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Agenda Item 09

EVALUATION OF THE INTERNATIONAL WATERS FOCAL AREA

(Prepared by the Independent Evaluation Office)

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ACRONYMS

ABNJ	Areas Beyond National Jurisdiction
ADB	Asian Development Bank
AfDB	African Development Bank
BBNJ	Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction
CAF	Development Bank of Latin America and the Caribbean
CHO-IP	Clean and Healthy Ocean Integrated Program
CI	Conservation International
CWM	Conjunctive Water Management
DIN	Dissolved Inorganic Nitrogen
EA	Enabling Activity
EAF	Ecosystem Approach to Fisheries
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
FAO	Food and Agriculture Organization of the United Nations
FSP	Full-Sized Project
GCP	Global Coordination Project
GEF	Global Environment Facility
GWP	Global Water Partnership
IDB	Inter-American Development Bank
ICM	Integrated Coastal Management
IEO	Independent Evaluation Office
IP	Integrated Program
IUCN	International Union for Conservation of Nature
IW	International Waters
IW:LEARN	International Waters Learning Exchange and Resource Network
IWC10	10th Global Environment Facility Biennial International Waters Conference
IWRM	Integrated Water Resources Management
KM	Knowledge Management
LAC	Latin America and the Caribbean
LME	Large Marine Ecosystem
M&E	Monitoring and Evaluation
MPA	Marine Protected Area
MSP	Medium-Sized Project
O&M	Operation and Maintenance
PEMSEA	Partnerships in Environmental Management for the Seas of East Asia
PFD	Program Framework Document
PIF	Project Identification Form

PROCARIBE+ Protecting and Restoring the Ocean's Natural Capital, building Resilience and Supporting Regionwide Investments for Sustainable Blue Socio-Economic Development
R2R Ridge to Reef
REBYC Reduction of Environmental Impact from Tropical Shrimp Trawling, through the Introduction of Bycatch Reduction Technologies and Change of Management
S2S Source to Sea
SAP Strategic Action Program
SIDS Small Island Developing States
TDA Transboundary Diagnostic Analysis
TOC Theory of Change
TWAP Transboundary Waters Assessment Programme
UNCCD United Nations Convention to Combat Desertification
UNDP United Nations Development Programme
UNECE United Nations Economic Commission for Europe
UNEP United Nations Environment Programme
UNFCCC United Nations Framework Convention on Climate Change
UNIDO United Nations Industrial Development Organization
WWF World Wildlife Fund

QUICK SCAN

1. Water is essential for all humans, animals, plants, and ecosystems to survive, grow, and thrive. The International Waters (IW) focal area within the Global Environment Facility (GEF) has been instrumental in fostering collaborative management of transboundary marine and freshwater ecosystems for global environmental benefits. Over the past decade, the GEF has shifted toward integrated programming, and this is the first assessment on whether and how the IW focal area has adapted its strategy in response to this shift. This evaluation has reviewed and synthesized available evaluative evidence on the relevance, effectiveness, coherence, impact, and sustainability of the GEF IW portfolio and its contribution to multi-focal area projects from GEF-5 to GEF-8.

2. The evaluation portfolio includes 277 projects (i.e., 44 closed, 153 ongoing, 80 at CEO endorsement stage) from GEF-5 to GEF-8, covering more than 140 countries. The total GEF funding for these projects was over $1.7 billion, with expected cofinancing of almost $17 billion. Approximately 40 percent of the portfolio projects are part of programs, while 60 percent are stand-alone projects. Geographically, Asia (67 projects with $399.6 million) and Africa (61 projects, $446.6 million) account for the largest share of projects and grants. Over 75 percent of the projects have been implemented by the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the Food and Agriculture Organization of the United Nations (FAO), and the World Bank.

FINDINGS AND CONCLUSIONS

Strategy, coherence, and relevance

3. The strategic priorities of the IW focal area have evolved in response to global priorities and emerging environmental issues. During GEF-5 and GEF-6, the focus was on transboundary cooperation in surface and groundwater basins, marine fisheries, coastal pollution reduction, large marine ecosystems (LMEs), foundational capacity building, research, and portfolio learning. In GEF-7 and GEF-8, the emphasis has been on the blue economy, ABNJ, and water security. Throughout these transitions**,** the IW focal area has consistently used transboundary diagnostic analysis–strategic action programs (TDA-SAP), enhancing regional coherence in transboundary water management and addressing relevant environmental issues across countries.

4. The IW focal area has been relevant to national, regional, and global priorities as evidenced by terminal evaluations, previous GEF Independent Evaluation Office (IEO) evaluations on water security, the lower Mekong River Basins, and integrated programs. Evaluation findings suggest that there are a limited number of GEF IW projects dedicated to

groundwater, and transboundary water bodies with the highest risks are not always covered, indicating the opportunities for further strengthening the GEF's IW relevance.

IW interventions and integration

5. From GEF-5 to GEF-8, the IW focal area addressed pollution reduction and sustainable fisheries as its most common thematic areas, while also promoting integrated programming approaches and strengthening the enabling environment. The majority of GEF-5 and GEF-6 projects incorporated at least one integrated approach, such as Integrated Water Resources Management, Integrated Coastal Management, and Ridge to Reef (R2R). Among currently active projects, key intervention areas include knowledge management, institutional capacity building, and policy and regulatory strengthening. An emerging area of work is the IW focal area's provision of technical support to countries on the implementation of the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ).

6. The IW focal area's mandate for transboundary cooperation has not been fully integrated or reflected within the GEF-8 integrated programs. From GEF-5 to GEF-8, GEF investments in the IW focal area have expanded from primarily supporting stand-alone IW projects to contributing to national and multi-focal area projects, integrated programs, and enabling activities related to the BBNJ Agreement. Despite the strategic emphasis on integration, these competing priorities risk diluting the IW focal area's core focus on transboundary cooperation. For example, the Clean and Healthy Ocean Integrated Program includes only a subset of countries from transboundary water bodies.

Performance, sustainability, and impacts

7. The performance of IW focal area projects has improved in recently completed GEF-5 and GEF-6 projects. Project ratings across all evaluation criteria were higher than the cumulative results from the pilot phase through GEF-6. Approximately 86 percent of recent projects received a satisfactory rating for outcomes, compared to 78 percent cumulatively. National and multi-focal projects have underperformed. Additionally, 73 percent of recent projects received a satisfactory rating for sustainability, compared to 65 percent cumulatively. These performance results are comparable to, or better than, those of the overall GEF portfolio.

8. Several factors affect sustainability of outcomes. Limited communication and coordination among projects and stakeholders, gaps in monitoring and evaluation—such as insufficient tracking of co-finance and socioeconomic benefits—and overly ambitious project designs, have impacted sustainability in GEF-5 and GEF-6 projects. Terminal evaluations also

highlighted that multi-focal area projects require a realistic scope and scale of interventions to avoid compromising both effectiveness and long-term sustainability.

9. Financial sustainability is essential for supporting long-term transboundary water management, yet current practices reveal gaps. GEF IW projects have often faced challenges with gaps between project phases, and the prevailing practice of deferring sustainability and exit planning until late in implementation period has not been effective or adequate. Furthermore, robust financial sustainability planning requires adequate training on available financing models and options.

10. Several IW projects have demonstrated catalytic effects in sustaining and scaling up interventions beyond the GEF project period. For example, the Global Maritime Energy Efficiency Partnerships (GloMEEP) project which aimed to reduce greenhouse gas emissions by supporting energy-efficient shipping, led to the establishment of the Global Industry Alliance (GIA) in 2017. The GIA, a public-private partnership, facilitated low-carbon shipping through research and development, technology demonstration, global dialogues, and capacity-building activities. This work continued with support from the International Maritime Organization and the Government of Norway through the launch of the GreenVoyage2050 Project in 2019.

11. Evidence from several terminal evaluations demonstrates that IW activities have contributed to socioeconomic co-benefits. For example, a terminal evaluation of the implementation of global and regional oceanic fisheries conventions in the Pacific SIDS reported that it contributed to an average increase of 6.25 percent in the fisheries sector employment between 2010 and 2019. Other evaluations highlighted additional co-benefits including increased employment and learning opportunities for women, improved economic conditions for fisherfolk, and enhanced food security.

Cross-cutting themes

12. The IW focal area has advanced knowledge management by disseminating impacts, successful practices, and key lessons from IW projects through IW:LEARN. IW:LEARN has established a knowledge management platform for the IW focal area by facilitating learning exchanges, knowledge sharing, biennial international waters conferences, regional workshops, and a central website. The implementation of IW:LEARN-4 alone led to the adoption of at least one new management approach in 47 IW projects, highlighting the replication and uptake of good practices.

13. Terminal evaluations of GEF-5 and GEF-6 projects highlighted several examples of innovative technologies applied in IW projects. For instance, the Yellow Sea LME SAP project, focused on adaptive ecosystem-based management, employed Integrated Multi-Trophic

Aquaculture technology—an approach that enhances aquaculture productivity while reducing water pollution by replicating natural food chain processes. The knowledge and experience from this project were shared with three Caribbean countries through a learning exchange facilitated by IW:LEARN.

14. The IW focal area's transboundary mandate offers an opportunity to promote policy coherence. By design, the mandate aims to harmonize water management policies across countries, ensuring consistent and coordinated protection and regulation of shared water resources. Survey findings and interviews highlighted the GEF IW focal area as an effective channel for advancing policy coherence, helping to integrate and align environmental objectives with policy instruments across sectors such as fisheries, tourism, agriculture, and others.

15. The IW focal area has consistently maintained a focus on gender inclusion and mainstreaming across GEF phases. For example, terminal evaluations from the Drin River Basin reported that women made up approximately 30 percent of the decision-making body and 60 percent of its expert working groups. A fisheries project in the Small Island Developing States also highlighted the publication of Moana Voices, a collection of firsthand experiences and narratives by women aimed at mainstreaming gender in the fisheries sector.

16. Despite some successes at the individual project level, the IW focal area has generally struggled to achieve meaningful private sector engagement. This challenge is highlighted by IWC participant survey results, stakeholder interviews, and project evaluations. Survey respondents identified the lack of private sector engagement as a major weakness of the IW focal area. Stakeholder interviews pointed to several contributing factors including time-consuming approval processes for private companies to participate in projects, limited private sector expertise within the GEF Secretariat, and the long-term nature of IW projects which often lack early economic returns to attract investment.

Key challenges

17. The GEF's core indicators are insufficient for systematically measuring and demonstrating IW-related transboundary benefits and socioeconomic co-benefits. While sub-indicators track elements such as the status of TDA-SAP, regional agreements, national/local reforms, multisectoral coordination, and IW:LEARN engagement, multi-focal area projects within integrated programs often do not focus on these IW specific benefits. Moreover, the measurement of socioeconomic co-benefits has lacked a systematic approach, with indicators that are either missing or inconsistent across projects, making it difficult to compare results or aggregate findings. The GEF IEO evaluation on water security also noted that water-related outcomes have not been consistently measured across all focal areas, making it difficult to demonstrate the GEF's overall synergistic impact.

18. The IW focal area has faced the challenge of balancing time efficiency with adequate stakeholder engagement and country ownership of projects. Timely project approval and implementation are essential for sustaining transboundary cooperation without significant gaps between projects. However, excessive focus on accelerating project preparation could result in limited stakeholder engagement and reduce ownership by participating countries.

Recommendations

(a) The GEF should continue to carefully assess all new IW supported projects to ensure that its core mandate of transboundary cooperation remains central to all investments.

(b) To enhance the financial sustainability of IW projects, the GEF Secretariat should support stakeholder training on innovative financing models and promote the development of comprehensive sustainability plans early in the project cycle. The IW focal area should also ensure an early and sustained emphasis on capacity building, delivery of targeted training to a broad range of stakeholders, and active engagement of private sector partners.

(c) The GEF Secretariat should establish guidance for Agencies and national partners to enhance monitoring the effectiveness of transboundary cooperation arrangements and relevant socioeconomic co-benefits using quantitative indicators and qualitative approaches, as required. This would be particularly pertinent where transboundary arrangements are associated with integrated programs.

1 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

1. International waters encompass transboundary marine and freshwater bodies, including oceans, rivers, lakes, aquifers, and large marine ecosystems (LMEs). Over 300 watersheds and 460 aquifers are shared by multiple countries, benefiting approximately 40 percent of the global population (GEF n.d.; UNECE, UNESCO, and UN Water 2024). Oceans and LMEs also play a crucial role in food security by providing fish as a key source of protein for billions of people. These international waters, however, have faced major environmental threats, such as pollution, overfishing, and climate change events. Addressing these challenges requires coordinated transboundary efforts and sustainable management practices to protect critical marine and freshwater ecosystems for future generations.

2. Since the Global Environment Facility (GEF) established the International Waters (IW) focal area in 1991, the GEF IW has become one of the largest financiers of transboundary cooperative arrangements in marine and freshwater bodies. The strategic priorities of the IW focal area have evolved in response to global priorities and emerging issues, such as transboundary cooperation on fisheries, pollution reduction, areas beyond national jurisdiction (ABNJ), and water security. Over the past decade, the GEF has shifted toward integrated programming, and it is timely to conduct the first assessment on whether and how the IW focal area has adapted its strategy.

3. This evaluation has reviewed and synthesized available evaluative evidence of the relevance, coherence, efficiency, effectiveness, and sustainability of the GEF IW portfolio and its contribution toward multi-focal area projects from GEF-5 to GEF-8. The IW evaluation portfolio has included 277 projects (i.e., 44 closed, 153 ongoing, and 80 at CEO endorsement stage), representing $1.7 billion in grant funding and approximately $17 billion in expected cofinancing. Building on prior GEF Independent Evaluation Office (IEO) assessments, it examines the alignment of GEF IW interventions with regional and global priorities, consistency with GEF strategies and programming directions, and the needs of participating countries. Additionally, it evaluated the design and relevance of recent projects that reflect a GEF-wide strategic shift toward a more multi-focal area approach involving integrated programs.

1.2 BACKGROUND

4. Water is essential for all humans, animals, plants, and ecosystems to survive, grow, and thrive. Available evidence suggests that over 1.38 billion cubic kilometers of water are available on Earth (NOAA 2024). Of the total, approximately 97.5 percent is saline or seawater, and the remaining 2.5 percent is fresh water (Kashiwase and Fujs 2023). Because glaciers account for 69

percent of available fresh water on Earth, humans can only access freshwater supplies from groundwater and surface water sources (e.g., rivers, lakes, ponds), which hold 30 percent and 0.3 percent of fresh water, respectively (Shikimalgor 1993). The remaining fresh water is available as moisture in the soil and atmosphere.

5. Freshwater supplies have been withdrawn on a major scale by humans for agricultural, industrial, and domestic purposes; water requirements for each of these sectors vary substantially across national income levels. Globally, agriculture accounts for approximately 70 percent of freshwater withdrawals, followed by industrial and domestic sectors (UNESCO 2024). However, the proportion of national freshwater use by the agricultural sector ranges from 44 percent in high-income countries to 90 percent in low-income countries. Similarly, industrial and domestic water use varies substantially by countries' income levels. The total amount of freshwater use in 2020 was highest among lower-middle-income countries at 1,656.9 billion cubic meters (bcm), followed by upper-middle-income (1,225.7 bcm), high-income (870.5 bcm), and low-income countries (110.6 bcm) (Kashiwase and Fujs 2023).

6. Marine ecosystems play an essential role in protecting the global environment and supporting a broad range of human activities. They absorb approximately 90 percent of excess heat and 30 percent of carbon dioxide emissions by humans (UNEP 2024), provide aquatic food as the major source of high-quality protein (FAO 2024), serve as habitats and breeding grounds for fish and other animals, foster biodiversity, and facilitate the transport of materials, products, and people. However, the ocean has faced substantial environmental stress and negative consequences of human activities, such as habitat destruction from coastal development activities (e.g., tourism, infrastructure development, and housing construction), acidification, plastic pollution, and loss of coastal ecosystems including mangroves, coral reefs, and seagrass. Social cohesion, indigenous knowledge, and cultural heritage have been placed at risk in various marine areas due to these activities (Pearson et al 2023).

7. Climate change, water scarcity, and water pollution have exacerbated the global environmental and socioeconomic challenges. Extreme climate events, such as floods and worsening droughts, have progressively increased worldwide. For the period between 2002 and 2021, floods resulted in 100,000 deaths, affected 1.6 billion people, and cost $832 billion in economic losses. During the same period, drought caused 21,000 deaths, affected more than 1.4 billion people, and led to $170 billion in economic losses (CRED 2023). Severe water scarcity has also been experienced by almost half of the global population (IPCC 2023), and 25 percent of the global population from 25 countries has withdrawn more than 80 percent of their renewable freshwater supply (Kuzma et al 2023). In 2021, several countries in the Middle East and North Africa were under critical water stress levels, because over 100 percent of their renewable freshwater supply was withdrawn (UN Water n.d.). These water-related issues have been

reported to have major implications for social stability, migration, and economic vulnerability in many countries (Zaveri et al 2021).

2 EVALUATION OBJECTIVE, SCOPE, METHODOLOGY, AND THEORY OF CHANGE

2.1 EVALUATION OBJECTIVE AND SCOPE

8. The main objective of this evaluation is to assemble and assess evaluative evidence to draw conclusions, learn lessons, and provide recommendations to strengthen the IW portfolio and its contribution to the GEF's overall performance. To achieve this objective, this evaluation covers a series of questions aligned with the programming directions of the IW focal area. A matrix is presented in annex A with a list of questions, methodology, sources of information, and alignment with OPS8 questions. The main questions are the following:

(a) To what extent has the IW focal area adapted to the evolving global, regional, and national priorities and the GEF's recent shift to integrated programming?

(b) How did the IW focal area projects perform and produce impacts?

(c) How has the GEF contributed to knowledge management and information sharing of IW-related projects and initiatives?

9. The scope of this evaluation encompasses a comprehensive review and assessment of the available evidence of the relevance, coherence, efficiency, effectiveness, and sustainability of the GEF IW portfolio from GEF-5 to GEF-8. This evaluation also examines the portfolio's contribution to multi-focal area projects. The IW portfolio under review includes 277 projects (i.e., 44 closed, 153 ongoing, and 80 at CEO endorsement stage), representing $1.7 billion in grant funding and approximately $17 billion in anticipated co-financing. Building on previous assessments by the GEF IEO, this evaluation assesses the alignment of GEF IW interventions with regional and global priorities, their consistency with GEF strategies and programming directions, and the needs of participating countries. Furthermore, it evaluates the design and relevance of recent projects that reflect a GEF-wide strategic shift toward a more integrated, multi-focal area approach.

2.2 METHODOLOGY

10. The evaluation has employed a mixed-methods approach to review, collect, and synthesize available evaluative evidence. Specifically, it conducted a portfolio review, terminal evaluation data analysis, an assessment of IW project quality at entry, an online survey, field visits, and key informant interviews. A brief outline of these methods follows.

(a) **A portfolio review was conducted,** which involved quantitative and qualitative analysis of IW project data from the GEF portal site, annual performance reports, and terminal evaluation reports submitted by the GEF implementing agencies. Descriptive analysis focused on the recent trend of the IW project number, size, geographic distribution, total funding and cofinancing amount per GEF replenishment period, and project ratings on the overall performance and monitoring and evaluation (M&E) implementation.

(b) **A quality at entry assessment** addressed the extent to which recently approved projects have been designed to address project relevance, effectiveness, efficiency, and sustainability by reviewing project activities, expected benefits, project designs and approaches, stakeholder engagement, knowledge management, and alignment with integration. **Key informant interviews** elicited a broad range of key stakeholders' experiences and perceptions of the IW focal area and projects. These interviews were conducted either through online platforms or in person. A list of key informants can be found in annex B. **An online survey** was completed by 70 participants at the 10th GEF Biennial International Waters Conference (IWC10) to explore IW project stakeholders' perceptions on IW's comparative advantages, strengths, weaknesses, project financial sustainability, and policy coherence. A separate report on the survey findings can be found in annex C.

(c) **Field visits** were conducted to perform a case study on policy coherence and participate in IWC10. These visits helped verify terminal evaluation findings, identify key IW informants, and collect additional primary data.

(d) **The evaluation also reviewed a total of 277 projects implemented through financing from GEF-5 to GEF-8, covering a full range of stages from those recently designed to completed projects.** A total of 42 projects with terminal evaluations were closely examined on their outcomes, sustainability, M&E, and quality of implementation and execution. Fifty-nine projects currently under implementation were included in the detailed review of project documents to assess their quality at entry. Additionally, 65 GEF-8 projects at the CEO endorsement stage were assessed for their basic project characteristics, such as project type (e.g., child, standalone) and focal area type (e.g., IW or multi-focal area), to identify any emerging trends. The Clean and Healthy Ocean Integrated Program's (CHO-IP) program framework document and its theory of change were also reviewed to provide an example of how integrated programs differ from standalone IW projects. The process of identifying this IW evaluation's selection of projects is presented in annex D.

