

TC Document

I. Basic Information for TC

▪ Country/Region:	BELIZE
▪ TC Name:	Support the formulation of a program to promote sustainable growth in the blue economy
▪ TC Number:	BL-T1149
▪ Team Leader/Members:	Hori, Tsuneki (CSD/RND) Team Leader; Chakalall, Yuri (CSD/RND) Alternate Team Leader; Alleng, Gerard P. (CSD/CCS); Arango Laws, Jessica (VPS/ESG); Bucaram Villacis, Santiago Junior (CSD/RND); Chavez, Elizabeth (CSD/RND); Ericka Morales Franco (CSD/RND); Levy, Denise Urias (CSD/RND); Margolis, David Lawrence (ORP/GCM); Restrepo, Lisa Sofia (CSD/RND); Sanmartin Baez, Alvaro Luis (LEG/SGO); Suarez Vazquez, Gines (CSD/RND); Watson, Brodrick Raylando (VPC/FMP); Henry Wade
▪ Taxonomy:	Operational Support
▪ Operation Supported by the TC:	BL-L1042.
▪ Date of TC Abstract authorization:	01 Mar 2022.
▪ Beneficiary:	Government of Belize (Ministry of Finance, Economic Development and Investment. Ministry of Blue Economy and Civil Aviation, Belize Fisheries Department)
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Japan Special Fund(JSF)) Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster and Health (JEI)
▪ IDB Funding Requested:	US\$850,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months
▪ Required start date:	May 2022
▪ Types of consultants:	Firm and Individual consultants
▪ Prepared by Unit:	CSD/RND-Env, Rural Dev & Disaster Risk
▪ Unit of Disbursement Responsibility:	CID/CBL-Country Office Belize
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability; Gender equality

II. Description of the Associated Loan/Guarantee

- 2.1 Small Island Developing States in the Caribbean area, including Belize, have an Extensive Exclusive Economic Zone compared to their land area. Thus, the blue economy has a great potential to expand the economic scale of these countries. According to [the Patil et al., \(2016\)](#), the Caribbean region's total annual revenue from the use of marine resources through shipping, mineral resources, tourism, and fisheries amounted to US\$407 billion and is expected to increase. This opportunity also applies to Belize. The rich coastal landscape, represented by the [largest barrier reef](#) in the northern hemisphere, generates 30-43% of the country's GDP, mainly through tourism. Its [fishing industry](#) also accounts for 1%-6% of the country's GDP, depending on the year.

- 2.2 In light of this opportunity, the Government of Belize (GoBL) has established the Ministry of Blue Economy and Civil Aviation (MBECA) in 2020 and has made Blue Economy a policy priority area. To effectively implement this policy, the MBECA is currently preparing (or is in the final stages of preparing) a Maritime Economy Plan (MEP) and a 5-year National Blue Economy Policy and Strategy. In this context, the GoBL has requested the IDB to undertake a public investment project titled: Program to Promote Sustainable Growth of the Blue Economy (BL-L1042) for the concrete promotion of this area.
- 2.3 Within the framework of the Blue Economy, which encompasses diverse industries and economic sectors, Project BL-L1042 will specifically focus on fisheries, as confirmed through the Identification Mission held in February 2022. The current fisheries industry in Belize is mainly represented by the production of lobster, conch, and shrimp in the nearshore area (or inside the barrier reef). In this context, one of the strategic areas of the MEP is the diversification of the fisheries industry for species which are mainly fished in offshore areas (beyond the barrier reef). Accordingly, the design of BL-L1042 project, is likely to be shaped to promote this diversification, mainly through small-scale infrastructure development, equipment improvement (including exploration fishing vessels), knowledge development and transfer, and organizational strengthening.
- 2.4 The loan project BL-L1042 is currently in its formulation stage, with a target approval by the end of 2022.

