## Technical Cooperation Project: Support Implementation of Climate-resilient and Sustainable Integrated Coastal Zone Management (ICZM) Public Policy in Barbados

#### (BA-T1109)

## A Consultant firm:

#### Development of a detailed proposal for an investment project related to climate-resilient ICZM to be implemented in the future under the Public-Private Partnership (PPP) framework in Barbados.

#### **Background**

Barbados is the easternmost island country in the Caribbean with a land area of 430 km<sup>2</sup>, an Exclusive Economic Zone (EEZ) of approximately 185,000 km<sup>2</sup>, and a coastline, approximately 97 km long. The natural resources contained within these vast ocean areas, particularly those in coastal zones, provide a variety of services that support human well-being and the tourism industry. More than half of Barbados' population resides within 2 km of the coastline in an urban corridor along the west and south coasts. Coastal areas, particularly the 33 km along the western and southern coasts, serve as the primary location for 95% of the country's tourism activity, attracting more than 1 million visitors a year.

While the coastal zone is critical to the country's socioeconomic activities, it is also a complex and sensitive natural system where land and sea border each other and mutually interact through a range of oceanographic, geomorphic, and biologic processes. Such processes are principally driven by, but not limited to, waves, tides, currents, sediment transport, erosion, weathering, sea level changes and organic activity. Delicate geography, sensitive ecosystems, urbanization, and continued urban expansion make the coastal areas of the country sensitive to a variety of socio-environmental challenges. In particular, the main challenges facing the country's coastline and exacerbated by changing climate are coral degradation, coastal erosion (both on sandy beaches and harder cliff areas), and coastal flooding.

A public policy framework for balancing climate resilience, environmental protection and restoration, sustainable use of natural resources and socio-economic/industrial development in coastal areas is commonly referred to as Coastal Zone Management (CZM) or Integrated CZM (ICZM). Since the 1980s, the Government of Barbados (GoBA) has made continuous efforts to improve the institutionalization of ICZM. Examples include the establishment of the Coastal Zone Management Unit (CZMU) in 1996 as the implementing agency for public policy on ICZM, and the enactment of the Coastal Zone Management Act (CZM Act) in 1998. Furthermore, after decades of ICZM implementation, especially with the IDB-financed investment projects (e.g., the Coastal Infrastructure Program: BA0019, implemented from 2002 to 2010 with the amount of US\$17 million, and the Coastal Risk Assessment and Management Program BA-L1014, 2011-

2020: US\$35 million), the GoBA/CZMU has deepened its coastal engineering and nonengineering knowledge on the design and application of various combinations of measures.

**Challenges:** In the face of increasing coastal climate risks, the GoBA is faced with the need to strengthen the framework for "climate-resilient" ICZM public policies. This includes the need for engineering interventions to reduce climate risks in several critical locations on the west and south coasts, as well as strengthening institutional capacity, including improving the climate risk analysis tool (National Coastal Risk Information and Planning Platform: NCRIPP) and enhancing the capacity to use it in development planning/implementation.

The IDB and the GoBA has signed an agreement in March 2024 for a US\$50 million loan project: Climate Resilient and Sustainable Integrated Coastal Zone Management (BA-L1059). The overall objective of the project is to promote climate-resilient economic development in the country by reducing the climate risk in the coastal zone. The project has three specific objectives: (i) to reduce the risk of coastal erosion and flooding; (ii) to improve the socio-economic value for the tourism industry and local communities in the coastal area; and (iii) to improve the technical capacity and governance necessary to promote climate-resilient ICZM public policies. Key outputs programmed to achieve these objectives include: a range of small-scale coastal infrastructure (e.g. breakwaters and groynes); coastal walkways (e.g., boardwalk) and institutional strengthening-related facilities; equipment; and training.

The objective of this TC is to provide complimentary technical support activities to the GoBA necessary to increase the effectiveness of the implementation of the investment loan project: Climate resilient and sustainable Integrated Coastal Zone Management (BA-L1059).

The TC consists of two components: (i) Implementation of complementary technical activities to increase the effectiveness of the implementation of the project BA-L1059; and (ii) Dissemination and communication of TC results. This TOR falls under and will be implemented as one of the activities of the Component (i) of the TC. For that purpose, the Environment, Rural Development and Disaster Risk Management Division (CSD/RND) of the IDB is looking for a consulting firm that can develop a detailed proposal for an investment project related to climate-resilient ICZM to be implemented in the future under the PPP framework in Barbados.

#### **Objectives:**

The purpose of this consultancy is to develop a detailed proposal for an investment project related to climate-resilient ICZM to be implemented in the future under the PPP framework in Barbados.

#### Scope of Services:

PPP in this TC refers to a mechanism or agreement in which the public and private sectors work together to develop infrastructure and provide services that take into account climate risk resilience and sustainable natural resources in coastal areas for the purpose of achieving synergistic effects.

There are several examples of the use of PPPs in the climate-resilient ICZM around the world, which can be systematized, among others, as follows (i) the public sector formulates a coastal zone management plan, while the private sector provides technical expertise, financing and

implementation; (ii) the private sector invests in facilities in the coastal zone, while the public sector strengthens regulations to ensure natural resource management that takes into account climate risk resilience; and (iii) the public and private sectors work together on comprehensive coastal zone management from the planning stage to development and operation in a given area.

In the context of ICZM public policy in Barbados, the discussion on the effective use of PPPs has only just begun, so as a starting point for discussion, a related action plan has been prepared very recently through the Technical Cooperation (TC) project: BA-T1068<sup>1</sup>. Based on the action plan, this consultancy will deepen the discussion on how to utilize PPPs to achieve more effective climate-resilient ICZM public policies in Barbados.

## Key Activities:

The consulting firm shall do the following:

- Review existing relevant literatures, including the Action Plan that has been prepared under the TC: BA-T1068.
- Disseminate the recently developed relevant Action Plans to national public and private stakeholders; and select some priority activities from the plan that are considered to be highly effective to implement;
- Develop conceptual design, preliminary feasibility studies (or ex-ante cost-benefit analysis) for the selected priority activities.
- Develop a detailed investment project proposal for selected priority activity that are deemed to have a particularly high impact
- Final dissemination workshop.