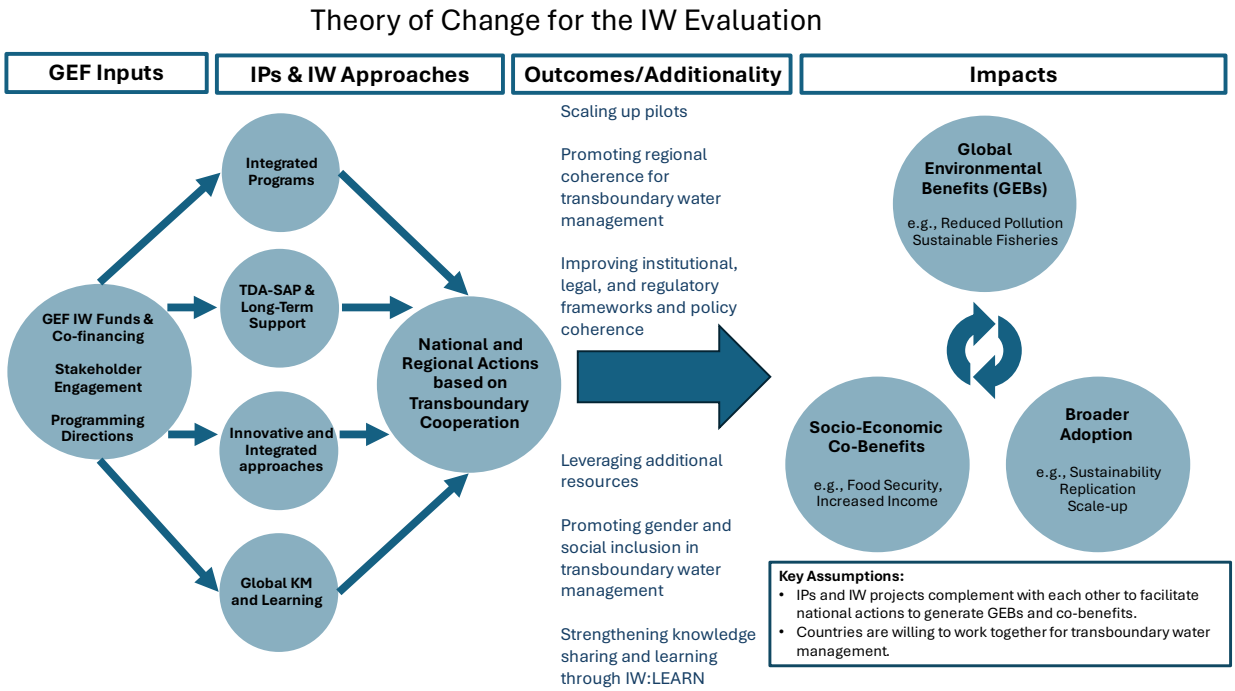
2.3 A THEORY OF CHANGE FOR THE INTERNATIONAL WATERS FOCAL AREA

11. Although the IW focal area has developed and implemented a systematic approach toward its mandate, this approach was not driven by an explicit overall or generic theory of change (TOC). The IW focal area commenced its work before theories of change were widely used, either within the GEF or more broadly among the international development and environmental management communities. This challenge is common for evaluations in these fields, which cover a long period. Because such theories have been helpful in assessing the extent to which interventions are progressing toward their long-term intentions, they are now a widely used tool for evaluation of complex issues such as portfolio achievements over time.

12. The GEF IEO developed a retrospective TOC for the IW focal area evaluation to illustrate how global environmental benefits and other impacts can be generated through the IW focal area (figure 1). In accordance with the GEF's strategic evolution, integrated programs have been incorporated into the pathway to facilitate national interventions to address key global environmental issues (e.g., hypoxia). A TOC highlights a complex and cyclical process based on GEF inputs, project approaches, additionality, and impacts.[1]

[1] IW projects have been implemented across various types of transboundary water bodies. One notable investment area within this focal area is large marine ecosystems. Additionally, IW interventions can potentially yield peace co-benefits, as briefly mentioned later in the report. IW focal area programs and projects are particularly sensitive to political environments, as they involve the cooperative management of transboundary water resources by two or more countries.

Figure 1: A theory of change for the IW focal area evaluation



2.4 DATA CONSTRAINTS

13. This evaluation has the following data constraints. Firstly, its latest outcome data are from GEF-6 projects because more recent projects are still under implementation or do not yet have a completed terminal evaluation. To address this issue, quality at entry assessment was conducted to obtain relevant information for projects still under implementation. Secondly, missing data and/or terminal evaluation reports hindered the comprehensive analysis of evaluative evidence. Thirdly, GEF-8 is currently ongoing, and the IW project count and financing amount for this GEF phase have not been finalized. The evaluation portfolio included available project data up to December 10th, 2024. Lastly, not all terminal evaluation reports included complete data for every project characteristic or variable, which prevented the evaluation from reviewing nine closed projects.

14. To overcome these data limitations, the evaluation collected primary data through field visits and interviews with a wide range of relevant stakeholders including government officials, civil society organizations, implementing and executing partners, and members of the GEF Secretariat. These firsthand sources were complemented by IWC10 participant surveys and an extensive review of documents and portfolio data. These mitigation measures also contributed to identifying and synthesizing relevant findings to address transboundary water bodies, which are often highly context specific and require tailored approaches.

3 KEY FINDINGS FROM PREVIOUS IEO EVALUATIONS

15. The International Waters Focal Area Study (2016) confirmed IW's high relevance and contributions to global priorities and goals (e.g., Sustainable Development Goals), regional security, and the GEF's internal strategic directions through transboundary water interventions (GEF IEO 2018). The ecosystem-based approach, transboundary diagnostic analysis–strategic action program (TDA-SAP) tools,[2] and knowledge management also allowed the IW focal area to be a catalyst for integration with other sectors, such as food, energy, urban planning, and forest management. This study identified an imbalance of financial resource allocation within the IW portfolio, with 60 percent for marine and 40 percent for freshwater projects.[3]

16. OPS-6 in 2017 noted that the IW focal area was the first to implement a programmatic approach and demonstrated how a series of projects contributed to some of the major environmental issues in the program region (GEF IEO 2017). Early examples of the IW programs focused on supporting the SAP implementation,[4] which addressed marine pollution in the Black Sea and ameliorating environmental stresses in the Mediterranean Sea. These programs leveraged investments and promoted the replication of successful practices, behaviors, and technologies.

17. OPS-7 in 2021 reported that the earlier imbalance between marine and freshwater investment was partially reduced by increasing investment for integrated water resources management (IWRM) (GEF IEO 2022). As of mid-2021, the GEF's investment allocation had shifted to 52 percent for marine projects and 48 percent for freshwater projects. This evaluation also highlighted that the GEF's fisheries projects were well-aligned with global, regional, and national priorities, and effectively addressed overexploitation of fishery resources in the marine environment. Furthermore, an assessment of freshwater projects suggested that such projects contribute to generating co-benefits in multiple focal areas (e.g., biodiversity, land degradation, and chemicals and waste) by enhancing freshwater resource management, water quality, and water security.

[2] For more information, the TDA-SAP manual can be accessed through: https://iwlearn.net/manuals/tda-sap-methodology/tdasap-methodology.

[3] The study noted that this imbalance primarily arose from the alignment of country and GEF agency interests, with project locations being influenced by the degree of transboundary tensions rather than by a deliberate strategic decision.

4 PORTFOLIO ANALYSIS

4.1 Evolution of Strategic Priorities of the International Waters Portfolio

18. The GEF established the IW focal area in 1995 with a specific commitment to address issues of transboundary cooperation in water bodies shared by two or more countries (GEF 1995). Since then, the GEF IW has become one of the largest financiers of transboundary cooperative arrangements in marine and freshwater bodies. The IW focal area aims to promote the collective management of transboundary water systems by facilitating policy, legal, and institutional reforms, as well as investments for ecosystem conservation and the sustainable use of ecosystem services.

19. The strategic priorities of the IW focal area have evolved in response to global priorities and emerging issues. GEF-5 and GEF-6 strategically focused on transboundary cooperation on surface and groundwater basins, marine fisheries, coastal pollution reduction, LMEs, foundational capacity building, research, and portfolio learning. GEF-5 added a strategic objective to address marine areas beyond national jurisdiction (ABNJ). The most recent GEF replenishment cycles (GEF-7 and GEF-8) identified blue economy, ABNJ, and water security as key priority areas. Details of this process, shown in table 1, are provided in the following paragraphs.

Table 1: Strategic objectives of the IW focal area from GEF-5 to GEF-8

	GEF-5 (2010–14)	GEF-6 (2014–18)	GEF-7 (2018–22)	GEF-8 (2022–26)
SO1	Catalyze multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins while considering climatic variability and change	Catalyze sustainable management of transboundary water systems by supporting multi-state cooperation through foundational capacity building, targeted research, and portfolio learning	Strengthen national blue economy opportunities to reduce threats to marine and coastal waters	Accelerate joint action to support a sustainable blue economy
SO2	Catalyze multi-state cooperation to build marine fisheries and reduce pollution of coasts and LMEs while considering climatic variability and change	Catalyze investments to balance competing water uses in the management of transboundary surface and groundwater and enhance multi-state cooperation	Improve management in ABNJ	Advance management in ABNJ

SO3	Support foundational capacity building, portfolio learning, and targeted research needs for ecosystem-based, joint management of transboundary water systems	Enhance multi-state cooperation and catalyze investments to foster sustainable fisheries, restore and protect coastal habitats, and reduce pollution of coasts and LMEs	Enhance water security in freshwater ecosystems	Enhance water security in shared freshwater ecosystems
SO4	Promote effective management of marine ABNJ			

20. Since the adoption of the GEF Operational Strategy in 1995, the IW focal area has primarily focused on building international cooperation for the management of transboundary water systems. It has contributed through such activities as regional dialogues, joint fact-findings by countries, and regional agreements to inform coherent national actions. The IW focal area has also provided flexibility to test new and innovative ideas through demonstration projects, which informed the development of new focal areas (e.g., chemicals and waste) in the GEF. Over the past decade, the IW focal area's strategic directions and approaches evolved to address many relevant international waters issues, as shown in table 1.

21. The GEF-5 IW strategy outlined four objectives addressing multistate cooperation in marine and freshwater bodies, ABNJ, and knowledge management. This programming cycle explicitly highlighted climatic variability and change as a key transboundary concern and aimed to address multiple stresses of international water bodies together rather than thematic or issue-specific approaches (GEF 2011).

22. The GEF-6 IW strategy promoted three objectives to enhance sustainability of transboundary water management, balance competing uses of surface and groundwater, and address key environmental issues in international waters. The GEF IW aimed to achieve the objectives through strengthening ecosystem services in melting high altitude glaciers, promoting conjunctive management of surface and groundwater, contributing to the nexus of water, food, energy, and ecosystem security, ameliorating ocean hypoxia, protecting coastal habitat, and promoting sustainable fisheries (GEF 2016).

23. The GEF-7 IW strategy included three objectives related to blue economy, ABNJ, and water security. The concept of blue economy suggests that oceans serve as potential areas for sustainable development by involving new and existing sectors, such as tourism, renewable energy, fisheries, coastal development, and marine transport (GEF 2018). To promote blue economy opportunities, GEF-7 investments focused on three strategic actions including

sustainable coastal and marine ecosystems, fisheries management, and pollution reduction. While GEF-6 did not explicitly focus on ABNJ, GEF-7 added it as a renewed focus of the GEF IW to address key issues in the open oceans. The strategy also focused on water security through information exchange and early warning systems, regional and national cooperation on transboundary freshwater basins, and investments for the security of water, food, energy, and the environment.

24. The GEF-8 IW strategy includes three objectives. As with GEF-7, GEF-8 investments focus on blue economy, ABNJ, and water security (GEF 2022). A key difference between GEF-7 and GEF-8 is the GEF IW's support to integrated programs (IPs). The GEF-8 programming directions highlighted how six integrated programs would contribute to the IW focal area.[5]

25. Throughout these strategic shifts, the GEF's fundamental focus on transboundary cooperation in marine and freshwater ecosystems has remained. The IW focal area has continued to address relevant IW issues by employing TDA and SAPs as key tools to promote transboundary water management based on agreements to participate among stakeholder countries. TDA provides an opportunity for countries to conduct joint fact-finding and scientific analysis to identify common threats in transboundary water systems. This analysis leads to the development of SAP, a politically endorsed document that highlights strategic interventions to address the transboundary water threats identified in the region. The nature of these IW interventions has centered around capacity building, improved assessment of environmental challenges and solutions, strategic planning, policy reforms, and investments for transboundary cooperation, and have contributed to strengthening collaboration among countries and informing national actions.

4.2 TRENDS IN GEF GRANT ALLOCATION

26. The evaluated IW portfolio includes a total of 277 projects from GEF-5 to GEF-8 at different stages of project implementation. Specifically, as elaborated in table 2, the IW evaluation portfolio consists of 76 projects from GEF-5, 61 projects from GEF-6, 67 projects from GEF-7, and 73 projects from GEF-8. Across these programming cycles, 80 projects are under the CEO endorsement stage, 153 projects are under implementation, and 44 projects are closed. In total, a total of over $1.7 billion has been mobilized as grants (table 2).

[5] The Amazon, Congo, and Critical Forest Biomes IP, the Greening Transportation and Infrastructure Development IP, the Clean and Healthy Ocean IP, The Circular Solutions to Plastic Pollution IP, the Blue and Green Islands IP, and the Elimination of Hazardous Chemicals from Supply Chains IP are rated as *major* contributions to the IW focal area.

Table 2: Number of projects and grant amount by project status and GEF programming cycles

	CEO endorsement stage		Active		Closed		Total	
GEF phase	Projects	Grants	Projects	Grants	Projects	Grants	Projects	Grants
GEF-5	6	23.2	37	288.7	33	179.6	76	491.6
GEF-6	8	18.2	42	290.1	11	36.1	61	344.4
GEF-7	1	0*	66	437.1	0	0	67	437.1
GEF-8	65	421.3	8	60.1	0	0	73	481.5
Total	80	462.7	153	1076.1	44	215.8	277	1754.6

Note: The grant amounts represent the sum of the latest stage project financing amount, PPG amount, and PPG fee. They are shown in US$ million. *The values of the latest stage project financing amount, PPG amount, and PPG fee were zero in the GEF portal for one project (GEF ID 10548), which was not included in the financial analysis.

27. The proportion of projects and grant allocation by region, focal areas, geographic scope, and GEF agencies highlights some regional gaps and agency concentrations between GEF-5 and GEF-8. While over 20 percent of the portfolio projects and grants are dedicated to Africa, Asia, Latin America and the Caribbean (LAC) regions, 10 percent in projects and seven percent in grants are allocated to Europe and Central Asia (ECA) (table 3). Historical political instability and conflicts in some European and Central Asian countries at least partially account for the small share of GEF projects and grants from GEF-5 to GEF-8. The United Nations Development Programme (UNDP) was the GEF implementing agency that covered the highest proportion of projects and grants at 28 percent each, followed by the United Nations Environment Program (UNEP) (19 percent for projects and grants), the Food and Agriculture Organization (FAO) of the United Nations (16 percent for projects and 15 percent for grants), and The World Bank (12 percent for projects and 15 percent for grants) (table 3).[6]

Table 3: Project and grant distributions by region and GEF implementing agencies

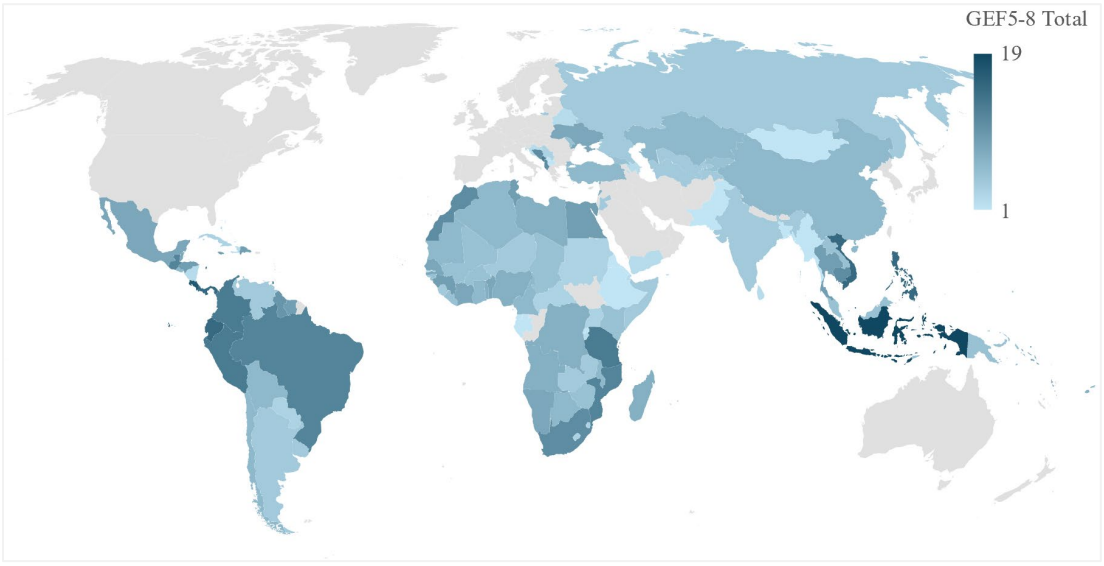
Regions and GEF Agencies	**Projects**		**Grant**	
	Number	**%**	**US$, millions**	**%**
Regions				
Africa	61	22	446.6	25

[6] The overall agency concentration between GEF-5 and GEF-8 (n=2,778) as of December 10th, 2024, is also led by UNDP (36 percent for grants), followed by UNEP (16 percent for grants), World Bank (14 percent for grants) FAO (12 percent for grants).

Regions and GEF Agencies	Projects		Grant	
	Number	%	US$, millions	%
Asia	67	24	399.6	23
ECA	28	10	130.4	7
LAC	57	21	393.2	22
Regional	10	4	54.3	3
Global	54	19	330.3	19
GEF Agencies				
ADB	4	1	18.7	1
AfDB	7	3	48.8	3
CAF	6	2	28.3	2
CI	11	4	73.0	4
EBRD	4	1	19.9	1
FAO	45	16	263.5	15
IDB	4	1	28.5	2
IUCN	14	5	94.5	5
UNDP	77	28	491.0	28
UNEP	53	19	329.9	19
UNIDO	11	4	56.7	3
WWF	9	3	45.8	3
WB	32	12	256.1	15

28. A review of country coverage by 230 GEF IW projects (i.e., 83 percent of the evaluation portfolio) identified 140 different partner countries, suggesting that the GEF has covered a high proportion of its potential project countries between GEF-5 and GEF-8. Figure 2 illustrates the total number of projects per country, ranging from one to 19 projects. Twenty countries had at least 10 GEF IW projects during these GEF programming cycles. The 10 countries with the most GEF IW projects are Indonesia, Costa Rica, Ecuador, Panama, the Philippines, Viet Nam, Colombia, Montenegro, Peru, and Tanzania (figure 2). Further details of the IW project distribution by country and GEF replenishment period can be found in annex E.

Figure 2: Distribution of GEF IW portfolio projects between GEF-5 and GEF-8 (n=230)



Note: Those projects that only indicated regional or global in the country name list in the GEF portal were not included in the analysis (n=41). Parent projects were not included in this analysis to avoid double counting (n=6).

29. A detailed analysis of IW project distribution by country shows that the number of IW projects in each country and subregion has often fluctuated from one programming cycle to another. For example**,** while the number of IW projects has been relatively stable across GEF programming cycles in such countries as Colombia and Ecuador, some other countries, such as the Philippines and Montenegro, have recorded several IW projects in one programming cycle, followed by less IW-related activity thereafter. Additionally, the mapping of the IW project count by country and programming cycles identified shifting subregional project concentration across Africa; projects showed some concentration in West Africa in GEF-5, North Africa in GEF-6, and Southern and Eastern Africa in GEF-7 and GEF-8. Such fluctuations and changes in allocation should not be interpreted as a lack of coherence or planning. The IW focal area must adapt to changing priorities in international waters, which may necessitate concentrating resources in some regions at the expense of others with lower priority.[7] However, these findings still underscore the need for long-term strategic planning for resource allocations to address the most significant transboundary water issues across time, regions, and countries.

4.3 Trends in Co-Financing Allocation

30. The IW focal area has continued to mobilize considerable co-financing across its recent programming cycles. A total of $16.98 billion has been expected as the co-financing amount for

[7] The IW focal area is not part of STAR, which contributes to supporting GEF recipient countries consistently across GEF phases. GEF projects may also span multiple GEF phases after being approved in one GEF phase.

the evaluation portfolio projects (table 4). The cofinancing amount ranged from $5.98 billion in GEF-5 to $3.94 billion in GEF-8.

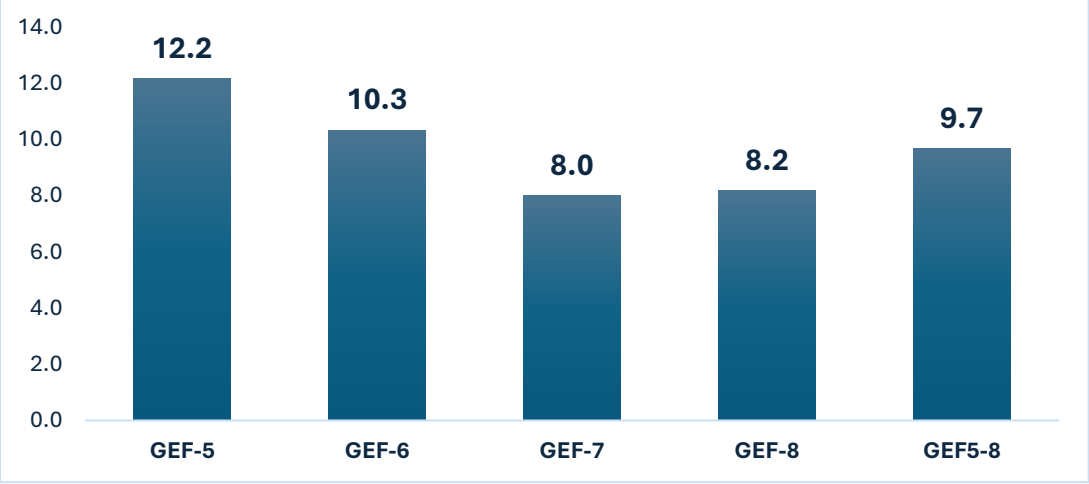
Table 4: Co-financing amount (US$, billion) by GEF programming cycles

	Endorsement	Active	Closed	Total
GEF-5	0.13	4.01	1.84	5.98
GEF-6	0.18	3.06	0.33	3.56
GEF-7	0	3.50	0	3.50
GEF-8	3.59	0.35	0	3.94
Total	3.90	10.91	2.17	16.98

Note: The cofinancing amount was calculated based on the CEO cofinancing amount in the GEF portal. The project identification form (PIF)-cofinancing amount was used for GEF-8 projects (n=26) under the CEO endorsement stage.

