

**FEASIBILITY STUDIES FOR A RISK-RESILIENT COASTAL ZONE
MANAGEMENT PROGRAM**

TT-T1038

CERTIFICATION

I hereby certify that this operation was approved for financing under the Disaster Prevention Fund (FDP), through a communication dated on April 23, 2013 signed by Jane de Souza Silva (ORP/GCM). Also, I certify that resources from the Disaster Prevention Fund (FDP) are available for up to US\$500,000 in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

Original Signed

Sonia M. Rivera
Chief
Grants and Co-Financing Management Unit
ORP/GCM

August 15, 2013

Date

APPROVAL

Approved Original Signed

Héctor R. Malarin
Division Chief
Environment, Rural Development Disaster Risk
Management Division
INE/RND

August 15, 2013

Date

TC Document

I. Basic Information for TC

▪ Country/Region:	Trinidad and Tobago
▪ TC Name:	Feasibility studies for a risk-resilient coastal zone management program
▪ TC Number:	TT-T1038
▪ Associated Loan/Guarantee Name:	Discussion of a loan supported by the findings of this TC have begun. However the programming mission for 2014 is pending and no numbers have been assigned.
▪ Team Leader/Members:	Team Leader: Michele Lemay (INE/RND); Alternate Team Leader: Cassandra Rogers; Members: Maria Claudia Perazza, Duncan Gromko, Elizabeth Chavez (INE/RND); Gerard Alleng (INE/CCS); Shirley Gayle (FMP/CTT); Gregory Dunbar (FMP/CTT); Dale James (CCB/CTT); and Guillermo Eschoyez (LEG/SGO)
▪ Date of TC Abstract authorization:	April 23, 2013
▪ Beneficiary:	Republic of Trinidad and Tobago
▪ Executing Agency and contact name	Executing Agencies: Ministry of Planning and Sustainable Development of Trinidad and Tobago for component 1 and, for component 2, the Inter-American Development Bank
▪ Donors providing funds	Disaster Prevention Fund (FDP)
▪ IDB Funding Requested:	US\$500,000
▪ Local counterpart funding, if any:	US\$160,000
▪ Disbursement period	20 months
▪ Execution period	18 months
▪ Required start date:	August 2013
▪ Types of consultants (firm or individual consultants):	Firm and individual consultants
▪ Prepared by Unit:	INE/RND
▪ Unit of Disbursement Responsibility:	INE/RND
▪ TC Included in Country Strategy (y/n):	N
▪ TC included in CPD (y/n):	Y
▪ GCI-9 Sector Priority:	(i) Supporting development in small and vulnerable countries; and (ii) climate change and environmental sustainability

II. Objectives and Justification of the TC

The general objective of the TC is to strengthen the policy framework and local capacity for risk-resilient Integrated Coastal Zone Management (ICZM) in Trinidad and Tobago, with a view towards making future investments in the sustainable development and management of the country's coastal zone. The specific objectives are to: (i) support the on-going development of an ICZM policy framework as mandated by Cabinet; (ii) build the foundational capacity for developing and implementing an investment

program; and (iii) provide designs and feasibility analyses for the investment program for consideration for Bank financing. The investment program to be designed through the TC would be aimed at optimizing the contribution of the coastal zone to national sustainable economic development and building resilience to coastal hazards including those associated with climate change through ICZM.

Extending over 700 km and encompassing a variety of regionally significant ecosystems such as one of the largest freshwater wetlands in the Caribbean, mangroves, extensive beaches and coral reefs, the coastal zone of Trinidad and Tobago is a key asset for the national economy. It harbors much of the islands' critical infrastructure in the energy, tourism and fisheries sectors, including industrial complexes, refineries and ports, fish processing plants and tourism resorts. Coastal ecosystems themselves provide goods and services that are also vital to these sectors, including for example the provision of nursery habitat for fish stocks, buffering public infrastructure and coastal populations from coastal erosion and flooding, and supporting tourism and recreation. The Government of Trinidad and Tobago (GOTT) has recognized that future growth and diversification of the economy depend on the maintenance of these ecosystem services and on enhancing the resilience of economic activities to coastal risks associated with natural and anthropogenic hazards such as erosion, flooding and oil spills and climate change, as well as threats to biodiversity such as deforestation.¹

In discussions with the Bank in preparing this TC, the Tobago House of Assembly (THA) has also emphasized the specific relevance of Tobago's coast, given that tourism is the main income earner for the island and is largely dependent on coastal tourism. In addition, Tobago is highly susceptible to both geologic and climatic hazards (earthquakes, landslides and the impacts of sea level rise); 70% to 80% of the island's population and 80% of the hotels are at risk as they are located on the coast; and the coastal zone is also important to the social and recreational well-being of Tobagonians. Since the entire island falls within the coastal zone, ICZM in Tobago needs to adopt a holistic "ridge to reef" approach to managing the coast, whereby decisions regarding the health of coastal ecosystems including reefs are directly linked to land-based processes, such as rapid river transport of sediment derived from deforested slopes in upper watersheds and local landslides.

Recognizing the strategic importance of the country's coastal zone to economic development, the GOTT has made several recent advances aimed at incorporating resilience to geologic and climatic hazards in ICZM. These advances include, for example, the on-going work of the National Steering Committee on ICZM which was created in April 2012 and mandated by Cabinet to recommend a national policy framework, strategy and action plan that would build the foundation for a permanent coastal zone management function in the country. Represented on the Committee are the key GOTT agencies (including the THA) that make policy, manage information, invest in public infrastructure and monitor and assess development in the coastal zone. The Steering Committee has organized its work around five thematic areas (social and economic development; natural resource assessment; vulnerability assessment and climate change adaptation; public outreach, education and awareness; and legal and institutional assessment). Working groups have been tasked to compile the available coastal data, assess gaps and recommend options with a target of submitting a national policy framework in 2014 following public consultations. The proposed TC would support the National Steering Committee and its working groups in conducting the analytical work and consensus-building activities in support of policy formulation while simultaneously building capacity among the network of institutions likely to be involved in implementing the policy and investment program.

In addition to the National Steering Committee on ICZM, the GOTT, under the leadership of the Ministry of Planning and Sustainable Development, has embarked on a comprehensive process for developing a National Spatial Development Strategy that will transform its physical development planning process,

¹ GOTT. 2012. Working for Sustainable Development in Trinidad and Tobago. Progress, Gaps and Opportunities for Action.

bringing about innovative approaches and tools and incorporating emerging issues such as ICZM in the process. There are also important synergies with the GOTT's Medium Term Policy Framework (2011-2014) which identifies five growth poles as centers of future investment to promote economic growth, job creation, competitiveness and innovation. Four of the five growth poles foresee increased investments in coastal activities in both islands (ports, marinas, fishing facilities, hotels, industrial development), which will require sound decisions to ensure the resilience of new infrastructure to coastal risks including those associated with climate change. These recent developments complement several other relevant on-going activities in both Trinidad and Tobago including in coastal and marine research and data collection (e.g., beach profiling), coastal infrastructure and engineering science; and vulnerability assessments that can all contribute to a solid foundation for a permanent ICZM Program. The proposed TC would help consolidate these on-going efforts by filling in the gaps in scientific baseline data and by designing an integrated information platform for coastal risk assessment and management.

In discussions held with the Bank, the National ICZM Steering Committee and the THA have reiterated that coastal protection including the mitigation of beach and cliff instability and coastal flooding is a priority for a future investment program. Recent field assessments have identified priority sites in both Trinidad and Tobago for coastal works for which baseline studies, designs and analyses of their economic, environmental and financial feasibility are required. The proposed TC would support the GOTT in designing and assessing cost-effective, low maintenance coastal stabilization measures as well as associated works to control coastal flooding and improve coastal access based on the best available scientific data.

The technical cooperation is designed to complement several existing operations including:

- (a) 'Piloting the integration of coastal zone management and climate change adaptation in Tobago' (TT-T1034), which is identifying some of the information gaps and collecting data on the effects of climate variability on a coral reef system as one element for the integration of climate change considerations in coastal zone management in Southwest Tobago. It is also supporting the review of the existing legal framework in support of the Thematic Working Group for Legal and Institutional Assessment of the National ICZM Steering Committee. The proposed TC will complement rather than duplicate this site-specific pilot experience by designing scientific baseline studies on a broad cross-section of coastal shoreline types (mangroves, beaches, cliffs, dunes, rocky shores, mudflats) found throughout Trinidad and Tobago and by supporting the other Thematic Working Groups of the ICZM Steering Committee.
- (b) 'Improving the delivery of comprehensive disaster risk management' (TT-T1017), which encompasses the development of a country disaster risk evaluation, including the preparation of hazard and risk maps, a capacity assessment and technical assistance in disaster risk management to OPDM. The proposed TC will complement these activities by assessing in greater depth at priority sites the physical, oceanographic and environmental processes underlying risks and by directing capacity building activities to the entire network of GOTT agencies involved in ICZM.
- (c) 'Understanding the economics of climate adaptation' (TT-T1033), which is expected to provide estimates of the potential economic impacts of climate change in the country and a portfolio of adaptation measures. The proposed TC will build and expand on the portfolio of measures and provide detailed designs and feasibility assessments.

The proposed TC will contribute to the following GCI-9 lending program priority targets: (i) supporting development in small and vulnerable countries (GN-2616-2); and (ii) climate change, sustainable (including renewable) energy, and environmental sustainability (iii) the IDB's Integrated Strategy for

Climate Change Adaptation and Mitigation and Sustainable Renewable Energy (GN-2609-1) and its Action Plan (2012-2015 GN-2609-3), specifically its strategic line to strengthen institutional capacity through the economic assessment of climate change vulnerabilities to the Region and benefits of alternative adaptation measures². The technical cooperation is also aligned with the objectives of the Biodiversity and Ecosystem Services program. The proposed TC is included in the 2013 Trinidad and Tobago Country Programming Document.

III. Description of activities/components and budget

Component 1: Support to Policy Framework and Institutional Sustainability for risk-resilient ICZM. This component will assist the GOTT in establishing a fully-endorsed framework for ICZM and help build the capacity needed to deliver an ICZM investment program. First, experts with experience in ICZM and knowledge of the local context will be contracted to support the National ICZM Steering Committee in assessing information gaps and providing the quantitative justification and rationale for the Policy Framework being developed as part of their mandate. Specific studies will include: (i) assessment of proposed coastal and marine development plans and potential socioeconomic conflicts and synergies³; (ii) economic analysis of the contribution of the coastal zone of both Trinidad and Tobago to the national economy and the sustainable development of potential growth poles; (iii) physical assessment and valuation of ecosystem services including coastal stabilization, flood protection, water quality control, recreational and provisioning services and identification of measures to build ecosystem resilience⁴; (iv) establishment of priorities and an action plan for nation-wide vulnerability and risk assessment⁵. Second, the network of agencies active in ICZM, including the agencies represented in the National ICZM Steering Committee, will receive capacity building in a series of workshops focusing on recent trends in ICZM, including the integration of disaster risk management and climate change adaptation, the mainstreaming of ecosystem services and biodiversity, economic analysis of investment options, science-based coastal engineering (including non-structural measures), and ecosystem-based coastal protection. The design of the training program will be based on a needs assessment. Third, the TC will finance public awareness and consultation activities⁶, including: (i) public consultations for the proposed Policy Framework, tailored to the most appropriate modalities for ensuring meaningful engagement of stakeholders in both Trinidad and Tobago; and (ii) multi-media campaigns aimed at increasing awareness and understanding of coastal risks and the benefits of risk-resilient ICZM.

Component 2: Design and feasibility analysis of risk-resilient ICZM investment program. This component will support the preparation of a risk-resilient ICZM investment program that is consistent with the Policy Framework developed by the National ICZM Steering Committee and international best practice in ICZM in the Caribbean while simultaneously recognizing the unique characteristics of both Trinidad and Tobago's coastal zones. As such the investment loan to be designed through the technical cooperation will combine: (i) sound science on assets, processes and risks in the coastal zone, including those associated with natural disasters and climate change; (ii) an effective governance structure involving key stakeholders; and (iii) investments that address specific relevant issues for sustainable coastal development in Trinidad and Tobago (in this case coastal risks such as shoreline and cliff instability, coastal flooding, sea level rise, conflicts between coastal uses, coastal public access) with innovative approaches.

² <http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36938123>

³ To support the Economic and Social Development Thematic Working Group

⁴ To support the Natural Resources Assessment Thematic Working Group

⁵ To support the Vulnerability and Adaptation to Climate Change Working Group which has recently completed an analysis of the gaps for vulnerability and risk assessment.

⁶ To support the Public Outreach, Awareness and Education Working Group

In order to deliver an investment package, this component will finance the services of an internationally-recognized firm with experience in the design and feasibility analysis of coastal investment programs to work with the GOTT on two sets of activities. First, the firm will prepare the specifications of baseline scientific studies needed for coastal risk assessment and management, including: (i) validation of priority baseline information gaps (e.g., bathymetry, coastal and oceanographic processes, hazards, risks) and how to fill them cost-effectively; (ii) preparation of terms of reference for baseline studies; and (iii) preparation of terms of reference for an integrated national coastal information platform. In addition to the specifications, the firm will be responsible for estimating the costs of the studies. Second, the firm will conduct the feasibility analysis of the investment package, including: (i) validation of coastal infrastructure investment priorities (Trinidad component and Tobago component), to include where appropriate ecosystem-based coastal protection, non-structural and soft-engineering measures; (ii) preparation of engineering and non-structural designs for pilot investments; and (iii) feasibility analysis of investments in accordance with the requirements of the Bank for public sector financing, including socioeconomic, environmental, financial, and institutional feasibility.

