

TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	BELIZE/CID - Isthmus & DR
▪ TC Name:	Improving Sustainable Production in the Belize Shrimp Cluster
▪ TC Number:	BL-T1113
▪ Team Leader/Members:	ALLENG, GERARD P. (CSD/CCS) Team Leader; VALERO FREITAG, SARA (CSD/CCS); ANGEL GOMEZ, ANGELO EDUARDO (CSD/CCS); FRANKLYN, RUSSELL LEVON (IFD/CTI); GOMEZ, JUAN CARLOS (CSD/CSD); BERTRAND, ANNIE (IFD/CTI); DRAKES, LISA (IFD/CTI); LINDSAY, COURTNEY OLIVER (IFD/CTI); GRANT, KAYLA SHAREE (IFD/CTI); PINELO LEE, MARILYN SUZETTE; SANMARTIN BAEZ, ALVARO LUIS (LEG/SGO); BRIANZA G, LIDIA M (LEG/SGO); LE POMMELLE, MARION (CSD/RND); COLEMAN, ROBIN ANGELA (CSD/RND)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	03 Aug 2018
▪ Beneficiary:	Belize
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	\$ 400,000.00
▪ Local counterpart funding:	\$ 72,000.00 (Cash); \$ 71,000.00 (In Kind)
▪ Disbursement period:	36 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	Climate Change
▪ Unit of Disbursement Responsibility:	Climate Chng & Sustainable Dev
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality ; Productivity and innovation ; Environmental sustainability

II. Objective and Justification

- 2.1 To improve the performance predictability of shrimp production through strengthened biosecurity that reduces disease risks and impacts, leading to increased exports earnings and job opportunities for rural communities in southern Belize by designing and implementing a Biosecurity Aquaculture Zone Management Plan (BAZMP).
- 2.2 After acquiring Aquaculture Standard Certification for the production of shrimp, Belize successfully opened new premium export markets in Europe. Sales reached a historic peak of US\$45 million in 2014, which represented 5.6% of the country's total GDP in 2014. However, in 2015 shrimp production was severely affected by an Early Mortality Syndrome (EMS) outbreak, reducing production by 41% with respect to 2014, resulting in significant declines in income, employment and foreign exchange earnings. The industry has continued to struggle to reach 2014 production, income, export and employment levels. There is a need to improve the shrimp cluster's biosecurity capabilities and infrastructure. Under a previous Compete Caribbean Partnership Facility-funded (CCPF) project - Phase 1 of the program, participant farms within the Belize Shrimp Growers Association (BSGA) – collaborated to implement better management practices to comply with the social and environmental standards of the Aquaculture Stewardship Council (ASC). They have acknowledged that outbreaks of diseases, access to new improved genetic material to improve shrimp production,

access to trained staff and access to the service industry are the main factors affecting growth of the sector. This TC will support these efforts, by designing and implementing a BAZMP.

Biosecurity challenges amidst climate change impacts such as changes in air temperature, sea level rise and changes in precipitation (increase in drought conditions or flood events) can negatively affect conditions within the biosecurity zone. These impacts can lead to an increase in the range of pests and pathogens, intensities of their occurrence and vulnerabilities of farmed animals to diseases. Diseases outbreaks may be triggered by changes in water temperature, acidification or precipitation patterns, that could increase or decrease the salinity in water bodies used by shrimp growers. This may result in increases of nutrient, bacteria and pathogen concentrations in coastal waters. This TC is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008) as it is strategically aligned with the development challenges of productivity and innovation and specifically addresses the special needs of small and vulnerable countries in fostering development through the private sector. The project is aligned with the Belize country strategy in its aim to “foster export-led growth and greater trade integration”. The project is aligned with the priorities defined in the Innovation, Science and Technology Sector Framework Document (GN-2791-3). The project is also aligned with the priorities of the “Proposal for the Establishment of the Compete Caribbean Partnership Facility” (GN-2851) and the cross-cutting theme of environmental sustainability.

