

TERMS OF REFERENCE

Consultancy for Site Suitability Analysis of Proposed Hospital Infrastructure at Black River, Falmouth and Noel Holmes in Jamaica

1. Background and Justification

1. Hurricane Melissa, a Category 5 storm and one of the most intense hurricanes ever recorded in the Atlantic, struck Jamaica on October 28, 2025, causing catastrophic island-wide impacts. The hurricane made landfall in Westmoreland and tracked across the country, bringing extreme winds exceeding 190 km/h, storm surge on both coasts, and over 500 mm of rainfall in several parishes.
2. The event resulted in 45 fatalities and extensive damage to critical infrastructure, with the western parishes—St. Elizabeth, Westmoreland, Hanover, St. James, Trelawny, and St. Ann—experiencing the greatest destruction due to flooding, landslides, and hurricane-force winds.
3. The scale of damage underscored the urgent need for resilient reconstruction of essential public facilities, including the affected hospitals, and for a rigorous, risk-informed analysis of their current and potential future sites.
4. Following the devastation caused by Hurricane Melissa, the Government of Jamaica seeks technical support through the IDB to assess the feasibility and suitability of reconstructing or relocating three public hospitals: Black River Hospital (St. Elizabeth), Falmouth Public General Hospital (Trelawny), and Noel Holmes Hospital (Hanover). These facilities suffered significant damage and require a robust, risk-informed decision-making process to guide future investments.
5. Given the complexity of hazard exposure, operational requirements, environmental regulations, and long-term climate risks, a firm with multidisciplinary technical expertise is required to conduct a comprehensive site suitability analysis and provide actionable, evidence-based recommendations.

2. Objectives

1. The objective of this consultancy is to support an evidence-based, risk-informed investment decision on whether the three hospitals affected by the Hurricane Melissa (Black River Hospital (St. Elizabeth), Falmouth Public General Hospital (Trelawny) and Noel Holmes Hospital (Hanover) should be reconstructed at their current locations or relocated to alternative sites.
2. The specific objectives are:
 - Conduct detailed diagnostic assessments of the three existing hospital sites.
 - Develop and apply technical criteria and thresholds for assessing site suitability.
 - Conduct a comparative risk and cost analysis of on-site reconstruction vs relocation.
 - Assess the regulatory, environmental, and social compliance of proposed options.

- Recommend clear, evidence-based strategies for reconstruction or relocation.
- Provide documentation required by Jamaica’s National Environment and Planning Agency (NEPA), relevant Municipal Corporation and IDB’s Environmental and Social Policy Framework (ESPF).

3. **Scope of Services**

1. The consulting firm will develop and implement the necessary technical resources, analytical tools, and field methodologies to carry out comprehensive site suitability assessments for locations of the three hospitals: Black River Hospital (St. Elizabeth), Falmouth Public General Hospital (Trelawny), and Noel Holmes Hospital (Hanover). This includes the development and operationalization of stakeholder engagement tools, methodology to determine site suitability, and reconstruction activities including cost comparison of alternatives.

4. **Key Activities**

1. **Activity 1: Workplan:** Include methodology and schedule. Summary of available site data and initial observation.
2. **Activity 2: Stakeholder engagement and regulatory compliance:** Hold consultation(s) with Jamaica’s Ministry of Health and Wellness personnel and other key stakeholders to learn and understand the needs for the reconstruction of the hospitals, according to ongoing MOHW plans. Identify applicability with IDB’s Environmental and Social Policy Framework (ESPF), Jamaica legislation and NEPA requirements and verify compliance with local building codes and zoning regulations. Check alignment with best practices for construction and operation of health facilities.
3. **Activity 3: Determine hospital spatial needs:** Guided by the GOJ’s Secondary Care Reform model, assessing, considering current needs and future projections, the needs for the reconstructed hospitals (type of facility, number of beds, services to be delivered, etc.) to estimate the hospital dimensions at each site.
4. **Activity 4: Diagnosis:** Develop technical criteria and assessment methodology to determine whether the hospitals should remain in their current location or be relocated and conduct complete review of the current three sites (Black River Hospital in St Elizabeth, Falmouth Public General Hospital in Trelawny, and Noel Holmes Hospital in Hanover, analyzing the following aspects:
 - Hazards, risks and risk management options and costs
 - Existing buildings’ conditions
 - Suitability to accommodate the new needs
 - Operational factors
 - Potential impacts
 - Regulatory compliance.

5. **Activity 5: Recommendations:** Provide clear recommendations for suitable and unsuitable sites, following the results of the assessment of Activity 4:
 - If the assessment determines that the current hospital location is suitable, recommend structural, non-structural, architectural, urban, and nature-based strategies for disaster risk reduction and climate change adaptation and mitigation, including cost comparison of the proposed strategies, taking into account demolition and temporary relocation costs (if any), in the event of maintaining the same construction site for new hospital infrastructure.
 - If the assessment determines that the current hospital location is not suitable, provide criteria for land selection. Provide recommendations for risk-informed land-use decision-making, including specific actions required to protect high-risk sites and prevent future construction in areas classified as unsafe by the consultant.

For both cases, provide adequate documentation to inform submissions which meet the requirements of the National Environment and Planning Agency (NEPA) and relevant Municipal Corporation. and IDB's Environmental and Social Safeguards Processes (See [IDB's Environmental and Social Policy Framework](#)).

6. **Expected Outcome and Deliverables**

1. Product 1 – Workplan:
 - Work Plan and activity schedule.
 - Review existing studies, maps, and environmental data for each site. Hurricane Melissa damage assessments summary to be provided.
2. Product 2 – Stakeholder engagement report and regulatory compliance document:
 - Reports on stakeholder meetings.
 - Review of IDB ESPF Standard 4 applicability.
 - Assessment of compliance with Jamaican laws including National Building Code of Jamaica (2023), Building Act (2018), Caribbean Uniform Building Code (CUBiC)
 - Alignment with international standards (WHO Hospital Safety Index, PAHO Safe Hospitals, IBC, ISO standards).
3. Product 3 – Preliminary Hospital Dimensioning:
 - Provide a preliminary estimation of general footage required to accommodate all services needed at each of the three hospitals. This will be used to determine if the current locations are suitable for accommodating the new uses.