Indicative Results Matrix

Project Component	Outputs	Results
General		TC General Outcome: Increased capacity for ICZM that addresses coastal vulnerability including capacity to implement investments that increase coastal resilience.
Component 1: Support to Policy Framework and Institutional Sustainability for risk-resilient ICZM	<u>Output 1A:</u> 4 technical studies providing quantitative justification and rationale for ICZM Policy Framework; <u>Output 1B:</u> Approximately 25-30 staff trained from various government entities in emerging trends in ICZM based on a needs assessment; <u>Output 1C:</u> Surveys of existing public awareness levels; <u>Output 1D:</u> At least 3 public consultations on ICZM Policy Framework <u>Output 1E:</u> At least 2 multi-media campaigns	<u>Outcome 1:</u> Fully-endorsed ICZM Framework tailored to the conditions of both Trinidad and Tobago and capacity to implement an investment program
Component 2: Design and feasibility analysis of risk-resilient ICZM investment program	<u>Output 2A:</u> Terms of reference for scientific baseline studies for coastal risk assessment and management; <u>Output 2B:</u> Terms of reference for the design of an integrated national coastal risk information platform <u>Output 2C:</u> Detailed designs and costs for priority coastal protection works in Trinidad and Tobago <u>Output 2D:</u> Environmental, socioeconomic, financial and institutional feasibility analysis of a public sector loan for consideration for financing	<u>Outcome 2:</u> Economically, socially and environmentally viable investment proposal for risk-resilient ICZM

Indicative Budget

Activity/Component	Description	IDB/Fund Funding	Counterpart Funding (in kind)	Total Funding
Component 1: Support to Policy Framework and Institutional Sustainability for risk-resilient ICZM				
1.1 Policy support and analysis	- 4 technical studies in support of ICZM Policy Framework	80,000	50,000	130,000
1.2 Capacity building for ICZM	- Capacity building needs assessment	5,000	-	5,000
	- Capacity building (workshops) of members of Steering the National ICZM Committee	40,000	30,000	70,000
1.3 Public awareness and consultation	- Public consultation events	10,000	20,000	30,000
	- Multi-media campaigns	30,000	-	30,000
Component 2: Design and feasibility analysis of risk-resilient ICZM investment program				
2.1 Design of baseline studies	- Validation of priorities and preparation of terms of reference for baseline studies and integrated information platform	45,000	30,000	80,000
2.2 Design and feasibility	- Validation of priorities for coastal protection works and preparation of designs	135,000	30,000	170,000
	- Feasibility analysis (socioeconomic, environmental, financial, institutional)	95,000	-	100,000
Project coordination	Project coordinator	45,000	-	45,000
Auditing	Auditing	15,000	-	15,000
Total		500,000	160,000	660,000

The TC will be financed with resources of the Disaster Prevention Fund. IDB resources will finance the services of individual consultants/consulting firms, training workshops, multi-media campaigns (informational videos, educational materials), and logistics and materials for public consultations. Counterpart resources will finance staff time, office equipment, and materials.

CCB/CTT will have responsibility for the execution of this technical cooperation. The monitoring and supervision of this technical cooperation will be carried out by the Bank's Country Office in Barbados (CCB/CBA), under the overall guidance of the team leaders and with the technical support of INE/RND.

IV. Executing agency and execution structure

The Executing Agency for the TC will be the Ministry of Planning and Sustainable Development (MPSD), which is charged with overseeing and directing the policies that guide socio-economic planning and spatial development. It is spearheading the formulation of the National Spatial Development Strategy, promoting a more comprehensive and inclusive approach to spatial planning. The Ministry coordinates will several agencies involved in sustainable development and ICZM, including the Ministry of Works. The Ministry is executing other Bank financed TCs and is a member of the National ICZM Steering Committee, serving as chair of the Social and Economic Development Working Group.

The National ICZM Steering Committee will serve as the Technical Advisory Committee (TAC) for this TC. In that capacity, the National ICZM Committee will provide technical advice in the execution of the studies in Components 1 and 2, validate the needs assessments for capacity building and review and comment on consultants' interim results and draft reports. A project coordinator will be hired by the MPSD with the resources of the TC to liaise with the National ICZM Steering Committee, to finalize terms of reference, coordinate the recruitment of consultants and ensure timely submission of results.

The IDB will execute Component 2 of the TC at the request of the Government of Trinidad and Tobago and will be responsible for the administration of the procurement of the consulting services of that

component. This arrangement is for the following reasons: (i) execution by the Bank will enable access to the Bank's highly specialized expertise in ecosystem services mapping and evaluation, disaster risk management and climate change adaptation, which is critical to the achievement of its objectives. It is expected that capacity in these areas will be developed through the implementation of the proposed TC in advance of the approval of the investment loan; and (ii) to minimize the risk that the TC deliverables that are required to inform the design and appraisal of the investment loan are delayed.

Procurement will be carried out in accordance with the Policies for the Procurement of Works and Goods financed by the IDB (GN-2349-7) and the Policies for the Selection and Contracting of Consultants financed by the IDB (GN-2350-7). The MPSD will be responsible for managing financial resources for component 1 and will follow the Bank's standard procedures for auditing, international accounting norms and reporting. The MPSD will also establish and maintain a separate and specific bank account for the purposes of managing the resources of this Program. It will prepare and submit to the IDB the Program's final financial statements within ninety (90) days after the date of the last disbursement. The statements will be audited by an independent accounting firm acceptable to the IDB, based on terms of reference agreed to by the IDB.

V. Project Risks and Issues

At this incipient stage of development, ICZM in Trinidad and Tobago depends on close and effective coordination of an array of government institutions and well as other local stakeholders who must engage fully in the formulation of the Policy Framework and the design of the investment program. There is the risk that this coordination will not take place particularly if consultants work in isolation. This risk will be mitigated by requiring that all activities, including the work of consultants, be vetted by the National ICZM Steering Committee which provides full representation of the network of institutions involved in ICZM, including the THA. In addition, recognizing the duality of Trinidad and Tobago, care will be taken to tailor activities to the unique needs of both islands.

VI. Exceptions to Bank policy

There are no exceptions to Bank policy.

VII. Environmental and Social Strategy

It is not anticipated that the activities to be financed under this TC will have negative direct or indirect social or environmental effects. Therefore the project team considers that, according to the Bank's Safeguards Screening Toolkit, this operation should be given a classification of "C" because (i) there are no environmental or social risks; (ii) and there is direct contribution to solve environmental issues.

Annexes:

- A. [Programming Mission Aide Memoire](#)
- B. [Procurement Plan](#)
- C. Terms of Reference:
 - a. [Feasibility Studies](#)
 - b. [Technical Studies](#)
 - c. [Public Awareness](#)
 - d. [Capacity Building](#)
 - e. [Program Coordinator](#)
- D. [ESR Forms](#)
- E. [Letter of Request](#)

PROGRAMMING MISSION

PORT OF SPAIN TRINIDAD

8-9 OCTOBER 2012

AIDE MEMOIRE

I. BACKGROUND AND PARTICIPANTS

1. The Bank's Programming Mission visited the Republic of Trinidad and Tobago October 8-9, 2012 to discuss and confirm the 2013 Loan and Technical Cooperation (TC) Program. The mission was led by Gerard Johnson (General Manager, CCB/CCB), and comprised Carina Cockburn (Senior Advisor, CCB/CCB), Michelle Cross Fenty (Representative, CCB/CTT), Inder Ruprah (Regional Economic Advisor, CCB/CCB) Sophie Autie (Country Coordinator, CCB/CTT), Valerie Mercer-Blackman (Country Lead Economist, CCB/CCB), Julian Belgrave (Operations Sr. Specialist, CCB/CTT), as well as members of the CTT Operations Team, Project Team Leaders, Procurement and Fiduciary Specialists. The mission met with the Government's team lead by Senator Dr. the Hon. Bhoendradatt Tewarie, Minister of Planning and Sustainable Development, also Trinidad and Tobago's Governor to the Bank and included Senator the Hon. Vasant Bharath, Minister of Trade, Industry and Investment and Minister in the Ministry of Finance and the Economy, Senator the Hon. Ganga Singh, Minister of Environment and Water Resources; Kurt Kisto, Executive Director, Caribbean Constituency, Arlene McComie, Permanent Secretary, other Permanent Secretaries, senior Government officials and technical staff.
2. The objectives of the mission were to discuss and confirm the Bank's 2013 lending program within the framework of the strategic priority areas defined in the Country Strategy 2011-2015 approved by the Board of Executive Directors in December 2011. These priority areas include: i) financial sector regulation and supervision; ii)

public sector management; iii) education; iv) social protection; v) climate change; vi) energy; vii) water and sanitation; and viii) transport. Tobago's development challenges will be addressed in a cross cutting manner, with a special focus being given to the priority areas of energy, climate change, and water and sanitation. Operations aligned with the Emerging and Sustainable Cities Initiative were also considered for the 2013 program.

Macroeconomic Situation

3. **As a result of low oil and gas output, it is estimated that the energy economy contracted by 0.4% of GDP in the first quarter of 2012, according to the Central Bank. Mild growth of about 0.3% in the non-energy sector, particularly retail, counteracted this somewhat. Overall, economic activity is expected to recover slightly in the non-energy sector over the course of the year. The expectation is for economic growth to be slightly above 1% of GDP in 2012, a downward revision from the April 2012 IMF projection of 1.7%. The risk to this projection is the protracted maintenance delays of certain oil and gas facilities. The unemployment rate in 2011 (latest available) was 4.9%.**

4. **The 2012/13 budget will likely be expansionary compared to last year, but other macroeconomic indicators suggest a stable economy going forward. The theme of the budget speech centered on setting the stage for economic growth through diversification and incentives to key sectors, as well as a promise to begin tackling subsidies, including the fuel subsidy. For 2012/13, under a conservative oil price assumption of US\$75 per barrel, the budget deficit is projected to be 4.5% of GDP, assuming the Public Investment Program accelerates pace, about the same as the preliminary estimate of the deficit in 2011/12. The banking system indicators remain sound. The public debt which averaged about 36% in the last 3 years, stood at 46% of GDP at end-September, largely because it now includes the debt issued in respect of the CLICO Settlement Offer. Gross international reserves are 46% of GDP (US\$9.7 billion) equivalent to 13.1 months import coverage, a high number which results**

from the country's continued current account surplus. Inflationary pressures decreased in 2012: headline inflation declined and stood at 7.9% in August 2012, due in part to a deceleration in food.

II. MAIN DISCUSSION POINTS

Issues affecting Project Implementation

5. In the last 6-12 months, the Country Office in Trinidad and Tobago has made a concerted effort to develop interventions to improve project implementation and improve disbursement projections. Historically, the biggest challenge facing implementation has been the limited project planning and project management capacity in Executing Agencies. Project Coordinators have been technical experts but lacked the necessary project management skill set. This has led to a lack of understanding of the linkages between the different elements of the project execution process and the limited use of project management best practices. Inadequate planning and implementation of procurement activities also contributed to difficulties in preparing accurate project expenditure and disbursement projections. The net result has been below par absorptive capacity of loans.

6. *IDB Intervention to support portfolio implementation:* In mid-2012 the Bank began a series of Project Management training sessions for the staff of Executing Agencies with the aim of building skills in this area, networking and sharing experiences. Additionally, the Bank supports the contracting of Project Managers for Executing Agencies to support project planning and scheduling. In July 2012, responsibility for the Bank's portfolio was moved to the Ministry of Planning and Sustainable Development, which has established an internal structure for portfolio monitoring and supervision. The combined effect of these actions is expected to improve overall implementation, which will in turn be reflected by an increased absorptive capacity and disbursement rates.

7. CTT agreed to support the Minister of Planning and Sustainable Development's request for IDB funding of at least two consultants to strengthen the capacity within the Ministry of Planning and Sustainable Development to undertake its mandate as the Bank's counterpart. Furthermore, as an incentive for timely completion of projects, it was recommended that performance indicators should be included in the contracts of all project executing unit staff.

8. *2012 Pipeline:* In order to facilitate approval and subsequent execution of the new Wastewater Rehabilitation loan (TT-L1026) (US\$246.5M), the Bank will provide consultant support in the area of project management. Additionally, in order to ensure approval of the new loan, the timely execution of the existing loan will also be important especially with respect to the VSEP. The Minister of the Environment and Water Resources emphasized that there is buy-in from every level in the government on the VSEP. The overall targeted injection in this sector is USD\$246M-US\$600M.

2013 Pipeline

9. *Programmatic policy-based loans:* The GORTT has advised the Bank that it will continue with its reform efforts in the areas of sustainable energy, climate change adaptation, social safety net, financial sector and public expenditure management as detailed in Table 1. However, the timing of the PBLs would be adjusted with preparations continuing in 2013 on possible hybrid loans for the Social Safety Net Program and the Climate Change Agenda. The other PBLs would be deferred for the discussions on the 2014 Pipeline.

