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2023 ANNUAL REPORT

PROBLUE



ADMINISTERED BY
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PROBLUE is an Umbrella 2.0 program administered by the World Bank; it supports the development of integrated, sustainable, healthy marine and coastal resources.

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The fiscal year covered in this report (FY23) runs from July 1, 2022, to June 30, 2023; the financial contribution and expenditures reported are reflected up to June 30, 2023; all amounts are in U.S. dollars (\$) unless otherwise indicated.

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FOREWORD

The triple crises of climate change, nature loss, and pollution are playing out before our eyes—from unrelenting marine biodiversity loss to the ever-increasing amount of plastic that pollutes the ocean. As 2023 delivers the hottest summer on record, it is vital that we look toward the more than three billion people reliant on the ocean for their livelihoods. Conserving and regenerating our ocean—a precious global resource for all—is fundamental to delivering on the promise of development, tackling climate change, and restoring and conserving nature.

Our ocean offers a distinct solution to the triple crises, but only if well-managed with development, climate and nature integrated in a global Blue Economy. “Blueing” our economy can develop marine and coastal sectors in a sustainable and integrated way, which means more jobs, greater food security, and a healthier ecosystem. The World Bank’s newly evolved mission to end poverty on a *livable planet* speaks to this, as does its commitment to mainstreaming nature into its policies, analyses, investments, and operations. PROBLUE champions this mission, working hand-in-hand with a range of partners and stakeholders to support Blue Economy development worldwide.

The 2023 fiscal year (FY23) saw significant action related to the ocean at the global level, and the Bank with support from PROBLUE has been heavily engaged and dedicated to this work. PROBLUE’s work is fully supportive of the ambitions of the Kunming-Montreal Global Biodiversity Framework (GBF) adopted at COP15, including the commitment to protect at least 30% of the planet’s ocean and land by 2030, or ‘30x30’ target. Likewise, PROBLUE was represented at COP27 with an event focused on the Blue Economy for Resilient Africa Program, and is supporting countries to ready for the adoption of the World Trade Organization fish subsidies agreement, the Biodiversity Beyond National Jurisdiction (BBNJ) agreement, the International Maritime Organization negotiations on decarbonizing maritime shipping, and the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution. In support of the latter, on the sidelines of INC-2, PROBLUE delivered its first Global Engagement Forum focused on Abandoned, Lost, or otherwise Discarded Fishing Gear (ALDFG), convening stakeholders from across the spectrum in solutions-focused discussion, making connections and facilitating future collaborations toward the Blue Economy.

This fiscal year, PROBLUE’s Mid-term review recognized the program’s relevance and efficacy in improving the enabling environment for the Blue Economy at national, regional and global levels. PROBLUE also made significant progress in a range of programmatic areas, including reaching a record number of grants awarded—more than \$50 million in 47 countries. Communication and knowledge-sharing inside and outside the Bank have also expanded with the launch of the Blue Academy Learning series, and results-focused communications which share innovation and lessons on how to accelerate action to tackle biodiversity loss, climate change and pollution.



Ghana / The World Bank

The impact of the triple crises varies across regions, within countries and affects parts of society differently, making tailored and flexible approaches to action imperative. As such, PROBLUE works with client countries and global partners to build unique approaches to the challenges each individual geography is facing. FY23 saw a significant step in the implementation of Recipient-Executed Trust Funds (RETF), with \$18 million in new financing approved. These PROBLUE activities support over \$1 billion in direct World Bank lending, demonstrating the high added value of PROBLUE financing promoting innovation and integrated approaches towards Blue Economy priorities. These activities also allow for increased depth of intervention impact and accelerate the support needed by countries to pursue blue growth that is sustainable, resilient, and inclusive.

For example, a PROBLUE Bank-Executed Trust Fund (BETF) in Indonesia informed the design of the Oceans for Prosperity project. The BETF saw the development of a Blue Finance Policy Note that provided a greater understanding of the financing challenges, gaps, and opportunities in the Blue Economy in the country, and the role of public and private sector finance. This project which combines \$5 million of PROBLUE Recipient Executed Trust Fund co-financing, also integrates gender equality and inclusion of vulnerable communities into each of the financing strategies to increase the potential impact of job opportunities for women and providing them access to finance.

Overarching themes, including climate, gender equity, and maximizing finance for development, drive all PROBLUE-supported work. In terms of numbers, this comes out to 97% of supported activities in FY23 that included gender as a key theme, 95% contributing to climate change adaptation and/or mitigation, and 83% featuring a direct maximizing finance for development area of focus. What's more, PROBLUE continues to push and increase these numbers every year to ensure all participants receive equal access and support from projects and activities.

These foundational themes ensure PROBLUE-supported work is directly connected to the most vulnerable ecosystems and communities. It also builds lasting support for nations by building outlets for internal funding and development. Working with international governments, NGO partners and communities on-the-ground in client countries, a range of perspectives and ideas are integral to the success of PROBLUE's endeavors.

All industries and sectors must adapt and realign to meet the challenges of today—and to ensure a prosperous future for all. Protecting and improving the resilience of our natural systems, particularly our ocean, is critical to social and environmental longevity for all. At the close of FY23, PROBLUE's fourth full year of operation, commitment to these principles and an unrelenting focus to deliver a livable, equitable planet has only expanded.



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ACRONYMS

ASAs	Global Advisory Services & Analytics
ADB	Asian Development Bank
AFD	Agence Française de Développement
AFR	Africa
ALDFG	Abandoned, Lost, and Discarded Fishing Gear
AMS	ASEAN Member States
ASEAN	Association of Southeast Asian Nations
BBNJ	Marine Biodiversity of Areas Beyond National Jurisdiction
BEDF	Blue Economy Development Framework
BE	Bank-Executed
BETF	Bank Executed Trust Fund
CBD	Convention on Biological Diversity
CCRIF	Caribbean Catastrophic Risk Insurance Facility
CCDR	Country Climate and Development Report
CfP	Call for Proposals
CMAR	Eastern Pacific Tropical Marine Corridor
COAST	Caribbean Ocean and Aquaculture Sustainability Facility
COP15	15th Conference of the Parties (UNCBD)
COP27	27th Conference of the Parties (UNFCCC)
CPF	Country partnership framework
CWON	Changing Wealth of Nations
EAP	East Asia and the Pacific
ECA	Europe and Central Asia
ENB	Environment, Natural Resources, and Blue Economy Global Practice
ENCORE	Enhancing Coastal and Ocean Resource Efficiency Project
EPR	Extended-producer responsibility
E&S	Environmental & Social
ESMAP	Energy Sector Management Assistance Program
EU	European Union
F&A	Fisheries and Aquaculture

FAO	Food and Agriculture Organization of the United Nations
FCI	Finance, Competitiveness & Innovation Global Practice
FCV	Fragility, Conflict, and Violence
FITI	Fisheries Transparency Initiative
FSAT	Fisheries Sector Assessment Toolkit
FSM	Federated States of Micronesia
FY23	Fiscal Year 2023
GBF	Global Biodiversity Framework
GBV	Gender-Based Violence
GEF	Global Environment Facility
GHG	Greenhouse Gas Emissions
GPAP	Global Plastic Action Partnership
GPNBS	Global Program on Nature-Based Solutions
GPS	Global Partnership for Sustainability
GRID	Green, Resilient and Inclusive Development
ICEM	International Centre for Environmental Management
ICZM	Integrated Coastal Zone Management
IFC	International Finance Corporation
IFI	International Financial Institution
IIED	Institute for Environment and Development
IMO	International Maritime Organization
INC	Intergovernmental Negotiating Committee
IUCN	International Union for the Conservation of Nature
IUU	Illegal, Unreported, and Unregulated
LAC	Latin America and the Caribbean
LBI	Legally Binding Instrument
LDCs	Least developed countries
LEAP	Livelihood Enhancement and Association of the Poor
LICs	Low-Income Countries
LMICs	Lower Middle Income Countries
MARPOL	International Convention for the Prevention of Pollution from Ships
MAS	Manufacturing Agribusiness and Services
MCP	Maximum Catch Potential
MDTF	Multi-Donor Trust Fund
MENA	Middle East and North Africa
MFD	Mobilizing Finance for Development
MITT	Ministry of Industry, Trade and Tourism
M&E	Monitoring and evaluation

MoE	Ministry of Economy
MoF	Ministry of Fisheries
MPAs	Marine Protected Areas
MRB	Matanza-Riachuelo Basin
MSMEs	Micro, Small, and Medium Enterprises
MSP	Marine Spatial Planning
MTR	Mid-term Review
MWM	Medical Waste Management
NBS	Nature-based Solutions
NDC	Nationally Determined Contributions
NGO	Nongovernmental organization
NPS	Non-Point Sources
OECS	Organization of Eastern Caribbean States
OWD	Offshore Wind Development
PDO	Project Development Objective
PFCRM	Philippine Fisheries and Coastal Resource Management
PfR	Program for Results
PIC	Pacific Island Country
POAP	Pacific Ocean Advisory Program
PPP	Public-private partnership
PPS	Plastics Policy Simulator
PSTE	Plastic Substitution Tradeoff Simulator
RE	Recipient-Executed
RETF	Recipient Executed Trust Funds
SACEP	South Asia Co-operative Environment Program
SAR	South Asia
SCD	Systematic Country Diagnostic
SDG	Sustainable Development Goal
SDTF	Single-Donor Trust Fund
SIDS	Small Island Developing States
SME	Small and medium enterprise
SMIT	Society of Tourism Engineering
SPL	Social protection and labor-market programs
SUPPs	Single-use plastic products
SWAC	Seawater air-conditioning
SWIO	Southwest Indian Ocean
SWM	Solid Waste Management
TASCO	Tourism Action Coalition for a Sustainable Ocean

TFs	Trust Funds
TORs	Terms of Reference
TTL	Task Team Leader
UBEEC	Unleashing the Blue Economy in the Eastern Caribbean
UNCTAD	United Nations Conference on Trade and Development
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Program
UNCBD	United Nations Convention on Biological Diversity
USP	University of the South Pacific
WACA	West Africa Coastal Areas Management Program
WASH	Water Supply, Sanitation, and Hygiene
WBG	World Bank Group
WCS	World Conservation Society
WTO	World Trade Organization
WWF	World Wildlife Fund



1. OCEAN HEALTH: A GLOBAL PRIORITY

1.1. MOMENTUM ON THE WORLD STAGE

FY23 was a historic period for well-coordinated ocean action. From the adoption of a landmark agreement at the 15th Conference of the Parties (COP15) to the United Nations Convention on Biological Diversity (UNCBD), to the similarly historic agreement on prohibiting harmful fisheries subsidies within the World Trade Organization (WTO), the first WTO agreement that focuses on environmental sustainability, 2022–2023 saw numerous multilateral achievements for ocean health. This increased momentum to protect and conserve the ocean for life above and below water underscores a growing recognition of the Blue Economy as a critical aspect in addressing varied global challenges.

Over the last year, the international community has made huge strides toward ocean-related goals and the achievement of SDG14: Life Below Water. Perhaps the most significant was the adoption of a new global framework to halt and reverse biodiversity loss adopted at the UNCBD COP15 in December 2022. Within the new “Kunming-Montreal Global Biodiversity Framework” (GBF) are targets to protect 30 percent of the ocean and restore 30 percent of the world’s coastlines by 2030. Countries around the world have committed to increasing marine protected areas (MPAs) over the next decade from the 8 percent of global coastal waters and ocean that are currently designated as MPAs.

In May 2022, came resolution 5/14 by the United Nations Environment Assembly (UNEA) to convene an intergovernmental negotiating committee (INC) with the ambition of adopting a legally binding instrument on plastic pollution, including the marine environment, by the end of 2024. The agreement came at a crucial time with the amount of plastic waste entering the marine environment projected to nearly triple between 2016 and 2040 under a business-as-usual scenario. While negotiations on the exact provisions are still underway, there is consensus that the instrument will address the full life cycle of plastics, in line with PROBLUE’s circular economy approach.

The global community took another step towards ocean sustainability by prohibiting certain forms of harmful ocean subsidies through the adoption of the WTO Agreement on Fisheries Subsidies, which seeks to ensure that support provided by governments to their fishing sector does not undermine the sustainability of marine resources. The prohibition encompasses subsidies to illegal, unreported, and unregulated IUU fishing, subsidies for overfished stocks, and subsidies to fishing of unmanaged stocks on the high seas.

Finally, the most recent development is 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). Finalized after nearly two decades of discussions and negotiations, this new legally-binding agreement will help reinforce other efforts to protect biodiversity.

Together, these huge milestones contribute to and strengthen the need for coordinated action to create sustainable ocean economies. For the last four years, PROBLUE, through the multilateral institution of the World Bank, has been a leading actor on biodiversity and nature, advancing a coordinated Blue Economy approach that seeks to maximize the socio-economic benefits generated by oceanic activities.

The Blue Economy approach is the foundation of all of PROBLUE's work and rests on delivering integrated and sustainable economic development in a healthy ocean. Increased country demand exemplifies both the need for scaling investments and the successes of the program. PROBLUE is working with multilateral partners, national and sub-national governments, and local stakeholders to continue pushing forward the global agenda on sustainable ocean economies. Through these partnerships, PROBLUE is supporting its client countries to meet global targets and implement action plans through the operationalization of these agreements, especially within the areas of fisheries and aquacultures, marine pollution, oceanic sectors, and seascape management.

Through its focus on development and implementation of country and issue-specific projects around the world, PROBLUE is helping to combine action on these various global crises and ensuring that our ocean is prioritized. Since its inception in 2018, PROBLUE has supported 181 activities and 22 additional financings in more than 80 countries. In FY23 alone, an additional \$50.2 million was approved to support 53 activities and 7 additional financings in more than 46 economies.

Moreover, demand increased to record levels: In FY23, requests for funding totaled \$56 million. This exceeds the value of requests in FY22 and FY21 combined, reflecting the successful rollout of a new approach to soliciting applications through a bi-annual Call for Proposals (CfP). The CfP process has increased the flexibility and responsiveness of PROBLUE to client demand in response to the global challenges and commitments that they face.

As an umbrella trust fund program, PROBLUE is fully aligned with the World Bank's mission to end extreme poverty and boost shared prosperity on a livable planet. 80 percent of national-level funding approved this year provided direct support to Low-Income Countries (LICs) or Lower Middle Income Countries (LMICs), with 34 percent of funding allocated to Africa, 18 percent to the Middle East and North Africa, and 17 percent in East Asia and the Pacific. Seven of these countries (eighteen across all fiscal years) also face situations of Fragility, Conflict, and Violence (FCV), increasing their need for strategic support to move toward economic and social sustainability.

1.2. ADOPTING A BLUE LENS TO GLOBAL CHALLENGES

Since the start of the program in 2018, the world has faced numerous unforeseen challenges. From the COVID-19 pandemic and the economic crises that followed, to the invasion of Ukraine, ensuring global health and food security have become urgent global priorities, alongside development and climate goals.

Ocean and maritime resources play an essential role in helping meet the needs of both coastal and inland communities. An estimated 37 percent of the world's population lives in coastal areas that are directly dependent on the ocean for their health, nutrition, and economic



Panama / The World Bank / Yatziri Zepeda

security. As these challenges mount, the importance of safeguarding the ocean for the food security, health, and well-being benefits it provides is imperative—especially for those most vulnerable.

On top of these timely challenges is the urgent need to increase resilience in the face of climate change. Investments to increase infrastructure resilience and promote adaptation are both stable and profitable: overall, the net benefit of investing in resilient infrastructure in developing countries could amount to \$4.2 trillion over the lifetime of new infrastructure—a \$4 benefit for each dollar invested in resilience. The ocean and climate change are inextricably linked. While the changing climate threatens ocean ecosystems through warming, acidification, biodiversity loss, and sea level rise, the ocean can support climate change mitigation and adaptation through its natural ability to store carbon and provide ecosystem services. As the world’s largest ecosystem, it absorbs of the world’s annual carbon dioxide (CO₂) emissions—and plays a vital role in regulating the climate.

Coastal ecosystems are powerful carbon sinks, with the potential to sequester more carbon per unit than forests. Mangroves, kelp forests, and seagrass meadows protect coastal communities from the heightened risk of natural disasters and coastal erosion by moderating wind,

waves, and flooding. Ocean ecosystems provide invaluable solutions to mitigate climate change and reduce the vulnerability of coastal communities that rely most on the ocean for their livelihoods. As countries recover from the multiple crises of the last few years, it is critical to place climate change and ocean health at the center of recovery strategies.

Against this backdrop, the World Bank has redoubled its efforts to fully integrate climate into how it addresses the challenges facing client countries. In 2021, it launched a Climate Change Action Plan 2021-2025 (CCAP) that identifies the Blue Economy as a crucial component to meeting global commitments as well as its own objectives. PROBLUE plays a key role in implementing the CCAP in the ocean through the provision of cutting-edge tools and expertise to apply a “blue lens” to operations planning.

In addition, the World Bank is promoting collaboration between its Environment, Natural Resources and Blue Economy (ENB) Global Practice Trust Fund programs (TFs)—PROGREEN, PROBLUE, and the Global Partnership on Sustainability (GPS). In June 2023, teams from all three TFs, along with development and government partners, gathered in Ghana to discuss strengthening synergies to scale-up impact in the face of increased interconnected global challenges (see Box 1.1).

BOX 1.1. Building Synergies Between ENB Trust Fund Programs: Reflections and Scaling Up Impact

Alongside PROGREEN and GPS, PROBLUE is one of three strategic environmental trust fund programs managed by the World Bank's Environment, Natural Resources and Blue Economy Global Practice, generously supported by development partners. The three trust fund programs focus on ocean and seascape issues, forest and landscape issues, and environmental and economic issues. Like PROBLUE, they support countries through knowledge, capacity building, grants and investments—and strive to respond to nature, economy, and livelihood needs of country clients. The TFs are accelerators that gain and add value by focusing on key issues of nature and finance, building on the Bank's country engagement model, blended finance approaches, efficient operating models, and ability to engage upstream at the policy level and downstream at the investment and implementation level.

In June, World Bank environment department staff, development partners, and government counterparts gathered in Ghana to discuss natural resource management work across the three World Bank ENB GP Trust Fund program—PROGREEN, PROBLUE, and the GPS—and how to chart a path forward for greater collaboration and synergy.

Ghana is a leading country in Africa addressing environmental issues with large investments and strategic support from the environmental TFs. Ghana's programs offer good case studies and examples of how the TFs can collaborate for greater impact. During the week, project examples were examined and global efforts to support governments with knowledge, lessons, analytics, convening, and investments were discussed.

The team went on several field visits around the country, including Lake Bosomtwe—the site of the PROGREEN-supported Ghana Landscape Restoration and Small-Scale Mining Project (GLRSSMP)—and the town of Keta, where PROBLUE is supporting communities using mangrove restoration to bolster climate adaptation, jobs, fisheries, tourism, and boosting resilience in the face of increased flooding and coastal erosion, to name a few. Officials and community members spoke with the participants to gain a deeper understanding of the challenges they face, how climate change is affecting their livelihoods, and ways to make development projects more responsive and targeted to their specific needs.

Two key takeaways emerged from the Ghana visit: 1) Joint discussions between the three TFs are key to delivering collaborative solutions on the ground; and 2) By listening to a wide range of actors, especially the voices of the local communities on the frontlines of the nature crisis, we are better equipped to ensure TF investments achieve their desired impact.

Grenada / The World Bank / Juliana Castaño



PROBLUE continued to fund the production and furthering of global tools and knowledge products to advance implementation at the national level. Cutting-edge tools such as those contained in the Fisheries Sector Assessment Toolkit (FSAT) and Pathways Out of Plastic Pollution (3P) provide upstream support by enabling countries to apply a “blue lens” to operations planning. After several years of focusing on knowledge, analytics and tool development, PROBLUE in FY23 emphasized greater uptake and implementation of existing tools that support capacity building, financing, and policy development.

For example, Marine Spatial Planning (MSP) was widely adopted in FY23, currently used by more than 26 countries. For example, in Thailand, PROBLUE is providing technical assistance on the development of an Integrated Seascape Management approach, where MSP will support the development of innovative blue financing frameworks. In FY23, the project undertook a baseline assessment of Thailand’s MSP regime and initiated stakeholder dialogue.

With the Blue Economy serving a critical role in addressing many of the challenges we face, it is critical that environmental, social, and development goals be integrated into activities and projects, so that they are designed, planned, and executed in an inclusive way.

PROBLUE uses three primary overarching themes—gender equality, climate change, and MFD—to guide its work, to ensure that developing a Blue Economy is inclusive, all while contributing to global climate and development goals. By using these filters in the selection and delivery of projects, PROBLUE can simultaneously tackle social concerns and advance the Blue Economy as an economic development mechanism for coastal communities.

1.3. LINKING KNOWLEDGE TO FINANCING

In its fourth year of operation, the work done over FY23 was amplified by Recipient-Executed (RE, also called Recipient-Executed Trust Fund or RETF) activities that provide high impact and direct support to countries.

In FY22, after determining that there was a high need for project co-financing, PROBLUE added RE activities to its portfolio by way of pilot interventions. The reasoning was to increase on the ground impact and ownership of projects by local communities. RETF’s expand the impact of PROBLUE funding through grants integrated into lending operations and add value through additional analytics, capacity building, policy engagement, and field action. This RE modality supports the expansion of blue operations as part of lending activities and the addition of blue analyses to operations that may not have otherwise incorporated a Blue Economy approach in their planning.

Last year’s pilot phase showed that demand for RETF support is very high across sectors and regions, which led to an additional US \$18 million of RETF financing approved in FY23, while continuing to meet country demand for analytics. In FY23, with this renewed investment, four new RETFs were approved, in Ghana, Morocco, Indonesia, and Comoros, informing nearly \$1.4 billion in direct support to World Bank investment.

For example, a \$5 million RE grant supports Ghana as co-financing to the West Africa Coastal Areas Resilience Investment Project 2 (WACA ResIP 2). The investments are supporting the Ghanaian Government to inform and catalyze Blue Economy investment with a focus on coastal erosion, flooding, and pollution. In particular, the government of Ghana will manage activities around the development of an innovative blue carbon market to help return funds directly back into communities.

BOX 1.2. RETFs Across the World

Currently, PROBLUE is informing seven RETF investments from the Caribbean to the Pacific. RETF projects, demand for which has grown significantly among PROBLUE client countries, enable expanded and scalable impact on the ground in the countries. These grants are integrated with lending operations to allow for further-reaching outcomes, as well as support expanded ownership and impact on the ground.

Below are three examples of how successful Bank-Executed (BE) analytics have led to the successful scaling up of country-led investments, supported with PROBLUE grants.

- **MOROCCO: Accelerating Blue Economy Development in the Kingdom of Morocco**

In Morocco, where the PROBLUE BETF has supported the country to become a regional leader in the Blue Economy through technical work on marine plastic pollution, blue carbon, and coastal tourism, a \$5 million PROBLUE RETF is now supporting the first World Bank Program for Results (PforR) for the Blue Economy (\$350 million). PROBLUE's added value is to support integrated management of marine and coastal areas in a way that creates jobs and conserves biodiversity in the region.

- **CAMBODIA: Solid Waste and Plastic Management Improvement Project**

Building on an initial PROBLUE BETF activity to improve the knowledge of solid waste and plastic management, Cambodia received a \$3 million RETF, informing the \$60 million investment, to support national institutional policy development for plastic management and reduction. Analytics performed in the first stage, including the identification of the top ten most polluting plastic items and the development of a plastic-policy roadmap, initiated further capacity building to better manage and monitor waste collection and disposal while enhancing economic opportunities for disadvantaged groups.

- **COMOROS: Food System Resilience Program for Eastern and Southern Africa**

Comoros, the latest of PROBLUE's RETF investments, is mobilizing funds to help implement sustainable fisheries management, following on modeling of the impact of climate change on key fish species, the knock-on impacts on the communities that target them, and how fisheries management can be used as an adaptation measure, undertaken as part of a BETF. The \$3 million PROBLUE RETF is adding value to a \$603 IDA investment by supporting the integration of sustainable fisheries and coastal-zone management, and, more broadly, integrated watershed management in line with a Land-to-Sea approach.

Grenada / The World Bank / Juliana Castaño







2. PROBLUE-AT-A-GLANCE

2.1. ABOUT PROBLUE

PROBLUE, an Umbrella 2.0 trust fund program, is the World Bank's Blue Economy program. Created in 2018, PROBLUE is committed to supporting the development of integrated, sustainable, and healthy marine and coastal resources in client countries around the globe. Administered by the World Bank's Global Practice on Environment, Natural Resources, and the Blue Economy, PROBLUE has four pillars: (1) Fisheries and Aquaculture; (2) Marine Pollution; (3) Oceanic Sectors; and (4) Seascape Management.

While the four pillars provide a foundation for PROBLUE's action, by helping organize the programmatic and financial structure, all the program's work is inherently interdisciplinary. To ensure lasting impact, PROBLUE's work takes an integrated approach to action across sectors on environmental, climatic, and social and economic-related issues facing ocean and marine resource development.

This interdisciplinary approach is directed by the overarching themes that underpin PROBLUE's work: gender and social inclusion, climate change, and MFD and private sector engagement. Aligning with the principles of the World Bank's Environmental and Social Framework (ESF) and relevant monitoring approaches guarantees that no PROBLUE financing results in environmental or social harm to ecosystems or communities. This is particularly critical in client countries facing FCV, where flexibility and situation-specific methods of engagement are required.

Pulling in a range of perspectives and expertise on these issues and their correlation through cross-sector partnerships, PROBLUE supports comprehensive action on the global and nation-specific issues facing our ocean. Collaboration is critical to how PROBLUE approaches financing and activity implementation, working with other multilateral development organizations, governments, non-governmental organizations (NGOs), the private sector, academic and research institutions, civil society, and community groups.

PROFISH

The Global Program on Fisheries (PROFISH) was a series of multi-donor TFs that supported analytics and knowledge on fisheries and ocean issues for 15 years prior to the formation of the PROBLUE Umbrella TF program. The PROFISH TFs had been implemented by IBRD/IDA since 2005, and became part of the PROBLUE Umbrella program in November 2018. The overall PROFISH program was broken into three TFs funding allotments: PROFISH 1, PROFISH 2, and PROFISH 3. PROFISH TFs, especially the third one, supported the Bank's initiative to create and build momentum behind the [Blue Economy Development Framework](#). PROFISH was an important precursor to the design and scaling up of this agenda under PROBLUE—and its effort to reach more countries. FY23 saw the completion of the PROFISH TFs as they reached their end-disbursement date. Box 2.1 discusses the closure of the program.



BOX 2.1. PROFISH Completion

PROFISH supported fisheries governance, sustainable aquaculture, and integrated seascape management in partnership with key donors to the fisheries sector, international financial institutions, developing countries, technical agencies, and other stakeholders. With the goal of fostering the contributions of fisheries and aquaculture to sustainable economic growth, nutrition, poverty reduction, and the expansion of economic opportunities for vulnerable groups, PROFISH focused on (1) designing and implementing sound governance systems through WBG investments and international partnerships, and (2) providing information, knowledge products, and expertise to ensure fisheries and aquaculture support sustainable wealth and reduce poverty.

