



## BZ Marine Conservation and Climate Adaptation (P131408)

LATIN AMERICA AND CARIBBEAN | Belize | Environment & Natural Resources Global Practice |  
 Recipient Executed Activities | Investment Project Financing | FY 2015 | Seq No: 3 | ARCHIVED on 06-Jul-2016 | ISR24155 |

Implementing Agencies: BZ PROTECTED AREAS -PACT, Ministry of Forestry, Fisheries and Sustainable Development

## Key Dates

## Key Project Dates

Bank Approval Date:03-Mar-2015

Effectiveness Date:15-Jul-2015

Planned Mid Term Review Date:25-Sep-2017

Actual Mid-Term Review Date:--

Original Closing Date:31-Mar-2020

Revised Closing Date:31-Mar-2020

## Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The objective of the proposed Project is to implement priority ecosystem-based marine conservation and climate adaptation measures to strengthen the climate resilience of the Belize Barrier Reef System.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

## Components

Name

Component 1. Improving the Protection Regime of Marine and Coastal Ecosystems:(Cost \$2.00 M)

Component 2. Promotion of Viable Alternative Livelihoods:(Cost \$2.45 M)

Component 3. Raising Awareness and Building Local Capacity:(Cost \$0.56 M)

Component 4. Project Management, Monitoring and Assessment:(Cost \$0.52 M)

## Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Satisfactory
Overall Implementation Progress (IP)	● Satisfactory	● Satisfactory
Overall Risk Rating	● Moderate	● Moderate



## Implementation Status and Key Decisions

Progress and highlights of project implementation during the first year are given below:

### **--Component 1:**

*-Spatially map and analyze target MPAs for realignment or expansion:* A series of consultations with reserve managers, fishers and key stakeholders were successfully held to discuss MPA expansion and Replenishment Zone. The meetings were conducted in the northern communities (Corozal, Sarteneja, Copper Bank, and Chunox), Belize City, December 1-4, 2015, and southern communities (Dangriga, Hopkins, Placencia, Seine Bight) on January 12-15, 2016, to discuss MPA expansion and replenishment zones for CBWS, TAMR, and SWCMR. Over 190 fishers, NGO community, Co-managers participated in the first round of consultation. Second round of consultations (April 19, 2016 at the Coastal Zone Conference Room, Belize City) completed with Regulatory agencies, Co-managers, and NGOs. The consultations allowed the Fisheries Department to incorporate all major stakeholders' perspectives in the maps.

*-Strengthening surveillance, monitoring and enforcement in the three MPAs:* This component has increased patrols in TAMR, CBWS, SWCMR by purchasing and repairing patrol vessels; providing fuel, accommodation and transportation for enforcement officers; and purchasing the necessary equipment for the roll out of the SMART enforcement system. A joint patrol was established for the Corozal Bay Wildlife Sanctuary between Sarteneja Alliance for Conservation and development, Fisheries Department, Forest Department, Coast Guard, and Customs Department. Two joint patrol meetings were held on January 27, 2016 and March 9, 2016 in Belize City to discuss agencies roles and responsibilities and reporting procedures. Members of the Corozal Bay Wildlife Sanctuary joint enforcement team include Fisheries Department, Sarteneja Alliance for Conservation and Development, Forest Department, Hol Chan Marine Reserve, and the Belize Coast Guard. A formalized joint patrol for Turneffe Atoll Marine Reserve is being planned; the first meeting will be held on June 7, 2016. The project conducted a 5 days training, January 31 – February 6, 2016 at Calabash Caye, Turneffe with 21 participants from Coast Guard, Fisheries Department Marine Reserve and Conservation Compliance Unit, and Co-managers (Belize Audubon Society, Turneffe Atoll Sustainability Association, Southern Environmental Association) in fisheries enforcement, prosecution, small craft handling, engine maintenance, and Spatial Monitoring and Reporting Tool (SMART) a new enforcement software. A Draft Comprehensive Enforcement Training Manual was developed as a training guide for Enforcement Officers, and will be circulated to the various partner/agencies. MCCAP sponsored one-on-one training with organizations to ensure officers working with co-managers receive further enforcement support. The first such mentoring was done in the Corozal Bay Wildlife Sanctuary with Rangers from the Sarteneja Alliance for Conservation and Development and Coast Guard on 16-18 February 2016 and 4-8 May 2016.