Table 1. List of Policy Based Loans

Policy Based Loan Operations	Action
(TT-L1020) Public Expenditure Management Program	To be considered during the programming discussions for the 2014 pipeline.
(TT-L1027) Transport loan (Hybrid component)	Removed from pipeline.
(TT-L1029) Strengthening of the Financial Sector Supervisory and Regulatory Framework	To be considered during the programming discussions for the 2014 pipeline.
(TT-L1030) Program to Support the Climate Change Agenda II	To be programmed in 2013. Consideration to be given as a hybrid loan.
(TT-L1031) Social Safety Net Program II	To be retained in the 2013 pipeline; consideration to be given to converting to a supplemental (investment) loan/hybrid.
(TT-L1032) Sustainable Energy Program for Trinidad and Tobago II	IDB to determine if this can be translated to an investment operation and included in the discussions on the 2014 pipeline.

10. *Areas discussed* included flooding and drainage, solid waste management, EGIS and civil registry. These areas are either aligned to the current Country Strategy 2011-2015, specifically in the areas of (i) water and sanitation; and (ii) public sector management or fit under the ambit of the Emerging and Sustainable Cities Initiative, which is consistent with the CS and which has been well received by the GoRTT.

11. *Sovereign Guarantee Loan Programming*: The programming discussions focused on the alignment of operations to the approved 2011- 2015 Country Strategy. The discussions also centered on the state of readiness for the proposed operations and the capacity of the relevant agencies to execute in a timely manner. Particular attention was paid to the high priority assigned to the Emerging and Sustainable Cities Initiative (ESCI) and the concrete steps to effect investments in this regard.

12. The results of these discussions defined the indicative Sovereign Guaranteed pipeline for 2013, which will comprise 5 operations for an estimated allocation of US\$148M. These include the Flooding and Drainage Program (US\$90.0 million), Project Preparation and Execution Facility (PROPEF) (US\$1.5 million), the Strengthened Information Management at the Registrar General's Department (US\$ 16.5 million), the Social Safety Net Program II (US\$20.0 million) and the Program to Support Climate Change Agenda II (US\$20.0 million). During preparation, further consideration will be given to developing the latter operations as hybrid loans comprising investment and policy based components. The corresponding formal loan requests (or signed Aide Memoire confirming the Government's interest in these operations) will be forwarded to the Bank during the month of November to avoid any delay in initiating the processing of these operations.

13. *Flooding and Drainage Program:* The main objective of this program is the reduction of flood risk by improving the management of the water resource in the drainage channels through development of the built infrastructure. Components include: (i) upgrade of drainage infrastructure in Port of Spain, and in particular East Port of Spain; (ii) watershed management in the East-West Corridor; and (iii) change management and capacity building of the Ministry of the Environment and Water Resources. The nine work packages that comprise this program are derived from previous drainage studies that address the treatment of runoff and watershed management. It was noted that East Port of Spain will be targeted in this operation through the upgrade of the drainage channel network in East Port of Spain. The expected outcomes of the program are: (i) 75% decrease in annualized flood occurrences in the city of Port of Spain; (ii) increase in the GDP as a result of works that reduce non-productive transportation time; (iii) 40% reduction in claims for damages as a result of storm events; and (iv) winning of water from new sources/improved derived water quality. With respect to the financing modality, a hybrid operation was discussed to finance both the proposed reforms as well as the infrastructure enhancements. The GoRTT also requested a technical assistance grant to support the preparation of the operation.

14. *E-GIS (Enterprise Geographic Information System) Program:* It was agreed that E-GIS would not be financed as separate new loan; rather existing loan resources would be sourced.

15. *Project Preparation and Execution Facility (PROPEF) for the development of projects.* The objective of this umbrella facility would be to provide financial resources to support project preparation activities. This would not replace the access of the Government to the grant financed trust funds, administered by the Bank that may also be able to finance project preparation activities. One operation that will be considered for financing under this facility is project preparation activity commencing after the Master Plan for the Health Sector is approved by GoRTT. The specific PROPEF operation will be linked to the development of a health strategy once the Master Plan is approved. The facility will finance engineering consultants to prepare final designs and tender documents, mobilization and initial implementation and will facilitate a seamless transition from the Master Plan to the loan proposal. The Bank will continue to explore alternative ways of financing the post master plan stage of project preparation and execution. It is important to note that all initiatives supported by PROPEF and/or trust funds must be fully aligned with the Country Strategy.

16. *Strengthened Information Management at the Registrar General's Department:* The objective of this program is to enhance the pivotal role played by the Registrar General's Department (RGD), Ministry of Legal Affairs in supporting business climate efficiency and service delivery to the population of Trinidad and Tobago. The components of the operation will include: (i) Vault Management: the RGD is proposing to undertake a comprehensive exercise to secure and digitize all documents stored in its vault, improve the efficiency of systems for storing, accessing and preserving the legal documents and restrict and control access to these documents; (ii) Population Registry: this component will enhance the institutional linkages necessary to establish a population registry, a potential data source for the

compilation of vital statistics; and (iii) Regularization of Unregistered Births: This component will involve the preparation of new birth certificates for over 300,000 persons whose names were never registered on their birth certificates. Interest was also expressed by GoRTT in having technical assistance support for this operation.

17. Social Safety Net Program II: The objective of this operation is continued support for the GoRTT's policy reform efforts to improve the effectiveness of the Social Safety Net programs delivered by the Ministry of the People and Social Development through: (i) strengthening of the delivery of cash transfers to enhance efficiency and effectiveness; (ii) developing an efficient, easily verifiable and transparent targeting system that can be used for targeted safety net programs; and (iii) developing and implementing a robust monitoring and evaluation strategy.

18. Program to Support Climate Change Agenda II: The program is the second operation under this the programmatic policy based loan (PBL). The main objective is to continue to support the Government's ongoing reform initiatives to develop, strengthen and modernize the regulatory, institutional and policy framework to integrate climate change and its impacts into national economic development. The Bank approved four (4) non-reimbursable Technical Cooperations (TCs) designed to enhance the Government's capacity to integrate issues of climate change into national development.

19. Technical Cooperation Programming: The results of the Programming Mission and follow-up discussions with the Government officials focused on the development of the TC Pipeline for 2013. In this regard, nine areas of technical support (4 of these are operation preparation support for the loan programs) were identified that are aligned with Country Strategy 2011- 2015. These areas are listed below.

- i. Institutional Strengthening of the Drainage Unit of the Ministry of Environment and Water Resources to support the preparation of the Flooding and Drainage Program loan.

- ii. Support for Capacity Building of the Registrar General's Department, which will assist in the preparation of the associated loan, *Strengthened Information Management at the Registrar General's Department*.
- iii. Institutional Strengthening of the Auditor General's Department
- iv. Institutional Strengthening of the Central Statistical Office.
- v. Strengthening of the Applied Research Unit of the Ministry of Planning and Sustainable Development.
- vi. Technical support for preparation of coastal engineering works for Coastal Zone Management in Trinidad and Tobago to support the preparation of a loan related to coastal zone management that mainstreams disaster risk management and climate change adaptation. The loan operation is being considered for programming in 2014
- vii. Technical Cooperation to support the preparation of a loan operation for Integrated Solid Waste Management Program for 2014.
- viii. Technical Support for the development of the Emerging and Sustainable Cities Initiative.
- ix. Support for the Inter-American Competitiveness Network (RIAC) Americas Competitiveness Forum 2014 in Trinidad and Tobago. This TC operation will be considered once there is formal confirmation that Trinidad and Tobago is selected as the Host site for the 2014 event.

Emerging and Sustainable Cities Initiative (ESCI)

20. This framework was discussed by stakeholders on October 5, 2012. There are three main areas of focus: (i) environmental sustainability and climate change; (ii) urban development; and (iii) fiscal sustainability and governance. A number of projects have been identified – East Dry River linear park, the upgrade and re-design of the Central Market, the upgrade of two squatter communities in East Port of Spain that could be financed under the Neighborhood Upgrading Program (LO 2469/OC-TT)

with the agreement of the Ministry of Housing, Land and Marine Affairs and implementation of the Ceasefire Initiative in selected East Port of Spain communities under the Citizen Security Program (LO 1965/OC-TT). However, the first tangible project was identified as the restoration of Fort Picton, for which final construction designs and tender documents are being prepared with grant resources from the ESCI while physical work will be funded by the Ministry of Tourism. The technical cooperation grant of US\$900,000.00 is also finances studies and development of projects from concepts to tender documents. In this regard, at least two other main studies on greenhouse gas emissions and a vulnerability map are being implemented.

21. It was confirmed that that the ESCI will be formally launched on October 22, 2012 with the arrival of students from the Swiss Federal Institute of Technology Zurich who will support the designs for sites at Sea Lots, the Central Market, East Dry River, Fort Picton and a Park-and-Ride Facility on the outskirts of the city. These students will partner with highly skilled local graduates and community representatives to carry out these activities.

22. The GoRTT also outlined other projects that can be incorporated under this initiative:

- i. *Creative Industries*: This is one of the largest industries in Trinidad and Tobago. In the area of East POS, the GORTT would like to develop 2 or 3 creative industries such as fashion and mas (carnival bands and costume) production.
- ii. *Food Security project in urban areas*: This area has potential for tilapia farming/hydroponics and grow box facilities.
- iii. Equipment for homework centres and garment construction.
- iv. Establishment of Port of Spain as a heritage city.
- v. Physical upgrade of the Central Market.

23. The Governor was advised that a Meeting of the Governors of the Caribbean Country Department customarily takes place early in the year in preparation for the Annual Meeting of the Bank. This Meeting of the Caribbean Governors is scheduled for January 2013 in Montego Bay. The Governor was advised that this would be an important meeting for clarifying regional positions in relation to the Bank prior to the Annual Meeting. The Governor acknowledged the importance of such a forum and indicated an interest in attending.

24. *Establishment of Technical Counterparts:* It was agreed that early establishment of technical counterparts in the respective line Ministries is critical to ensuring country and sector ownership, enhancing project design as well as facilitating timely preparation and project execution for results. To this end, it was recommended that these technical counterpart teams should be established and appointed to work with the Bank to fully scope and cost these operations. In addition, interest was expressed by GoRTT in having project staff in executing agencies and units recruited on the basis of performance based contracts.

25. The possibility of reformulating under-performing projects in the current portfolio was explicitly discussed. The Government communicated its decision to retain all ongoing operations in their current form.

III. AGREED NEXT STEPS:

1. Preparation of the Country Program Document for 2013 reflecting the agreed new pipeline of 2013 activities.
2. A review of the Citizen Security Program (LO 1965/OC-TT) and the E-Government and Knowledge Brokering Program (LO 1808/OC-TT) activities will be done to determine whether the E-GIS project can be funded from existing loan resources.

3. The GoRTT would provide greater details on activities under the ambit of creative industries and food security initiatives for urban areas that could be further developed and implemented.
4. With respect to the Strengthened Information Management at the Registrar General's Department (RGD) – project timelines, sequencing, deliverables, as well as the amount of the loan are to be defined. IDB to investigate the availability of technical assistance resources and the RGD to examine how the deliverables can be fast-tracked.
5. Regarding, Solid Waste Management: the GoRTT to request technical cooperation resources for preparation of a possible loan in integrated solid waste management.
6. The IDB and the GoRTT to agree on a research agenda for 2013.
7. ESCI – the IDB to convene a meeting with its Private Sector arm and the GoRTT Steering Committee to discuss funding for several initiatives under this framework.
8. The IDB and Ministry of Planning and Sustainable Development to meet to discuss the use of C&D Resources to fund two positions for the IDB Portfolio Monitoring and Supervision Unit.
9. The IDB and GoRTT to sign outstanding technical cooperation operations on or before November 30, 2012.
10. The IDB and GoRTT to establish counterpart teams to scope new operations.
11. The IDB to circulate a schedule of missions for each loan in the 2013 pipeline.

IV. CONCLUSION:

1. The Bank's Programming Mission Team thanked the GoRTT for its hospitality in hosting the Mission. It was agreed that the Bank will continue to work proactively with its counterparts to strengthen the relationship and improve execution performance. In addition, it was decided that this Aide Memoire would serve as the expression of interest for technical assistance and the investment loan operations that will form the Loan and TC Program for 2013, as follows:

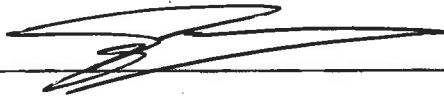
Loan Program:

- i. Flooding and Drainage Program (US\$ 90.0 million);
- ii. Project Preparation and Execution Facility (PROPEF) (US\$ 1.5 million);
- iii. (TT-L1034) Strengthened Information Management at the Registrar General's Department (US\$ 16.5 million);
- iv. (TT-L1031) Social Safety Net Program II (USD\$20.0 million); and
- v. (TT-L10XX) Program for Climate Change Adaptation (USD\$20.0 million).