#### Expected Deliverables, project schedule/payments and milestones:

The Consultant shall submit the following products to the IDB:

Deliverables		% of payment	Due date after contract signing
a)	Work plan	10%	
b)	ConceptualDesign,preliminaryfeasibilitystudies for theselectedpriority activities	45%	
C)	A detailed investment project proposal	45%	

#### **Reporting Requirements**

The firm is expected to produce the deliverables within the timeline as described above.

#### **Required:**

- **Citizenship:** Citizenship of one of the 48 member countries.

<sup>&</sup>lt;sup>1</sup> The title of the TC: improving Institutional Frameworks for ICZM, National Risk Information Planning Systems and Sustainable Climate-Resilient Coastal Infrastructure

- **Consanguinity;** No relatives (blood relatives up to the fourth degree, including spouse, and in-laws up to the second degree) working for the IDB Group.
- **Education;** At least a Master's degree in the field of: Computer Science, Environmental Management, Sustainability Science, International Development, Public Policy, Climate Change Adaptation.
- **Experience:** Minimum of 10 years of equivalent experience.
- Languages: English or Spanish.

### General and technical competencies.

- **Knowledge:** Integrated Coastal Zone Management, Environmental Management, Policy, Risk Management, Climate Change Adaptation. Coordination and sector dialogue skills.

#### **Opportunity Overview**

- **TYPE AND FORM OF CONTRACT:** Consulting Firm. Lump sum payment.
- Duration/Start Date: 12 months/beginning XXX.
- Location: Consultant's place of residence.
- Contact Person: Disaster Risk Management Specialist (CSD/RND).
- **REQUIREMENTS:** Must be a citizen of one of the 48 IDB member countries and have no family member currently working for the IDB Group.

Payment Methods and Conditions Compensation will be determined in accordance with the Bank's policies and procedures. The Bank may reimburse travel and transportation expenses in accordance with applicable policies. Candidates must also be citizens of one of the IDB member countries.

Visas and Work Permits: The Bank may submit visa applications to the relevant immigration authorities in accordance with applicable policies, but the granting of visas shall be at the discretion of the immigration authorities. However, it shall be the candidate's responsibility to obtain any visa or work permit required by the authorities of the country of service. If the candidate is unable to obtain a visa or work permit to provide services to the Bank, the contractual offer shall be revoked.

Blood: In accordance with applicable Bank policies, candidates who have relatives (by blood to the fourth degree, including spouse, and by affinity to the second degree) working for the Bank as officers or supplemental contract staff are ineligible to provide services to the Bank.

# Technical Cooperation Project: Support Implementation of Climate-resilient and Sustainable Integrated Coastal Zone Management (ICZM) Public Policy in Barbados (BA-T1109)

#### A Consultant firm:

# Development of a detailed proposal for Nature based Solution (NbS) focused investment project to be implemented within the framework of climate-resilient ICZM in Barbados.

#### **Background**

Barbados is the easternmost island country in the Caribbean with a land area of 430 km<sup>2</sup>, an Exclusive Economic Zone (EEZ) of approximately 185,000 km<sup>2</sup>, and a coastline, approximately 97 km long. The natural resources contained within these vast ocean areas, particularly those in coastal zones, provide a variety of services that support human well-being and the tourism industry. More than half of Barbados' population resides within 2 km of the coastline in an urban corridor along the west and south coasts. Coastal areas, particularly the 33 km along the western and southern coasts, serve as the primary location for 95% of the country's tourism activity, attracting more than 1 million visitors a year.

While the coastal zone is critical to the country's socioeconomic activities, it is also a complex and sensitive natural system where land and sea border each other and mutually interact through a range of oceanographic, geomorphic, and biologic processes. Such processes are principally driven by, but not limited to, waves, tides, currents, sediment transport, erosion, weathering, sea level changes and organic activity. Delicate geography, sensitive ecosystems, urbanization, and continued urban expansion make the coastal areas of the country sensitive to a variety of socio-environmental challenges. In particular, the main challenges facing the country's coastline and exacerbated by changing climate are coral degradation, coastal erosion (both on sandy beaches and harder cliff areas), and coastal flooding.

A public policy framework for balancing climate resilience, environmental protection and restoration, sustainable use of natural resources and socio-economic/industrial development in coastal areas is commonly referred to as Coastal Zone Management (CZM) or Integrated CZM (ICZM). Since the 1980s, the Government of Barbados (GoBA) has made continuous efforts to improve the institutionalization of ICZM. Examples include the establishment of the Coastal Zone Management Unit (CZMU) in 1996 as the implementing agency for public policy on ICZM, and the enactment of the Coastal Zone Management Act (CZM Act) in 1998. Furthermore, after decades of ICZM implementation, especially with the IDB-financed investment projects (e.g., the Coastal Infrastructure Program: BA0019, implemented from 2002 to 2010 with the amount of US\$17 million, and the Coastal Risk Assessment and Management Program BA-L1014, 2011-2020: US\$35 million), the GoBA/CZMU has deepened its coastal engineering and non-engineering knowledge on the design and application of various combinations of measures.

**Challenges:** In the face of increasing coastal climate risks, the GoBA is faced with the need to strengthen the framework for "climate-resilient" ICZM public policies. This includes the need for engineering interventions to reduce climate risks in several critical locations on the west and south coasts, as well as strengthening institutional capacity, including improving the climate risk analysis tool (National Coastal Risk Information and Planning Platform: NCRIPP) and enhancing the capacity to use it in development planning/implementation.

The IDB and the GoBA has signed an agreement in March 2024 for a US\$50 million loan project: Climate Resilient and Sustainable Integrated Coastal Zone Management (BA-L1059). The overall objective of the project is to promote climate-resilient economic development in the country by reducing the climate risk in the coastal zone. The project has three specific objectives: (i) to reduce the risk of coastal erosion and flooding; (ii) to improve the socio-economic value for the tourism industry and local communities in the coastal area; and (iii) to improve the technical capacity and governance necessary to promote climate-resilient ICZM public policies. Key outputs programmed to achieve these objectives include: a range of small-scale coastal infrastructure (e.g. breakwaters and groynes); coastal walkways (e.g., boardwalk) and institutional strengthening-related facilities; equipment; and training.