III. Objectives and Justification of the TC

- 3.1 The objective of this TC is to provide the Government of Belize (GoBL) with technical knowledge and preliminary technical inputs necessary for the design and early implementation stages of the loan project - Program to Promote Sustainable Growth of the Blue Economy (BL-L1042). The term "blue economy" as used in the TC and the loan project is defined as "a concept that promotes economic growth, social inclusion, and the maintenance and improvement of livelihoods, while at the same time ensuring the sustainability of the marine and coastal environment" ([The World Bank, 2019](#)).
- 3.2 **Challenges.** [FAO \(2005\)](#) reported finfish catch species on the outer reef deepwater slope in Belize include groupers of the genera *Epinephelus* and *Mycteroperca*; snappers of the genera *Lutjanus* and *Ocyurus*; the hogfish (*Lachnolaimus maximus*); the king mackerel (*Scomberomorus cavalla*); the great barracuda (*Syngnathus barracuda*); and jacks of the genera *Alectis*, *Caranx* and *Trachinotus*. However, the [World Bank \(2018\)](#) reports total catch of all fisheries in the country peaked around 2010 and has been declining. An analysis of the reasons for this and an approach to overcome this key challenge (and identification of priority investment activities) should be identified/detailed in the current and upcoming BL-L1042 project formulation phase (note: analysis and data collection for this purpose are also included in the main objective of this project). In this sense, throughout the dialogue between GoBL and IDB to date, it has become qualitatively clear that the following challenges and approaches need to be identified to resolve this critical challenge:
 - a. **Stock Assessment and Marine Environmental Assessment.** Periodic monitoring and diagnostics of deep-sea offshore demersal fish stocks have only been implemented to a limited extent. This is essential for sustainable fisheries development based on scientific data. In addition to this, Belize needs to long-term

monitor the state of the marine environment that supports marine resource ecosystems, considering its vulnerability to climate change, disaster risk, and sea level rise risk, and reflect these in policy implementation as appropriate. Based on these scientific data, the long-term potential of deep-sea offshore demersal fish resources needs to be assessed, and then the closed seasons and other fisheries management and regulatory measures need to be incorporated into the policy in a complex manner.

- b. **Intentions of fishing communities (including women) and unions.** Deep-sea (deep-sea slope) fishing requires different gear and fishing methods than the lobster, conch, and shrimp fisheries currently popular in Belize. Based on the needs analysis and gap analysis from the perspective of the local stakeholders, including whether or not fishermen and fishing associations (including women) are interested in deep-sea slope fishing, the selection of priority activities for the BL-L1042 project (e.g., what kind of fishing gear and training is needed) should be determined.
 - c. **Consumer perspectives and needs.** Through previous dialogues with the Government of Belize, there is also a need or room for improvement in the quality at the processing and distribution stages to meet the preferences of domestic and international consumers, in the value chain (production, processing, processing, commercialization, distribution to sales) to accurately approach consumer trends, and in marketing and branding strategies.
- 3.3 **Approach.** Based on the above three issues, this TC project will be divided into two phases of the BL-L1042 project, e.g.: (i) project formation: mainly in mid-2022; and (ii) pre-implementation to early implementation phase: mainly from late 2022 to 2023, with the aim of developing the data, diagnostics, and basic knowledge required for each phase. Specifically, the former is considered as the primary activity focus of the first component and the latter as the second component. Which means that, Component 1 of this TC will serve as technical input for the BL-L1042 proposal to be prepared in mid to late 2022, and Component 2 will serve as a complementary activity for the same loan project, which is expected to begin after mid-2023.
- 3.4 While there have been several fisheries resource assessments in the deep sea (deep sea slope) in the Caribbean, such as [Stunz et al. \(2021\)](#) and [JICA \(2012\)](#), there are no quantitative studies specific to the outer barrier reef (deep sea slope) in Belize. Similar surveys, including trials of innovative methods, are very active in e.g.: the Pacific and Indian Oceans. These include [Shaik et al. \(2019\)](#), [Han et al. \(2021\)](#), [LACOURSI ERE-ROUSSEL et al. \(2016\)](#), among many others. This TC project will build on these findings in the Caribbean region and beyond and will coordinate with the Government of Belize (GoBL) to conduct studies and fieldwork (including interviews with fishermen and stakeholders in rural fishery communities) that may be useful and practical in the country.
- 3.5 In addition to several diagnostics and studies programmed under both components, particularly with respect to 2.4 c. above, the TC will pilot a business forum and promotional materials (video materials) for the purpose of transferring know-how to the GoBL on how to approach raising international visibility and branding for Belizean fishery products (to be implemented under Component 2).
- 3.6 There are other projects related to the blue economy (more specifically the fisheries sector) in Belize. One example is the project "Strengthening Adaptation Planning and Improving Climate Change Resilience in Belize's Coastal Zone and Fisheries Sector"

through the Green Climate Fund (GCF). The IDB also approved another TC in February 2022: Developing Belize's Blue Economy (BL-T1145) which is intended to introduce Belize to global good practices related to the Blue Economy. The GoBL's counterparts in these currently implemented related projects are MBECA and the Fisheries Department. Therefore, the IDB will coordinate closely with these agencies to ensure that there is no overlap with existing projects and that the activities of this TC will benefit from synergies by leveraging existing project outputs. In addition, all other Bank projects that are being implemented or in preparation in Belize will be reviewed, and efforts will be made to collaborate as appropriate and avoid duplication as necessary.

