



**Multi-sectoral Adaptation Measures to Climate Change in the
South Oropouche River Basin (SORB) for Flood Relief**

National Designated Authority:



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

Funded by:

Implemented by:

Executed by:



ADAPTATION FUND



DEVELOPMENT BANK
OF LATIN AMERICA
AND THE CARIBBEAN



UWI
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CAMPUS

Terms of Reference for Request for Proposal (RFP)

Activity 1.1.5: Improve Flood Emergency Response

Deadline for Submission:

31st October 2025

BACKGROUND INFORMATION

SORB Flood Risk Management Project

The South Oropouche River Basin (SORB) in Trinidad and Tobago, West Indies has faced frequent flooding, exacerbated recently by prolonged basin-wide floods causing significant economic losses, ranging from US \$ 19-36 million annually. Climate change models predict increased flood frequency and intensity, further threatening livelihoods, especially small-scale fisheries. In July 2022, Trinidad and Tobago secured US\$ 10 million from the Adaptation Fund via the Latin American Development Bank (CAF) for the "Multi-sectoral Adaptation Measures to Flood Relief in the South Oropouche River Basin" project. The Ministry of Planning and Development, Government of Trinidad and Tobago (GOVTT) oversees this initiative, ensuring alignment with the National Development Strategy (2016-2030), while the University of the West Indies (UWI) executes the project through its Engineering Institute, St Augustine Centre for Innovation & Entrepreneurship (STACIE), and the University of the West Indies-Project Management Unit (PMU) (UWI-PMU), Trinidad and Tobago, West Indies. The project, running for four (4) years, aims to enhance flood resilience and water management, strengthen ecosystems, and build stakeholder capacity. A consultancy firm will be procured for this task with a budget of USD\$ 12,000, following UWI's procurement policies.

Challenges and Vulnerabilities

Climate change exacerbates existing challenges in this natural hydro system (SORB), including the coexistence of various economic activities (agriculture, fishing, commercial, and oil/gas production), inadequate drainage systems, and rapid urban expansion. The riverine system, vital to the region's livelihoods, is highly susceptible to climate change, including saline intrusion, which affects both flora and fauna, with tangible economic repercussions on people's lives.

Geographical Context

The South Oropouche River flows through a diverse landscape, transitioning from flat, arable lands in Barrackpore to the Godineau Swamp, an estuarine wetland, before reaching the Gulf of Paria. Covering 3,171 hectares, the swamp acts as a natural buffer against flooding and sea-level effects. However, it faces extreme pressures from human activities and environmental changes induced by climate change, necessitating reinforcement and protection to safeguard the basin's population.

Prioritisation and Vulnerability

The SORB has been identified as a priority region due to chronic flooding issues, high population density, agricultural and commercial activity, evident sea water intrusion, and projections indicating that climate change will exacerbate the situation without adaptation measures.

Projected Impact and Beneficiaries

The project is expected to benefit a total of 197,540 individuals. Direct interventions will reach 9,758 community members, with a focus on gender balance, and prevent income reduction for 679 individuals through diversified livelihood options. Additionally, for the SORB, vast areas of key coastal and wetland

ecosystems in the Godineau swamp will be rehabilitated. Furthermore, sustainable production practices will improve an additional 17.5 hectares of these vital ecosystems. This project aims to address the pressing climate challenges faced by the SORB, fostering resilience, safeguarding livelihoods, and protecting vital ecosystems. Its implementation will require coordinated efforts and active engagement from various stakeholders to ensure the sustainable development of this vulnerable region.

