



REQUEST FOR PROPOSAL (RFP) (RE-RFP-BD-2019-037)

NAME & ADDRESS OF FIRM	DATE: September 26, 2019
	REFERENCE: RE-RFP-BD-2019-037

Dear Sir / Madam:

We kindly request you to submit your Proposal for *Re-advertisement-Hiring a firm for Conducting Disaster Impact Modelling for Ukhia and Teknaf sub-districts for UNDP Bangladesh Cox's Bazar Office.*

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals shall be submitted on or **before 4.30 p.m. (local time) on Thursday, October 03, 2019** before the deadline indicated by UNDP in the eTendering system. Bids must be submitted in the online eTendering system in the following link: <https://etendering.partneragencies.org> using your username and password. If you have not registered in the system before, you can register now by logging in using

username: event.guest

password: why2change

and follow the registration steps as specified in the system user guide.

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days

You are kindly requested to indicate whether your company intends to submit a Proposal by clicking on "Accept Invitation".

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

The Financial Proposal and the Technical Proposal files **MUST BE COMPLETELY SEPARATE** and uploaded separately in the system and clearly named as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each document shall include the Proposer's name and address. **The file with the "FINANCIAL PROPOSAL" must be encrypted with a password so that it cannot be opened nor viewed until the Proposal has been found to pass the technical evaluation stage. Once a Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the responsibility for not encrypting the financial proposal. Please do not put the price of your proposal in the 'line items' in the system. Instead put 1 and upload the financial proposal as instructed above.**

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html>

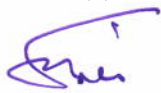
UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscc/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,