III. Description of Activities and Outputs

- 3.1 Component 1: Design and implement a Biosecurity Aquaculture Zone Management Plan (BAZMP). This activity will undertake a biosecurity risk assessment to identify disease risks and gaps in biosecurity measures; and to develop the BAZMP and adapt to Belize shrimp production biosecurity needs. Component 2: Design and implement a surveillance and monitoring system to prevent shrimp disease outbreaks. This will include (i) establish and improve surveillance programs of shrimp health and production information and develop capacity for epidemiological analysis of data; (ii) develop a standardized and systematic data collection system to be used among cluster members, including establishment of sampling protocols and training of key personnel; (iii) develop an online database connecting pond conditions and the prevalence of pathogens, and an early warning system; (iv) hire and train an epidemiologist to maintain and improve the disease surveillance program; (v) develop an early warning and emergency response program based on new pathogens potentially affecting the industry in the future. Component 3: Establishment of a Capacity Building Program for Cluster members.
- 3.2 **Component I: Design and implementation of a Biosecurity Aquaculture Zone Management Plan (BAZMP).** This component will identify disease risks and gaps in biosecurity measures.
- 3.3 **Component II: Design and implementation of a surveillance and monitoring system to prevent shrimp disease outbreaks.** This component will focus on improving surveillance programs and develop capacity for epidemiological analysis of data; a standardized and systematic data collection system; an online database connecting pond conditions and an early warning system.
- 3.4 **Component III: Establishment of a Capacity Building Program for Cluster members.** This component will analyze new technologies and best practices to provide training in biosecurity protocols and standards.

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Design and implementation of a Biosecurity Aquaculture Zone Management Plan (BAZMP)	\$ 205,000.00	\$ 82,000.00	\$ 287,000.00
Design and implementation of a surveillance and monitoring system to prevent shrimp disease outbreaks	\$ 160,000.00	\$ 51,000.00	\$ 211,000.00
Establishment of a Capacity Building Program for Cluster members	\$ 35,000.00	\$ 10,000.00	\$ 45,000.00

V. Executing Agency and Execution Structure

- 5.1 Executing Agency: Inter-American Development Bank. The execution and disbursement period will be 36 months and the UDR will be CCS. The procurement of individual consulting services will be carried out by the IDB in accordance with Human Resources (HRD) Complementary Workforce Policy (AM-650). The procurement of consulting firms will be carried out by the IDB in accordance with the Policy for the Section and Contracting of Consulting Firms for Bank-executed Operational Work (GN-2765-1). The procurement of consulting services different from consultants will be carried out by IDB in accordance with Corporate Procurement Policy (GN-2303-20)
- 5.2 The Compete Caribbean Partnership Facility (CCPF), approved under GN-2851, was jointly designed with donors to be a Bank Executed Program, through the CCPF's Facility Coordination Unit (FCU) established in COF Barbados. The FCU has strong experience in design and implementation of cluster capacity building projects. The Bank has demonstrated its ability to coordinate and motivate action across diverse stakeholders at both the national and regional levels. The execution of this TC will be carried out by the Bank through Climate Change and Sustainable Development (CSD/CCS) in coordination with FCU. Project output indicators will be monitored following the Monitoring and Evaluation (M&E) framework of the CCPF. The IDB and the CCPF will work in close collaboration with relevant partners such as the regulatory agency - Belize Agricultural Health Authority (BAHA) and the Development Finance Corporation (DFC).

VI. Project Risks and Issues

- 6.1 A key risk to the project is that standards, online database systems, data collection systems and monitoring systems that require voluntary cooperation of farmers may not be sustained and used beyond the project. However, this sustainability risk is considered to be low given the vested interest of the BSGA members in improving the cluster and the productivity of the shrimp industry and their willingness to provide the necessary data for the program. Regarding disease outbreaks, creating standards and consistency among cluster actors will be key towards recovery from the EMS outbreak and to mitigate risks associated with potential future disease outbreaks

VII. Environmental and Social Classification

- 7.1 The ESG classification for this operation is "C".