Institutions responsible/stakeholders involved:

- **Regional Corporation (RC)**
 - Penal Debe Regional Corporation
 - Princes Town Regional Corporation
 - Siparia Regional Corporation
- **Project Management Unit (PMU)**
- **Office of Disaster Preparedness and Management (ODPM)**
- **Town and Country Planning Division (TCPD)**
- **Environmental Management Authority (EMA)**
- **Water Resources Agency (WRA)**
- **Water and Sewerage Authority (WASA)**
- **Ministry of Rural Development and Local Government (MRDLG)**
- **Ministry of Agriculture, Land and Fisheries (MALF)**
- **Ministry of Social Development and Family Services (MSDFS)**
- **Ministry of Finance (MoF)**
- **Ministry of Health (MoH)**
- **Disaster Management Units (DMUs),**
- **Drainage Division (DD) of Ministry of Works and Transport (MOWT)**
- **The Association of Professional Engineers of Trinidad & Tobago (APETT)**
- **Trinidad and Tobago Meteorological Service (TTMS)**
- **Non-governmental organization (NGOs)**

PROJECT CONTEXT

The SORB watershed information:

The South Oropouche River Basin (SORB), situated on the southwestern coast of Trinidad (see Figure 1). Its catchment area of about 450 km² is drained westward by a dense network of tributaries that drain into the Godineau/South Oropouche Swamp. A sand dune on the coast extends across the interface with the Gulf of Paria that controls free flow into the sea. Drainage is through two openings in the dune, the Godineau River to the south and Mosquito Creek to the north. The catchment is relatively flat with the highest point being about 175 m MSL. The average slope of the catchment along Godineau River, the main westward flowing watercourse, is about 0.30%. The longest flow path is about thirty (30) km and the travel time to the coast is approximately one (1) day. The average annual flow velocity from the basin is 3.6 m³/s, but it varies appreciably. In some years, streamflow stations have recorded almost no flow along the main channel.