Technical Cooperation Program:

- i. Institutional Strengthening of the Drainage Unit of the Ministry of Environment and Water Resources to support the preparation of the Flooding and Drainage Program loan;
- ii. Support for Capacity Building of Registrar General's Department, which will assist in the preparation of the associated loan, *Strengthened Information Management at the Registrar General's Department*;
- iii. Institutional Strengthening of the Auditor General's Department;
- iv. Institutional Strengthening of the Central Statistical Office;
- v. Strengthening of the Applied Research Unit of the Ministry of Planning and Sustainable Development;
- vi. Technical support for preparation of coastal engineering works for Coastal Zone Management in Trinidad and Tobago to support the preparation of a loan related to coastal zone management that mainstreams disaster risk management and climate change adaptation being considered for programming in 2014;
- vii. Technical Cooperation to support the preparation of a loan operation for Integrated Solid Waste Management Program for 2014; and
- viii. Technical Support for the development of the Emerging and Sustainable Cities Initiative.
- ix. Support for the Inter-American Competitiveness Network (RIAC) Americas Competitiveness Forum 2014 in Trinidad and Tobago. This TC operation will be

considered once there is formal confirmation that Trinidad and Tobago is selected as the Host site for the 2014 event.



Gerard Johnson
General Manager
Caribbean Country Division



Senator Dr. the Hon. Bhoendradatt Tewarie
Minister of Planning and Sustainable
Development

Date:

7/11/12

November 01, 2012

PROCUREMENT PLAN FOR NON-REIMBURSABLE TECHNICAL COOPERATIONS										
Country: Trinidad and Tobago				Executing agency: Ministry of Planning and Sustainable Development				Public or private sector: PUBLIC		
Project number: TT-T1038				Title of Project: Feasibility studies for a risk-resilient coastal zone management program in Trinidad and Tobago						
Period covered by the plan: 18 months (August 2013 - February 2015)										
Threshold for ex post review of procurements:			Goods and services (in US\$): <u>10,000</u>			Consulting services(in US\$): <u>490,000</u>				
Item No.	Ref. AWP	Description (1)	Estimated contract cost (US\$)	Procurement Method (2)	procurement (ex-ante or ex-post) (3)	Source of financing and percentage		Estimated date of the procurement notice or start of the contract	Technical review by the PTL (4)	Comments
						IDB/MIF %	Local/other %			
1		Component 1								
		Consulting services								
		Consulting service 1: Policy support and analysis	80,000	FBS	Ex-post	100%	0%	Sep-13		
		Consulting service 2: Capacity building for ICZM	45,000	FBS	Ex-post	100%	0%	Sep-13		
		Consulting service 3: Public awareness and consultation	30,000	IICQ	Ex-post	100%	0%	Sep-13		
2		Component 2								
		Consulting services								
		Consulting service 4: Design of baseline studies	45,000	FBS	Ex-Post	100%	0%	Sep-13		
		Consulting service 5: Design and feasibility	230,000	FBS	Ex-Post	100%	0%	Sep-13		
		Consulting service 6: Project coordination	45,000	IICQ	Ex-Post	100%	0%	Sep-13		
		Consulting service 7: Auditing	15,000	IICQ	Ex-Post	100%	0%	Sep-14		
		Non-consulting services								
		Component 1								
		Public consultation workshops	10,000	PC	Ex-post	100%	0%	N/A		
Total			500,000	Prepared by: Duncan Gromko INE/RND			Date: 7/22/2013			

Design and feasibility study for a risk-resilient integrated coastal zone management program in Trinidad and Tobago (TT-T1038)

INDICATIVE TERMS OF REFERENCE

I. BACKGROUND AND JUSTIFICATION

A. The importance of Trinidad and Tobago's coastal zone

- 1.1 Extending over 700 km and encompassing a variety of regionally significant ecosystems such as one of the largest freshwater wetland in the Caribbean, mangroves, extensive beaches and coral reefs, the coastal zone of Trinidad and Tobago is a key asset for the national economy. It harbors much of the islands' critical infrastructure in the energy, tourism and fisheries sectors, including industrial complexes, refineries and ports, fish processing plants and tourism resorts. Coastal ecosystems themselves provide goods and services that are also vital to these sectors, including for example the provision of nursery habitat for fish stocks, buffering public infrastructure from coastal erosion and flooding, and supporting tourism and recreation. The Government of Trinidad and Tobago (GOTT) has recognized that future growth and diversification of the economy depend on the maintenance of these ecosystem services and on enhancing the resilience of economic activities to coastal risks associated with natural and anthropogenic hazards such as earthquakes, landslides, erosion, flooding and oil spills and, including climate change and sea level rise as well as threats to biodiversity such as deforestation.¹ In this context, the GOTT endorses an integrated approach to coastal zone management (ICZM) that addresses risks and seeks to optimize the contribution of the coastal zone to the economy.
- 1.2 The Tobago House of Assembly (THA) has also emphasized the specific relevance of Tobago's coast, given that tourism is the main income earner for the island and is largely dependent on coastal tourism. In addition, Tobago is also highly susceptible to both geologic and climatic hazards); and 70% to 80% of the island's population and 80% of the hotel plant are at risk as they are located on the coast; and the coastal zone is also important to the social and recreational well-being of Tobagonians. Since the entire island falls within the coastal zone, ICZM in Tobago needs to adopt a holistic 'ridge to reef' approach to managing the coast, whereby decisions regarding the health of coastal ecosystems including reefs are directly linked to land-based processes, such as rapid river transport of sediment derived from deforested slopes in upper watersheds as well as from local landslides.
- 1.3 Climate change is likely to increase the frequency and severity of natural hazards and disasters in Trinidad and Tobago and thus has the potential to adversely affect

¹ GOTT. 2012. Working for Sustainable Development in Trinidad and Tobago. Progress, Gaps and Opportunities for Action.

- shoreline stability, the health of coastal and marine ecosystems, industry and private property in general. Coral bleaching, the intensification of beach erosion and encroachment or loss of mangroves and lagoons associated with sea level rise could have serious implications for future development, recreational activities and land use in the coastal zone. This means that without adaptation, climate change impacts are likely to threaten the physical and economic viability of the coastal zone.
- 1.4 Recognizing the strategic importance of the country's coastal zone to economic development, the Government of Trinidad and Tobago has made several recent advances towards risk-resilient ICZM. These advances include, for example, the on-going work of the National Steering Committee on ICZM which was created in April 2012 and mandated by Cabinet to recommend a national policy framework, strategy and action plan that would build the foundation for a permanent CZM function in the country. Represented on the Committee are the key GOTT agencies (including the THA) that make policy, manage information, invest in public infrastructure, and monitor and assess development in the coastal zone. These recent developments complement several other relevant on-going activities in the country including in coastal and marine research and data collection (e.g., beach profiling), coastal infrastructure and engineering science, and vulnerability assessments that can all contribute to a solid foundation for a permanent ICZM Program. The proposed design and feasibility study will help consolidate these on-going efforts by helping to fill in the gaps in scientific baseline data and by designing an integrated information platform for coastal risk assessment and management consistent with the priorities recommended by the National ICZM Committee.
- 1.5 In discussions held with the Bank, the National ICZM Steering Committee and the THA have also reiterated that coastal protection including the control of beach erosion and cliff instability is a priority for a future investment program. Recent field assessments have identified priority sites in both Trinidad and Tobago for coastal works for which baseline studies, designs and analyses of their economic, environmental and financial feasibility are required. Given the variety and extension of coastal ecosystems in the country, there are also opportunities to combine conventional measures with ecosystem-based coastal protection that capitalizes on ecosystem regulating services (e.g., mangrove, dune and seagrass bed restoration for shore protection). The proposed design and feasibility study will support the GOTT in designing and assessing cost-effective, low maintenance coastal protection measures based on the best available scientific data.
- 1.6 The design and feasibility study will result in a complete proposal for a risk-resilient ICZM investment program that is consistent with the Policy Framework developed by the National ICZM Steering Committee and international best practice in ICZM in the Caribbean while simultaneously recognizing the unique characteristics of both Trinidad and Tobago's coastal zones. As such the investment loan to be designed will combine: (i) sound science on assets, processes and risks in the coastal zone, including those associated with natural

- disasters and climate change, (ii) an effective governance structure involving key stakeholders; and (iii) investments that address specific relevant issues for sustainable coastal development in Trinidad and Tobago (in this case coastal risks such as shoreline and cliff instability, conflicts between coastal uses, coastal public access) with innovative approaches.
- 1.7 To help prepare the investment loan, the Bank has approved a Technical Cooperation (grant) entitled ‘Feasibility studies for a risk-resilient integrated coastal zone management program in Trinidad and Tobago’. The TC consists of two components: (i) Component 1: Support to policy framework and institutional sustainability for risk-resilient ICZM aimed at assisting the GOTT in establishing a fully-endorsed framework for ICZM and help build the capacity needed to deliver and ICZM investment program; and (ii) Component 2: Design and feasibility analysis of a risk-resilient ICZM investment program. The terms of reference presented here pertain to Component 2 of the TC.
- 1.8 In order to deliver a viable investment package, the IDB on behalf of the GOTT is seeking the services of an internationally-recognized consulting firm with demonstrated experience in the design and feasibility analysis of risk-resilient coastal investment programs, including aspects related to the design of assessment and monitoring systems, planning, coastal engineering (structural and non-structural measures), DRM, CCA, ecosystem-based coastal protection, institutional strengthening, socioeconomic analysis, environmental assessment and financial analysis. The firm will work with the GOTT and the Bank project team on two sets of activities. First, the firm will prepare the specifications of baseline scientific studies needed for coastal risk assessment and management as well as for the design of a national integrated coastal risk information platform. Second, the firm will: (i) validate coastal infrastructure investment priorities (Trinidad component and Tobago component), to include where appropriate ecosystem-based coastal protection, non-structural and soft-engineering measures; (ii) prepare engineering and non-structural designs for pilot investments; (iii) conduct the feasibility analysis of investments in accordance with the requirements of the Bank for public sector financing, including socioeconomic, environmental, financial, and institutional feasibility; and (iv) provide all the elements required for a draft loan proposal.

II. OBJECTIVES OF THE CONSULTANCY

- 2.1 The general objective of the consultancy is to design and carry out the feasibility studies required for the preparation of the Risk-resilient Integrated Coastal Zone Management Program (XXXX) for Trinidad and Tobago scheduled for presentation to the IDB Board of Directors in 2014.
- 2.2 The specific objectives are to:
- a. Validate the information needs for and design a coastal risk assessment and management system that can serve as a basis for development planning and control;

- b. Identify, prioritize and design an investment program for coastal protection that addresses coastal risks including climate change impacts;
- c. Identify needs for strengthening national capacity for integrated coastal risk management; and
- d. Analyze the overall socioeconomic, environmental and financial feasibility of the investment package for financing;
- e. Provide the technical inputs for the preparation of a draft loan proposal; and
- f. Facilitate consultations with key stakeholders on the design of the loan.

III. TASKS

3.1 The consulting team will carry out the following main tasks according to the components of the proposed investment program:

1. Design of Coastal Risk Assessment, Monitoring and Management Component.

- a. Review the available relevant technical information on coastal risks in Trinidad and Tobago and gain familiarity with the on-going work of the National ICZM Steering Committee including its five thematic working groups (social and economic development; natural resource assessment; vulnerability assessment and climate change adaptation; public outreach, education and awareness; and legal and institutional assessment).
- b. Review and assess existing data collection, monitoring and modeling activities as well as information systems administered by the GOTT as they relate to coastal risks.
- c. Validate and prioritize needs for baseline surveys, expanded and/or updated risk monitoring programs, information management systems and modeling capabilities for the purposes of coastal risk management. A preliminary list of studies under consideration appears in Annex 1.
- d. Select designs, prepare detailed terms of reference and budgets for: (i) baseline studies of coastal and oceanographic processes (beach, cliff and other shoreline changes, currents, tides, bathymetry and sediment transport), ecosystems and ecosystem goods and services, monitoring systems, and modeling of these processes and services; (ii) natural hazard risk assessment, including hazard assessments, inventories of vulnerable infrastructure, property and population; and estimates of probable losses to public and private assets; and (iii) the development of an integrated coastal risk information platform. The terms of reference will be prepared in accordance to guidelines to be provided by the IDB.

2. Design of Investment Program for Coastal Protection Component

- e. Prepare and validate with key stakeholders a priority list of coastal protection works for improved hazard resilience in the coastal zone (Trinidad and Tobago components). This is to include, where appropriate, ecosystem-based

coastal protection, non-structural and soft-engineering measures. See Annex II for a preliminary list of sites for Trinidad.

- f. Recommend a priority list of coastal protection works (Trinidad and Tobago components) for endorsement by the GOTT.
- g. Prepare specifications for pre-feasibility modeling studies and development of full engineering designs for structural, non-structural and ecosystem-based coastal protection works for a pilot package of investments.

