

## TC ABSTRACT

### I. Basic Project Data

▪ Country/Region:	BAHAMAS/CCB - Caribbean Group
▪ TC Name:	Impact of protection of blue natural capital and promotion of the blue economy in The Bahamas
▪ TC Number:	BH-T1118
▪ Team Leader/Members:	GONI PACCHIONI, EDWIN ANTONIO (IFD/CTI) Team Leader; STEVENSON, CLAUDIA (IFD/CTI) Alternate Team Leader; ALLENG, GERARD P. (CSD/CCS); CAZOR KATZ ANDRE JOSEF (IFD/CTI); SABOIN GARCIA, JOSE LUIS (CCB/CBH); MORALES REINA GENESIS DEL CARMEN (IFD/CTI); VILA SAINT ETIENNE, SARA (LEG/SGO)
▪ Taxonomy:	Operational Support
▪ Number and name of operation supported by the TC:	Local Sustainable Development in the Blue Economy - BH-L1058
▪ Date of TC Abstract:	03 Sep 2024
▪ Beneficiary:	The Bahamas
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	US\$300,000.00
▪ Local counterpart funding:	US\$0.00
▪ Disbursement period:	48 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	IFD/CTI - Competitiveness, Technology and Innovation Division
▪ Unit of Disbursement Responsibility:	IFD/CTI - Competitiveness, Technology and Innovation Division
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation ; Institutional capacity and rule of law

### II. Objective and Justification

- 2.1 The first objective of this TC aims to support the Monitoring and Evaluation of outcome indicators tied to the specific development goal of “Promoting sustainable economic activities related to Marine Protected Areas (MPAs) through the implementation of management plans” of BH-L1058. This objective aligns with the overarching goal of fostering sustainable growth, both of which are integral to Component 3 of the loan. This support will involve producing follow-up estimates for the following indicators listed in the operation’s Results Matrix.
- 2.2
- Annual contribution of nursery habitat in MPA network of Abaco and Andros to lobster revenue
  - Annual expenditures of tourists attributable to MPA network in Abaco and Andros
  - Annual contribution of nursery habitat in 5 MPA in Abaco and Andros to lobster revenue
  - Annual expenditures of tourists attributable to the implementation of management plans in 5 MPA in Abaco and Andros

- 2.3 The Monitoring and Evaluation Plan of BH-L1058 will employ the Stanford NatCap Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST) model to assess these outcomes. The InVEST model is designed to help decision-makers visualize the impacts of potential actions by quantifying ecosystem services and trade-offs.
- 2.4 The second objective of the TC focuses on building and transferring the capacity to both the counterparts and the Bank to run and update the InVEST model. In particular, this capacity will enable them to comprehend and operate the specific elements of the InVEST model that are pertinent to the evaluation of the aforementioned outcomes in longer term evaluations of BH-L1058, or in similar projects in other Bahamian islands or countries.
- 2.5 The third objective of the TC is dedicated to supporting the Monitoring and Evaluation of outcome indicators linked to the specific development goal of “Supporting the continuity and growth of tourism-related businesses within the project’s area of influence.” This is associated with Subcomponent 1.2 of the loan. The support will be provided by producing estimates of the nightlight indicators (annual median radiance) for the locations where the program will establish infrastructure to enhance tourism activities. This approach will help quantify the impact of the program’s interventions on local tourism development.
- 2.6 The Family Islands of The Bahamas, comprising over 700 islets, islands, and 2,400 cays, face unique challenges due to their geographic dispersion and logistics. These challenges are compounded by the vulnerability of the local ecosystem and the high risk of natural disasters. To address these issues, the Government of The Bahamas sought assistance from the Bank to design and implement a program that will simultaneously promote economic growth in the blue economy (or BE) and preserve the fragile ecosystems of the Family Islands. As a response, the IDB approved in April 2024 the loan BH-L1058 (first individual operation under the Conditional Credit Line for Investment Projects – or CCLIP - BH-O0011). This operation, currently under implementation, builds upon previous interventions and support the following specific development objectives:
- 2.7
- i. Enhancing business continuity and growth for Bahamian Micro, Small, and Medium Enterprises (MSMEs) in the blue economy through technological extension, adoption, and innovation.
  - ii. Supporting the continuity and growth of tourism-related businesses within the project’s area of influence.
  - iii. Improving salaries for professionals trained by the Bahamas Agriculture and Marine Science Institute (BAMSI) in blue economy-related fields.
  - iv. Promoting sustainable economic activities related to Marine Protected Areas (MPAs) through the implementation of management plans.
- 2.8 It is important to emphasize that the government of the Bahamas is prioritizing economic development in the Family Islands as stated in the 2024/2025 Budget Communication. Being part of a CLIPP, lessons learned from the first individual operation, will be replicated across other islands within the archipelago. Consequently, the evaluation of the effectiveness of BH-L1058 is essential for the design of subsequent operations.

