Mainstreaming Nature in
Policy and Investment Decisions

Monitoring Progress Toward a Prosperous, Sustainable Future

Belize Case Study

Geographic Location

Policy/Project Stage

AGENDA-SETTING | SELECTION | DESIGN | **IMPLEMENTATION** | **MONITORING & EVALUATION**

Policy or Finance Targets

- Results-based financing
- Ecosystem-based climate adaption

Sectors Engaged

- Tourism and recreation
- Fisheries
- Forestry

Ecosystem Services

- Water quality/quantity
- Coastal protection
- Fisheries
- Tourism/Recreation
- Climate regulation

This document outlines the activities and results of the Belize pilot project under the Regional Technical Cooperation (TC), "**Transforming Policy and Investment through Mainstreaming Rapid Approaches for Natural Capital Assessment and Accounting.**"[1] This TC was funded by the Global Environmental Facility (GEF), implemented by the Inter-American Development Bank (IDB), and executed by Stanford University. The main beneficiaries and co-designers of this TC are Belize's Ministry of Blue Economy and Marine Conservation, the Belize Blue Bond Finance Permanence Unit, and the Ministry of Economic Transformation, and the technical work was led by the Natural Capital Project team (Stanford University), with WWF-Belize as a key collaborator. This work also received funding from the Gordon and Betty Moore and a National Science Foundation grant (#2209284). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the funders.

This pilot project in Belize is also part of the **People, Planet, Prosperity (3Ps)**[2] project, through which the Stanford University-based Natural Capital Project (NatCap) collaborates with IDB, the Asian Development Bank, and the World Bank on pilots in 16 countries, to scale up the use of natural capital approaches around the world.

Summary

This pilot project in Belize conducted cross-sectoral engagement to co-develop a key performance indicator framework linking nature finance with socio-economic outcomes. The team also designed a Blue Economy Jobs monitoring survey tool and laid out plans for a centralized dashboard to track progress of those KPIs, while strengthening capacity to use these tools and approaches through workshops and virtual meetings. This work is informing a number of results-based finance mechanisms that support both nature and people in Belize.

Natural capital approaches make explicit nature's benefits to people so they can be incorporated into decisions and motivate investments in ecosystems, improving the well-being of both people and nature. This includes both natural capital assessments and accounting.

Background

Belize is located on the eastern coast of Central America in the Mesoamerican Reef region, the second-largest coral reef system in the world. Coastal and marine resources play a vital role in Belize's economy, particularly through tourism (ecotourism) and small-scale fisheries. However, Belize faces significant environmental threats, including rising sea levels, coral bleaching, intensifying storms, unsustainable fishing, coastal development, agricultural runoff, untreated wastewater, and plastic pollution, all of which impact biodiversity and marine resource sustainability.

With so much at stake, Belize has emerged as a world leader in securing the long-term health of local natural resources, particularly in its marine environments. As part of this, Belize has been using natural capital approaches to drive innovative policy, management, and investment in ecosystems, while supporting its economy. This began with its groundbreaking Integrated Coastal Zone Management

1 Transforming Policy and Investment Through Mainstreaming Rapid Approaches for Natural Capital Assessment and Accounting, 2023, Inter-American Development Bank.

2 People, Planet, Prosperity: Mainstreaming Nature in Policy & Investment Decisions (Global), The Natural Capital Project, Stanford University.

Plan in 2016[3] (updated in 2021[4]), which provides a strategic framework for coastal and marine resource management. More recently, Belize has sought to secure funding to sustainably manage its natural capital through results-based finance instruments. The first example is the Blue Bond[5] issued in 2021, a debt restructuring mechanism that converted a portion of its external debt at a discount in exchange for securing its blue natural capital (e.g., coast, water, mangroves, and fish) and supporting human well-being and economic prosperity. The Blue Bond is financing the Belize Sustainable Ocean Plan[6]. The second example is the Resilient Bold Belize (RBB) program[7], a Project Finance for Permanence (PFP)[8] model aimed at securing long-term funding for marine and coastal conservation.