This estimation shall be used to assess: (i) spatial adequacy of the existing sites, (ii) operational functionality, (iii) capacity to accommodate critical services and technical systems, (iv) resilience and continuity of operations during emergencies, and (v) potential for future expansion or phased development.

4. Product 4 – Site Suitability Reports (One per site):

- Technical criteria and assessment methodology.
- Site assessment: Reviewing topography, soil stability, drainage and accessibility; Analyzing existing sites and determining if the reconstructed hospital needs can be accommodated within the existing site, either by refurbishing existing pavilion, expanding with new additions, or demolishing existing buildings and constructing new.
- Operational factors: Review the availability of basic services (water, energy, telecommunications), safe evacuation routes, connectivity to healthcare networks, and the capacity of the site to ensure operational continuity and accessibility in emergency situations.
- Risk Screening: Review of the exposure of each facility including category 5 hurricane wind zones, storm surge, flood plains and seismic hazard, and vulnerability to the climate change effects.
- Define risk thresholds for hazards (e.g., flood recurrence intervals, wind speed ratings) and estimate the risk management costs.
- Estimated costs: Compare costs for refurbishing existing facilities (whenever deemed adequate), expanding with new additions, or constructing new. Factor all costs (demolitions-if required, temporary solutions to maintain services during construction, etc.).
- Timelines: Compare time estimated for refurbishing existing facilities (whenever deemed adequate), expanding with new additions, or constructing new, including phasing, if needed.
- Given all of the above, determine existing site suitability of each site.

5. Product 5 – Recommendations:

- Provide structural, non-structural, architectural, urban, and nature-based strategies for disaster risk reduction and climate change adaptation, for existing location(s) deemed suitable.
- Provide criteria for land selection if the assessment determines that the current hospital location(s) is(are) not suitable.

Product 6 – Final report:

- Consolidated findings and recommendations.
- Recommended strategies for reconstruction or relocation.
- Criteria and evaluation of potential relocation sites.
- Provide documentation to support compliance with NEPA and relevant Municipal Corporation requirements.
- Submit the final report and attach technical appendices.

7. Project Schedule and Milestones

1. The project will be completed in 3 months. The products will be submitted following the dates below:

Project Schedule	
<i>Deliverable</i>	Submission Date
Product 1 - Workplan	5 days after contract signature
Product 2 – Stakeholder engagement report and regulatory compliance document	10 days after contract signature
Product 3 – Preliminary Hospital Dimensioning (One per site)	20 days after contract signature
Product 4 – Site Suitability Reports (One per site)	2 months after contract signature
Product 5 – Recommendations	2.5 months after contract signature
Product 6 – Final report	3 months after contract signature

8. Reporting Requirements

1. The products must be presented in English. All reports must be submitted as follows: i) the relevant electronic files in MS Word, Excel, or other applications acceptable to the IDB (they must include all annexes and appendices); and ii) a PDF file for each complete report. These reports and electronic files must be submitted within the time limits mentioned above. Functional copies of all GIS digital files (.shp, .tiff, .grd, .gdb, .mxd, etc.), models, databases, and any other files created during the consultancy must be submitted. In addition, the main results and conclusions of the consultancy must be collected and delivered in a presentation in MS format.
2. The Consultancy firm and the IDB Team will have biweekly virtual meetings to follow the advance of the work. Once the deliverables are received, the IDB team will have 10 days to send comments.

9. Acceptance Criteria

1. Deliverables will be accepted when they fully address all required components, demonstrate clear and well-justified analyses supported by appropriate data, and present recommendations that are actionable and explicitly linked to the evidence generated throughout the consultancy.
2. All outputs must comply with the documentation standards and requirements established by both the IDB, MOHW, Jamaica’s National Environment and Planning Agency (NEPA) and relevant Municipal Corporation.
3. The IDB technical team in consultation with the MOHW team will review each submission, provide consolidated comments, and issue final approval once all requested adjustments have been incorporated.

10. Other Requirements

1. The consultancy will require close coordination with Jamaican counterparts to facilitate fieldwork, data collection, and access to relevant sites.
2. The firm must also adhere to IDB security protocols, data protection standards, and confidentiality requirements throughout the assignment.
3. The firm is expected to ensure the continuous availability and participation of key experts for the duration of the contract, guaranteeing consistency and quality in all analyses, engagements, and deliverables.
4. The firm must provide evidence of at least two (2) consultancies of similar nature and complexity and ability to engage with multiple stakeholders and synthesize technical findings into clear, actionable reports.

11. Payment Schedule

Payment Schedule	
<i>Deliverable</i>	%
<i>Product 1 - Workplan</i>	10%
<i>Product 2 – Stakeholder engagement report and regulatory compliance document</i>	10%
<i>Product 3 – Medical Architectural Program (One per site)</i>	20%
<i>Product 4 – Site Suitability Reports (One per site)</i>	20%
<i>Product 5 – Assessment reports</i>	20%/
<i>Product 6 – Final report</i>	20%
TOTAL	100%

12. Supervision

1. The Health, Nutrition and Population Division (HNP) will be responsible for the execution of this contract, as well as for the approval of the products prepared by the firm. The team will have the support of the Social Infrastructure Group (INE/GIS) and the Disaster Risk Management Unit (CSD/DRM) specialists.

13. Key roles

1. **Civil Engineer (Site & Structural Assessment Lead):** The Civil Engineer will lead the evaluation of site conditions, structural feasibility, and geotechnical considerations for each hospital location.
 - The specialist must hold a bachelor’s degree in civil engineering; a Master’s degree in Structural Engineering, Geotechnical Engineering, or a related field is strongly preferred.