31. The average ratio of GEF grants to expected cofinancing between GEF-5 and GEF-8 for the evaluation portfolio is 1 to 9.7, which is expected to be updated in accordance with the project endorsement process in GEF-8.[8] Although the recent programming cycles (GEF-7 and GEF-8) mobilized less cofinancing than the GEF-5 and GEF-6 cycles, the overall portfolio has maintained a grant-cofinancing ratio of 9.7 as presented in figure 3. An analysis of the expected and actual co-financing amounts for the closed projects (n=44) revealed that 25 percent did not meet the expected co-financing amount. The high co-financing ratios in GEF-5 and GEF-6 are therefore partially attributed to the overestimation of co-financing amounts.

Figure 3: Trend of grant-to-cofinancing ratio between GEF-5 and GEF-8



[8] Based on the available data as of December 10th, 2024, the estimated co-financing ratio (n=2,584) for the overall GEF portfolio between GEF-5 and GEF-8 is 1 to 7.

4.4 IW Enabling Activities

32. An emerging area of work led by the IW focal area is providing technical support to countries on the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ) (UN n.d.). While the IW focal area had not served as the financing mechanism for any specific international convention, the adoption of the BBNJ Agreement in 2023 presented an opportunity to facilitate BBNJ ratification and early implementation as part of the financial mechanism.

33. The IW portfolio for this evaluation includes three EA projects to facilitate the ratification and early implementation of the BBNJ Agreement.[9] Two projects (GEF IDs 11656 and 11820) were approved in June and October 2024, and the other project (GEF ID 11821) was approved in February 2025. A total of 27 countries across multiple regions and Small Island Developing States (SIDS) are provided with technical assistance to ratify and implement the BBNJ Agreement. UNEP, UNDP, and FAO lead one project each. Over $4.7 million has been mobilized as grants for these projects (table 5).

Table 5: Countries supported by three EA projects in GEF-8

GEF ID	GEF Agency	Countries supported by EA projects in GEF-8
11821	UNEP	Cambodia; Cameroon; Congo, Rep.; Cook Islands; Costa Rica; Ecuador; Liberia; Maldives; Mozambique; Nigeria; Panama; Senegal; Seychelles; Somalia
11820	UNDP	Belize, Cabo Verde, Chile, Dominican Republic, Ghana, Mexico, Philippines, Tanzania, Uruguay
11656	FAO	Marshall Islands, Palau, Solomon Islands, Vanuatu[10]

4.5 Increasing IW Engagement in Multi-Focal Area Activities

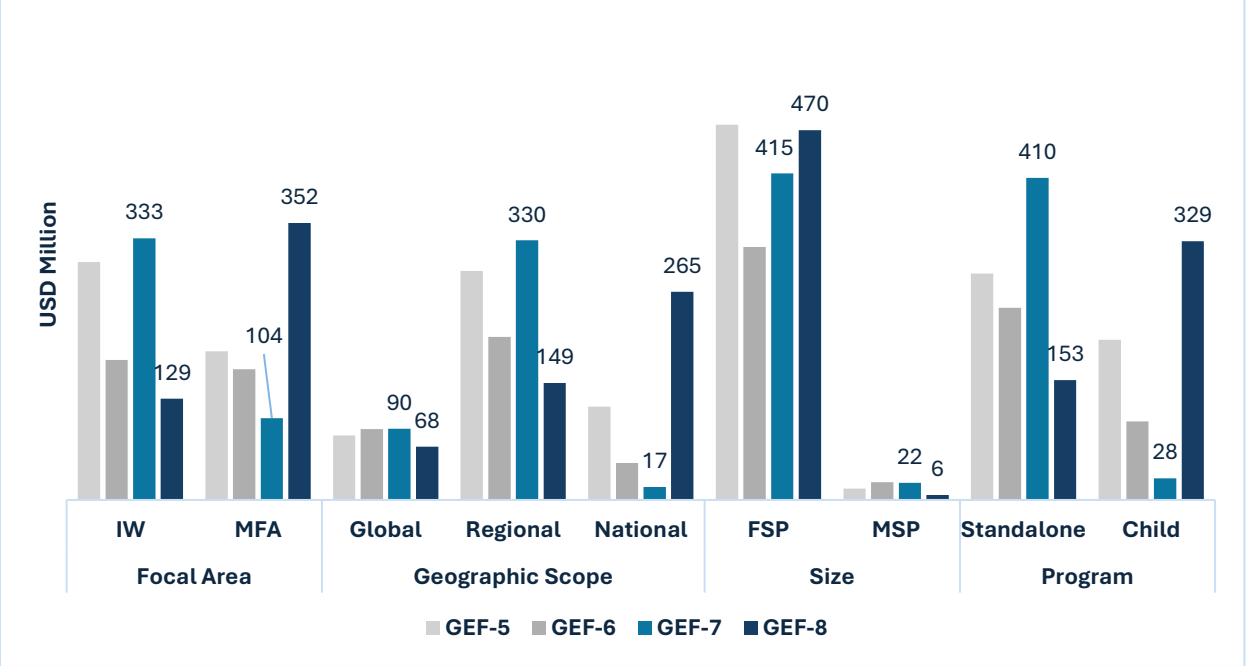
34. The IW portfolio underwent a significant shift from GEF-7 to GEF-8, marked by a rise in multi-focal area, national, and child projects within integrated programs. The share of focal area-specific IW projects dropped from 81 percent in GEF-7 to 27 percent in GEF-8, while multi-

[9] These are umbrella EA projects covering multiple countries rather than supporting a single country.
[10] A major amendment has been made to a project (GEF ID 11656), and three countries (Colombia, Morocco, and Suriname) have been added. The list in this table was valid as of December 2024.

focal area projects with IW contributions rose from 19 percent to 73 percent. Similarly, standalone IW projects declined from 91 percent to 29 percent, with child projects increasing from 9 percent to 71 percent. This transformation reflects IW's active participation in four IPs: Clean and Healthy Ocean (GEF ID 11349), Circular Solutions to Plastic Pollution (GEF ID 11181), Elimination of Hazardous Chemicals (GEF ID 11169), and Amazon, Congo, and Critical Forest Biomes (GEF IDs 11273, 11241, and 11142). These IPs collectively account for 49 child projects—representing 67 percent of the IW portfolio in GEF-8.

35. The review of the IW portfolio from GEF-5 to GEF-8 confirms a clear trend toward increased financial allocations for multi-focal area, national, and child projects, aligning with GEF's strategic emphasis on integration. GEF grants for multi-focal area projects with IW elements rose significantly from $104 million to $352 million (figure 4). In earlier cycles, regional projects dominated the IW focal area in both number and funding. However, GEF-8 marked a shift, with national projects receiving the largest share ($265 million), followed by regional ($149 million) and global projects ($68 million). Similarly, funding for child projects grew substantially, from $28 million in GEF-7 to $329 million in GEF-8. Additionally, the full-sized project (FSP) grants increased steadily, from $322 million in GEF-6 to $470 million in GEF-8.

Figure 4: GEF grant allocation (US$, millions) by focal area, geographic scope, project size, and project type



36. In GEF-8, the IW focal area accounts for approximately 47 percent of GEF grants for multi-focal area projects with IW-funded components, followed by biodiversity (29 percent), chemicals and waste (10 percent), climate change (9 percent), and land degradation (4 percent). Notably, 83 percent of IW funding for multi-focal area projects is directed toward integrated

programs. The remaining IW funds support other objectives such as blue economy, ABNJ and water security.[11]

4.6 IW Approaches and Typologies

37. A review of 42 terminal evaluations from GEF-5 and GEF-6 indicates that most IW projects incorporated at least one of the IW's internal integrated approaches, such as integrated water resource management (IWRM), integrated coastal management (ICM), or ridge to reef (R2R). Based on such integrated approaches, 66.7 percent of these recently evaluated projects covered marine water bodies, and 54.8 percent supported freshwater bodies. Approximately 48 percent of IW projects also used the TDA-SAP approach to strengthen transboundary water management. Pollution and fishery were the most common thematic issues covered by 64.3 percent and 47.6 percent of the projects, respectively (table 6). These findings highlight the alignment of project focus and strategic objectives in GEF-5 and GEF-6.

Table 6: Project characteristics of evaluated projects in GEF-5 and GEF-6 (n=42)

	Number of projects	Percentage
Water types/locations		
Marine	28	66.7
Fresh water	23	54.8
LMEs	13	31.0
Rivers	13	31.0
Open oceans	4	9.5
Marine protected areas	4	9.5
Coastal	4	9.5
Aquifer/groundwater	3	7.1
Lake	2	4.8
TDA-SAP		
TDA-SAP planning or implementation	20	47.6
Project focus		
Pollution	27	64.3

[11] Of $352 million grants for multi-focal area projects, the IW focal area accounts for $166 million, including $137 million for integrated programs and $29 million for IW objectives as of December 2024.

	Number of projects	Percentage
Fisheries	20	47.6
SIDS	12	28.6
Plastics	6	14.3
ABNJ	4	9.5
Integrated approach		
At least one approach used	22	52.4
IWRM	12	28.6
ICM	7	16.7
Ridge to reef/source to sea	7	16.7

38. Analysis of the IW portfolio projects presented above suggests that, at a strategic level, GEF IW projects generally fall into three core types, each offering distinct opportunities. The first type focuses on specific transboundary water bodies or regions, with interventions sustained over an extended period within the same geographic area. As an example, the project *Scaling up the implementation of the Sustainable Development Strategy for the Seas of East Asia* (SDS-SEA) (GEF ID 5405) was built on the foundation of three earlier projects. The initial project (GEF ID 396) was a regional project addressing marine pollution, and the second project (GEF ID 597) focused on developing intergovernmental and multisectoral partnerships as the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA). The third project (GEF ID 2700) facilitated the implementation of the SDS-SEA, a regional framework to guide actions for sustainable coastal and marine environments in East Asia. These three projects contributed to building the foundation of governance, partnerships, and ownership. Based on such long-term project engagement, the SDS-SEA project successfully demonstrated catalytic effects through the incorporation of ICM approaches and tools into SAPs of LMEs. These included the Yellow Sea, the Arafura and Timor Seas, and the Bay of Bengal, and LMEs in Africa. Additionally, the Seas of East Asia Knowledge Bank was developed for regional knowledge management and was linked to IW:LEARN. Other projects (GEF IDs 4343, 4483, and 9121) also demonstrated how TDA and SAP development and implementation were conducted over multiple projects in the same geographic regions.

39. The second type of project focuses on a specific transboundary water issue, applying targeted interventions across different geographic regions over time. The REBYC-II Latin American and the Caribbean (LAC) (GEF ID 5304) and two previous projects (GEF IDs 884 and 3619) all focused on reducing bycatch in bottom trawl fishing. Yet, projects were implemented in

different countries and regions. The first project REBYC developed bycatch reduction devices as a global project. The second project REBYC-II Coral Triangle Initiative (CTI) addressed policy, legal, and institutional frameworks and identified more selective fishing gear through field trials and enhanced information management. Building on the experience and lessons of these two projects, the REBYC-II LAC strengthened collaboration through the regional strategy on the management of bycatch and discards, conducted trawl gear trials, and established multi-stakeholder platforms to manage fishery bycatch in Latin America and the Caribbean.

40. The third project type focused on knowledge management and evidence generation at the global level. The International Waters Learning Exchange and Resource Network (IW:LEARN) projects (GEF IDs 1893, 3639, 3900, and 5729) established a knowledge management platform for the IW focal area by facilitating learning exchanges (e.g., twinning), knowledge sharing, biennial international waters conferences, regional workshops and a central website. The implementation of IW:LEARN-4 (GEF ID 5729) alone resulted in the adoption of at least one new management approach in 47 IW projects, suggesting the replication and learning of good practices. Also, the Transboundary Waters Assessment Programme (TWAP) (GEF ID 4489) conducted the first global comparative assessment of five transboundary water bodies including aquifers, lakes and reservoirs, river basins, LMEs, and open oceans. These examples demonstrate GEF's contributions to global knowledge management and evidence generation on transboundary water management.

41. Each of the three IW project types has made distinct contributions to advancing transboundary cooperation and improving water management. Long-term engagement through GEF IW projects in specific geographic areas has fostered strong partnerships and multisectoral coordination, indicating transboundary coherence in pursuit of shared water management goals. The issue-specific approach has enabled the testing of innovative tools across regions, offering valuable insights for replication and scaling. Additionally, GEF's global projects position it as a potential hub for knowledge management and evidence generation on transboundary water issues. These distinct strengths across the three project streams present an opportunity for the GEF to reflect on strategic priorities and determine which types of interventions to emphasize moving forward.

4.7 Findings from Review of Ongoing Projects (GEF-6 to GEF-8)

42. The IW focal area evaluation reviewed 59 ongoing projects, which were relatively early in their active implementation stage. Most of the projects reviewed originated from GEF-7 (81 percent), followed by GEF-8 (14 percent) and GEF-6 (5 percent). Regional representation ranged from 6.8 percent in Europe and Central Asia (4 projects) to 22 percent in Asia (13 projects). FAO (27 percent) and UNDP (25 percent) were the leading implementing agencies, jointly covering most projects. Approximately 75 percent were IW projects, while the remaining 25 percent were

multi-focal area projects. In terms of scope, 73 percent were regional, 22 percent global, and 5 percent national. Standalone projects made up over 81 percent, with child projects accounting for 19 percent. Nearly 90 percent were FSPs, with medium-sized projects (MSPs) at 6.8 percent and EAs at 3.4 percent. Notably, the IW focal area included EA projects for the first time, specifically related to the BBNJ Agreement.

Table 7: Project characteristics of quality at entry assessment portfolio (n=52) [12]

	Number of projects	Percentage
Enabling environment		
Institutional capacity strengthening	41	78.9
Policy and regulatory reform	35	67.3
Innovative financial instruments	13	25.0
Stakeholder engagement		
Gender mainstreaming	51	98.0
Private sector	45	86.5
Civil society	44	84.6
Indigenous peoples	12	23.1
Water types/locations		
Marine	30	57.7
Coastal	25	48.1
Fresh water	23	44.2
River	20	38.5
Aquifer	11	21.2
ABNJ	8	15.4
Lake	6	11.5
TDA-SAP		
TDA-SAP planning or implementation	32	61.5
SAP implementation	24	46.2
TDA-SAP planning	19	36.5

[12] This analysis did not include projects (n=5) from the integrated programs (IPs), which are not the same as focal area projects. A review of IP is presented in the subsequent section of this report. EA projects (n=2) were not included because the nature of interventions is different from other projects. One project can be counted toward multiple response categories.

	Number of projects	Percentage
Innovation and knowledge management		
Knowledge management	52	100
Innovation	31	59.6
Project focus		
Pollution	35	67.3
Behavior change	35	67.3
Fisheries	32	61.5
SIDS	16	30.8
Plastics	11	21.2
Programming directions		
Blue economy	27	51.9
ABNJ	8	15.4
Water security	20	38.5

43. Over 78 percent of the projects include institutional capacity strengthening, and 67 percent focus on policy and regulatory reform (table 7). While only 25 percent incorporate innovative financial instruments, several projects demonstrate innovative financing approaches. For example, the Caribbean Blue Economy Financing (BluEFin) Project (GEF ID 10782) established regional financing models—a blue carbon facility, a blue credit/debit card, and digital payments for marine protected areas (MPAs)—based on the existing Caribbean Sustainable Finance Architecture (CSFA). CSFA includes national conservation trust funds and the Caribbean Biodiversity Fund (CBF). These mechanisms aim to generate sustainable funds for multiple countries in the Caribbean at the regional level. Similarly, the global coordination project for the Circular Solutions to Plastic Pollution integrated program (GEF ID 11197) mobilized cofinancing through equity investment. The “Build back a blue and stronger Mediterranean” project (GEF ID 10685) benefited from the MedFund, a financing mechanism to enhance the financial sustainability of project interventions in the MPAs in the Mediterranean.

44. The quality at entry assessment indicates that stakeholder engagement remains a key strength of the IW focal area. Nearly all projects (98 percent) include gender mainstreaming across project components, while 86.5 percent engage the private sector and 84.6 percent involve civil society organizations IW projects consistently promote stakeholder participation throughout

project planning, implementation, financing, completion, and knowledge management. Engagement with Indigenous peoples was noted in 23 percent of projects, when applicable.

45. Ongoing GEF IW projects demonstrate a fairly balanced focus between marine and freshwater systems, though groundwater remains underrepresented. About 57 percent of current projects are ***marine*** related, and 44 percent address ***fresh water***,[13] with grant allocations of $201 million and $180 million, respectively. Nearly 48 percent of projects include coastal areas. Groundwater or aquifer-related projects account for 21 percent, indicating that roughly half of the freshwater projects address transboundary groundwater issues. Transboundary rivers are the most common freshwater focus, yet groundwater and conjunctive water management (CWM) continue to pose challenges in international river basins. While IW:LEARN identifies over 450 transboundary aquifers globally, the GEF IW has supported work in only 14. For example, the UNEP/GEF MedProgramme recently convened national dialogues with Albania, Montenegro, Morocco, and Tunisia to strengthen information sharing and capacity building in key coastal aquifers (e.g., Buna-Bojana, Ras Jebel, and Rhiss-Nekor). There is clear potential for the GEF to increase its emphasis on transboundary groundwater in future programming, acknowledging that not all transboundary aquifers are located in GEF-eligible countries.

46. As in previous cycles, current GEF IW projects continue to apply the TDA-SAP process, with over 61 percent including TDA-SAP planning or SAP implementation. All projects incorporate knowledge management components, often linked to IW:LEARN and cross-project learning. For instance, the Drin Basin SAP implementation project (GEF ID 10881) explores innovative tools such as remote sensing, pollution modeling, machine learning, and AI to enhance transboundary monitoring. Similarly, the "Global Partnership for Mitigation of Underwater Noise from Shipping (GloNoise Partnership)" (GEF ID 10890) is developing a Global Noise Assessment Toolkit to address underwater noise pollution—a growing issue, especially in the Caribbean.

47. The GEF-7 and GEF-8 programming directions explicitly highlighted blue economy, ABNJ, and water security as key objectives. The quality at entry assessment estimated the share of projects aligned with these priorities: approximately 52 percent focus on blue economy, 15.4 percent on ABNJ, and 38.5 percent on water security. Reflecting the strategic objectives, IW portfolio addresses a broad range of topics, including pollution reduction (67 percent), behavior change (67 percent), and fisheries (61.5 percent). Additionally, about 31 percent of the projects target the SIDS (table 7).

[13] It exceeds 100 percent because GEF ID 10800 has an explicit focus on both marine and freshwater bodies. As demonstrated through this project, some IW projects connect freshwater and marine water bodies through integrated approaches (e.g., source-to-sea).

4.8 IW Engagement with the Clean and Healthy Oceans Integrated Program

48. In light of GEF's strategic shift toward integrated programming, it is important to understand the link between the IW focal area and CHO-IP. CHO-IP addresses marine hypoxia by tackling coastal pollution through four key outcomes:

(a) Dialogue, science, and knowledge management improved to inform decision-making and accelerate collaborative action to alleviate marine hypoxia;

(b) Policy, regulation, and investment frameworks strengthened to promote achievement of marine hypoxia pollution reduction targets;

(c) Best management practices adopted and amplified that emphasize nature-based solutions and achievement of marine hypoxia reduction targets; and

(d) IP progress, impact, and contributions to marine hypoxia reduction effectively monitored, evaluated, and widely reported.

49. The CHO-IP Program Framework Document (PFD) highlights how its outputs build on the foundational work of the IW focal area. For example, Output 2.3 ("assist LME countries to strengthen and adopt strategic action programs and regional norms designed to reduce hypoxia, including zonation and validation of existing TDA, SAPs, and blue economy plans") demonstrates how the TDA-SAP process provides a platform for addressing hypoxia at national and regional levels. Additionally, Output 2.1 emphasizes the promotion of regional or LME-level agreements and strategies, reinforcing the programmatic continuity with previous IW efforts.

50. The Global Coordination Project (GCP) (GEF ID 11353) is designed to play a vital role in coordinating and consolidating data from child projects for coherent evidence generation, policy formulation, and environmental conservation efforts. According to the PFD document (para 140), the GCP will engage those countries, LMEs, and regions that are not directly part of the child projects to join relevant dialogues and knowledge management activities. The previous and ongoing SAPs serve as the foundation for such collaborations.