3. Institutional Strengthening Needs Assessment

- h. Review recent analyses commissioned by the National ICZM Steering Committee of the existing legislation and regulatory framework for ICZM, coastal risk management, disaster risk management (DRM) and climate change adaptation (CCA), including their mainstreaming in national development planning in an integrated manner. This will be undertaken in coordination with other reviews being undertaken in parallel projects (e.g., TT-T1034, TT-T1017, TT-T1033).
- i. Undertake an analysis of the institutional framework for CZM, coastal risk management, DRM and CCA, taking into consideration on-going assessments and capacity building activities (e.g., TT-T1034, TT-T1017, and TT-T1033). This shall include an analysis of the functions, responsibilities and level of authority of the different agencies participating in coastal zone management, DRM and CCA as they actually exist. Recommend and validate alternatives for institutional arrangements for the execution of the investment program, including the establishment of a Project Execution Unit.
- j. Carry out an assessment of needs and the design of a proposal for institutional strengthening and capacity building to enable the network of institutions in the National ICZM Steering Committee to more effectively fulfill its mandate, including data management, associated training and research functions, and incorporating an integrated coastal risk management approach;
- k. Conduct an institutional assessment of the capacity of the institution recommended to host the PEU to execute the investment program as required by the Bank, in close coordination with the fiduciary specialists (procurement and financial) of the IDB Project Team (SECI analysis). This will include functions such as annual project and activity planning, management and supervision, financial management, procurement and other execution functions and will examine past performance of the PEU in the execution of other programs.
- l. Preparation of the terms of reference for a study of measures to be instituted to permit the government to recover investments and maintenance costs of coastal infrastructure measures

4. Feasibility studies

- 3.2 This component will produce the feasibility analyses required for structuring the Risk-resilient Coastal Zone Management Program. To this end, the consulting firm will carry out the following tasks:
- a. Analysis of environmental and social viability of the Program at two levels: (i) a Strategic Environmental Analysis of the overall phased investment package, including an assessment of the policies, regulations, institutional coordination mechanisms and procedures in place to ensure the viability of the Program during the course of its execution, potential impacts and preventive and mitigation measures; and (ii) environmental analyses of the potential direct, indirect and cumulative impacts of the specific works and activities proposed for the first individual loan operation as required by national legislation and the Bank's Environmental and Social Safeguards Policy, as well as the selection and costing of preventive and mitigation measures. Particular attention will be directed at the analysis and prevention of potential negative environmental impacts on critical and/or natural habitats. The consultants will be responsible for preparing an Environmental and Social Management Plan which consolidates the measures at the programmatic level and for the individual investments.
 - b. Analysis of the socio-economic feasibility: The consulting firm will carry out an ex-ante economic assessment of the investment program, and propose an impact evaluation plan for the program. For the economic analysis of the program, the firm will: (i) identify measurable benefits and its associated beneficiaries resulting from the implementation of the program; (ii) propose a feasible methodology to estimate the benefits of the program given the resources available for the economic analysis; (iii) estimate the aggregate costs (investment, operational and management) of the Program and the lifespan of the investments; (iv) subtract aggregate costs from aggregate benefits to compute the following summary measures of economic viability: net present value (NPV) and internal rate of return (IRR); and (v) where possible, assess the benefits and costs of individual program components and calculate the economic viability of these components. For the impact evaluation, the firm will: (i) identify a feasible methodology for impact evaluation of the program. When implemented this methodology should determine whether the proposed program has an impact on the outcomes of interest, and more specifically, to quantify how large that impact is on the outcomes; (ii) determine how the impact evaluation plan links to the standard program monitoring procedures; and (iii) present all steps needed to implement the methodology (including help the GOTT and the IDB to translate the program's objective down to a handful of outcomes that will be used to define success. Then, each outcome should be further simplified to a measurable indicator, develop the baseline of the program using the measurable indicators identified in the previous step; develop the sampling strategy and sample size, in case surveys are needed to be carried out, with preliminary survey instruments and timing of implementation of the surveys;

estimate a budget for the implementation of the plan for monitoring and impact evaluation; and (iv) develop detailed Terms of Reference for the implementation of the proposed plan for impact evaluation.

- c. Analysis of Options for Sustainability: The sustainability of the structural interventions depends on adequate monitoring of their performance and maintenance. Given Barbados's critical fiscal situation, some form of cost recovery or sharing mechanism should be considered particularly where property owners benefit from the coastal infrastructural improvements under the Program. This will require an analysis of the technical options available for cost recovery and a realistic assessment of the political and legal challenges that Trinidad and Tobago must overcome to recover the costs of public investments in places where the private sector is the main beneficiary.
- d. Mechanisms for Inter-institutional coordination: Clear lines of responsibility are needed between the various agencies involved in integrated coastal risk management. This will require the design of a coordination mechanism that can help resolve conflicts and avoid duplication in functions

5. Consultations with public/private sector and civil society

- 3.3 Past experience with national development initiatives has demonstrated that effective participation of key stakeholders in the definition of the program and the creation of partnerships is a key factor of success. To this end, the National ICZM Steering Committee intends to conduct a set of consultations that will take place concurrent to the various phases of the consultancy. These will be moderated consultations that will provide opportunities to canvas opinions from communities, non-governmental organizations, private sector associations and potential investors on government priorities for investments. The consultations are to be hosted by the National ICZM Steering Committee and the Ministry of Planning and Sustainable Development. The consulting firm will serve as resources for these consultations, with specialists from its team to be called upon to present the work being undertaken at strategic stages of the preparation.

6. Consolidation of the loan proposal

- 3.4 Using the results of the feasibility studies, the consultant will be responsible for preparing a draft loan proposal package to be organized into the two components of the Program presented above (see paragraph 1.7) in accordance with a format and structure required by the Bank. In addition to the full technical justification for the proposed approach, activities to be financed and alternatives selected, the loan proposal must include all the instruments necessary to ensure its effective implementation. This includes:
 - a. A Results Matrix, with a baseline of indicators, projected values (without Program) and target values (with Program) and intermediate results indicators;
 - b. Monitoring and Evaluation System for the Program, including the methodology for the evaluation of the impacts of the Program;

- c. Detailed Budget by Components and Activities and Schedule of Investments (Project Execution Plan or PEP);
- d. Program Operating Regulations;
- e. Annual Operating Plan for the first 18 months;
- f. Procurement Plan for the first 18 months;
- g. Socioeconomic viability analysis for the overall Program and specific investments;
- h. Environmental Analysis of the overall Program, including Environmental and Social Management Plan;
- i. Institutional Analysis for execution (SECI);
- j. Updated engineering costs; and
- k. Detailed terms of reference for studies and design of systems.

IV. CHARACTERISTICS OF THE CONSULTANCY

- 4.1 **Qualifications:** International consulting firm or consortium with demonstrated experience and in-depth expertise in the design and feasibility analysis of coastal risk assessment and management programs in countries with similarities to Trinidad and Tobago, including aspects related to: (i) the design of coastal and oceanographic baseline surveys, monitoring and information systems, (ii) integrated coastal zone planning, (iii) comprehensive disaster risk management, (iv) climate change adaptation, (v) physical modeling of and design of coastal engineering structures for erosion and other coastal risks; (vi) institutional strengthening; (vii) environmental assessment; and (viii) economic and financial analysis. Previous experience working in projects financed by multi-lateral and bilateral organizations in the Caribbean is desirable.
- 4.2 **Expertise required on team:** coastal geology/geomorphology, oceanography, coastal and marine biology, ecosystem services analysis, coastal zone planning, DRM including disaster risk assessment; CCA, coastal engineering, data management, environmental and social impact assessment, financial project analysis; legal and institutional analysis, private sector and public/private partnership financing.
- 4.3 **Duration:** 6 months.
- 4.4 **Place of work:** Various locations in Trinidad and Tobago
- 4.5 **Coordination:** The work of the consulting firm will be closely coordinated with the Ministry of Planning and Sustainable Development and the National ICZM Committee, the Technical Advisory Committee for the project. The work will also be monitored by the IDB Country Office in Trinidad and the IDB Project Team assigned to the preparation of the Feasibility studies for a risk-resilient coastal zone management program in Trinidad and Tobago (TT-T1038).

V. DELIVERABLES

- 5.1 The consultancy will be responsible for submitting the following interim and final deliverables:
- (i) Work plan to be submitted within two weeks after signature of the contract
 - (ii) First interim report to be submitted within six weeks after contract signature and containing as a minimum for Component 1: the review and assessment of current data collection and monitoring activities and the gap analysis; for Component 2: the priority list of engineering works for improved hazard resilience in the coastal zone; for Component 3: the review of existing legislations and regulatory framework for integrated coastal risk management and the analysis of the institutional framework for coastal risk management.
 - (iii) Second interim report to be submitted 16 weeks (4 months) after signature of the contract and containing for Component 1: the preliminary draft terms of reference and indicative budgets for the baseline studies, vulnerability assessment and integrated risk information platform; for Component 2: the recommended preliminary cost estimates for the engineering works selected for inclusion in the Program, for Component 3: the assessment of the institutional capacity to execute the program (SECI analysis) and the preliminary draft terms of reference for the institutional strengthening activities and associated cost estimate and the results of the consultations
 - (iv) Draft final report to be submitted 20 weeks (5 months) after signature of the contract and containing all results of the consultancy including the complete feasibility analysis, final designs and terms of reference and all the elements of the loan proposal (see Paragraph 3.4 above).
 - (v) Final report: incorporating Bank and comments from the National ICZM Steering Committee and the Ministry of Planning and Sustainable Development.
7. Every report must be submitted to the Bank in one electronic file that should include cover, main document, and all annexes. (Zip files will not be accepted as final reports, due to regulations from the Records Management Section).

Annex 1

Indicative of baseline surveys to be undertaken as part of the Risk-resilient Coastal Zone Management Program

Below is an indicative list of diagnostic baseline surveys for which specifications may be needed as part of the design and feasibility study. The final list of baseline studies to be designed will be established by the National ICZMCommittee.

- a) Georeferenced digital aerial photogrammetry
- b) Delineation of shoreline types by geomorphological units for oil spill sensitivity mapping and other risk applications
- c) Historical Beach and Shoreline Changes
- d) Bathymetry and Coastal and Marine Resource Mapping
- e) Oceanography
- f) Nearshore current modeling
- g) Nearshore and Marine Sedimentology and Sediment Transport
- h) Coral Reef Economic Valuation for both natural and artificial reefs (wrecks)
- i) Land Use
- j) Inventory and Condition of Engineering Structures
- k) Hydrogeology, and Terrestrial and Marine Water Quality associated with Watershed management
- l) Sedimentation dispersion modeling and pollution indicators
- m) Coastal Vulnerability Assessment mapping
- n) Stormwater drainage mitigation
- o) Storm surge inundation mapping
- p) Sea level rise inundation scenarios
- q) Characterization of coastal cliffs
- r) Determination of slope stability in coastal areas

**Technical studies for the National ICZM Steering Committee in Trinidad and Tobago
(TT-T1038)**

INDICATIVE TERMS OF REFERENCE

I. BACKGROUND AND JUSTIFICATION

A. The importance of Trinidad and Tobago's coastal zone

- 1.1 Extending over 700 km and encompassing a variety of regionally significant ecosystems such as one of the largest freshwater wetland in the Caribbean, mangroves, extensive beaches and coral reefs, the coastal zone of Trinidad and Tobago is a key asset for the national economy. It harbors much of the islands' critical infrastructure in the energy, tourism and fisheries sectors, including industrial complexes, refineries and ports, fish processing plants and tourism resorts. Coastal ecosystems themselves provide goods and services that are also vital to these sectors, including for example the provision of nursery habitat for fish stocks, buffering public infrastructure from coastal erosion and flooding, and supporting tourism and recreation. The Government of Trinidad and Tobago (GOTT) has recognized that future growth and diversification of the economy depend on the maintenance of these ecosystem services and enhancing the resilience of economic activities to coastal risks, including climate change and sea level rise, natural and anthropogenic hazards such as erosion and flooding as well as threats to biodiversity such as deforestation.¹ In this context, the GOTT endorses an integrated approach to coastal zone management that addresses risks and seeks to optimize the contribution of the coastal zone to the economy
- 1.2 The Tobago House of Assembly (THA) has also emphasized the specific relevance of Tobago's coast, given that tourism is the main income earner for the island and is largely dependent on coastal tourism. In addition, Tobago is highly susceptible to both geologic and climatic hazards (earthquakes, landslides and the impacts of impacts of climate change and sea level rise); and 70% to 80% of the island's population and 80% of the hotel plant are at risk as they are located on the coast; and the coastal zone is also important to the social and recreational well-being of Tobagonians. Since the entire island falls within the coastal zone, ICZM in Tobago needs to adopt a holistic 'ridge to reef' approach to managing the coast, whereby decisions regarding the health of coastal ecosystems including reefs are directly linked to land-based processes, such as rapid river transport of sediment derived from deforested slopes in upper watersheds as well as from local landslides.
- 1.3 Climate change is likely to increase the frequency and severity of natural hazards and disasters in Trinidad and Tobago and thus has the potential to adversely affect shoreline stability, the health of coastal and marine ecosystems, industry and private property in general. Coral bleaching, the intensification of beach erosion and encroachment or loss of mangroves and lagoons associated with sea level rise could have serious implications for

¹ GOTT. 2012. Working for Sustainable Development in Trinidad and Tobago. Progress, Gaps and Opportunities for Action.