- A minimum of 10 years of professional experience in the assessment, design, or retrofitting of infrastructure in hurricane-prone or multi-hazard environments is required.
 - The expert should have proven experience conducting structural assessments, reviewing site stability and soil conditions, and designing mitigation measures aligned with regional codes such as the National Building Code of Jamaica (2023), Building Act (2018), and CUBiC.
 - Experience working in Jamaica, the Caribbean or other coastal, hazard-exposed regions is considered an asset.
2. **Hydrologist / Coastal Engineering Specialist (Hazard & Risk Modeling Lead):** The Hydrologist or Coastal Engineer will lead the modeling and analysis of hydrological, coastal, and climate-driven hazards affecting each hospital site.
- The specialist must hold at least a bachelor's degree in Hydrology, Coastal Engineering, Environmental Engineering, Water Resources Engineering, or a related field; a Master's degree in coastal processes, hydrodynamics, climate resilience, or water resources is preferred.
 - A minimum of 10 years of professional experience is required in conducting flood modeling, storm-surge analysis, watershed studies, or coastal hazard assessments—preferably within hurricane-affected regions.
 - The expert should be proficient in defining hazard thresholds, climate-related vulnerability, and risk management costs, as well as applying models and tools relevant to storm surge, riverine flooding, rainfall-runoff, and coastal erosion.
 - Experience supporting regulatory processes (e.g., NEPA, ESPF compliance) will be considered an advantage.
3. **Health Specialist (Health Services Operations & Service Continuity Lead):** The Health Specialist will evaluate the operational resilience and functional capacity of the hospitals under different hazard scenarios.
- The specialist should hold a degree in Public Health, Health Systems Management, Hospital Administration, Disaster Health Management, or a related field; a master's degree in public health, Health Emergency Management, or Health Systems Strengthening is highly desirable.
 - A minimum of 10 years of professional experience is required in health-facility planning, hospital emergency preparedness, service continuity, or resilience of health systems in emergencies.
 - The specialist must be familiar with international frameworks such as the WHO Hospital Safety Index and PAHO's Safe Hospitals Initiative and SMART Hospital Initiative. The specialist should have direct experience assessing essential service availability, access routes, emergency response operations, and interactions with local health networks.
 - Experience working in Jamaica or Caribbean health systems is an asset.

TERMS OF REFERENCE

Consultancy Services

For

Environmental Impact Assessment Studies & Reporting Of

Prioritized Health Facilities

1. Background and Justification

Hurricane Melissa, a Category 5 storm and one of the most intense hurricanes ever recorded in the Atlantic, struck Jamaica on October 28, 2025, causing catastrophic island-wide impacts. The hurricane made landfall in Westmoreland and tracked across the country, bringing extreme winds exceeding 190 km/h, storm surge on both coasts, and over 500 mm of rainfall in several parishes.

The event resulted in 45 fatalities and extensive damage to critical infrastructure, with the western parishes—St. Elizabeth, Westmoreland, Hanover, St. James, Trelawny, and St. Ann—experiencing the greatest destruction due to flooding, landslides, and hurricane-force winds.

The scale of damage underscored the urgent need for resilient reconstruction of essential public facilities, including the affected hospitals, and for a rigorous, risk-informed analysis of their current and potential future sites.

Following the devastation caused by Hurricane Melissa, the Government of Jamaica seeks technical support through the IDB to assess the feasibility and suitability of reconstructing or relocating three public hospitals: Black River Hospital (St. Elizabeth), Falmouth Public General Hospital (Trelawny), and Noel Holmes Hospital (Hanover). These facilities suffered significant damage and require a robust, risk-informed decision-making process to guide future investments.

Given the complexity of hazard exposure, operational requirements, environmental regulations, and long-term climate risks, a firm with multidisciplinary technical expertise is required to conduct a comprehensive site suitability analysis and provide actionable, evidence-based recommendations.

2. Objectives

The main objective of the TOR is to engage a highly experienced and relevant consulting firm who will be able to carry out an Environmental Impact Assessment on Prioritized Health Facilities in the specific areas slated for future expansion. The overall objectives of the proposed consultancy are to:

- Carry out Environmental Impact Assessments, for proposed construction works.
- Prepare site-specific Environmental Management Plans (EMP's and other plans as may be required) based on Assessment findings.
- To ensure that all positive and adverse impacts associated with construction and operation of the Project, including all associated/ancillary works and linked activities if any, are taken into account.
- To comply with the MOHW (Ministry of Health and Wellness) & IDB (Inter-American

Development Bank) Policies.

Specific objectives of the consultancy include:

- To carry out Environmental Screening, identify and assess potential positive and adverse environmental impacts as well as environmental settings for detailed investigations, and recommend further environmental assessment including direct, indirect and induced impacts in terms of magnitude, extent and duration that may be expected to occur due to proposed construction works and other related project activities.
- To carry out project site visits to collect primary data and review all available relevant secondary data to establish a comprehensive environmental baseline (including physical, biological, social, cultural and economic environments) for the Project Area of Influence; (analyze and include the issues and recommendation identified from Environmental Screening).
- To develop proposed measures to avoid, reduce, mitigate, manage and/or compensate for such impacts, including the institutional arrangements and required capacity for the implementation of all such measures and monitor their effectiveness and suggest changes to the arrangements as well as capacity strengthening measures, if necessary.
- To identify and carry out a comparative analysis or "Project Alternative Analysis" with or without project in terms of project location (such as upstream/downstream or no change of location), project design, technology and construction methodology to avoid, minimize or reduce environmental risks associated with site locations and propose potential opportunities and design appropriate measures to minimize environmental impacts and maximize complementary environmental and enhancement measures of the Project.
- To conduct a public consultation process that ensures that project affected people and other stakeholders are informed about the project and its possible impacts, as well as offered the opportunity to share their opinions and feedback to input into the environmental assessment, planning and design studies and implementation.
- To document all of the above mitigation and development interventions in appropriate forms and formats to be further discussed and agreed upon with MOHW and in line with IDB standards.
- To prepare intervention specific Scoping Report to meet the MOHW's environmental requirements as well as all Government's requirements (NEPA etc.); and support in the National Environmental & Planning Agency (NEPA) and other relevant agencies approval. The Scoping Report for each intervention, will identify intervention specific and relevant issues, define potential influence area, identify the priority or most significant issues/ subjects to be covered in the assessment, and confirm applicable policies, requirements and standards.
- The Consultancy shall ensure that the environmental assessment, planning and design outputs of this assignment will comply with and meet the legal and technical requirements of the PEU/MOHW and IDB Safeguard Policies. This assignment is considered complete only upon approval and clearance of the final versions of the required environmental assessment and planning documents by the PEU/MOHW and relevant approval agencies.