The objective of this TC is to provide complimentary technical support activities to the GoBA necessary to increase the effectiveness of the implementation of the investment loan project: Climate resilient and sustainable Integrated Coastal Zone Management (BA-L1059).

The TC consists of two components: (i) Implementation of complementary technical activities to increase the effectiveness of the implementation of the project BA-L1059; and (ii) Dissemination and communication of TC results. This TOR falls under and will be implemented as one of the activities of the Component (i) of the TC. For that purpose, the Environment, Rural Development and Disaster Risk Management Division (CSD/RND) of the IDB is looking for a consulting firm that can develop a detailed proposal for NbS-focused investment project to be implemented within the framework of climate-resilient ICZM in Barbados.

# **Objectives:**

The purpose of this consultancy is to develop a detailed proposal for NbS-focused investment project to be implemented within the framework of climate-resilient ICZM in Barbados.

# Scope of Services:

NbS refer in this TC to approaches that aim to achieve coastal climate resilience through the use, protection and restoration of natural resources (such as mangroves and coral reefs). In general, NbS through the implementation of the climate-resilient ICZM public policies is expected to achieve the protection of biodiversity and promoting the participation of local communities in coastal development<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> Examples of climate-resilience ICZM using NbS (particularly for coastal erosion and storm surge protection) using mangrove planting can be seen in Andros, the Bahamas, through the IDB financed project BH-L1043: Climate Resilient Coastal Management and Infrastructure Program.

The GoBA/CZMU has been discussing the adoption of NbS since the 2000s, and to date, several pilot projects have been implemented, including a coral regeneration pilot project led by the CZMU and the University of the West Indies, Barbados, and a mangrove regeneration project in the East Coast Walker's Reserve (mainly led by the Walkers Institute for Regenerative Research, Education, and Design: WIRRED).

To further incorporate NbS initiatives for the effective implementation of ICZM in the future, a related national action plan was created very recently through the TC BA-T1068<sup>3</sup>. This TC will deepen the specific discussion on how to adopt NbS to achieve more sustainable ICZM public policies in Barbados based on the action plan.

# Key Activities:

The consulting firm shall do the following:

- Review existing relevant literatures, including the Action Plan that has been prepared under the TC: BA-T1068.
- Disseminate the recently developed relevant Action Plans to national public and private stakeholders; and select some priority activities from the plan that are considered to be highly effective to implement;
- Develop conceptual design, preliminary feasibility studies (or ex-ante cost-benefit analysis) for the selected priority activities.
- Develop a detailed investment project proposal for selected priority activity that are deemed to have a particularly high impact
- Final dissemination workshop.

#### Expected Deliverables, project schedule/payments and milestones:

The Consultant shall submit the following products to the IDB:

Deliverables		% of payment	Due date after contract signing
d)	Work plan	10%	
e)	ConceptualDesign,preliminaryfeasibilitystudies for theselectedpriority activities	45%	
f)	A detailed investment project proposal	45%	

#### **Reporting Requirements**

The firm is expected to produce the deliverables within the timeline as described above.

#### Required:

- **Citizenship:** Citizenship of one of the 48 member countries.

<sup>&</sup>lt;sup>3</sup> The title of the TC: improving Institutional Frameworks for ICZM, National Risk Information Planning Systems and Sustainable Climate-Resilient Coastal Infrastructure

- **Consanguinity;** No relatives (blood relatives up to the fourth degree, including spouse, and in-laws up to the second degree) working for the IDB Group.
- **Education;** At least a Master's degree in the field of: Computer Science, Environmental Management, Sustainability Science, International Development, Public Policy, Climate Change Adaptation.
- **Experience:** Minimum of 10 years of equivalent experience.
- Languages: English or Spanish.

## General and technical competencies.

- **Knowledge:** Integrated Coastal Zone Management, Environmental Management, Policy, Risk Management, Climate Change Adaptation. Coordination and sector dialogue skills.

## **Opportunity Overview**

- **TYPE AND FORM OF CONTRACT:** Consulting Firm. Lump sum payment.
- Duration/Start Date: 9 months/beginning XXX.
- Location: Consultant's place of residence.
- Contact Person: Disaster Risk Management Specialist (CSD/RND).
- **REQUIREMENTS:** Must be a citizen of one of the 48 IDB member countries and have no family member currently working for the IDB Group.

Payment Methods and Conditions Compensation will be determined in accordance with the Bank's policies and procedures. The Bank may reimburse travel and transportation expenses in accordance with applicable policies. Candidates must also be citizens of one of the IDB member countries.

Visas and Work Permits: The Bank may submit visa applications to the relevant immigration authorities in accordance with applicable policies, but the granting of visas shall be at the discretion of the immigration authorities. However, it shall be the candidate's responsibility to obtain any visa or work permit required by the authorities of the country of service. If the candidate is unable to obtain a visa or work permit to provide services to the Bank, the contractual offer shall be revoked.

Blood: In accordance with applicable Bank policies, candidates who have relatives (by blood to the fourth degree, including spouse, and by affinity to the second degree) working for the Bank as officers or supplemental contract staff are ineligible to provide services to the Bank.

# Technical Cooperation Project: Support Implementation of Climate-resilient and Sustainable Integrated Coastal Zone Management (ICZM) Public Policy in Barbados (BA-T1109)

## A Consultant firm:

#### Development of a Sea turtle conservation diagnosis and action plan in Barbados.

#### Background

Barbados is the easternmost island country in the Caribbean with a land area of 430 km<sup>2</sup>, an Exclusive Economic Zone (EEZ) of approximately 185,000 km<sup>2</sup>, and a coastline, approximately 97 km long. The natural resources contained within these vast ocean areas, particularly those in coastal zones, provide a variety of services that support human well-being and the tourism industry. More than half of Barbados' population resides within 2 km of the coastline in an urban corridor along the west and south coasts. Coastal areas, particularly the 33 km along the western and southern coasts, serve as the primary location for 95% of the country's tourism activity, attracting more than 1 million visitors a year.