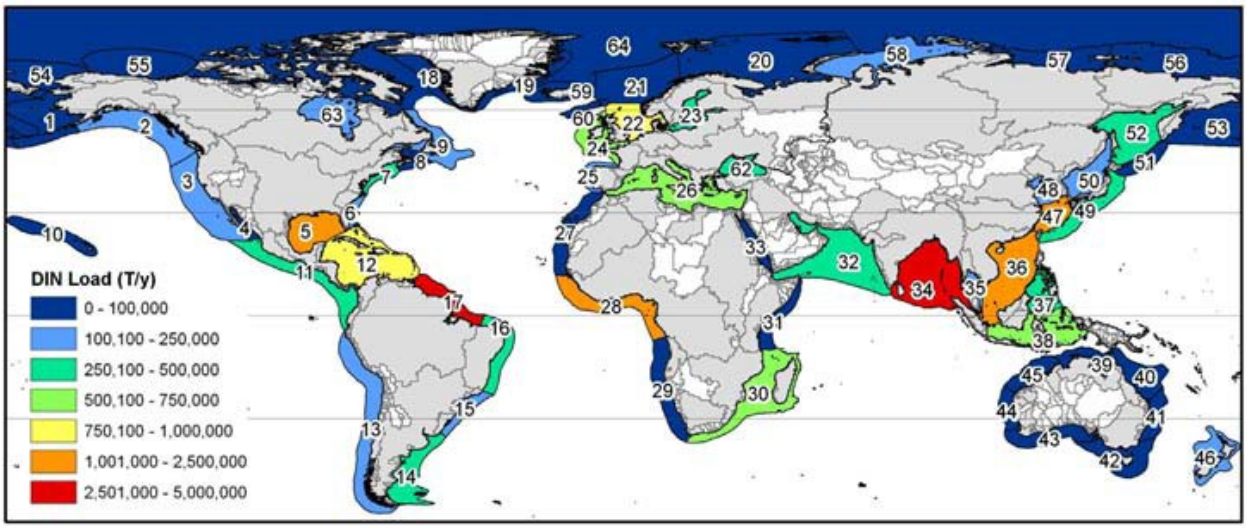
51. The child projects focus on raising public awareness of nutrient pollution and hypoxia, generating scientific evidence to inform decision-making, strengthening the enabling environment (e.g., policies, regulatory frameworks, financing), and knowledge management with a specific emphasis on best management practices. CHO-IP covers 14 project countries (i.e., Maldives, Thailand, Sri Lanka, Viet Nam, Venezuela, Mexico, Trinidad and Tobago, Panama, St. Kitts and Nevis, Grenada, Jordan, Moldova, Peru, and Madagascar) to cover the following LMEs: Bay of Bengal, Gulf of Thailand, Arabian Sea, South China Sea, Caribbean Sea, Gulf of Mexico, Red Sea, Black Sea, Humboldt Current, and Agulhas Current.

52. Some of the program indicators suggest that the CHO-IP measures results at regional or subregional levels and covers policy coherence. More specifically, the fourth indicator requires at least three countries to be involved in collaboration for coastal zone hypoxia reduction. The seventh and eighth indicators present opportunities to achieve policy coherence across multiple sectors through regulatory and policy frameworks. Additionally, the 10th indicator addresses LME-wide nutrient pollution and coastal hypoxia reduction strategies, which can inform policy and regulatory reform in multiple countries.

53. What has not been elucidated in the PFD and child projects is the contributions of IPs to strengthening transboundary cooperation, which represents the fundamental difference between IW focal area projects and IP child projects. While the GCP is expected to facilitate global coordination within IP countries and with neighboring countries, dedicated project interventions to strengthen collaborative relationships among the countries that share transboundary water bodies are limited. The objectives of IP initiatives and IW focal area initiatives are not the same despite their potential complementarity. These differences are corroborated by GEF IW stakeholder interviews. Although many IP initiatives address important global issues, including hypoxia, they cannot fully address them from IW perspectives. When IPs only involve single countries without a specific transboundary intervention, meaningful collective action and transboundary cooperation may not be promoted.

54. A comparison of LMEs covered by CHO-IP and the projected nitrogen load in LMEs also suggested that GEF project sites may not be fully matched with high pollution areas. While four child projects (GEF IDs 11350, 11352, 11357, and 11360) covered three LMEs (i.e., the Bay of Bengal, the South China Sea, and the Gulf of Mexico) with a high level of projected dissolved inorganic nitrogen (DIN) load, other child projects (GEF IDs 11354, 11359, and 11362) covered LMEs with a relatively low DIN load, such as the Red Sea, the Gulf of Thailand, and the Humboldt Current. Because nutrient pollution is not the only risk factor that informed the country selection for CHO-IP, this finding does not negate the importance of CHO-IP interventions or the contributions of IW projects that have addressed hypoxia and other land-based sources of pollution. It still highlights an opportunity from IW perspectives to focus on a limited number of LMEs with high pollution levels by involving all relevant countries to address hypoxia and strengthening transboundary cooperation (figure 5 and table 8).

Figure 5: Projected DIN load in LMEs predicted by the NEWS DIN model



Source: Adapted from Lee, R. Y., Seitzinger, S., and Mayorga, E. 2016. Land-based nutrient loading to LMEs: a global watershed perspective on magnitudes and sources. *Environmental development*, *17*, 220–29.

Table 8: Countries in CHO-IP and relevant LMEs covered

Countries	GEF ID	Relevant LME/gulf covered	DIN load
Viet Nam	11350	South China Sea (Gulf of Tonkin)	
Venezuela	11351	Caribbean Sea	
Sri Lanka	11352	Bay of Bengal	
Jordan	11354	Red Sea (Gulf of Aqaba)	
St. Kitts and Nevis	11355	Caribbean Sea	
Panama	11356	Pacific Central-American Coastal (Parita Bay)	
Maldives	11357	Bay of Bengal	
Grenada	11358	Caribbean Sea	
Thailand	11359	Gulf of Thailand	
Mexico	11360	Gulf of Mexico	
Moldova	11361	Black Sea	

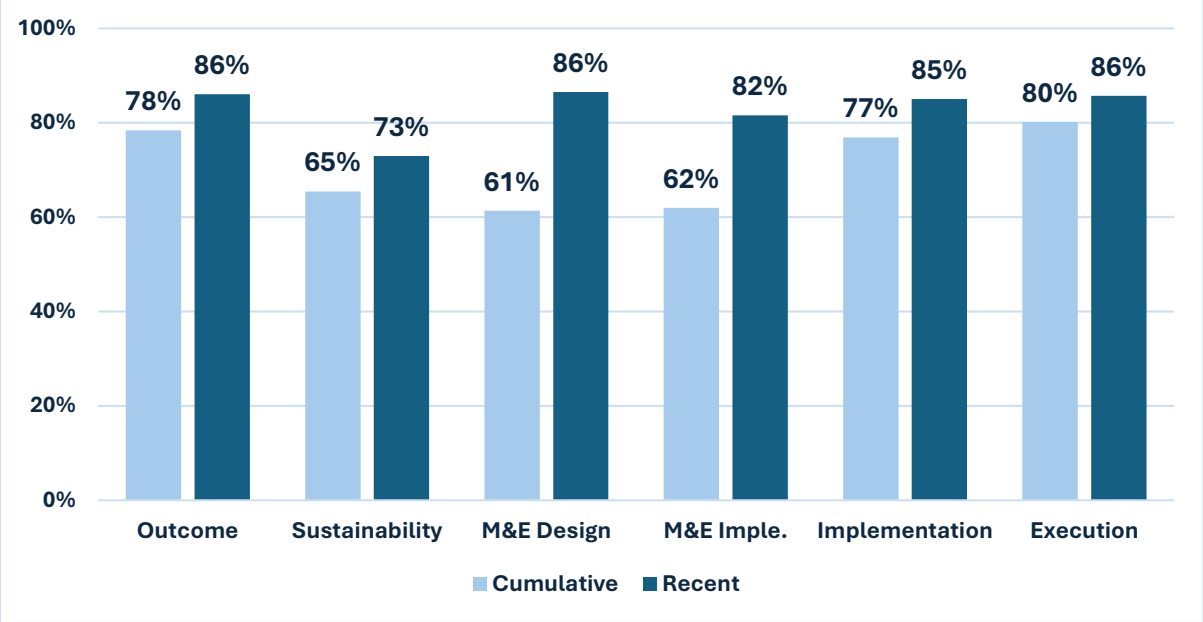
Peru	11362	Humboldt Current	
Trinidad and Tobago	11363	Caribbean Sea	
Madagascar	11364	Agulhas Current	

5 PERFORMANCE OF THE GEF IW PORTFOLIO

5.1 Overall Trends in Project Performance

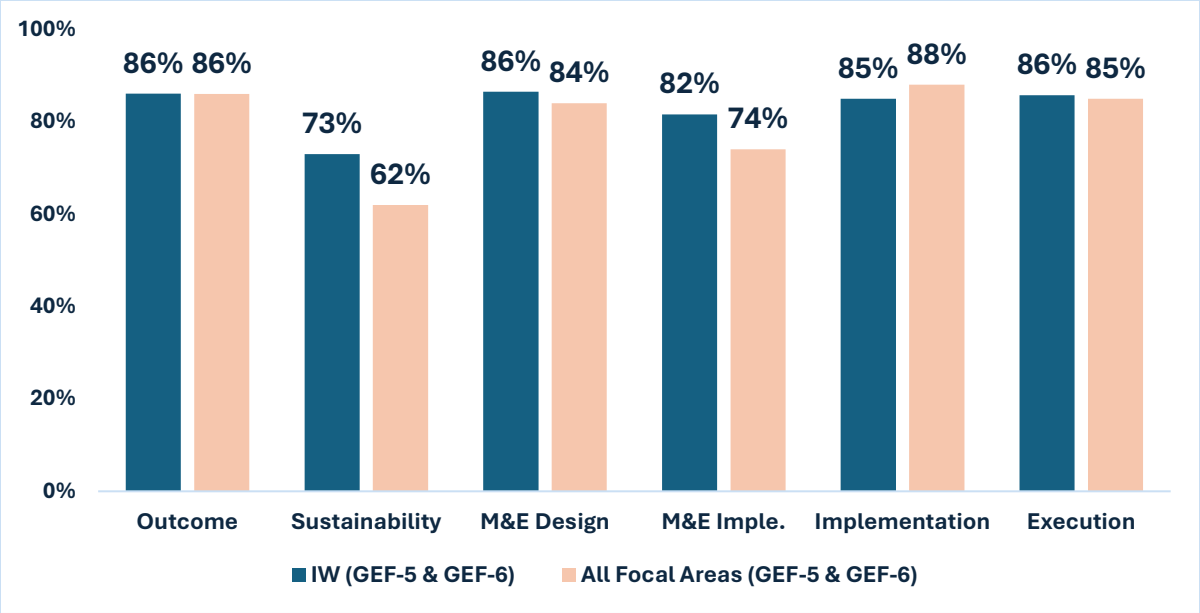
55. A comparison of project ratings from terminal evaluations shows that GEF-5 and GEF-6 projects have shown improved project performance over time. The proportion of projects with a positive rating was consistently higher among GEF-5 and GEF-6 projects than for the cumulative average of all IW projects (pilot phase to GEF-6) (figure 6). This trend held true across all measures on the outcome, likelihood of sustainability, quality of M&E at design and implementation, implementation quality, and execution quality. For recent projects (GEF-5 and GEF-6), approximately 86 percent received a project rating in the satisfactory range for outcome, and 73 percent for the sustainability rating. The largest difference was observed in the quality of M&E at design. The cumulative proportion of projects with a positive rating was 61 percent while 86 percent of the recent projects received a rating in the satisfactory range.

Figure 6: A comparison of cumulative (pilot to GEF-6) and recent (GEF-5 and GEF-6) results on GEF IW project ratings



56. A comparison of completed IW projects from GEF-5 and GEF-6 with the overall GEF portfolio also shows that IW activities are broadly comparable with those in all Focal Areas and that IW is notably stronger regarding sustainability, M&E, and implementation. It appears likely that the detailed preparation processes of TDA-SAP provide a strong foundation for sustainability, as well as help define important areas for M&E attention and how best to assess these (figure 7).

Figure 7: Proportions of IW projects (n=42) and overall GEF portfolio projects (n=721) from GEF-5 and GEF-6 with a project rating in the satisfactory or likely range



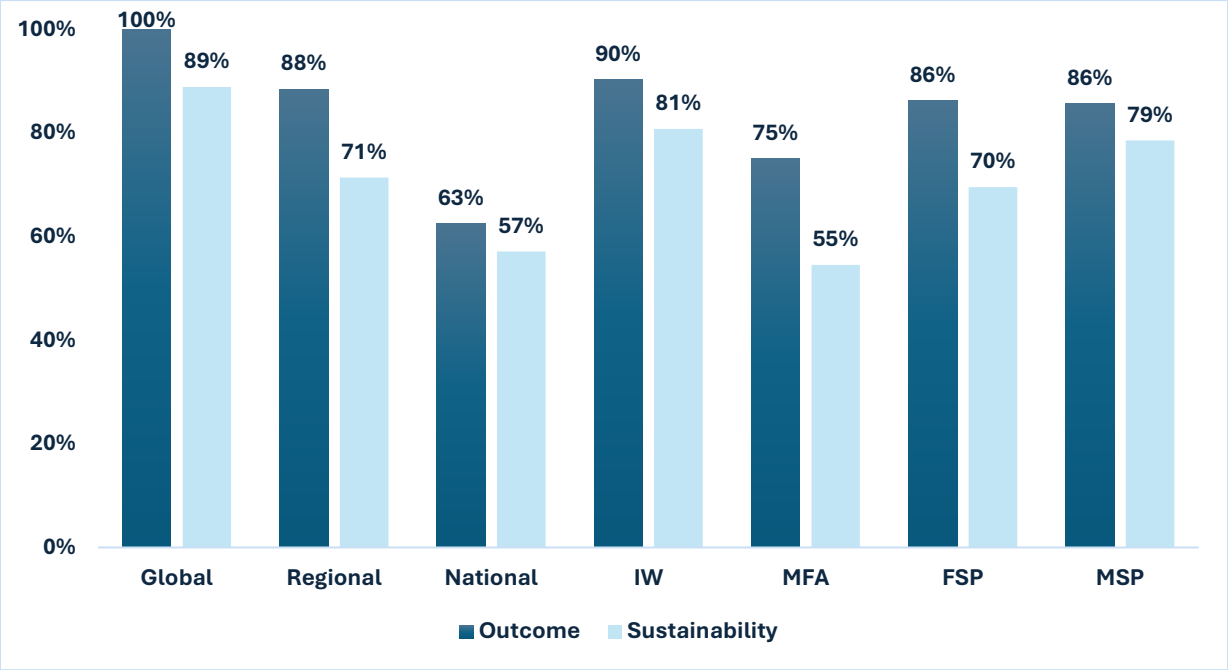
Note: The total number of GEF-5 and GEF-6 projects included in the GEF IEO's verified dataset from June 2024 was 721. Of these, project performance ratings were available for 715 projects on outcome, 627 projects on sustainability, 637 projects on M&E at design, 683 projects on M&E at implementation, 698 projects on project implementation, and 620 projects on project execution.

57. Terminal evaluations of projects from GEF-5 and GEF-6 reported a high level of relevance, efficiency, and effectiveness. The proportion of projects with a moderately satisfactory rating or higher was 98 percent for relevance, 88 percent for efficiency, and 95 percent for effectiveness, suggesting that most of the IW projects addressed globally, regionally, and nationally relevant transboundary water issues with high efficiency and effectiveness.

58. As shown in figure 8, analysis of terminal evaluations also showed that on average, national projects (n=7) received lower outcome and sustainability ratings than global and regional projects. Despite the limited sample size in this evaluation, the findings are consistent with the previous IW focal area study, which indicated the underperformance of national projects

compared to regional projects (GEF IEO 2018).[14] Also, multi-focal area projects had lower outcome and sustainability ratings than IW projects. Project size did not affect the outcomes while the likelihood of sustainability was higher in MSPs than that of FSPs.

Figure 8: Proportion of GEF-5 and GEF-6 projects with positive outcome and sustainability ratings by project scope, size, and focal area



59. A thematic analysis of 42 terminal evaluations including IW and multi-focal area projects on key findings, conclusions, and lessons provided insights into why some projects were not as successful as others in attaining project outcomes and sustainability. Some of the common issues observed in GEF-5 and GEF-6 projects include limited communications and coordination among projects and stakeholders, gaps in M&E, including insufficient tracking of cofinance and socioeconomic benefits, and overly ambitious project designs. For example, a terminal evaluation of an R2R child project in the Cook Islands (GEF ID 5348) highlighted that the project scope was too broad to be strategic or realistic to achieve project outcomes on water, land, and coastal management in one project. Sustainability was consequently in serious question because unfinished work from the project had to be listed in the exit strategy. Another R2R terminal evaluation (GEF ID 5404) similarly highlighted the oversized and overambitious design, which included regional and national interventions across 14 Pacific SIDS. These findings suggest that multi-focal area projects particularly need a realistic number and scale of intervention to avoid

[14] Underperformance was concentrated in R2R projects.

developing integrated projects at the expense of their effectiveness and sustainability. More information can be found in annex F.

5.2 Progress Toward Impacts

60. Several IW projects have demonstrated catalytic effects for sustaining and scaling up results beyond the GEF project period. One notable example is the Global Maritime Energy Efficiency Partnerships (GloMEEP) project (GEF ID 5508), which aimed to reduce greenhouse gas (GHG) emissions by supporting more energy-efficient shipping. A key outcome of GloMEEP was the establishment of the Global Industry Alliance (GIA) in 2017 — a public-private partnership, under which 16 private companies each committed $20,000 per year to facilitate low-carbon shipping. The GIA has supported research and development (R&D), technology demonstration, global dialogues, and capacity-building activities, creating a self-sustaining model that attracted additional private sector participation. Following the completion of the GEF project, the International Maritime Organization (IMO) and the Government of Norway continued support through the GreenVoyage2050 Project in 2019, ensuring the long-term impact of GloMEEP's initiatives.

61. An IW project in the Chu and Talas River Basins (GEF ID 5310) showed the early impact of GEF partnerships and institutional strengthening to sustain transboundary water management beyond the GEF-funded project period. This project focused on TDA-SAP development for Kazakhstan and Kyrgyzstan from 2014 to 2018. By the closure of this project, SAP approval by these countries was still pending. By leveraging the existing partnerships and follow-up support from the United Nations Economic Commission for Europe (UNECE), the Chu-Talas Water Commission was able to continue facilitating SAP approval processes without an additional GEF investment. The SAP was eventually approved in 2023 to guide national actions.

5.3 Monitoring: Coverage of GEF core indicators

62. While GEF's core indicators enable overall monitoring of IW performance, this evaluation found them inadequate to measure progress against strategic objectives. The IW focal area primarily addresses the GEF seventh and eighth Core Indicator by measuring the number of shared water ecosystems under new or improved cooperative management and the amount of globally over-exploited marine fisheries that have moved to more sustainable levels in million metric tons (GEF 2022).[15] Additionally, the following four sub-indicators provide measures of specific aspects of transboundary water management:

[15] Some GEF IW stakeholders have said in stakeholder interviews that additional, and more robust, indicators are necessary to adequately and properly evaluate whether the GEF IW is working in the highest risk situations.

(a) Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation

(b) Level of Regional Legal Agreements and Regional Management Institution(s) to support its implementation

(c) Level of national/local reforms and active participation of Inter-Ministerial Committees

(d) Level of engagement in IW:LEARN through participation and delivery of key products.

63. The review of IW-related core indicator results in the evaluation portfolio suggested that the IW focal area can continue improving its target setting, reporting, and recording of results. At least 126 projects or 45 percent of the evaluation portfolio reported the target for the relevant core indicator (table 9). Because the core indicator monitoring was introduced in 2018 and updated in 2019, none of the projects from GEF-5 set such targets.

64. Evidence suggests that several GEF-6 and GEF-7 projects achieved their core indicator targets. Four projects (GEF IDs 10172, 9684, 9593, and 9246) reported their core indicator targets at project design and achieved them at mid-term review. Three projects (GEF IDs 9720, 9359, and 6962) also set their targets and met them at terminal evaluation. Two projects (GEF IDs 9451 and 9124) reported the results at mid-term review and terminal evaluation while missing a target. Two projects (GEF IDs 9949 and 9121) only reported their indicator results at terminal evaluation without having a target. A total of 11 projects collectively improved transboundary cooperation in 14 shared water ecosystems.

Table 9: Status of GEF's core indicator monitoring by GEF phase

GEF phase	Number of projects with a target	Total targets	Number of projects with data available[16]	MTR/TE results
GEF-6	25	34	10	13
GEF-7	56	78	1	1
GEF-8	45	50	0	0
Total	126	162	11	14

[16]Additional data are expected to be available in the GEF portal over time.

65. GEF-8 has also included indicators, including 1) the number of LMEs with reduced pollution and hypoxia, 2) the number of people benefiting from transboundary water management, 3) MPAs or areas under improved management in million hectares, and 4) the areas of marine habitat under improved practices to benefit biodiversity. Although it is important to measure these quantitative indicators, they do not directly measure strategic objectives related to blue economy, ABNJ and water security. Additionally, the effectiveness of transboundary cooperation has not been monitored over time as it requires monitoring beyond the time span of a single project. Furthermore, the transition from IW tracking tools to core indicators has also diminished the opportunity to utilize various process indicators on transboundary cooperation. While the CHO-IP has established a program-level monitoring framework, the direct measurement of transboundary cooperation or specific IW benefits will be limited. These findings suggest that the IW focal area needs additional metrics to monitor the evolving IW strategic objectives and IW benefits supported by IPs and child projects.