- future development, recreational activities and land use in the coastal zone. This means that without adaptation, climate change impacts are likely to threaten the physical and economic viability of the coastal zone.
- 1.4 Recognizing the strategic importance of the country's coastal zone to economic development, the Government of Trinidad and Tobago has made several recent advances towards climate-resilient ICZM. These advances include, for example, the on-going work of the National Steering Committee on ICZM which was created in April 2012 and mandated by Cabinet to recommend a national policy framework, strategy and action plan that would build the foundation for a permanent coastal zone management function in the country. Represented on the Committee are the key GOTT agencies (including the THA) that make policy, manage information, invest in public infrastructure, and monitor and assess development in the coastal zone. These recent developments complement several other relevant on-going activities in both Trinidad and Tobago including in coastal and marine research and data collection (e.g., beach profiling), coastal infrastructure and engineering science; and vulnerability assessments that can all contribute to a solid foundation for a permanent ICZM Program.
 - 1.5 In 2013 the IDB approved the technical cooperation (TC) the Bank has approved a Technical Cooperation (grant) entitled 'Feasibility studies for a risk-resilient integrated coastal zone management program in Trinidad and Tobago'. The TC consists of two components: (i) Component 1: Support to policy framework and institutional sustainability for risk-resilient ICZM, aimed at assisting the GOTT in establishing a fully-endorsed framework for ICZM and help build the capacity needed to deliver and ICZM investment program; and (ii) Component 2: Design and feasibility analysis of a risk-resilient ICZM investment program. The proposed technical studies forms part of Component 1 of the TC and will support the creation of a national ICZM policy framework by filling important information gaps.
 - 1.6 The IDB is seeking the services of a consulting firm to assist in the execution of this activity under the technical cooperation TT-T1038, which seeks to strengthen the policy framework and local capacity for risk-resilient ICZM in Trinidad and Tobago, with a view towards making future investments in the sustainable development and management of the country's coastal zone.

II. OBJECTIVES OF THE CONSULTANCY

- 2.1 The objective of the consultancy is to assess any information gaps related to the development of an ICZM policy framework and to provide quantitative justification and rationale for the policy framework being developed by the National ICZM Steering Committee.
- 2.2 The consultancy will provide information around four thematic areas in support of specific thematic Working Groups that comprise the National ICZM Steering Committee: (i) an assessment of proposed coastal and marine development plans and potential socioeconomic conflicts and synergies (to support the Economic and Social Development Thematic Working Group); (ii) an economic analysis of the contribution of the coastal zone of both Trinidad and Tobago to the national economy and the sustainable development of potential growth poles (to support the Economic and Social Development

- Thematic Working Group); (iii) a physical assessment and valuation of ecosystem services, including coastal identification of measures to build ecosystem resilience (to support the Natural Resources Assessment Thematic Working Group); and (iv) a study to establish priorities and an action plan for a nation-wide vulnerability and risk assessment (to support the Vulnerability and Adaptation to Climate Change Working Group).
- 2.3 The first study will inform the policy framework by assessing current and proposed development plans and programs in the coastal zone to identify policy synergies and possible socioeconomic conflicts. The assessment will provide guidance about where the different agencies of the GOTT have overlapping responsibilities and plans for the coastal zone and how these approaches might be harmonized in the ICZM policy framework.
 - 2.4 The second study will provide information on the contribution of the coastal zone to the national economy and the sustainable development of the coastal zone. This study should evaluate the sustainability of coastal and marine dependent industries and the interaction of these industries between other economic activities in the coastal zone (particularly tourism and fisheries). The study should also identify sustainable livelihood opportunities in the coastal zone and provide recommendations as to what type of economic and social activities should be encouraged in the coastal zone.
 - 2.5 The third study will assess the current state of coastal and marine resources in the framework of ecosystems services, including a physical assessment and valuation of coastal ecosystem services. Priority ecosystem services include: coastal stabilization, flood protection, water quality control, recreational services, and provisioning services. Based on this assessment, the study will provide recommendations for the potential of building ecosystem-based resilience and mitigation of negative impacts. This study should also work closely with the Public Outreach, Awareness and Education Working Group in order to solicit stakeholder input on the study.
 - 2.6 The fourth study will recommend priorities and an action plan for a nation-wide vulnerability and risk assessment, taking into consideration both socio-economic and environmental vulnerabilities. This study should include a spatially explicit component to map vulnerable coastal areas and communities. It will also provide strategic guidelines for integrating climate change adaptation and hazard mitigation into the ICZM policy framework.

III. TASKS

- 3.1 The consulting team will carry out the following tasks:
 - a) Consult with the National ICZM Steering Committee as well as each individual Working Group in the Committee to identify knowledge gaps. This assessment should allow the consultancy to establish priority research areas and to identify key individuals and agencies to interview.
 - b) Review existing development plans and programs that relate to the country's coastal zone; relevant documentation on the contribution of the coastal zone to the national economy; and climate change and vulnerability and risk assessments.

- c) Interview relevant agencies and individuals on current policy, planned investments, the impact of coastal activities on ecosystem services, and coastal vulnerabilities.
- d) Synthesize findings of above tasks and prepare the four studies:
 - a. An assessment of proposed coastal and marine development plans and potential socioeconomic conflicts and synergies;
 - b. An economic analysis of the contribution of the coastal zone of both Trinidad and Tobago to the national economy and the sustainable development of potential growth poles;
 - c. A physical assessment and valuation of ecosystem services and identification of measures to build ecosystem resilience;
 - d. An assessment of priorities and an action plan for nation-wide vulnerability risk assessment, including strategic guidelines for integrating climate change adaptation and hazard mitigation into the ICZM policy framework.

IV. CHARACTERISTICS OF THE CONSULTANCY

- 4.1 **Qualifications:** International consulting firm or consortium with demonstrated experience and in-depth expertise in coastal zone management technical studies, including aspects related to: (i) integrated policy making, (ii) climate change adaptation, (iii) ecosystem services as a framework for decision-making, (iv) economic analysis of investment programs, and (v) both grey and ecosystem-based coastal protection infrastructure. Previous experience working in projects financed by multi-lateral and bilateral organizations in the Caribbean is desirable.
- 4.2 **Duration:** 6 months.
- 4.3 **Place of work:** Various locations in Trinidad and Tobago.
- 4.4 **Coordination:** The work of the consulting firm will be closely coordinated with the Ministry of Planning and Sustainable Development and the National ICZM Committee, the Technical Advisory Committee for the project. The work will also be monitored by the IDB Country Office in Trinidad and the IDB Project Team assigned to the preparation of the Feasibility studies for a risk-resilient coastal zone management program in Trinidad and Tobago (TT-T1038).

V. DELIVERABLES

- 5.1 The consultancy will be responsible for submitting the following interim and final deliverables:
 - (i) Work plan, to be submitted three weeks after the signature of the contract;
 - (ii) Four interim reports, to be submitted four months after the signature of the contract;
 - (iii) Four final reports, based on comments from IDB and Ministry of Planning and Sustainable Development and the National ICZM Steering Committee, to be submitted six months after the signature of the contract.

**Building Public Awareness of Integrated Coastal Zone Management in Trinidad and
Tobago
(TT-T1038)**

INDICATIVE TERMS OF REFERENCE

I. BACKGROUND AND JUSTIFICATION

A. The importance of Trinidad and Tobago's coastal zone

- 1.1 Extending over 700 km and encompassing a variety of regionally significant ecosystems such as one of the largest freshwater wetland in the Caribbean, mangroves, extensive beaches and coral reefs, the coastal zone of Trinidad and Tobago is a key asset for the national economy. It harbors much of the islands' critical infrastructure in the energy, tourism and fisheries sectors, including industrial complexes, refineries and ports, fish processing plants and tourism resorts. Coastal ecosystems themselves provide goods and services that are also vital to these sectors, including for example the provision of nursery habitat for fish stocks, buffering public infrastructure from coastal erosion and flooding, and supporting tourism and recreation. The Government of Trinidad and Tobago (GOTT) has recognized that future growth and diversification of the economy depend on the maintenance of these ecosystem services and on enhancing the resilience of economic activities to coastal risks associated with natural and anthropogenic hazards such as earthquakes, landslides, erosion, flooding and oil spills and, including climate change and sea level rise as well as threats to biodiversity such as deforestation.¹ In this context, the GOTT endorses an integrated approach to coastal zone management (ICZM) that addresses risks and seeks to optimize the contribution of the coastal zone to the economy.
- 1.2 The Tobago House of Assembly (THA) has also emphasized the specific relevance of Tobago's coast, given that tourism is the main income earner for the island and is largely dependent on coastal tourism. In addition, Tobago is also highly susceptible to both geologic and climatic hazards); and 70% to 80% of the island's population and 80% of the hotel plant are at risk as they are located on the coast; and the coastal zone is also important to the social and recreational well-being of Tobagonians. Since the entire island falls within the coastal zone, ICZM in Tobago needs to adopt a holistic 'ridge to reef' approach to managing the coast, whereby decisions regarding the health of coastal ecosystems including reefs are directly linked to land-based processes, such as rapid river transport of sediment derived from deforested slopes in upper watersheds as well as from local landslides.
- 1.3 Climate change is likely to increase the frequency and severity of natural hazards and disasters in Trinidad and Tobago and thus has the potential to adversely affect shoreline stability, the health of coastal and marine ecosystems, industry and private property in general. Coral bleaching, the intensification of beach erosion and encroachment or loss of mangroves and lagoons associated with sea level rise could have serious implications for

¹ GOTT. 2012. Working for Sustainable Development in Trinidad and Tobago. Progress, Gaps and Opportunities for Action.

future development, recreational activities and land use in the coastal zone. This means that without adaptation, climate change impacts are likely to threaten the physical and economic viability of the coastal zone.

- 1.4 Recognizing the strategic importance of the country's coastal zone to economic development, the Government of Trinidad and Tobago has made several recent advances towards risk-resilient ICZM. These advances include, for example, the on-going work of the National Steering Committee on ICZM which was created in April 2012 and mandated by Cabinet to recommend a national policy framework, strategy and action plan that would build the foundation for a permanent CZM function in the country. Represented on the Committee are the key GOTT agencies (including the THA) that make policy, manage information, invest in public infrastructure, and monitor and assess development in the coastal zone. These recent developments complement several other relevant on-going activities in the country including in coastal and marine research and data collection (e.g., beach profiling), coastal infrastructure and engineering science, and vulnerability assessments that can all contribute to a solid foundation for a permanent ICZM Program.
- 1.5 The GOTT is considering an investment loan for risk-resilient ICZM as a means towards establishing a permanent ICZM function in Trinidad and Tobago. In view of this, the Bank has approved a Technical Cooperation (grant) entitled 'Feasibility studies for a risk-resilient integrated coastal zone management program in Trinidad and Tobago' (TT-T1038). The TC consists of two components: (i) Component 1: Support to policy framework and institutional sustainability for risk-resilient ICZM aimed at assisting the GOTT in establishing a fully-endorsed framework for ICZM and help build the capacity needed to deliver an ICZM investment program; and (ii) Component 2: Design and feasibility analysis of a risk-resilient ICZM investment program. The terms of reference presented here refer to communication services aimed at supporting the National ICZM Committee in its efforts to raise public awareness and understanding of the value of the coastal zone to the national economy and local welfare, coastal risks and the benefits of risk-resilient ICZM.
- 1.6 The IDB is seeking the services of an individual consultant with demonstrated experience in delivering highly-effective communication solutions to help design and carry out a multi-media campaign that will accompany the formulation of the national framework for ICZM.

II. OBJECTIVES OF THE CONSULTANCY

- 2.1 The general objective of the consultancy is to support the National ICZM Steering Committee, particularly its Working Group for Public Outreach, Awareness and Education, in communicating and informing its public constituency in parallel to the formulation of the ICZM national policy framework. The specific objectives of the consultancy are to: (i) design and deliver a cost-effective and high-impact multi-media campaign aimed at raising public awareness and understanding of the value of the coastal zone to the national economy, coastal risks including those associated with natural disasters and climate change impacts and the benefits of risk-resilient ICZM; and (ii) provide support in the design and production of compelling and relevant

communication materials to be used during the public consultations to be conducted in concert with the formulation of the national ICZM policy framework.

III. TASKS

3.1 The consultant will carry out the following tasks:

- a) Review results of the baseline survey commissioned by the National ICZM Committee to assess existing public awareness and understanding of ICZM opportunities and issues in both rural and urban areas. Using the survey results complemented with interviews with the members of the National ICZM Committee, the consultant should identify the following: (i) the thematic gaps in public awareness of ICZM; (ii) the demographic and social groups that are priorities for outreach campaigns due to both their lack of understanding of ICZM and relevance to successful ICZM implementation; (iii) the benefits and opportunities associated with ICZM that have widespread popularity; (iv) the ecosystem services that are widely valued across different stakeholder groups; and (v) the optimal media outlets for disseminating information about ICZM.
- b) Design and deliver a multi-media public communication strategy that will promote buy-in to the ICZM process and build awareness of environmental issues. The design of the multi-media campaign (i.e.: audiences, key messages) will use lessons learned from the baseline survey to emphasize environmental issues that resonate with different stakeholders. The campaign will introduce the idea of “ecosystem services” in order to emphasize the connection between the environment and public well-being. Critical ecosystem services to consider include: recreation/tourism, provisioning (with an emphasis on fisheries), coastal stabilization, flood protection, and water quality control. Moreover, the campaign will explain how the ICZM policy framework and investment plan will work to protect the natural resources that provide valuable ecosystem services. The Public Outreach, Awareness and Education Working Group of the National ICZM Committee has budgeted specific amounts for radio, TV and newspaper advertisements; the consultancy will take this budget into account and make recommendations as to how it should be allotted and which media outlets would be best to use to achieve the desired goals (TV programs, radio stations, etc.). Finally, this consultancy will develop a project, timeline, and monitoring plan to complement the strategy describing the implementation process (phases and messages/outlets synchronization).
- c) Help in the design of public consultation events for the proposed policy framework, tailored to the most appropriate modalities for ensuring meaningful engagement of stakeholders in both Trinidad and Tobago. Based upon the results from the baseline studies, the consultant will provide his/her input on target priority stakeholders for the consultations, including private sector actors with economic interest in the coastal zone, civil society groups, and relevant government agencies. The consultancy will be responsible for the design and development of appropriate communication materials to complement the public consultation process. An overview of the policy framework will be presented with the objective of receiving feedback to further inform the development of the policy framework. The public consultations will be designed and

implemented in close coordination with the Public Outreach, Awareness and Education Working Group.