3. Scope of Services

The Consultancy Firm selected will be solely responsible for conducting environmental impact assessment works and should fulfill the requirements of this TOR.

The SOW defines the extent of the services to be provided and the general method to be followed, the types of reports and the normal range of recommendations, which may be included by the Consultancy Firm who originates the work.

The Environmental Impact Assessment Consultancy Firm should be familiar with the procedures in initiating an Environmental Impact Assessment Investigation and in making an objective appraisal of submitted reports.

The SOW also takes into account the commitments which municipalities may require from Environmental Impact Assessment Consultancy Firm while conducting fieldwork.

The Consultancy will be carried out in two phases as the need for downstream work is anticipated. The first phase shall be the pre-construction phase of environmental impact assessment, and the second phase shall be the environmental impact assessment of the construction projects.

4. Key Activities

4.1. Phase I-Pre Construction Assessments:

There are (2) two major work or deliverables to be achieved in Phase 1. Main scope of work with deliverables required are given below.

The Environmental Impact Assessment Study: Initial Environmental Assessments (Screening and Project Scoping Report)

- Conduct reconnaissance study on the MOHW health facility sites (preferably before submission of the bids or RFP for construction/ upgrading); The Assessment shall take into consideration the preliminary information provided by the UNOPS report and in line with the overall MOHW policy and strategic plans. Data collection shall involve meeting with all stakeholders and representative from PEU/MOHW.
- The Consultancy will perform environmental impact assessment investigations and related services for MOHW HSSP projects. The Consultancy will be required to execute a Work Plan which will specify the scope of services, task schedule, and compensations if any.
- During the conceptual planning of the project, a preliminary environmental impact assessment study must be carried out. The environmental impact assessment (EIA) consultant must attend, as required, periodic meetings with the MOHW/PEU and design consultants to obtain the MOHW/PEU instructions regarding project requirements.
- During the feasibility stage for the proposed works to all (3) three health facilities stated the Consultant shall:
 - Develop environmental risk and impact screening/assessment tools in close coordination with MOHW, the Government of Jamaica (GOJ) & National Environmental & Planning Agency (NEPA) policies and any other relevant agency.
 - Determine applicable NEPA and other local municipalities' legislative provisions and the IDB safeguard policies triggered on environmental assessment, amongst others. Publish public notice for scoping study purpose as may be required.

- Carry out inception-stage site-specific environmental impact assessment/screening by visiting each potential site/project area together with the feasibility and detailed design consultant team, and in consultation with local communities to identify key issues and risks in the project area relevant to the project, to get to know the alternatives under consideration from the site perspective, and to determine the level, extent and type of environmental investigation needed.
- Review the environmental screening and initial alternatives analysis and provide an independent assessment of the adequacy of consideration of environmental aspects in the selection of the preferred environmental assessed risk alternative. Initiate, plan and guide in mitigating natural environmental risks such as natural disaster management as well. This should include a review of the appropriateness of the expected approximate costs of environmental mitigation and management measures (including possible involuntary resettlement and rehabilitation for displaced staff, currently offered and planned services and MOHW facility activities) for each alternative, as well as social acceptability considerations. Assess whether the mitigation hierarchy (e.g., avoid, minimize, mitigate, compensate) is being followed in the process of ranking alternatives from environmental perspectives. Assess whether stakeholder feedback received during consultations has been adequately reflected in decision-making. Document findings and recommendations in a summary report and presentation for MOHW.
- Carry out scoping of the detailed environmental impact assessment and planning studies to be undertaken. Based on this, prepare (i) Scoping report including a detailed work plan for carrying out further assessments and studies as required, and (ii) develop scoping document based on the issues identified during the scoping process.
- The Scoping Report will contain, but not be limited to:
 - Brief Project description and definition of overall Project Area of Influence; ii. The detailed scoping process followed to determine the influence area/define boundaries of the project for Environmental Impact Assessment (EIA); iii. Identify the priority or most significant issues/subjects to be covered in the assessment process and related methodology; iv. Key social and environmental issues, baseline aspects and potential impacts, including an indicative assessment of scale and severity, which should be included for further study in the environmental and social assessment and planning studies;
 - Confirmation on the applicable MOHW/IDB safeguard policies, NEPA's health and safety requirements and other national standards and regulations which apply to the Project; vi. A detailed outline and work plan for the EIA to be carried out (including extended consultation plan for the assessment process); specific to each of the proposed construction works, and a detailed outline and work plan for the assessment (including consultation plan for the assessment process); and
 - Share the draft Scoping Report and detailed related documents with the MOHW/MOHW PEU NEPA and IDB for further reviews.
 - Disclose the draft Scoping Report, and support MOHW to carryout consultations with stakeholders on the draft documents. The consultancy shall document the consultancy process, including feedback received, and update the Scoping Report taking the feedback into account.
 - As per the requirements of the MOHW/MOHW PEU, make presentation on the findings of the Scoping Report to the relevant stakeholders