5.4 GEF Interventions in Water Security

66. The evaluation of the GEF's approach and interventions in water security (GEF IEO 2023) highlighted the criticality and relevance of water to all the focal areas of the GEF (UN Water 2013). The evaluation assessed 283 projects with the total GEF funding of $1.56 billion with cofinancing of $13.42 billion. The GEF supported water security interventions mainly through international waters (30 percent), climate change (29 percent), and multi-focal areas (26 percent). The evaluation findings noted that the GEF enhanced water security primarily through facilitating infrastructural improvements (e.g., solar-based water pumps, small-scale irrigation systems) and strengthening enabling environment through policy development, stakeholder engagement, and knowledge generation.

67. The water security evaluation concluded that international conventions and GEF's focal areas address water security issues through their specific environmental focus rather than promote a holistic approach to the issue. The United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), and the Convention on Biological Diversity (CBD) address water from the perspectives of climate change, agriculture and land management, and ecosystems, respectively. In the GEF-8 results framework, the international waters focal area directly measures transboundary water governance, while the land degradation focal area addresses water resources on land management and restoration. Other GEF focal areas—biodiversity, climate change, and chemicals and waste—do not include freshwater-related indicators. This siloed approach has resulted in limited availability of evidence of GEF's overall contributions to water security.

68. Coherence between the GEF and other actors' water security projects has not been fully attained due to limited coordination at national, subnational, and implementation levels. Multiple instances were noted where other water security initiatives were implemented in the same geographic areas of GEF projects without any coordination. The coordination challenge resulted from different project timelines, different goals, and the lack of a responsible entity to facilitate the coordination on water security. Water-related issues in ecosystems, socioeconomic development, and natural disasters are often handled by different ministries, whereas coordination on water security requires multi-sectoral engagement.

69. While some water infrastructure continued to benefit project communities beyond the project period through operations and maintenance (O&M) with locally available materials, efforts on enabling environment, such as technical report writing, governance reforms, and capacity building activities, showed mixed results on sustainability. Additionally, GEF project activities have not been scaled up or reached broader adoption to adequately address water security challenges in project countries and regions. A key recommendation from the water security evaluation was to create sustainable financing mechanisms for scaling up successful interventions.

70. Water security projects have increasingly focused on gender inclusion by promoting women's participation in water decision-making bodies, including gender perspectives in water policy and governance, and targeting women for microloan programs. Limited attention has been paid to other vulnerable groups, such as indigenous people, refugees, and minority ethnic groups. Private sector engagement has also been limited in the previous and current water security projects.

5.5 IW Contributions to Regional Interventions

71. The Strategic Country Cluster Evaluation of the Lower Mekong River Basin Ecosystem revealed the high relevance of water to key environmental issues in this transboundary water body in Southeast Asia. The evaluation findings suggested that Mekong River communities face 1) inadequate water supplies for irrigation and drinking due to overharvesting and salinization of aquifers; 2) limited baseline data availability on water quality, wetlands, and riverine habitat; 3) resilience loss of ecosystem services due to altered water recharge and river flows; 4) reduced livelihood benefits from unsustainable harvesting of aquatic fisheries; and 5) lower food security from reduced water availability.

72. The findings also suggested that GEF interventions contributed to transboundary, national, and local water resource management, which facilitated multiple uses of water for agriculture, ecosystem services, and human consumption. The IW focal area projects specifically

focused on freshwater resource management in binational river basins and water security in the Mekong River Delta Transboundary Aquifer.

73. The evaluation further highlighted the transformative impacts of GEF's multi-focal area efforts in a transboundary setting. Over two-thirds of projects addressed water resource availability by promoting the landscape-level planning and management, which resulted in restoration of forest cover and watershed stability, diversification of agricultural production, livelihood improvements, and ecosystem service protection. These outcomes led to some of the transformative changes in local communities, such as increased access to irrigation and drinking water services, inclusion of women and indigenous people in the projects focusing on water availability, food security, and ecosystem resilience, and increased recognition that sustainable practices can increase income and ecosystem services when water is available.

74. A successful implementation of regional dialogues for transboundary water management and international cooperation has been documented. For example, an Experience Note through IW:LEARN highlighted how regional dialogues led to the development of Regional Guidelines and Communities of Practice in Central America. Box 1 below outlines key enabling factors for successful regional dialogues.

Box 1: Experience note highlighting regional dialogues

The Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network (IW:LEARN) has served for many years as a knowledge management hub for the International Waters (IW) focal area by promoting IW-related events, providing a repository of knowledge products, and summarizing IW project information through interactive maps. An Experience Note (GEF IDs 5279 and 10374) produced in partnership between IW:LEARN and the Global Water Partnership (GWP) has summarized key processes through which the Central American Commission on Environment and Development and the GWP initiated annual regional multistakeholder dialogues in 2019 and facilitated the development, finalization, and validation of Regional Guidelines in 2023 to guide transboundary water management in Central America (Yasuda and Tabora 2024).

This Guideline identifies four enabling factors for successful implementation of regional dialogues[17] and their further replication. These factors are 1) effective facilitators to manage regional dialogues, 2) use of the existing political and economic processes, 3) promotion of social learning, and 4) assurance of sustainable financing by leveraging co-financing from partners. Additionally, the Guideline project reports that regional dialogues have resulted in creation of Communities of Practice for further cooperation and information sharing on transboundary water management. To further facilitate, replicate, and share experiences from regional dialogues, a massive open online course on Governance

[17] Other GEF projects in the Drin River Basin (GEF IDs 4483 and 9121) also demonstrated how regional dialogues contributed to fostering political will and establishing the Drin Core Group as a decision-making and coordination mechanism for the region.

for Transboundary Freshwater Security has been made available to the public.[18] Overall, this Guideline Note emphasizes the vital role of regional dialogues in promoting transboundary cooperation and successful knowledge dissemination efforts, specifically building on experiences of GEF IW activities, shared through IW:LEARN.

5.6 THE IW AND PLASTIC POLLUTION

75. The GEF has directly addressed plastic pollution in the IW and multi-focal area projects through a wide range of interventions, such as global and regional assessment, infrastructure development, private sector engagement, capacity building for behavioral change, community-based cleaning activities, and knowledge management. These initiatives contributed to shaping the Circular Solutions to Plastic Pollution IP (GEF ID 11181), which focuses on upstream and midstream interventions.[19] Notably, the IW project on marine plastics (GEF ID 9681) laid the groundwork for this program by offering a roadmap and emphasizing systemic actions to address plastic pollution.

76. The global and regional transboundary water assessments by GEF-supported projects have generated quantitative evidence of plastic pollution and informed strategic actions. The TWAP (GEF ID 4489), for instance, conducted the first global assessment on transboundary waters including rivers, aquifers, lakes, LMEs, and open oceans. As part of this assessment, TWAP estimated the risk levels from floating plastic debris in 66 LMEs based on quantitative models (Eriksen et al 2014; Lebreton et al 2012) and informed GEF's strategic actions in relation to marine plastic pollution (UNEP Evaluation Office 2018). Another project covering the Yellow Sea LME (GEF ID 4343) reported that the TDA highlighted microplastics (plastics less than 5 mm) as a key environmental issue and called for a regional strategy. These projects provide examples of how the GEF has contributed to generating key information and evidence to inform actions on plastic pollution.

77. Plastic pollution projects have demonstrated the importance of local communities as a catalyst for change. Evidence suggests that local communities, women, and youths successfully promoted and conducted cleaning campaigns in coastal villages, plastic waste collection, and innovative reuse of plastic materials. In Indonesia, an evidence-based behavior change project (GEF ID 4690) equipped local communities and women with relevant knowledge and tools to lead

[18] The online training course is available at: https://www.edx.org/learn/international-law/sdg-academy-governance-for-transboundary-freshwater-security.

[19] Upstream efforts include the elimination of unnecessary plastic products and the promotion of sustainable alternatives. Midstream efforts focus on extending the lifecycle of plastics through circular systems, such as reuse, repair, and resale. These are some examples of upstream and midstream initiatives.

plastic waste management activities, such as plastic waste collection and production of decorative items from plastic bottles. Stakeholders suggested that local communities were able to set their own objectives and drove project activities as active agents rather than passive beneficiaries (CCRES 2018).

78. However, sustainability of community level interventions can prove to be challenging. The Integrated Environmental Management of the Fanga'uta Lagoon Catchment (GEF ID 5663) presented a key challenge with sustainability of community-level interventions. This project conducted cleanup campaigns in 26 villages, which led to the collection of over 350 tonnes of solid waste including plastics. After the project period, however, the mangroves and shores at project sites were polluted again with plastic bottles and other solid wastes. While regular cleanup campaigns by communities and youths were recommended in the terminal evaluation, it remained unclear what models and approaches can be owned, managed, and sustained by key stakeholders including the local government, local communities, women, youths, and private sector partners.

79. The Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (GEF ID 5405) also contributed to knowledge management by creating the Seas of East Asia Knowledge Bank to share knowledge and lessons from PEMSEA. PEMSEA has been supported by the GEF for the past three decades and recently mobilized external resources to implement a marine plastic project in the Philippines and Timor-Leste. While the GEF is not the main financial contributor for this project, PEMSEA's successful resource mobilization from non-GEF sources can be viewed as a result of GEF's long-term institutional support to PEMSEA.

5.7 POLICY COHERENCE

80. Policy coherence is an important priority in the GEF-8 programming directions. IW projects have historically focused on facilitating coherent policies and actions across multiple countries and sectors. The primary tool used by the IW focal area to achieve policy coherence across countries has been the TDA-SAP process. The TDA is a research-based, participatory process that identifies the priority issues to be addressed in the shared water body; the SAP is a plan of action agreed upon by the countries on how they will address these issues, jointly and/or within their respective countries. A case study below highlights how GEF IW projects contributed to promoting policy coherence through the TDA-SAP approach in Georgia and Azerbaijan (box 2).

Box 2: Case Study: Policy Coherence in the Kura River

The Kura River is the largest river in the Caucasus region and an important source of fresh water for Georgia and Azerbaijan. After providing support for a transboundary diagnostic analysis–strategic action program (TDA-SAP) in 2009 (GEF ID 1375, UNDP), the Global Environment Facility (GEF) funded a SAP implementation project (GEF ID 6962, UNDP) that ran from 2016 to 2021. The project used integrated water resources management (IWRM) as its primary approach, with an aim to address the water-energy-food-ecosystem security nexus in Georgia and Azerbaijan. IWRM is also the approach used by the European Union's Water Framework Directive, which both countries wanted to align with. CWM was identified as a critical component by the project's steering committee to resolve conflicts that arose from lack of data on water resources in both countries.

Through the project, the two countries agreed, for the first time, on monitoring standards for both water quality and quantity, which were also aligned with international standards. This agreement included establishing monitoring stations for both surface and groundwater, from which the two countries would regularly exchange data. Before the project, the countries had neither assessed their groundwater resources nor developed a management plan for them. Regular meetings strengthened cooperative relationships and enabled a common technical language not only between technical staff of the two countries, but also for the government agencies within the countries dealing separately with water quality and quantity.

At the strategic level, the project hosted quarterly national policy meetings with various water-related sectors, many of which had never participated in transboundary water initiatives. These sectors were represented in national advisory groups which, along with the technical working groups on water quality and quantity, served as prototype intersectoral bodies and approaches toward improved policy coherence.

In 2023, Georgia enacted a new Water Law based on IWRM, which integrates the various water-related EU directives, such as those on water protection, pollution, and flooding. Water resources management is mandated to shift from administrative boundaries to basin-defined boundaries by 2026. In 2020, Azerbaijan also used IWRM principles to form a multisectoral Water Commission that coordinated the country's various water-related agencies to respond to extreme drought and saltwater intrusion in the Kura River. The Water Commission eventually recommended the integration of all water-related functions into a single agency. In 2023, the State Water Resources Agency was established, bringing together the functions for managing drinking water supply, irrigation, amelioration, and water reservoirs—which included the management of water-related emergencies and disasters—under one umbrella institution.

81. Over 90 countries have undertaken SAPs, which represent politically endorsed frameworks for coherent regional and national actions. Of 52 ongoing projects reviewed in this evaluation, 60 percent include either TDA-SAP development or its implementation, suggesting that the IW focal area has tangibly taken steps to promote transboundary cooperation and

coherent water management at regional levels. In addition, the IW focal area's Common Oceans interventions in areas beyond national jurisdiction (ABNJ) also aim to achieve coherence among policies of regional fisheries management organizations, area-based governance mechanisms and other multilateral regulatory institutions to develop a cross-sectoral ABNJ management framework at the global, regional and national levels.

82. Recent strategic shifts by the GEF to integrated programming highlight the importance of regional and national-level policy coherence to address key environmental issues with transboundary implications. For example, a pollution reduction project in the Black Sea (GEF ID 10563), explicitly included an output to promote policy harmonization on pollution prevention in Georgia, Moldova, and Türkiye. A child project of the Circular Solutions to Plastic Pollution integrated program (GEF ID 11197) identified the absence of policy instruments and frameworks as key barriers to address plastic pollution and included a policy framework to facilitate alignment of economic, social, and environmental policies in project countries. Furthermore, CHO-IP includes a few relevant program-level indicators that provide insights into policy coherence across agriculture, municipal, and industrial sectors. However, national-level policy coherence across sectors has not been explicitly measured or reported on at the portfolio level.

83. The IW focal area's transboundary mandate provides an opportunity to promote policy coherence. The majority of IWC10 survey respondents perceived the IW focal area as an effective channel for the GEF to promote policy coherence by integrating and harmonizing environmental objectives with policy instruments in fisheries, tourism, agriculture, and other sectors. Further assessment of the level of integration and coherence of the IW focal area is provided in annex G.

84. The IW focal area has also historically supported tools to enhance national-level policy coherence to implement the SAPs. Despite not measuring national-level policy coherence at the portfolio level, the IW focal area has been supporting tools and approaches that can promote policy coherence across different water-related sectors and uses, such as municipal drinking water, sewage, fisheries, tourism, and ecosystem protection. Examples of these tools and approaches are IWRM, ICM, blue economy, marine spatial planning, source-to-sea (S2S), and CWM. The following paragraphs present some instances in which these tools have been adopted and the ongoing challenges in using them to promote policy coherence.

85. Marine spatial planning is a science-based process used to manage and allocate marine space for various human activities while ensuring the sustainable use of marine resources. It involves mapping marine environments, identifying competing uses, and developing plans to balance ecological, economic, and social objectives and reduce conflicts. In the Caribbean LME, which the GEF has supported since 2009, marine spatial planning is being applied in a wide range of areas, from small-scale pilots, to bays, to the full Exclusive Economic Zone of the Dominican Republic and the Mesoamerican Reef that spans Belize, Guatemala, and Honduras. The Western

Indian Ocean (WIO) LME countries have embedded marine spatial planning in decisions implementing the Nairobi Convention. However, implementing marine spatial planning at the regional level has faced some challenges due to language barriers among countries, different levels of readiness for marine spatial planning, differences in institutions and legislation, territorial disputes, insufficient interaction with other regions in Africa, and a lack of technical and financial capacity to implement.

86. S2S scales up from earlier area-based management frameworks (e.g., marine spatial planning, integrated coastal zone management, integrated watershed management, ecosystem-based approach) to link the various ecosystems, sectors, administrative units, and stakeholders through which water flows from its source to its multiple users and ultimately to the open ocean. Thus, the approach promotes cooperation between upstream and downstream stakeholders, as well as coordination among different sectors within the same area, which could contribute to increased coherence of policies covering these sectors and geographical areas. Through GEF capacity-building support for member states, the Nairobi Convention[20] Conference of Parties has recently adopted a decision on S2S and has included this approach in its 10-year Regional Integrated Programme (2025–35), which covers the Western Indian Ocean LME.

87. CWM aims to integrate the management of surface waters and groundwater, which is particularly critical for climate change adaptation. Colombia is adopting CWM by building on a reformulated and more inclusive National IWRM Policy. The country has moved to make its National Development Plan more coherent with environmental objectives by organizing its land use planning around water and environmental justice. Because it is relatively new compared to other approaches, implementation challenges with CWM have arisen, and were specified in national dialogues in the Mediterranean LME. These challenges have included the fragmentation of data and lack of data exchange among countries. These findings show that a regulatory framework for transboundary water management is a prerequisite for harmonized data exchange and management, that there is often a lack of implementation of existing national water laws, absence of efficient multisectoral institutional coordination for joint decision-making, and the failure to include the energy sector, which plays a significant role in flood regulation.

5.8 SOCIOECONOMIC CO-BENEFITS

88. Evidence from several terminal evaluations has demonstrated that IW activities have helped generate socioeconomic co-benefits. For example, a terminal evaluation on the implementation of global and regional oceanic fisheries conventions in the Pacific SIDS (GEF ID

[20] Nairobi Convention is a regional agreement, which focuses on the sustainable management of Western Indian Ocean. Further information can be accessed through the following: https://www.nairobiconvention.org/.

4746) reported that it had contributed toward an average increase in fisheries sector employment of 6.25 percent from 2010 to 2019. Other terminal evaluations highlighted additional socioeconomic co-benefits, such as increased employment and learning opportunities for women (GEF ID 4581), improved economic conditions for fisherfolk (GEF ID 5271), and improved food security (GEF ID 4966). A recent STAP information note has also suggested that GEF's investments in transboundary cooperation facilitate marine and freshwater management as well as contribute to generating socioeconomic and peace co-benefits (GEF STAP 2024).

89. The measurement of socioeconomic co-benefits, however, has lacked a systematic approach, with missing or inconsistent indicators across projects that make it difficult to compare results or aggregate findings. A water security project in the adjacent Cuvelai and Kunene Transboundary River Basins (GEF ID 10565) in southern Africa has tracked the number of farms with improved conditions due to sustainable land management practices. In another example, a blue economy and conservation project in Costa Rica, Peru, and Panama (GEF ID 10931) has measured the number of fishers and postharvest workers in artisanal fisheries who have benefitted from increased market access, improved prices, or other economic incentives. The challenge lies in identifying viable socioeconomic indicators that can be used in a diverse operating context to demonstrate the overall impact as the focal area.

5.9 Sustainability Planning

90. The development of sustainability plans for the benefits of IW projects has often been limited or initiated too late. A review of terminal evaluations from GEF-5 and GEF-6 projects (n=42) suggested that less than 30 percent of them developed sustainability or exit plans. Among 52 ongoing IW projects assessed, 56 percent did not explicitly indicate their plan to develop sustainability plans, and 34 percent would develop sustainability or exit plans in the latter half of GEF support, which does not provide enough time to take concrete actions or support development and strengthening of necessary institutions. However, a few more recent project proposals have specified that sustainability plans will be developed earlier. For example, an Areas Beyond National Jurisdiction (ABNJ) project in the Sargasso Sea (GEF ID 10620) commits to developing its exit strategy and sustainability plan before its Mid-Term Review. Similarly, a SAP implementation project in Ecuador and Peru (GEF ID 10700) aims to develop a post-project sustainability strategy during the second year of implementation.

91. A critical aspect of sustainability of benefits concerns financial aspects. Several projects under implementation have committed to developing detailed financial sustainability plans. One example of this development is a project for the implementation of an Ecosystem Approach to Fisheries (EAF) in the North Brazil Shelf LME (GEF ID 10919). This project will prepare a financial sustainability plan during its final year. A project in the Limpopo River Basin (GEF ID 10182) will develop a financial sustainability plan for the Limpopo Watercourse Commission (LIMCOM)

Secretariat by the end of the project. Given the long lifecycle of many IW projects, developing a specific sustainability plan early in the implementation process will enable its refinement throughout the project cycle.

5.10 INNOVATION AND INCLUSION

92. Terminal evaluations of GEF-5 and GEF-6 projects highlighted several examples of innovative technologies used in IW projects. The Yellow Sea LME SAP project for adaptive ecosystem-based management (GEF ID 4343), for instance, employed integrated multi-trophic aquaculture technology. This technology enhances aquaculture productivity and reduces water pollution by utilizing a food chain in the ocean. The knowledge and experience from this project were shared with three Caribbean countries through a learning exchange facilitated by IW:LEARN. Additionally, three projects (GEF IDs 4343, 6962, and 9121) utilized constructed wetlands, where polluted water is naturally treated through physical filtration and biological purification. A project in the Kura River Basin (GEF ID 6962) reported that a pilot site of constructed wetlands achieved an 85 percent reduction in nitrogen levels. These examples demonstrate how the IW focal area has adopted innovative technologies to reduce environmental stresses.

93. Increasing and monitoring innovative and transformative projects, however, has proven challenging because it is essential to maintain the central focus of the IW focal area on promoting transboundary water cooperation. Stakeholders with knowledge of GEF's project screening process reported the following challenges:

(a) limited number of innovative or transformative projects

(b) lack of clarity in theories of change

(c) low quality of project identification forms (PIFs).

Despite such challenges to incorporate innovations in GEF projects, IWC10 highlighted new approaches in the use of technologies (e.g., DNA monitoring, modelling to facilitate scenario-based planning), which have potential to be incorporated into future GEF projects.

94. The IW focal area has maintained a high level of gender inclusion and mainstreaming across GEF phases. Terminal evaluations (GEF IDs 4483 and 9121) from the Drin River Basin reported that approximately 30 percent of the decision-making body or Drin Core Group and 60 percent of its expert working groups were women. An ABNJ capacity building project (GEF ID 4582) similarly highlighted that, women accounted for 43 percent of the regional leader's program, which aimed to strengthen the capacity of leaders from SIDS and developing countries for ABNJ interventions. A fisheries project in SIDS (GEF ID 4746) further highlighted the publication of Moana Voices, a collection of women's firsthand experiences and narratives to mainstream gender in the fisheries sector.