Munir Hossain
Operations Manager (a.i)
9/26/2019



Description of Requirements

Context of the Requirement	Cox's Bazaar is highly exposed to cyclones and storms. In the past three years, the district has been affected by cyclones Mora in May 2017, Roanu in May 2016 and Komen in July 2015. Since 2017, the risk landscape of Cox's Bazaar has changed significantly with the mass influx of Rohingya refugees, double in number compared to the local population, and posing significant additional demands on local government functions, the natural resources, and on the infrastructure. During cyclone Mora, 70% of the shelters in the then much smaller refugee camps were found to have been damaged following the cyclone. In 2018, relatively mild wind events such as kalbaishaki/Nor'wester storms affected 27,005 people in the refugee camps, while 37,167 people have been affected till July 2019. In 2018, it was estimated that the majority of the household shelters and facilities in the camps are unable to bear wind loads over 50 km/hour. All factors indicate that the camp population should be considered at higher risk of trauma, fatality and asset loss related to storm winds than what is usual for the country. Multiple factors exacerbate the risks from wind, including (a) extremely dense settlement, (b) use of bamboo for household shelter construction and the vast majority of other structures in the camps, (c) the known low wind resistance of the majority of the household shelters in the camps and (d) the practice of drying firewood on top of household shelters. There are at present no cyclone shelters or other large concrete buildings in the Rohingya camps. In this environment, the majority of the population is at all times surrounded by a large volume of poorly secured objects which have the potential for causing acute trauma if thrown by extreme winds. While the Kutupalong camps in Ukhia sub-district are not exposed to storm surges or inundation risks, most of the camps in Teknaf sub-district are separated from the eastern river Naf by only a less than 1 km wide coastal plain protected by embankments along the river. A breach or overflow of those embankments during a cyclone event may cause flooding of the eastern Teknaf camps. One Teknaf camp – Shamlapur/camp 23 – is on the western coast of the Teknaf peninsula and is at direct risk of storm surge. Unlike the rest of Bangladesh, the terrain of Cox's Bazaar is hilly, consisting of poorly consolidated sand and silt deposits that are vulnerable to erosion processes, landslides and flash floods during rainfall. Vegetation removal for cooking fuel and hill cutting for shelters, facilities and new roads exacerbates the pre-existing landslide susceptibility of the sandy soil hills. The 2018 and 2019 monsoon seasons demonstrated that immediate heavy rainfall impacts in the camps include impediments to road access and navigability, shelter, NFI and asset loss, and additional barriers for refugees to access services and distribution points. Similar impacts can be anticipated in the case of a depression or cyclonic storm, independently of wind. Massive shelter loss and damage, casualties from flying debris, damage to facilities, and loss of NFIs and facility equipment due to wind, flooding and erosion is therefore anticipated in the case of a cyclone happening in the camps in 2019. To adequately respond to the medical and humanitarian needs of the 900,000 people living in the camps, as well as affected Bangladeshi host community members, robust emergency planning is needed. Determining the risk of disaster and its potential impact, as well as understanding the existing vulnerabilities and capacities of a population, is necessary to ensure informed and appropriately scaled planning. In support of the Inter-Sector Coordination Group (ISCG) coordinating the UN and NGO response to the Rohingya crisis, UNDP is therefore seeking consultancy services of a firm to develop a Disaster Impact Model (DIM) and generate two impact scenarios which can be used to support
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	humanitarian contingency planning for responding in the Rohingya camps and host community (i.e. Ukhia and Teknaf sub-districts), with the aim of improving contingency planning of critical stakeholders. As part of its ECHO and SDC-funded "Disaster Risk Management in Cox's Bazaar District" programme, UNDP is providing technical support to local government and humanitarian stakeholders in Cox's Bazaar on disaster risk management. In support of ISCG contingency planning for cyclone, UNDP is now seeking bids from experienced firms/institutions for an assignment to develop a cyclone impact model and produce resulting impact scenario for two categories of cyclone.
Implementing Partner of UNDP	Disaster Risk Reduction in Cox's Bazaar District
Brief Description of the Required Services	Objective of the Assignment: The objective of the assignment is to develop a Disaster Impact Model (DIM) using existing data for the impacts on Ukhia and Teknaf upazila and generate two impact scenarios which can be used to support contingency planning for response in the Rohingya camps and host community (i.e. Ukhia and Teknaf sub-districts). The two scenarios are: 1. A Category 1 cyclone (Saffir-Simpson scale) making landfall between midnight and 4 AM at the border of Chittagong district and Cox's Bazaar district, during high tide. 2. A Category 4 cyclone (Saffir-Simpson scale) making landfall between midnight and 4 AM on the coast between Cox's Bazaar Sadar and the southern end of the Teknaf peninsula, at king tide, with the storm surge entering the Naf river. (Scenario 2 is intended to produce the worst-case scenario; the hazard variables may be adjusted following discussion between UNDP, government counterparts, ISCG and service provider during the inception of the work.) Scope of Work The required consultancy service shall include the following tasks but not be limited to: 1. Coordination and communication with UNDP and ISCG throughout the duration of the assignment 2. Maintain the confidentiality of data and results throughout the duration of the assignment and after 3. Assess current situation and develop work plan and methodology accordingly 4. Review existing data and confirm the technical methodology for cyclone impact modelling 5. Hazard assessment for 2 scenarios based on cyclonic wind, storm surge, landslide and precipitation models, including landslide and debris-associated hazard 6. Exposure assessment 7. Vulnerability assessment 8. Prepare report including relevant maps and annexes 9. Submit draft report and present findings to UNDP and key response stakeholders in Dhaka and Cox's Bazaar 10. Revise and submit final report and Shape files of all maps generated

