.28	5	7	7	0.332
#2 Objective 1: “Conflicting water uses”	6	5	7	6	0.349
#3 Objective 2: “Marine fisheries, coasts, LMEs”	5.62	3	8	5.5	0.498
#4 Objective 3: “Foundational capacity”	5.85	5	8	5	0.425
#5 Objective 4: “Marine ABNJ”	5.42	3	8	5	0.566

3.3 Summary of qualitative results from RTD on International Waters

As a consequence of the low number of participants in the RT Delphi process for International Waters, expert discussion among the participants was limited. Some participants voiced the opinion that the fisheries related aspects of GEF support under IW were overemphasized. In addition, participants welcomed the strategies inclusion of ABNJ as an important new area for GEF activities.