95. The ongoing GEF IW projects also provide examples of how youth engagement, gender mainstreaming, and local community participation can be achieved. The Groundwater for Deep Resilience (G4DR) in Africa project (GEF ID 10970) exemplifies how GEF projects can organize groundwater interventions with a great deal of youth involvement. This project facilitates a pan-continental Youth Forum on groundwater management in Africa by engaging young people in dialogues, capacity building, networking, and communication activities. The Youth Ambassadors will also be identified to ensure that various social media platforms are used to disseminate groundwater-related information and news to young populations. The PROCARIBE+ project (GEF ID 10800) in Latin America and the Caribbean also includes specific measures to address gender mainstreaming and youth participation by aiming to benefit at least 30 percent of women-led projects and 10 percent of youth-led projects through the small grants. Another project in Côte d'Ivoire, Ghana, and Togo (GEF ID 10875) has also demonstrated gender mainstreaming efforts through dedicated engagement of women in income generating activities.

96. Despite some success at the individual project level, the IW focal area has generally struggled to engage private sector partners. This challenge is evidenced by the IWC conference survey and project evaluations. IWC10 participants perceived the lack of private sector engagement as the major weakness of the IW focal area. Stakeholder interviews also highlighted the following factors as potentially contributing to this challenge:

(a) Limited private sector expertise within the GEF Secretariat

(b) Time-consuming processes to approve some private companies for project participation

(c) The long-term nature of IW projects without early economic returns on investments.

5.11 CHALLENGES

97. One of the most persistent challenges identified concerns on how to achieve a balance between the quality and time efficiency of IW project planning and implementation. Government stakeholders reported that GEF agencies sometimes do not involve all the relevant ministries in project proposal development, consequently leaving some ministries uninformed and weakly engaged with the intervention. Proposal documents may be presented to the Ministry directly responsible for dealing with the GEF, for the purpose of obtaining government approval and signature, without seeking meaningful contributions from other ministries toward the proposal development. Another important factor, which is sometimes ignored, is to allow adequate time to coordinate with indigenous communities or other affected parties. This important process may seem slow and in some cases the project timeline may be too short to achieve all the desirable coordination and project setup activities. Stakeholder interviews with GEF implementing and executing agencies reinforced this finding, with reports that the limited

time available to them for proposal submission has sometimes reduced the possibility of adequate stakeholder engagement. These findings indicate that adequate time for the development of project proposals and other relevant documents is an important aspect of ensuring the ownership of project planning processes by countries.

98. The timely development and approval of IW projects were reported to be equally important to avoid major project gaps and loss of momentum on the ground. Stakeholder interviews consistently highlighted that 1) the current GEF process does not allow GEF agencies to submit a project proposal and receive timely approval without a significant project gap, 2) the current system does not allow GEF agencies to use ongoing project funds to develop a proposal for a subsequent project, and 3) a terminal evaluation must be completed before submitting a new proposal to GEF. These conditions were said to have specifically affected the Caribbean LME (CLME) (GEF ID 1032), CLME+ (GEF ID 5542), and Protecting and Restoring the Ocean's natural Capital, Building Resilience and Supporting Region Wide Investments for Sustainable Blue Socio-Economic Development (PROCARIBE+) (GEF ID 10800) projects, each of which had a significant project gap, resulting in staff turnover and a loss of institutional memory. Affected stakeholders assessed that the GEF is losing money from such project gaps because GEF agencies later need to explain what was previously completed to new players and rebuild momentum, using valuable project time during the start-up phase of new activities. This problem could have been prevented if project transition had occurred without any gap.

99. Stakeholder interviews conducted by the GEF IEO also identified persistent challenges related to GEF IW projects, particularly in terms of a relative paucity of robust IW indicators. The GEF-8 core indicators for the IW focal area are the number of shared water ecosystems under new or improved cooperative management and globally over-exploited marine fisheries moved to more sustainable levels. Despite the importance of tracking IW results quantitatively, this indicator does not provide adequate insights into the quality of such cooperative management. Additionally, the IW focal area has not conducted a critical review on the effectiveness of transboundary legal and institutional arrangements in generating environmental benefits beyond the project period.

100. A range of evidence suggests that GEF IW projects have not adequately focused on supporting the transboundary systems with the highest risk. According to the latest statistics from IW:LEARN, the GEF IW has been involved in at least 44 out of 310 international river basins and 13 out of 450 international aquifers. A global comparative baseline assessment of 286 transboundary international river basins used a suite of indicators to determine which international waters situations posed the highest risks (UNEP-DHI and UNEP 2016). These indicators measured environmental stress, nutrient pollution, biodiversity extinction, floods and drought, legal frameworks, and hydro-political tension. Similar studies have been done for

transboundary international aquifers, transboundary international lakes and transboundary international marine systems.[21] These studies suggest that the GEF IW activities have not covered many of the locations with the highest environmental risks. A list of GEF-supported transboundary river basins and those with highest risks can be found in annexes H and I.

101. Upgrading the GEF portal site can further enhance the efficiency of IW project management processes. IW stakeholders highlighted some of the challenges associated with the GEF portal site. For instance, project geolocations need to be entered on the portal site one by one (i.e., entering longitude and latitude), and it has been time-consuming for implementing agencies when they need to enter information for many projects. Another issue was the error message on the GEF portal. When an error message appears, users cannot tell where the error is, what the error is, and why it is an error. While these examples are highly specific challenges and are not only applicable to the IW focal area, GEF implementing agencies lose time due to such administrative bottlenecks.

102. This evaluation has also found that two IW-supported programs have faced challenges due to inadequacies in communications and knowledge management. More specifically, three terminal evaluations (GEF IDs 4581, 4582, and 4660) of the Common Oceans Areas Beyond National Jurisdiction (ABNJ) Program reported that limited communications and knowledge sharing within and between child projects present a missed opportunity for programmatic synergy and stakeholder engagement.[22] The Terminal Evaluation of the Deep-Sea project (GEF ID 4660) concluded that Deep-Sea and Tuna fishery projects could have collaborated on monitoring, surveillance and capacity development activities. Yet, such synergistic interactions were limited. The Tuna fishery and capacity building projects (GEF IDs 4581 and 4582) also suggested that tailored communications and knowledge sharing to specific interest groups and stakeholders (e.g., regional fisheries management organizations) did not occur due to the lack of a communication strategy and a dedicated knowledge management mechanism for the program. These gaps in communications and knowledge sharing led to missed opportunities to encourage stakeholder participation necessary for broader discussions on ocean management.

103. An emerging challenge in the IW focal area is how to best measure IW-related benefits in multi-focal area projects within integrated programs. A strategic shift occurred from GEF-5 to GEF-8 with a major emphasis on multi-focal area projects and integrated programming. While this change presented substantial advantages in addressing key environmental issues more holistically, cogent concerns have been raised. Stakeholder interviews suggested that despite the financial

[21] TWAP also conducted a similar analysis for transboundary aquifers and groundwater systems of SIDS, transboundary lakes and reservoirs, LMEs, the open ocean, and transboundary crosscutting water systems.

[22] Terminal evaluations for the R2R program also suggested that communications were limited for stakeholder engagement (GEF ID 5348) and internal project coordination (GEF ID 5404).

contributions of the IW focal area to IPs, regional and global IW priorities may not be adequately addressed in IP's child projects. Additionally, individual country priorities and interests do not necessarily align with the mandate of the GEF IW to demonstrate IW-related transboundary benefits. Consequently, the IW focal area may not be able to produce the same level of IW benefits in transboundary water bodies if IW focal area resources are incrementally allocated to IPs.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

104. The IW focal area has been relevant to national, regional, and global priorities, as evidenced by terminal evaluations, previous GEF IEO evaluations on water security, the Mekong River Basins, and integrated programs. Evaluation findings suggest that marine and freshwater imbalances previously identified by the GEF IEO did not persist. However, there are a limited number of GEF IW projects dedicated to groundwater, and transboundary water bodies with the highest risks are not always covered, indicating potential for further strengthening the GEF IW's relevance.

105. The IW focal area addressed pollution reduction and sustainable fisheries as the most common thematic issues from GEF-5 to GEF-8 while promoting integrated programming approaches and strengthening the enabling environment. The majority of GEF-5 and GEF-6 projects incorporated at least one integrated approach, such as IWRM, ICM, and Ridge to Reef. Among the currently active projects, key intervention areas include knowledge management, institutional capacity building, and policy and regulatory strengthening. An emerging area of work led by the IW focal area is providing technical support to countries on BBNJ Agreement. While the IW focal area had not been attached to any specific international convention, the adoption of the BBNJ Agreement in 2023 presented an opportunity for the IW focal area to conduct related EAs in GEF-8 and future support for implementation once the Agreement enters into force.

106. The performance of IW focal area projects has improved in recently completed GEF-5 and GEF-6 projects. Project ratings on all evaluation criteria, including outcome, sustainability, M&E at design and implementation, project implementation, and project execution, were better than the cumulative results from the pilot phase to GEF-6. These performance results were also comparable to or better than the overall GEF portfolio.

107. In contrast to the regional projects, some national and multi-focal projects in IW have underperformed. While the overall proportion of projects with an outcome rating in the satisfactory range was 86 percent, national and multi-focal area projects had lower proportions at 63 percent and 75 percent, respectively. This issue will need to be addressed with the shift toward greater integration of IW. In addition, the GEF IEO evaluation on water security also noted

that water has not been measured across all focal areas, making it difficult to demonstrate GEF's synergistic impact.

108. The IW focal mandate on transboundary cooperation has not been fully integrated or reflected in the integrated programs in GEF-8 and cannot replace dedicated IW projects. From GEF-5 to GEF-8, GEF investments in the IW focal area have expanded from primarily supporting standalone IW projects to contributing to national and multi-focal area projects, integrated programs, and EAs for the BBNJ Agreement. While this strategic shift presented opportunities to generate multiple environmental benefits, such competing priorities could dilute or reduce the IW focal area's principal focus on transboundary cooperation, which has been promoted through long-term support for specific water bodies, application of innovative approaches in multiple regions, and knowledge and evidence generation at the global level.

109. GEF's core indicators are inadequate in measuring and demonstrating IW-related transboundary benefits and socioeconomic co-benefits. While sub-indicators address the status of TDA-SAP, regional agreements, national/local reforms, multi-sectoral coordination, and IW:LEARN engagement, multi-focal area projects in integrated programs do not focus on these IW benefits. Additionally, the quality and effectiveness of transboundary cooperation and agreements in producing global environmental benefits have not been monitored or measured. Furthermore, the measurement of socioeconomic co-benefits has lacked a systematic approach, with indicators that are missing or inconsistent across projects, making it difficult to compare results or aggregate findings.

110. The IW focal area has supported knowledge management by disseminating the impacts, successful practices, and key lessons of IW projects through IW:LEARN. The current upgrading of the IW:LEARN website is expected to further strengthen knowledge sharing within the GEF and with external audiences. The recent IWC10 also provided a platform for IW stakeholders to exchange their knowledge and experience.

111. While the IW focal area has maintained focus on gender inclusion and mainstreaming across GEF phases, private sector engagement has been a key weakness. Both terminal evaluations and project documents for ongoing projects provided successful examples of gender inclusion and mainstreaming in leadership roles, capacity building, and knowledge dissemination. While there has been limited success, private sector engagement has been recognized as a key weakness among IW stakeholders, as evidenced in the IWC10 survey.

112. The IW focal area has faced the challenge of pursuing time efficiencies while ensuring adequate stakeholder engagement and project ownership by countries. Timely project approval and implementation are vital to continue strengthening transboundary cooperation without a major project gap. However, excessive pursuit of shortening the project preparation could result

in limited stakeholder engagement and ownership by project countries. This evaluation also highlighted how the GEF portal has been a hindrance to time efficiency from a technical level.

113. Financial sustainability is vital to facilitate long-term transboundary water management. Yet, the degree of sustainability planning varies by project. Given that GEF IW projects have faced challenges with gaps between projects, the current tendency to leave sustainability and exit plan development until the end of the project implementation period is not effective or adequate. Furthermore, financial sustainability planning requires adequate training on available financing models and options.

114. The IW focal area's transboundary mandate provides an opportunity to promote policy coherence. Inherently, the mandate seeks coherence in water-related management policies across countries, so that the degree of protection and regulation of resources in these water bodies approaches a degree of uniformity and consistency. The TDA-SAP approach has consistently promoted regional and transboundary coherence among stakeholder countries. The IWC10 survey also identified the GEF IW focal area as an effective channel for the GEF to promote policy coherence by integrating and harmonizing environmental objectives with policy instruments in fisheries, tourism, agriculture, and other sectors.

6.2 RECOMMENDATIONS

115. The GEF Secretariat should continue to carefully assess all new IW supported projects to ensure that its core mandate of transboundary cooperation remains central to all investments.

116. To enhance the financial sustainability of IW projects, the GEF Secretariat should support stakeholder training on innovative financing models and promote the development of comprehensive sustainability plans early in the project cycle. The IW focal area should also ensure an early and sustained emphasis on capacity-building, delivering targeted training to a broad range of stakeholders and actively engaging private sector partners.

117. The GEF Secretariat should establish guidance for Agencies and national partners to enhance monitoring the effectiveness of transboundary cooperation arrangements and relevant socioeconomic co-benefits using quantitative indicators and qualitative approaches, this would be particularly pertinent where transboundary arrangements are associated with integrated programs.

7 REFERENCES

CCRES (Capturing Coral Reef & Related Ecosystem Services). 2018. "CCRES Makassar workshops: My Future, My Oceans." Makassar, Indonesia, 2018 workshop.

CRED (Centre for Research on the Epidemiology of Disasters). 2023. "2022 Disasters in Numbers." Emergency Disaster Database 2022 report. Brussels, Belgium: CRED.

Eriksen, Marcus, Laurent C. M. Lebreton, Henry S. Carson, Martin Thiel, Charles J. Moore, Jose C. Borerro, François Galgani, Peter G. Ryan, and Julia Reisser. 2014. "Plastic Pollution in the World's Oceans: More than 5 Trillion Plastic Pieces Weighing over 250,000 Tons Afloat at Sea." *PLoS ONE*, 9(12): e111913.

FAO (Food and Agriculture Organization of the United Nations). 2024. "The State of World Fisheries and Aquaculture 2024 – Blue Transformation in action." Rome: FAO.

GEF (Global Environment Facility). 1995. Scope and Preliminary Operational Strategy for International Waters. Washington, DC: GEF.

———. 2011. GEF-5 Focal Area Strategies. Washington, DC: GEF.

———. 2016. GEF-6 Programming Directions. Washington, DC: GEF.

———. 2018. GEF-7 Programming Directions. Washington, DC: GEF.

———. 2022. GEF-8 Programming Directions. Washington, DC: GEF.

———. 2022. Guidelines on the Implementation of the GEF-8 Results Measurement Framework. Washington, DC: GEF.

———. n.d. Areas Beyond National Jurisdiction. GEF portal.

———. n.d. International Waters: Main Issue. GEF portal.

GEF IEO (Global Environment Facility Independent Evaluation Office). 2017. *The GEF in the Changing Environmental Finance Landscape: Final Report of OPS6*. Evaluation Report No. 110. Washington, DC: GEF IEO.

———. 2018. *International Waters Focal Area Study*. Evaluation Report No. 114. Washington, DC: GEF IEO.

———. 2022. *Working Toward a Greener Global Recovery: Seventh Comprehensive Evaluation of the GEF*. Washington, DC: GEF IEO.

———. 2023. *Evaluation of the GEF's Approach and Interventions in Water Security*. Washington, DC: GEF IEO.

GEF STAP (Scientific and Technical Advisory Panel). 2024. *Fostering cooperation and managing conflict: A STAP information note on GEF transboundary water projects.* Washington, DC: GEF STAP.

IPCC (Intergovernmental Panel on Climate Change). 2023. *Climate Change 2023 Synthesis Report: Summary for Policymakers*. Geneva, Switzerland: IPCC.

Kashiwase, Haruna, and Fujs, Tony. 2023. "Strains on freshwater resources." In *Atlas of Sustainable Development Goals 2023.* A. F. Pirlea, U. Serajuddin, A. Thudt, D. Wadhwa, and M. Welch (eds.). Washington, DC: World Bank.

Kuzma, Samantha, Marc F.P. Bierkens, Shivani Lakshman, Tianyi Luo, Liz Saccoccia, Edwin H. Sutanudjaja, and Rens Van Beek. 2023. Aqueduct 4.0: Updated Decision-Relevant Global Water Risk Indicators. Washington, DC: World Resources Institute.

Lebreton, Laurent C. M., S. D. Greer, and Jose C. Borrero. 2012. Numerical modelling of floating debris in the world's oceans. *Marine Pollution Bulletin.* 2012 Mar;64(3):653–61.

McCracken, M., and A. T. Wolf. 2019. Updating the Register of International River Basins of the world. *International Journal of Water Resources Development*, *35*(5), 732–82.

NOAA (National Oceanic and Atmospheric Administration). 2024. Where is all of the earth's water?. Silver Spring, MD: NOAA.

Pearson, Jasmine, Guy Jackson, and Karen E. McNamara. 2021. Climate-driven losses to knowledge systems and cultural heritage: A literature review exploring the impacts on Indigenous and local cultures. The Anthropocene Review, 10(2), 343–66.

ShikimaIgor, Igor A. 1993. World fresh water resources. In *Water in Crisis: A Guide to the World's Fresh Water Resources,* Peter H. Gleick (ed.). Oxford University Press: New York.

UN Water. 2013. Water security and the global water agenda. Geneva, Switzerland: UN Water.

UN Water. n.d. Level of water stress: freshwater withdrawal as a proportion of available freshwater resources. Geneva, Switzerland: UN Water.

UNECE (United Nations Economic Commission for Europe), UNESCO (United Nations Educational, Scientific and Cultural Organization), and UN Water. 2024. Progress on

transboundary water cooperation: Mid-term status of SDG indicator 6.5.2, with a special focus on climate change. Paris, France: UNESCO.

UNEP (United Nations Environment Programme). 2024. Ocean, Seas and Coast. Nairobi, Kenya: UNEP.

UNEP Evaluation Office. 2018. "Terminal Evaluation of the Global Environment Facility/UN Environment Project 'Transboundary Waters Assessment Programme (TWAP).'" Nairobi, Kenya: UNEP.

UNEP-DHI and UNEP. 2016. *Transboundary River Basins: Status and Trends.* Nairobi, Kenya: UNEP.

UNESCO. 2024. The United Nations World Water Development Report 2024: Water for Prosperity and Peace. Paris: UNESCO.

United Nations. n.d. Agreement on Marine Biodiversity of Areas beyond National Jurisdiction.

United Nations and UNESCO. 2021. Progress on Transboundary Water Cooperation: Global Status of SDG Indicator 6.5.2 and Acceleration Needs. Paris: UNESCO.

Yasuda, Yumiko and Fabiola Tabora. 2024. Enhancing transboundary water cooperation through multistakeholder regional dialogues. Stockholm: Global Water Partnership.

Zaveri, Esha, Jason Russ, Amjad Khan, Richard Damania, Edoardo Borgomeo, and Anders Jägerskog. 2021. *Ebb and Flow, Volume 1: Water, Migration, and Development.* Washington, DC: World Bank.

8 ANNEXES

8.1 ANNEX A: IW FOCAL AREA EVALUATION QUESTIONS

The IW focal area evaluation will address three primary evaluation questions:

- To what extent has the IW focal area adapted to the evolving global, regional, and national priorities and GEF's recent shift to integrated programming?
- How did the IW focal area projects perform and produce impacts?
- How has the GEF contributed to knowledge management and information sharing of IW-related projects and initiatives?

Additional evaluation questions are closely aligned to the OPS8 evaluation questions to ensure coherence between individual focal area studies and the OPS8. Table 1 presents the evaluation matrix.