- **PROFISH 1 & 2**

PROFISH 1 & 2 focused on bolstering the role of fisheries and aquaculture in sustainable economic growth, better nutrition, economic opportunities for women, and poverty reduction. The initial two allotments of the program raised awareness of fisheries governance and increased fisheries support within the World Bank, bilateral donor agencies, and client countries.

PROFISH 1 & 2 designed and supported the implementation of best-practice governance systems through World Bank investments and international partnerships, and provided information, knowledge products, and expertise to help ensure the creation of sustainable wealth through fisheries and aquaculture. Critically, PROFISH filled key niches in addressing specific fisheries and aquaculture knowledge gaps at the global, regional, and country levels.

- **PROFISH 3**

PROFISH 3 expanded on the goals of PROFISH 1 & 2 through the adoption of a broader, Blue Economy-focused approach. This was centered on two strategic areas: (1) rapid but generally small investments to support World Bank teams engaged in upstream work on fisheries analysis and management, and (2) the creation and pilot application of the Blue Economy Development Framework.

PROFISH 3 was critical in the creation of the global Blue Economy Development Framework (BEDF), which provided key entry points for the blue transformation of a number of countries and the integration of established and emerging industries into the larger Blue Economy. In this way, PROFISH 3 was instrumental in getting the BEDF agenda off the ground and creating momentum to scale up this work in multiple countries under PROBLUE.

Mexico / The World Bank / Juliana Castaño



PROBLUE Mid-Term Review

PROBLUE’s mid-term review (MTR) was undertaken in FY23. The review was based on research into the program’s functioning and results, from its inception in December 2018 until the end of June 2022. The MTR

was of particular value in light of the high demand for RE activities in relation to the Program’s timeline and available funding—informing the dialogue with the PROBLUE Partnership Council on an extension and funding requirements.

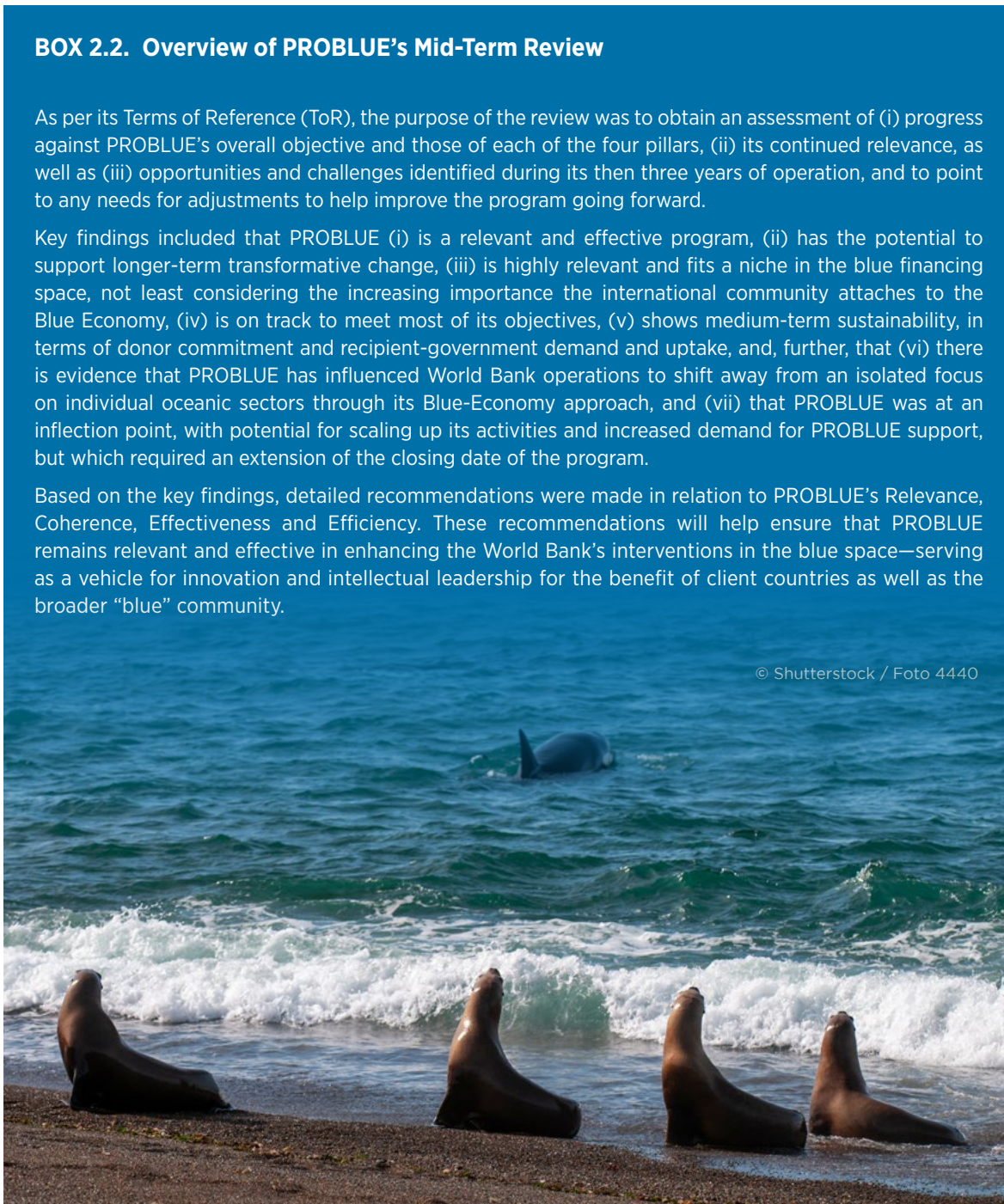
BOX 2.2. Overview of PROBLUE’s Mid-Term Review

As per its Terms of Reference (ToR), the purpose of the review was to obtain an assessment of (i) progress against PROBLUE’s overall objective and those of each of the four pillars, (ii) its continued relevance, as well as (iii) opportunities and challenges identified during its then three years of operation, and to point to any needs for adjustments to help improve the program going forward.

Key findings included that PROBLUE (i) is a relevant and effective program, (ii) has the potential to support longer-term transformative change, (iii) is highly relevant and fits a niche in the blue financing space, not least considering the increasing importance the international community attaches to the Blue Economy, (iv) is on track to meet most of its objectives, (v) shows medium-term sustainability, in terms of donor commitment and recipient-government demand and uptake, and, further, that (vi) there is evidence that PROBLUE has influenced World Bank operations to shift away from an isolated focus on individual oceanic sectors through its Blue-Economy approach, and (vii) that PROBLUE was at an inflection point, with potential for scaling up its activities and increased demand for PROBLUE support, but which required an extension of the closing date of the program.

Based on the key findings, detailed recommendations were made in relation to PROBLUE’s Relevance, Coherence, Effectiveness and Efficiency. These recommendations will help ensure that PROBLUE remains relevant and effective in enhancing the World Bank’s interventions in the blue space—serving as a vehicle for innovation and intellectual leadership for the benefit of client countries as well as the broader “blue” community.

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2.2. OVERARCHING THEMES

Gender Equality and Social Inclusion

Combating inequality and seeking opportunities for groups such as women, youth, Indigenous peoples, and others is always a priority. To ensure the Blue Economy champions social inclusion and empowerment, PROBLUE is working with countries to address gaps in knowledge and support the incorporation of these considerations, including gender, throughout project development and implementation. Approximately 99 percent of PROBLUE funding approved last year supported gender-inclusive activities.

The World Bank understands that countries, communities, and economies can only achieve their potential and meet the challenges of the 21st century with the full and equal participation of women and men, girls and boys. Women play a significant role in the integration of ocean-related activities and economic sectors such as in fisheries, aquaculture, processing and trading of marine products, waste management, coastal tourism, conservation activities, and coastal disaster-risk reduction, among others.

However, a range of barriers prevent or restrict women from fully contributing to the Blue Economy. These include gender norms, Gender-Based Violence (GBV), and lack of opportunity or access to education, finance, and employment opportunities. Additionally, there is a significant difference in how men, women, and children use and interact with ecosystems, making their vulnerabilities to climate change and ecosystem degradation vastly different. It is critical that this variation is reflected in the work done to address climate and development challenges—a practice that remains far too uncommon.

Increasing gender equity and fair representation in Blue Economy development is not only important for improving the security,

and social and economic mobility of women and girls, but it is also a fundamental aspect of their overall community's development and resilience to future economic and environmental shocks. In this way, full incorporation and support of gender equity serve to benefit other marginalized groups, such as Indigenous peoples, those facing extreme poverty, disabled peoples, and youth. In FY23, World Bank team members as well as project partners and stakeholders worked to identify gaps in gender and social inclusion across activities, planning, and implementation, supporting cross-project and cross-program learning, and uptake of best practices.

Gender Highlights

To further understand and address gender issues both within its own financing and more broadly, PROBLUE supported the production of the World Bank report: [*Gender Integration in the Blue Economy Portfolio: Review of Experiences and Future Opportunities*](#) to continue exploring how best to incorporate gender in upcoming Blue Economy World Bank operations. The study surveyed a range of World Bank projects and the ways they approached specific gender issues across sectors, regions, and communities. The findings serve as a knowledge bank for other projects on best practices for addressing these issues and better incorporating gender in Blue Economy-focused projects and activities.

Making Marine Spatial Planning (MSP) Socially Inclusive

PROBLUE's global tools have been key vehicles for improving and expanding gender equity and access to development benefits. For example, an inclusive MSP process can support job creation and expand economic opportunities for diverse communities in both new and existing coastal and maritime sectors, as well as enable governments to create a conducive environment to meet social targets and



Panama / The World Bank / Yatziri Zepeda

employment goals. Additionally, in the seascape management and renewable energy sectors, which have a shortage of gender-affirmative planning and engagement, MSP knowledge tools are increasing gender-affirmative planning to move away from gender-blind action and development, and ensure the full realization of the sector's benefits.

Women in Aquaculture

In FY23, the PROBLUE-funded Aquabusiness Investment Advisory Platform ([AqualInvest Platform](#)), focused on gender equity through the identification of new markets and applications to increase demand for seaweed and seaweed products. Seaweed production and processing is predominantly undertaken by women in most regions where it is produced. By expanding its use and industrial processing, seaweed farming female groups are likely to benefit economically and socially while they build viable livelihood.

Gender Equality in Fisheries

PROBLUE funding is also supporting gender equality and broader inclusion in fisheries globally through activities like “Connecting social protection and the Blue Economy in a changing climate.” This activity is focused on expanding knowledge and awareness of the ways social protection and labor-market programs (SPL) can support fishers, fish workers, and their communities while increasing sustainability and reducing overexploitation related to fisheries-based livelihoods. Including pre- and post-harvesting activities, about half of the workers engaged throughout the value chain are female. Those same workers tend to hold the lowest-paid, lowest-status, and least-protected jobs, mostly in post-harvest activities such as processing and trading, as well as gleaning and other forms of harvesting on the shoreline. Building on a [conceptual framework](#), case studies in five client countries are being undertaken within the framework of this activity to develop a toolkit for practitioners.



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Integrating Gender and Social Inclusion in Nature-Based Solutions (NBS)

Gender aspects feature prominently in PROBLUE funded work on NBS at the global level. For example, PROBLUE’s “Global-Advancing coastal nature-based solutions and identifying opportunities across sectors” activity focused on developing tools and knowledge to support the identification and assessment of NBS opportunities for coastal resilience, tourism, and seaports. The inclusion of diverse stakeholders and those historically excluded, such as women and other vulnerable groups, are a primary focus group for this piece of work. Likewise, under this project the Global Program on Nature-Based Solutions (GPNBS) team developed a separate Gender and Inclusion guidance note for NBS to inform the activities under this grant.

Gender Regional Highlights

Africa (AFR)

In FY23, PROBLUE focused on removing some of the structural barriers that limit

opportunities for women and girls, enhancing their agency and voices in decision-making. For example, in Guinea, the West Africa Coastal Areas (WACA) Program - Resilience Investment Project (ResIP) initiated a study to gain a deeper understanding of the role of women in the use and rehabilitation of mangroves. The technical report, released in March 2023 and titled [*Understanding the Nexus of Mangroves and Women in Guinea-Conakry*](#), has helped strengthen the knowledge of both government and nongovernment actors to better manage issues pertaining to the relationship between mangroves and women. Additionally, it has helped provide tailored solutions for local communities to adopt in service of a sustainable, resilient approach for the protection and rehabilitation of mangroves.

East Asia and the Pacific (EAP)

PROBLUE-funded work in the Philippines is supporting the government to implement appropriate support mechanisms for stakeholders to ensure a just transition away from single-use plastic products (SUPPs) in

the country. Women and men are impacted differently by plastics throughout the value chain. For example, women working in marketplaces and micro, small, and medium enterprises (MSMEs) rely on plastics for packaging and business activities. In the management of plastic waste, women are also involved through the informal collection and recycling of plastic waste and are thus dependent on plastics for their livelihoods. The analytical work of this activity will help inform the design and improve implementation of policies and economic instruments to ensure women dependent on plastics for household and business needs are minimally impacted by SUPPs regulations. Additionally, analysis of distributional impacts will support the development of policies that shift manufacturing towards plastic alternatives, creating new green jobs and livelihood opportunities for women.

South Asia (SAR)

In the World Bank's Bangladesh Environmental Sustainability and Transformation Project (BEST, P172817), PROBLUE is supporting the development of studies and analysis of the investment and regulatory priorities for Medical Waste Management (MWM) in Dhaka, Bangladesh. Working with environmental and health agencies in the country, baseline studies, gap analyses, and a strategy production for MWM have been conducted. This work has also evaluated gender issues across current MWM practices in Dhaka, providing recommendations to minimize the risks of exposing formal and informal waste-management workers—the most vulnerable of which are female—to hazardous medical waste, such as sharps and infectious waste. During consultations, the team ensured meaningful participation of women in roles such as government officials, workers of health facilities, and representatives of waste-workers associations.

Climate Change

The World Bank continues to be the largest multilateral financier of climate action in developing countries, delivering a record \$31.7 billion in fiscal year 2022 (FY22) to help countries address climate change.

The vast impacts of climate change on the world's ocean are widely felt, from sea-level rise, temperature increase and acidification, to biodiversity loss. These impacts go further than just the deep sea or coastal regions, with far-reaching consequences for both natural ecosystems and human populations across the world.

PROBLUE supports countries in addressing their climate and development needs together. PROBLUE incorporates climate action into nearly all its work, taking innovative approaches to the way it rolls out climate mitigation to both protect ocean and marine ecosystems from the climate crisis and support economic opportunities for the communities that surround them.

Climate change was one of the largest focus areas across all PROBLUE-funded activities in FY23, with 96 percent of approved funds in FY23 contributing to climate change adaptation and/or mitigation.

Climate Change Highlights

Plastic Pollution

The intricate relationship between plastics and climate change presents a pressing concern, with numerous marine species and ecosystems bearing the brunt of these intertwined issues. At its core, the key climate costs of plastics are GHG emissions and plastic pollution impacts on the environment, which affect the ability of carbon sinks to absorb carbon and ecosystems to help sustain resilience. Throughout their lifecycle, plastics have a significant carbon footprint and emit 3.4% of global greenhouse

gas emissions. By 2060, emissions from the plastics lifecycle are set to more than double, reaching 4.3 billion tonnes of GHG emissions. The World Bank is collaborating with partners (such as UNEP and OECD) to understand and estimate climate costs associated with the plastic lifecycle. This is intended to provide inputs to the negotiations relating to the LBI. This work on the costs of plastics will include the direct and indirect impacts of plastic pollution on adaptation and mitigation efforts, as well as potential impacts on biodiversity.

Blue Carbon

Blue carbon—when carbon dioxide is absorbed and stored by coastal and marine ecosystems such as mangroves, seagrasses, and salt marshes – is one of the largest and most important sources of natural carbon storage on the planet. Management of blue carbon is a quickly developing environmental, social, and economic opportunity for countries around the world. To tap into this opportunity, countries must first understand the potential of their blue carbon stocks, and invest in blue carbon finance frameworks and mechanisms that establish a market for the sale of emissions credits, generating financial incentives for preserving and restoring the blue carbon assets. In FY23, PROBLUE-funded work helped develop these tools as well as share knowledge on best practices with countries interested in tapping into their blue carbon potential. In particular, this work helped trace the status of global blue carbon data, as well as the extent of blue carbon ecosystems’ potential to mitigate climate change through conservation, restoration, and sustainable management.

Offshore Wind Production

Offshore wind has the potential to deliver large-scale clean electricity at competitive prices as well as create significant economic opportunities for renewable energy technology. To support the World Bank’s Offshore Wind Development (OWD) Program, PROBLUE-

funded work is integrating environmental and social development considerations into the global knowledge products and country activities funded under the program. As OWD is largely in very early stages in the majority of the WB’s client countries, the inclusion of MSP, biodiversity assessments, and the Environmental and Social (E&S) assessment framework are critical to reduce risks to marine habitats and accelerate future deployment.

Decarbonizing Marine Transport

Decarbonizing the global shipping industry has gained significant attention and pressure from the international community and presents a significant opportunity to decrease emissions, improve air quality, and provide an opportunity for the energy transition in the production of zero-carbon fuels. The larger WB and PROBLUE are supporting work to explore and develop lower-carbon, and even zero-carbon shipping alternatives. Three pilot countries have been identified (South Africa, Morocco, and Colombia) and are engaged in a range of different actions, including technical assessments for a pilot zero-carbon bunker fuel project in South Africa, and stakeholder consultations on port locations in Morocco and Colombia. In June 2023, a study was released examining how carbon revenues from shipping could be distributed to maximize climate benefits and support an equitable energy transition. The report, titled *Distributing Carbon Revenues from Shipping*, outlines a smart and flexible framework for putting a price on carbon, and suggests how revenues could be divided to decarbonize shipping, enhance maritime infrastructure, and support broader climate aims.

Climate Change Regional Highlights

Africa (AFR)

FY23 saw the close of an activity to strengthen Mozambique’s National Blue Economy Development Strategy. This work was done

through economic and climate assessments and institutional coordination enhancement, including of the present and future impacts of climate change on marine and coastal resources and dependent economic sectors, and identified key opportunities for mitigating and adapting to climate change conditions associated with priority blue sectors. Likewise, this work included the identification of priority blue sectors for the development of a climate agenda within the Blue Economy in Mozambique and presented recommendations to ensure the implementation of climate-smart Blue Economy development.

East Asia and the Pacific (EAP)

Working across a number of EAP nations, including Fiji, Kiribati, Nauru, Tonga, Papua New Guinea, the Federated States Micronesia (FSM), the EAP-Pacific Ocean Advisory Program is informing the design, financing, implementation, coordination, and monitoring of priority policies and investments for a sustainable ocean economy and a healthier and more resilient environment, of which climate is a priority. For example, targeted studies are being conducted to explore NBS options for climate adaptation in atoll countries (RMI, Kiribati, Tuvalu) and other islands (Tonga, Samoa). These studies will assess climate change impact, adaptation strategies, costs and benefits, and policy changes for enhancing climate resilience.

Europe and Central Asia (ECA)

Education about pollution is often a key first step to addressing and mitigating it. In Albania, work is underway to improve the public understanding of pollution from land-based sources into marine environments, and will be paired with the design of solutions to reduce it. This work includes an assessment of the current Municipal Waste Management process and capacity, mapping of waste-leakage

hotspots, and the design of an Environmental Performance-Based Investment (EPBI) plan to incentivize municipalities to achieve measurable results in waste collection, recycling, and fee recovery.

Latin America and the Caribbean (LCR)

Excessive heat waves and prolonged high temperatures are common and prevalent impacts of climate change, with air-conditioning as an effective, but expensive, adaptation measure to protect people from heat exposure. Air conditioning also uses large amounts of electricity, resulting in higher levels of greenhouse gas (GHG) emissions. Seawater Air-Conditioning (SWAC), or ocean water cooling, is a system that uses seawater as a cooling agent that is clean, efficient, and cost-effective. SWAC can reduce emissions substantially at lower costs than conventional air conditioning. PROBLUE is supporting analytical studies to better understand the challenges and benefits of SWAC and identify areas most suitable for SWAC, including the potential use of discharge water for aquaculture in the Caribbean. This analytical work will inform potential investors to scale up this technology in the Caribbean and other SIDS.

Middle East and North Africa (MNA)

In Lebanon, a country where pollution and ineffective waste management have been widely documented for their environmental and social consequences (from the 2020 Beirut explosion to on-going landfill overflows), preventing and reducing marine litter is critical to protect its citizens, natural ecosystems, and its economy. Work is underway to establish a baseline for monitoring various marine sources of pollution by way of 1) upstream analysis of key sources of marine litter, and 2) building national capacity to prevent and reduce pollution in marine environments.

Mobilizing Finance for Development and Private Sector Engagement

Engaging and embedding support from a range of different stakeholders and potential donors—including governments, local and international NGOs, and the private sector—is critical to ensure lasting impact and action on climate and sustainable development. Due to the inherently global nature of ocean and marine ecosystems, this kind of creative and diverse development support is even more important. PROBLUE is committed to helping client countries build systems for private-sector investment and inclusion in Blue Economy development and expansion.

MFD is key in ensuring lasting progress. In FY23, PROBLUE scaled the breadth and scope of MFD, especially in tandem with new RETF activities, where partnerships are essential for the success of projects. The RETF modality provides high-impact and direct support to countries, and potentially regional organizations, seeking to implement key interventions in oceanic sectors. As such, “blue-informed” lending is a central aspect of PROBLUE’s shift toward RETF co-financing. Once this work moves beyond PROBLUE backed investment, it is critical that the private sector step in to promote the expansion of this work. Of PROBLUE funding approved in FY23, 56 percent supports MFD-related activities, while 84 percent includes private sector engagement more generally.

MFD Highlights

Tourism

Small Island Development States (SIDS) and other primarily coastal nations are some of the most vulnerable to climate change and its impacts—both environmental and economic. Tourism is a central industry for overall GDP and income generation for these states. Ensuring the tourism sector, and all the infrastructure it relies on, is sustainable and climate resilient is

therefore critical to increasing and maintaining the industry’s success. To improve sustainable tourism on SIDS, MFD has been critical in expanding assessments of the circular economy and plastic waste to identify private sector and public-private partnership (PPP) opportunities. Ongoing PROBLUE-supported research and analysis of tourism in SIDS will inform the development of three business cases for Cabo Verde and The Gambia, designed to mobilize private and public investment in the circular economy.

Nature-Based Solutions

NBS are a critical aspect of sustainable and resilient development, particularly for coastal resilience, tourism, and seaports. PROBLUE supports the development of tools and knowledge to facilitate the identification and assessment of these opportunities. This work relies heavily on private-sector engagement and MFD to ensure these solutions are well funded and built into the overarching development approach. While bilateral and multilateral funding for NBS is increasing across different projects and regions, it is not yet enough to meet the rising demand and need for NBS. Therefore, there is an acute need for expanded public funding in combination with private finance. An example of this is the facilitation of an agreement with Ecoshape, a firm specialized in the design and construction of water-related green infrastructure that represents major private-sector operators in coastal management, dredging, and coastal NBS implementation, on the joint development of a Ports Guidance Note. This engagement will influence continued private-sector implementation of NBS beyond the work supported by PROBLUE and the larger WBG. Additionally, this work includes the collection of MFD and private-sector financing case-studies in the tourism and port sectors to share best practices and examples of how to mobilize finance from philanthropy, the private sector, payment for ecosystem services, and insurance.



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Aquabusiness Investment Advisory Platform (AqualInvest)

Working directly with IFC, the Aquabusiness Investment Advisory Platform (AqualInvest) has started negotiations for investments in aquaculture in several countries, including China, Uganda, Pakistan, Kyrgyzstan, Honduras, Indonesia, and Vietnam, among others. An example is the 10,000 metric tons [insect meal](#) factory in Vietnam. These efforts have seen investors in diverse areas of the economy, such as fisheries, agriculture, the textile and fabric industry, motor vehicle producers, cosmetics, and transport, expand their portfolios to aquaculture investments. Discussions with these new investors revealed a renewed interest in supporting the growth of smallholder aqua farmers through partnerships with government in providing quality inputs, such as fish feed and seed, access to export markets, as well capacity building, and knowledge transfer. In FY23, IFC's Manufacturing Agribusiness and Services (MAS), a member of the AqualInvest Platform, initiated a regional and national review of

selected aquaculture industries, including seaweeds in Africa and the LAC region, to diversify and expand IFC's aquaculture portfolio with the potential to spur both private and public investments in aquaculture.

MFD Regional Highlights

Latin America and the Caribbean (LAC)

Pollution from non-point sources (NPS), which encompasses pollution from unidentified sources or from multiple sources, poses a significant threat to natural resources and ecosystems around the world, including the Matanza-Riachuelo Basin in Argentina. PROBLUE and the World Bank's Finance, Competitiveness & Innovation Global Practice (FCI) are supporting the development of a green financing option study to explore how to support circular economy interventions in animal production and biogas/compost production to access the voluntary carbon market. This study will identify effective ways to mobilize different financing instruments,

such as grants, concessional loans, guarantees, and bonds, and different sources of financing, including those from the private sector, to support green investments to reduce and control NPS pollution from the waste/plastics management practices and agricultural production in the Matanza-Riachuelo Basin and beyond. The proposed strategies and circular economy pilots will incorporate findings from the green financing study and present a clear roadmap for MFD support.

Middle East and North Africa (MNA)

Work began in early 2023 to support collaborative policy development for the Blue Economy and integrate climate actions into coastal tourism and fisheries management in Morocco. This work will contribute to the development of an enabling environment for private-sector engagement in the Blue Economy through a range of different approaches. For example, the activity will support MSMEs by training and enabling the coastal tourism Regional Development Corporations to set up quality and sustainability standards. Going forward, multi-stakeholder Blue Economy workshops, with considerable private-sector engagement, will be organized to inform the development of a Blue Economy Strategy, as well as identify policy and investment gaps, which the government,

development partners, and the private sector will be able to fill. Additionally, this activity is one of the four RETF activities approved in 2023, and showcases the expanded interest in RETF work across regions.

East Asia and the Pacific (EAP)

Another recently approved RETF activity in Indonesia is working to improve the country's capacity to mobilize financing for priority Blue Economy sectors. RE activities will include establishing a Blue Finance Advisory Committee to strengthen the enabling environment and develop necessary policy interventions for blue finance solutions, as well as identify and prioritize the reduction of subsidies and the repurposing of government funds. In addition, the government plans to develop and implement three long-term investment strategies and subsequent thematic financing instruments, including Coral Bonds, for MPA management, coastal infrastructure, and MSMEs access to finance. Under this project, the coordination of policies related to public expenditure and blue carbon in relation to MPAs, as well as the adoption of a robust monitoring and reporting framework, will provide the direction and legitimacy needed for banks and the private sector to engage in thematic financial instruments.

“PROBLUE has an important global role to support the transition to a sustainable blue economy. The promotion of healthy oceans has become an increasingly important international priority, and Ireland appreciates the role PROBLUE plays in the development of sustainable and resilient marine and coastal resources, particularly for Least Developed Countries and Small Island Developing States.”

Sinead Walsh, Climate Director, Department of Foreign Affairs, Ireland.