IV. CHARACTERISTICS OF THE CONSULTANCY

- 4.1 **Qualifications:** Individual consultant with demonstrated experience and in-depth expertise in public awareness campaigns, including aspects related to: (i) baseline surveys, (ii) focus groups, (iii) public consultations, and (iv) multi-media campaigns. Previous experience working in projects financed by multi-lateral and bilateral organizations in the Caribbean is desirable. Experience with coastal zone ecosystems and ecosystem services is also beneficial.
- 4.2 **Duration:** 4 months.
- 4.3 **Place of work:** Various locations in Trinidad and Tobago
- 4.4 **Coordination:** The work of the consulting firm will be closely coordinated with the Ministry of Planning and Sustainable Development and the National ICZM Committee, the Technical Advisory Committee for the project. The work will also be monitored by the IDB Country Office in Trinidad and the IDB Project Team assigned to the preparation of the Feasibility studies for a risk-resilient coastal zone management program in Trinidad and Tobago (TT-T1038).

V. DELIVERABLES

- 5.1 The consultancy will be responsible for submitting the following interim and final deliverables:
 - a) Work plan to be submitted two weeks after the signature of the contract;
 - b) Summary report of findings from baseline survey results and interviews;
 - c) Multi-media public communication strategy (design, implementation, timeline, monitoring, and budget plan);
 - d) Materials for public consultations (print and online);
 - e) Inputs and recommendations in the design of the public consultation process (i.e.: key stakeholders, modality of public consultation events, content).

**Capacity Building for Integrated Coastal Zone Management in Trinidad and Tobago
(TT-T1038)**

INDICATIVE TERMS OF REFERENCE

I. BACKGROUND AND JUSTIFICATION

A. The importance of Trinidad and Tobago's coastal zone

- 1.1 Extending over 700 km and encompassing a variety of regionally significant ecosystems such as one of the largest freshwater wetland in the Caribbean, mangroves, extensive beaches and coral reefs, the coastal zone of Trinidad and Tobago is a key asset for the national economy. It harbors much of the islands' critical infrastructure in the energy, tourism and fisheries sectors, including industrial complexes, refineries and ports, fish processing plants and tourism resorts. Coastal ecosystems themselves provide goods and services that are also vital to these sectors, including for example the provision of nursery habitat for fish stocks, buffering public infrastructure from coastal erosion and flooding, and supporting tourism and recreation. The Government of Trinidad and Tobago (GOTT) has recognized that future growth and diversification of the economy depend on the maintenance of these ecosystem services and on enhancing the resilience of economic activities to coastal risks associated with natural and anthropogenic hazards such as earthquakes, landslides, erosion, flooding and oil spills and, including climate change and sea level rise as well as threats to biodiversity such as deforestation.¹ In this context, the GOTT endorses an integrated approach to coastal zone management (ICZM) that addresses risks and seeks to optimize the contribution of the coastal zone to the economy.
- 1.2 The Tobago House of Assembly (THA) has also emphasized the specific relevance of Tobago's coast, given that tourism is the main income earner for the island and is largely dependent on coastal tourism. In addition, Tobago is also highly susceptible to both geologic and climatic hazards); and 70% to 80% of the island's population and 80% of the hotel plant are at risk as they are located on the coast; and the coastal zone is also important to the social and recreational well-being of Tobagonians. Since the entire island falls within the coastal zone, ICZM in Tobago needs to adopt a holistic 'ridge to reef' approach to managing the coast, whereby decisions regarding the health of coastal ecosystems including reefs are directly linked to land-based processes, such as rapid river transport of sediment derived from deforested slopes in upper watersheds as well as from local landslides.
- 1.3 Climate change is likely to increase the frequency and severity of natural hazards and disasters in Trinidad and Tobago and thus has the potential to adversely affect shoreline stability, the health of coastal and marine ecosystems, industry and private property in general. Coral bleaching, the intensification of beach erosion and encroachment or loss of mangroves and lagoons associated with sea level rise could have serious implications for future development, recreational activities and land use in the coastal zone. This means

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that without adaptation, climate change impacts are likely to threaten the physical and economic viability of the coastal zone.

- 1.4 Recognizing the strategic importance of the country's coastal zone to economic development, the Government of Trinidad and Tobago has made several recent advances towards risk-resilient ICZM. These advances include, for example, the on-going work of the National Steering Committee on ICZM which was created in April 2012 and mandated by Cabinet to recommend a national policy framework, strategy and action plan that would build the foundation for a permanent CZM function in the country. Represented on the Committee are the key GOTT agencies (including the THA) that make policy, manage information, invest in public infrastructure, and monitor and assess development in the coastal zone. These recent developments complement several other relevant on-going activities in the country including in coastal and marine research and data collection (e.g., beach profiling), coastal infrastructure and engineering science, and vulnerability assessments that can all contribute to a solid foundation for a permanent ICZM Program.
- 1.5 The GOTT is considering an investment loan for risk-resilient ICZM as a means towards establishing a permanent ICZM function in Trinidad and Tobago. In view of this, the Bank has approved a Technical Cooperation (grant) entitled 'Feasibility studies for a risk-resilient integrated coastal zone management program in Trinidad and Tobago' (TT-T1038). The TC consists of two components: (i) Component 1: Support to policy framework and institutional sustainability for risk-resilient ICZM aimed at assisting the GOTT in establishing a fully-endorsed framework for ICZM and help build the capacity needed to deliver an ICZM investment program; and (ii) Component 2: Design and feasibility analysis of a risk-resilient ICZM investment program. The terms of reference presented here pertain to Component 1 of the TC. The proposed capacity building activities will support the creation of a national ICZM policy framework by informing the National ICZM Steering Committee of recent trends in ICZM.
- 1.6 The GOTT and the Bank are seeking the services of a consulting firm with demonstrated experience in the design and delivery of training services in natural resources management and sustainable development fields to help assess capacity building needs in ICZM as well as support the design and delivery of capacity building activities.

II. OBJECTIVES OF THE CONSULTANCY

- 2.1 The general objective of the consultancy is to enhance knowledge and capacities in innovative aspects of ICZM of the National ICZM Steering Committee, its Working Groups and other key stakeholders in ICZM. Enhanced knowledge and capacities will enable the National ICZM Steering Committee to recommend a national policy framework that builds the foundation for a permanent coastal zone management function and to design a risk resilient ICZM investment program that is consistent with the policy framework.
- 2.2 The consultancy will work to build the capacity of the National ICZM Steering Committee in a number of thematic areas representing the state-of-the-art in ICZM in the Caribbean. Although the definitive list of thematic areas will depend on a needs assessment survey to be conducted at the beginning of the consultancy, potential areas for

- capacity building include: (i) the integration of disaster risk management and climate change adaptation in ICZM (e.g., risk identification and assessment); (ii) decision-making skills related to the valuation of ecosystem services and economic analysis of investment options; and (iii) investment solutions (science-based coastal engineering, including non-structural measures, and ecosystem-based coastal protection).
- 2.3 As detailed in Section I, the abundant and diverse coastal zone resources of Trinidad and Tobago face risks associated with geologic and climatic hazards expected to increase due to climate change. The consultancy will build the capacity of the National ICZM Steering Committee in understanding the concepts and science associated with risks, their identification, assessment and mitigation within the context of the coastal zone. In the context of Tobago Risk management in the context of the coastal zone should adopt a “ridge to reef” approach, given the size of the country and the diversity of threats. Adaptation to climate change is a priority in the context of disaster risk management; capacity building will focus on the predicted changes that Trinidad and Tobago will face in the coming years and risk reduction and adaptation measures.
- 2.4 The consultancy will also build the capacity of the National ICZM Steering Committee in decision-making skills in at least two specific areas. First, ecosystem services and their valuation are new concepts that have been growing in prominence since the release of the Millennium Ecosystem Assessment. By understanding the benefits that ecosystems provide to people, the Steering Committee will be better able to incorporate environmental management into the policy framework. The role of ecosystem services in disaster risk management will be highlighted. Second, the consultancy will increase capacity in economic analysis of investment options. This will allow the Steering Committee to design the policy framework to maximize returns from the ICZM investment program, the design of which is supported under other activities within this TC.
- 2.5 Finally, the consultancy will increase the Steering Committee’s capacity to identify investment solutions to increase coastal resilience. As the innovative ICZM program in Barbados shows, coastal infrastructure can help protect valuable coastal resources. The consultancy will provide the Steering Committee with information on a range of coastal infrastructure options, including grey infrastructure, non-structural measures and ecosystem-based coastal protection. This capacity building component will relate to disaster risk management strategies identified in 2.3 and the incorporation of ecosystem services as a decision-making tool and economic analysis of investment options in 2.4, and will include a technical visit by key stakeholders to Barbados in order to view the Barbados ICZM Program including the use of coastal infrastructure to protect coastal resources.

III. TASKS

- 3.1 The consulting team will carry out the following tasks:
- a) Conduct a brief assessment of immediate capacity building needs for the National ICZM Steering Committee and each of Working Group (listed in paragraph 3.1.g). The assessment will involve interviews with representatives of each Working Group

- in order to identify the unique requirements of each Working Group and their relation to the thematic areas outlined in section II.
- b) Collect reports and other relevant printed knowledge products that are related to each thematic area in paragraph 2.2.
 - c) Outline a plan for capacity building.
 - d) Design course agendas and select modules.
 - e) Recruit instructors for the selected modules.
 - f) Curriculum development (lectures, case studies, exercises, background reading materials).
 - g) Execute separate two-day training workshops with each of the following Working Groups that comprise the Steering Committee: the Economic and Social Development Working Group; the Natural Resources Assessment Working Group; the Vulnerability and Adaptation to Climate Change Impacts Working Group; the Public Outreach, Awareness and Education Working Group; and the Legal and Institutional Assessment Working Group. The total number of individuals trained will be between 25-20. The needs assessment exercises will define which thematic areas are a priority for each Working Group workshop. Each workshop should be specifically tailored to the requirements of the particular Working Group. For instance, the content of the workshop for the Vulnerability and Adaptation to Climate Change Impacts Working Group should focus on the thematic areas of disaster risk management and climate change adaptation in 2.3.

IV. CHARACTERISTICS OF THE CONSULTANCY

- 4.1 **Qualifications:** International consulting firm or consortium with demonstrated experience and in-depth expertise in capacity building on the issue of coastal zone management, including aspects related to: (i) disaster risk management, (ii) climate change adaptation, (iii) ecosystem services as a framework for decision-making, (iv) economic analysis of investment programs, and (v) both grey and ecosystem-based coastal protection infrastructure. Previous experience working in projects financed by multi-lateral and bilateral organizations in the Caribbean is desirable.
- 4.2 **Duration:** 3 months.
- 4.3 **Place of work:** Trinidad and Tobago.
- 4.4 **Coordination:** The work of the consulting firm will be closely coordinated with the Ministry of Planning and Sustainable Development and the National ICZM Committee, the Technical Advisory Committee for the project. The work will also be monitored by the IDB Country Office in Trinidad and the IDB Project Team assigned to the preparation of the Feasibility studies for a risk-resilient coastal zone management program in Trinidad and Tobago (TT-T1038).

V. DELIVERABLES

- 5.1 The consultancy will be responsible for submitting the following interim and final deliverables:
- (i) Work plan to be submitted two weeks after the signature of the contract.
 - (ii) Report summarizing findings of the needs assessment exercises, including the specific needs of each Working Group, within five weeks after the signature of the contract. The report will include a strategy and outline for the capacity building workshops.
 - (iii) Electronic knowledge packets for each Working Group. These should include any powerpoint presentations given to the Working Group during the workshops along with supplemental reports that are foundational to each of the thematic areas in 2.2.