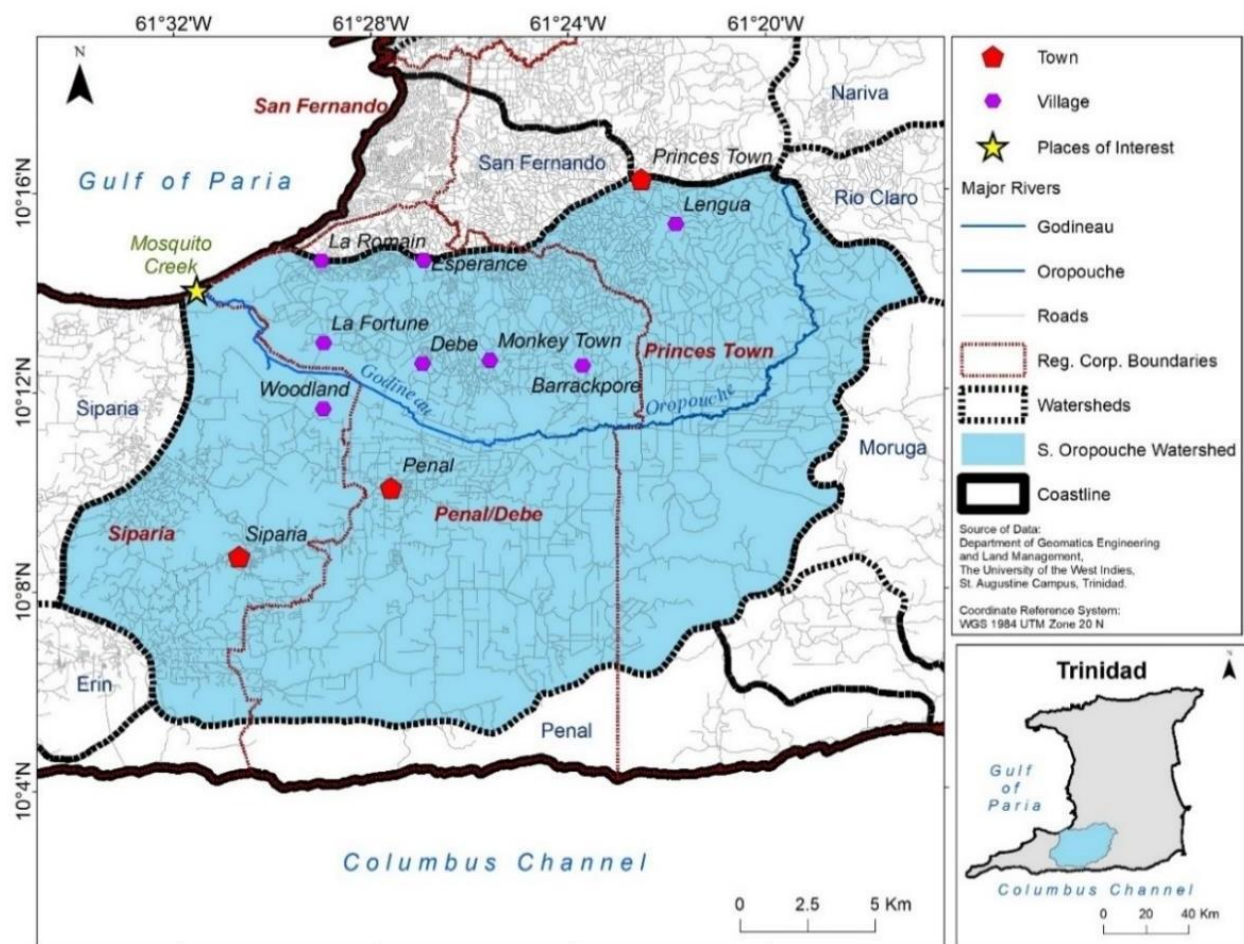


Figure 1. The South Oropouche River Basin (SORB), Trinidad, West Indies.

Demographic data in the project area

Portions of three Regional Corporations comprise SORB, namely Siparia, Penal/Debe and Princes Town. Overall, the population of the SORB accounted for 143,855 people in 2000, equivalent to 11.35% of the total population of Trinidad and Tobago at that time. In 2011, date of the last census, the population had grown to 197,540 people.

The Siparia region, spanning over 51,000 hectares (10% of Trinidad's land area), features diverse settlements, oil production bases, ports, industrial areas, fishing centers, forests, swamps, agriculture, and beaches. Oropouche East and West fall under the Penal/Debe Regional Corporation, while Princes Town, one of the largest municipalities at 62,000 hectares, includes fifty-six communities extending to the coast. According to the 2011 census, Siparia has 86,949 residents in 22,393 households, Penal/Debe has 89,392 residents in 26,067 households, and Princes Town has 102,957 residents with a population density of 148 per km². Over half the population in these regions is under 35, with an almost even gender distribution. Educational attainment is low, with approximately 49% of those over 15 in Siparia and Penal/Debe having no qualifications. Tertiary education rates are below 8%. Gender inequality is significant, with low female workforce participation, particularly in Princes Town. Health metrics indicate higher life expectancies in Siparia (74.65 years) and Penal/Debe (70.2 years for males, 76.5 for females), with lower incidences of chronic diseases compared to the national average. Informal settlements are prevalent, with 23 in Siparia, 12 in Penal/Debe, and 10 in Princes Town. Disability rates are 3.3% in Penal/Debe, 4.5% in Princes Town, and 4.8% in Siparia.

AIM OF THIS PROJECT

The main goal of this sub-project is the hiring of a Consulting Firm (CF) to accomplish the revising of current local flood emergency response capabilities in the South Oropouche River Basin (SORB) region. This will be achieved by updating and assisting with the implementation of the Regional Corporations' Flood Emergency Response Plans, raising awareness in communities, and developing a priority listing of equipment and machinery to be procured for flood emergency response.