- Finalising Scoping documents based on feedback received from the relevant stakeholders for required clearances, and for approval from NEPA.
- Collect baseline data on environmental conditions of the project influence/ impact area
- Identify environmental risks and impacts in terms of magnitude, extent and duration that may be expected to occur during construction and operation.
- Identify the critical environmental problems that require further studies and/or monitoring.
- Carry out and document alternative analyses from the environmental point of views including "No Project Alternative" (or with and without project comparison)
- Suggest mitigation measures for the adverse impacts and enhancement measures for the beneficial impacts
- Develop Environmental Management and Monitoring Plan, including site-specific Environmental Management Plan(s) (EMPs) as appropriate.
- Assess the institutional arrangements and capacity for the implementation of Environmental Management and Monitoring Plans, and suggest changes to the arrangements as well as capacity strengthening measures, if necessary.
- Develop information dissemination and consultation strategy for the implementation of the environmental mitigations and enhancement measures during project implementation
- Publish public notices for EIA purposes as may be required
- Consult and inform the MOHW/ MOHW PEU and other stakeholders, and ensure active participation
- Advise the MOHW/ MOHW PEU and other stakeholders regarding the environmental implications of the project

Environmental Impact Assessment Analysis and Report

- Based on the findings of the impact assessment and feedback from consultations the Consultant shall prepare an Environmental Impact Assessment Report for each impact identified, feasible and cost-effective mitigation measures proposed to reduce potentially significant adverse environmental impacts to acceptable levels. The capital and recurrent costs of the measures, institutional, training and monitoring requirements to effectively implement these measures shall be determined. The Environmental Impact Assessment Report shall also outline different environmental enhancements including landscaping around proposed project, considerations to aesthetic appeal, provisional pathways for greening the area, and development of cultural properties or improving access. The report should include the typical impacts and any other identified by the Consultant including but not limited to dust, noise, waste (biohazardous and non-biohazardous) and waste water management and disposal, and impacts of water sources, aquifers air pollution, noise, traffic safety, and impacts on wildlife, Occupational health and safety risks, community health and safety risks and issues.
- The EIA Report shall be divided in (2) two sections: -
 - A client version containing the comprehensive set of mitigation, management and monitoring measures, requirements and institutional responsibilities for both construction and operation stages to fully address all identified impacts. This shall include an executive summary. (i) Each mitigation and management measure should be briefly described regarding the impact to which it relates, as well as an appropriate timeline for its implementation, indicators for measuring success, and budgetary requirements. In addition to environmental management measures, an occupational health and safety plan, community health and safety plan

- (including traffic safety), and emergency management plan, if necessary, should be prepared, among others to be identified by the consultant during the assessment process.
- The EIA Report shall include detailed specification, bill of quantities, execution drawings and contracting procedures for execution of the environmental mitigation and enhancement measures suggested, separate for pre-construction, construction and operation periods.
 - The EIA Report shall include good practice guides related to construction procedures as well as to include mobilization, maintenance and demobilization of plant and machinery.
 - Responsibilities for execution and supervision of each of the mitigation and enhancement measures shall be specified in the EIA Report.
 - A plan for continued consultation, communications, and grievance management to be conducted during implementation stage of the project.
 - All mitigation and management measures shall be consistent with national requirements, applicable to MOHW/IDB safeguard policies, and MOHW Health and Safety (EHS) Guidelines.
 - Summary of the grievance management, consultation and communications aspects shall also be included.
 - A monitoring program including indicators, parameters/thresholds, and locations, frequency and methodology for monitoring should also be included, to enable verification that mitigation measures have been successful.
 - Institutional arrangements and responsibilities for carrying out, monitoring, supervising and reporting on compliance with each mitigation and monitoring measure, as well as the arrangements for coordination between the various agencies responsible for implementation and management of the project.
 - Assessment of institutional capacity of the agencies responsible for EIA implementation, and recommendations for capacity-strengthening, training programs, etc. as needed.
 - A construction contractor's version which would emphasize on a series of Site-Specific Environmental Management Plans (EMPs) tailored specifically for each of the related bid packages (sites), developed to be directly annexable to bidding documents and contracts. It shall include (i) Specific cost estimate for EIA measures required of the contractor, to be included as a line item in the BOQ of the bid document; and (ii) Requirements for environmental management staffing and training by the contractor.

4.2. Phase 2- Construction Phase

The Consultant shall prepare the Environmental Impact Assessment for construction, postconstruction/operation of health facilities, direct, indirect, induced and cumulative impacts, related key issues identified during construction and record any negative construction impacts related but not limited to the following:

- Construction impacts not limited to dust, noise, waste and waste water management and disposal, and impacts of water sources, aquifers etc.
- Environmental impacts during operational not limited to; air pollution, noise, traffic safety, and impacts on wildlife if any, and impacts due to climate change
- Occupational health and safety risks and issues during construction and operation, including those related to biohazardous waste.
- Traffic safety management during construction and operations
- Construction stage impacts to existing health facility daily services and activities
- Cumulative environmental impacts if any

- Summary of safety concerns and risks, considering increased speed and traffic volumes community/pedestrian safety issues
- Community health and safety risks and issues, including those related to biohazardous waste.
- Summary of additional social impacts identified through social assessment and planning studies

The Environmental Impact Analysis Report during Phase 2 shall contain but not be limited to:

- Site-specific measures pertaining to each health facility site
- All other general construction-related environmental, health and safety management measures, which are the responsibility of the contractor to implement
- Ant further and necessary cost estimate for EIA measures required of the contractor,
- Any further requirements for environmental management staffing and training by the contractor.