Annex A, Table 1. Evaluation matrix

Additional evaluation questions	Information sources	Methodology
How relevant are the strategic priorities in GEF-7 and GEF-8 aligned with global priorities in this focal area?	• GEF project documents • Journal articles • Grey literature • Terminal evaluations	• Desk review
How have the IW focal area strategies continued to align with country priorities?	• GEF project documents • Terminal evaluations	• Desk review • Key informant interviews
How has the IW focal area demonstrated policy coherence in the recent and ongoing projects?	• Terminal evaluations • Project stakeholders • IW evaluations	• Desk review • Key informant interviews
To what extent has the IW focal area made progress against the GEF-8 core indicator targets?	• GEF-8 corporate scorecard • GEF Secretariat	• Desk review • Key informant interviews
How has the IW focal area produced health co-benefits?	• Terminal evaluations • Project stakeholders	• Desk review

Additional evaluation questions	Information sources	Methodology
		• Key informant interviews • Survey
To what extent did the IW focal area projects achieve intended outcomes and project sustainability?	• Terminal evaluations	• Quantitative analysis of project ratings
How has the IW focal area considered gender, indigenous people, local communities, and youths?	• Terminal evaluations • Project stakeholders	• Desk review • Key informant interviews
How has the IW focal area engaged the private sector?	• Terminal evaluations • Project stakeholders	• Desk review • Key informant interviews
How has the IW focal area promoted broader adoption and scaling up of key interventions for transformational change?	• Terminal evaluations • IWC10 • Project stakeholders	• Desk review • Direct observations • Key informant interviews
What innovations and technologies have the IW focal area projects used?	• Terminal evaluations • IWC10	• Desk review • Review of IWC10 materials

8.2 ANNEX B: STAKEHOLDERS INTERVIEWED

Name	Affiliation
Dr. M. Saparis Soedarjanto	Ministry of Environment and Forestry, Indonesia
Ms. Hadiyati Utami	Ministry of Environment and Forestry, Indonesia
Ms. Sitti Hamdiyah	Ministry of Marine Affairs and Fisheries, Indonesia
Mr. Prabowo P.	Ministry of Marine Affairs and Fisheries, Indonesia
Mr. Seyla Sok	Ministry of Environment, Cambodia
Ms. Ana Mponda	Ministry of Public Works, Housing and Water Resources, Mozambique
Mr. Gilbert Mawere	Ministry of Lands, Agriculture, Water, Climate, and Rural Development, Zimbabwe
Ms. J. C.	Ministry of Environment and Climate Change, Fiji
Mr. Pablo Kok	Ministry of Environment, Uruguay
Mr. Jeffrey Griffin	FAO
Mr. Lorenzo Galbiati	FAO
Ms. Lucilla Minelli	FAO
Ms. Louise Whiting	FAO
Mr. Tony Thompson	FAO
Ms. Isabelle Vanderbeck	UNEP
Mr. Vladimir Mamaev	UNDP
Ms. Sonja Koeppel	UNECE
Ms. Diana Aripkhanova	UNESCO
Mr. Mish Hamid	Former IW:LEARN
Mr. Nagaraja Harshadeep	World Bank
Ms. Sara El Choufi	World Bank
Ms. Erin Jan L. Sinogba	ADB
Mr. James Dalton	IUCN
Ms. Maha Ismail	Nile Basin Initiative
Dr. Susanne Schmeier	GEF Scientific and Technical Advisory Panel (STAP)

Mr. Aki Mercelino	Conservation International
Ms. Olivia Reed	Conservation International
Ms. Yumiko Yasuda	Former GWP
Mr. Will Griffiths	International Maritime Organization
Ms. Shirley Ann S. Pelep	Micronesia Conservation Trust
Ms. Madeline Beattie	Blue Nature Alliance
Ms. Ivan Zavadski	Former GEF IW Coordinator
Dr. Alfred M. Duda	Former GEF Secretariat Senior Advisor
Ms. Andrea Merla	Former GEF Secretariat
Ms. Astrid Hillers	GEF Secretariat
Mr. Andrew Hume	GEF Secretariat
Mr. Taylor Henshaw	GEF Secretariat
Mr. Mohamed Imam Bakarr	GEF Secretariat
Ms. Constantina Toli	IW:LEARN Director
Ms. Natalie Degger	UNIDO
Mr. Mish Hamid	UNIDO/Former IW:LEARN Director
Mr. Patrick Debels	UNOP

8.3 ANNEX C: IWC10 PARTICIPANT SURVEY

IWC10 was held in Uruguay in September 2024. The GEF IEO conducted an online survey with IWC10 participants to explore their perceptions of the IW focal area regarding key strengths and weaknesses, comparative advantages, financial sustainability, and policy coherence.

Methods

SurveyMonkey was used as the data collection tool, and IWC10 participants were invited to participate in the GEF IEO survey before, during, and after the conference. A total of 12 questions were included in the survey with an expected time requirement of 10 minutes. Some of the key questions included the following:

- In the projects that you were involved in, did the GEF support the integration/harmonization of policies and regulations across different sectors (e.g., environment with agriculture, fisheries, tourism, energy, waste management)?
- In your opinion, to what extent do the following GEF IW focal area interventions have a comparative advantage over freshwater/marine interventions funded by other donors?
- In your opinion, what are the strengths and weaknesses of IW focal area projects? Please rate each option below as a strength, weakness, or neutral.
- In your opinion, how can IW focal area interventions improve their financial sustainability? Please check all that apply.
- Is the IW focal area an effective channel for the GEF to promote horizontal policy coherence (i.e., integration/harmonization of environmental objectives with policies and regulations for agriculture, fisheries, tourism, energy, waste management and other sectors)?

Results

Participant characteristics

A total of 70 participants[23] provided valid response to the survey. Of these, 42 people (60 percent) were from executing agencies or project management teams, 13 people (18.6 percent) were from

[23] Data management notes: If participants are coming from implementing agencies (IAs) but selected other categories, they are coded as the IA in the role. If participants picked multiple background categories including IA but without IA's organizational email address, their role was not coded as the IA. Multiple people picked executing agencies and project management team. As such, a new category was created to include either one of them.

implementing agencies, eight people (11.4 percent) were IW project stakeholders, three people (4.3 percent) were consultants or service providers, another three people (4.3 percent) had never been involved in IW projects, and one person (1.4 percent) was from the GEF Secretariat.

Of those people who have been involved in IW projects and provided a valid response (n=56), 47 people (83.9 percent) were involved in ongoing projects, three people (5.4 percent) were involved in the completed projects, and six people (10.7 percent) were involved in both project types.

Policy coherence

Of those people who provided a valid response (n=56), 41 people (73.2 percent) perceived that the GEF supported the integration/harmonization of policies and regulations across different sectors, such as agriculture, fisheries, tourism, energy, and waste management. Eight people (14.3 percent) did not see this support, and seven people (12.5 percent) were not sure.

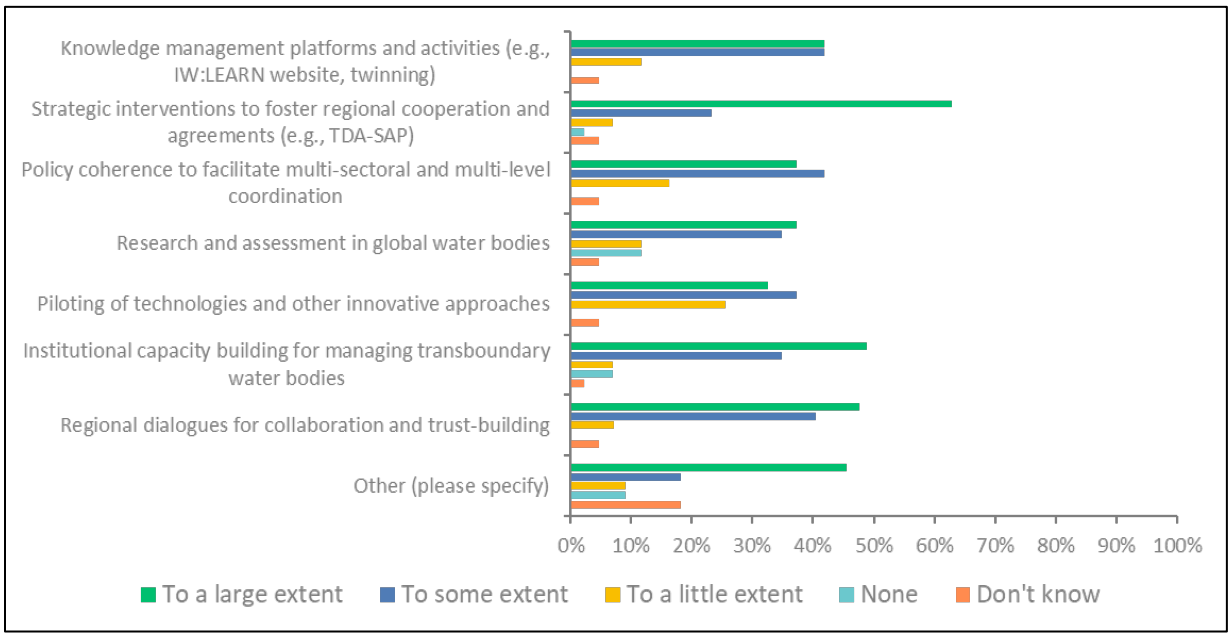
The IW focal area was also perceived as an effective channel for the GEF to promote horizontal policy coherence by 35 people (83.3 percent) out of 42 valid responses. Seven people (16.7 percent) were not sure if this focal area could be an effective platform for this purpose.

IW comparative advantages

Figure 1 presents the proportion of respondents (n=43) who perceived GEF IW focal area interventions as having comparative advantages over freshwater and marine interventions supported by other donors in predefined categories. Over 62 percent of respondents identified strategic interventions to foster regional cooperation and agreements through the TDA-SAP process as a comparative advantage to a large extent. Institutional capacity building for managing transboundary water bodies (48.8 percent), regional dialogues for collaboration and trust building (47.6 percent), and knowledge management platforms and activities (41.9 percent) were also the major comparative advantages perceived by respondents.

While most respondents perceived all the predefined activities as GEF's comparative advantages at least to some extent, 25.6 percent of respondents perceived piloting of technologies and other innovative approaches as a comparative advantage to a lesser extent.

Annex C, Figure 1. IWC10 participants' perceptions of comparative advantages of GEF IW interventions over other donors



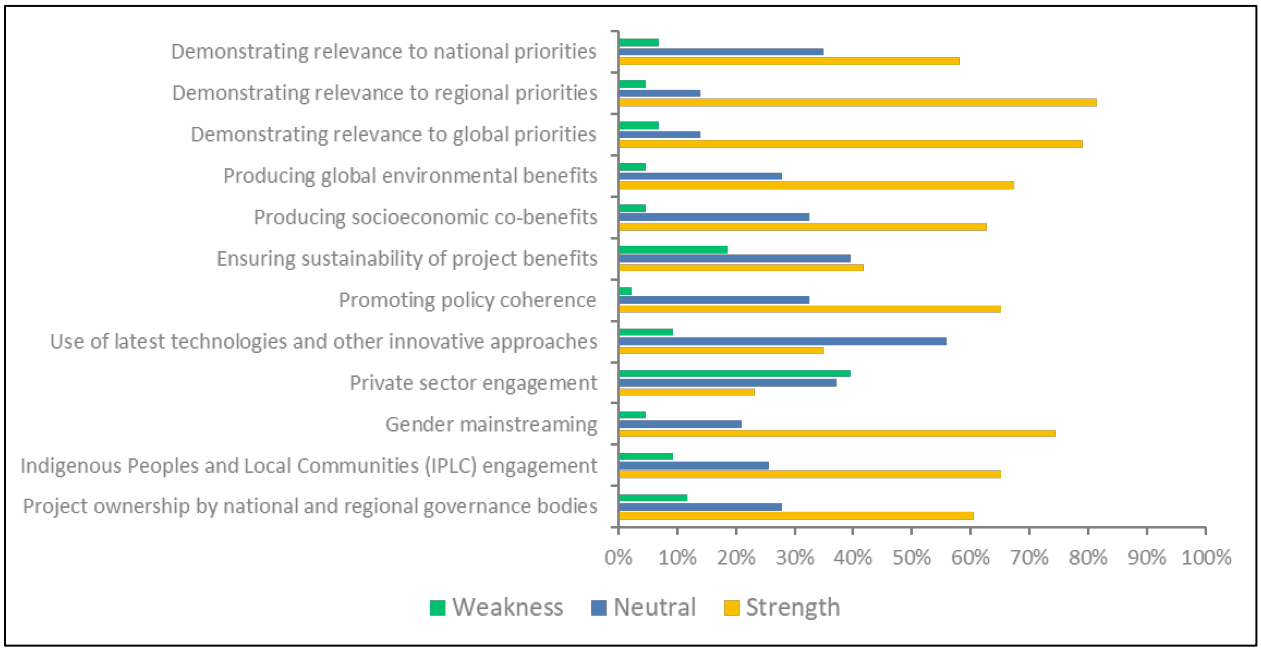
IW focal area strengths and weaknesses

Figure 2 presents IWC10 participants' perceptions of IW focal area strengths and weaknesses. The majority of pre-determined topics (e.g., relevance, global environmental benefits, socioeconomic benefits, policy coherence, gender, indigenous peoples and local community engagement, project ownership by national and regional governance bodies) was perceived as strengths of the IW focal area.

The top three strengths identified by respondents are 1) demonstrating relevance to regional priorities (81.4 percent), 2) demonstrating relevance to global priorities (79.1 percent), and 3) gender mainstreaming (74.4 percent).

The top three weaknesses are 1) private sector engagement (39.5 percent), 2) ensuring sustainability of project benefits (18.6 percent), and 3) project ownership by national and regional governance bodies (11.6 percent). The majority of respondents (55.8 percent) was neutral about the use of the latest technologies and other innovative approaches.

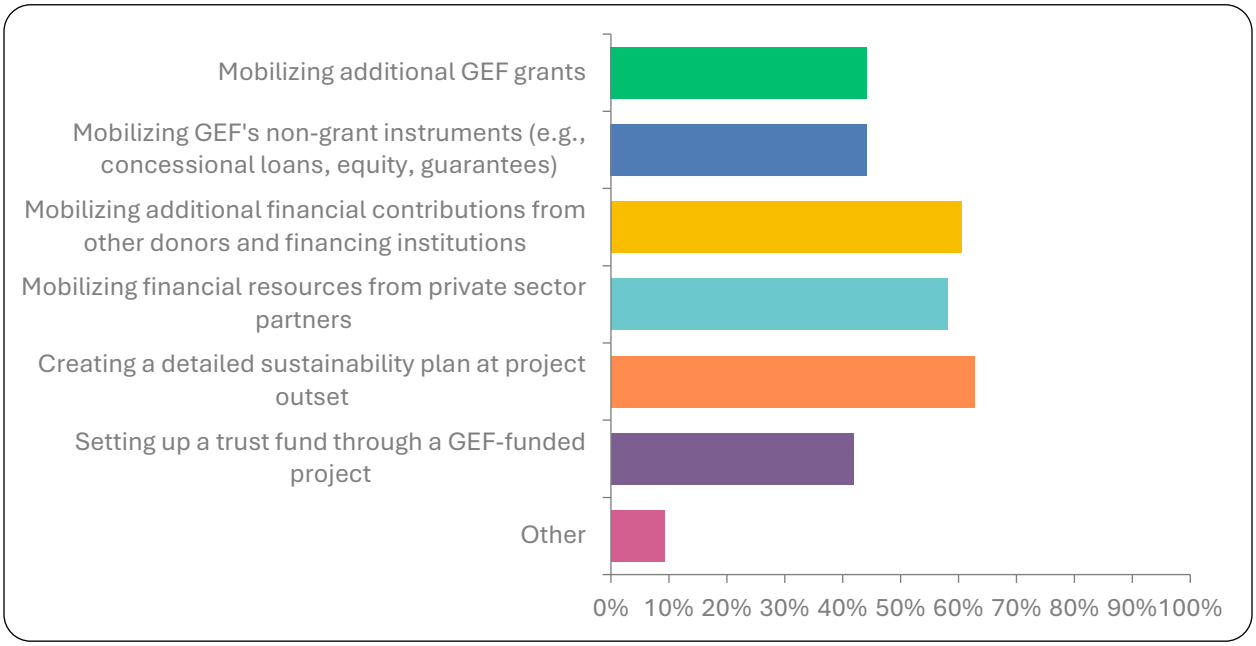
Annex C, Figure 2. IWC10 participants' perceptions of IW focal area strengths and weaknesses



Financial sustainability

Figure 3 presents IWC10 participants' perceptions on how the IW focal area can improve financial sustainability. Respondents could pick multiple answer options. The top three responses include 1) creating a detailed sustainability plan at project outset (62.8 percent), 2) mobilizing additional financial contributions from other donors and financing institutions (60.5 percent), and 3) mobilizing financial resources from private sector partners (58.1 percent).

Annex C, Figure 3. IWC10 participants' perceptions on how to improve financial sustainability of IW projects



Key findings

This report presented key insights from the IWC10 participant survey to inform the overall IW focal area evaluation. The findings suggested that IWC10 participants generally recognize the contributions of GEF IW projects to policy coherence and perceive the IW focal area as an effective channel to promote horizontal policy coherence. While this survey did not directly explore the rationale behind such perceptions, the IWRM, the marine spatial planning, and the S2S approach could serve as effective channels to promote and achieve policy coherence.

The survey also highlighted IW focal area's unique expertise and comparative advantages in strategic interventions for transboundary cooperation, regional dialogues for trust building, institutional capacity building, and knowledge management. Piloting technologies and other innovative practices, however, may not be the main comparative advantage of the GEF IW focal area. These findings suggested that GEF's contributions to the IW and transboundary cooperation are especially unique compared to other donors and financing institutions.

The GEF IW's relevance to regional and global priorities and strengths in gender mainstreaming were also confirmed. At the same time, private sector engagement, project sustainability, and project ownership could be strengthened. Given the nature of IW projects that require long-term

engagement to produce visible results, private sector partners may not be fully attracted to the focal area.

The survey findings further suggested that IW projects could enhance their financial sustainability through developing a detailed sustainability assessment early in the project cycle and mobilizing financial resources from non-GEF sources. Because the quality at entry analysis revealed that IW projects tend to produce sustainability plans at the end of project implementation, this finding may be informative to guide the financial sustainability planning of future IW projects.

A key limitation of this survey is the limited number and types of respondents. Although the GEF IEO aimed to collect additional responses from IWC10 participants, only 70 people provided their response. Additionally, this survey only collected data from IWC10 participants; other donors and key stakeholders who did not attend the conference were not included. The findings, therefore, are not representative of the entire IW community.

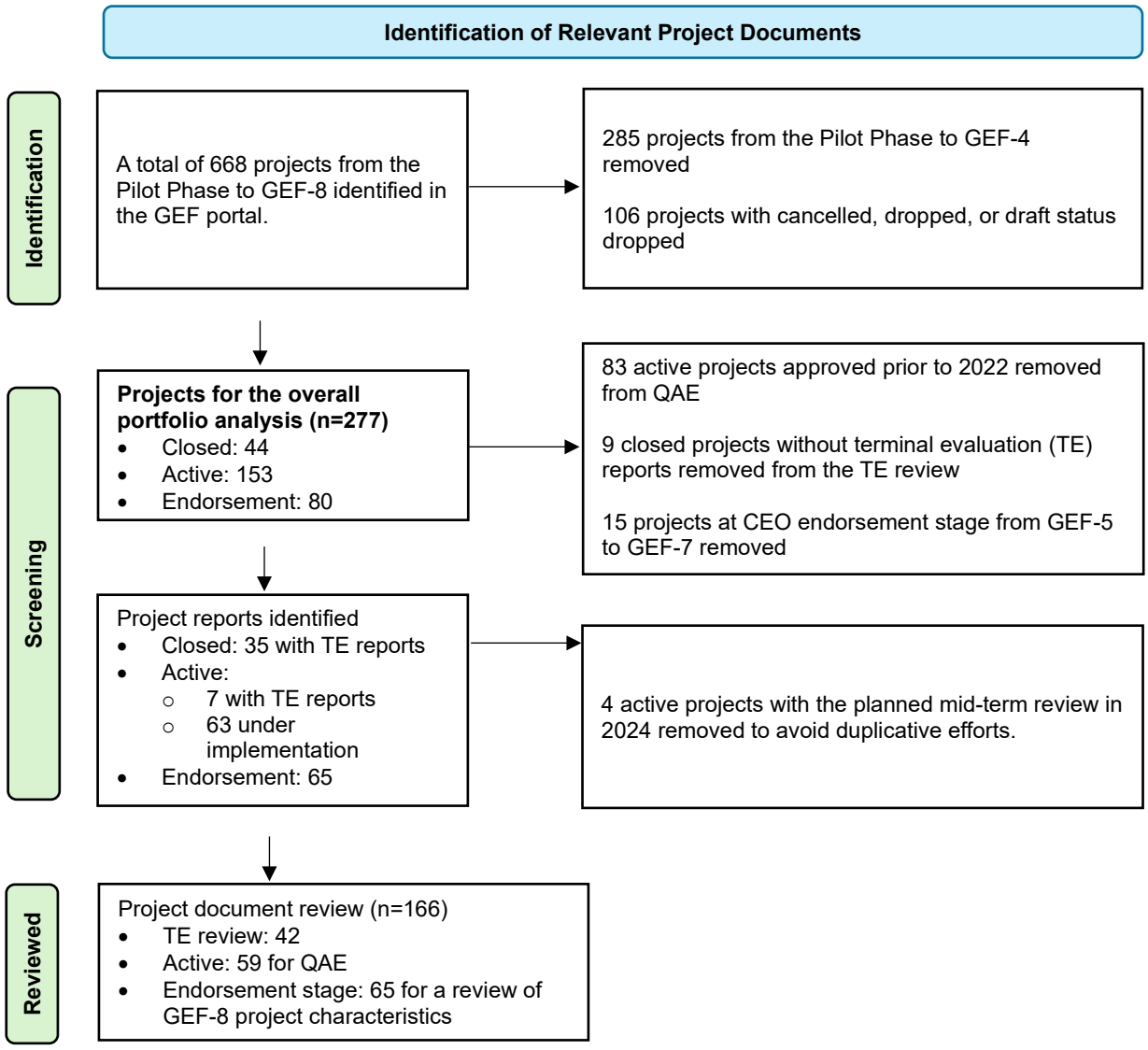
Conclusions

Despite the limitations, this survey provided a useful insight into the perceptions of IW stakeholders on key topics, such as financial sustainability and policy coherence. The survey results could be synthesized with evidence from other information sources (e.g., project documents, terminal evaluations, portfolio data, and stakeholder interviews) to better inform how to improve project financial sustainability, maintain comparative advantages over other institutions, and address IW focal area strengths and weaknesses in future projects. Early sustainability planning may be one of the concrete actions to be implemented in the near future.

8.4 ANNEX D: IW FOCAL AREA PORTFOLIO ANALYSIS

The IW focal area evaluation conducted a review of the IW portfolio between GEF-5 and GEF-8 (figure 1) to gain insights into GEF's recent programming efforts. The data were downloaded from the GEF portal on December 10, 2024, which is the cutoff date of inclusion for the evaluation portfolio.