The project aims to utilise outputs of other subprojects such as updated flood risk and land use maps to provide response support to the various regional corporations' Disaster Management Units (DMU) within their emergency response directives. Effective flood response not only reduces immediate impacts but also builds resilience against future floods by ensuring that critical infrastructure is fortified, urban areas are better protected, and economic disruptions are minimized. This project is a coordinated effort aimed at minimizing the impact of flooding on people, property, and the environment, encompassing pre-planning, immediate action during the event, and post-flood recovery efforts. A spatial inventory of special needs persons—aged, physically disabled, ones with particular debilitating ailments, etc. During a flood, response activities include coordination through an Incident Command System (ICS) for orderly evacuations, rescue operations, and flood control measures. Post-flood recovery focuses on damage assessment, clean-up, restoration of services, financial assistance, and psychosocial support. Thus, the continuous improvement/revision of current plans may be required in order to effect long term strategies.

The project is not so much about these strategies, but more so about a system to modify the plan within which these strategies are implemented, tying them back to specified coordination and supervision.

Objectives

To enhance flood preparedness and resilience of local communities and government agencies in the SORB region to effectively respond to flood emergencies through a coordinated and well-equipped approach. The following tasks are key actions to be undertaken:

1. Updating emergency plans in consultation with the 3 Regional Corporation's disaster management units to revise their current plan.
2. Assistance with participatory workshops and awareness-raising campaigns in the communities to socialize the updated emergency plans with local personnel, fostering their involvement and understanding of emergency response procedures, also requiring the formulation of the workshop involving strategising for maximum participation.
3. Understand and incorporate coordination between government agencies (such as the ODPM and other key entities) in DMU plans to improve the efficiency, coherence and effectiveness of their emergency response efforts during flood events.
4. Develop a criterion for the purchase of emergency response equipment by identification of needs and procuring, for instance rescue boats, as identified by the Regional Corporations and DMUs, to strengthen their operational capabilities in responding to flood emergencies within the SORB region.

SCOPE AND ACTIVITIES OF THE PROPOSED CONTRACTED SERVICES

The project activities to be covered by the CF are divided into three (3) main areas:

Activity 1.1.5.1: Updating emergency plans of local Regional Corporations (Siparia, Princes Town and Penal/Debe

- a) **Service Description:** The CF will be required to undertake a review of existing emergency plans to identify gaps and areas for improvement and develop updated emergency response plans that make maximum use of new information, tailored to local needs and compliant with national policies.

Deliverables (a): Revised emergency response plans, including protocols for evacuation, communication, resource allocation, and coordination with relevant agencies especially the ODPM.

- b) **Service Description:** Provide guidance to the Regional Corporation Disaster Management Units (DMUs) on policy and regulatory frameworks to support the implementation of updated emergency plans. Ensure alignment with national disaster management policies and international best practices.

Deliverables (b): Policy recommendations, regulatory guidelines, and compliance checklists.

- c) **Service Description:** To understand and increase exchanges between government agencies involved in flood response and coordination efforts.

Deliverables (c): A section of the final report to include directives on organizing a coordination meeting once per year to include the participation of private contractors of the area (to be identified and evaluated by the Regional Corporation) in charge of cleaning and clearing.

- d) **Service Description:** Improve response equipment for each of the 3 Regional Corporations by developing a criteria of needs and prioritizing equipment within the allocated budget under this activity.

Deliverables (d): Criteria of needs and procurement of identified equipment.

Activity 1.1.5.2: Sharing Awareness of Pre-COVID-19 and Post-COVID-19 Activities with Community Responses and Available Resources, Coordinated with the Three Regional Corporations/Borough Councils

- a) **Service Description:** The CF will coordinate efforts to document and disseminate information about community activities and responses before and after the COVID-19 pandemic. This includes identifying successful initiatives, lessons learned, and available resources that can be leveraged for current and future community resilience efforts. The CF will work closely with the Regional Corporations/Borough Councils (Siparia, Princes Town, and Penal/Debe) to ensure a cohesive and comprehensive approach.

Deliverables (a): Comprehensive reports detailing pre- and post-COVID-19 community activities, documented lessons learned, resource inventories, and recommendations for leveraging these resources in ongoing and future community resilience initiatives.

- b) **Service Description:** To design and implement community engagement campaigns that highlight the transition from pre-COVID-19 to post-COVID-19 activities. This includes showcasing community resilience, promoting awareness of available resources, and fostering a sense of collective responsibility and preparedness. Various communication channels such as social media, community meetings, and printed materials will be utilized to reach diverse community members.

Deliverables (b): A section of reporting to include recommended strategies for engagement, educational materials (brochures, posters, videos), social media content, and reports on community outreach efforts.

- c) **Service Description:** Provide strategic guidance to the Regional Corporation/Borough Council Disaster Management Units (DMUs) on incorporating insights from pre- and post-COVID-19 community activities into current emergency planning and response strategies. This includes ensuring alignment with national disaster management policies and international best practices, and recommending policy updates where necessary.

Deliverables (c): A section of the report which speaks to strategic recommendations to include policy update advice, integration plans, and compliance checklists to ensure that community insights are effectively incorporated into ongoing disaster management efforts.

- d) **Service Description:** To support the design and implementation of public awareness campaigns to educate communities about flood risks, prevention, mitigation and preparedness measures, and emergency procedures by maximizing use of various communication channels such as social media, community meetings, and printed materials.

Deliverables (d): A section of the final report to include suggestions for educational materials (brochures, posters, videos), campaign plans, and reports on community outreach efforts.

Activity 1.1.5.3: Contractors with Historical Links to Provide Regional Corporations/Borough Councils with Necessary Criteria for Monitoring and Evaluation

- a) **Service Description:** The CF will conduct a thorough assessment of contractors who have historically worked with the Regional Corporations/Borough Councils (Siparia, Princes Town, and Penal/Debe). This includes evaluating past performance, reliability, and the relevance of their expertise to current and future projects. The CF will develop detailed criteria for selecting contractors, focusing on their capacity to meet the specific needs of the Regional Corporations/Borough Councils and ensuring effective monitoring and evaluation mechanisms.

Deliverables: Comprehensive assessment reports, criteria for contractor selection, and detailed monitoring and evaluation frameworks to ensure that chosen contractors meet the necessary standards and can effectively support the needs of the Regional Corporations/Borough Councils.

1. GENERAL TIME SCHEDULE

All activities under this contract are expected to be completed within three (3) months from the date of the contract signing.

- The contract award and work plan should be done in 3 weeks
- Procurement will be completed in tandem with project procurement procedures. The CF is expected to acquire all relevant procurement documents and details on purchases in coordination with SORB-PMU personnel including but not limited to Request for Quotes (RFQ), warranties, guarantees, formal equipment testing etc. throughout the duration of this project.

2. PERSONNEL IN THE FIELD (PROFESSIONAL EXPERIENCE AND QUALIFICATIONS)

The consulting firm must provide a team with the following competencies:

- At least a degree in Disaster Risk Management and experience working with communities to build their capacity in flood emergency response. Relevant Certification in Flood and Emergency Management will be an asset.
- Proven experience in climate change adaptation, especially flood mitigation measures and knowledge of flood forecasting and warning systems.
- Previous experience in training staff and conducting stakeholder consultations.
- Project coordination and facilitation skills.
- A strong command of English.
- A track record of proven project success in the same/related areas.
- Capacity to work closely with national counterparts and excellent conceptual, analytical, and writing skills.

CVs of the experts assigned to the project must be provided.

The CF needs to provide references for previous work in the following technical areas:

- Flood risk assessment
- Flood Response and Emergency Management.

These references should showcase the CF's expertise, the quality of work, and ability to deliver results within specified timelines.

Note: Up-to-date Government License, company registration, Government Regulatory body approval and tax clearance are required for submission of proposal.