5. Expected Outcome and Deliverables

1. Inception Report and Work plan
2. Inception Screening and categorization report: initial environmental assessment of the specific health facility, environmental categorization, and summary presentation on independent assessment on alternative analysis considering environmental and social aspects in the selection of the preferred intervention construction alternative (Six copies each in paper and electronic soft copy in original version). The Consultant(s) shall make presentation of findings to MOHW/MOHW PEU, which may also include the feasibility and design consultants at MOHW/MOHW PEU's discretion. The IDB will review and clear each of the screening and categorization of reports for interventions.
3. Draft Scoping Report (Six copies each in paper and electronic soft copy in original version). Within one month after finalization of the proposed health facility, the consultant shall submit the draft Scoping Report including findings of the scoping stage, definition of area of influence, priority/ key issues for the proposed health facility intervention, guidance on the information needed and methodology to be followed, details of the specific/ customized Scoping Report, and detailed outline/work plan for undertaking environmental assessment studies, in a content and format acceptable to MOHW/MOHW PEU.
4. Final Scoping Report including feedback received from MOHW stakeholders, MOHW/MOHW PEU and IDB. (Six copies each in paper and electronic soft copy in original version), within one month after receiving feedbacks/ comments.
5. Draft Environmental Impact Assessment Analysis and Report (six copies)
6. Final Report (10 copies each) in paper and electronic soft copy in original version) consultant shall submit all data pertaining to the survey.

Each contract package must have a Site-Specific Environmental Management Action Plan (SS-EMP) prepared based upon the overall project-level Environmental Management Plan but tailored to each contact package. The EMPs must have corridor/strip-maps for each health facility region or aerial

map showing spots of environmental impacts or risks/ hazards and provide site-specific information/data as well as designed mitigation and management measures, in addition to all generic / general environmental, health and safety related management measures, which pertain to the contractor.

6. Project Schedule and Milestones

1. The project will be completed in 5 months. The products will be submitted following the dates below:

Project Schedule	
<i>Deliverable</i>	Submission Date
Product 1 - Workplan	10 days after contract signature
Product 2 – Inception Screening and categorization report	1 month after contract signature
Product 3 – Draft Scoping Report	2 months after contract signature
Product 4 – Final Scoping Report	3 months after contract signature
Product 5 – Draft Environmental Impact Assessment Analysis and Report (six copies)	4 months after contract signature
Product 6 – Final report	5 months after contract signature

7. Reporting Requirements

1. The products must be presented in English. All reports must be submitted as follows: i) the relevant electronic files in MS Word, Excel, or other applications acceptable to the IDB (they must include all annexes and appendices); and ii) a PDF file for each complete report. These reports and electronic files must be submitted within the time limits mentioned above. Functional copies of all GIS digital files (.shp, .tiff, .grd, .gdb, .mxd, etc.), models, databases, and any other files created during the consultancy must be submitted. In addition, the main results and conclusions of the consultancy must be collected and delivered in a presentation in MS format.
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3. The IDB technical team in consultation with the MOHW team will review each submission, provide consolidated comments, and issue final approval once all requested adjustments have been incorporated.

9. Other Requirements

1. The consultancy will require close coordination with Jamaican counterparts to facilitate fieldwork, data collection, and access to relevant sites.
2. The firm must also adhere to IDB security protocols, data protection standards, and confidentiality requirements throughout the assignment.
3. The firm is expected to ensure the continuous availability and participation of key experts for the duration of the contract, guaranteeing consistency and quality in all analyses, engagements, and deliverables.
4. The firm must provide evidence of at least two (2) consultancies of similar nature and complexity and ability to engage with multiple stakeholders and synthesize technical findings into clear, actionable reports.

10. Payment Schedule

<i>Deliverable</i>	<i>%</i>
Product 1 - Workplan	10%
Product 2 – Inception Screening and categorization report	10%
Product 3 – Draft Scoping Report	20%
Product 4 – Final Scoping Report	20%
Product 5 – Draft Environmental Impact Assessment Analysis and Report (six copies)	20%
Product 6 – Final report	20%
<i>TOTAL</i>	<i>100%</i>

11. Supervision

1. The Health, Nutrition and Population Division (HNP) will be responsible for the execution of this contract, as well as for the approval of the products prepared by the firm. The team will have the support of the Environmental and Social Unit (ESG), Social Infrastructure Group (INE/GIS) and the Disaster Risk Management Unit (CSD/DRM) specialists.

12. Qualifications/Experience of Firm

Team Qualifications and Experience - Prospective Consultancy Firms Key Staff must have:

- Environmental Safeguard Specialist and Team Leader (Key Expert)
 - Master's Degree or equivalent in environmental science, environmental engineering, environmental planning, or other related disciplines

- At least seven (7) years of experience on environmental impact assessment and/or environmental management aspects of development projects including health facilities
- Experience of preparing environmental assessments and environmental management plans, including for two or more IDB or other donor funded projects.
- Knowledge of the IDB operational policies/directives, guidelines, and procedures related to environmental assessment and management is essential.

- Biodiversity Expert
 - Master's Degree or equivalent in environmental science, bio-diversity, natural resources, forestry/wild life/ aquatic life etc. for each intervention, define screening and scoping of the intervention.
 - At least five (5) years of experience on bio-diversity aspects of development projects including health facilities
 - Experience of preparing bio-diversity assessments and environmental management plans, including for two or more IDB or other donor funded projects.
 - Knowledge of the IDB operational policies/directives, guidelines, and procedures related to environmental assessment and management is essential.

- Geotechnical Expert
 - Master's Degree or equivalent in Geo-technology, applied geology technical engineering, geology etc. or other related discipline for each intervention, define screening and scoping of the intervention.
 - At least five (5) years of experience on geo-technical assessment of health facilities and/or aspects of development projects including health facilities ● Geotechnical expert in environmental assessments and/or environmental management plans, including for two or more IDB or other donor funded projects.
 - Knowledge of the IDB operational policies/directives, guidelines, and procedures related to environmental assessment and management is essential.

Additional specialist-level expertise, such as in biodiversity, hydrology, cultural resources, GIS mapping, stakeholder engagement and consultation, cultural heritage, occupational health and safety, community health, social surveys, citizen, medical and non-medical staff engagement may be needed for input in EIA studies.

Qualifications / Experience of the Firm -The Firm must have: Demonstrated experience of organizing large-scale surveys and EIA studies within the past five (5) - ten (10) years.

- Minimum five (5) years demonstrated capacity and experience in planning and organizing survey logistics for the Government of Jamaica.