While the coastal zone is critical to the country's socioeconomic activities, it is also a complex and sensitive natural system where land and sea border each other and mutually interact through a range of oceanographic, geomorphic, and biologic processes. Such processes are principally driven by, but not limited to, waves, tides, currents, sediment transport, erosion, weathering, sea level changes and organic activity. Delicate geography, sensitive ecosystems, urbanization, and continued urban expansion make the coastal areas of the country sensitive to a variety of socio-environmental challenges. In particular, the main challenges facing the country's coastline and exacerbated by changing climate are coral degradation, coastal erosion (both on sandy beaches and harder cliff areas), and coastal flooding.

A public policy framework for balancing climate resilience, environmental protection and restoration, sustainable use of natural resources and socio-economic/industrial development in coastal areas is commonly referred to as Coastal Zone Management (CZM) or Integrated CZM (ICZM). Since the 1980s, the Government of Barbados (GoBA) has made continuous efforts to improve the institutionalization of ICZM. Examples include the establishment of the Coastal Zone Management Unit (CZMU) in 1996 as the implementing agency for public policy on ICZM, and the enactment of the Coastal Zone Management Act (CZM Act) in 1998. Furthermore, after decades of ICZM implementation, especially with the IDB-financed investment projects (e.g., the Coastal Infrastructure Program: BA0019, implemented from 2002 to 2010 with the amount of US\$17 million, and the Coastal Risk Assessment and Management Program BA-L1014, 2011-2020: US\$35 million), the GoBA/CZMU has deepened its coastal engineering and non-engineering knowledge on the design and application of various combinations of measures.

**Challenges:** In the face of increasing coastal climate risks, the GoBA is faced with the need to strengthen the framework for "climate-resilient" ICZM public policies. This includes the need for

engineering interventions to reduce climate risks in several critical locations on the west and south coasts, as well as strengthening institutional capacity, including improving the climate risk analysis tool (National Coastal Risk Information and Planning Platform: NCRIPP) and enhancing the capacity to use it in development planning/implementation.

The IDB and the GoBA has signed an agreement in March 2024 for a US\$50 million loan project: Climate Resilient and Sustainable Integrated Coastal Zone Management (BA-L1059). The overall objective of the project is to promote climate-resilient economic development in the country by reducing the climate risk in the coastal zone. The project has three specific objectives: (i) to reduce the risk of coastal erosion and flooding; (ii) to improve the socio-economic value for the tourism industry and local communities in the coastal area; and (iii) to improve the technical capacity and governance necessary to promote climate-resilient ICZM public policies. Key outputs programmed to achieve these objectives include: a range of small-scale coastal infrastructure (e.g. breakwaters and groynes); coastal walkways (e.g., boardwalk) and institutional strengthening-related facilities; equipment; and training.

The objective of this TC is to provide complimentary technical support activities to the GoBA necessary to increase the effectiveness of the implementation of the investment loan project: Climate resilient and sustainable Integrated Coastal Zone Management (BA-L1059).

The TC consists of two components: (i) Implementation of complementary technical activities to increase the effectiveness of the implementation of the project BA-L1059; and (ii) Dissemination and communication of TC results. This TOR falls under and will be implemented as one of the activities of the Component (i) of the TC. For that purpose, the Environment, Rural Development and Disaster Risk Management Division (CSD/RND) of the IDB is looking for a consulting firm that can develop a Sea turtle conservation diagnosis and action plan in Barbados.

# **Objectives:**

The purpose of this consultancy is to develop a Sea turtle conservation diagnosis and action plan.

# Scope of Services:

The importance of the sea turtle conservation is specifically raised at the Environmental and Social Management (ESM) Stakeholder Consultation Meeting held at the final stage of the BA-L1059 formulation. Naturally, the appropriate protection of all flora and fauna, including sea turtles, must be achieved through the Environmental and Social Management Plan (ESMP) that is being developed as part of BA-L1059. In this sense, this TC will focus on carrying out a series of technical activities necessary to improve the quality of implementation of the management of flora and fauna (in particular, sea turtle protection) through the ESMP, including (i) diagnostic surveys; (ii) formulation of an action plan to improve sea turtle conservation based on the diagnostics; and (iii) pilot implementation of some activities based on the action plan. The consulting firm will carry out the activites (i) and (ii) in coordination with GoBA and IDB.

#### Key Activities:

The consulting firm shall do the following:

- Conduct objective diagnostic surveys, e.g., whether sea turtle nests are adequately protected, whether lighting management is adequately implemented, whether school education is adequately implemented, whether awareness activities are adequately implemented.
- Formulate an action plan to improve sea turtle conservation based on the diagnostic survey.
- Several communication engagement workshops
- Final dissemination workshop.

## Expected Deliverables, project schedule/payments and milestones:

Deliverables	% of payment	Due date after contract signing
g) Work plan	10%	
h) Diagnostic survey	45%	
i) Action Plan	45%	

The Consultant shall submit the following products to the IDB:

## **Reporting Requirements**

The firm is expected to produce the deliverables within the timeline as described above.

#### Required:

- **Citizenship:** Citizenship of one of the 48 member countries.
- **Consanguinity**; No relatives (blood relatives up to the fourth degree, including spouse, and in-laws up to the second degree) working for the IDB Group.
- **Education;** At least a Master's degree in the field of: Computer Science, Environmental Management, Sustainability Science, International Development, Public Policy, Climate Change Adaptation.
- **Experience:** Minimum of 10 years of equivalent experience.
- Languages: English or Spanish.

#### General and technical competencies.

- **Knowledge:** Integrated Coastal Zone Management, Environmental Management, Policy, Risk Management, Climate Change Adaptation. Coordination and sector dialogue skills.

#### **Opportunity Overview**

- **TYPE AND FORM OF CONTRACT:** Consulting Firm. Lump sum payment.
- Duration/Start Date: 9 months/beginning XXX.
- **Location:** Consultant's place of residence.
- Contact Person: Disaster Risk Management Specialist (CSD/RND).
- **REQUIREMENTS:** Must be a citizen of one of the 48 IDB member countries and have no family member currently working for the IDB Group.