### III. Description of Activities and Outputs

- 3.1 **Component I: Update of Ecosystem Service Models & Software** . This component will carry out three key deliverables: (i) Build a baseline Habitat Risk Assessment model for the MPA network, using data on human and climate stressors. Produce risk maps and a workflow to track changes; (ii) Scope and collect data to update the ecosystem service models and document the process. Produce updated indicators

where applicable; and (iii) Create a customized software tool to link multiple InVEST models and produce indicators for MRV.

- 3.2 **Component II: Capacity Building for InVEST Mode.** NatCap experts will train IDB and Bahamian staff to use InVEST models for blue economy goals. They will coach them in updating models and use existing curricula for remote and in-person sessions. The trainings will cover science-policy processes and natural capital approaches.
- 3.3 **Component III: Nightlight Indicators & Capacity Building.** This component will carry out two deliverables: i. Estimation of nightlights model and impact evaluation and Capacity building through workshops to build capacity in the national counterparts will be carried out. Training will transfer the conceptual and computational knowledge that will allow the counterparts to update the information used by the nightlights model and to implement this methodology in similar contexts.
- 3.4 **Component IV: Supervision & Dissemination.** Supervision missions will be conducted as needed, and both a mid-term workshop and an end-of-project workshop will be held to disseminate intermediate findings and final results, respectively, as part of the project.

#### IV. Budget

##### Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Update of Ecosystem Service Models & Software	US\$180,000.00	US\$0.00	US\$180,000.00
Capacity Building for InVEST Mode	US\$37,500.00	US\$0.00	US\$37,500.00
Nightlight Indicators & Capacity Building	US\$60,000.00	US\$0.00	US\$60,000.00
Supervision & Dissemination	US\$22,500.00	US\$0.00	US\$22,500.00
<b>Total</b>	<b>US\$300,000.00</b>	<b>US\$0.00</b>	<b>US\$300,000.00</b>

#### V. Executing Agency and Execution Structure

- 5.1 The Bank will act as the executing agency as this TC is an initiative promoted by the Bank. The IDB will execute this TC through the Competitiveness Technology and Innovation (IFD/CTI) Division. The TC activities will be implemented by CTI under the leadership of the Project Team Leader.
- 5.2 The IDB has extensive experience and a track record of successfully and efficiently executing technical assistance projects. Additionally, it should be emphasized that the Bank has the appropriate systems in place to ensure proper execution of the operation and ensure the sustainability of the project in accordance with document "Procedures for the Processing of Technical Cooperation Operations and Related Matters" (OP-619-4, Annex II). Similarly, the Bank has the necessary experience to ensure compliance with the relevant procurement policies and procedures.

#### VI. Project Risks and Issues

- 6.1 Key factors for successful completion of Component 1, updating of the InVEST models include: (i) access to relevant data inputs that can reflect changes in human activities, habitat extent and condition, locations and characteristics of beneficiaries or people who demand services, and socio-economic indicators of value; and (b) technical capacity to format or carry out any needed pre-processing of data, running InVEST models, and visualizing results for sharing with IDB and Bahamian experts. If data

reflecting change in parameters are not available, the ability of updated models to indicate shifts in ecosystem services or their values will be limited. Similarly, if technical experts from IDB and The Bahamas do not have sufficient time to carry out model updates, the delivery of Component 1 will be less certain. These risks can be mitigated by inclusion of government experts and data providers from The Bahamas, as well as a commitment by both The Bahamas and IDB to contribute experts to the team conducting the work.

- 6.2 Risk factors for completion of Component 2, capacity building to run and update the InVEST model, include the participation of technical experts in the InVEST update team (as described under Component 1) and participation of technical, policy and finance experts from IDB and The Bahamas in virtual and in-person trainings. Mitigation of the risk of inadequate commitment to trainings will come through offering a diversity of capacity development modes (via online courses, virtual trainings, and in-person workshops), as well as enlisting help from local experts to train a new group of people who can implement natural capital approaches using technical, policy and finance information.

## **VII. Environmental and Social Aspects**

- 7.1 This TC does not have applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF).