

## TC ABSTRACT

### I. Basic project data

▪ Country and region:	Belize/CID
▪ TC name:	Project Preparation Studies for the Rehabilitation of the Caracol Road
▪ TC Number:	BL-T1072
▪ Team leader and members:	Amado Crotte, Team Leader (TSP/CME); Sergio Deambrosi , Alejandro Taddia, Jacob Veverka, Raúl Rodríguez and Caterina Vecco (INE/TSP); Christopher Persaud (TSP/CSU); Michele Lemay (INE/RND); Sybille Nueninghoff (RND/CBL); Cassandra Rogers (RND/CBA); Andrés Suárez (FMP/CCR); Vanessa Lynch (CID/CBL); John Primo (FMP/CBL) and Taos Aliouat (LEG/SGO)
▪ Taxonomy:	Client support and operational support
▪ Number and name of Operation Supported by the TC:	BL-L1022 Caracol Road Rehabilitation
▪ Reference to request: (IDB docs #)	Programming Memo 2015 attached
▪ Date of TC Abstract:	April 11 <sup>th</sup> , 2015
▪ Beneficiary:	Ministry of Works and Transport Ministry of Tourism, Culture and Civil Aviation Ministry of Forestry, Fisheries and Sustainable Development
▪ Executing Agency and contact name	Government of Belize through the Ministry of Works and Transport
▪ IDB funding requested:	US\$690,000 (US\$300,000 BIO Program; US\$390,000 to be determined)
▪ Local counterpart funding:	US\$10,000
▪ Disbursement period:	18 months disbursement (15 months execution)
▪ Required start date:	May 2015
▪ Types of consultants:	Firm and individual consultants
▪ Prepared by Unit:	TSP/CME
▪ Unit of disbursement responsibility:	CID/CBL
▪ Included in Country Strategy:	Yes
▪ TC included in CPD:	Yes
▪ GCI-9 Sector Priority:	a) Support Climate Change initiatives and environmental sustainability, b) Support to small and vulnerable countries

### II. Objective and Justification

- 2.1 **Background.** According to the world tourism and travel council, tourism and travel is the most important economic sector in Belize, as it directly contributed with 13.5% of GDP in 2013, and including indirect and induced effects it represented 36.6% of GDP<sup>1</sup>.
- 2.2 However, Belize's high developmental potential, particularly in its headline sectors of tourism and agriculture, is not being realized, attributed in part to limitations in the country's transport system.<sup>2</sup>

<sup>1</sup> Belize Economic Impact 2014, World Travel and Tourism Council.

The tourism sector, for instance, has had its growth impeded significantly due to the lack of access (or poor access) to key tourism attractions. Similarly, the agricultural sector must assume high costs to move goods due to substandard roads.<sup>3</sup>

- 2.3 In addition, Belize is classified to be within the hurricane belt, with tropical storms and hurricanes affecting the country once every three years, which makes infrastructure investments in transport relatively expensive.<sup>4</sup>
- 2.4 The Caracol Archeological Reserve, the largest known Maya archeological complex in Belize, along with other attractions such as the Mountain Pine Ridge and the Chiquibul Forest Reserve, are part of a tri national bioregion forming the largest remaining contiguous block of tropical broadleaf forest north of the amazon. These assets, which attribute the area with a tourism potential which until now has not been developed<sup>5</sup>, can only be accessed through the caracol road. The 80 km road connects the western highway (George Price Highway) with the archeological site. It is a Y shaped road that links caracol with the towns of San Ignacio and Santa Elena, on the left arm, and Georgeville, on the right arm. The left and right arms are 20 km and 14 km long, respectively. There is some commercial activity (agriculture and tourism) on both arms of the road, where some sections are paved but in a bad condition. The rest of the road is winding and mostly unpaved, with over 20 small bridges that need maintenance and some of them need to be fully replaced.
- 2.5 **Objective.** This Technical Cooperation (TC) is intended to support the development of technical and economic feasibility studies, as well as the needed environmental and social assessment for the preparation of the operation. Through this technical input, the Bank will be able to establish the physical scope of the program, prioritize investments, and determine project costs and benefits to substantiate the investments.
- 2.6 **Justification.** The Belize Government has acknowledged that the tourism and agricultural sectors in the Chiquibul-Caracol Complex would benefit from updating the caracol road. During the last portfolio review of 2014 and the 2015 portfolio programming, the Government of Belize requested assistance for a TC aimed at providing client and operational support to conduct the necessary studies to rehabilitate the road.
- 2.7 The objective of the operation is to support Belize's tourism sector's competitiveness, in a socially and environmentally sustainable manner. The rehabilitation of the caracol road aims to: (i) promote economic growth by reducing transport costs for agricultural and timber production; (ii) improve access to the archeological site and other tourism attractions located along the transport corridor; and (iii) contribute to the maintenance of ecosystem services associated with the road, including biodiversity, climate change mitigation and adaptation and disaster risk reduction.
- 2.8 **Corporate alignment.** This TC is aligned with the objectives of the Ninth General Capital Increase (GCI-9) as the results will have co-benefits in mitigating the effects of climate change and natural disasters, promoting environmental sustainability, and will support the development of infrastructure for competitiveness and social welfare. Similarly, the TC is aligned with the Belize Country Strategy 2013 – 2017 (GN-2805) as it contributes directly to the results of "Transport" one

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<sup>2</sup> Belize national sustainable development report: energy and transport represent the highest costs of industrial and agricultural production.

<sup>3</sup> National sustainable tourism master plan.

<sup>4</sup> Belize national meteorological service.

<sup>5</sup> A Sustainable Tourism Program II (BL-L1020) currently under preparation encompasses the mountain pine ridge, chiquibul and caracol complex as one of the target destinations for investments.

of the strategy's four priority areas. It also contributes to tourism (in which access is a constraint); and trade (by examining transport infrastructure needs for trade).

### III. Description of activities and outputs

- 3.1 This TC will support the preparation of the studies required to assess the best alternative for the rehabilitation of the caracol road, which include environmental, social, technical and economic feasibility studies.
- 3.2 **Component 1. Technical study.** The study will develop: (i) technical alternatives (possible types and quality of the infrastructure) for two scenarios, a low traffic scenario with light vehicles for tourism purposes, and a higher specifications road for freight traffic, primarily for transportation of timber. The studies will assess the implications of the two scenarios in terms of ecosystem services, risk of illegal deforestation, climate adaptation and risk reduction; (ii) analysis of short, medium and long term interventions; and (iii) analysis to prioritize interventions (road sections, bridges/sewage system) considering environmental, social, technical and economic factors. Upon selection of the preferred alternative, the study will also include a traffic and road safety analysis, preliminary geometric study and design, structure analysis and identification. The study will also identify design features to protect the tropical broadleaf forest from illegal logging and overall from negative environmental impacts, as well as alternatives aimed at promoting ecosystem services such as protection of biodiversity.
- 3.3 **Component 2. Economic studies.** A market study with a focus on sustainability will determine the size and value of the agriculture, timber and tourism markets in the Chiquibul-Caracol Complex. The study will assess the current and future transportation and market demands. A key element of the market study will include consultation and stakeholder engagement processes with relevant parties from the agricultural, timber and tourism sectors. An economic feasibility study will also be developed, with a preliminary assessment of costs and benefits, including where feasible ecosystem services changes from the baseline scenario, expected from all scenarios analyzed in Component 1. The studies will entail modeling/forecasting to determine the level of economic output and rate of return from the investment of all scenarios.
- 3.4 **Component 3. Social and environmental studies.** This activity includes the necessary studies to provide the information to assess each alternative in terms of its environmental and social impacts. The studies will include the generation and analysis of social and environmental issues<sup>6</sup> baseline information, including biodiversity, hydrological and geological characteristics, soil quality, land use, climate, natural hazards, etc. The study will also identify and assess direct, indirect and cumulative social and environmental impacts and risks of the proposed alternatives, including natural disasters and climate change risk and the type of control, mitigations and compensation measures as well as the institutional arrangements, if any, to guarantee its successful implementation. Given the attributes of the forest, all of which has some form of national protection (either forest reserve or national park or archeological reserve), the studies will focus on the potential impacts on these habitat. The study will include a comprehensive action identifying the necessary mitigation measures required to control and prevent negative impacts, particularly the degradation or significant conversion of the forest and the protection of cultural sites, either directly or indirectly as a result of the enhancement of the road. The study will also include a strategy for the strengthening of institutions and other agencies involved in any capacity in the implementation of the action plan and a communication, participation and stakeholder engagement program.

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<sup>6</sup> A spatial characterization of the area has been undertaken as part of BL-L1020.

**IV. Budget**

4.1 The total estimated cost of the TC is US\$610,000. A breakdown of the indicative budget is shown below:

**Table 1. Indicative Budget (in US\$)**

Activity/Component	Description	IDB/Fund Funding	BIO	Counterpart Funding	Total Funding
<b>Component 1.</b> Technical study	Preliminary engineering designs and costing	75,000	100,000		175,000
<b>Component 2.</b> Economic Studies	Market and economic feasibility studies	75,000	75,000		150,000
<b>Component 3.</b> Social and environmental studies	Scoping, and environmental and social impact assessment	165,000	75,000		240,000
Technical supervision and evaluation	Experts for technical supervision and evaluation of the TC	75,000	50,000	10,000	135,000
<b>TOTAL</b>		<b>390,000</b>	<b>300,000</b>	<b>10,000</b>	<b>700,000</b>

**V. Executing agency and execution structure**

5.1 The executing agency will be the Ministry of Works and Transport (MWOt). The MWOt has successfully executed TCs and loans in the past and is currently executing two loans and two TCs. INE/TSP and INE/RND will be actively involved in the technical review and acceptance of all terms of references for the studies and the products of the consultancies.

**VI. Project risks and issues**

6.1 Although data on tourist demand is available for the caracol archaeological site, there is a lack of official data regarding transport demand for the road (number and type of vehicles) as well as transport operation and maintenance costs. Therefore, there is a risk that the studies base their results on incorrect estimations. To mitigate this, all relevant stakeholders will be included in the consultation process in order to collect the largest amount of reliable data.

**VII. Environmental and social classification**

7.1 Being focused on the preparation of feasibility studies and assessments, this technical cooperation has no social or environmental impacts. Such feasibility studies and assessments will identify the potential positive and negative impacts associated with the execution of the specific works to be financed, which in turn, will allow for timely and appropriate formulation of mitigation strategies (Safeguard Policy Filter Report and Safeguard Screening Form Report).

**Concurrence:**

V.P.  
EDR



Néstor Roa  
Transport Division Chief

04/24/2015  
Date