Payment Methods and Conditions Compensation will be determined in accordance with the Bank's policies and procedures. The Bank may reimburse travel and transportation expenses in accordance with applicable policies. Candidates must also be citizens of one of the IDB member countries.

Visas and Work Permits: The Bank may submit visa applications to the relevant immigration authorities in accordance with applicable policies, but the granting of visas shall be at the discretion of the immigration authorities. However, it shall be the candidate's responsibility to obtain any visa or work permit required by the authorities of the country of service. If the candidate is unable to obtain a visa or work permit to provide services to the Bank, the contractual offer shall be revoked.

Blood: In accordance with applicable Bank policies, candidates who have relatives (by blood to the fourth degree, including spouse, and by affinity to the second degree) working for the Bank as officers or supplemental contract staff are ineligible to provide services to the Bank.

# Technical Cooperation Project: Support Implementation of Climate-resilient and Sustainable Integrated Coastal Zone Management (ICZM) Public Policy in Barbados (BA-T1109)

## A Consultant firm:

#### Implementation of priority activities for effective sea turtle conservation in Barbados.

#### Background

Barbados is the easternmost island country in the Caribbean with a land area of 430 km<sup>2</sup>, an Exclusive Economic Zone (EEZ) of approximately 185,000 km<sup>2</sup>, and a coastline, approximately 97 km long. The natural resources contained within these vast ocean areas, particularly those in coastal zones, provide a variety of services that support human well-being and the tourism industry. More than half of Barbados' population resides within 2 km of the coastline in an urban corridor along the west and south coasts. Coastal areas, particularly the 33 km along the western and southern coasts, serve as the primary location for 95% of the country's tourism activity, attracting more than 1 million visitors a year.

While the coastal zone is critical to the country's socioeconomic activities, it is also a complex and sensitive natural system where land and sea border each other and mutually interact through a range of oceanographic, geomorphic, and biologic processes. Such processes are principally driven by, but not limited to, waves, tides, currents, sediment transport, erosion, weathering, sea level changes and organic activity. Delicate geography, sensitive ecosystems, urbanization, and continued urban expansion make the coastal areas of the country sensitive to a variety of socio-environmental challenges. In particular, the main challenges facing the country's coastline and exacerbated by changing climate are coral degradation, coastal erosion (both on sandy beaches and harder cliff areas), and coastal flooding.

A public policy framework for balancing climate resilience, environmental protection and restoration, sustainable use of natural resources and socio-economic/industrial development in coastal areas is commonly referred to as Coastal Zone Management (CZM) or Integrated CZM (ICZM). Since the 1980s, the Government of Barbados (GoBA) has made continuous efforts to improve the institutionalization of ICZM. Examples include the establishment of the Coastal Zone Management Unit (CZMU) in 1996 as the implementing agency for public policy on ICZM, and the enactment of the Coastal Zone Management Act (CZM Act) in 1998. Furthermore, after decades of ICZM implementation, especially with the IDB-financed investment projects (e.g., the Coastal Infrastructure Program: BA0019, implemented from 2002 to 2010 with the amount of US\$17 million, and the Coastal Risk Assessment and Management Program BA-L1014, 2011-2020: US\$35 million), the GoBA/CZMU has deepened its coastal engineering and non-engineering knowledge on the design and application of various combinations of measures.

**Challenges:** In the face of increasing coastal climate risks, the GoBA is faced with the need to strengthen the framework for "climate-resilient" ICZM public policies. This includes the need for

engineering interventions to reduce climate risks in several critical locations on the west and south coasts, as well as strengthening institutional capacity, including improving the climate risk analysis tool (National Coastal Risk Information and Planning Platform: NCRIPP) and enhancing the capacity to use it in development planning/implementation.

The IDB and the GoBA has signed an agreement in March 2024 for a US\$50 million loan project: Climate Resilient and Sustainable Integrated Coastal Zone Management (BA-L1059). The overall objective of the project is to promote climate-resilient economic development in the country by reducing the climate risk in the coastal zone. The project has three specific objectives: (i) to reduce the risk of coastal erosion and flooding; (ii) to improve the socio-economic value for the tourism industry and local communities in the coastal area; and (iii) to improve the technical capacity and governance necessary to promote climate-resilient ICZM public policies. Key outputs programmed to achieve these objectives include: a range of small-scale coastal infrastructure (e.g. breakwaters and groynes); coastal walkways (e.g., boardwalk) and institutional strengthening-related facilities; equipment; and training.

The objective of this TC is to provide complimentary technical support activities to the GoBA necessary to increase the effectiveness of the implementation of the investment loan project: Climate resilient and sustainable Integrated Coastal Zone Management (BA-L1059).

The TC consists of two components: (i) Implementation of complementary technical activities to increase the effectiveness of the implementation of the project BA-L1059; and (ii) Dissemination and communication of TC results. This TOR falls under and will be implemented as one of the activities of the Component (i) of the TC. For that purpose, the Environment, Rural Development and Disaster Risk Management Division (CSD/RND) of the IDB is looking for a consulting firm that can Implement priority activities for effective sea turtle conservation in Barbados.

# **Objectives:**

The purpose of this consultancy is to implement priority activities for effective sea turtle conservation in Barbados.

# Scope of Services:

The importance of the sea turtle conservation is specifically raised at the Environmental and Social Management (ESM) Stakeholder Consultation Meeting held at the final stage of the BA-L1059 formulation. Naturally, the appropriate protection of all flora and fauna, including sea turtles, must be achieved through the Environmental and Social Management Plan (ESMP) that is being developed as part of BA-L1059. In this sense, this TC will focus on carrying out a series of technical activities necessary to improve the quality of implementation of the management of flora and fauna (in particular, sea turtle protection) through the ESMP, including (i) diagnostic surveys; (ii) formulation of an action plan to improve sea turtle conservation based on the diagnostics; (iii) pilot implementation of some activities based on the action plan; and (iv) capacity building to improve methods for the rescue, treatment and rehabilitation of injured sea turtles. The consulting firm will carry out the activites (iii) and (iv) in coordination with GoBA and IDB.