Job Title: Consultancy to conduct a comprehensive human resource for health (HRH) analysis in Jamaica / SCL/HNP/ PEC
Post of Duty: Jamaica

About this position:

The Health, Nutrition, and Population Division (SCL/SPH) of the IDB is seeking a health systems expert knowledgeable in human resources for health to support technical activities for the Hurricane Melissa Relief, Rehabilitation, and Reconstruction Programme for the Health Sector of Jamaica. The efforts must ensure the availability, distribution, competencies, and resilience of the health workforce as the backbone of the service continuity, quality of care, and financial sustainability. The consultancy will conduct a comprehensive human resource for health (HRH) analysis in the affected areas to inform network reorganization, reconstruction options, and medium-term workforce sustainability planning. This analysis will deliver actionable inputs for investment design, fiscal planning, and system resilience. It will serve as a key input for the pre-feasibility analysis of the reconstruction of health facilities.

The team's mission:

The Social Sector (SCL) is a multidisciplinary team that believes investing in people is the key to improving lives and overcoming development challenges in Latin America and the Caribbean. In collaboration with countries in the region, the Social Sector formulates public policy solutions to reduce poverty and improve the delivery of education, employment, social protection, and health services. The objective is to advance a more productive region, with equal opportunities for men and women, and greater inclusion of the most vulnerable groups.

The Division of Health, Nutrition, and Population, through these efforts, focuses on ensuring the overall well-being of individuals, contributing to sustainable and equitable development for all. You will work in the Division of Health, Nutrition, and Population (SCL), which is responsible for preparing and overseeing the operations of the IDB in borrowing countries in the areas of health (investment strategies in health human capital, strengthening health networks, health system financing, organization and performance, etc.), nutrition, and population.

What you'll do:

To assess the current status, distribution, competencies, productivity, surge capacity, governance framework, and fiscal sustainability of the health workforce in the Hurricane Melissa-affected areas, and to provide strategic recommendations aligned with health network strengthening and reconstruction scenarios.

Scope of work:

1. Assessment of workforce stock and distribution: The assessment comprises
 - a. The compilation and validation of HRH data disaggregated by cadre and specialty, facility level of the intervention area, geographic location, employment modality, age, and gender distribution.

- b. Estimation of health worker-to-population ratios by cadre, vacancy rates and unfilled positions, staff displacement, absenteeism, and attrition due to Hurricane Melissa.
 - c. Comparison of HRH distribution against the national staffing norms, international benchmarks, and pre-hurricane distribution patterns
 - d. Identify geographic inequities and the distribution's characteristics.
- 2. Analysis of competencies and skill-mix
 - a. Assess alignment between current workforce competencies and priority service needs, comprising: NCD management, trauma and emergency care, maternal, neonatal and reproductive services, mental health and public health functions.
 - b. Identify skill-mix imbalances, opportunities for task-shifting and role optimization, and training and supervision gaps.
- 3. Workforce functionality and productivity
 - a. The analysis comprises patient-to-provider ratios, service outputs per provider, trends in service delivery before and after the hurricane, absenteeism, and overtime.
- 4. Workforce well-being and retention
 - a. Assessment of: workforce burnout and psychosocial risks, staff retention vulnerabilities, housing and livelihood disruption affecting health workers
 - b. Identify priority measures to support HRH mental health, strengthen retention in high-need areas, and introduce financial and non-financial incentives.
- 5. Service expansion and capacity planning analysis
 - a. Assess the HRH implications of the proposed expansion of hospitals and health centers: required cadre of specialists and nurses, diagnostic and support staff, and training pipeline feasibility.
- 6. Financial and Operational Sustainability
 - a. Estimate current costs in affected areas: cost of filling critical vacancies, financial implications of skill-mix adjustments, and costs associated with surge staffing mechanisms.
 - b. Develop the workforce cost projections under the alternative reconstruction and the expansion of health facilities.
 - c. Estimate incremental recurrent costs (HR)
 - d. Assess medium-term affordability with current fiscal conditions.

Deliverables and payment schedule:

The table below outlines the main deliverables expected for this consultancy, along with the proposed payment schedule. Supply capacity analysis of the health centers: infrastructure,

Deliverable	Payment (%)
1. Inception report including methodology, data requirements, analytical framework, workplan and timeline.	10%

2. HRH diagnostic report comprising workforce and distribution analysis, skill-mix and competency assessment,	18%
3. Productivity and functionality assessment, surge capacity analysis	18%
4. HRH wellbeing analysis.	18%
3. Workforce expansion and capacity planning analysis	18%
4. Financial and operational sustainability	18%

What you'll need:

- **Education:** A degree in medicine, nursing, economics, epidemiology, or a related area. A master's or doctoral degree in public health, epidemiology, health systems, health services or healthcare management.
- **Experience:** Specific experience of no less than 10 years in the health sector, particularly in the analysis of human resources. Strong quantitative and qualitative skills, including previous experience with data collection and analysis. Knowledge and experience in the Jamaican health sector is an asset.
- **Language:** The consultant must be proficient in English.

Requirements:

- **Citizenship:** You are either a citizen of Jamaica or a citizen of one of our 48-member countries.
- **Consanguinity:** You have no family members (up to fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB Group.

Type of contract and duration:

- **Type of contract:** Products and External Services Contractual (PEC), Lump Sum.
- **Length of contract:** 60 non-consecutive days in a period of 5 months.

Job Title: Consultancy to conduct a new healthcare network analysis in Jamaica / SCL/HNP/ PEC
Post of Duty: Jamaica

About this position:

The Health, Nutrition, and Population Division (SCL/SPH) of the IDB is seeking a health systems expert knowledgeable in Integrated Healthcare Services Delivery Networks to support technical activities for the Hurricane Melissa Relief, Rehabilitation, and Reconstruction Programme for the Health Sector of Jamaica. One of the primary goals of the Programme is to help restore and maintain essential health services by strengthening Primary Health Care through analyzing the organization of the health service network, ensuring effective referral pathways, and maintaining the delivery of priority services during recovery.