Results-based finance mechanisms are designed with specific goals in mind. In the case of blue bonds or PFP initiatives, these goals are closely tied to environmental outcomes, and, in contexts like Belize, also to socio-economic impacts. This aligns with Belize's Blue Economy strategy, which emphasizes progress in nature conservation, ecosystem health, and human well-being. Progress toward these goals is tracked using a clearly defined set of Key Performance Indicators (KPIs) that cover areas such as finance, nature, climate, and livelihoods. The monitoring and management of these KPIs are carried out through a structured Monitoring, Reporting, and Verification (MRV) process, ensuring transparency and accountability in achieving the intended outcomes.

An integrated team, including local Belizean government partners (the Blue Bond Finance Permanent Unit within the Office of the Prime Minister, the Ministry of Economic Tranformation, a local NGO (WWF-Belize), the Inter-American Development Bank (IDB), and researchers from Stanford University's Natural Capital Project (NatCap) came together to empower local leaders with approaches that quantify, track, and report the multiple benefits of Belize's blue natural capital.

Key Outcomes

The team:

Developed a framework of KPIs (see Appendix 1 in main report) to track progress toward nature- and people-positive goals, for use in priority financial instruments in Belize (the Blue Bond and the Resilient Bold Belize PFP).

Created a new Blue Economy Jobs monitoring survey tool (see Appendix 2 of main report) for Belize, which will be implemented in the next phase through the Resilient Bold Belize PFP. By involving local community members in the data collection process in collaboration with Belize-WWF, the use of this approach will also raise awareness, build local capacity, and ensure community engagement in the long-term stewardship of blue natural capital.

Designed the plan for a cost-effective centralized monitoring platform, the dashboard (see Section 4.3 of main report), to foster transparency and collaboration across sectors. This tool will support the Resilient Bold Belize PFP and serve as a prototype for the Ministry of Blue Economy and Marine Conservation and the Blue Bond Finance Permanence Unit, which will build on this effort in developing future results-based finance mechanisms.

3 Belize Integrated Coastal Zone Management Plan, 2016.

4 Belize Integrated Coastal Zone Management Plan, updated 2021.

5 The Nature Conservancy, Belize Blue Bonds for Ocean Conservation Case Study.

6 Belize Sustainable Ocean Plan

7 Resilient Bold Belize Program

8 Cabrera, H. et al. 2021. Securing Sustainable Financing for Conservation Areas: A Guide to Project Finance for Permanence. Washington D.C. Amazon Sustainable Landscapes Program and WWF.

Based on the results of this pilot, Belize will implement and launch the Blue Economy MRV System[9], funded by IDB and executed by the Blue Bond and Finance Permanence Unit. This work will also inform updates to Belize's Integrated Coastal Zone Management Plan and Belize Sustainable Ocean Plan under Blue Bond commitments[10], and support results-based financing through the Resilient Bold Belize PFP, and IDB's Outcome-Based Financing (OBF) framework for blue biodiversity credits.[11] The team is also collaborating with the Global Ocean Partnership to align ocean and social accounting with this KPI framework and MRV system.

Natural Capital Approaches

A framework for social and environmental KPIs. A key focus of this pilot was to identify a subset of linked people- and nature-focused KPIs to illustrate how these connections can be effectively incorporated into policy and finance decision-making. The team strategically selected indicators that best demonstrate the interdependencies between ecosystem health and socio-economic outcomes. For more details on the selected KPIs, see Appendix 1 in the full report.

A science-based monitoring tool was developed to track social Key Performance Indicators (KPIs) linked to the Resilient Bold Belize PFP initiatives. In response to local needs that were identified during an in-person workshop in Belize, the team proposed a novel monitoring framework focused on livelihoods dependent on blue natural capital. This Blue Economy Jobs monitoring survey aims to establish a baseline for characterizing blue economy-based livelihoods in Belize, track changes in social KPIs related to these livelihoods, and support pathways toward a more equitable and inclusive workforce in ecosystem-based solutions and related sectors. Aligned with partner efforts to improve livelihoods in Belize[12], the team identified key sectors to monitor, including fisheries,

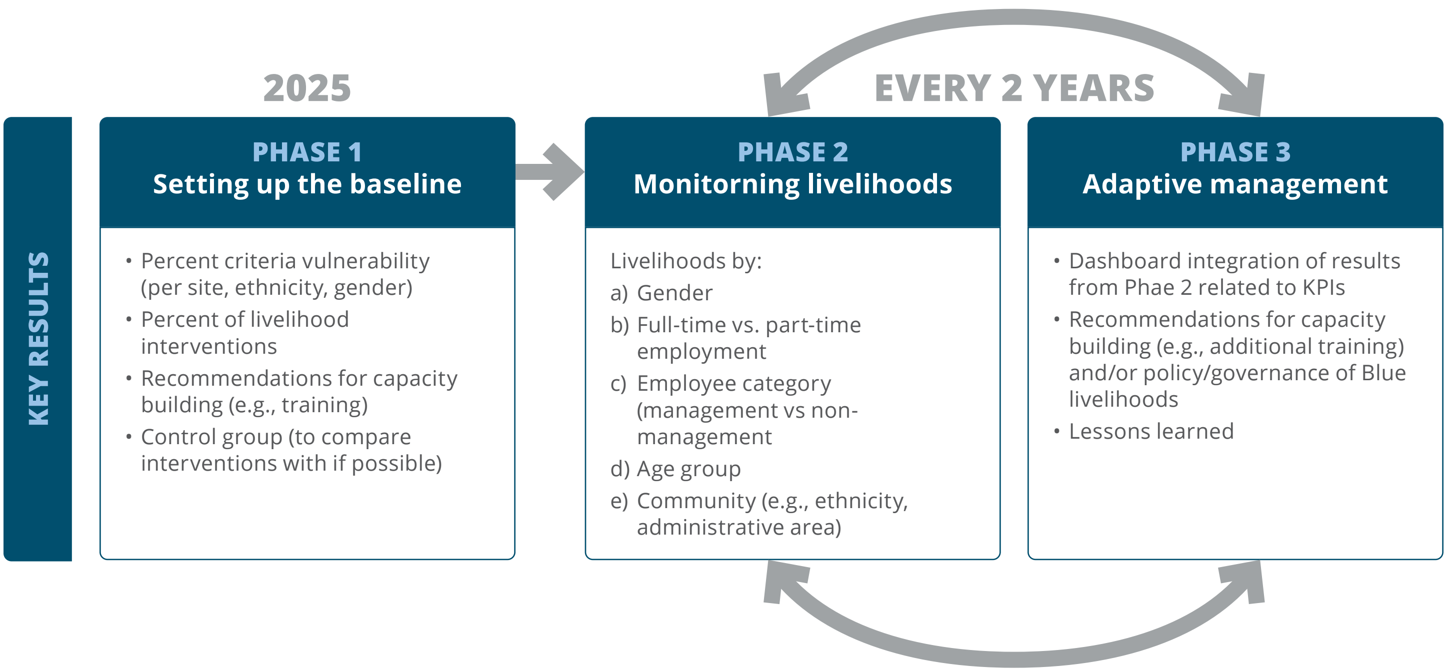

Figure 1: Framework for a Blue Economy Jobs Monitoring Survey Tool

9 IDB project: Implementing a Blue Economy MRV System in Belize

10 Belize Blue Bond Conservation Commitments

11 IDB project: Development Of A Voluntary Market For Biodiversity Credits To Strengthen Financing For Making The Dominican Republic More Resilient To Climate Change