3. SNAPSHOT OF FY23 PROGRESS

3.1. PROBLUE BY THE NUMBERS

PROBLUE's fourth year of operation, FY23, saw significant and critical progress on global ocean action around climate change.

The following figures illustrate PROBLUE's priorities in directing funding over the past fiscal year, and are distinct from the program total indicators shown in the Monitoring & Evaluation section in two ways: First, the following totals are restricted to those approvals in FY23, and second, the percentages are proportion of funding approved in FY23 instead of the total number of activities.

These figures showcase PROBLUE's commitment to the collaborative multi-sector work needed to address these challenges, the shift towards RETF-focused activities, and the foundational role played by the cross-cutting themes of gender equality, climate change adaptation and mitigation, and MFD to all PROBLUE's work.

The PROBLUE portfolio grew considerably over FY23 to 181 activities and 22 additional financings worth a total of \$144 million. 53 proposals were approved in FY23, amounting to \$50.5 million, alongside seven additional financings worth \$1.35 million.

\$18 million of PROBLUE RETF financing supports 1.4 billion of WB lending



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The following statistics are based on the \$50.5 million value of approvals in FY23:

- PROBLUE continued to link its analytics to financing. A major theme of FY23 was the increase in RETF activities, with 4 proposals worth \$18 million approved in Ghana, Morocco, Indonesia, and Comoros. These PROBLUE activities support nearly \$1.4 billion in direct World Bank lending, demonstrating the high added value of PROBLUE financing, and its ability to promote innovation and integrated approaches toward Blue Economy priorities.
- In FY23, PROBLUE continued to focus on collaborative and cross-sector approaches to Blue Economy development. 47 percent of PROBLUE financing in FY23 supported activities that are multi-pillar, and 89 percent are supporting country or region-level engagement.

FIGURE 3.1. Multipillar Support

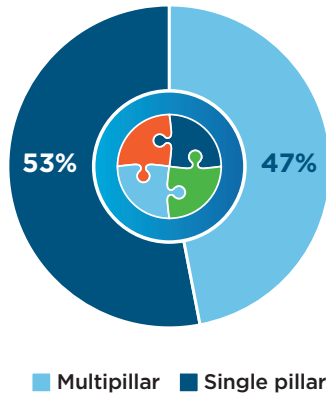
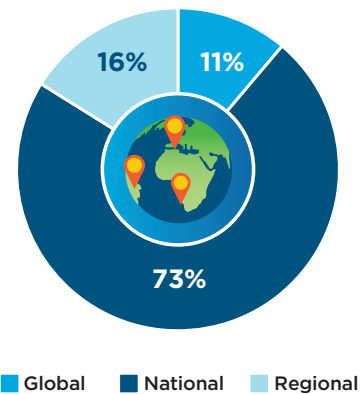


FIGURE 3.2. Focus on National and Regional Support



- In FY23, Pillar 1: Fisheries and Aquaculture, accounted for 19 percent of approved BE funding; Pillar 2: Marine Pollution, accounted for 30 percent, Pillar 3: Oceanic Sectors, had 15 percent, and Pillar 4: Seascape Management, accounted for 36 percent.

FIGURE 3.3. BE Approvals by Pillar

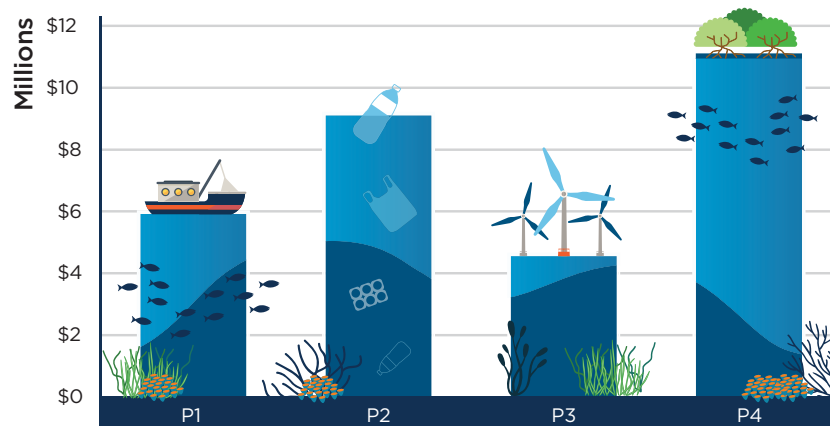
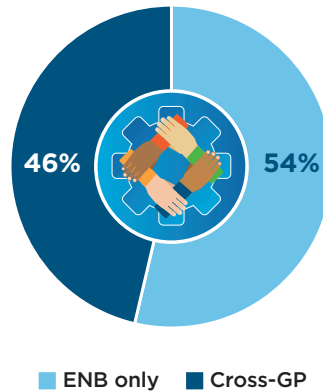


FIGURE 3.4. Strong Institutional Collaboration

- In FY23, 46 percent of approved funding supported activities featuring multi-disciplinary teams from across the Bank's Global Practices, including agriculture, water, finance, climate, and infrastructure, providing further evidence of the cross-sectoral value and added and reach of PROBLUE financing.



- PROBLUE's cross-cutting themes were heavily represented in FY23 approved funding. 99 percent of funding supported activities that addressed gender inequities, 96 percent supported activities addressing climate change, and 84 percent involved collaboration with the private sector.

FIGURE 3.5. Cross-Cutting Issues

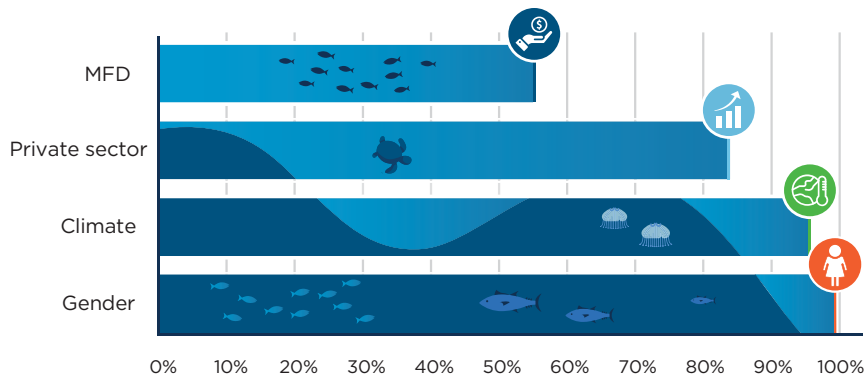
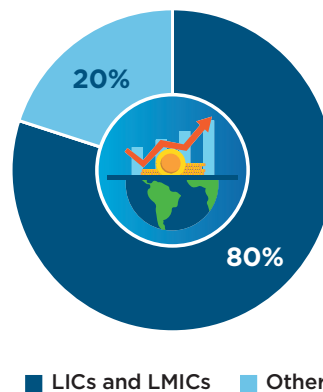


FIGURE 3.6. Strong Support for LICs and LMICs

- In FY23, 80 percent of PROBLUE funding at the national level supported LICs and LMICs.
- In FY23, 16 percent of PROBLUE funding supported countries in situations of conflict and fragility, as defined by the FY23 FCV list.





4. PROBLUE-SUPPORTED WORK AROUND THE WORLD

4.1. GLOBAL ADVISORY SERVICES AND ANALYTICS

Central to the delivery of PROBLUE is the development and implementation of global analytics and tools to support country needs. In FY23, PROBLUE predominantly focused on the implementation and uptake of existing tools, while also developing a handful of new tools to meet emerging needs. In FY23, PROBLUE supported the following global analytical work.

Fisheries and Aquaculture

In terms of analytical work on climate change for aquatic-food value chains, FY23 saw an increased emphasis on mitigation, with a focus on understanding the role of fisheries and aquaculture in carbon sequestration. A study of GHG emissions in value chains across fisheries and aquaculture was initiated, including an interdisciplinary component to improve the understanding of the economic impacts and opportunities for reducing emissions in these value chains.

Advancing Transparency

Transparency has always been a key focus within PROBLUE's fisheries work, specifically to improve governance and management. In FY23, PROBLUE continued engaging global and country stakeholders to advance transparency in the sector, including through the Fisheries Transparency Initiative (FiTI)—an internationally recognized framework that

sets transparency requirements for marine fisheries. As part of this activity, PROBLUE supported countries, such as Cabo Verde and Guinea, to become compliant with the initiative through the development of internal mechanisms and structures like a national multi-stakeholder group. On the initiative level, PROBLUE supported the development and design of a comprehensive and reusable FiTI report template, that included a section on the number of women employed in the fisheries sector to simultaneously advance gender goals.

Expanding the Fisheries Sector Assessment Toolkit (FSAT)

Over the last year, many country teams have begun using various tools within the Fisheries Sector Assessment Toolkit (FSAT) to continue improving the performance of the fisheries sector. Aside from promoting the uptake of existing tools, PROBLUE supported the development and finalization of four additional tools, in close collaboration with the FAO. First, the Statistical Capacity Assessment Tool, designed to assess the capacity of statistical and related agencies to collect, collate, curate, analyze, and disseminate fisheries data, including catch and effort data. Similarly, the Fisheries Stock Assessment Capacity Guidance tool aims to assist in the evaluation of the capacities of institutions to undertake stock-assessment activities. The Rapid Fish Value Chain Screening & Assessment tools seeks to screen fish value chains for feasibility and sustainability, and rapidly

assess the triple bottom line (environmental, social and economic) sustainability of a value chain. Finally, a capture fisheries Household Survey and Data module was finalized to help streamline engagement with coastal communities by way of a survey to better understand the role, needs, and contributions of potential project beneficiaries in the fisheries sector. An event on FSAT for internal and external audiences was hosted in June 2023 within the World Bank's Blue-Academy Learning series, during which the FAO and the WB jointly provided concrete examples of the uptake of specific tools, including the Fisheries Infrastructure Assessment Tool and the new fisheries and aquaculture value chain tools, in addition to an explanation on how to combine Local Economy-Wide Impact Assessments with biological modeling.

The Aquabusiness Investment Advisory Platform (Aqualvest Platform)

FY23 deepened PROBLUE's work on aquaculture to improve the sector's overall environmental performance. The [Aqualvest Platform](#) is a collaborative initiative between the World Bank, IFC, and other partners to distill and improve best practices in aquabusiness development for economic, social, and environmental sustainability. The platform acts as a hub for guidance notes, tools, and knowledge products. This year saw the development of three significant deliverables under the platform. First, the seaweed component undertook a comprehensive global seaweed market study focusing on the identification of new and emerging markets and applications for the expected expansion of biomass production from aquaculture (to be released in FY24). In parallel, the WB hosted a series of webinars on "Catalyzing the Seaweed Revolution," including a [Blue Academy event](#) in March, to engage stakeholders in discussions on investment opportunities and receive feedback on preliminary report findings.

Second, the Aqualvest Platform began a series of consultations with the public and private sector to develop global guidelines for investment in sustainable aqua businesses that meet the necessary requirements, analytics, and enabling factors for environmental, social, and economically feasible aquaculture investments. Third, during FY23, Cabo Verde and Pakistan were selected for a case study that covers carrying capacity assessments, spatial planning, site selection, and species selection studies. The Cabo Verde Spatial Planning Scoping Report was finalized and validated by the Cabo Verde Government, development partners, and stakeholders. Through the Aqualvest Platform, PROBLUE organized a range of side events to raise awareness of the platform and its coming work, such as at the Our Ocean Conference in Panama and the 12th FAO Commission of Fisheries Sub-Committee for Aquaculture in Hermosillo, Mexico.

Connecting Social Protection and Fisheries

In FY23, PROBLUE continued carrying out activities under the initiative led by the Social Protection and Jobs Global Practice on how social protection and labor-market programs can enable and incentivize small-scale fishers, fish workers, and their communities to engage in more sustainable practices and resilient livelihoods. Case studies were undertaken to test out the conceptual framework in the five countries selected in FY22, namely Costa Rica, Solomon Islands, Sri Lanka, Vietnam, and Kenya. The goal of the case studies was to collate information on how such cross-sectoral interventions can be framed and provide lessons learned across regions. The results will form the basis for a toolkit for practitioners that contributes to the larger goal of enhancing the understanding of how social protection and labor-market programs can support fisheries management and fishing



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communities at large while also contributing to the climate change agenda.

Marine Pollution (including marine plastics)

In FY23, PROBLUE prioritized support to the international marine pollution agenda by scaling up solutions for plastic waste in alignment with the upcoming Legally Binding Instrument (LBI) on plastics pollution, including in the marine environment. Globally, PROBLUE continued to support countries in the design and implementation of National Action Plans, and related policies, as well as undertook strategic work along the plastics life cycle, such as technical studies, knowledge sharing, and capacity building. In FY23, PROBLUE supported the following global work:

Supporting the Global Momentum on Addressing Marine Plastics

This past year has shown rising momentum towards a LBI on plastic pollution—reflected

through the INC’s first convening in Uruguay in November 2022, and the second in France in May 2023. Members of the PROBLUE team actively engaged in organizing several side events on the margins of INC-2, including the first Global Engagement Forum on ALDFG, forging collaboration with partner agencies, and providing visibility to PROBLUE funded work. PROBLUE-supported work was also showcased at other international conferences throughout FY23, such as the eighth Our Ocean Conference in Panama City from March 2-3, 2023, where combating marine pollution was one of six areas of action; and UNEP’s Conference “Promotion of Community Resilience Against Plastic Pollution and Climate Change in the Mekong River Basin,” held from March 7-9, 2023, in Bangkok, Thailand.

Scaling the Use of Decision-Support Tools to Inform Plastic Policies

In previous years, PROBLUE financed the development of the [Plastics Policy Simulator](#) (PPS) and [Plastic Substitution Tradeoff](#)



Ghana / The world Bank / Morgan Graham

[Estimator](#) (PSTE) to support governments in policy decisions. In FY23, there has been an increased uptake (such as in Ghana and the Philippines) of the PPS—which assesses and measures the impact of policies or policy packages on society, including households, government, and businesses. In the Philippines, for example, the PPS is being used to understand the distributional impacts of different combinations of policy reforms and to inform the related regulatory process, and the PSTE is being implemented as a government initiative. New assessments of policy instrument packages with the PPS and the PSTE in Türkiye, Georgia, and Ukraine were approved in FY23, and are underway. At the global level, PROBLUE is helping scale-up implementation of PPS and PSTE by extracting lessons learned from country pilots, updating and fine-tuning the models, generating training and communication materials, and preparing new policy guidance notes. Building on these tools, in FY23, PROBLUE also financed the development of an Investment Decision Support Tool aimed at creating effective market

demand for private investments and finance to support the implementation of the LBI.

Encouraging Plastic Action in the Fisheries and Tourism Sectors

Building on an initial focus on plastic packaging, there is now growing attention to plastic pollution in other key economic sectors, such as fisheries and tourism. In FY23, PROBLUE prioritized funding to activities that identified clear actions to address plastic pollution and reduce plastic usage in these other sectors. Fishing and other marine activities are estimated to contribute around 0.3 million metric tons to global macroplastic leakage. In the fisheries sector, ALDFG comprises the bulk of sea-based plastic leakage. With key partners, including FAO, UNEP, UNCTAD, IUCN, WWF, and the Ocean Conservancy, the World Bank and PROBLUE hosted the inaugural PROBLUE Global Engagement Forum, which focused on ALDFG, on the sidelines of INC-2 in Paris, France.

Tourism is a growing contributor to plastic pollution, with around 80 percent of all tourism taking place in coastal areas. The industry is also heavily impacted by plastic pollution—with SUPPs washing up on beaches and affecting tourism traffic. In FY23, PROBLUE funding helped promote sustainable practices in SIDS and coastal destinations through nine plastic-focused audits carried out in locations in Cabo Verde, the Gambia, and Sao Tome. Results of the mapping, market sizing, policy reform, and potential coordinated interventions are underway and will help to inform sustainable and circular tourism infrastructure and stakeholder assessments.

Helping to Inform a Just (Plastics) Transition

Estimates suggest that the informal sector is responsible for 58 percent of all the plastic waste collected and recovered globally. A just transition requires a comprehensive approach towards sustainable consumption and production that prioritizes inclusivity and fosters opportunities for decent jobs, while ensuring that no one is marginalized or left behind. PROBLUE continues to support critical analytics to help client countries devise policies and strategies to combat plastic pollution, while also recognizing the impact of livelihood transitions on various stakeholders. For example, a report completed in FY23 included three country studies—Indonesia, Vietnam, and Philippines—which assessed the vulnerabilities of informal sector waste workers, especially women. Findings and primary data helped inform social and gender elements in forthcoming policies.

Promoting Attention to Trade Policies

Global trade in plastics tops \$1 trillion each year, or 5 percent of total merchandise trade. The growing numbers unveil the need

for international cooperation to address the challenges posed by the cross-border movement of plastic waste. In FY23, PROBLUE started discussions with UNCTAD and WTO to elaborate on the relationship between trade policies and the plastics economy and, consequently, plastics pollution. As part of the “Curbing the Flow” activity that started in January 2023, a paper is being elaborated with the objective of understanding the transboundary effects of policies aiming to ban, phase out, reduce, or control plastics waste trade, and to discuss the importance of harmonized waste trade instruments and policies. It will also recognize how the forthcoming LBI will complement existing multilateral environmental agreements, such as the Basel and Rotterdam Conventions.

Prioritizing Behavior Change

While proper infrastructure and policies are needed to collect and process solid waste, human behavior is central to improving waste management. As such, both ‘upstream’ solutions, or pre-consumer activities that include material redesign, plastic reduction, and substitution, and ‘downstream’ solutions related to post-consumer waste management must be applied in parallel. In FY23, a global report on *Behavior Change and Waste Management* was finalized as a guidebook for local authorities to understand how to change citizen behavior, compiling a body of knowledge and experiences across geographies and country income level groups. The study is a considerable contribution to global understanding of the behavioral change aspects of waste management practices. The showcased experiences expose the power of citizen engagement to drive systematic advances in waste prevention and management to reduce ocean pollution from land-based sources. The case studies highlight a variety of behavior change

interventions that range from “hard” methods, such as financial penalties, to “soft” methods, such as social nudges.

Oceanic Sectors

The large and growing oceanic sectors such as shipping, tourism, and offshore renewable energy play an important role in establishing a more resilient Blue Economy. In FY23, with PROBLUE support several countries began implementing global analytics to decarbonize the shipping sector, initiate desalination, scale up coastal tourism recovery, and establish offshore wind energy infrastructure—a sign of increasing interest in these ocean sectors.

Scaling Offshore Wind Development

In FY23, the Offshore Wind Development Program aimed to integrate environmental and social considerations into global knowledge products and country grant activities funded under the program. Achievements include the development of an eLearning course, Key Factors for Successful Development of Offshore Wind in Emerging Markets, an [Offshore Wind Roadmap for Azerbaijan](#), and biodiversity screening for India's [offshore wind spatial planning](#). In May 2023, PROBLUE hosted an event within the Blue Academy Learning series on offshore wind to engage government agencies, environment and social (E&S) stakeholders, and offshore wind developers. The session covered tools, analysis, and activities, as well as shared best practices and lessons learned from case studies in Colombia, India, the Philippines, and Vietnam. Additionally, an Environmental and Social Framework for Offshore Wind Spatial Planning (ES-FOWSP) is underway to accelerate integrated spatial planning of offshore wind infrastructure. Three of the offshore wind roadmaps that will inform the study have been completed, and three others are under development.

Decarbonizing Marine Transport

A new phase of the Decarbonizing Marine Transport activity was initiated to continue supporting countries in their efforts to decarbonize marine transport. In FY23, the activity scoped out three pilot countries and settled on South Africa, Morocco, and Colombia. In South Africa, teams drafted technical pre-assessments for two pilot projects (in Saldanha Bay and Boeogoebaai) on zero-carbon bunker fuels, of which the preliminary findings were presented in an interim stakeholder workshop in Cape Town in May 2023. In addition, a national zero-carbon shipping committee was established and tasked with initiating a national roadmap for decarbonization. Both Morocco and Colombia obtained letters of interest from their governments and are organizing stakeholder consultations on the most promising port locations. Additionally, the World Bank team also co-organized a side event, “[Producing Future Marine Fuels: Opportunities for Renewable Energy Production in Developing Countries](#)” at COP27, and has agreed with the IMO and UNCTAD to do a similar public event at COP28.

Blueing Ports

Ports play a critical role in the global trading system, yet they increasingly face exposure to climate related damage, disruptions, and delays, hence enhancing their climate resilience is of strategic socio-economic importance. As port managers and industries are increasingly planning how to adapt and develop more climate resilient infrastructure and operations, there is a significant opportunity to explore the multi-benefits of NBS, such as shoreline restoration to reduce sedimentation of navigation channels. In FY23, in partnership with the WB's MDTF Global Facility for Disaster Reduction and Recovery (GFDRR)



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and EcoShape, PROBLUE co-financed the production of a catalog to identify available NBS (or hybrid) options, such as shoreline restoration, engineered seawalls, and artificial reefs, and finance mechanisms for scale up their use.

Given that ports and maritime transport play an especially key role in the economic development of SIDS, especially in the Pacific, a [Blue Transformation for Pacific Maritime Transport](#) study was conducted. The report reviews the challenges these SIDS face in modernizing and improving environmental and economic sustainability of the maritime sector and highlights opportunities for transformation with a focus on infrastructure, services, and governance.

Desalination

To mainstream the sustainable use of unconventional water resources, such as sea water desalination and wastewater reuse, a PROBLUE funded activity conducted a

comparative analysis of the legal and regulatory frameworks that exist, and case studies on institutional and management frameworks that pertain to desalination and reuse. As a result of this work, PROBLUE supported the creation of a desalination community of practice internal to the World Bank, which contributes with knowledge sharing and analytics to inform WB investments and policy engagement in the desalination field.

Other Renewable-Energy Sources

PROBLUE is supporting the development of seawater air-conditioning (SWAC) systems as a clean, efficient, and cost-effective alternative to cooling in the Caribbean. The primary component of the system is to reduce the costs of air-conditioning by up to 90 percent%. Since most of the target countries in the Caribbean rely on fossil fuels to generate electricity, the SWAC systems would reduce CO2 emissions substantially, thus contributing to climate mitigation.



Panama / The World Bank / Yatziri Zepeda

Integrated Seascape Management

As a key strategic driver of the Blue Economy, PROBLUE advocates for the use of an integrated seascape approach when developing marine and coastal activities. Specifically, in FY23, PROBLUE expanded the implementation of global integrated seascape management tools, including broadening the Blue Economy Development Framework, scaling up the development of marine spatial planning (MSP) efforts at the national and regional levels, and promoting the uptake of Blue Public Expenditure Reviews (BPER). In addition, novel guidance materials to respond to the global thematic priorities, and country demand in integrated seascape management were developed including a Blue Carbon Readiness Framework, and various notes and tools designed to upscale nature and climate investments.

Marine Spatial Planning (MSP)

In FY23, the World Bank continued to draw on its financial instruments, convening power, and technical expertise to support client countries

as they addressed the dual challenges of climate change and biodiversity loss through MSP. This support included helping identify trade-offs and synergies between climate action plans across marine sectors, data sharing, capacity building, and institutional strengthening. Supported by PROBLUE, the World Bank published the Marine Spatial Planning for a Resilient and Inclusive Blue Economy toolkit, consisting of a series of guidance notes and factsheets related to the different MSP phases. The toolkit was designed to close knowledge gaps, highlighting the World Bank's effort to deliver financial and technical support to governments and the private sector. This is essential for countries to take advantage of investment opportunities to improve food security and livelihoods, and strengthen community resilience to natural and economic shocks.

In FY23, PROBLUE disseminated and accelerated the implementation of the MSP toolkit. Since 2020, the World Bank has supported the development of three regional MSPs (Eastern Caribbean, Gulf of Fonseca, and

West Africa), and eighteen country-specific MSP processes, out of which ten were initiated in FY23. Most of this work was co-financed by the PROBLUE MDTF. The World Bank presented its contribution to MSP, including the PROBLUE financed work, at the 3rd International Conference on Marine Spatial Planning, and later at the WBG Blue Academy Learning series. The World Bank also participated in the High-Level Panel (HLP) for a Sustainable Ocean Economy learning event to share progress on the uptake of MSPs across the HLP member countries and beyond. Overall, the development of the MSP toolkit has increased momentum for countries to engage in MSPs as part of their Blue Economy aspirations.

Blue Public Expenditure Review (BPER)

The Blue Public Expenditure Review (BPER) also continued to scale over FY23 as the need to tap into private sector resources and innovative blue financing increased. The tool, which helps countries assess their fiscal allocations in the oceanic sector, is also helping to identify budgetary gaps in different countries. Preliminary results of country level Blue PER have shed light on the allocation of funds and the specific areas where these financial resources are directed. The scoping and identification of a wide range of public expenditures and subsidies associated with the Blue Economy was a first achievement of this effort. Opportunities for future Blue PERs have been identified, along with the need to construct comprehensive databases that encompasses all available data on Blue Economy expenditure, subsidies, and revenues. These kinds of databases are expected to serve as a valuable resource for further analysis and contribute to enhancing the assessment of public expenditure and revenue within the Blue Economy sectors.

Blue Carbon Readiness Framework

The role of mangroves, seagrass beds, and salt marsh ecosystems in climate change mitigation has inspired the concept of blue carbon markets, where projects restoring or conserving these ecosystems generate “credits” based on the tons of carbon captured and stored. To embrace the growing importance of coastal blue carbon ecosystems for climate change mitigation, PROBLUE developed a practical readiness framework (to be publicly launched in FY24) to guide governments in catalyzing and scaling up public and private investment in blue carbon as part of their Blue Economy development. The framework describes a step-by-step process with simple checklists that countries can use to determine their readiness to catalyze blue carbon finance. Enhancing these coastal ecosystems will have multiple economic and social benefits, including sequestering of carbon, reduction in flooding and erosion, storm protection, increased food security, improved livelihoods for women and Indigenous groups, and biodiversity maintenance and improvement. The Framework will be implemented in selected countries in FY24.

Nature-Based Solutions

NBS present a sustainable and economically viable approach to maintaining the scenic beauty of coastal areas faced with climate change that rely on pristine beaches for tourism. To address coastline erosion and its impact on the tourism industry, PROBLUE is supporting the development of a brief guidance note in collaboration with the GFDRR. The document aims to identify and explore nature-based interventions as effective measures for protecting coastlines from beach erosion and evaluate mechanisms to include them in tourism operations, business lines, and financing models through mechanisms such as public-private partnerships, revenue

generation, cost reduction models, payments for ecosystem services, eco-taxes, and blended finance approaches, among others. Another new activity on tourism was approved in FY23 to advance the development of tools and knowledge to support the identification and assessment of nature-based solution opportunities for coastal resilience. This year, the team developed an initial methodological implementation for the coastal NBS Opportunity Scan (NBSOS), an on-demand mapping service of opportunity areas for specific typologies of NBS, such as mangroves, based on openly available geospatial datasets. To date, the NBSOS is being piloted on four islands in the Eastern Caribbean.