Annex D, Figure 1. Review of the IW portfolio between GEF-5 and GEF-8



8.5 ANNEX E: COUNTRY COVERAGE BY THE IW EVALUATION PORTFOLIO PROJECTS

Annex E, Table 1. Number of IW and MFA projects in GEF countries (n=230)

Country	GEF-5	GEF-6	GEF-7	GEF-8	GEF5-8 Total
Albania	1	9	1	0	11
Algeria	1	4	1	0	6
Angola	3	0	2	2	7
Antigua and Barbuda	2	1	1	0	4
Argentina	0	2	1	1	4
Azerbaijan	0	1	0	1	2
Bahamas	0	0	2	0	2
Bangladesh	0	1	0	0	1
Barbados	2	2	2	0	6
Belarus	0	2	0	0	2
Belize	2	2	2	2	8
Benin	2	4	2	0	8
Bolivia	1	2	1	2	6
Bosnia-Herzegovina	2	8	1	0	11
Botswana	2	1	2	1	6
Brazil	2	3	4	3	12
Burkina Faso	2	2	0	1	5
Burundi	0	1	1	0	2
Cabo Verde	0	2	1	1	4
Cambodia	3	2	2	4	11
Cameroon	4	1	0	1	6
Central African Republic	2	0	0	1	3
Chad	4	1	0	0	5
Chile	0	2	2	2	6
China	6	0	0	0	6
Colombia	3	4	3	3	13
Comoros	2	0	2	1	5
Congo	0	1	0	0	1
Congo DR	2	1	2	2	7
Cook Islands	3	0	2	2	7
Costa Rica	4	1	6	6	17
Côte d'Ivoire	3	4	1	0	8
Croatia	1	1	0	0	2

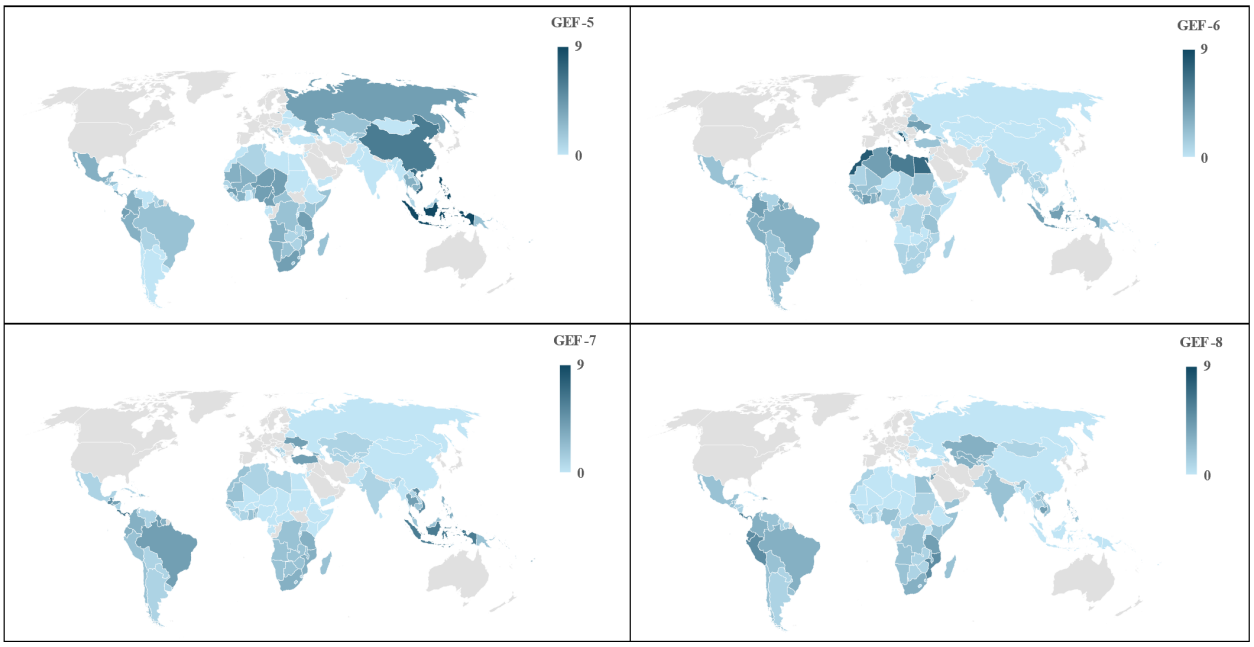
Cuba	1	1	1	0	3
Djibouti	0	0	0	2	2
Dominica	1	1	0	0	2
Dominican Republic	2	1	2	4	9
Ecuador	4	3	3	5	15
Egypt	0	7	0	2	9
El Salvador	0	0	4	2	6
Equatorial Guinea	0	1	0	0	1
Eritrea	0	0	0	1	1
Eswatini	1	0	1	1	3
Ethiopia	0	1	0	0	1
Fiji	3	0	4	0	7
Gabon	0	1	0	0	1
Gambia	0	1	1	0	2
Georgia	0	2	3	0	5
Ghana	0	3	2	1	6
Grenada	2	2	1	2	7
Guatemala	2	3	5	2	12
Guinea	4	3	1	1	9
Guinea-Bissau	0	2	3	0	5
Guyana	1	4	4	1	10
Haiti	1	0	1	0	2
Honduras	2	2	4	1	9
India	0	1	1	2	4
Indonesia	9	4	6	0	19
Jamaica	2	2	3	2	9
Jordan	0	0	0	4	4
Kazakhstan	2	0	1	3	6
Kenya	2	1	0	2	5
Kiribati	3	0	2	0	5
Kosovo	0	1	0	0	1
Kyrgyz Republic	2	0	1	2	5
Lao PDR	1	1	1	2	5
Lebanon	0	6	1	0	7
Lesotho	1	1	1	0	3
Liberia	1	2	0	2	5
Libya	0	6	1	0	7

Madagascar	2	1	2	2	7
Malawi	1	1	2	2	6
Malaysia	1	2	2	0	5
Maldives	0	1	0	2	3
Mali	3	2	0	0	5
Marshall Islands	3	2	3	1	9
Mauritania	3	1	2	0	6
Mauritius	2	0	2	0	4
Mexico	3	2	1	2	8
Micronesia	3	0	3	0	6
Moldova	0	2	2	1	5
Mongolia	0	0	0	1	1
Montenegro	2	9	2	0	13
Morocco	0	8	2	1	11
Mozambique	3	1	3	5	12
Myanmar	0	1	0	0	1
Namibia	3	1	2	2	8
Nauru	3	0	2	0	5
Nicaragua	0	0	1	1	2
Niger	4	0	0	0	4
Nigeria	4	1	0	2	7
Niue	3	0	2	0	5
North Macedonia	1	0	0	0	1
Pakistan	0	0	0	1	1
Palau	3	1	3	1	8
Panama	2	1	7	5	15
Papua New Guinea	2	1	2	0	5
Paraguay	0	1	1	1	3
Peru	3	3	2	5	13
Philippines	9	1	3	2	15
Russian Federation	4	0	0	0	4
Rwanda	0	1	0	0	1
Samoa	2	0	2	0	4
Sao Tome and Principe	0	2	1	0	3
Senegal	1	3	2	2	8
Serbia	1	1	1	0	3
Seychelles	3	1	2	1	7

Sierra Leone	1	2	0	1	4
Solomon Islands	2	1	4	1	8
Somalia	2	0	0	2	4
South Africa	4	1	3	3	11
Sri Lanka	0	1	0	1	2
St. Kitts and Nevis	2	2	1	1	6
St. Lucia	2	3	3	1	9
St. Vincent and Grenadines	2	3	1	0	6
Sudan	0	2	0	1	3
Suriname	2	3	3	1	9
Tajikistan	1	0	1	2	4
Tanzania	4	2	3	4	13
Thailand	3	1	4	1	9
Timor-Leste	2	1	2	0	5
Togo	0	4	3	0	7
Tonga	3	0	2	0	5
Trinidad and Tobago	3	1	4	3	11
Tunisia	1	7	1	0	9
Türkiye	0	2	4	0	6
Turkmenistan	0	0	1	3	4
Tuvalu	3	2	2	0	7
Uganda	1	1	1	0	3
Ukraine	0	4	4	0	8
Uruguay	0	1	1	2	4
Uzbekistan	0	0	1	3	4
Vanuatu	3	0	3	2	8
Venezuela	0	1	1	2	4
Viet Nam	7	1	5	2	15
Yemen	0	0	0	2	2
Zambia	1	0	2	1	4
Zimbabwe	1	1	2	1	5

Note: Those projects that only indicated regional or global in the country name list in the GEF portal were not included in the analysis (n=41). Parent projects were not included in this analysis to avoid double counting (n=6).

Annex E, Figure 1. Country distribution of GEF IW evaluation portfolio projects by GEF programming cycles from GEF-5 to GEF-8



8.6 ANNEX F: THEMATIC ANALYSIS OF TERMINAL EVALUATION REPORTS

Background

A total of 42 terminal evaluation reports from GEF-5 and GEF-6 were reviewed with a specific focus on key findings, conclusions, and recommendations to synthesize qualitative evidence. The GEF IEO conducted a thematic analysis to identify key themes and issues across GEF IW projects. NVivo12 was used to perform open coding and axial coding for the analysis.

Findings

A thematic analysis of 42 terminal evaluation reports from GEF-5 and GEF-6 identified the following five themes (tables 1 and 2):

- Theme 1: IW projects are complex and require long-term efforts and multiple projects to foster transboundary cooperation.
- Theme 2: IW projects with a realistic project scope, clarity for action, and effective project management can be successful at the project level.
- Theme 3: IW projects require solid sustainability measures based on the foundation of strengthened governance, partnerships, and ownership.
- Theme 4: IW projects demonstrated strengths in knowledge management through evidence generation, knowledge sharing, and knowledge management platforms at regional and global levels.
- Theme 5: Remaining gaps in the previous IW projects include limited communications and coordination among projects and stakeholders, M&E, and project design issues.

The IW focal area requires long-term engagement and multiple projects to foster cooperative relationships among stakeholders, coordinate project interventions in a wide range of sociocultural, economic, political and legislative contexts, and reach a national and regional agreement to manage transboundary water. This complexity necessitates realistic project designs and adequate planning.

Some of the potential determinants of project success identified in the terminal evaluations include 1) a realistic project scope and timeframe; 2) relevance to local, national, regional, and global priorities; 3) clarity for action by articulating stakeholder roles and responsibilities and setting realistic targets based on the project scope; and 4) project strategies and plans on sustainability, gender, communication, knowledge management, and stakeholder engagement to

ensure cross-cutting themes are addressed throughout the project period. Based on the strengthened governance, partnerships, and ownerships from project interventions, IW projects need solid sustainability measures, particularly on financial sustainability, to ensure long-term transboundary water management.

Annex F, Table 1. Top three themes identified through a thematic analysis of 42 terminal evaluations from GEF-5 and GEF-6

Theme 1: Complex nature of IW projects requiring long-term engagement and stakeholder involvement (39)	**Theme 2: Potential determinants of IW project success (41)**	**Theme 3: Considerations for the future (39)**
Sub-theme 1.1: Stakeholder engagement and coordination (34) • Gender, local communities, and indigenous peoples • Partnerships • Coordination • Multiple stakeholder engagement • Active project participation	**Sub-theme 2.1: Realistic project design (37)** • Clarity for action (M&E and roles and responsibilities) • Strategies, plans, and information • Realistic scope and workload • Relevance • Realistic timeframe	**Sub-theme 5.1: Project sustainability (17)** • Financial resource mobilization and management • Other aspects of sustainability
Sub-theme 1.2: Long-term engagement and time needed (17) • Building on the foundation from the past • Time requirements	**Sub-theme 2.2: Project implementation and management (36)** • Adaptive management • Effective project governance and management • Capable project team and HR management • Capacity building for effective project implementation • Capacity development for sustainability	**Sub-theme 5.2: Future projects and key actions to be taken (30)** • More emphasis on innovation and demonstration • Promoting and improving TDA-SAP • Implementing follow-up projects
Sub-theme 1.3: Complexity of IW projects (13) • Transboundary work • Politics • Others		

Sub-theme 1.4: Ownership (8) • Factors to promote ownership • Ownership for sustainability • Country ownership • Hindrance to ownership		

Terminal evaluations also highlighted successful practices and remaining gaps for future improvements. Key successes and strengths of the IW focal area were found in knowledge management through evidence generation, knowledge sharing, and knowledge management platforms at regional and global levels. The PEMSEA project, for example, produced a knowledge bank, and the CLME+ website and the Drin Project also demonstrate the potential utility of regional knowledge management hubs.

The remaining gaps include limited coordination within and between projects in a program, inadequate communications for stakeholder engagement, insufficient tracking of cofinance and socioeconomic benefits, and overambitious project designs for a given project timeframe.

Annex F, Table 2. Additional themes identified through a thematic analysis of 42 terminal evaluations from GEF-5 and GEF-6

Theme 4: Demonstrated strengths in knowledge management (27)	**Theme 5: Remaining gaps in IW projects (23)**
Sub-theme 3.1: Knowledge Products, Sharing, and Platforms (25) • **Knowledge products** • **Knowledge sharing** • **Knowledge management platforms**	**Sub-theme 4.1: Overly ambitious project design (12)** • Unrealistic project scope • Project delay and time limitations
Sub-theme 3.2: Learning (11) • **Scope of learning** • **Community to community learning** • **Networks for learning** • **Communications**	**Sub-theme 4.2: Gaps in communications, knowledge management, and M&E (15)** • Gaps in communications and coordination • Gaps in knowledge management • Gaps in M&E and reporting
	Sub-theme 4.3: Other project-related issues (14) • Limited project ownership • Financial challenges • Institutional, legislative, and political issues • Limited relevance • Limited technologies

8.7 ANNEX G: SNAPSHOT OF INTEGRATION AND COHERENCE IN THE GEF IW FOCAL AREA

1. Introduction

The GEF has long been a major financier of transboundary water cooperation through the IW Focal Area. Under GEF-8, the Facility has moved its emphasis from focal areas toward integrated programs. This snapshot highlights evidence of the effectiveness of IW integration within GEF's broader strategic framework. Specifically, it pulls together evidence that is distributed throughout the main report on the issues of:

- The effectiveness of IW integration in addressing transboundary water challenges
- The coherence of IW programs with national and regional policy frameworks
- Financial and strategic sustainability of IW programming
- The adequacy of performance measurement frameworks in IW.

2. Effectiveness of integration in IW programs

2.1. Transition to integrated and impact-driven approaches

- GEF-8 has significantly increased IW's engagement in integrated programs, with six key integrated programs incorporating IW elements, including the Clean and Healthy Ocean IP and Amazon, Congo, and Critical Forest Biomes IP.
- IW funding has shifted from standalone projects to multi-focal area programs, with 73 percent of IW projects in GEF-8 classified as multi-focal.
- However, evidence of the effectiveness of this transition is limited because most projects are still in early implementation stages.

2.2. Addressing transboundary water challenges

- IW programs have facilitated regional cooperation and policy agreements, as seen in the BUPUSA Basin Initiative (Mozambique-Zimbabwe).
- Some high-risk transboundary water systems, such as the Ganges and Brahmaputra, remain underfunded, raising concerns over IW's strategic focus.
- The TDA-SAP framework remains a cornerstone of IW programming, but its effectiveness is hindered when national governments lack political commitment.

2.3. Interaction with other focal areas in GEF

- IW represents 49 percent of multi-focal area funding in the evaluation portfolio, with growing links to biodiversity, climate change, and land degradation projects.
- However, water security remains insufficiently integrated into other focal areas, with no dedicated freshwater indicators in biodiversity and climate change tracking.

- Cross-sector coordination remains fragmented, particularly at national levels, where IW projects do not always align with agriculture, fisheries, and energy policies.

2.4. Added value of integration in IW

- IW projects have enhanced regional cooperation, particularly through institutional capacity building and knowledge-sharing platforms.
- Gender inclusion and indigenous peoples' engagement have improved, but evidence of long-term impact in these areas is still limited.
- Challenges remain in scaling up IW initiatives because national governments often struggle to maintain financial and technical commitments beyond project lifespans.

3. Policy and institutional coherence in IW programming

3.1. Alignment with national and regional policies

- Most IWC10 survey respondents (73.2 percent) reported that IW programs support cross-sectoral policy harmonization (e.g., agriculture, fisheries, tourism, and waste management).
- Some IW programs, such as the Lower Mekong River Basin project, have contributed to national policy changes on water security.
- However, policy coherence is inconsistent, especially in cases where GEF agencies fail to engage all relevant ministries during project design.

3.2. Scale and influence of IW programming

- IW's funding has declined in real terms, limiting its ability to support large-scale national interventions.
- IW focuses on demonstration-scale projects, meaning that governments often need to secure additional funding for full implementation.
- Some bilateral agreements facilitated by IW projects have improved transboundary water governance, but national implementation remains slow.

4. Financial and strategic sustainability of IW integration

4.1. Financial resource mobilization

- GEF-5 to GEF-8 mobilized a reported $15.43 billion in co-financing, demonstrating strong financial leverage.

- However, co-financing has declined in GEF-8, from $6 billion in GEF-5 to $2.39 billion in GEF-8, raising concerns about long-term financial sustainability.
- IW projects have largely failed to engage with innovative financing mechanisms, such as blue bonds, green bonds, or private investment partnerships.

4.2. Private sector engagement

- Of the IWC10 survey respondents, 39.5 percent identified private sector engagement as a major weakness.
- Few incentives exist for private sector investment in transboundary water governance, particularly in politically sensitive regions.
- IW has been slow to incorporate payment-for-ecosystem-services models, which have the potential to improve financial sustainability.

5. Performance measurement and learning in IW programs

5.1. Adequacy of IW indicators

- IW still relies on a limited set of core indicators, making it difficult to track integration and policy coherence outcomes.
- Freshwater-related indicators are missing from other GEF focal areas, limiting the ability to assess IW's cross-sector impact.

5.2. Effectiveness of M&E in IW

- Most recent IW projects (86 percent) received satisfactory M&E ratings at design, suggesting improved monitoring frameworks.
- However, limited post-project tracking means that long-term policy coherence impacts are often not captured.

6. Conclusion and recommendations

This annex indicates the growing role of integration in IW programming and suggests key areas for improvement to enhance financial sustainability, policy coherence, and private sector engagement.

8.8 ANNEX H: INTERNATIONAL WATERCOURSES WITH GEF INVOLVEMENT AND KEY RISKS ADDRESSED

Name of IW watercourse with GEF involvement	Environmental stress	Nutrient pollution	Biodiversity extinction	Floods and droughts	Legal framework	Hydro-political tension
Amazon			X			
Artibonite						
Asi/Orontes						
Bei Jiang/Hsi		X	X		X	X
Chang Jiang (Yangtze)						
Da Yunhe River Basin and Grand Canal (Yellow and Yangtse)						
Danube			X			
Dnieper						
Dniester						
Drin			X			X
Hai He River Basin						
Helmand					X	
Kura-Aras						
La Plata						
Lake Chad						
Lake Prespa						
Lake Titicaca /Poopó System						
Mekong				X		
Neretva						
Niger						
Nile						
Okavango				X		
Orange						
Rio Grande				X		
Rio São Francisco						
San Juan					X	X
Senegal						
Shu-Chu				X		
Sixaola						
Talas						

Tumbes						
Tumen					X	
Volta						
Zarumilla						

Note: This table is based on data from IW:LEARN and the TWAP River Basins study. X means that the TWAP River Basins study identifies a given watercourse as having the highest risks for the risk category (e.g., Amazon having the highest risk of biodiversity extinction).

8.9 ANNEX I: INTERNATIONAL RIVER BASINS WITH HIGHEST RISKS IDENTIFIED BY THE TWAP RIVER BASINS STUDY

Risk types	Transboundary shared international watercourses with highest risks
Environmental stress	Cancoso/Lauca, Colorado, Dasht, Guadiana, Hamun-i-Mashkel/Rakshan, Hari/Harirud, Jordan, Kowl E Namaksar, Murgab, Rio Grande (North America), Tarim
Nutrient pollution	Bei Jiang/Hsi, Elbe, Ganges-Brahmaputra-Meghna, Jordan, Limpopo, Ma, Rhine, Seine
Biodiversity extinction	Amazon, Danube. Very high relative risk BCUs include Albania and Macedonia (Drin), China (Bei Jiang/His), Guatemala and Mexico (Grijalva), United States (Mississippi).
Exposure to floods and droughts	Atui, Baraka, Cancoso/Lauca, Colorado, Ganges-Brahmaputra-Meghna, Juba-Shibeli, Kowl E Namaksar, Lake Natron, Limpopo, Lotagipi Swamp, Maroni, Mekong, Okavango, Orange, Oueme, Rio Grande (North America), Saigon, Shu/Chu, Tarim
Legal frameworks	Alsek, Atui, Awash, BahuKalat/Rudkhanehye, Baker, Baraka, Bei Jiang/Hsi, Benito/Ntem, Cancoso/Lauca, Catatumbo, Coco/Segovia, Corantijn/Courantyne, Coruh, Dasht, Digul, Essequibo, Gash, Hamun-i-Mashkel/Rakshan, Han, Helmand, Irrawaddy, Juba-Shibeli, Kaladan, Komoe, Kowl E Namaksar, Nyanga, Ogooue, Oiapoque/Oyupock, Orinoco, Patia, Salween, San Juan, Sanaga, St. Paul, Stikine, Tami, Tarim, Tumen, Yalu, Yukon
Hydro-political tensions	Bei Jiang/Hsi, Benito/Ntem, Ca/Song-Koi, Drin, Irrawaddy, Lake Turkana, Ma, Mira, Mono, Ogooue, Red/Song Hong, Sabi, Saigon, Salween, San Juan, Sanaga, Tarim, Thukela, Vardar