*-Biological and water quality monitoring of strategic and control sites:* MCCAP supported biological data collection activities at SWCMR to conduct fishery independent study of lobster catch rates of traps in replenishment zones and fishing area. The data will complement fishery depend activities where fishers will be given log-books and fish ID guide to record catch and effort data.

*-CZMAI Water Quality Monitoring (WQM) Program:* MCCAP developed a Water Quality Monitoring (WQM) protocol which will be discussed with other relevant agencies. The activities undertaken were: purchase of a vehicle, a 30 ft vessel with engines and trailer, and purchase of laboratory equipment for WQM Program. A Boat Captain/Water quality Assistant and a Laboratory Technician were hired. Training of Boat Captain and Lab Technician was held on 24-27 May 2016 on field data collection with Sarteneja Alliance for Conservation and Development (SACD) in the Corozal Bay Wildlife Sanctuary. The CZMAI Officers spent 3 days with SACD staff to calibrate their new Sonde equipments and practice collecting samples for WQM.

*-Aerial survey of seascape and landscape for Ambergris Caye, Central and Caye Caulker* was conducted. The purpose of the inventory was to establish a spatial and temporal baseline for human use of coastal and marine resources in tandem with the implementation of the Belize Integrated Coastal Zone Management (ICZM) Plan. The MCCAP Project will equip CZMAI with tools that will assist in compilation and analysis to track health of the coastal systems and the strengthening of coastal outreach. The inventory will serve as an important tool for monitoring and assessing compliance with the ICZM Plan, and establishing a baseline aerial survey of seascape and landscape database for Ambergris Caye, Central and Caye Caulker. 1,575 geo-referenced aerial photographs were received, and currently in the process of digitizing aerial imagery to assess % change in human use activities with Ambergris Caye, Central and Caye Caulker.

-Several Terms of Reference were approved by the Bank, TAC and PSC; and the procurement process is ongoing for re-population of coral reefs, revision of the mangrove regulations and the Belize Coastal Zone Management Act and Regulation.

### **--Component 2:**

-The Project held 22 project consultation meetings during the first year of implementation to introduce MCCAP and discuss viable alternative livelihood activities. Consultations took place with the following communities: Corozal, Sarteneja, Chunox, Belize City, Dangriga Town, Hopkins, Riversdale, Seine Bight and Placencia. The PIU also organized meetings with the Agriculture Department and the Ministry of Tourism to develop agriculture and tourism-based alternative livelihood projects. A vocational training needs assessment was conducted in the northern communities on 24-26 May 2016 with 154 participants. A total of 10 community groups submitted concept note/project profiles for review by the TAC and PSC. The concepts are being reviewed for action. The project organized a sustainable livelihoods forum on 21 January 2016, a meeting with 14 organizations responsible for implementing sustainable livelihoods project to discuss the success rates of their development/ intervention program and share lessons learnt. The forum provided MCCAP the opportunity to review its program and apply recommendations.

### **--Component 3:**

- Belize Environmental Technologies (BET) was contracted to conduct a Knowledge, Attitude, and Behaviour Practice Survey. BET engaged with key stakeholders working in the target communities. The first deliverable (inception report) outlining the methodology was submitted and approved by the TAC and PSC. They employed a combination of quantitative and qualitative techniques to undertake the survey. The KAP survey has 3 main elements: (1) a probability sample of household representatives at the village/community level based on the 2010 Household and Population Census. A total of 2,100 households were sampled. (2) A probability sample of 10% random sample of registered fisher-folks based on the Fisheries Department 2015 Database of fishers. (3) a purposeful sample of key policy actors in the fisheries sector (regulators, managers and co-managers of MPAs) was invited to participate in an online component of the survey. The Second deliverable (Survey Instrument) was completed, approved and piloted. A stakeholder meeting was convened on 27 November 2015 to validate and finalize the survey instrument with over 20 participants. Training of surveyors was



completed and data collection and entry has been completed. The survey was conducted and the data entered and analysed. The draft KAP survey report was validated at a stakeholder workshop on 8 April 2016 with 23 participants including members of the MCCAP Technical Advisory Committee. The consultants noted the poor response rate of Policy Actors using the web-based instrument. The PIAG increased efforts to have Regulatory Agencies and Co-managers complete the online survey. Overall response rate for community households was 77.3%, fishers 74.2%, and Policy Actors 41.8%. The final report was approved by the TAC and the PSC.