3. QUALIFICATION SCORING CRITERIA

ELECTION CRITERIA	
SCORING CRITERIA	POINTS
EXPERIENCE OF THE FIRM	
Successful development and application of flood emergency response mechanisms	25
Experience training and building awareness on of flood emergency responses	15
Experience with community relations in sensitive areas	6
Track record of experience in flood emergency response coordination at all levels	10
PROPOSED PERSONNEL	
General technical expertise & experience of the proposed team members	10
Proven strength of networking through previous projects with local government and non-governmental stakeholders	10
Academic and other high-level qualifications and training	10
Participation of local experts or contractors	8

4. LANGUAGE REQUIREMENTS

CF personnel must have a proficient understanding of English, as it is the main language used for communication in Trinidad and Tobago, West Indies.

5. SUBMISSION CHECKLIST

The checklist of all documentation that is to be provided with the submission of the Technical

Proposal (TP) includes:

- A Cover letter acknowledging the CF's ability to provide the services outlined herein with the official signature of the company. (2-3 pages).
- Business History and Ownership (2-3 pages)
- Description of CF's experience in 3 or more similar projects including contract value (8-10 pages)
- Three client references including all contact information – Name, Location, Telephone number, and Email.

Additional information can be attached as appendices. The proposal should contain:

- Main Structure
- Approach, Methodology and Organization of the Consultant's team
- Work Plan and Staffing
- Any additional comments (on the ToR) and on counterpart staff and facilities

- A detailed Financial Proposal including cost breakdown, remuneration by activity and/or team member(s), and any reimbursable expenses. All costs must include taxes.
- Filled CV – CVs of each team member (format found in the Annex of this document)

Specifications:

- Minimum font size 11 pts
- Electronic submission in *.pdf format as one document.
- Submission deadline: 30th July 2025.
- Submissions are to be made to STA-SORBProject@sta.uwi.edu

6. PRELIMINARY PROCESS AND SCHEDULE FOR SELECTION

The project duration is three (3) months. Below is the preliminary schedule for recruiting the CF.

Activity Date	2025
Call for Technical Proposal (TP) circulated	16 May 2025 to 31 October 2025
Deadline for questions from interested CF	10 October 2025
Deadline for responses and Clarifications call (Zoom)	18 October 2025
Deadline for submission of TP	31 st October 2025
Completion of Internal Evaluation	14 th November 2025
Contract negotiations completed	21 st November 2025
Award & Acceptance letter	24 th November 2025
Project Start	25 th November 2025
Project End	27 th February 2026

7. DELIVERABLES AND SCHEDULE

The following table provides an indicative schedule for deliverables

Activity	Deliverables	Delivery Date Deadlines
Activity 1.1.5.1: Updating emergency plans of local Regional Corporations (Siparia, Princes Town and Penal/Debe)	Deliverables (a): Revised emergency response plans, including protocols for evacuation, communication, resource allocation, and coordination with relevant agencies especially the ODPM.	12 December 2025 to 21 January 2026
	Deliverables (b): Policy recommendations, regulatory guidelines, and compliance checklists.	
	Deliverables (c): A section of the final report to include directives on organizing a coordination meeting once per year to include the participation of private contractors of the area (to be identified and evaluated by the Regional Corporation) in charge of cleaning and clearing.	

	<u>Deliverables (d):</u> Criteria of needs and procurement of identified equipment.	
Activity 1.1.5.2: Sharing Awareness of Pre-COVID-19 and Post-COVID-19 Activities with Community Responses and Available Resources, Coordinated with the Three Regional Corporations/Borough Councils	<u>Deliverables (a):</u> Comprehensive reports detailing pre- and post-COVID-19 community activities, documented lessons learned, resource inventories, and recommendations for leveraging these resources in ongoing and future community resilience initiatives.	30 January 2026 to 14 February 2026
	<u>Deliverables (b):</u> A section of reporting to include recommended strategies for engagement, educational materials (brochures, posters, videos), social media content, and reports on community outreach efforts.	
	<u>Deliverables (c):</u> A section of the report which speaks to strategic recommendations to include policy update advice, integration plans, and compliance checklists to ensure that community insights are effectively incorporated into ongoing disaster management efforts.	
	<u>Deliverables (d):</u> A section of the final report to include suggestions for educational materials (brochures, posters, videos), campaign plans, and reports on community outreach efforts.	
Activity 1.1.5.3: Contractors with Historical Links to Provide Regional Corporations/Borough Councils with Necessary Criteria for Monitoring and Evaluation	Comprehensive assessment reports, criteria for contractor selection, and detailed monitoring and evaluation frameworks to ensure that chosen contractors meet the necessary standards and can effectively support the needs of the Regional Corporations/Borough Councils.	15 February 2026 to 27 February 2026