12 Reef Guard Project: Sustaining Life and Livelihoods, 2024, WWF

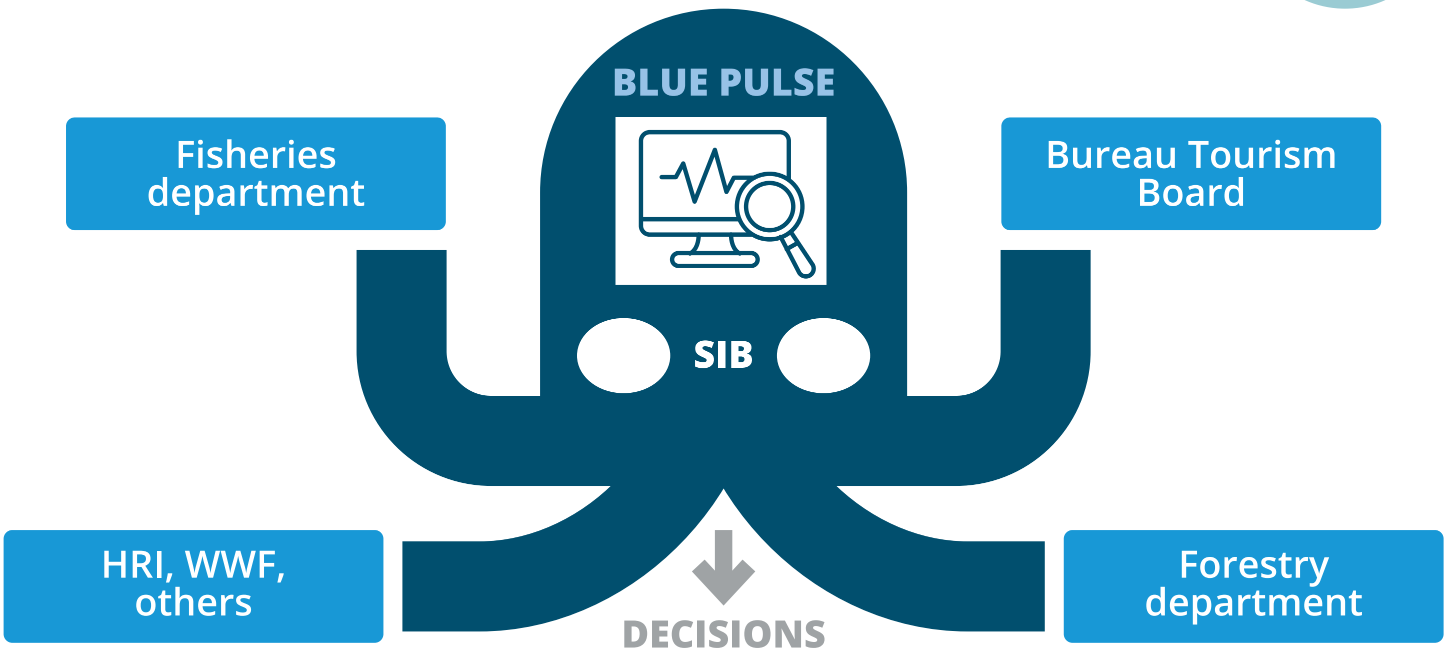

Figure 2: KPIs are connected by key actors through a centralized MRV system that can then help inform their decisions

tourism, seaweed cultivation, trade, small business enterprises, and environmental monitoring activities. The survey will be conducted across 17 sites, targeting a total of 640 individuals or households. As part of the implementation, a local consultancy will be funded to train community fellows in deploying the monitoring tool and establishing the baseline.

A centralized dashboard to report KPIs. Local participants in Belize highlighted the need to develop a centralized dashboard to host and track the KPIs. Such a dashboard would also allow the country's government to show how the KPIs relate to (and inform) targets of different policies or finance mechanisms, enhancing local government and NGO collaboration and management. The dashboard will bring together cross-sectoral information relevant to blue economy growth and results-based finance, centralizing and updating data through semi-automated workflows. For instance, key departments already collecting social and environmental KPIs, including fisheries, tourism, coastal management, and climate offices, could feed into this unified dashboard.

The dashboard will potentially be managed by the Statistical Institute of Belize, promoting data-driven insights and supporting stronger cross-sectoral governance. The team developed a scope of work for the design of this prototype[13] (see the full report's appendices).


Image courtesy of Impact Media Lab

13 ToR Developing Dashboard Prototype

Capacity Development Approaches

Capacity development during this pilot took place through three main pathways:

1

Collaborative participation in the integrated pilot project team, through which representatives from government, multilateral development banks (MDBs), local NGOs, and NatCap experts worked together to co-develop a shared vision and technical approach, with clear pathways to policy and finance impact.

2

Local engagement through an in-person workshop and the 2025 Blue Forum in Belize, which provided a platform for knowledge exchange and stakeholder alignment.