Draft TOR to 1) to develop a communication, education and public awareness strategy and 2) to develop Project monitoring and evaluation system were approved by the TAC, and will be presented at the next PSC meeting. To improve the image of the Project a branding exercise was undertaken and completed. The Fisheries Department website up and running, [www.fisheries.gov.bz/](http://www.fisheries.gov.bz/), with a dedicated space to upload MCCAP information. MCCAP will partner with the Caribbean Community Climate Change Centre and the National Climate Change Office to develop a training curriculum for community members, targeted government organization (Fisheries Department, Forest Department, CZMAI), and teachers involved in MCCAP supported climate change clubs in schools.

**Risks**

**Systematic Operations Risk-rating Tool**

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● Moderate	● Moderate



Macroeconomic	--	● Moderate	● Moderate
Sector Strategies and Policies	--	● Moderate	● Moderate
Technical Design of Project or Program	--	● Moderate	● Moderate
Institutional Capacity for Implementation and Sustainability	--	● Moderate	● Moderate
Fiduciary	--	● Moderate	● Moderate
Environment and Social	--	● Moderate	● Moderate
Stakeholders	--	● Moderate	● Moderate
Other	--	● Moderate	● Moderate
Overall	--	● Moderate	● Moderate

## Results

### Project Development Objective Indicators

#### ► Marine areas brought under biodiversity protection (ha) (Hectare(Ha), Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	248810.00	--	248810.00	386612.00
Date	10-Nov-2014	--	10-Jun-2016	31-Jan-2020

#### ▲ Replenishment Zones (no take) brought under biodiversity protection (Hectare(Ha), Custom Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	38278.00	38278.00	38278.00	59331.00

#### ► Coastline and freshwater under biodiversity protection (km) (Kilometers, Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	386.00
Date	10-Nov-2014	22-Dec-2015	22-Dec-2015	31-Jan-2020



► Direct project beneficiaries (Number, Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2500.00
Date	10-Nov-2014	22-Dec-2015	10-Jun-2016	31-Jan-2020

▲ Female beneficiaries (Percentage, Core Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	30.00

► Change of attitude and/or behavior of targeted beneficiaries (%) (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	75.00
Date	10-Nov-2014	22-Dec-2015	10-Jun-2016	31-Jan-2020

Overall Comments

Intermediate Results Indicators

► 1.1 (a) The target MPA (TAMR) are effectively managed as recorded by the Management Effectiveness Tracking Tool (METT) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.50
Date	10-Nov-2014	22-Dec-2015	10-Jun-2016	31-Jan-2020



▲ 1.1 (b) The target MPA (CBWS) are effectively managed as recorded by the Management Effectiveness Tracking Tool (METT) (Number, Custom Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	2.16	2.16	2.16	3.50

▲ 1.1 (c) The target MPA (SWCMR) are effectively managed as recorded by the Management Effectiveness Tracking Tool (METT) (Number, Custom Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	2.65	2.65	2.65	3.50

▶ 1.2 At least 3 restored coral sites, with resilient varieties grown in coral nurseries, within TAMR and SWCMR (with each site measuring 300 m2); (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	6.00
Date	10-Nov-2014	--	10-Jun-2016	31-Jan-2020

▶ 1.3 Coastal developments adhering to the development guidelines set by the ICZM Plan (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	75.00
Date	10-Nov-2014	--	10-Jun-2016	31-Jan-2020



▶ 2.1 Alternative livelihoods Sub-projects developed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	20.00
Date	10-Nov-2014	--	10-Jun-2016	31-Jan-2020

▶ 2.2 (a) Persons participating in training based on training needs assessment and % of trainees are women; (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	21.00	2000.00
Date	10-Nov-2014	--	16-Jun-2016	31-Jan-2020

▶ 2.2 (b) % of trainees are women (Percentage, Custom Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	5.00	30.00