# Key Activities:

The consulting firm shall do the following:

- Review existing relevant literatures, including the Action Plan that has been prepared by another consultancy (corresponding to the activity (ii) above).
- Disseminate the Action Plans to national public and private stakeholders; and select some priority activities from the plan that are considered to be highly effective to implement;
- pilot implementation of the selected priority activities based on the action plan.
- capacity building to improve methods for the rescue, treatment and rehabilitation of injured sea turtles
- Several communication engagement workshops
- Final dissemination workshop.

## Expected Deliverables, project schedule/payments and milestones:

Deliverables		% of payment	Due date after contract signing
j)	Work plan	10%	
k)	Implementation of the priority activities of the action plan	45%	
1)	Capacity building	45%	

The Consultant shall submit the following products to the IDB:

#### **Reporting Requirements**

The firm is expected to produce the deliverables within the timeline as described above.

#### Required:

- **Citizenship:** Citizenship of one of the 48 member countries.
- **Consanguinity;** No relatives (blood relatives up to the fourth degree, including spouse, and in-laws up to the second degree) working for the IDB Group.
- **Education;** At least a Master's degree in the field of: Computer Science, Environmental Management, Sustainability Science, International Development, Public Policy, Climate Change Adaptation.
- **Experience:** Minimum of 10 years of equivalent experience.
- Languages: English or Spanish.

#### General and technical competencies.

- **Knowledge:** Integrated Coastal Zone Management, Environmental Management, Policy, Risk Management, Climate Change Adaptation. Coordination and sector dialogue skills.

# **Opportunity Overview**

- **TYPE AND FORM OF CONTRACT:** Consulting Firm. Lump sum payment.

- **Duration/Start Date:** 9 months/beginning XXX.
- **Location:** Consultant's place of residence.
- Contact Person: Disaster Risk Management Specialist (CSD/RND).
- **REQUIREMENTS:** Must be a citizen of one of the 48 IDB member countries and have no family member currently working for the IDB Group.

Payment Methods and Conditions Compensation will be determined in accordance with the Bank's policies and procedures. The Bank may reimburse travel and transportation expenses in accordance with applicable policies. Candidates must also be citizens of one of the IDB member countries.

Visas and Work Permits: The Bank may submit visa applications to the relevant immigration authorities in accordance with applicable policies, but the granting of visas shall be at the discretion of the immigration authorities. However, it shall be the candidate's responsibility to obtain any visa or work permit required by the authorities of the country of service. If the candidate is unable to obtain a visa or work permit to provide services to the Bank, the contractual offer shall be revoked.

Blood: In accordance with applicable Bank policies, candidates who have relatives (by blood to the fourth degree, including spouse, and by affinity to the second degree) working for the Bank as officers or supplemental contract staff are ineligible to provide services to the Bank.

# Technical Cooperation Project: Support Implementation of Climate-resilient and Sustainable Integrated Coastal Zone Management (ICZM) Public Policy in Barbados (BA-T1109)

#### An Individual Consultant:

# A study to verify whether female and people with disabilities business owners benefit economically from Project BA-L1059.

#### **Background**

Barbados is the easternmost island country in the Caribbean with a land area of 430 km<sup>2</sup>, an Exclusive Economic Zone (EEZ) of approximately 185,000 km<sup>2</sup>, and a coastline, approximately 97 km long. The natural resources contained within these vast ocean areas, particularly those in coastal zones, provide a variety of services that support human well-being and the tourism industry. More than half of Barbados' population resides within 2 km of the coastline in an urban corridor along the west and south coasts. Coastal areas, particularly the 33 km along the western and southern coasts, serve as the primary location for 95% of the country's tourism activity, attracting more than 1 million visitors a year.

While the coastal zone is critical to the country's socioeconomic activities, it is also a complex and sensitive natural system where land and sea border each other and mutually interact through a range of oceanographic, geomorphic, and biologic processes. Such processes are principally driven by, but not limited to, waves, tides, currents, sediment transport, erosion, weathering, sea level changes and organic activity. Delicate geography, sensitive ecosystems, urbanization, and continued urban expansion make the coastal areas of the country sensitive to a variety of socio-environmental challenges. In particular, the main challenges facing the country's coastline and exacerbated by changing climate are coral degradation, coastal erosion (both on sandy beaches and harder cliff areas), and coastal flooding.

A public policy framework for balancing climate resilience, environmental protection and restoration, sustainable use of natural resources and socio-economic/industrial development in coastal areas is commonly referred to as Coastal Zone Management (CZM) or Integrated CZM (ICZM). Since the 1980s, the Government of Barbados (GoBA) has made continuous efforts to improve the institutionalization of ICZM. Examples include the establishment of the Coastal Zone Management Unit (CZMU) in 1996 as the implementing agency for public policy on ICZM, and the enactment of the Coastal Zone Management Act (CZM Act) in 1998. Furthermore, after decades of ICZM implementation, especially with the IDB-financed investment projects (e.g., the Coastal Infrastructure Program: BA0019, implemented from 2002 to 2010 with the amount of US\$17 million, and the Coastal Risk Assessment and Management Program BA-L1014, 2011-2020: US\$35 million), the GoBA/CZMU has deepened its coastal engineering and non-engineering knowledge on the design and application of various combinations of measures.

**Challenges:** In the face of increasing coastal climate risks, the GoBA is faced with the need to strengthen the framework for "climate-resilient" ICZM public policies. This includes the need for engineering interventions to reduce climate risks in several critical locations on the west and south coasts, as well as strengthening institutional capacity, including improving the climate risk analysis tool (National Coastal Risk Information and Planning Platform: NCRIPP) and enhancing the capacity to use it in development planning/implementation.

The IDB and the GoBA has signed an agreement in March 2024 for a US\$50 million loan project: Climate Resilient and Sustainable Integrated Coastal Zone Management (BA-L1059). The overall objective of the project is to promote climate-resilient economic development in the country by reducing the climate risk in the coastal zone. The project has three specific objectives: (i) to reduce the risk of coastal erosion and flooding; (ii) to improve the socio-economic value for the tourism industry and local communities in the coastal area; and (iii) to improve the technical capacity and governance necessary to promote climate-resilient ICZM public policies. Key outputs programmed to achieve these objectives include: a range of small-scale coastal infrastructure (e.g. breakwaters and groynes); coastal walkways (e.g., boardwalk) and institutional strengthening-related facilities; equipment; and training.

The objective of this TC is to provide complimentary technical support activities to the GoBA necessary to increase the effectiveness of the implementation of the investment loan project: Climate resilient and sustainable Integrated Coastal Zone Management (BA-L1059).

The TC consists of two components: (i) Implementation of complementary technical activities to increase the effectiveness of the implementation of the project BA-L1059; and (ii) Dissemination and communication of TC results. This TOR falls under and will be implemented as one of the activities of the Component (i) of the TC. For that purpose, the Environment, Rural Development and Disaster Risk Management Division (CSD/RND) of the IDB is looking for an individual consultant that can conduct a study to verify whether female and people with disabilities business owners benefit economically from Project BA-L1059.

# **Objectives:**

The purpose of this consultancy is to conduct a study to verify whether female and people with disabilities business owners benefit economically from Project BA-L1059.

#### Scope of Services:

The development of Project BA-L1059 incorporates a gender and disability perspective, for example, by adding lighting to the boardwalks to make them more accessible to women at night, and by adding ramps to stairs to make facilities more accessible to wheelchair users.

In addition, during the formulation of BA-L1059, it was discussed that there was a potential for economic benefits to women owners (and probably persons with disabilities) of small businesses (such as restaurants) in the neighborhoods as a spillover effect of this project. However, this was difficult to demonstrate and was not included as an indicator to be monitored through the results matrix. This consultancy, therefore, will focus on a specific review of whether the benefits envisaged in the formulation of BA-L1059 will actually be achieved

# Key Activities:

The consulting firm shall do the following:

- The collection of baseline data
- Conduct a specific and quantitative evaluation to verify the extent to which the project BA-L1059 will benefit female and people with disabilities small business owners benefits several years after several years of implementation of BA-L1059.
- Final dissemination workshop.

#### Expected Deliverables, project schedule/payments and milestones:

Deliverables	% of payment	Due date after contract signing
m) Work plan	10%	
n) Draft study report	45%	
o) Final study report	45%	

The Consultant shall submit the following products to the IDB:

## **Reporting Requirements**

The firm is expected to produce the deliverables within the timeline as described above.

#### Required:

- Citizenship: Citizenship of one of the 48 member countries.
- **Consanguinity;** No relatives (blood relatives up to the fourth degree, including spouse, and in-laws up to the second degree) working for the IDB Group.
- **Education;** At least a Master's degree in the field of: Computer Science, Environmental Management, Sustainability Science, International Development, Public Policy, Climate Change Adaptation.
- **Experience:** Minimum of 10 years of equivalent experience.
- Languages: English or Spanish.

# General and technical competencies.

- **Knowledge:** Integrated Coastal Zone Management, Environmental Management, Policy, Risk Management, Climate Change Adaptation. Coordination and sector dialogue skills.

# **Opportunity Overview**

- **TYPE AND FORM OF CONTRACT:** Individual consultant (PEC). Lump sum payment.
- Duration/Start Date: 9 months/beginning XXX.
- Location: Consultant's place of residence.
- Contact Person: Disaster Risk Management Specialist (CSD/RND).

- **REQUIREMENTS:** Must be a citizen of one of the 48 IDB member countries and have no family member currently working for the IDB Group.

Payment Methods and Conditions Compensation will be determined in accordance with the Bank's policies and procedures. The Bank may reimburse travel and transportation expenses in accordance with applicable policies. Candidates must also be citizens of one of the IDB member countries.

Visas and Work Permits: The Bank may submit visa applications to the relevant immigration authorities in accordance with applicable policies, but the granting of visas shall be at the discretion of the immigration authorities. However, it shall be the candidate's responsibility to obtain any visa or work permit required by the authorities of the country of service. If the candidate is unable to obtain a visa or work permit to provide services to the Bank, the contractual offer shall be revoked.

Blood: In accordance with applicable Bank policies, candidates who have relatives (by blood to the fourth degree, including spouse, and by affinity to the second degree) working for the Bank as officers or supplemental contract staff are ineligible to provide services to the Bank.

# Technical Cooperation Project: Support Implementation of Climate-resilient and Sustainable Integrated Coastal Zone Management (ICZM) Public Policy in Barbados (BA-T1109)

#### An Individual Consultant:

# Editorial work - Sector notes for the dissemination of the knowledge obtained through the TC.

#### **Background**

Barbados is the easternmost island country in the Caribbean with a land area of 430 km<sup>2</sup>, an Exclusive Economic Zone (EEZ) of approximately 185,000 km<sup>2</sup>, and a coastline, approximately 97 km long. The natural resources contained within these vast ocean areas, particularly those in coastal zones, provide a variety of services that support human well-being and the tourism industry. More than half of Barbados' population resides within 2 km of the coastline in an urban corridor along the west and south coasts. Coastal areas, particularly the 33 km along the western and southern coasts, serve as the primary location for 95% of the country's tourism activity, attracting more than 1 million visitors a year.

While the coastal zone is critical to the country's socioeconomic activities, it is also a complex and sensitive natural system where land and sea border each other and mutually interact through a range of oceanographic, geomorphic, and biologic processes. Such processes are principally driven by, but not limited to, waves, tides, currents, sediment transport, erosion, weathering, sea level changes and organic activity. Delicate geography, sensitive ecosystems, urbanization, and continued urban expansion make the coastal areas of the country sensitive to a variety of socio-environmental challenges. In particular, the main challenges facing the country's coastline and exacerbated by changing climate are coral degradation, coastal erosion (both on sandy beaches and harder cliff areas), and coastal flooding.

A public policy framework for balancing climate resilience, environmental protection and restoration, sustainable use of natural resources and socio-economic/industrial development in coastal areas is commonly referred to as Coastal Zone Management (CZM) or Integrated CZM (ICZM). Since the 1980s, the Government of Barbados (GoBA) has made continuous efforts to improve the institutionalization of ICZM. Examples include the establishment of the Coastal Zone Management Unit (CZMU) in 1996 as the implementing agency for public policy on ICZM, and the enactment of the Coastal Zone Management Act (CZM Act) in 1998. Furthermore, after decades of ICZM implementation, especially with the IDB-financed investment projects (e.g., the Coastal Infrastructure Program: BA0019, implemented from 2002 to 2010 with the amount of US\$17 million, and the Coastal Risk Assessment and Management Program BA-L1014, 2011-2020: US\$35 million), the GoBA/CZMU has deepened its coastal engineering and non-engineering knowledge on the design and application of various combinations of measures.

**Challenges:** In the face of increasing coastal climate risks, the GoBA is faced with the need to strengthen the framework for "climate-resilient" ICZM public policies. This includes the need for engineering interventions to reduce climate risks in several critical locations on the west and south coasts, as well as strengthening institutional capacity, including improving the climate risk analysis tool (National Coastal Risk Information and Planning Platform: NCRIPP) and enhancing the capacity to use it in development planning/implementation.

The IDB and the GoBA has signed an agreement in March 2024 for a US\$50 million loan project: Climate Resilient and Sustainable Integrated Coastal Zone Management (BA-L1059). The overall objective of the project is to promote climate-resilient economic development in the country by reducing the climate risk in the coastal zone. The project has three specific objectives: (i) to reduce the risk of coastal erosion and flooding; (ii) to improve the socio-economic value for the tourism industry and local communities in the coastal area; and (iii) to improve the technical capacity and governance necessary to promote climate-resilient ICZM public policies. Key outputs programmed to achieve these objectives include: a range of small-scale coastal infrastructure (e.g. breakwaters and groynes); coastal walkways (e.g., boardwalk) and institutional strengthening-related facilities; equipment; and training.

The objective of this TC is to provide complimentary technical support activities to the GoBA necessary to increase the effectiveness of the implementation of the investment loan project: Climate resilient and sustainable Integrated Coastal Zone Management (BA-L1059).

The TC consists of two components: (i) Implementation of complementary technical activities to increase the effectiveness of the implementation of the project BA-L1059; and (ii) Dissemination and communication of TC results. This TOR falls under and will be implemented as one of the activities of the Component (ii) of the TC. For that purpose, the Environment, Rural Development and Disaster Risk Management Division (CSD/RND) of the IDB is looking for an individual consultant that can conduct an editorial work for the four sector notes for the dissemination of the knowledge gained through the TC BA-T1109.

# **Objectives:**

The purpose of this consultancy is to conduct an editorial work for the four sector notes for the dissemination of the knowledge gained through the TC BA-T1109

# Scope of Services:

Products developed under Component 1 will be disseminated through the IDB Knowledge Portal as appropriate. The knowledge products under the Component 1 will include: (i) a detailed proposal for an investment project related to climate-resilient ICZM to be implemented in the future under the Public-Private Partnership (PPP) framework in Barbados; (ii) a detailed proposal for Nature based Solution (NbS) focused investment project to be implemented within the framework of climate-resilient ICZM in Barbados; (iii) a Sea turtle conservation diagnosis and action plan in Barbados; and (iv) a study to verify whether female and people with disabilities business owners benefit economically from Project BA-L1059.

# Key Activities:

The consulting firm shall do the editorial work for the sector note:

- Proposal for an investment project related to climate-resilient ICZM to be implemented in the future under the Public-Private Partnership (PPP) framework in Barbados
- Proposal for Nature based Solution (NbS) focused investment project to be implemented within the framework of climate-resilient ICZM in Barbados; (
- Sea turtle conservation diagnosis and action plan in Barbados; and
- study to verify whether female and people with disabilities business owners benefit economically from Project BA-L1059.

# Expected Deliverables, project schedule/payments and milestones:

Deliverables	% of payment	Due date after contract signing
p) Work plan	10%	
q) First two editorial work	45%	
r) The rest of the editorial work	45%	

The Consultant shall submit the following products to the IDB:

# **Reporting Requirements**

The firm is expected to produce the deliverables within the timeline as described above.

# Required:

- **Citizenship:** Citizenship of one of the 48 member countries.
- **Consanguinity;** No relatives (blood relatives up to the fourth degree, including spouse, and in-laws up to the second degree) working for the IDB Group.
- **Education;** At least a Master's degree in the field of: Computer Science, Environmental Management, Sustainability Science, International Development, Public Policy, Climate Change Adaptation.
- **Experience:** Minimum of 10 years of equivalent experience.
- Languages: English or Spanish.

# General and technical competencies.

- **Knowledge:** Integrated Coastal Zone Management, Environmental Management, Policy, Risk Management, Climate Change Adaptation. Coordination and sector dialogue skills.

# **Opportunity Overview**

- **TYPE AND FORM OF CONTRACT:** Individual consultant (PEC). Lump sum payment.
- **Duration/Start Date:** 3 months/beginning XXX.
- **Location:** Consultant's place of residence.

- **Contact Person:** Disaster Risk Management Specialist (CSD/RND).
- **REQUIREMENTS:** Must be a citizen of one of the 48 IDB member countries and have no family member currently working for the IDB Group.

Payment Methods and Conditions Compensation will be determined in accordance with the Bank's policies and procedures. The Bank may reimburse travel and transportation expenses in accordance with applicable policies. Candidates must also be citizens of one of the IDB member countries.

Visas and Work Permits: The Bank may submit visa applications to the relevant immigration authorities in accordance with applicable policies, but the granting of visas shall be at the discretion of the immigration authorities. However, it shall be the candidate's responsibility to obtain any visa or work permit required by the authorities of the country of service. If the candidate is unable to obtain a visa or work permit to provide services to the Bank, the contractual offer shall be revoked.

Blood: In accordance with applicable Bank policies, candidates who have relatives (by blood to the fourth degree, including spouse, and by affinity to the second degree) working for the Bank as officers or supplemental contract staff are ineligible to provide services to the Bank.