3

Global learning through two international forums at Stanford University, where teams from 15 other countries and three MDBs shared innovations, challenges, and solutions from similar pilot projects.

Through these efforts, 33 individuals from government agencies, NGOs, financial institutions, and academia were trained in understanding KPIs and MRVs, and they helped guide this project, including providing the impetus for its innovative monitoring approach and dashboard. This diverse group, spanning ministries responsible for economic development, climate resilience, and conservation as well as researchers and finance experts, helped strengthen cross-sectoral collaboration and foster a more cohesive approach to natural capital management. Their contributions are already yielding results through a range of related initiatives.

Lessons Learned and Pathways for Mainstreaming Natural Capital Approaches

The Belize pilot provided critical insights into the value of working with an integrated team of local leaders from government, scaling partners such as the IDB, and scientists to co-develop the KPI framework and an MRV system that meets Belize's priorities. A key factor in the pilot's success was the involvement of dedicated local partners who facilitated connections with agencies, leaders, and networks, enriching the project with collective knowledge gathered through workshops and virtual engagements. This effort was further strengthened by the longstanding relationships built by the NatCap team, which has worked in Belize for over 15 years, conducting natural capital assessments and strengthening capacity to embed those approaches into decision-making.[14] This foundation of trust enabled rapid integration into local networks and fostered deep collaboration and co-design of the KPI framework and MRV system.

However, the pilot also revealed challenges, particularly uneven levels of engagement and capacity among partners. While some agencies fully participated

14 Arkema, K., et al. 2015, **Embedding Ecosystem Services in Coastal Planning Leads to Better Outcomes for People and Nature**. PNAS.
Arkema, K., et al. 2023. **Evidence-Based Target Setting Forms Blue Carbon Strategies for Nationally Determined Contributions**. Nature Ecology and Evolution.
Delevaux, J., et al. 2024. **Social-Ecological Benefits of Land-Sea Planning at Multiple Scales in Mesoamerica**, Nature Sustainability.

(the Forestry Department and Belize Tourism Board emerged as local champions for the establishment of an MRV system), others were hesitant due to concerns about the use of data and the application of project outputs. This gap highlights the need for more targeted engagement efforts to further strengthen these partnerships in the next phase of the project.

By convening groups such as the Ministry of Blue Economy and Marine Conservation, the Blue Bond Finance Permanence Unit, the Coastal Zone Management Authority Institute, the Department of Forestry, the Belize Tourism Board, the Department of Fisheries, IDB, and WWF, the project helped develop a shared vision and pathway to implementation. This pilot now serves as a model for other countries seeking to develop integrated MRV systems for their blue economies and to demonstrate progress under results-based finance mechanisms.

The KPI framework developed through this pilot will inform updates to Belize's Integrated Coastal Zone Management Plan and Belize Sustainable Ocean Plan, under its Blue Bond commitments. Belize is also moving forward with the implementation of a Blue Economy MRV system, leveraging the foundational work established in this pilot. Building on the cross-ministerial and institutional relationships developed in this pilot, Belize is also leveraging other funding opportunities to support practical applications, such as an IDB-financed wastewater treatment plant.[15] The KPIs developed in this pilot will also feed into IDB's forthcoming Outcome-Based Financing Framework for Blue Biodiversity credits[16] in the Dominican Republic.

This work also catalyzed new collaborations, including with the Global Ocean Accounts Partnership, which is advancing ocean and social accounting in Belize and around the globe. By collaborating with this initiative, the pilot ensures knowledge sharing, alignment between policy and science, continuity in implementing this KPI framework and MRV system, and mainstreaming natural capital approaches by linking assessments to national accounting for the blue economy.

Read more on the pilot project page: https://bit.ly/3PsBelize.

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15 IDB project: **Support the Development of an IDB CLIMA Pilot Project in Belize**

16 IDB project: **Development of a Voluntary Market for Biodiversity Credits to Strengthen Financing for Making the Dominican Republic More Resilient to Climate Change**

PEOPLE PLANET PROSPERITY

For more information, please visit the **3Ps project page**. bit.ly/peopleplanetprosperity

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