	The draft and final report should include but not be limited to: ▪ Non-technical executive summary ▪ Detailed description of the hazard and risk assessment methodologies and results ▪ Detailed description of the hazard scenarios and corresponding impact assessment ▪ Hazard and risk maps at the appropriate scale ▪ Recommendations for improving cyclone impact assessment ▪ Detailed catalogue of the datasets used and annexes. As proprietary data from other UN agencies will likely be necessary to complete the assignment, the contractor is expected to maintain confidentiality at all stages of the work, including after completion of the assignment. Sharing of the final report with other actors will be at the discretion of UNDP and ISCG. Approach and Methodology The contractor is expected to use geospatial and planning tools to provide estimates of possible impacts of disaster, needs for commodities, number of people and households likely affected, and possible humanitarian needs. The service provider is expected to consider the impact as a function of the Hazard x Vulnerability x Exposure for: ○ Hazard: wind speed, rainfall, and storm surge should be utilized; ○ Vulnerability: damage curve for the buildings in the camps, housing data regarding the host communities; ○ Exposure: position and number of buildings, and the population living in them. The likely impact of the debris flying around will have to be evaluated. The service provider is expected to consider the following factors affecting the cyclone risk scenario of Ukhia and Teknaf and ensure that the impact modelling takes into account the effect of: ▪ Due to the hilly terrain characterizing Ukhia and Teknaf, rainfall associated with the cyclone system is likely to induce landslides and cause flooding in addition to wind and storm surge impacts. ▪ Severe deforestation in the Rohingya camps will compound wind and rain impacts in these areas. ▪ The vast majority of structures in the Rohingya camps cannot withstand wind-loads of above 50 km/hour winds, the majority of the camps are extremely densely populated, and there is a common practice to dry firewood on roofs. The potential volume of flying debris (including splintered bamboo from shelters and facilities, corrugated iron sheets from latrines, and firewood) is high and needs to be accounted for in modelling of affected population. The model and resulting scenarios are required to include projections for: ▪ Geographical areas at high/moderate/low exposure to hazards associated with the cyclone
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	▪ Number and location of people and households affected (disaggregated by sex, age, and disability to the extent possible by existing available population data) ▪ Number of fatalities and injuries, segregated by location, sex, origin ▪ Number and location of host community houses destroyed, damaged ▪ Number and location of refugee household shelters destroyed ▪ Expected requirements for temporary shelter for displaced people ▪ Expected impact on access (roads, bridges, etc.), telecommunications and public infrastructure (i.e. power plants, fuel depots, field hospitals, and other local government buildings and infrastructure). Appendix A provides initial guidance on the availability of baseline data. The consulting team is anticipated to review these and adapt/complement them according to their knowledge and experience and to the local context as required.																			
List and Description of Expected Outputs to be Delivered	Below are the required activities and expected outputs/deliverables based on the objectives and scope of work stated above: ▪ Prepare and submit a detailed workplan and study methodology describing total implementation process of the mentioned assignment. ▪ Develop and share Disaster Impact Models (DIMs). ▪ Submit all raw copies of models and assessment reports in soft and hard copies. Deliverables linked with specific Required Day <table><tr><th>Activities</th><th>Estimated Completion Duration</th><th>Review and Approval By</th></tr><tr><td>Work plan and methodology</td><td>3 days</td><td rowspan="6">Review by UNDP and EPR advisor ISCG, approval by UNDP Project Manager DRR</td></tr><tr><td>Hazard assessment: 2 scenarios run based for cyclone, storm surge and inundation models and drafting of corresponding report chapter</td><td>12 days</td></tr><tr><td>Exposure assessment and drafting of corresponding report chapter</td><td>10 days</td></tr><tr><td>Vulnerability assessment and drafting of corresponding report chapter</td><td>10 days</td></tr><tr><td>Presentation in Dhaka and Cox’s Bazaar of findings to key stakeholders</td><td>3 days</td></tr><tr><td>Finalization of report and shape files of all maps generated</td><td>5 days</td></tr><tr><td>Total</td><td>43 days over a period of 02 months</td><td></td></tr></table>	Activities	Estimated Completion Duration	Review and Approval By	Work plan and methodology	3 days	Review by UNDP and EPR advisor ISCG, approval by UNDP Project Manager DRR	Hazard assessment: 2 scenarios run based for cyclone, storm surge and inundation models and drafting of corresponding report chapter	12 days	Exposure assessment and drafting of corresponding report chapter	10 days	Vulnerability assessment and drafting of corresponding report chapter	10 days	Presentation in Dhaka and Cox’s Bazaar of findings to key stakeholders	3 days	Finalization of report and shape files of all maps generated	5 days	Total	43 days over a period of 02 months	
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Person to Supervise the Work/Performance of the Service Provider	The team leader of the contracted firm/institution/organization will report to the Project Manager DRR in UNDP CXB, and coordinate with the UNDP Project Manager DRR, UNDP Project Officer, the assigned ISCG focal point, and the chair of the ISCG Natural Hazards and Risk Analysis Task Force. The contractor will report to the Project Manager DRR every three weeks on the progress of the assignment. The deliverables shall be submitted to the Project Manager DRR in the UNDP Cox's Bazaar sub office and are subject to the approval of the Project Manager DRR to process payments to the Contractor. A performance evaluation will be carried by out at the end of the assignment, with these key stakeholders' feedback taken into account. Key performance indicators include: ☐ Completeness of detailed workplan describing total implementation process of the assignment ☐ Completeness of detailed study methodology including instrument based environmental data collection method ☐ Completeness and quality of Disaster Impact Models (DIMs) developed ☐ Completeness and thoroughness of assessment reports submitted ☐ Completeness of required maps (in shape files) generated ☐ Completeness and thoroughness of the Final Report submitted The assignment will be guided and reviewed by the Project Manager-DRR of UNDP CXB, with support from the Emergency Coordinator of ISCG.
Frequency of Reporting	<i>[As Indicate in the TOR]</i>
Progress Reporting Requirements	<i>As Indicate in the TOR</i>
Location of work	☒ Exact Address/es <i>[pls. specify]</i> ☒ At Contractor's Location
Expected duration of work	The proposed time plan to complete the assignment is estimated to be 43 days over a period of 02 months. The contracted organization/institutions/agency will undertake field travel to Cox's Bazaar as deemed necessary for the methodology and will be required send a representative to Cox's Bazaar and Dhaka to present findings to key stakeholders but is otherwise expected to complete the majority of the work from its main base. The financial proposal should encompass all costs related to these requirements. ISCG and UNDP will facilitate the necessary introduction to Site Managing agencies and the RRRC office to gain approval for camp visits as part of any field work deemed necessary.
Target start date	15 October 2019
Latest completion date	Last week in December 2019
Travels Expected	☒ As indicated in the ToR
Special Security Requirements	☒ Not Required
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	☒ Others <i>As indicated in the ToR</i>