4.2. PROBLUE WORK BY REGION

Africa

The African Union estimates that the Blue Economy currently generates nearly [US\\$300 billion annually for the continent](#), creating 49 million jobs in the process. These and other crucial benefits—most notably food security, livelihoods, and biodiversity—are

entirely dependent on the ocean’s health. The Blue Economy for Resilient Africa Program (BE4RAP), supported by PROBLUE, was launched at the UNFCCC Conference of the Parties (COP27) in November 2022. The Program aims to provide multi-sectoral analytical, financial, and policy support to Africa’s coastal countries to help them leverage these opportunities—and mitigate the risks—inherent in scaling up their Blue Economies.

As part of this effort, PROBLUE financed the delivery of a [series of operational briefs](#) or Blue Economy “solutions papers” tailored to the African context that provide technical solutions and tools to better manage the development challenges they face. The second deliverable that is currently in motion is convening committed partners—financing partners, TF partners, and knowledge partners—to scale up the program on all fronts. Currently, the French Development Agency (AFD), European Investment Bank (EIB), Deutsche Bank (DB), Equity Group Kenya, Ørsted Energy Denmark, the Nordic Development Fund, and the French Institute for Research and Development (IRD) have signed on.

FIGURE 4.1. Blue Economy Solutions Papers Released as Part of BE4RAP



BOX 4.1. Addressing Plastics Pollution Across West Africa Coastal Countries

One crucial part of ensuring an effective Blue Economy is managing marine plastic pollution and litter that threatens marine and coastal biodiversity, ecosystem resilience, food security, and human health. Across Africa, rising populations and increased socio-economic activity in coastal areas is increasing marine pollution, making it a high priority across the region. In response to this urgent threat, the WB launched the West African Coastal Areas Management Program (WACA) in 2019 to enhance knowledge and understanding of value chains, circularity opportunities, key economic impacts, and regulatory frameworks related to plastics in West Africa.

All the planned activities for FY23 were completed, including the reports *Realizing the potential of plastics circularity* and *The Economics of Plastic Use and Cleanup Priorities for West African Coastal Countries*. FY23 culminated with the delivery of a synthesis report *Plastic Pollution in Coastal West Africa* to inform decision-makers on the challenges related to plastic pollution and the urgency to act. A [WACA plastics e-book](#) was also launched to allow the public to access and explore a broad set of new information. In addition, through the recently approved activity “West Africa Regional Action on Plastics Management and Circular Economy,” PROBLUE will support baselining and the identification of information needed to draft a regional action plan that aligns with the targets and commitments of the forthcoming LBI.



Tanzania is developing national and sub-national government knowledge and capacity to reduce marine plastic litter through enhanced urban services, infrastructure, and planning. By examining the sources of plastic pollution, the legal and institutional waste management frameworks, and the performance of local services and actors in recycling and cleaning services in the area, it will be able to provide strategic advice for litter management strategies in the coming year, essentially mitigating the costs of coastal environmental degradation from plastic pollution. Also, in FY23, a report on [The Costs of Environmental Degradation from Plastic Pollution in Selected Coastal Areas in the United Republic of Tanzania](#) was published. By conducting several consultations with relevant stakeholders

and developing a methodology of economic valuation, the study assessed and evaluated the costs of environmental degradation from marine plastic pollution, identified and prioritized critical areas and issues, and provided recommendations for effective control in select coastal areas in Tanzania and Zanzibar.

In FY23, PROBLUE approved a [\\$5 million RE grant](#) to Ghana as co-financing to the West Africa Coastal Areas Resilience Investment Project (WACA ResIP 2). In particular, the government of Ghana will implement activities to operationalize the Blue Economy approach through marine spatial planning and a blue carbon scheme in addition to tackling marine litter. As a first for the World Bank in Africa, a “Mangrove Blue Carbon Pilot Program” will

combine innovative mechanisms for scaling up blue carbon markets with the potential to invest funds directly back into the local communities. The RE grant will be implemented for its potential to strengthen buy-in, deepen engagement, and multiply impact. The blue carbon activities were informed by two analytical pieces, funded by PROBLUE, on the [*Benefits of Mangrove Afforestation and Restoration Programs in Ghana*](#) and the [*Understanding the Nexus of Mangroves and Women in Ghana*](#).

In Nigeria, a PROBLUE-funded activity supported the development of sector-specific extended producer responsibility (EPR) guidelines on plastics, which the government plans to adopt and pilot for the plastics sector. In addition, a web-based platform prototype was designed to improve access to information on SWM systems, and three reports titled, *Solid and Plastic Waste Sector Analysis and Recommendations, Nigeria Solid Waste and Plastic Waste Institutional Analysis, and Waste Characterization Study of Solid Waste in Lagos State* have significantly expanded the government's knowledge base for informed decision-making on SWM and marine pollution.

In South Africa, the first phase of the [*Advancing Circular Economy in South Africa*](#) activity was finalized, under which PROBLUE supported the registration of 5,844 waste pickers across 19 municipalities onto a new platform for them to take advantage of South Africa's new EPR regulations. This exercise promoted an equitable and inclusive role for women-led waste picker cooperatives in South Africa. One example of a positive outcome on gender equality relates to a woman from the African Reclaimers Organization (ARO) who, through her engagement, visibility, and leadership in the registration process, was recently elected as the newly appointed ARO Chairperson.

This activity also included a "Circularity in Plastics in South Africa" compilation of 10 briefs developed in partnership with GreenCape and other international organizations, and a report on [*Barriers, Opportunities and Recommendations for Advancing Circularity Plastic Packaging and Single Use Plastic Products*](#). The second phase of this activity was approved in January 2023, and is further supporting the implementation of the above-mentioned EPR regulations, with a focus on the upstream causes of plastic pollution and litter in waterways, holistically addressing the problem through a circular economy approach.

Other activities took a wider-lens approach to enabling a Blue Economy. For example, in The Gambia, PROBLUE is helping to identify and incorporate NBS into The Gambia Integrated Urban, Coastal Resilience, and Land Program. PROBLUE's support, initiated in 2020, has been critical to increasing the country's awareness and understanding of NBS, in particular around coastal resilience and flood-risk management. Outputs from this PROBLUE-financed work allowed the government to leverage IDA resources for two projects that integrate NBS in coastal tourism, and in coastal resilience.

In Sierra Leone, an activity on reducing land-based and marine sources of plastic pollution concluded with the development of a National Plastic and Plastic Waste Management Policy. Now, a second PROBLUE funded activity has been approved that will concentrate on key actions outlined in the policy to establish a coordinated national and local level framework of laws, by-laws, systems of governance, and implementation plans. The new activity "from waste to wealth" will leverage the tourism sector to develop and pilot innovative private sector circular economy activities to reduce marine litter and enhance sustainable coastal tourism.

BOX 4.2. Spotlight on In-Country Partnerships: Ghana

The World Bank's West Africa Coastal Areas (WACA) Program is dedicated to bolstering the resilience of coastal communities against the adverse effects of coastal erosion, flooding, and pollution. With the backing of PROBLUE, the program strategically collaborates with existing initiatives and programs to drive substantial action on coastal resilience that leads to transformative outcomes.

An example of this approach is the partnership between the WACA Program and the University of Cape Coast (UCC) in Ghana, which resulted in UCC securing \$6 million in grants to establish the Africa Center of Excellence in Coastal Resilience (ACECoR). The primary focus of ACECoR is to train the next generation of coastal and marine scientists while conducting innovative research that will directly shape future investments. Notably, this collaboration has fostered the emergence of over 100 new PhD and Masters students specializing in coastal resilience. Additionally, two groundbreaking research collaborations between ACECoR and esteemed international institutions in the Netherlands and Japan have been initiated, centering on nature-based solutions and integrated sediment management.

This approach to forming international partnerships is mirrored at the community level, where the World Bank collaborates directly with civil society organizations. This enables the expansion of the Bank's impact on livelihood diversification and job creation through tailored subprojects for individual communities. In Ghana, the World Bank is partnering with multiple civil society groups to establish a CSO Platform, strengthening the Bank's direct engagement with communities and ensuring that WACA's physical and social investments address their most pressing needs.

By prioritizing the forging and expansion of partnerships, the World Bank effectively multiplies its impact and fosters long-term collaborations that extend beyond the life of any single project. This approach underscores the program's sustainability and has proven instrumental in enhancing development outcomes for coastal communities in West Africa.

Ghana / The World Bank / Morgan Graham



BOX 4.3. Mozambique’s Private Sector Assessment and Identification of Priority Investment Actions for the Blue Economy Development Strategy (EDEA)

The private sector makes up a significant part of the Blue Economy and is often the leading driver of growth. The private sector’s role should be carefully managed to efficiently use the country’s resources, engage local communities in Blue Economy development, and leverage finance to enhance biodiversity and ecosystem services and mitigate climate change. The PROBLUE financed activity provided strategic recommendations to incorporate in the EDEA, to leverage the private sector investments:

- **Aquaculture:**

Invest along the entire aquaculture value chain, starting with production and processing, expanding to input/output markets and associated value-chain services. Take into consideration the sector’s higher employment of women compared with the fisheries sector.

- **Capture fisheries:**

Prevent the expansion of capture fisheries efforts, to reduce threats to the sustainability of fish stocks. Encourage fisheries efficiency (reduction of waste and bycatch), sustainability (traceability and collective management), and value addition. Leverage synergies with Blue Economy offset activities.

- **Tourism:**

Develop tourism services, including accommodation, restaurants, and leisure activities such as scuba diving and fishing tours. Consider its effects as a job multiplier in decentralized areas (including for women and youth) and to improve revenues and alternative livelihoods for traditional farmers and fishers.

- **Ports and shipping:**

Expand and upgrade existing ports, with a focus on sustainability (blue ports), to serve fast-growing hinterland markets.

- **Ecosystem services:**

Investments in coastal and marine restoration and conservation, to generate markets for biodiversity offsets and/or carbon credits.



Source: PescaMoz Fisheries Company: Female Job Creation in the Tuna Processing Facility

In Mozambique, the World Bank remains a key partner in the development of an integrated seascape agenda, with longer and more consolidated engagements. In November 2022, technical assistance financed by PROBLUE was delivered to the government, providing critical inputs on private-sector engagement, and

climate-change considerations in the Blue Economy. Overall, PROBLUE-financed activities led to the strengthened integration of the private sector into government decision making in the Blue Economy, and enhanced capacity for the prioritization of Blue Economy investments. In addition, the activity improved

the government's capacity to integrate climate-change considerations into Blue Economy development, also contributing to the country's CCDR. PROBLUE continues to support Mozambique through the BETF MozAzul Phase II, focused on aquaculture, coastal tourism, blue carbon, and blue satellite accounts.

In Comoros, the PROBLUE BETF was mobilized for a number of activities in support of the Blue Economy, including high resolution modeling to anticipate climate change effects on key target fish species. The model will be incorporated into the country's sustainable fisheries management efforts through a recently approved investment project, Food System Resilience Program for Eastern and Southern Africa (\$603 million of which \$40 million are for Comoros) with an additional \$3million of PROBLUE RETF. PROBLUE's added value is to support the integration of sustainable fisheries and coastal-zone management, and, more broadly, integrated watershed management, as per a Land-to-Sea approach. The RETF support focuses on improving capacity at the national level, helping create regular budgetary support for fisheries management. PROBLUE support is targeted at an FCV country, and the Comoros component is the only one that includes marine capture fisheries in the overall strategy to address Food Systems Resilience.

Europe and Central Asia

Albania remains a champion in the region when it comes to ending plastic pollution. Following a baseline assessment and mapping of municipal waste including plastics, the activity is in the process of designing and developing pilot solutions for reduction, reuse, and recycling of plastics and other municipal waste. In March 2023, the scope of the waste analysis was modified, broadening it to include the entire set of municipal waste in line with the newly approved CARE4BlueSea project, which aims to reduce pollution from land-based sources in

selected areas of the south-west coastal belt of Albania.

At the regional level, Türkiye, Georgia, Ukraine, and Moldova, are all contributing to the development of an economic rationale for addressing pollution in the Black Sea, by estimating the cost of inaction of reducing nutrient, chemical and plastic pollution. In FY23, in partnership with national governments, regional organizations (BSEC, BSC), and international partners such as the European Commission, UNDP, and FAO, PROBLUE developed a Marine National Pollution Diagnostics for each country. To support dialogue on the Blue Economy agenda in areas such as healthy marine environment and actions for eutrophication mitigation, a regional marine pollution diagnostic report *Turning the Tide of Pollution in the Black Sea* was also finalized. The report draws on a wealth of information from the country-level pollution risk and impact diagnostics prepared for Bulgaria, Georgia, Romania, Moldova, Türkiye, and Ukraine, and highlights specific country issues and recommendations. The technical studies under this activity identified the need and potential for mobilizing private financing to mitigate sources of marine pollution. Both the country and regional work informed the design of the BBSEA GEF project, which is currently in preparation, and plans to leverage private sector funding to address marine pollution.

PROBLUE is also supporting analytical work to identify potential avenues for public and private sector investment in low to zero carbon bunker fuel production in Türkiye. Included in the analytical work is an assessment of the fuel's potential for road and rail transportation. PROBLUE-support is also helping identify the role of women in the decarbonization of shipping and ports, informing how to maximize opportunities in the emerging industry with a focus on leadership and investment opportunities.

East Asia and the Pacific

Adapting fisheries and aquaculture to climate change remained of high priority for countries in East Asia and the Pacific (EAP), underscored by the release of seminal reports such as *Hot Water Rising*, which brings the impacts of climate change on coastal communities into sharp focus. The report is a world-first sub-national species-specific assessment of the impact of climate change on fisheries and marine habitats, that outlines a set of policy options to increase the resilience of natural assets and the fisheries sector. The report was produced as a result of an innovative partnership between the Indonesian Ministry of Marine Affairs and Fisheries, the University of British Columbia, the University of Bern, and the World Bank, with the support of PROBLUE and the David and Lucile Packard Foundation.

With many countries playing an active role in the international discussions on the legally binding instrument to end plastic pollution, marine plastics also ranked highly on the agenda in the region. In FY23, PROBLUE received high demand for the development and implementation of national action plans to phase out single-use plastics. For example, a new activity in Malaysia is using a deep dive analysis into two product value chains to develop circular economy measures and an implementation roadmap to reduce plastics and inform private sector investment in plastics recycling. This activity focuses on MFD and private-sector engagement, with the plastic-recycling value chain studies directly feeding into potential investments between IFC and the private sector.

In the realm where plastics and agriculture intersect, significant strides have been made in China. As a significant user of single-use and short-lived plastics, food systems and producers have become a leading source

of plastic waste and pollution. Using this knowledge, a comprehensive report exploring the contributions of the food system to plastic pollution in the country concluded in FY23, as well as several assessments on plastic waste generation and management in both urban and rural settings, including in the Poyang Lake Basin, Yangtze River. The culmination of these efforts is a final synthesis report that carried out diagnostics on sources of pollution, mismanaged plastics, and plastics leakage to waterways in the country, and provided a basis for further benchmarking with international policies and practices related to the production and consumption of plastics and plastic waste management. It also looks at trade-offs between food security needs and sustainability considerations to mitigate the environmental risks.

Investments in solid-waste management are a key to reducing plastic from entering the marine environment. With the support of PROBLUE, countries such as Vietnam are undertaking analytical work on the planning and financing of municipal solid and plastic waste interventions to reduce pollution and marine littering. In FY23, a report on *National Level Financial and Fiscal Analysis of the Domestic Solid Waste Sector in Vietnam* was completed, benchmarking Vietnam's SWM policies and practices. A specific study on the collection, treatment, recycling, and EPR for e-waste, including data on the informal sector, was also undertaken to outline recommendations for an e-waste policy. At the city level, a study on baseline costing and financing in Hanoi has contributed to an enhanced understanding of the investment needs to bridge the financial gap (both opex and capex) for municipal solid waste service delivery. The study also highlighted the need to improve the reliability of data to support investment and operational management.



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Through a series of activities, PROBLUE supported the government of Cambodia to strengthen its legislation and institutional capacity for solid waste and plastic management at the national and sub-national levels as well as enhance private sector engagement in waste services. In addition to the marine pollution work, PROBLUE financed the production of a report to advance Cambodia's sustainable Blue Economy development. The report, [*Building a Blue Economy Roadmap for Cambodia*](#), published in June 2023, provides an analysis of existing marine and coastal resources, and outlines subsequent recommendations with a focus on marine policy, marine spatial planning, and strengthening coastal livelihoods.

Plastics pollution is a transboundary issue—with shared river systems, coastlines, and connected markets for plastic products and plastic waste. As such, single-country solutions will not suffice, and countries in the region are starting to collaborate, coordinate, and harmonize on policies, strategies, certifications, and monitoring activities to work on regional solutions to end plastic pollution. Over the last few years, PROBLUE has supported significant regional work, especially in southeast Asia, where it had previously funded the [*ASEAN Regional Action Plan to Combat Marine Debris*](#). In FY23, PROBLUE continued to support the agenda through a web-based toolkit that identifies appropriate plastic pollution assessment methodologies to inform

more effective policy making. In February 2023, an additional activity started with the objective of providing advice and capacity support to ASEAN Member States (AMS) on plastics policies and regulatory frameworks, and enhancing their contribution to and engagement in the plastics global agenda. In addition, a region-wide study on plastic crediting in Southeast Asia is ongoing to understand the challenges and opportunities of using a plastic-crediting mechanism to reduce plastic pollution in developing countries in Southeast Asia.

Beyond fisheries and plastics, an activity in Timor-Leste is increasing capacity for the integrated management of blue sectors by developing a roadmap to transition to a sustainable and integrated Blue Economy. In FY23, this activity held meetings with the Secretariat of State for Environment and the Ministry of Marine Affairs and Fisheries to establish an initial relationship and understand their priorities, and with a broad list of stakeholders to discuss the current state of the Timor-Leste Blue Economy as implementation commenced.

In the Philippines, activities to support the design of a Fisheries and Coastal Resiliency Project (FISHCORE) were successfully completed. This included developing a knowledge base of the fisheries sector and undertaking analytical studies to support improving coastal resilience. In FY23, a number of assessments were completed, including an institutional capacity assessment and GIS data management assessment. In terms of stakeholder engagement, many activities were carried out this year, including bio-economic modelling and stock assessment training workshops.

In addition, the Pacific Ocean Advisory Program (POAP) made significant progress in FY23, notably in Fiji, a key country of focus for the initial phase of POAP. In June 2023, an *Assessment of Needs and Opportunities to Improve Ecosystem Resilience and Sustainable Tourism in Fiji*, undertaken by the International Centre for Environmental Management (ICEM), was released to support the Fijian Government in its efforts to improve ecosystem resilience through conservation, adapt to climate change, and develop sustainable tourism. The report, which outlines a set of guidance materials for the design and potential application of policies, market-based instruments (MBIs), and other management measures, is one of several ongoing technical assessments and studies across the region undertaken within the framework of POAP to guide future investments.

PROBLUE supported work in Kiribati produced the first account of natural capital in the Kiritimati atoll, including an estimate of the economic value of select natural assets. The analysis also covers options for diversification and investment in Kiritimati's Blue Economy, which pointed to fisheries and aquaculture as well as the salt sector as key areas for development (see Figure 4.2. below). PROBLUE is also supporting the Pacific Blue Transformation, through the production of a report that recommends transformations to maritime transport in the Pacific region—particularly domestic shipping—in ways that promote economic development and enhance connectivity. To that end, research and analyses from six in-depth assessments were distilled to identify seven long run benefits for Pacific peoples, as shown in figure 4.2.

FIGURE 4.2. The Pacific Blue Transformation



In Palau, PROBLUE is guiding the operationalization of Palau’s Blue Prosperity Plan in support of a transition to long-term protection and production of blue sectors based on an improved understanding of the economic viability of Palau’s ocean-based economy. Through this effort, PROBLUE is strengthening governance and technical processes in Palau around MSP, and providing technical assistance on policies and roles for those accountable for implementing each policy. Moreover, the implementation of the blue PER will support the identification of financial gaps and opportunities to develop and diversify the Blue Economy.

Latin America and the Caribbean

Most countries in Latin America and the Caribbean face high climate change related risks, from shifting and increasingly erratic precipitation patterns and rising temperatures, to sea level rise and ecosystem degradation. These impacts are compounded by limited economic resources and infrastructure support for sustainable and effective responses. PROBLUE-funded work in the region is supporting a range of Blue Economy development BE and RE activities, including the ongoing cross-pillar activity, Unleashing the Blue Economy of the Caribbean Project (UBEC). A comprehensive set of analytics, active in Antigua & Barbuda, Dominica, Grenada, St Lucia, St. Vincent and the Grenadines, and the Organization of Eastern Caribbean States (OECS) Commission supported the

identification of policy gaps, organizational reforms, and capacity needs at the national and regional levels. In FY23, PROBLUE supported the development of diagnostic reports and roadmaps to fill these gaps and strengthen the marine and coastal assets in these countries across the thematic areas of all four PROBLUE pillars, which later informed the UBEC project with a PROBLUE RE co-financing of \$4 million.

PROBLUE also supported an assessment of future investment operations in the region: the Caribbean Regional Blue Port Connectivity Project. This project will enhance port efficiency and resilience while reducing pollution, increasing energy efficiency and connectivity, and elevating compliance with the International Convention for the Prevention of Pollution from Ships (MARPOL) in selected Caribbean States. The study analyzed the status of port operations and infrastructure resilience in Caribbean countries and assessed the viability of the project, developing a framework to harmonize blue port assessments, and establish a method for measuring the integration of Blue Economy principles in ports. The work identified projects at the port, country, and regional levels, and produced a Blue Port Project Package and Implementation Roadmap to guide future development projects. Five countries, namely Grenada, Jamaica, St. Lucia, Belize, and the Dominican Republic, actively served as focal points for the framework's development and testing.

Building on work financed by PROFISH, PROBLUE supported the development of the *Recommendations for a Blue Economy Roadmap in Jamaica* report, which is the first strategic document of its kind in Jamaica and expected to serve as a basis for the government to adopt an overarching Blue Economy framework. Work also included the development of a report on *Financing Options for a Blue Economy for Jamaica*, which will guide the

inclusion of MFD and private sector finance in Blue Economy development going forward.

Regarding marine pollution, several assessments were finalized in Jamaica to inform strategies to reduce plastic waste in Kingston's Harbor through physical waste capture and community-based interventions. The interventions identified structural solutions to capture waste from four specific gullies feeding Kingston Harbour, and behavioral approaches to reduce waste disposal into these waterways targeting adjacent communities. Also, the activity developed gender-informed approaches to support commercial opportunities for the community, including community waste collectors' employment.

At the regional level, the Eastern Pacific Tropical Marine Corridor (CMAR), established by the Governments of Costa Rica, Colombia, Ecuador, and Panama in 2004, hosts globally relevant marine biodiversity and drives a significant portion of the local and regional economy as it is home to some of the most productive fisheries in the world, sequesters significant carbon emissions, and is fundamental to international blue tourism. In FY23, PROBLUE initiated support to strengthen regional coordination and oversight of the CMAR mechanism and its secretariat and inform the preparation of new investments designed to support CMAR at the national and regional levels. Activities include a rapid assessment of optimal strategic corridor management and integrated planning, support to the financial architecture of CMAR to ensure long term financial sustainability, and capacity building for the integrated seascape management. Climate change and gender issues are built into the design of these activities. This process has already enabled the engagement with the CMAR Technical Committee and key partners, as well as weekly meetings with the CMAR Secretariat. Additionally, PROBLUE financed



Jamaica / The World Bank / Juliana Castaño

BOX 4.4. Creating an Enabling Environment for Blue Economy Development in Jamaica

Jamaica is an archipelagic state whose marine space is more than 25 times its terrestrial footprint. The country's coastline has a diversity of ecosystems, including coral reefs, mangrove forests, seagrass beds, and wetlands. These ecosystems form the habitat for countless species of fish and other marine life and play a key role in protecting the coastline. The seascape sustains the livelihoods of fisher folk and provides protein for the wider population. It is also the basis of Jamaica's tourism sector, accounting for 8 percent of GDP and 8 percent of employment. Investing in the Blue Economy is critical to expanding economic growth and generating jobs while protecting and preserving the country's marine and coastal environment.

Jamaica's Blue Economy Baseline Assessment provided the following results:

1. Data, research, and capacity gaps.
2. The assessment concluded that intensive human capacity-building, regulatory reform, and investment are necessary to accelerate the transition towards a sustainable Blue Economy in Jamaica.
3. National regulatory, institutional, environmental, technological, and cultural landscapes—barriers and drivers.
4. Jamaica has no overarching Blue Economy legislation. Different policies and acts govern various inter-sectoral interests that fall within the scope of the Blue Economy.
5. Preliminary options, potential priority areas, and recommendations to foster Blue Economy growth in Jamaica.
 - Jamaica has many opportunities to update and integrate marine-related policies to align with a new, more strategic approach.

Top risks to the Blue Economy are natural disasters and climate change, coastal water pollution, and illegal fishing.

For Jamaica to successfully develop a sustainable equity-focused Blue Economy sector, social benefits and equity must receive equal attention to economic and environmental concerns. Education and training are essential social pillars needed to unlock greater sustainable utilization of marine resources and participation in the Blue Economy.

work has supported initial trainings on Blue Economy for professionals from nationally relevant CMAR agencies and has advanced the discussions and preparation of a regional Blue Economy program that will support CMAR agency interventions at the national and regional levels. This intervention is building synergies with other PROBLUE activities at a national scale in Colombia, Costa Rica, Ecuador, and Panama.

At the country level, PROBLUE is also supporting integrated seascape management in Latin American countries. In Mexico, PROBLUE is supporting the government to strengthen its institutional, financial, and technical capacity to promote sustainable, inclusive, and climate resilient blue economic growth, including improved governance with marine spatial planning. This activity has contributed to the country's efforts to achieve the climate change mitigation and adaptation commitments included in its updated Nationally Determined Contribution (NDC). The activity includes commitments to strengthen instruments and implement actions for the conservation of biodiversity and the restoration of marine, coastal, and freshwater ecosystems, increase the permanence of carbon reservoirs, emphasizing blue carbon; and implement actions for the conservation and restoration of the seas and the ocean to enhance their resilience in the face of climate change.

In Ecuador, PROBLUE is supporting the government to enhance the enabling conditions for the development of its Blue Economy. This effort is targeting a subset of priority Blue Economy building blocks to increase the contribution of blue sectors to the economy while ensuring the long-term sustainable use of marine and coastal resources. The technical assistance financed by PROBLUE is enabling

the preparation of participatory plans, capacity building, and a knowledge base to advance integrated management of the marine and coastal activities in both the continental coast and the Galapagos islands. The support provided is also contributing to the preparation of some of the most critical enabling conditions to augment the contribution of blue sectors (e.g., fisheries, tourism, aquaculture, transport) to the country's post COVID-19 recovery, climate resilience, and equitable growth.

PROBLUE is supporting the government of Argentina and its ocean commission—backed by the multidisciplinary ocean governance initiatives of Argentina and Uruguay—to explore the potential to transition from a fisheries-focused governance mechanism to a transboundary integrated seascape management (MSP) model in the region. This effort is exploring options for mainstreaming emerging priorities into its management regime and the potential economic tradeoffs. Technical assistance is facilitating the transition of the ocean commission from a fisheries management body to an engine for Blue Economy development in Argentina and Uruguay, while also supporting their broader policy objectives, such as Argentina's Pampa Azul and Uruguay Azul 2030.