- 3.7 **Alignment to the Country Strategy.** This TC aims to diversify and activate Belize's fishing industry as operational support for loan project BL-L1042. This approach is expected to build a Belizean fisheries industry resilient to climate change and climate risks. It is also expected to result in Belizean fisheries products being offered in various markets around the world. In that sense, this project is in line with IDB Group's Belize Country Strategy 2022-2025 (GN-3086), especially with its 2.1 Support the reactivation of key economic sectors through the continued provision of services, improving their resilience to natural hazards and climate change and 2.4 Improve connectivity with regional and global markets, promote exports, facilitate investment and trade.
- 3.8 **Alignment to the Update to the Institutional Strategy 2020-2023.** This TC project (and BL-L1042, all of which are the same below) aims to diversify and activate Belize's fisheries industry based on scientific objective data and findings. In this regard, the TC project is aligned with the **Productivity and innovation** of the Update to the Institutional Strategy 2020-2023. In addition, this TC project employs an approach to planning and regulating fishery production based on objective scientific findings, which is aligned with the **Institutional Capacity and Rule of Law** in the same Strategy. Also, this TC assumes rural communities involved in the fishing industry in Belize as the ultimate beneficiaries, which will contribute to reducing regional economic disparities. In this sense, the project is aligned with the Strategy's **Social Inclusion and Equality**. Changes in the marine environment due to climate change and its impacts on fisheries resources, as well as the impacts of climate risk on fisheries infrastructure and the realization of a sustainable fisheries industry are among the key approaches of this TC project. Therefore, the TC project is aligned with the Strategy's **Climate Change and Environmental Sustainability**. Finally, the perspective of women, who will contribute significantly to the fisheries value chain, especially in post-landing processing and production, is essential to the development of the effective fisheries industry value chain. Therefore, this TC project is also aligned with the Strategy's **Gender Equality and Diversity**.
- 3.9 **Alignment with Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster and Health (JEI):** This project aims to build (climate risk resilient) coastal fisheries infrastructure in Belize country. It is therefore aligned with (a) and (b) of Chapter 3, Section 2 (JEI) of the JEI's Operating Guidance.
- 3.10 **Sector knowledge.** The [IDB has approved](#) 15 projects related to the blue economy so far since 2016. Twelve of these projects are TCs (6 of which are regional TCs). The others are Equity, Loan Operation, and Guarantee. Through the knowledge gained through these projects, the IDB has a general knowledge of the policies, governance, and organizational strengthening necessary for the blue economy.

IV. Description of activities/components and budget

- 4.1 This TC has the following two components, designed to address all the challenges and approaches identified in sections 2.4 – 2.7:
- 4.2 **Component I: Development of data, diagnostics and basic knowledge needed for loan preparation.** Building on the initial diagnosis referred to in paragraph 2.4, this component will develop the data, diagnostics and basic knowledge required for the formulation phase of BL-L1042. Specifically, this will be accomplished mainly through individual consultants for diagnoses studies focusing on the following areas (i) Availability of existing data (necessary for BL-L1042 project formation) and gap analysis. Where data do not exist, the consultant will assess whether alternative proxies are available and whether they are valid; (ii) Collection and systematization of state-of-the-art deep-sea (deep slope) demersal fish stock assessment methods used around the world, and a discussion of their feasibility for implementation in Belize; (iii) Economic profile of current deep-sea slope fishermen, including an understanding of the current baseline of vessel and gear ownership and performance; (iv) Research on training needs for deep-sea slope fishermen (preliminary research through interviews); (v) A survey of the current state of infrastructure in the coastal zone for improving landing sites (taking into account the climate risks and sea level rise); (vi) Preliminary market/consumption demand potential study for national and international markets (including sampling interview study of national and international intermediate buyers), and identification of key logistical barriers to international trade in fishery products given Belize's limited connectivity; (vii) Identification of elements for value chain optimization. Potential roles and activities of women in this context; and (viii) Identification of issues related to indigenous-oriented fisheries operations. In addition to these diagnostics, this component will also address the development of required documents during the approval of the loan project BL-L1042 e.g., loan operation manual.
- 4.3 **Component II: Complementary studies required prior to the start of the project or in the early stages of implementation.** This component will conduct preliminary studies and trainings that are considered necessary prior to the BL-L1042 project's full-scale implementation, as knowledge acquisition during the preparation period or in the early stages of implementation is expected to facilitate the smooth implementation of the loan project. These studies/trainings will include: (i) establishment of a methodology for deep slope fisheries stock and marine environmental assessment in Belize, proposal of detailed specifications for equipment and exploration vessels required for long-term monitoring of marine resources and technology transfer (mainly to the Belize Fisheries Department); (ii) Climate risk profile of coastal fisheries infrastructure and facilities, development of damage assumption models for climate events, selection of priority actions (or infrastructure reinforcement) for risk reduction, and macro-level cost-benefit analysis of risk reduction policies. Note: These will form the basis for an infrastructure development plan for long-term climate risk resilient fisheries economic activities that is expected to be included in the loan project; and (iii) Development of an overall branding and promotion strategy. This activity may include the creation of several sample promotional videos and a business forum (maybe in an online format) to which internal and external buyers and others would be invited.