Implementation Schedule indicating breakdown and timing of activities/sub-activities	☒ Required																	
Names and curriculum vitae of individuals who will be involved in completing the services	☒ Required																	
Currency of Proposal	☒ Local Currency BDT or USD for international																	
Value Added Tax on Price Proposal	☒ must be inclusive of VAT and other applicable indirect taxes																	
Validity Period of Proposals (Counting for the last day of submission of quotes)	☒ 90 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.																	
Partial Quotes	☒ Not permitted																	
Payment Terms	<table border="1"> <thead> <tr> <th>Installments Linked with deliverables</th> <th>Amount</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>01. First Installment- Submission of a detailed workplan and methodology by</td> <td>20% of the total contract amount shall be paid upon submission of deliverables-01</td> <td>By third October 2019</td> </tr> <tr> <td>02. Second Installment- Submission of draft report</td> <td>30% of the total contract amount shall be paid upon submission of deliverables-02</td> <td>By 1st week of November 2019</td> </tr> <tr> <td>03. Third Installment- Submission of shape files of maps and soft copies of databases underpinning the model</td> <td>20% of the total contract amount shall be paid upon submission of deliverables-03</td> <td>By last week of November 2019</td> </tr> <tr> <td>04. Final Installment- Submission of final report</td> <td>30% of the total contract amount shall be paid upon submission of deliverables-04</td> <td>By last week- December 2019</td> </tr> </tbody> </table>			Installments Linked with deliverables	Amount	Date	01. First Installment- Submission of a detailed workplan and methodology by	20% of the total contract amount shall be paid upon submission of deliverables-01	By third October 2019	02. Second Installment- Submission of draft report	30% of the total contract amount shall be paid upon submission of deliverables-02	By 1 st week of November 2019	03. Third Installment- Submission of shape files of maps and soft copies of databases underpinning the model	20% of the total contract amount shall be paid upon submission of deliverables-03	By last week of November 2019	04. Final Installment- Submission of final report	30% of the total contract amount shall be paid upon submission of deliverables-04	By last week- December 2019
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Person(s) to review/inspect/	Project Manager DRR in UNDP CXB, and coordinate with the UNDP Project Manager DRR																	

approve outputs/completed services and authorize the disbursement of payment	
Type of Contract to be Signed	☒ Purchase Order ☒ Institutional Contract
Criteria for Contract Award	☒ Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) ☒ Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.
Criteria for the Assessment of Proposal	Evaluation and comparison of proposals: Prior to the technical evaluation all proposals will be screened based on the minimum eligibility criteria mentioned below: Eligibility criteria of the consulting firm: The firm should be able to demonstrate that it has proven expertise and experience to accomplish the assigned tasks. The firm should have sufficient human resources, hardware, software and infrastructure to conduct the assessments and deliver high quality output and results. This is a high-profile assignment requiring senior and professional advice based on substantive experience and qualifications of the contracting firm(s)/organization(s)/research institute(s), based on a team approach comprising several experts. The firm(s)/organization(s)/research institute(s) will be invited to submit a detailed delivery proposal along with suitable methodologies and CVs for the team leader and any other key experts (see below). Minimum eligibility criteria of the consultancy firm/organizations/research institutes: • Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured • Business Licenses – Registration Papers, Tax Payment Certification, VAT/ BIN, Incorporation Certificate if Limited company etc. • Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation, etc.; (Last two fiscal years) • Minimum 05 years of operational experience in disaster risk management, environmental risk management, disaster risk analysis and similar relevant