▶ 3.1 Behavior change communication (BCC) campaigns conducted at all the target fishing communities (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	12.00
Date	10-Nov-2014	--	10-Jun-2016	31-Jan-2020

Overall Comments

## Data on Financial Performance



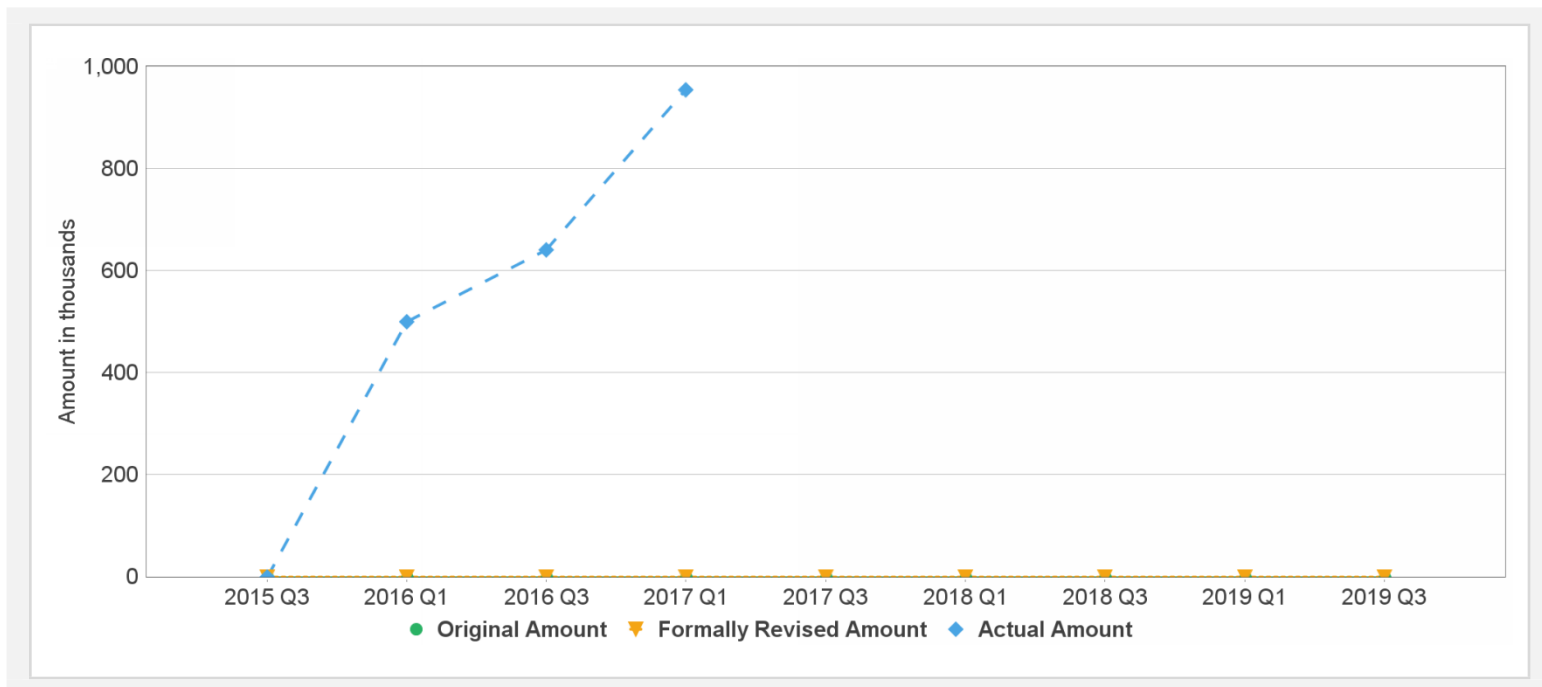
**Disbursements (by loan)**

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disbursed
P131408	TF-18449	Effective	USD	5.53	5.53	0.00	0.95	4.58	17%

**Key Dates (by loan)**

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P131408	TF-18449	Effective	03-Mar-2015	03-Jun-2015	15-Jul-2015	31-Mar-2020	31-Mar-2020

**Cumulative Disbursements**



**Restructuring History**

There has been no restructuring to date.

**Related Project(s)**

There are no related projects.