In FY23, there was growing demand to support countries to find viable solutions for sargassum collection, elimination, reuse, and repurposing. In June 2023, a multi-pillar activity was approved by PROBLUE to conduct a series of studies to assess the Blue Economy potential of Belize's coastal cities. This activity has a specific component on marine pollution reduction and prevention, under which a technical study of nutrient transport and a near-term management options assessment for sargassum control in Belize will be conducted.

Middle East and North Africa

The Middle East and North Africa region was the site of one of the four RETF grants approved in FY23. PROBLUE provided \$5 million to the Accelerating Blue Economy Development in the Kingdom of Morocco, which is the first Blue Economy focused Bank Program for Results (PforR) that will inform collaborative policy development for the Blue Economy and integrate climate actions into coastal tourism and fisheries management. In February 2023, the project began, and initial groundwork is underway for the development of an environmental and social impact assessment as well as the recruitment of staff to develop communications and Blue Economy strategies. Additionally, groundwork is underway for a technical partnership with the Society of Tourism Engineering (SMIT) to expand the capacity of coastal tourism Regional Development Corporations (SDRs) to apply sustainability standards and certificates. Likewise, for fisheries management, the project will collaborate with the Maritime Fisheries Department (DPM) to apply MSP approaches in Larache and Cape Trois Fourches, beginning with the mapping of existing uses and environmental pressures to identify conflicts and compatibility with other existing uses.

Water scarcity is a critical issue globally and is growing in severity as a result of climate change. Addressing this issue and ensuring equitable and sufficient access to water for drinking, agriculture, and industry requires innovative solutions, such as desalination. Because of the heightened risk of water scarcity in the MENA region, PROBLUE is supporting a comprehensive assessment of Libya's desalination experience and providing recommendations to improve the sector's performance.

In the plastics space, PROBLUE is providing guidance to the Government of Jordan on reducing plastic pollution, especially in the country's waterways. PROBLUE-supported activities began in January 2023, to map plastic product consumption, identify innovative opportunities for plastics recycling, outline arrangements to involve plastic product producers in reduction schemes, and map the recyclability for different types of plastics in the recycling industry. Likewise, PROBLUE-funded work is underway in Lebanon to produce a National Action Plan for the prevention and reduction of marine litter. This includes the establishment of a baseline for monitoring marine sources of pollution, upstream analysis of marine litter sources, and increasing the national capacity for preventing and reducing marine pollution. To date, this activity has widely informed government consultations, and two of the elaborated discussion papers were integrated into the Ministry of the Environment's "Solid Waste Roadmap for Lebanon 2023-2026". Activities in both Jordan and Lebanon had a particular focus on climate and gender. For example, in Lebanon, at least 30 percent of the participants in the training activities were female.

In Egypt, a diagnostic study and a material flow analysis informed the development of a strategy and roadmap for plastic pollution prevention, adopted by the government in late 2022. Additionally, discussions are being held to further strengthen the implementation of this strategy. Notably, this activity incorporates a strong gender component, actively promoting the involvement of women and girls in designing and implementing community-based pilot projects. The activity has also fostered private sector engagement, particularly within the hotel industry and with waste management and recycling companies to discuss public-private partnerships to support ecosystems, health, and the tourism sector.



Ghana / The World Bank / Morgan Graham

In terms of fisheries and aquaculture, PROBLUE-funded work is underway in Egypt to support the development of adaptive policies and planning to respond to the impacts of climate change, drawn from similar work in Indonesia to assess the impact of climate change on fisheries and marine habitats. For capture fisheries, the adaptive planning priorities will focus on strengthening sustainable fishing, reducing pollution, and promoting the utilization of species that are better adapted to the changing climate. For the aquaculture aspect of the project, adaptation priorities will center around management of water resources, balancing water demands for aquaculture and agriculture, and monitoring and managing pollution and fish health. Both parts of the activity will be carried out in partnership with the Lakes and Fish Resources Protection and Development Agency (LFPDA).

PROBLUE-supported work in the West Bank and Gaza, which faces FCV challenges augmented by severe climate vulnerabilities,

was completed in FY23. This activity focused on developing critical pathways for pollution management and sustainable fisheries and aquaculture. The first component on plastic pollution management included analysis of current plastic waste flow in the West Bank and Gaza and the production of a strategy for circular economy development. Under sustainable fisheries and aquaculture management, the objective was to identify challenges and opportunities and outline concrete steps for developing climate-resilient marine cages and inland aquaculture and sustainable fisheries. The deliverables included a fisheries and aquaculture value chain analysis for the Gaza Strip and West Bank, a strategy for value chain development, and an aquaculture scale-up action plan. Both components relied heavily on diverse stakeholder engagement and collaboration, including with the Ministry of Local Governments (MoLG), the Environment Quality Authority (EQA), the Municipal Development and Lending Fund (MDLF), and the General Directorate of Fisheries

(DOF) in the Ministry of Agriculture's (MOA). International partners and collaborators included the Japan International Cooperation Agency (JICA) and FAO.

South Asia

Across South Asia, PROBLUE is supporting work to strengthen the knowledge base for taking coordinated action to reduce marine plastic pollution. Several pollution-focused reports are being finalized, including two regional reports on the extent of plastic pollution from land and ocean-based sources, an ALDFG analysis report, and a baseline assessment of marine plastic pollution from land-based sources. Following their completion, the Bank will work closely with the South Asia Co-operative Environment Program (SACEP) to develop an interactive online database on plastic waste for their website. All the work done in this activity is in line with the INC process and will help SACEP member states to meet forthcoming obligations and targets under the LBI.

PROBLUE is also supporting circular economy and marine plastic work at the national level in South Asia. For example, there is ongoing work in Bangladesh to support the government to better understand the status of marine debris, especially plastics, and to develop a roadmap to reduce marine plastics. For the first time in the country, the activity contributed to convening a range of public and private stakeholders. Additionally, it contributed to the development of a multi-sectoral technical advisory committee and a baseline study to identify the most problematic types of plastics and their material flow in the country. This analysis informed the development of "Toward a Multisectoral Action Plan for Sustainable Plastic Management in Bangladesh," which was endorsed by the government in the fall of 2022. The Action Plan was launched in a ceremony

attended by the ministry, MoEFCC alongside 150 participants, including high-level officials and private sector, increasing opportunities for cross-sector partnerships and MFD in the future.

A second activity in Bangladesh was completed in FY23, which addressed domestic illegal, unreported, and unregulated fishing (IUU) in the country, and in South-east Asia more broadly. Through this activity, PROBLUE supported the execution of a legal gaps analysis of existing licensing rules and regulations, as well as a comparative analysis of industrial fisheries licensing models. Findings reduced critical knowledge gaps and improved sector-information transparency, leading to the eventual completion of a FiTI assessment, following which Bangladesh's national authorities publicly disclosed relevant fisheries management information on the government's website.

[In Nepal](#), a stock take of SUPs, plastics flow, and key originating sources is being conducted in selected protected areas and municipalities. With those inputs, a study on options for alternatives and recycling will be conducted. In Pakistan, a marine pollution and waste management diagnostic is ongoing to develop a strategic action plan as well as a market study of plastic circularity to assess opportunities and barriers for investment by the private sector. Finally, in India, PROBLUE is fostering collaboration between the public and private sectors by providing funding for a joint initiative led by the Bank and IFC. This activity started in FY23 and aims to, among other components, conduct a comprehensive market assessment study for the states of Maharashtra and Karnataka.

Besides the marine pollution work in the SAR region, PROBLUE took significant steps during FY23 to integrate different blue sectors. In

India, PROBLUE is helping to address three strands of work that will transform India's ability to manage blue natural capital, including the elaboration of a roadmap for a stronger Blue Economy, a nature-based approach to coastal resilience, and support tackling plastic pollution. As part of this work, PROBLUE is financing the development of Blue Ocean Accounts to understand and measure the Blue Economy, and explicitly identify the contributions made by women and other marginalized groups. In addition, this work is developing innovative finance mechanisms using the Bank's Blue PER tool, evaluating the status of private sector finance in Integrated Coastal Zone Management (ICZM), and recommending options for novel financing mechanisms, including supporting the government to target fiscal transfers.

In Sri Lanka, PROBLUE is supporting activities to strengthen the knowledge base for prioritizing investments, institutional changes, and policy actions in the Blue Economy, specifically focusing on fisheries and aquaculture. In FY23, progress was made on the household data analyses for communities engaged in lobster fisheries and in small pelagics, including local-economy modeling of different management scenarios. In terms of aquaculture, the Strategic Environmental Assessment (SEA) for the Aquaculture Development Programme of the Northern Province was completed, and an aquaculture business modeling exercise is underway.

In Bangladesh, PROBLUE is supporting the government to fill knowledge gaps and develop pathways for achieving greener growth with the Blue Economy as a central component for a climate resilient development. In doing so, PROBLUE is supporting the elaboration of a Legal, Policy and Institutional Review to inform a Blue Economy Governance roadmap. In addition, a Blue PER will enhance the government's understanding of budgetary

allocation and public expenditure management. These analyses are providing the basis for the development of the marine spatial plan roadmap for Bangladesh.

In Pakistan, the first PROBLUE-financed Blue PER was completed in FY23. Findings suggest that there were low expenditures and even lower revenue streams from the current blue sectors in Pakistan, indicating that the government is still prioritizing infrastructure and basic public services, with the Blue Economy at the periphery. Recommendations to improve revenue sources from the Blue Economy were provided at the policy and institutional level. In addition, recommendations to integrate requirements for the inclusion and equitable sharing of benefits from the Blue Economy were proposed.

In the Maldives, PROBLUE is supporting a transition to a sustainable Blue Economy through in-depth analytical work. In FY23, a Coastal Vulnerability Index (CVI) was developed as well as the elaboration of key chapters within the Maldives Country Environmental Analysis (CEA) on critical marine resources (especially corals and fisheries), NBS, coastal erosion, MPAs, and MSP. The compiled analytical work was used by the World Bank in its dialogue with the Government of Maldives to motivate a project on enhancing and enlarging MPAs and strengthening conservation financing. In addition, a separate activity, approved in June 2023, will further the World Bank's engagement in sustainable fisheries, including in support of the investment Transforming fisheries-sector management in South-West Indian Ocean Region and Maldives Project (P179242), approved in FY23. Previous studies on understanding the preferences and barriers for participation of women in the fisheries sector will be critical in shaping the activity's implementation plan.



Panama / The World Bank / Yatziri Zepeda

4.3. PARTNERSHIPS

In FY23, PROBLUE continued to expand and deepen partnerships at the global, national, and local levels as a means of delivering integrated and sustainable economic development in a healthy ocean. All PROBLUE-funded activities are built on collaboration and partnership with client countries, from their governments, private sector, civil society, and academic and research organizations. FY23 was a significant year for global momentum in support of a healthy ocean and the Blue Economy. As such, PROBLUE played an important convening role on the world stage, facilitating international cooperation, and bringing together cross-sectoral partnerships under various thematic areas to advance goals across its four pillars.

The PROBLUE Secretariat worked collectively with development partners, UN agencies and other intergovernmental bodies, academia, and NGOs to support and prepare for the

implementation of high-level international agreements and treaties such as the UN GBF, the WTO Agreement on Fisheries Subsidies, and a forthcoming LBI on plastic pollution.

Global Partnerships

PROBLUE's work on plastics pollution is strategically aligned to complement and synergize with the work of other agencies and development partners. Through strategic partnerships, PROBLUE is making, and will continue to make, joint contributions to the INC process, with some examples below:

- Toolkits and methodologies: Collaboration is ongoing with UNEP, IUCN, WEF, and WWF to present on a common approach for addressing plastics pollution at the national level—specifically elaborating on the steps and approaches to follow, and the toolkits to be used in doing so, for the achievement of national, in turn, global goals.

- Financing: An Investment Decision Support Tool is being developed in consultation with an expert panel from agencies and organizations including UNEP, UNEP FI, WEF—Global Plastic Action Partnership (GPAP), OECD, and The Circulate Initiative, who have agreed to provide their perspectives on how the tool should be designed and implemented, as well as what type of questions it should answer and how.
- Events: PROBLUE's first [Global Engagement Forum](#) was held on the margins of INC-2 in Paris and served as a remarkable example of meaningful collaboration with development partners. PROBLUE worked and continues to work closely with UNEP, FAO, IUCN, UNCTAD, Ocean Conservancy, GGGI, WWF, ICFA, ICSF, and others to keep the ALDFG issue in the INC-process agenda. The ongoing efforts aim to assist countries and delegations in establishing productive partnerships with relevant actors to implement appropriate and sustainable solutions in all stages of the fishing gear life cycle.

Similarly, the PROBLUE Secretariat is collaborating with partners to prepare for in-country implementation of the WTO Agreement on Fisheries Subsidies. In January 2023, PROBLUE supported the launch of the International Institute for Sustainable Development's (IISD) Self-Assessment Tool for Implementation, which includes a checklist and a guide to help countries collect key data, assess alignment, and identify gaps and needs. PROBLUE is also collaborating with the Fisheries Transparency Initiative (FITI), which provides a consistent framework for reporting on subsidies, to assist countries to enhance the accessibility, credibility, and usability of national fisheries management information. In addition, many of the tools in the Fisheries Sector

Assessment Toolkit have been developed and collated in collaboration with the FAO. This level of partnership is key to promote coordination and avoid duplication of tools and knowledge products.

In addition, as a key player in the international arena, PROBLUE continued to contribute to a wide range of efforts including the [GPAP](#), [UN Restoration Finance Taskforce](#), [Tourism Action Coalition for a Sustainable Ocean](#), and [High Level Panel for a Sustainable Ocean Economy](#), among others.

In particular, tourism is an industry that intersects with nearly all blue sectors. To ensure that tourism development is sustainable and resilient, strategies and practices require collaboration with a range of stakeholders and topic experts. In FY23, PROBLUE funding supported the engagement with the Tourism Action Coalition for a Sustainable Ocean (TACSO), a coalition made up of businesses, financial actors, NGOs, and IGOs working to build a sustainable and resilient tourism ocean economy. The PROBLUE Secretariat collaborated with TACSO, The Ocean Foundation, and IBEROSTAR to advance sustainable coastal tourism. Together, global partners published a synthesis report on the economic impact of protected areas and launched a Blue Tourism Portal for resilient and sustainable tourism. At the project and country level, PROBLUE-supported work has also fostered innovative and important collaborations for resilient tourism development. For example, in Cabo Verde, PROBLUE funding has allowed for coordination with relevant development partners, including the FAO and the United Nations Industrial Development Organization (UNIDO).

Collaborative efforts among the Bank's trust funds were also strengthened this year. The Environment and Nature Trust Funds initiated a

drive for greater synergy by explicitly defining the rationale, benefits, and opportunities for collaboration and joining up work. The joint TF meeting in Ghana advanced conversations on increased collaboration between the blue, green, and economics TFs, as the landscape, seascape, natural capital accounting, and biodiversity agendas become further intertwined with the adoption of multilateral frameworks such as the Global Biodiversity Framework. Examples of joint TF activities include The Changing Wealth of Nations, Scaling up Ecosystem Restoration Finance, Banking on Protected Areas, and Integrating Aquaculture into Land and Seascape Programs, among others. The Ghana deliberations reinforced the resolve to work in a concerted manner, not least on the basis of increased global alignment between the climate and nature agendas and their associated COPs, growing engagement by the private sector, and greater demand from clients.

Regional Partnerships

In addition to strengthening global partnerships, PROBLUE funding has helped deepen and expand partnerships at the national and regional levels. These innovative in-country partnerships are key to support and coordinate efforts across all sectors of the Blue Economy. One example is the Western and Central Africa (WACA) Sustainable Ports Partnership, which is seeking to establish and operationalize a partnership of port authorities and operators to reduce the negative environmental and social impacts of port infrastructure. The activity, which focuses exclusively on private-sector ports, counted 96 participants from 22 port authorities in 19 West and Central African countries, and is facilitated by the Ports Environmental Network-Africa (PENAf).

Another example is the ASEAN Regional Plastic Waste Trade, which aims to explore the potential for a regional plastic waste trade agreement across ASEAN member states (AMS) to combat plastic pollution in the Southeast Asian region. During INC-2, the PROBLUE team attended several meetings with WTO and other relevant agencies to ensure that the ASEAN framework is well aligned with global counterparts. PROBLUE is currently in conversation with a long list of partners, including the World Customs Organization (WCO), United Nations Office of Drugs and Crime (UNODC), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), UNCTAD, Institute for Global Environment Strategies (IGES), and more are to come with the Secretariat of the Basel, Rotterdam, and Stockholm Conventions (SBRS) and WTO.

National Partnerships

Africa (AFR)

Work to support sustainable livelihoods and combat poverty in Tanzania is underway through the development and promotion of smart, sustainable, and inclusive waste management and marine debris control. Government focal points, including The National Environment Management Council (NEMC), the University of Dar es Salaam, and several NGOs have been highly supportive of activities. Together, they are working to deliver a plastic assessment and mapping of pollution hotspots, which will contribute to capacity building and improve existing knowledge of marine litter pollution management.



Latin America and the Caribbean (LAC)

PROBLUE is providing support for Argentina's fisheries and aquaculture sectors—the first work of this kind by the World Bank in the country in over two decades—to inform priority areas for investment, with the goal of benefiting regional peers as well. Despite beginning in early 2023, a significant partnership with FAO has offered important background and technical support for the development of economic, environmental, and socially sustainable activities. In addition to central-government representatives, the partnership includes the National Institute for Fisheries Research and Development (INIDEP), the Tierra del Fuego Provincial Government, civil-society organizations, private-sector entities, and research institutions. Going forward, continued and expanded partnerships and collaboration with these groups will be key to ensuring success in expanding Argentina's aquaculture, coastal fisheries, and Blue Economy, and extending this growth to other countries in the region.

Middle East and North Africa (MNA)

Work began in FY23 to strengthen knowledge and capacity for sustainable fisheries sector management in the Red Sea and Gulf of Aden, with a particular focus on Yemen and Djibouti. This work is supported by the FAO who provide expertise for the use of the Fisheries Performance Assessment Toolkit (FPAT), a tool contained in FSAT. Going forward, expanded collaboration will include the UNDP, which will serve as the implementing agency of this operation in Yemen, and the Regional Organization for the Conservation of the Environment in the Red Sea and Gulf of Aden (PERSGA) as the regional implementing partner. Future partnerships will extend to academic experts in the FPAT methodology. Training on FPAT data collection and methodology will be provided in close coordination with partners to increase capacity for fisheries monitoring in the targeted countries.

East Asia and the Pacific (EAP)

In FY23, PROBLUE supported research on the impacts of climate change on Indonesia's fisheries sector in collaboration with the Indonesian Ministry of Marine Affairs and Fisheries, the University of British Columbia, the University of Bern, and the World Bank, with the support of the David and Lucile Packard Foundation. The partnership, which included a research team from international academic institutions, a philanthropic donor, and the national Indonesian ministry, culminated in a comprehensive report titled *Hot Water Rising* that outlines policy options for creating a more resilient fisheries sector to support governments, the private sector, and civil society to adapt to climate impacts and maintain progress toward development goals.

South Asia (SA)

In the Solomon Islands, PROBLUE-funded activities are bringing partners together to generate knowledge on innovative approaches to reduce vulnerability and improve the livelihoods and sustainability of fisheries resources. To conduct the case study, the World Bank has collaborated with two international research centers, WorldFish, headquartered in Penang, Malaysia, and the International Food Policy Research Institute (IFPRI) based in Washington, DC. Work with WorldFish also

brings in collaboration with the Australian National Centre for Ocean Resources and Security (ANCORS) at the University of Wollongong, for the use of data and expertise from an ongoing research project on food security in coastal communities. The team also worked with a broad range of stakeholders involved in disaster risk reduction, sustainable livelihood programs, and community-based resources management (CBRM), including government, and international and local environmental and humanitarian organizations.

Europe and Central Asia (ECA)

The Black Sea is at risk of eutrophication, deoxygenation, invasive species, emerging pollutants, and litter—like the majority of bodies of water on earth. To limit these risks, work is underway to improve national and regional understanding and increase regional coordination on sustainable interventions. Policy briefs and a Black Sea Pollution Diagnostic report were produced for decision makers and other stakeholders, in close collaboration with development partners and relevant organizations, such as the European Commission and Black Sea Economic Cooperation. Other partners in this work include the Black Sea Commissions (BSC) and international partner organizations, including UNDP, FAO, and some universities and institute contractors.



5. RESULTS AND MONITORING

PROBLUE is a results-focused program with the overarching objective to achieve integrated and sustainable economic development in a healthy ocean. To monitor and assess progress towards accomplishing the objective, PROBLUE tracks performance on a set of results indicators. These indicators were agreed upon with the Partnership Council and are specific metrics and data points along different levels of the results chain. This chapter presents PROBLUE's performance on the indicators as of June 30, 2023.

The total disbursement of the PROBLUE Program (that includes the PROFISH and PROBLUE Trust Funds) is \$72.5 million as of July 6, 2023. As the PROBLUE program matures, the Secretariat and project teams have gained experience in tracking progress on PROBLUE's results indicators. Building on this experience, the Secretariat improved its results monitoring process to enhance the quality and integrity of the reported results data. In fiscal year 2023, reporting templates were updated,

a new result tracking database was introduced, and more rigorous results data verification and validation methods were applied. Additionally, the PROBLUE results monitoring system was enhanced by integrating updated World Bank guidance for results and measurement. PROBLUE's results data has been updated to comply with these newer, and in some cases stricter, results reporting guidelines and following the application of the more advanced verification and validation methods.



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FIGURE 5.1.

PROBLUE RESULTS 2019–2023 AT-A-GLANCE

Achieving integrated and sustainable economic development in healthy oceans

 **52** completed activities, **129** ongoing activities 
in **over 80** countries



RESULTED IN



IMPROVED KNOWLEDGE & CAPACITY IN THE BLUE ECONOMY



322 knowledge products
85 tools
427 workshops, trainings,
and consultations

IMPROVED INVESTMENTS

\$7.4 billion in
development finance informed, of which

- \$5.7 billion IBRD and IDA funding
- \$810 million government counterpart funding
- \$930 million other financing



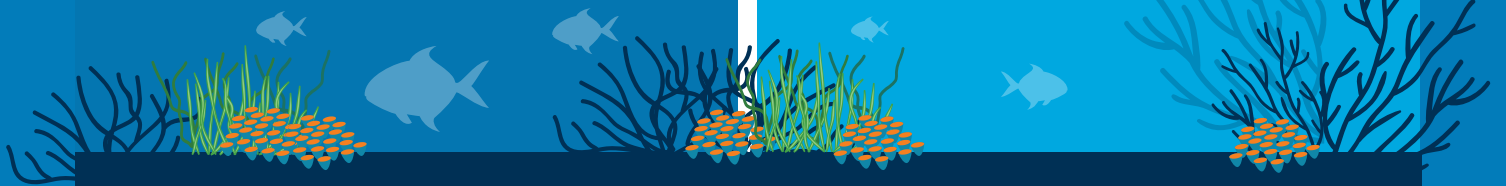
IMPROVED POLICIES, PLANS & REGULATIONS



31
policies, plans and regulations
informed to improve the
enabling environment for the
Blue Economy

IMPROVED REGIONAL COLLABORATION

44 countries with
strengthened engagement
in Blue Economy at the
regional level



5.1. CROSS-CUTTING THEMES IN GRANT PROPOSALS

PROBLUE uses funding allocation decisions to prioritize activities that integrate cross-cutting priority areas such as gender equality and climate change adaptation. When the Secretariat reviews proposals, it pays particular attention to the activities' expected contributions to priority topics. Table 5.1 provides an overview of the proportion of proposals with expected results in the cross-cutting areas. The table confirms that the program's has been successful in reaching its targets for supporting activities that plan to integrate gender, maximizing finance for development, and climate change.

Of all approved PROBLUE proposals, 93 percent include gender analysis and gender-focused approaches, showcasing the program's commitment to promoting gender equality. PROBLUE is actively supporting the development of blue gender gap analyses in coastal and marine areas. This involves for example incorporating gender aspects into data analyses, value chain studies, and creating gender tools and knowledge products to foster inclusivity. Throughout the entire process, from activity design to on-the-ground implementation, PROBLUE emphasizes gender and social inclusion to ensure equitable outcomes for men and women.

RESULT HIGHLIGHTS



Gender roles in marine plastics in Maldives

Persistent gender roles in the Maldives limit job opportunities for young women, especially in tourism and waste-related services. PROBLUE has supported capacity building and training on waste management and alternatives to single-use plastics on multiple islands, benefiting 5,000 people. Furthermore, retail businesses on four islands collaborated with larger communities to test different models for bottle return systems, aiming to address single-use plastics usage.

This PROBLUE supported initiative informed two World Bank projects: the Enhancing Employability and Resilience of Youth Project (MEERY) and the Maldives Clean Environment Project (MCEP). For MEERY, PROBLUE provided training materials for its TVET programs to increase employability of women to engage in home-based work. A bottle return pilot developed with PROBLUE support is informing the Extended Producer Responsibility (EPR) portion of the ongoing MCEP funded policy studies.

Climate change adaptation of Egyptian fisheries and aquaculture

In Egypt, the impact of climate change on vulnerable communities is severe in terms of food security. To address this issue, PROBLUE financed analytical work that supported the identification of adaptive planning policies, interventions, and action for capture fisheries and aquaculture. Furthermore, the activity focused on strengthening the institutional capacity of the Government to effectively respond to climate change risks. PROBLUE financed work suggested adaptive planning priorities that focus on measures to strengthen sustainable fishing, reducing pollution, promoting fish species that are better adapted to changing climate, and advancing mariculture systems. With reference to aquaculture, the analytical work suggested adaptation priorities with focus on management of water resources, balancing water demands of aquaculture and agriculture, and improving management of pollution and fish health.

Currently, 92 percent of PROBLUE-supported proposals include climate change-specific data and analytics. Climate change is a central issue within the Blue Economy and a key factor impacting the health of the ocean. Therefore, PROBLUE supports climate change mitigation and adaptation through various ways. This includes supporting research to understand climate change impacts, developing scenarios and tools, implementing adaptation and mitigation strategies, and providing assistance in policy development and reforms.

With 31 approved proposals for activities in fragile settings, PROBLUE is on track to reach its target of 50 proposals for providing support in countries facing fragility, conflict, and violence. At the same time, the portion of proposals approved in fragile countries is 17 percent compared to the 33 percent target. This proportionate shortfall may be explained by PROBLUE's demand-driven nature. Overall, the program receives relatively fewer grant requests for activities in countries facing fragility and violence compared to non-fragile countries. The Secretariat will continue to prioritize its support for activities in fragile settings and also emphasize this funding priority to teams applying for PROBLUE grants.

RESULT HIGHLIGHTS



Creating an enabling environment for Blue Economy development in Jamaica

A “Financing Options for a Blue Economy for Jamaica” report was developed with the intent to help Jamaica explore its options to maximize Blue Economy investments. The report identifies thirteen priority next steps for the government of Jamaica to consider as it looks to develop its Blue Economy finance and investment framework. This framework includes building capacity of existing agencies and financing vehicles to promote Blue Economy investment opportunities as well as exploring the feasibility of providing fiscal incentives for Blue Economy investments.