- 4.4 **Expected results.** The expected results of this TC are the following:
- d. **Component I:** (i) 8 diagnostic studies; and (ii) one additional accompanying loan proposal document
 - e. **Component II:** (i) 3 studies; (ii) 1 business forum; and (iii) 1 set of promotional materials
- 4.5 The total amount of financing required is eight hundred fifty thousand US dollars (US\$850,000), all of which to be drawn from the Bank contribution (Japan Enhanced Initiative for Quality Infrastructure, Resilience against Disaster and Health: JEI). There will be no contribution from local counterparts.

Indicative Budget

Activity/Component	Description	IDB/Fund Funding	Total Funding
Development of data, diagnostics and basic knowledge needed for loan preparation	<ul style="list-style-type: none"> - 8 diagnostic studies: US\$25,000 x 8 = US\$200,000 - Loan operation manual: US\$30,000 	US\$230,000	US\$230,000
Urban and Sub-urban Planning for resilient infrastructure.	<ul style="list-style-type: none"> - 3 studies: US\$180,000 x 3 = US\$540,000 - Business Forum: US\$20,000 - Promotional materials: US\$60,000 	US\$620,000	US\$620,000
Total	US\$850,000.00	US\$850,000	US\$850,000.00

V. Executing agency and execution structure

- 5.1 Since this project is considered as Operational Support for loan project BL-L1042, there are several public agencies of the Government of Belize with which this TC (and BL-L1042) should be involved. These include the Ministry of Finance, Economic Development, and Investment, MBECA and the Belize Fisheries Department. To coordinate with these agencies as appropriate and to ensure smooth progress of the TC activities (due to the advance input nature of loan BL-L1042), the IDB, through CSD/RND, will be the Executing Agency for this TC. This rationale for Bank execution is consistent with the justification provided in Appendix 10, d. of the Operational Guidelines for TC Instruments (GN-2629-1). It was further agreed from the Government of Belize during the Identification mission conducted in February 2022 that the executing agency for the TC would be the IDB.
- 5.2 Follow-up and monitoring of the implementation of this TC will be done by the IDB, in accordance with the "Policy on the Selection and Contracting of Consulting Firms for Operational Services to be Performed by the IDB" (GN-2765-4) and the corresponding "Operational Guidelines" (OP-1155-4) and will hire firm consultants in accordance with the guidelines set forth in AM-650 for individual consultants. There are no preconditions for the first disbursement.

VI. Major issues

- 6.1 It is essential that the formulation of the loan project be carried out on schedule so that the TC can achieve the objectives of its activities. Any delay in the formulation of the loan project will also delay the implementation of the TC. Therefore, the project team will engage in risk mitigation through close coordination and dialogue with the CBL and the GoBL to ensure that the implementation of the loan project is on schedule.

- 6.2 On the other hand, the non-delay in TC implementation is also a prerequisite for the on-time formulation of loan project BL-L1042. In this sense, the IDB will be responsible for the implementation of this project to mitigate this risk.

VII. Exceptions to Bank policy

- 7.1 None.

VIII. Environmental and Social Strategy

- 8.1 This TC will not finance feasibility or pre-feasibility studies of investment projects or associated environmental and social studies, for which it does not have applicable requirements of the Bank's Environmental and Social Policy Framework (MPAS).

Required Annexes:

[Request from the Client - BL-T1149](#)

[Results Matrix - BL-T1149](#)

[Terms of Reference - BL-T1149](#)

[Procurement Plan - BL-T1149](#)