FORM CF-TEAM MEMBER**CURRICULUM VITAE (CV)**

Position Title and No.	(e.g. Team leader)
Name of Expert:	(Insert full name)
Date of Birth:	(day/month/year)
Country of Citizenship/Residence	

Education: (List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained)

Employment record relevant to the assignment: (Starting with current position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.)

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
[e.g., May 2005-present]	[e.g., Ministry of, advisor/consultant to... For references: Tel /e-mail.....; Mr. , deputy minister]		

Membership in Professional Associations and Publications:

Language Skills (indicate only languages in which you can work): _____

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
(List all deliverables/tasks as in which the Expert will be involved)	

Expert's contact information : (e-mail, phone.....)

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available, as and when necessary, to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

{day/month/year}

Name of Expert	Signature	Date
		{day/month/year}

Name of authorized	Signature	Date
Representative of the Consultant (the same who signs the Proposal)		

Appendix 1

<p>To create a scoring matrix for evaluating the budget for the SORB Flood Emergency Response Project, we need to establish criteria that reflect the importance & effectiveness of each budget category and items. The Table below shows the proposed scoring matrix</p>				
Category	Item	Weight (%)	Score (1-5)	Weighted Score
Personnel Costs	Project Manager	15%	5	0.5
	Disaster Risk Management Specialist	10%	4	0.4
	Climate Change Adaptation Specialist	10%	4	0.4
	Community Engagement Specialist	7%	3	0.3
Subtotal		42%		
Workshops & Awareness Campaigns	Workshop Facilitation	10%	4	0.4
	Community Outreach Events	8%	2	0.2
Subtotal		18%		
Consultancy Services	Policy and Regulatory Framework Development	15%	4	0.4
	Strategic Guidance on Contractor Selection and Performance Evaluation	5%	3	0.3
	Technical Assessment and Reporting	10%	1	0.1
Subtotal		30%		
Monitoring & Evaluation	Development of Monitoring Tools and Guidelines	10%	2	0.2
Subtotal		10%	3	0.3
Total Weighting		100%		

Instructions for Scoring:

Weight (%): This column indicates the relative importance of each budget category and item.

Score (1-5): Assign a score from 1 (lowest) to 5 (highest) based on the quality, necessity, and impact of each budget item.

Weighted Score: Multiply the score by the weight to get the weighted score.

Example Scoring:-

Let's assume we evaluate the Project Manager position:

Project Manager: Assume the score is 5.

Weighted Score = 5 (Score) * 10% (Weight) = 0.5

Complete this process for each item to determine the overall effectiveness and value of the budget allocation. This matrix helps in assessing whether the allocated funds align well with the project's objectives & priorities.

Appendix 2

This table provides a clear and concise breakdown of the budget for the SORB Flood Emergency Response Project by each activity, ensuring that all aspects of the project are covered.

Activity No.	Activities	Weight (%)	Score (1-5)	Weighted Score
1.1.5.1	Updating emergency plans of local Regional Corporations (Siparia, Princes Town and Penal/Debe	22%		
1.1.5.2	Sharing Awareness of Pre-COVID-19 and post-COVID-19 Activities with Community Responses and Available Resources, Coordinated with the Three Regional Corporations/Borough Councils	43%		
1.1.5.3	Contractors with Historical Links to Provide Regional Corporations/Borough Councils with Necessary Criteria for Monitoring and Evaluation	35%		
Total		100%		