Fisheries management in Somalia

In Somalia, PROBLUE provides support to develop a fisheries management mechanism that serves as a model for post-conflict and fragile situations where there are challenges between levels of government in managing overlapping fisheries jurisdictions. There are also challenges in ensuring equitable and transparent distribution of the benefits from fishing agreements and other fisheries management measures. Furthermore, the activity aims to provide a co-management model for community recovery and resilience building. This can help conflict affecting fishing communities respond to future shocks. Finally, the activity supports efforts to reduce the potential of a return to piracy through livelihood improvements.

TABLE 5.1. Approved Proposals Incorporating Cross-Cutting Priority Areas

Results Indicator	Delivered to-date (FY19-23)	Program Target (FY19-26)
Approved PROBLUE-supported proposals with gender analysis and gender focused approaches and strategies (#, %)	168 (93%)	120 (80%)
Approved PROBLUE-supported proposals with climate change-specific data and analytics (#, %)	166 (92%)	120 (80%)
Approved PROBLUE-supported proposals with MFD-specific data and analytics (#, %)	100 (55%)	75 (50%)
Approved PROBLUE-supported proposals relevant to FCV context (#, %)	31 (17%)	50 (33%)

The PROBLUE team has approved 100 proposals that integrate data and analytics for maximizing finance for development, which is 55 percent of all proposals. The initial targets for proposals with data and analytics on maximizing finance for development were 75 proposals and 50 percent of all proposals. This means that PROBLUE has already achieved its intended goals for this indicator.

5.2. KNOWLEDGE, TOOLS, AND CAPACITY BUILDING IN THE BLUE ECONOMY

Capacity building is crucial to enhance knowledge on the Blue Economy as well as building and enhancing skills to implement the Blue Economy approach. PROBLUE has completed more capacity building activities than planned at inception. To date, 427 capacity building activities have been undertaken against a target of 150. These activities range from workshops, trainings, consultations,

webinars, side events during important international fora and negotiations, and more.

Tools play a crucial role in implementing the Blue Economy approach and building its enabling environment. These tools may include databases, models, spatial plans, classification systems, training material, and more. PROBLUE has surpassed its initial target for supporting tools that help advance the Blue Economy. Currently, there are 85 tools supported, exceeding the set target of 50.

Knowledge products are essential to gain information on the Blue Economy and to guide implementation of policies and interventions. PROBLUE supports the development of knowledge products such as analytical reports, policy reviews and recommendations, frameworks for action plans, baseline- and feasibility studies as well as case studies and various assessments. Currently, PROBLUE's initial target of producing 100 knowledge products is well exceeded with the delivery of 322 knowledge products.

TABLE 5.2. Output Indicators: Capacity Building, Tools, and Knowledge Products

Results Indicator	Delivered to-date (FY19-23)	Program Target (FY19-26)
Workshops, trainings, and consultations conducted (#)	427	150
Tools developed (#)	85	50
Knowledge products prepared (#)	322	100

RESULT HIGHLIGHTS



Workshops and partnerships for cleaner & bluer sustainable development in North Africa

Under this activity, PROBLUE facilitated two regional workshops on the Blue Economy and marine plastic pollution. In Morocco, the Ministry of Economy and Finance and sector partners were engaged to discuss collaborative budgeting for the Blue Economy. In Tunisia, consultations were held with government stakeholders to discuss the analysis of an impact assessment of coastal erosion and marine submersion on coastal development and the tourism value chain. It was the first time the government had a comprehensive overview of climate change's impact on coastal areas, enabling transparent decision-making for integrated coastal management. Additionally, the team is collaborating with the European Space Agency to assess Tunisia's blue carbon potential using satellite images and the French Research Institute for Exploitation of the Sea (IFREMER) to provide training on monitoring marine plastic pollution, focusing on floating litter and litter in sediments. Finally, PROBLUE supported a fisheries module of a public expenditure review for Morocco with co-financing from the Global Program on Sustainability Trust Fund.

Tool for plastic crediting in Southeast Asia


PROBLUE supported the development of a knowledge product on plastic crediting, which could lower the demand for virgin plastics and emissions generated from plastic production. The study explored how plastic credits can reduce plastic production and consumption and explored potential risk and challenges. Furthermore, it linked plastic crediting and Extended Producer Responsibility (EPR) schemes and identified case studies that applied plastic crediting and EPR schemes. The activity facilitated the synthesis of lessons learned and presentation of findings to inform policy dialogues.

5.3. IMPROVING INVESTMENTS IN THE BLUE ECONOMY

PROBLUE achieves results through combining analytics, technical assistance, and knowledge with large investments. By infusing new thinking, specialized knowledge, practical tools, and technical assistance into large World Bank operations, investments and government institutions are strengthened. Through a set of results indicators presented in Table 5.3, a quantitative assessment of the influence and impact of knowledge and technical assistance on lending operations is provided. The table shows that since its inception, PROBLUE has informed 32 World Bank operations, representing investments worth \$7.4 billion. Out of these \$7.4 billion, a total of \$5.7 billion came from World Bank's IDA/IBRD, \$810 million was government counterpart funding and

over \$930 million was financed through other sources such as funds from multilateral and bilateral partners or other World Bank Trust Funds. When PROBLUE-supported knowledge was used in the design or implementation of a World Bank operation, the value of that entire operation was included to calculate the informed investment amount. PROBLUE's leverage ratio shows us that each dollar for PROBLUE-funded activities informed \$49 in World Bank operations. The ratio is calculated by taking the total IBRD/IDA-financing amount of approved World Bank lending operations that were informed by PROBLUE (around \$5.7 billion), divided by the total grant amount for Bank-Executed activities provided by PROBLUE (around \$115 million).

When we look at the number of beneficiaries targeted by the informed investments, we see that more than 31 million people are expected to benefit from the investments. This far exceeds the target of 20 million beneficiaries. The current percentage of targeted female beneficiaries is 41 percent, which falls below the aimed 50 percent. The observed shortfall can be attributed to limited female representation in the sector where some projects operate, particularly in certain local contexts. This gender disparity may impact the extent of female beneficiaries expected to benefit from the informed project. For example, in the process of seascape planning in Indonesia (Oceans for Prosperity Project), a 30 percent target for female beneficiaries is a significant increase over baseline levels of participation in decision-making. Also, for several operations with potentially higher targets for female beneficiaries, the targets have not yet been set. This is because project teams are still in the process of gathering additional baseline information through surveys and other methods to determine appropriate targets.



RESULT HIGHLIGHT

Kerala Solid Waste Management Project in India

Total investment \$300 million: \$105 million IBRD, \$90 million client contribution, \$105 million Asian Infrastructure Investment Bank (AIIB)

PROBLUE work has informed this operation through a comprehensive assessment of mismanagement of plastics for Kerala. The study identified major coastal and land-based hotspots which are connected through rivers that serve as conduits for marine litter. Furthermore, it presented strategies and roadmaps for the states and key hotspot cities to address the plastic problem. The project in Kerala is the first of its kind in India, covering 93 Urban Local Bodies. The study conducted for Karnataka was used to start high-level discussions on a potential state-wide solid waste management engagement.

The technical findings from the study have specifically informed the Kerala Solid Waste Management Project on developing public-private partnership projects for recycling facilities at the city and regional levels. It has also become a guidance on adopting an evidence-based approach for policy, institutional arrangements, and investment interventions for plastic waste management.

TABLE 5.3. Intermediate Outcome Indicators: WB Investment Operations Strengthened by PROBLUE-Supported Knowledge and Technical Assistance

Results Indicator	Delivered to-date (FY19-23)	Program Target (FY19-26)
WB operations informed by PROBLUE (#)	32	105
WB resources informed (\$)	\$5.7 billion	\$9 billion
Catalyzing ratio (WB operations informed (\$)/PROBLUE funding)	49	80
Beneficiaries (targeted beneficiaries of WB lending operations that are informed by PROBLUE funded activities (number), of which female (%))	31 million (41%)	20 million (50%)

RESULT HIGHLIGHT



Gaza central desalination program

Total investment \$117 million: \$15 million from the Trust Fund for Gaza and West Bank (TFGWB), \$42 million from the Partnership for Infrastructure Development Multi-Donor Trust Fund (PID MDTF), \$60 million from the Kuwait Fund for Arab Economic Development (Multilateral Bilateral Financing).

This project aims to improve water supply quality and quantity to municipalities in the project area and strengthen the Palestinian Water Authority. The design and set up of the National bulk Water Supplier that will manage the central Gaza desalination plant was informed by PROBLUE's case studies on institutional setups for mainstreaming unconventional water resources. PROBLUE also provided an analysis of the legal and regulatory framework for desalination, reuse regulations, and guidelines for project appraisal. The progress made was shared internally within the World Bank, attracting significant attention from higher management, and contributed to the establishment of a Community of Practice (CoP) on desalination within the Water Global Practice.

5.4. IMPACT AREAS OF WORLD BANK LENDING OPERATIONS INFORMED BY PROBLUE

PROBLUE activities enhance the design and implementation of sector reforms and infrastructure projects in the Blue Economy. As mentioned above, PROBLUE knowledge and technical assistance has strengthened 32 World Bank operations. These operations cover various aspects of the Blue Economy, such as fisheries and aquaculture, marine litter prevention, offshore energy, shipping and transport, tourism, as well as cross-cutting issues. The table below shows the results areas of these 32 informed operations, measured through a set of intermediate outcome indicators. These intermediate outcome indicators do not report on the PROBLUE activities in themselves but, rather,

on the number of operations the activities informed and what focus areas these informed operations will contribute to. While still relevant, these indicators thus report on areas outside PROBLUE's direct control. Findings of the recently conducted mid-term review pointed to the fact that these indicators are at times misunderstood. This may have resulted in underreporting on these indicators by project teams and sometimes misinterpretation of PROBLUE's performance in specific result areas. In an upcoming revision of the PROBLUE results framework these indicators will therefore be reconsidered and further discussed with the Partnership Council.

TABLE 5.4. Intermediate Outcome Indicators: Number of World Bank Operations, Informed by PROBLUE, with Expected Results in Specific Focus Areas

	Results Indicator	Delivered to-date (FY19-23)	Program Target (FY19-26)
NUMBER OF WORLD BANK OPERATIONS THAT HAVE BEEN INFORMED BY PROBLUE AND THAT WILL DELIVER RESULTS IN THE FOLLOWING AREAS	<i>Cross-cutting</i>		
	Reducing net GHG emissions	10	50
	Reducing ghost gear	3	20
	Increasing men’s and women’s equal economic opportunities in traditional and/or new economic sectors	12	40
	Increasing men’s and women’s equal awareness of gender issues, economic opportunities, and related risks	9	40
	Increasing men’s and women’s equal participation in planning and decision-making on the Blue Economy	12	80
	Increasing the number of gender-based violence prevention and response practices in relation to the Blue Economy	4	80
	Increasing the number of women’s rights organization consulted and involved in seascape planning	3	40
	Decreasing the number of households in coastal areas vulnerable to erosion and flooding	8	20
	<i>Fisheries & aquaculture</i>		
	Increasing the number of fisheries under sustainable management	6	25
	Increasing the value from improved handling from fisheries under improved management	6	25
	Increasing the production in small-scale aquaculture	3	12
	Increasing the number of countries with public disclosure of all important fisheries related information	2	10
	<i>Marine litter prevention</i>		
	Reducing leakage of plastics to the environment	16	30
	Increasing the number of plastic product value chains with application of circular economy approaches	9	25
	Increasing the number of households connected to waste management services	7	15
	Increasing the agricultural area under improved practices to reduce leakage of pesticides and/or fertilizers	2	15
	Increasing the number of coastal and marine pollution hotspots managed for reduced environmental impacts	13	10
	<i>Offshore energy</i>		
	Increasing the electricity generation from offshore sources with due environmental and social considerations	1	15
	<i>Shipping & transport</i>		
	Improving desalination practices to become environmentally friendly	1	5
	<i>Tourism</i>		
	Increasing the number of coastal tourism hotspots under improved environmental destination management	4	15

5.5. IMPROVING POLICIES, PLANS AND REGULATIONS

PROBLUE activities play an important role in promoting and advancing the Blue Economy by informing policy reforms. Through various means, like organizing regional workshops, contributing to policy dialogues, participating in global and (inter)national discussions, and supporting the development of policies through creating policy notes and briefs, PROBLUE contributes to shaping a favorable policy environment for the Blue Economy. This is done in collaboration with ministries, civil society organizations, marginalized groups, NGOs, and other stakeholders. An increasing number of Blue Economy Strategies are being supported by PROBLUE, for example in Mozambique where their Blue Economy Strategy (EDEA) was prepared. This strategy will guide future investments in Mozambique’s Blue Economy and drive policy and institutional changes.

When PROBLUE monitors the policy reforms it supports, it looks at processes that bring about

changes to the established rules, which may include laws, regulations, policies, institutions, and national plans. These changes are aimed at tackling specific issues or achieving goals like economic growth, environmental protection, or poverty reduction. Sometimes, certain policies and plans address multiple aspects, leading to them being counted under more than one PROBLUE policy indicator. In some instances, PROBLUE provided support for policy reforms that could not be included in the current set of policy indicators because these reforms targeted areas not covered in by the indicators. For example, policy reforms related to coastal erosion are not currently captured in the results framework. After removing the duplicates and adding policy reforms that did not fit within the existing categories, the total number of distinct policies, plans, and regulations informed by PROBLUE amounts to 31. During the forthcoming results framework revision, the indicators for tracking policy reforms will be reevaluated to potentially encompass all relevant categories that advance the Blue Economy.

TABLE 5.5. Intermediate Outcome Indicators: Supporting Policy Reforms

Results Indicator	Delivered to-date (FY19-23)	Program Target (FY19-26)
National policy reforms in fisheries & aquaculture informed (#)	10	20
National policy reforms in marine pollution management informed (#)	18	25
National policy reform in offshore energy with due environmental and social considerations informed (#)	4	10
National policy reform in shipping & transport (including desalination) informed (#)	6	5
National policy reform in coastal tourism informed (#)	5	20

RESULT HIGHLIGHTS



Informing Policies on Offshore Wind

Under this activity four roadmaps were developed, informing four different countries on their offshore wind policies and plans. In Colombia, the roadmap on spatial planning informed the Government's designation of a suitable area for its first offshore wind projects. This was adopted into the Offshore Wind Resolution published in 2022. In the Philippines, the roadmap encouraged the Government to publish an Executive Order, which sets the policy and administrative framework for offshore wind development, including roles and permitting requirements. In Türkiye, the roadmap informed the Government on the potential role of offshore wind in its long-term energy plans. Offshore wind was subsequently incorporated into its energy plan with a target of 5GW by 2035. Finally, in Vietnam, the roadmap informed the Government on the potential role of offshore wind in its net-zero plans. Offshore wind was subsequently incorporated into its energy plan with a target of 6GW by 2030. Aside from informing policy, the activity produced an e-learning course on marine spatial planning, permitting, and Environmental and Social Impact Assessment. Capacity building and knowledge sharing were done through a study tour to Europe, workshops on marine spatial planning and Environmental and Social Impact Assessment, as well as a Blue Academy seminar on offshore wind organized by the PROBLUE team.

Enhancing Guinea's NDC climate ambition

The updated Guinea Nationally Determined Contributions (NDC) submitted in July 2021 for COP26, achieved in part with PROBLUE funding, has a higher climate ambition than the previous NDC. The updated Guinea NDC integrated an adaptation coastal section and a forest mitigation pillar, including mangroves, based on data compiled with PROBLUE support.

Designing a Fisheries Act in Somalia

The design of regulations under the Fisheries Act in Somalia were supported by PROBLUE through a monitoring, control, and surveillance analysis. Furthermore, PROBLUE supported consultations with the Ministry of Fisheries and Blue Economy staff tasked with drafting the regulations. Monitoring, control, and surveillance experts assisted with examples of how similar regulations functioned in neighboring countries in similar fisheries contexts and advised on coherence with the Fisheries Act.

Medical Waste Management Policy in Bangladesh

PROBLUE supported a baseline study and strategy for medical waste management in Dhaka in consultation with environmental and health agencies. The study identifies the quantity and projection of medical waste generated in Dhaka, as well as the gaps and challenges in the collection, transport, and disposal of medical waste in the city. Thereby, developing diagnostics and proposed interventions to improve medical waste management. As part of the study, a medical waste management strategy with policies and regulatory reforms, investments, and capacity building activities was developed.

5.6. DEVELOPING INVESTMENTS CASES AND STRENGTHENING REGIONAL ENGAGEMENT IN THE BLUE ECONOMY

The private sector can play a much bigger role in Blue Economy development than it currently does, both as an investor and as a source of innovation and expertise. To achieve this, the enabling environment for private sector engagement in the Blue Economy needs to be strengthened and investment cases advanced.

The objective of scaling up private-finance mobilization is to assist countries in achieving their development goals by supporting them in ways that complement and reinforce public resources. Within this context, PROBLUE seeks to boost private investments in areas like fisheries and aquaculture, marine pollution management, offshore energy, shipping and transport, and tourism. Most PROBLUE proposals incorporate plans for private sector involvement in their activities. Table 5.6 below presents the number of investment cases where the initial analytics and calculations study show positive returns (a bankable proposal) and that were presented to potential investors. PROBLUE has supported activities that led to five bankable investment cases having been presented to investors.

PROBLUE also aims to help governments address binding constraints and unlock opportunities for the private sector to play a bigger role in advancing the Blue Economy.

RESULT HIGHLIGHT



Investment case for sustainable marine tourism in Sierra Leone

This activity has provided investment opportunities for hotels. It delivered guidelines for circular economy business cases. Investment opportunities were presented during a meeting about sustainable marine tourism. Ten hotels have adopted the guidelines and are actively working to reduce their plastic purchase and use. Many have removed straws, cutlery, plastic bottles, and amenity bottles. Several hotels are now purchasing sustainable construction materials and locally made cosmetics. One water company has shifted from plastic sachets to large 20-gallon water containers which are more sustainable. Further discussions with the government continue about a green taxonomy platform to improve the sustainability of imported products (plastic alternatives), and how it can be used to improve links between sustainable plastic product producers and adopters of the plastic guidelines for tourism.

For example, through informing policy and regulatory reforms in this area. The current MFD-indicator, however, does not fully capture results in creating a favorable environment for the private sector to play a more substantial role in driving blue development. For the upcoming revision of the results framework the MFD results indicator will therefore be reevaluated.

TABLE 5.6. Intermediate Outcome Indicator: Bankable Investments and Regional Collaboration in The Blue Economy

Results Indicator	Delivered to-date (FY19-23)	Program Target (FY19-26)
Investment cases in PROBLUE relevant sectors presented to investors	5	10
Countries strengthened engagement in Blue Economy at regional level	44	25

Collaboration among neighboring countries in the Blue Economy is crucial for managing shared resources and tackling cross-boundary challenges like marine pollution and climate impacts. By working together, these countries can unlock economic growth through improved market access and policy alignment. Moreover, when countries work together and share information and research about marine ecosystems, they can make better informed decisions for the long-term health of

the ocean and their coast. Due to increasing environmental pressures, engagement at the regional level has never been more important. PROBLUE aims to assist countries in enhancing their involvement and cooperation at the regional level within the Blue Economy. Currently, 44 countries are supported by PROBLUE to strengthen their regional Blue Economy engagement, surpassing the initial target of 25 countries.

RESULT HIGHLIGHT



Strengthened engagement in the Eastern Caribbean

PROBLUE supported the development of six National Blue Economy Roadmaps and Action Plans for Grenada, St. Lucia, St. Vincent and the Grenadines, Dominica and Antigua and Barbuda. Also, a Regional Organization of Eastern Caribbean States (OECS) Blue Economy Roadmap and an Action Plan for OECS member states were developed. These sector diagnostics and assessments evaluated the existing institutional partnerships and capacity in the Blue Economy at the country and regional level in terms of delivery mechanisms and modalities to support the core principles of a strengthened Blue Economy. The OECS Commission used analytics and knowledge products to strengthen key development partner relations and modes of collaboration. As evidenced by use of the research findings in multiple webinars sponsored by the Commission, development partners were able to coordinate their efforts in a more streamlined and efficient manner. By identifying capacity gaps and formulating recommendations to strengthen the fisheries, tourism, and waste management sectors in each country, development partners have been able to work more closely together in the Blue Economy.

5.7. EXPECTED RESULTS OF WORLD BANK OPERATIONS CO-FINANCED BY PROBLUE

As of June 30, 2023, PROBLUE approved co-financing-grants for seven investment operations. These are World Bank operations, improved and co-financed by PROBLUE. By co-financing these Recipient Executed activities, PROBLUE channels resources directly to on-the-ground implementation managed by (local) governments. Some results coming from these

projects are therefore directly attributable to PROBLUE support.

The co-financed projects have their own results frameworks with indicators specific to the operation's objectives. The PROBLUE list of outcome indicators functions as a menu of result indicators from which each project co-financed by PROBLUE integrates the most suitable and relevant ones into the results framework of the larger investment project. However, project teams are not required to

HIGHLIGHTS



Resilient tourism and Blue Economy development in Cabo Verde

The targets for this project include supporting the development of two policies. The first one being the development of guidelines on fishing practices and equipment for deep-sea species. The other concerns consolidating regulations on small scale and sportive fishing, as well as marina installation (siting, environmental assessment, and permits) and management. Aside this, PROBLUE is supporting the development of detailed zoning plans in select areas with high investment demand and critical status to organize sustainable land use in these high potential beach and coastal areas. The PROBLUE financing is supporting coastal planning to improve the management of tourism development in relation to other economic sectors and its social and environmental effects. Furthermore, it serves as a genuine blue enabler by integrating tourism and fisheries value chains.

Solid waste and plastic management improvement in Cambodia

The targets for this operation include strengthening of legislation, regulations, policies related to solid waste and plastic management at the national level. The operation aims to reduce GHG emissions by supporting integrated solid waste and plastic management, planning, monitoring, and capacity building for several municipalities. Another target is to increase economic opportunities in traditional and/or new economic sectors for men and women by integrating informal workers in the formal solid waste sector. Lastly, the operation aims to reduce the leakage of plastic to the environment by increasing household waste collection in nearby waterways and drains.

Oceans for Prosperity Project in Indonesia

Targets for this operation include strengthening the enabling environment and policy framework for blue finance and developing long-term investment strategies for prioritized blue economy sectors. Draft regulations will be made to repurpose government spending and incentivizing sustainable business practices. Policy recommendations will be made for the realization of scalable nontax revenue options for marine protected areas related to blue carbon. The support also includes the development of two blue finance proposals which will serve as potential investment cases for the Ministry of Finance. The project is currently establishing a Blue Finance Advisory Committee that will support the development of these policies to seek inputs from relevant institutions. Furthermore, the World Bank is collaborating with relevant institutions to refine a Coral Bond concept, building on experiences of the Rhino Bond issued by the World Bank in 2022.

use the exact PROBLUE indicator-wording. They may use customized indicators that are best suited to the context and demands from clients. As long as these tailored indicators track equivalent results as the indicators used by PROBLUE, they can be utilized to monitor progress. This approach ensures that the indicators reflect the unique circumstances of each project while also being aligned with the PROBLUE results framework.

Table 5.7 presents the PROBLUE indicators upon which co-financed projects plan to report. For certain indicators, targets have not been set yet because the projects are still in the process of gathering additional information through baseline surveys or other means. These surveys will help determine appropriate and realistic targets for those indicators. The table lists these indicators without specific numerical targets, marked with (*).

Projects benefiting from PROBLUE recipient-executed grants are long-term investments, and still in the initial stages of implementation. As of June 30, 2023, these projects have not yet

reported progress on the PROBLUE outcome indicators, given the early phase of their implementation. As anticipated, it will require more time to showcase concrete results.

TABLE 5.7. (Intermediate) Outcome Indicators: Targets of PROBLUE Co-Financed Investment Projects

Results Indicator	Project target	PROBLUE portion target
INTERMEDIATE OUTCOME INDICATORS		
National policy reforms (#)	28	19
of which in fisheries and aquaculture		4
of which in marine pollution management		6
of which in offshore energy with due environment and social considerations		0
of which in shipping & transport		0
of which in coastal tourism		2
of which other related to Blue Economy		7
Investment cases in PROBLUE relevant sectors presented to potential investors (number)	2	2
Countries with strengthened engagement in the Blue Economy at regional level	*	1
OUTCOME INDICATORS - CROSS CUTTING		
Net GHG emissions reduced (tCO2eq.)	315,000	*
Men and women in coastal areas with increased economic opportunities in traditional and/or new economic sectors (number), of which women (%)	233,175	7,631
of which female (%)	46%	
Men and women participating in planning and decision-making on the Blue Economy (number), of which women (%)	2,800	1,729
of which female (%)	51%	
Women's rights organization consulted and involved in seascape planning (number)	*	3
Households in coastal areas vulnerable to erosion and flooding (in negative numbers)	60,000	1,314
OUTCOME INDICATORS - FISHERIES		
Fisheries under sustainable management (number)	*	3
Value increase from improved handling from fisheries under improved management (USD)	*	*
Countries with public disclosure of all important fisheries-related information (number)	*	1
OUTCOME INDICATORS - OTHER		
Leakage of plastics to the environment reduced (mt)	*	*
Coastal and marine pollution hotspots managed for reduced environmental impacts (number)	2	2

* Targets have not been set yet for the indicator as project teams are gathering additional information through baseline surveys and other means to determine appropriate targets.

5.8. NEXT STEPS FOR PROBLUE RESULTS MONITORING

In fiscal year 2023, a mid-term review of PROBLUE was conducted by an independent party. The review assessed the program performance from its inception in December 2018 to June 2022. Key findings of the review included that PROBLUE is relevant and effective, that it fits a niche in the blue financing space, and that the program is on track to meet most of its objectives. The mid-term review also provided several recommendations related to the PROBLUE results framework. The evaluators suggested revising selected results indicators, including those related to gender, fisheries transparency, and oceanic sectors. Findings also pointed to the need to develop indicators to track results on integrated seascape management. Similarly, during a PROBLUE Partnership Council meeting held in Ghana in June 2023, it was discussed that

several priority areas need to be featured more prominently in the results framework, including for example biodiversity, and mobilizing finance for development.

Following recommendations from the mid-term review and building upon PROBLUE's experience with the current set of indicators, the Partnership Council agreed to revise some of PROBLUE's results indicators in the coming fiscal year. A revised framework will enable PROBLUE to better track progress on priority areas, adapt to emerging areas, learn from experiences, and maintain its focus on achieving its goals. In the coming year, the PROBLUE Secretariat intends to collaborate with members of the partnership council to develop an enhanced results framework.

“PROBLUE has been instrumental in helping countries gain better understanding of the benefits healthy fish stocks may bring to people and economies. This knowledge is of particular importance to address challenges associated with climate change, biodiversity and oceanic pollution through sustainable management of aquatic resources as well as harnessing a greater share of the value chain.”

Steingrímur Sigurgeirsson,
Adviser, WBG focal point at the Ministry for Foreign Affairs, Iceland.