Project Coordinator for Feasibility Studies for a Risk-resilient Integrated Coastal Zone Management Program in Trinidad and Tobago

INDICATIVE TERMS OF REFERENCE

I. BACKGROUND AND JUSTIFICATION

A. The importance of Trinidad and Tobago's coastal zone

- 1.1 Extending over 700 km and encompassing a variety of regionally significant ecosystems such as one of the largest freshwater wetland in the Caribbean, mangroves, extensive beaches and coral reefs, the coastal zone of Trinidad and Tobago is a key asset for the national economy. It harbors much of the islands' critical infrastructure in the energy, tourism and fisheries sectors, including industrial complexes, refineries and ports, fish processing plants and tourism resorts. Coastal ecosystems themselves provide goods and services that are also vital to these sectors, including for example the provision of nursery habitat for fish stocks, buffering public infrastructure from coastal erosion and flooding, and supporting tourism and recreation. The Government of Trinidad and Tobago (GOTT) has recognized that future growth and diversification of the economy depend on the maintenance of these ecosystem services and on enhancing the resilience of economic activities to coastal risks associated with natural and anthropogenic hazards such as earthquakes, landslides, erosion, flooding and oil spills and, including climate change and sea level rise as well as threats to biodiversity such as deforestation.¹ In this context, the GOTT endorses an integrated approach to coastal zone management (ICZM) that addresses risks and seeks to optimize the contribution of the coastal zone to the economy.
- 1.2 The Tobago House of Assembly (THA) has also emphasized the specific relevance of Tobago's coast, given that tourism is the main income earner for the island and is largely dependent on coastal tourism. In addition, Tobago is also highly susceptible to both geologic and climatic hazards); and 70% to 80% of the island's population and 80% of the hotel plant are at risk as they are located on the coast; and the coastal zone is also important to the social and recreational well-being of Tobagonians. Since the entire island falls within the coastal zone, ICZM in Tobago needs to adopt a holistic 'ridge to reef' approach to managing the coast, whereby decisions regarding the health of coastal ecosystems including reefs are directly linked to land-based processes, such as rapid river transport of sediment derived from deforested slopes in upper watersheds as well as from local landslides.
- 1.3 Climate change is likely to increase the frequency and severity of natural hazards and disasters in Trinidad and Tobago and thus has the potential to adversely affect shoreline stability, the health of coastal and marine ecosystems, industry and private property in general. Coral bleaching, the intensification of beach erosion and encroachment or loss of mangroves and lagoons associated with sea level rise could have serious implications for future development, recreational activities and land use in the coastal zone. This means

¹ GOTT. 2012. Working for Sustainable Development in Trinidad and Tobago. Progress, Gaps and Opportunities for Action.

that without adaptation, climate change impacts are likely to threaten the physical and economic viability of the coastal zone.

- 1.4 Recognizing the strategic importance of the country's coastal zone to economic development, the Government of Trinidad and Tobago has made several recent advances towards risk-resilient ICZM. These advances include, for example, the on-going work of the National Steering Committee on ICZM which was created in April 2012 and mandated by Cabinet to recommend a national policy framework, strategy and action plan that would build the foundation for a permanent CZM function in the country. Represented on the Committee are the key GOTT agencies (including the THA) that make policy, manage information, invest in public infrastructure, and monitor and assess development in the coastal zone. These recent developments complement several other relevant on-going activities in the country including in coastal and marine research and data collection (e.g., beach profiling), coastal infrastructure and engineering science, and vulnerability assessments that can all contribute to a solid foundation for a permanent ICZM Program.
- 1.5 The GOTT is considering an investment loan for risk-resilient ICZM as a means towards establishing a permanent ICZM function in Trinidad and Tobago. In view of this, the Bank has approved a Technical Cooperation (grant) entitled 'Feasibility studies for a risk-resilient integrated coastal zone management program in Trinidad and Tobago' (TT-T1038). The TC consists of two components: (i) Component 1: Support to policy framework and institutional sustainability for risk-resilient ICZM aimed at assisting the GOTT in establishing a fully-endorsed framework for ICZM and help build the capacity needed to deliver an ICZM investment program; and (ii) Component 2: Design and feasibility analysis of a risk-resilient ICZM investment program. This consultancy will coordinate the activities supported by the TC.
- 1.6 The GOTT and the Bank are seeking the services of an individual consultant with demonstrated experience in program coordination.

II. OBJECTIVES OF THE CONSULTANCY

- 2.1 The objective of this consultancy is to coordinate the activities of the TC entitled 'Feasibility studies for a risk-resilient integrated coastal zone management program in Trinidad and Tobago.' Successful implementation of this project is expected to contribute to the development of a national policy framework for coastal zone management; and enhanced capacity to deliver an ICZM investment program.

III. TASKS

- 3.1 The consultant in the role of the Project Coordinator (PC) will help ensure that the procurement of goods and services on this project is in accordance with agreed procurement guidelines and standards. The PC will:
 - a. Manage the consultant(s) who will deliver the technical components of the project.
 - b. Manage and control the project documents, logistics, procurement, outputs and publications.

- c. Ensure timely liaison with the National ICZM Committee, including submission for review by the Committee of interim and draft reports of consultants.
 - d. Review and consolidate all technical comments received on interim and draft reports.
 - e. Use project management tools and techniques to facilitate successful implementation of all components of the project, paying attention to the management of resources, the keeping of financial and other records, stakeholder relationships and communications and visibility.
 - f. Monitor project implementation and prepare periodic monitoring reports (technical and financial) ensuring timely submission.
 - g. Coordinate project activities to ensure that each component is implemented in accordance with the program objectives.
 - h. Help organize and hold project events including capacity building workshops and public consultations.
- 3.2 Collaborate with the GOTT and the IDB to facilitate project review missions by the IDB and plan and organize mid-term reviews.

IV. CHARACTERISTICS OF THE CONSULTANCY

- 4.1 **Qualifications:** A post-graduate degree or equivalent professional experience in environmental or coastal zone management, sustainable development or related areas, environmental economics, and project management skills. Minimum 5 (five) years of experience in project management, preferably in an area related to risk resilience, e.g. coastal zone management; natural resources management; disaster risk management or related field; prior working experience in the Caribbean and in IDB or other internationally funded project will be an asset. Excellent communication (oral and written) skill in English.
- 4.2 **Type of consultancy:** Individual consultant.
- 4.3 **Duration:** 14 months from the date of the signing of the contract.
- 4.4 **Location:** Trinidad and Tobago.
- 4.5 **Payment schedule:** Remuneration will be monthly and contingent on the submission of satisfactory progress reports.
- 4.6 **Coordination:** The work of the consulting firm will be closely coordinated with the Ministry of Planning and Sustainable Development and the National ICZM Committee, the Technical Advisory Committee for the project. The work will also be monitored by the IDB Country Office in Trinidad and the IDB Project Team assigned to the preparation of the Feasibility studies for a risk-resilient coastal zone management program in Trinidad and Tobago (TT-T1038).

V. DELIVERABLES

- 5.1 The consultancy will be responsible for submitting the following interim and final deliverables:

- (i) A detailed work plan, methodology and implementation schedule within ten (10) working days after commencement of the assignment.
- (ii) Submission of periodic program reports in accordance with agreed schedule.

SAFEGUARD POLICY FILTER REPORT

This Report provides guidance for project teams on safeguard policy triggers and should be attached as an annex to the PP (or equivalent) together with the Safeguard Screening Form, and sent to ESR.

1. Save as a Word document.
2. Enter additional information in the spaces provided, where applicable.
3. Save new changes.

PROJECT DETAILS	IDB Sector	ENVIRONMENT AND NATURAL DISASTERS-COASTAL ZONE MANAGEMENT
	Type of Operation	Technical Cooperation
	Additional Operation Details	
	Investment Checklist	Generic Checklist
	Team Leader	Lemay, Michele H. (MICHELEL@iadb.org)
	Project Title	Feasibility Studies for a Coastal Zone Management Investment Program
	Project Number	TT-T1038
	Safeguard Screening Assessor(s)	Gromko, Duncan (duncang@IADB.ORG)
	Assessment Date	2013-07-31
	Additional Comments	

SAFEGUARD POLICY FILTER RESULTS	Type of Operation	Technical Cooperation	
	Safeguard Policy Items Identified (Yes)	Activities to be financed in the project area are located within a geographical area or sector exposed to natural hazards* (Type 1 Disaster Risk Scenario).	(B.01) Disaster Risk Management Policy– OP-704
		The Bank will make available to the public the relevant Project documents.	(B.01) Access to Information Policy– OP-102
		The operation is in compliance with environmental, specific women’s rights, gender, and indigenous laws and regulations of the country where the	(B.02)

		operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	
		The operation (including associated facilities) is screened and classified according to their potential environmental impacts.	(B.03)
		If a Technical Cooperation, the operation is associated with the design and/or implementation of a major investment loan in infrastructure.	(B.04)
		The project is specifically designed to increase the capacity of human and natural systems to adapt to a changing climate.	(B.04)
		The project includes activities to close current “adaptation deficits” or to increase the capacity of human and natural systems to adapt to a changing climate.	(B.04)
		Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation of women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.	(B.06)
		The Bank will monitor the executing agency/borrower’s compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
		Suitable safeguard provisions for procurement of goods and	(B.17)

		services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.	
	Potential Safeguard Policy Items(?)	No potential issues identified	
	Recommended Action:	<p>Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.</p> <p>The project triggered the Disaster Risk Management policy (OP-704).</p> <p>A more limited and specific Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704). Please contact a Natural Disaster Specialist in VPS/ESG or INE/RND for guidance.</p> <p>Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please contact a INE/CCS adaptation specialist for guidance.</p> <p>The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.</p>	
	Additional Comments:		

ASSESSOR DETAILS	Name of person who completed screening:	Gromko, Duncan (duncang@IADB.ORG)
	Title:	
	Date:	2013-07-31

SAFEGUARD SCREENING FORM

This Report provides a summary of the project classification process and is consistent with Safeguard Screening Form requirements. The printed Report should be attached as an annex to the PP (or equivalent) and sent to ESR.

1. Save as a Word document.
2. Enter additional information in the spaces provided, where applicable.
3. Save new changes.

PROJECT DETAILS	IDB Sector	ENVIRONMENT AND NATURAL DISASTERS- COASTAL ZONE MANAGEMENT
	Type of Operation	Technical Cooperation
	Additional Operation Details	
	Country	TRINIDAD AND TOBAGO
	Project Status	
	Investment Checklist	Generic Checklist
	Team Leader	Lemay, Michele H. (MICHELEL@iadb.org)
	Project Title	Feasibility Studies for a Coastal Zone Management Investment Program
	Project Number	TT-T1038
	Safeguard Screening Assessor(s)	Gromko, Duncan (duncang@IADB.ORG)
	Assessment Date	2013-07-31
	Additional Comments	

PROJECT CLASSIFICATION SUMMARY	Project Category: C	Override Rating:	Override Justification:
	Conditions/ Recommendations		Comments:
			<ul style="list-style-type: none"> • No environmental assessment studies or consultations are required for Category "C" operations. • Some Category "C" operations may require specific safeguard or monitoring requirements (Policy Directive B.3).Where relevant, these operations will establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.). • The Project Team must send the PP (or equivalent)

		containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports.
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SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	Identified Impacts/Risks	Potential Solutions
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DISASTER SUMMARY	Details	Actions
	<p>The Project should include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. Alternative prevention and mitigation measures that decrease vulnerability must be analyzed and included in project design and implementation as applicable. These measures should include safety and contingency planning to protect human health and economic assets. Expert opinion and adherence to international standards should be sought, where reasonably necessary.</p>	<p>A more limited and specific Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704). Please contact a Natural Disaster Specialist in VPS/ESG or INE/RND for guidance.</p> <p>Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please contact a INE/CCS adaptation specialist for guidance.</p> <p>The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.</p>

ASSESSOR DETAILS	Name of person who completed screening:	Gromko, Duncan (duncang@IADB.ORG)
	Title:	
	Date:	2013-07-31



Ministry of Planning and Sustainable Development
Government of the Republic of Trinidad and Tobago

August 12, 2013

Ms. Michelle Fenty
Representative
Inter-American Development Bank
17 Alexandra Street
ST CLAIR

Dear Ms. Fenty

Feasibility Studies for a Risk-Resilient Coastal Zone Management Investment Program

I refer to the above captioned Technical Cooperation (TC), which is in the preparation phase and is to be executed by the Ministry of Planning and Sustainable Development in 2013. The TC is intended to strengthen the policy framework and local capacity for risk-resilient Integrated Coastal Zone Management (ICZM) in Trinidad and Tobago, with a view towards making future investments in the sustainable development and management of the country's coastal zone. The proposed TC will comprise the following components:

- **Component 1:** Support to Policy Framework and Institutional Sustainability for risk-resilient ICZM
- **Component 2:** Design and feasibility analysis of risk-resilient ICZM investment programme

To this end, the Government of the Republic of Trinidad and Tobago requests that the IDB executes Component 2 of the TC on its behalf. The justification for this arrangement are as follows: (i) execution by the Bank will enable access to the Bank's highly specialized expertise in ecosystem services mapping and evaluation, disaster risk management and climate change adaptation, which is critical to the achievement of its objectives. It is expected that capacity in these areas will be developed through the implementation of the proposed TC in advance of the approval of the investment loan; and (ii) to minimize the risk that the TC deliverables that are required to inform the design and appraisal of the investment loan are delayed.

We look forward to a positive response regarding your support in this critical area.

Sincerely,

[f]Permanent Secretary

Ministry of Planning and Sustainable Development