The team's mission:

The Social Sector (SCL) is a multidisciplinary team that believes investing in people is the key to improving lives and overcoming development challenges in Latin America and the Caribbean. In collaboration with countries in the region, the Social Sector formulates public policy solutions to reduce poverty and improve the delivery of education, employment, social protection, and health services. The objective is to advance a more productive region, with equal opportunities for men and women, and greater inclusion of the most vulnerable groups.

The Division of Health, Nutrition, and Population, through these efforts, focuses on ensuring the overall well-being of individuals, contributing to sustainable and equitable development for all. You will work in the Division of Health, Nutrition, and Population (SCL), which is responsible for preparing and overseeing the operations of the IDB in borrowing countries in the areas of health (investment strategies in health human capital, strengthening health networks, health system financing, organization and performance, etc.), nutrition, and population.

What you'll do:

The activities that the selected candidate will perform include, but are not limited to, the following:

1. **Demand analysis.**
 - a. Update the demographic and epidemiological analysis to identify the main causes of morbidity and mortality in the intervention area, categorized by age, sex, and administrative region. Analyze the tendencies between 2015-2025.
 - b. **Service demand projections.** Using data from the healthcare network, demographic and epidemiological analyses, and international literature, model the potential healthcare demand over the next 10 years. This analysis should consider the following “tracer” services: (i) births; (ii) hospitalizations (by specialty); (iii) emergency and elective surgeries; (iv) intensive care; (v) urgent/emergency consultations; (vi) specialty consultations; and (vii) primary care consultations. The forecast must consider two scenarios: with digital health services and without them.

2. Supply capacity analysis.

- a. Characterize the supply capacity of hospitals by examining (i) physical infrastructure, such as the number of beds, surgical theaters, laboratory and imaging, and emergency services.
- b. Characterize the supply capacity of health centers by examining (i) infrastructure, such as services, number of offices and examining rooms, A&E services, pharmacy, and diagnostic services.

Parish	Regional Health Authority	Hospital Facility	Health Centres
St Elizabeth	Southern Regional Health Authority (SERHA)	Black River Hospital	HCs within the area of coverage of Black River Hospital
Westmoreland	Western Regional Health Authority (SERHA)	Savanna-la-Mar Public General Hospital	HCs within the coverage area of Savanna-la-Mar hospital
Hanover		Noel Holmes Hospital	HCs within the coverage area of Noel Holmes Hospital

3. Productivity analysis. Update service production at the health center and hospital levels (2018-2025), by region, within the intervention area (please see the table).

- a. **Hospital productivity:** consider assessing “tracer” services: (i) births; (ii) admissions by medical and surgical specialty; (iii) emergency and elective surgeries; (iv) intensive care; (v) urgent/emergency consultations; (vi) specialty consultations. This exercise should also look at the availability and use of digital health services (e.g., telehealth)
- b. **Health centers’ productivity:** main causes of visits for ambulatory services, referrals, and counter referrals.
- c. Evaluate hospital and service productivity using average output per resource. This analysis should include hospitals and health centers

4. Healthcare network analysis:

- a. Characterize the coverage area of hospitals based on the origin-destination analysis of hospital discharges by hospital and parish.
- b. Describe the coverage of health centers. The initial approach can be to define the area assigned to each health center, but it is highly recommended to verify if there is another source of patient residence.
- c. Compare the supply capacity of hospitals and health centers, identifying areas of complementarity or competition. Focus especially on emergency care and user profiles at both facilities.
- d. Identify gaps between the secondary-level model and the hospitals' situation before the hurricane.
- e. Identify gaps between the primary care model and the situation of health centers before the hurricane.
- f. Review the referral and counter-referral system for scheduled services, including the registration and management of waiting lists.

- g. Assess the emergency service management system, including pre-hospital care and coordination of urgent transfers between health centers and hospitals.
- h. Distribution of beds by hospital within the network, identifying whether the facilities will retain or refer their patients.
- i. Referral and counter-referral system with technical and administrative criteria between health centers and hospitals, as well as between hospitals.
- j. Emergency management system: pre-hospital and between facilities.

5. Organizational structure analysis

- a. Structural organizational design: hierarchy, department, and reporting lines
- b. Clinical governance and protocols: rules governing patient flows, triage, discharges
- c. Information systems structure: analysis of health information data and processes

The activities will be conducted through the review of government documents and reports, as well as interviews with key stakeholders in the health sector, particularly the Ministry of Health and Wellness and regional authorities.

- 6. **Gap analysis report.** Based on previous analyses of hospitals and health centers in the intervention area and considering the MOHW’s plans to expand supply capacity, estimate the regional-level gaps in service provision. Identify specific needs for hospital beds and specialized services, including the geographical distribution of these gaps.

Deliverables and payment schedule:

The table below outlines the main deliverables expected for this consultancy, along with the proposed payment schedule. Supply capacity analysis of the health centers: infrastructure,

Deliverable	Payment (%)
At contract signature.	10%
Product 1. Demand analysis containing current situation and service demand projection report	18%
Product 2. Supply capacity analysis report of hospital and health centers report	18%
Product 3. Productivity analysis by health facility and region using the tracer services report	18%
Product 4. Healthcare network analysis and organizational structure analysis report	18%
Product 5. Gap Analysis Report	18%

What you’ll need:

- **Education:** A degree in medicine, nursing, economics, epidemiology, or a related area. A master's or doctoral degree in public health, epidemiology, health systems, health services or healthcare management.
- **Experience:** Specific experience of no less than 10 years in the health sector, particularly in the analysis of healthcare networks. Strong quantitative and qualitative skills, including previous experience with data collection and analysis. Previous experience with similar types of assessment is highly desirable. Knowledge and experience in the Jamaican health sector is an asset.
- **Language:** The consultant must be proficient in English.

Requirements:

- **Citizenship:** You are either a citizen of Jamaica or a citizen of one of our 48-member countries.
- **Consanguinity:** You have no family members (up to fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB Group.

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