6. COMMUNICATIONS AND KNOWLEDGE MANAGEMENT

Communications and Knowledge Management (KM) are critical to PROBLUE's design and implementation as they facilitate the sharing and transfer of knowledge, tools, results, and best practices, which are essential to the work done by PROBLUE and its partners. Communications and Knowledge Management aim to (1) educate on the importance and urgency of PROBLUE's mission; and (2) promote PROBLUE as a World Bank accelerator to advance Blue Economy efforts—emphasizing its results and the value it creates for communities and the planet, thereby deepening support for the program among key stakeholders.

In FY23, PROBLUE executed an elevated communications strategy with new innovations and upgrades. The PROBLUE team shared results in new ways by highlighting beneficiary voices and partnerships, with increased visibility both externally and internally, including in international fora and in the media, where coverage increased significantly. In addition to foundational communications and knowledge sharing, PROBLUE delivered videos showcasing results, story-focused printed assets, and new digital assets, such as webpages and new social media campaigns.

6.1. SOCIAL MEDIA AND WEBPAGES

PROBLUE harnessed social media to expand its reach and connect activities to global events and conversations. Twitter in particular, served as a key outlet for ensuring PROBLUE was a part of the global discussion on strategically chosen themes, agendas, events, UN days, launches, and publications. Connecting PROBLUE's name and work to

relevant discourse on the platform enabled the expansion of its audience and increased awareness of its work. The [#PROBLUE_Oceans](#) hashtag was used over 250 times in FY23.

For example, PROBLUE led the creation of a World Bank-wide social media campaign for World Oceans Day on June 8. The campaign, which was featured across [Facebook](#), [Twitter](#), [LinkedIn](#), [Instagram](#), and [YouTube](#), highlighted the World Bank's Blue Economy work at the global, regional, and country levels, with posts translated into various languages to increase reach and engagement. PROBLUE led the design of unique branding for the campaign and disseminated templates and pre-prepared messages across the World Bank using Trello, a visual project management tool.

Likewise, in the lead up to INC-2, which included PROBLUE's first Global Engagement Forum on May 28 and World Environment Day on June 5 (fittingly themed "Solutions to Plastic Pollution"), PROBLUE organized an 11-day Twitter campaign on marine plastic pollution

and the World Bank's actions to address it. The campaign ended on World Environment Day, with promotions across [Twitter](#), [Facebook](#), [LinkedIn](#), and [Instagram](#), highlighting results from different countries. Similarly, PROBLUE designed unique branding and disseminated it across the World Bank via Trello boards. Teams were empowered to use existing templates and messages, or could customize content to their own country or regional-specific Blue Economy audiences, all over the world.

PROBLUE also supported the Twitter campaign for COP27 and the launch of #BE4RAP. PROBLUE produced three two-minute videos for Twitter, featuring the report authors teasing the findings from the BE4RAP [solutions papers](#) on [MSP](#), [marine pollution](#), and [financing](#), using the #PROBLUE_Oceans hashtag. Overall, the

#BE4RAP campaign drove significant reach and was even featured on the World Bank's homepage.

In addition to these highlighted events, PROBLUE kept the drumbeat of social media engagement on all year long, posting regularly, including a series on [gender](#), posts in other [languages](#), and with increased amplification on [partner channels](#).

PROBLUE also added multiple new webpages, including a complementary “read more” page that lists [a full repository](#) of all PROBLUE-supported resources and news items so that all assets can be found in one place. PROBLUE also supported the launch of the [Blue Tourism Resource Portal](#) and the creation of a [PROBLUE Global Engagement Forum](#) webpage.



6.2. EVENTS

FY23 marked the return of many in-person ocean-related events and PROBLUE was highly engaged. The following are a selection of highlights.

For example, at COP27, the World Bank announced the new [Blue Economy for a Resilient Africa Program \(BE4RAP\)](#), a \$13.5 million program, which includes \$3 million in financing from PROBLUE. The hybrid event “[Blue Economy for Resilient Africa Program](#)” featured interventions and keynotes from partners including Ørsted Sustainable Energy, the French Development Agency, the Nordic Development Fund, and representatives from Egypt, Tanzania, and Morocco. PROBLUE was also represented in the event.

In November, PROBLUE was mentioned and discussed in several international fora. World Bank Managing Director of Development Policy and Partnerships Mari Pangestu presented at the Economist’s World Ocean Summit Asia-Pacific in Singapore, where PROBLUE’s work was part of her opening remarks. PROBLUE tools were also highlighted in Uruguay at the first Intergovernmental Negotiating Committee (INC-1) to develop an international legally binding instrument on plastic pollution. Similarly, the PROBLUE-supported MSP toolkit was highlighted at the 3rd International Conference on Marine/Maritime Spatial Planning, and the Aquaculture Agribusiness Investment Advisory Platform, supported by PROBLUE was highlighted at meetings in Nigeria.

For COP15, PROBLUE complemented the Bank’s activities at the convening by participating digitally. PROBLUE was highlighted in both the Feature Story [Securing Our Future Through Biodiversity](#) and an op-ed penned by MD Mari Pangestu, [Nature’s High Returns](#).



Entering the 2023 calendar year, what became clear was PROBLUE’s deep immersion and recognition as a key player in the Blue Economy landscape; PROBLUE received several mentions at the fora from client and donor countries alike.

In February, PROBLUE members attended the 5th International Marine Protected Areas Congress (IMPAC5), in Vancouver. World Bank Practice Manager Christian Peter represented the Bank and PROBLUE at the Leadership Forum where he discussed finance for marine conservation—a session by invitation—only with global leaders from various sectors.

At the Our Ocean Conference (OOC) in Panama in March, ENB Global Director Valerie Hickey participated in the event’s main plenary panel: [Towards an Equitable, Viable and Sustainable Economy](#). PROBLUE also hosted an official side event on the [Global Seaweed Market](#), and participated in Strengthening Climate Resilience in SIDS and Coastal LDCs, hosted by the Stimson Center.

In the days prior to OOC, PROBLUE members participated in the High-Level Panel (HLP) for a Sustainable Ocean Economy Learning Event. PROBLUE was mentioned and thanked by several country participants in their remarks, acknowledging the World Bank’s support through PROBLUE, especially in the development of marine spatial plans.



In May, PROBLUE convened the first Global Engagement Forum directly before the second session of INC-2. Held in collaboration with several different international organizations, the Forum brought together more than 80 participants from the private sector, government agencies, NGOs, and civil society organizations. In addition to the livestream, communications supported the forum with the creation of the [PROBLUE Global Engagement Forum](#) webpage and some messaging on [social media](#).

In June, PROBLUE convened with development partners from the PROGREEN and GPS Trust

Funds in [Ghana](#) to discuss ongoing and planned sustainable natural resource management work across the landscape, seascape, natural capital accounting, and biodiversity agendas. PROBLUE's Ghana video was shown and the communications mission in early February informed the June visit.

PROBLUE also facilitated a number of webinars in FY23 in collaboration with World Bank and other partners. These ranged from internal knowledge sharing events for World Bank staff as well as external partner events that highlighted PROBLUE supported work.



In total, PROBLUE participated in more than 20 external engagements in FY23, nearly doubling those attended and facilitated in FY22. These events were chosen selectively and strategically based on impact, with a focus on participation at high-level thematic global fora or at events of national priority.

6.3. KNOWLEDGE MANAGEMENT

PROBLUE launched the [Blue Academy Learning Series](#) this FY, a new training program facilitated by PROBLUE and organized in collaboration with the WBG Open Learning Campus (OLC). The Blue Academy offers staff and external experts opportunities to engage with and learn about PROBLUE-supported activities and tools for Blue Economy development. [Five sessions](#) were held this year: Demonstrating Tools to Strengthen Fisheries Project Design and Implementation; Ensuring the Environmental and Social Sustainability of Offshore Wind in Emerging; Catalyzing the Seaweed Revolution: Lessons and Opportunities; Advances in Marine Spatial Planning: From Global Tools, to Country efforts, with a Hands-on Experience; and, Applying Blue Economy Management Tools: Lessons and Opportunities.

In addition to the Blue Academy sessions, PROBLUE held 17 webinars, and released five internal newsletters sharing updates and key insights on PROBLUE activities, highlighting country case studies as well as overall programmatic best-practices. These newsletters reached more than 1,000 World Bank staff. The PROBLUE intranet site was also updated this fiscal year, with the addition of an apply for funding page and an interactive map of PROBLUE activities.

6.4. PUBLICATIONS

In addition to the [PROBLUE 2022 Annual Report](#) released in October, PROBLUE supported the production of a number of reports across a range of focus areas and scopes—from global analysis to regional and national case studies on Blue Economy development, ocean health and plastic pollution, and gender integration. For example, the [Detox Development: Repurposing Environmentally Harmful Subsidies](#) report, published in June 2023, examined the impact of subsidies on critical natural assets in the ocean. PROBLUE contributed to the chapter on fish subsidies, further underpinning World Bank support to the conversation around the WTO Agreement on Fisheries Subsidies. The research was picked up by popular media, including [The Guardian](#). Communication efforts around this report included a [video](#), [press release](#), [blog](#), and more.

Regional and country-specific publications in FY23 include a report on the [Costs of Environmental Degradation from Plastic Pollution in Selected Coastal Areas in the United Republic of Tanzania, and Vietnam: Plastic Pollution Diagnostics](#). These publications, while specific case studies, also have knowledge-sharing potential across regional divides, sharing best practices. PROBLUE communications supported dissemination via the webpage, social media, internal and external newsletters, and more.

The PROBLUE Secretariat also supported the production of briefing notes and factsheets, including the six-pager on [PROBLUE and the Global Biodiversity Framework](#), highlighting the financial, technical, and knowledge support PROBLUE offers client countries as they seek to implement the GBF.

New to this FY, PROBLUE launched an internal photo contest to be used in calendars, encouraging staff to showcase stories from the field of activities that benefit from PROBLUE support. Winners were chosen to reflect the diversity of work across both geographic regions and oceanic sectors. These calendars were distributed widely, including at international fora like Our Ocean Conference, and others.



6.5. MEDIA, BLOGS, AND MESSAGING

PROBLUE was mentioned in seven World Bank Blogs and Feature Stories in FY23, such as [Unleashing the Blue Economy of the Eastern Caribbean](#) and [Fisheries Under Pressure—from Ghana to the Caribbean](#).

PROBLUE received 78 media mentions in French and English alone, in both print and broadcast, such as “[PROBLUE: World Bank partner government to fight marine plastic pollution](#)” on MetroTV (Ghana) and “[Lancé en partenariat avec la Banque mondiale : Accélération du projet de développement de l'économie bleue](#)” with *Aujourd'hui Le Maroc* (Morocco). Outlets including [Sustainable Brands](#) also mentioned PROBLUE in connection to ocean and marine restoration. Likewise, PROBLUE's country-specific work was highlighted in many local and national news outlets, including in Ghana, Jamaica, and Tunisia.

Communications also engaged proactive media outreach, positioning the World Bank and PROBLUE in the heart of discussions around major key agendas and events. For example, at the OOC in Panama, Director Hickey interviewed with two top-tier local news outlets, including [Martes Financiero](#) and

[La Prensa](#). Director Hickey also wrote an op-ed published in the [New Scientist](#) on World Oceans Day titled, “From promise to prosperity: harnessing the Blue Economy for resilience and growth.” At INC-2, PROBLUE's engagement was complemented by media coverage in Paris, including a media interview with Director Hickey in France's popular outlet [Les Echos](#) and a blog on plastic pollution in [Voices](#). Director Hickey also wrote an op-ed published in the UK outlet [New Scientist](#) on World Oceans Day titled, “From promise to prosperity: harnessing the Blue Economy for resilience and growth.”

Like all communications products, these engagements are underpinned by strong messaging. In FY23, PROBLUE maintained and developed new and existing key messages on a wide range of Blue Economy topics, which inform briefing notes, speeches, media engagements, blogs, webpages, and more. These are shared throughout the World Bank to mainstream a Blue Economy approach across the institution. Further, this year, PROBLUE External Affairs worked directly with FAO on messaging specifically around fisheries and food security, a key strategic priority. This cross-multilateral partnership ensures that the World Bank has the latest and that it is speaking with one voice on an urgent priority.

6.6. VIDEOS

Eight videos were released highlighting work supported by PROBLUE over FY23, sharing testimonies of citizens and organizations engaged in this work on the ground. Videos, with PROBLUE mentions of support, included [A Single Use Plastics Free Maldives: Turning the Tide of Waste into Wealth](#) and [Tackling Single-Use Plastic Pollution and Solid Waste in the City of Lagos with a Strong Ecosystem](#).

In early 2023, PROBLUE's External Affairs Officer, in collaboration with country office staff and government counterparts, conducted week-long on-camera interviews across coastal Ghana with government officials, NGOs, chiefs, and communities on the Blue Economy and support from PROBLUE. The focus was on highlighting beneficiary voices and also those of in-country partners. Emphasis was placed on interviewing women and community chiefs. In the spirit of partnership and collaboration across trust funds, as well as cost effectiveness and mitigation of carbon impact, interviews were also conducted with PROGREEN counterparts and stakeholders, enriching our understanding of the integrated nature of environment and nature issues across the landscape and seascape.

Several communications products have since been created, showcasing the impact of PROBLUE's work on the ground. The first video [Blue Economy Resurgence: Revitalizing Ghana's Mangroves and Coastal Livelihoods](#), showcased the multi-faceted issue of mangrove degradation and restoration, which spans gender, biodiversity, jobs, education, fishing,

firewood, cooking, livelihoods, and more. The richness of this story, told from the voices of local people and partners, resulted in more than 2,300 views on YouTube. Additional footage is being used for upcoming projects. Photographs from the coast of Ghana have been featured in several communications products, including feature stories, social media, and webpages.





7. FINANCIAL OVERVIEW AND ADMINISTRATION

7.1. PROBLUE FINANCIAL OVERVIEW

By the end of FY23 (June 30, 2023), the PROBLUE program had signed contributions of \$237.6 million, including \$34 million received in new and additional contributions in FY23 alone. The signed contributions included:

- \$224.8 million from 11 donor countries under the PROBLUE MDTF (TF073194) and the PROBLUE SDTF (TF073437), of which paid-in contributions were \$218.6 million as well as
- \$12.8 million under the three PROFISH trust funds.
- At the end of FY23, total disbursements from the PROBLUE umbrella program were almost \$72.5 million, including:
 - \$59 million disbursed from the PROBLUE MDTF and SDTF (which represented more than a \$20 million increase in disbursements compared to the end of FY22), and
 - \$12.9 million disbursed from the three PROFISH TFs

Table 7.1 outlines PROBLUE’s (MDTF and SDTF) financial summary. As of June 30, 2023, PROBLUE’s total available fund balance under the PROBLUE MDTF and SDTF, taking into account funds received from donors, disbursements, commitments, and investment income, was approximately \$141.4 million.

TABLE 7.1. PROBLUE Multi-Donor Trust Fund (MDTF) and Single-Donor Trust Fund (SDTF) Financial Summary (as of June 30, 2023)

Note: All figures are in US dollars.

	MDTF (TF073194)	SDTF (TF073437)	Total
A. Total donor-signed contribution amount	191,714,968	33,086,306	224,801,274
B. Actual funds received from donors	185,488,468	33,086,306	218,574,774
C. Other adjustments	6,210,263	1,265,757	7,476,020
Investment income (+)	6,210,263	1,265,757	7,476,020
Other adjustments (+)	-	-	-
D. Total funds available (B + C)	191,698,731	34,352,063	226,050,794
E. Disbursements	56,345,947	3,264,993	59,610,939
F. Commitments	22,527,314	1,858,785	24,386,099
G. Available fund balance at trustee, subfund, and disbursing account level	112,825,470	29,228,286	142,053,756

7.2. PROFISH FINANCIAL OVERVIEW

FY23 was the last year of implementation for the three PROFISH trust funds. At the close of FY23, PROBLUE had signed contributions of about \$12.8 million from six donors (European Union, France, Iceland, New Zealand, the United Kingdom, and the United States) under three PROFISH trustee accounts (TF070942, TF072918, TF072959). All of the contributions were paid-in. In addition, these trust funds accrued close to \$604,000 of investment income over the life of the trust funds, thereby increasing the amount of resources available for grants to \$12.87 million. Almost all of the \$12.87 million of available balance had been disbursed

by the end of FY23, making the PROFISH funds disbursements rate close to 100%. These trust funds were legally closed in FY23 upon reaching their end disbursement date. The remaining amount of \$218 across the three PROFISH trustee funds was refunded to donors.

Table 7.2 provides a financial summary of PROFISH. As of June 30, 2023, PROFISH's total available fund balance, taking into account funds received from donors, disbursements, commitments, investment income, and refunds to donors was \$0.

TABLE 7.2. Global Program on Fisheries Financial Summary (as of June 30, 2023)

Note: All figures are in US dollars.

	TF070942	TF072918	TF072959	Total
A. Total donor-signed contributions	10,119,522	400,000	2,255,980	12,775,502
B. Funds received from donors	10,119,522	400,000	2,255,980	12,775,502
C. Administrative fees	505,976	0	0	505,976
D. Investment income	544,401	15,254	44,079	603,734
E. Total funds available (B - C + D)	10,157,947	415,254	2,300,059	12,873,260
F. Disbursements	10,157,882	415,187	2,299,966	12,873,034
G. Commitments	-	-	-	-
H. Available fund balance at trustee, subfund, and disbursing account level	57	67	94	218
I. Available fund balance at trustee, subfund, and disbursing account level	-	-	-	-

ANNEXES



LIST OF PROBLUE-SUPPORTED ACTIVITIES

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G047A	ADDITIONAL FINANCING-3.1.-AFR-WACA Sustainable Ports Partnership	Additional financing BE	AFR	NA	11/01/22	12/31/23	\$400,000	P3	To establish and operationalize a partnership of port authorities and operators to support reduction of negative environmental and social impacts from port infrastructure and operations on targeted communities and areas in coastal Western and Central Africa.
G068A	ADDITIONAL FINANCING-1.1.-Global-Connecting social protection and the blue economy in a changing climate	Additional financing BE	Global	NA	11/17/22	12/31/23	\$160,000	P1	To enhance understanding of how social protection programs can support workers engaged in fisheries while reducing overexploitation and enhancing sustainability of fisheries-based livelihoods.
G084A	Sri Lanka: Priorities for Sustainably Managing Sri Lanka's Fisheries and Ecosystems that Support Them	Additional financing BE	EAP	Sri Lanka	06/29/23	12/31/23	\$175,000	Multi	To develop an improved knowledge base for prioritizing investments, institutional changes and policy actions in the Blue Economy of Sri Lanka, in the context recovery from the severe economic crisis that the country has experienced since March 2022.
G091A	ADDITIONAL FINANCING-2.2.-NG-Reducing Marine Plastic Pollution and Creating Plastic Recycling Market in Lagos State, Nigeria	Additional financing BE	AFR	Nigeria	07/30/22	07/31/23	\$400,000	P2	To develop an improved knowledge base and increased capacity for Lagos state to reduce marine plastic pollution by promoting sustainable plastic management (3Rs).
G109	3.1.-GLOBAL-Decarbonizing Maritime Transport Phase II	Standalone BE	Global	NA	10/24/22	05/31/25	\$1,600,000	P3	To contribute to accelerating decarbonization of maritime transport by supporting national counterparts in opportunity identification, informing relevant global policy-making, and enhancing the World Bank's leadership role in the area.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G139	4.1-4.2-4.4-AFR-WACA Blue Economy Block Grant A in support of Marine Spatial Planning, Development Policy, and Livelihoods	Standalone BE	AFR	WACA countries: Mauritania; Senegal; The Gambia; Guinea Bissau; Guinea; Cote D'Ivoire; Ghana; Togo; Benin; Nigeria;	09/01/22	04/30/25	\$1,800,000	P4	To operationalize the blue economy approach and sustain engagements to strengthen coastal resilience in West Africa.
G150A	ADDITIONAL FINANCING-4.3-MOZ-Strengthening Mozambique's National Blue Economy Strategy	Additional financing BE	AFR	Mozambique	08/24/22	10/31/22	\$15,000	P4	To strengthen Mozambique's National Blue Economy Development Strategy, through economic and climate assessments, and institutional coordination enhancement.
G153A	Producing blue natural capital accounts for The Changing Wealth of Nations (CWON) 2.0	Additional financing BE	Global	Global	06/30/23	12/31/23	\$45,000	P4	To expand the coverage of blue natural capital in The Changing Wealth of Nations (CWON) 2.0.
G156	4.2.-MNA-AFR-Blue Economy Initiative	Standalone BE	AFR	West Africa	07/22/22	12/31/22	\$30,000	P4	To position the WBG blue agenda as a solution for climate change, through showcasing operational flagships as a platform to leverage resources for climate adaptation and mitigation.
G157	4.3.- Harnessing the potential of oceans for sustainable development in Ecuador	Standalone BE	LAC	Ecuador	07/22/22	06/30/24	\$1,200,000	P4	To enhance the enabling conditions for the blue economy in Ecuador.
G158	4.3.-ST-Supporting the Blue Economy Transition in Sao Tome and Principe	Standalone BE	AFR	Sao Tome e Principe	08/31/22	03/31/24	\$350,000	P4	To strengthen the knowledge base and support the prioritization of investments towards sustainable Blue Economy development in Sao Tome and Principe.
G161	1.2.-EG-Climate Change impacts and adaptive planning priorities of capture fisheries and aquaculture in Egypt	Standalone BE	MENA	Egypt	07/21/22	04/30/24	\$560,000	P1	Adaptive Policies and Planning to Respond to Climate Change Impacts on Fisheries and Aquaculture in Egypt.
G167	3.1-Global-Ocean Governance Capacity Building Phase II	Standalone BE	Global	NA	10/05/22	09/30/24	\$826,210	P3	To enhance the capacity on oceans governance of decision- and policymakers and other stakeholders in client countries as well as of World Bank staff.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G169	2.4.-4.4 Ghana- WACA/ Ghana Resilience Investment Project 2	Standalone RE	AFR	Ghana	10/24/22	09/30/25	\$5,000,000	Multi	To strengthen the resilience of targeted communities and areas in coastal Western Africa.
G170	4.4-ID-Oceans for Prosperity-LAUTRA	Standalone RE	EAP	Indonesia	09/22/22	09/30/25	\$5,000,000	P4	To improve Indonesia's capacity for mobilizing financing to support priority Blue Economy sectors.
G171	3.1-4.2-Global- Advancing coastal nature-based solutions and identifying opportunities across sectors	Standalone BE	Global	NA	12/08/22	12/31/24	\$350,000	Multi	Development of tools and knowledge to support the identification and assessment of nature-based solutions opportunities for coastal resilience, tourism, and seaports.
G172	1.2.-4.3.-AR- Supporting sustainable development of Argentina's aquaculture, coastal fisheries, and Blue Economy	Standalone BE	LAC	Argentina	01/26/23	07/31/24	\$500,000	Multi	The proposed activity aims to inform priority areas of future investments in Argentina's aquaculture, coastal fisheries, and Blue Economy in a way that can also benefit regional peers.
G173	4.3-JM-Creating an Enabling Environment for Blue Economy Development in Jamaica	Standalone BE	LAC	Jamaica	11/22/22	05/31/23	\$280,000	P4	To help create enabling environment for fostering Jamaica's Blue Economy growth and sustainable use and management of ocean and marine resources.
G174	2.2-JO-Jordan Plastic Pollution Reduction for Cleaner Waterways	Standalone BE	MENA	Jordan	12/14/22	12/31/23	\$350,000	P2	To provide guidance to the Government of Jordan on reducing plastic pollution, especially in Jordan's waterways.
G175	2.1-EAP-Southeast Asia Regional Activities for Combating Marine Plastics	Standalone BE	SAR	NA	02/10/23	02/28/25	\$1,200,000	P2	To deepen knowledge and analytics, provide advice and capacity support to ASEAN Member States (AMS) on plastics policies and regulatory frameworks and their contribution to and engagement in the international process.
G176	1.2-2.2-4.3-KE-Blue Kenya- Increasing knowledge for a sustainable Blue Economy development	Standalone BE	AFR	Kenya	12/16/22	11/30/24	\$1,790,000	Multi	To support the development of knowledge, strategies and investments for the development of a Blue Economy in Kenya.
G177	2.2-MY-Towards a circular economy in Malaysia for plastics and beyond	Standalone BE	EAP	Malaysia	12/13/22	05/30/24	\$550,000	P2	To deepen knowledge and analytics and provide advice to the Government of Malaysia on developing circular economy measures and implementation roadmap for plastics and beyond, and inform private sector investment in plastics recycling.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G178	4.2-Global-Scaling up Coastal Blue Carbon Opportunities for Blue Economy Development: a flagship report	Standalone BE	Global	NA	12/09/22	05/31/23	\$250,000	P4	To improve the readiness of Bank teams and relevant development partners to catalyze, leverage and scale public and private sector investment in coastal blue carbon.
G179	4.3-PH-Integrated Seascape Management Empowered by Geospatial Information	Standalone BE	EAP	Philippines	12/09/22	03/31/25	\$585,000	P4	To facilitate integrated seascape management for targeted use cases using geospatial information.
G180	1.1-Global-The effect of fuel subsidies on Chinese distant water fishing and on global fish populations	Standalone BE	Global	NA	01/27/23	06/30/24	\$53,000	P1	To inform national and international fisheries policy by quantifying the effect of fuel subsidies on fishing and on global fish populations.
G182	1.2-2.2-4.3-PW-Operationalizing Palau's Blue Prosperity Plan	Standalone BE	EAP	Palau	02/13/23	03/31/25	\$1,600,000	Multi	To guide the operationalization of Palau's Blue Prosperity Plan for transition to long-term protection and production objectives based on ecosystem conservation, value capture in the fisheries sector, restorative aquaculture, and innovation and diversification of Palau's ocean-based economy.
G183	2.2-TZ-Assessment of Plastic Leakage to improve urban services and recycling in Dar es Salaam	Standalone BE	AFR	Tanzania	11/21/22	12/31/24	\$400,000	P2	To provide a city-wide assessment of plastic waste leakage, urban services and recycling for use in elaborating solutions and providing financing for improved services and plastic recycling to reduce marine plastic pollution from Dar es Salaam.
G184	2.2-PE-Peru Plastic Policy and Technical Support	Standalone BE	LAC	Peru	11/22/22	06/30/25	\$350,000	P2	To provide technical support to the Government of Peru in its efforts to control plastic pollution at the national and global levels.
G185	2.2-SAR-Integrated Regional Plastic Approach for South Asia	Standalone BE	SAR	NA	12/23/22	06/30/24	\$410,000	P2	To strengthen the region's framework and knowledge base for taking coordinated actions to reduce marine plastic pollution.
G186	2.2-4.3-IN-India's Blue Economy: Pathways for Resource-Efficient, Inclusive and Resilient Growth	Standalone BE	SAR	India	12/14/22	05/31/25	\$1,700,000	Multi	To support the Government of India and selected states to make institutional, policy and regulatory shifts to improve the management of blue natural capital and mobilize financing from the public and private sectors.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G188	3.2-4.3-BD-Establishing Pathway for Achieving Blue Economy in Bangladesh	Standalone BE	SAR	Bangladesh	12/13/22	03/31/24	\$460,000	P4	To fill knowledge gaps and develop pathways for achieving greener growth where Blue Economy is a critical component for a climate resilient Bangladesh, contributing to the country climate action plan: Phase 1 of this proposal aims to analyse select sectors and aspects of Public Expenditure Review (PER) and Marine Spatial Planning (MSP), engage, and build awareness, and develop a plan; and Phase 2 (follow-up proposal to be submitted in March 2023) shall complete the technical analysis of additional sectors and aspects of PER and MSP, identify pathways and develop an action and investment plan.
G190	2.2-ZA-South Africa: Advancing a Circular Economy to Improve Solid Waste Management and Waste Recycling	Standalone BE	AFR	South Africa	12/14/22	12/31/24	\$420,000	P2	To support South Africa implement the mandatory Extended Producer Responsibility regulation and advance its circular economy.
G191	1.2-3.2-4.3.-MZ-MOZAZUL II Phase	Standalone BE	AFR	Mozambique	12/16/22	06/30/24	\$800,000	Multi	Strengthening knowledge for targeted investments in Mozambique's Blue Economy sectors.
G192	2.2-TR-GE-BBSEA: Improving Plastic Management and Circularity in Türkiye and Georgia	Standalone BE	ECA	Turkey; Georgia;	12/14/22	12/31/24	\$600,000	P2	To improve knowledge and regional dialogue on marine litter in the Black Sea and inform innovative approaches and policies for addressing plastic pollution.
G192A	BBSEA: Improving Plastic Management and Circularity in Türkiye, Georgia, and Ukraine	Additional financing BE	ECA	Turkey, Georgia, Ukraine	04/27/23	12/31/24	\$120,000	P2	To improve knowledge and regional dialogue on marine litter in the Black Sea and inform innovative approaches and policies for addressing plastic pollution.
G193	2.2.-MZ-Strengthening plastic waste recycling and recovery in Mozambique's capital city Maputo	Standalone BE	AFR	Mozambique	11/23/22	02/28/25	\$400,000	P2	To strengthen the recycling and recovery of waste including plastics in Maputo to support a shift towards circular economy.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G194	3.2-LAC-Caribbean Clean Ocean Cooling Initiative	Standalone BE	LAC	Caribbean	12/16/22	05/31/24	\$340,000	P3	To promote clean, efficient and cost-effective cooling in the Caribbean region for relevant sectors including municipal and commercial buildings, tourism (hotels and resorts), agriculture, manufacturing and transport (e.g., airports) through the blue economy with the use of sea water air conditioning (SWAC) and by-products of aquaculture and desalination.
G195	2.2-3.2-4.3-LAC-Promoting Resilient Pro-Blue Growth in the Caribbean	Standalone BE	LAC	Caribbean	12/23/22	10/31/24	\$1,050,000	Multi	To strengthen the resilience of Caribbean economies through financial and private sector solutions, while incentivizing new sustainable growth sectors in the Blue Economy.
G196	3.3-TR-Sustainable Shipping and Ports in Türkiye	Standalone BE	ECA	Turkey	12/16/22	09/30/24	\$600,000	P3	To support a national stock-taking of key maritime sector components in Türkiye and facilitate dialogues between key stakeholders to enable consensus-building efforts and establish alignment with national best practices, both of which will help establish the foundation for future investments in decarbonized and sustainable shipping and ports in Türkiye.
G198	2.2-EC-A Circular Economy for Plastics in Ecuador	Standalone BE	LAC	Ecuador	12/14/22	02/28/25	\$280,000	P2	Identify key plastics value chains for circular markets, that would help reduce pollution in Ecuador.
G199	1.2-GN-Support to the Guinean Halieutic Strategy	Standalone BE	AFR	Guinea	12/21/22	01/31/25	\$470,000	P1	To support Guinea's readiness for implementation of its 2023-2027 halieutic strategy for sustainable food security and job creation.
G200	1.2-YM-DJ-Support to Fishery Sector Development in the Red Sea and Gulf of Aden with a special focus on Yemen and Djibouti	Standalone BE	MENA	Yemen; Djibouti	12/21/22	01/31/25	\$1,240,000	P1	To strengthen knowledge and capacity for sustainable fishery sector management in the Red Sea and Gulf of Aden with a special focus on Yemen and Djibouti.
G201	2.1-Global-Curbing the flow: Moving to Global Plastics Action	Standalone BE	Global	NA	12/15/22	08/31/24	\$1,680,000	P2	To catalyze plastic solutions and help shape the global plastics agenda through strategic analytics, policy support, and knowledge sharing.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G202	1.1-Global-Understanding the role of fisheries and aquaculture in carbon sequestration	Standalone BE	Global	NA	12/14/22	06/15/23	\$100,000	P1	To establish a scientific basis on the role of fisheries and aquaculture in carbon sequestration.
G203	4.3.-VN-Toward a Blue Economy: A Pathway for Sustainable Marine Economy in Vietnam	Standalone BE	EAP	Vietnam	12/09/22	12/09/24*	\$500,000	P4	To support the Government of Vietnam, through the Ministry of Planning and Investment and Ministry of Natural Resources and Environment, to assess and enhance monitoring and financing for sustainable and natural capital based marine economy development.
G204	1.2-SS-Review of the Fisheries Sector in South Sudan	Standalone BE	AFR	South Sudan	12/07/22	01/31/24	\$475,000	P1	To strengthen the knowledge base for South Sudan's fisheries sector to inform government decision-making and upcoming operations.
G205	3.2-4.1-EG-Egypt Resilient Blue Economy	Standalone BE	MENA	Egypt	12/16/22	09/30/25	\$800,000	Multi	To support the development of a national strategy for Egypt to advance resilient and efficient coastal economic growth in priority blue sectors.
G208	3.2.-LY-Assessment of Water Desalination in Libya	Standalone BE	MENA	Libya	12/05/22	04/30/24	\$350,000	P3	To contribute to building the resilience of Libya's water sector by undertaking a comprehensive assessment of its desalination experience and providing recommendations to improve the sector's performance.
G209	Alternative livelihoods and innovations for sustainable fisheries and aquaculture development in Uganda	Standalone BE	AFR	Uganda	06/28/23	06/28/25*	\$575,000	P1	To assess alternative livelihoods, options for aquaculture feed resources, and options for sustainable management of capture fisheries in Uganda.
G210	3.4-4.4-MA-Accelerating Blue Economy Development in the Kingdom of Morocco	Standalone RE	MENA	Morocco	12/01/22	09/30/25	\$5,000,000	Multi	To support collaborative policy development for the Blue Economy and integrate climate actions into coastal tourism and fisheries management in targeted areas.
G211	Integrating Aquaculture into Land and Seascape Programs	Standalone BE	Global	Global	06/05/23	06/05/25*	\$300,000	Multi	To enhance awareness, knowledge and capacity of land and seascape practitioners to better integrate aquaculture into landscape and seascape programs for improved system resilience, biodiversity, and ecosystem services.

*Indicates a tentative closing date.

Ref	Activity Name	Type	Mapping	Country	Approval Date	Closing Date	Proposal Amount	Pillar	Objective
G212	Assessing the Blue Economy Potential of Belize's Coastal Cities	Standalone BE	LAC	Belize	06/30/23	06/30/24*	\$300,000	Multi	To address knowledge and data gaps in Belize's oceanic sectors for better-informed policies and investments in its Blue Economy.
G213	Building a climate-resilient Blue Economy in North Africa	Standalone BE	MENA	Morocco/ Tunisia	06/01/23	06/01/25*	\$610,000	Multi	To strengthen analytical bases for the North African countries to develop a climate-resilient Blue Economy.
G214	Scaling-up the Resilient Blue Economy in Africa	Standalone BE	AFR	AFE/AFW/ MNA	06/07/23	06/07/24*	\$300,000	P4	To deepen collaboration among countries, and enhance use of knowledge and tools to scale up finance for resilience and sustainable management of Blue Economy.
G220	Strengthening Regional Management of the Eastern Pacific Tropical Marine Corridor	Standalone BE	LAC	Colombia/ Costa Rica/ Ecuador/ Panamá	05/12/23	05/12/24*	\$300,000	P4	To strengthen regional management of the Eastern Pacific Tropical Marine Corridor in support of biodiversity protection and a more sustainable Blue Economy.
G221	Reducing greenhouse-gas emissions in fisheries and aquaculture value chains	Standalone BE	Global	Global	06/29/23	05/29/24*	\$300,000	P1	To improve understanding among WBG task teams and bank clients of technologically fit-for-purpose, economically and socially feasible means to reduce GHG emissions primarily in small scale fisheries and aquaculture.
G222	Strengthening fisheries management in Cabo Verde	Standalone BE	AFR	Cabo Verde	05/10/23	05/10/25*	\$300,000	P1	To identify concrete actions toward strengthening Cabo Verde's fisheries value chain and support efforts targeted at improving the governance of the fisheries sector.
G223	Sierra Leone Urban Resilience and Plastics Technical Assistance	Standalone BE	AFR	Sierra Leone	05/16/23	11/16/24*	\$300,000	P2	To increase multistakeholder coordination and capacitate local government, civil society, private and informal sectors to enhance circularity across the plastics value chain.
G224	Sri Lanka: Restoration of coastal natural capital and green growth opportunities	Standalone BE	EAP	Sri Lanka	06/29/23	12/29/24*	\$300,000	Multi	To improve understanding of nature-based solutions and nature-based tourism for restoration and sustainable use of coastal natural capital in Sri Lanka.
G226	Building capacity in support of fisheries management in Comoros	Standalone RE	AFR	Comoros	04/19/23	09/30/25	\$3,000,000	Multi	To increase the resilience of food systems and preparedness for food insecurity in the participating countries. Sub-PDO for the activity: To improve the integration of sustainable fisheries development in marine and coastal management.

*Indicates a tentative closing date.

ANNEX 2

LIST OF PROBLUE-SUPPORTED ACTIVITIES

PROBLUE BETF

PROBLUE RETF

INVESTMENTS INFORMED

PROBLUE-Investment Ratio

Bank executed Trust Fund (BETF)

Recipient executed Trust Fund (RETF)

Investment

PILLAR 1 2 3 4

Caribbean: Unleashing the Blue Economy of the Caribbean

(G053)

PROBLUE BETF
(\$2,146,000 – 1, 2, 3, 4)

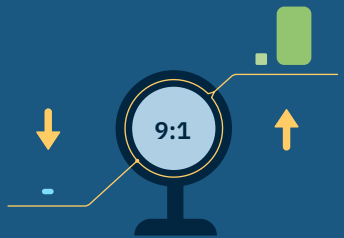
PROBLUE RETF
\$4 million

INVESTMENTS INFORMED

Unleashing the Blue Economy of the Caribbean (UBEC) Project (P171833)
IDA \$56 million

PROBLUE-Investment Ratio

\$2M \$4M \$56M



PROBLUE BETF provided a comprehensive package of upstream analytics including blue economy roadmaps, deep dive on waste management and plastics, blue tourism, national fisheries assessments, and a fisheries insurance model, which were key to inform the design of the UBEC investment project combined with \$4 million of RETF co-financing. UBEC aims at stimulating economic recovery, bolstering marine and coastal resilience, and strengthening the competitiveness of the three interconnected sectors: tourism, fisheries and aquaculture, and waste management. This comprehensive package of support was a game changer for the Eastern Caribbean in terms of establishing a functional platform for future blue economy projects in line with their established marine spatial plans.

Cambodia: Supporting Solid Waste and Plastic Improvement Project

(G075)

PROBLUE BETF
(\$600,000 – 2)

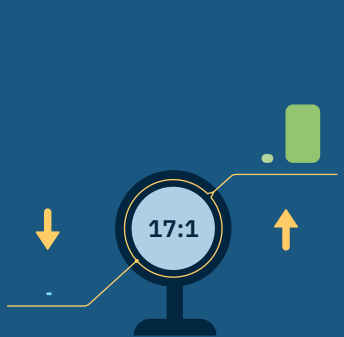
PROBLUE RETF
\$3 million

INVESTMENTS INFORMED

Solid Waste and Plastic Management Improvement Project (P170976)
IDA \$60 million

PROBLUE-Investment Ratio

\$0.6M \$3M \$60M



PROBLUE BETF aimed at further improving knowledge about the solid-waste sector, including institutional and regulatory policies related to solid waste and plastic management, through the identification of the top 10 polluting plastic items and development of a plastic-policy roadmap for Cambodia. These analytics were key to inform the \$60M investment combined with \$3M RETF to support national institutional policy development for plastic management and reduction at the source. PROBLUE is also supporting capacity building to better manage and monitor waste collection/disposal to reduce plastic leakage into the environment and enhance economic opportunities for disadvantaged and vulnerable groups (including women).

PROBLUE BETF

PROBLUE RETF

INVESTMENTS INFORMED

PROBLUE-Investment Ratio

Bank executed Trust Fund (BETF)

Recipient executed Trust Fund (RETF)

Investment

PILLAR 1 2 3 4

Global Sustainable and Resilient Tourism on Small Islands

(G080)

Strengthening fisheries management in Cabo Verde

(G222)

PROBLUE BETF

(G080) (\$1,750,000 – 2, 3, 4)

(G222) (\$300,000 – 1)

PROBLUE RETF
\$5 million

INVESTMENTS INFORMED

Cabo Verde: Resilient tourism and blue-economy development in Cabo Verde project (P176981)
IDA \$30 million

PROBLUE-Investment Ratio

\$2M \$5M \$30M



PROBLUE was catalytic in facilitating the integration of fisheries into tourism value chains. Through PROBLUE RETF, the project is focusing on integrated interventions that combine key ocean-economy sectors, most notably fisheries and tourism, to create jobs and diversify local economies with a strong emphasis on women-led businesses, building on and incorporating PROBLUE-supported analytics including on understanding how SIDS can increase the competitiveness of their tourism sectors in the wake of COVID-19 through sustainable tourism practices and water, sanitation, and hygiene diagnostic tools for fisheries value chains.

Cleaner and bluer sustainable development in North Africa

(G125)

PROBLUE BETF

(\$1,480,000 – 2, 3, 4)

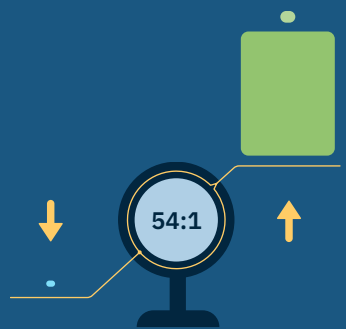
PROBLUE RETF
\$5 million

INVESTMENTS INFORMED

Morocco: Accelerating Blue Economy Development in the Kingdom of Morocco (P172926)
IBRD \$350 million

PROBLUE-Investment Ratio

\$1.5M \$5M \$350M



PROBLUE BETF has supported Morocco to become the regional leader in the blue economy, including through technical work on marine plastic pollution, blue carbon, coastal tourism, and developing a national blue economy roadmap. For example, both Morocco and Tunisia produced their first assessments on marine plastic pollution, where priority actions and knowledge gaps for implementing plastic-free coastlines strategies have been identified. Building on the BETF, PROBLUE RETF is supporting the first World Bank Program for Results (PforR) for the blue economy, an innovative investment focused on integrated management of marine/coastal areas, with a focus on creating jobs and improving biodiversity management in Morocco.

PROBLUE BETF

PROBLUE RETF

INVESTMENTS INFORMED

PROBLUE-Investment Ratio

Bank executed Trust Fund (BETF)

Recipient executed Trust Fund (RETF)

Investment

PILLAR 1 2 3 4

Indonesia: Oceans for Prosperity

(G066)

PROBLUE BETF
(\$775,000 – 4)

PROBLUE RETF
\$5 million

INVESTMENTS INFORMED

Indonesia: Oceans for Prosperity – LAUTRA (P173391)
IBRD \$200 million

PROBLUE-Investment Ratio

\$0.8M \$5M \$200M



Among the activities, PROBLUE BETF has supported the development of a Blue Finance Policy Note which builds a greater understanding of the financing challenges, gaps, and opportunities in the blue economy as well as the role to be played by public and private sector finance, informing the design of the LAUTRA project, and combined with \$5 million of PROBLUE RETF co-financing. The findings of the BETF-supported activity underpinned the LAUTRA economic and financial analysis for World Bank appraisal of the investment. The PROBLUE RETF addresses the enabling environment and policy constraints for blue finance, aiming at developing the appropriate investment strategies and related financing instruments to crowd in investments for effective MPA management and strengthened coastal livelihoods. The project integrates gender equality and the inclusion of vulnerable communities (especially youth and indigenous people in coastal communities) into each of the financing strategies to be developed, including the MSME financing strategies, which will also have the greatest potential impact on increasing employment opportunities for women and providing them with access to finance.

Madagascar/Comoros: Blue Economy Development

(G144)

PROBLUE BETF
(\$2,190,000 – 1, 2, 3, 4)

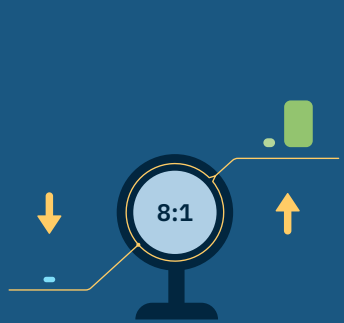
PROBLUE RETF
\$3 million

INVESTMENTS INFORMED

Comoros: Food System Resilience Program for Eastern and Southern Africa (Regional/Comoros) (P177816)
IDA \$40 million (Comoros) of \$603 million (Regional)

PROBLUE-Investment Ratio

\$2M \$3M \$40M



PROBLUE BETF was mobilized for several activities in support of the blue economy in Comoros, including highest resolution possible modelling to anticipate climate change effects on key target fish species. The results of the model will be incorporated into the country's sustainable fisheries management efforts through a recently approved investment project, which catalyzes an additional \$3M of PROBLUE RETF. PROBLUE's added value is to support integration of sustainable fisheries and coastal-zone management, and more broadly integrated watershed management, in line with a Land-to-Sea approach. The RETF support will focus on improving capacity at national level, including to create regular budgetary support for fisheries management. In this broader regional investment, which exceeds \$2.5 billion, PROBLUE support is targeted at an FCV country, and the Comoros component is the only one that includes marine capture fisheries in the overall strategy to address Food Systems Resilience – a strategic focus that was a result of the PROBLUE RETF

PROBLUE BETF

PROBLUE RETF

INVESTMENTS INFORMED

PROBLUE-Investment Ratio

Bank executed Trust Fund (BETF)

Recipient executed Trust Fund (RETF)

Investment

PILLAR 1 2 3 4

Ghana: Improving framework conditions for reducing marine litter and pollution in Accra

(G102)

Mangroves as the Protection from Coastal Flooding in selected West Africa countries

(G055)

PROBLUE BETF

(G102) (\$1,750,000 – 2)

(G055) (\$450,000 – 4)

PROBLUE RETF

\$5 million

INVESTMENTS INFORMED

Ghana: West Africa Coastal Areas Resilience Investment Project 2 WACA (P175525) IDA \$150 million (Ghana) of \$241 million (Regional)

PROBLUE-Investment Ratio

\$2M \$5M \$150M



PROBLUE BETF has supported various activities in Ghana including reducing marine litter pollution by strengthening evidence-based policy frameworks and improving waste management; protecting coastal flooding and through investing in mangroves; all of which have informed the design of the Ghana WACA investment project to operationalize the blue economy approach through marine spatial planning and a blue carbon scheme in addition to tackling marine litter. These are innovative activities brought in by PROBLUE RETF which also catalyzes parallel financing from the private sector – Orsted. The vision is to support Ghana in using this pilot to achieve a national coastal-wide implementation of carbon finance deals.

India: TA for sustainable municipal solid waste in India for reduced plastic pollution

(G048)

PROBLUE BETF

(\$600,000 – 2)

INVESTMENTS INFORMED

Kerala Solid Waste Management Project (KSWMP, P168633) \$105M IBRD

PROBLUE-Investment Ratio

\$0.6M \$105M



PROBLUE BETF delivered a comprehensive technical, policy and institutional assessment of the mismanaged plastic waste as part of the municipal solid waste, identifying the major coastal hotspots & land-based hotspots which are connected through rivers that serve as conduits for marine litter, and prepared strategies and roadmaps for the states and key hotspot cities to address the problem. Further, based on the detailed technical engagement at the national level and with two partner states, the analytical work in the form of a policy note, is informing policy actions of the central government through guidance on adopting an evidence-based approach in terms of the type of policy, institutional and investment interventions to be supported and incentivized for plastic waste management, by the central government. The report “Addressing mismanaged plastics for Kerala” and technical work on private sector engagement informed the Kerala Solid Waste Management Project on developing PPPs for city level & regional level recycling facilities.

PROBLUE BETF

PROBLUE RETF

INVESTMENTS INFORMED

PROBLUE-Investment Ratio

Bank executed Trust Fund (BETF)

Recipient executed Trust Fund (RETF)

Investment

PILLAR 1 2 3 4

Global: The Economics, Regulation and Management of Desalination and Water Reuse

(G115)

PROBLUE BETF
(\$150,000 – 3)

INVESTMENTS INFORMED

Water Security Development - Gaza Central Desalination Program – Associated Works Phase I Project (P168739)

\$60M Kuwait Fund for Arab Economic Development, \$15M TF for Gaza & West Bank, \$42M Partnership for Infrastructure Development MDTF

PROBLUE-Investment Ratio

\$0.1M \$117M



PROBLUE BETF delivered case studies on the economics, regulation & management of desalination & water reuse which informed support for the set-up of Gaza’s National Bulk Water Supplier responsible for managing the central Gaza desalination plant. In addition, activities developed under this grant were instrumental to raise the interest of the internal audience for desalination governance, creating demand for the establishment of a desalination Community of Practice (CoP) within the WBG to provide support to task teams working on desal. Tools developed under this ASA are contributing to the policy dialogue and the design and implementation of desalination related operations, particularly in Jordan, Morocco, Egypt, Chile, and Peru.

Mozambique: MozAzul

(G050/G150A)

PROBLUE BETF
(\$950,000/ \$140,000 – 1, 2, 4)

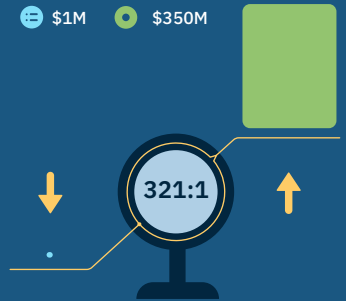
INVESTMENTS INFORMED

Sustainable Rural Economy Program-SREP (P174002) \$200 M IDA

Northern Mozambique Rural Resilience Project-MozNorte (P174002) \$150 M IDA

PROBLUE-Investment Ratio

\$1M \$350M



PROBLUE BETF support to MozAzul informed two World Bank investment operations, SREP-3 and MozNorte, blue economic activities. The grant matching instrument in MozAzul was also revised to better target opportunities in oceanic sector that include consideration of gender and inform the National Blue Economy Development Strategy and upgrade of the 1996 Fisheries Policy, thus strengthening the policy framework and enabling environment for the blue economy. The above two operations, contributed to different aspects of the blue economy in Mozambique, including climate change, private sector engagement, as well as investments on capture fisheries, aquaculture, mangrove conservation, among others. The analytical work is directly informing Mozambique’s National Blue Economy Strategy (EDEA) and has served as an input for the Mozambique Climate Change and Development Report (P177152).

ASEAN, Malaysia, Thailand, and the Philippines: Rethinking Plastics: Support of ASEAN Region in select Countries on Marine Plastics

(G002-G036-G038-G039)

PROBLUE BETF

- 2 (\$2.1 million comprising of USD800,000 (ASEAN) + \$450,000 (Thailand) + \$450,000 (Philippines) + \$400,000 (Malaysia))

INVESTMENTS INFORMED

Southeast Asia Regional Program on Combating Marine Plastics-SEA-MaP (P175659) \$20M IDA. IFC has signed the Indorama (IVL) deal for \$300M on plastics recycling; exploring more deals across SEA and China.

PROBLUE-Investment Ratio

\$2M \$320M



PROBLUE BETF strengthened regional momentum across ASEAN member states. Under this work, the World Bank supported Thailand (2020 ASEAN Chair) to develop the ASEAN Regional Action Plan for Combating Marine Debris—now endorsed by all 10 states and launched. This has directly led to inform the design of the Southeast Asia Regional Program on Combating Marine Plastics (SEA-MaP, P175659) to tackle marine plastics pollution and will bring catalytic financing for innovations to drive plastics transitions. Covering two years (FY20-21), and with just over \$2.2 million in trust funds from PROBLUE (and KGGTF), this work resulted in about 15 impactful reports, toolkits, and guidance documents. Several communications and dissemination activities supported this work, including an op-ed co-authored by World Bank and IFC Regional Vice Presidents, and press release.

Argentina: Actions for NPS Pollution Reduction at the Matanza-Riachuelo Basin in Argentina

(G148)

PROBLUE BETF

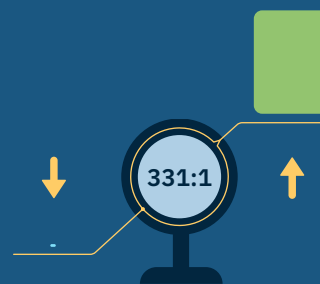
(\$800,000 – 2)

INVESTMENTS INFORMED

Matanza-Riachuelo Basin Sustainable Development Project-Add'l Financing 2 (P176034) \$265M IBRD

PROBLUE-Investment Ratio

\$0.8M \$265M



Findings of this PROBLUE BETF supports the current Matanza-Riachuelo Project to better understand and address waste, agricultural pollution sources and green financing options. This will also help inform the project design of Matanza 2.0, to be initiated after the new government takes office in early 2024.

PROBLUE BETF

PROBLUE RETF

INVESTMENTS INFORMED

PROBLUE-Investment Ratio

Bank executed Trust Fund (BETF)

Recipient executed Trust Fund (RETF)

Investment

PILLAR 1 2 3 4

Panama's Blue Gender Gap Analysis and Action Plan

(G128)

PROBLUE BETF
(\$250,000 – 4)

INVESTMENTS INFORMED

Panama's Climate Resilience and Green Growth Development Policy Loan 1 (P179817)
\$150M IBRD

PROBLUE-Investment Ratio

\$0.2M \$150M



PROBLUE's BETF support was key to informing Panama's Climate Resilience and Green Growth DPL1 (P179817). Through this project (Prior Action 8), the Government enacted its National Ocean Policy, recognizing the importance of marine and coastal ecosystems for economic growth through tourism, fisheries, and enhanced livelihood opportunities for coastal communities, and its role in addressing climate change. Panama's Blue Gender Gap Analysis and Action Plan supported by PROBLUE informed the government's NDC commitments for an integrated gender-responsive approach to restore and conserve marine and coastal ecosystems. The Gender Action Plan recognizes gender-differentiated vulnerabilities and promotes their role in addressing climate change in coastal areas. Integrating gender into marine and coastal public policies indirectly strengthens the resilience of coastal communities, reduces vulnerability, and improves women's adaptive capacity. By implementing the Blue Gender Action Plan, the government aims to reduce gender inequalities constraining women's rights, access to and control over coastal and marine biodiversity and natural resources and contribute to a gender-responsive implementation of the CBD.



PROBLUE

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PROBLUE is an Umbrella 2.0 program, administered by the World Bank, that supports the development of integrated, sustainable, and healthy marine and coastal resources.

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