	experiences. (Relevant Experience Certificate and work order must be attached with the proposal) • Experience of conducting minimum two similar type studies/assignments in the field of disaster risk reduction/management, meteorology, earth sciences and communications in last 05 years (relevant Experience Certificate and work order must be attached with the proposal). • Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List. Minimum Eligibility Criteria of the Team: Based on the conceptual approach and methodology proposed to carry out the assignments described in this ToR, the Contractor shall define the composition of the best possible team of professionals in order to deliver the expected results. The roles and responsibilities of each team member (including the timing of his/her intervention) should be clearly described. The Contractors should include, besides the CVs of all the team members, a table summarizing their qualifications and competencies with regard to the assigned responsibilities. The implementation team should include at minimum the following key experts: A. Team Leader: One Person Educational Qualification: • Should have at least a master's degree (preferably a PhD) in any of the following disciplines of disaster management, engineering, coastal/environmental engineering or any other related field of study from a recognized university. Required Experience: • Minimum 08 years experiences in climate risk assessment, disaster risk reduction/management, coastal engineering or related field; • Among the stated 08 years , 05 years' experience as natural hazard resilience specialist and/or coastal hazard Specialist in conducting hazard and risk assessments and designing solutions for coastal and climate processes and developing numerical and physical modelling. B. Team Combination: 01. Disaster Risk/Climate Resilience Expert: One Person Educational Qualification: • At least a master's degree in any of the following disciplines of disaster risk management, climate change, natural sciences or any other related field of study from a recognized university. Required Experience: • Minimum 05 years experiences in the field of disaster risk reduction/management and/or climate resilience with extensive experience and expertise in cyclone and early warning system and conducting disaster and climate assessments. 02. Hazard Specialist/Expert: One Person Educational Qualification:
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	- At least a master's degree in any of the following disciplines of disaster risk reduction/management, natural sciences, climate change or any other related field of study from a recognized university. Required Experience: - Minimum 05 years of related work experience in natural hazard, disaster risk reduction, environmental or natural resource management projects with extensive expertise in conducting hazard assessments specifically and knowledge on various DRR frameworks. 03. Meteorologist: One Person Educational Qualification: - At least a master's degree in any of the following disciplines of natural sciences, climate studies and meteorology or any other related field of study from a recognized university. Required Experience: - Minimum 05 years of related work experience in field of meteorology, with extensive knowledge and experience in cyclonic storms, forecasting and early warning systems. 04. IT/Simulator Specialist: One Person Educational Qualification: - At least a master's degree in any of the following disciplines of computer sciences, software development, engineering or any other related field of study from a recognized university. Required Experience: - Minimum 05 years of demonstrated experience in application development and programming, preferably in the field of climate change, disaster, and/or environment. 05. Engineer(s): Number as determined by Contractor necessary for proposed approach/methodology Educational Qualification: - At least a master's degree in any of the following disciplines of engineering, geology, geographical information systems, environmental science or any other related field of study from a recognized university. Required Experience: - At least 05 years of demonstrated experience in coastal/geotechnical engineering, numerical and physical modelling of coastal projects, conducting hazard and risk assessments. - Should have civil engineering specialization on infrastructure, telecommunications, etc. 06. Natural Hazard and Disaster Specialist(s): Number as determined by Contractor necessary for proposed approach/methodology Educational Qualification: - At least a bachelor's degree in any of the following disciplines of climate change, disaster management, environmental/natural sciences or any other related field of study from a recognized university. Required Experience: - At least 02 years of demonstrated experience (preferably 05 years working experience) in conducting hazard and disaster risk assessments.
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Note:

- 1) Consultancy firm(s), organization(s), research institute(s), consultant(s) that do not meet the above eligibility criteria shall not be considered for further evaluation. Necessary documentation including Legal documents-such as registration certificate must be submitted to substantiate the above eligibility criteria.
- 2) Consultancy firm(s), organization(s), research institute(s), consultant(s) **must** ensure availability of the technical resource persons in the team (as per proposed team composition) during the period of contract to render technical/oversight services as per requirement.
- 3) Consultancy firm(s), organization(s), research institute(s), consultant(s) who have worked in the project preparation phase and/or different implementation activities in implementing phase of the UNDP DRM Project shall not be eligible for this assignment.

Technical Proposal (70%)

- ☒ Expertise of the Firm 40 %
- ☒ Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan 20 %
- ☒ Management Structure and Qualification of Key Personnel 40 %

Summary of Technical Proposal Evaluation Forms		Score Weight	Points Obtainable
1	Overall experience and Expertise of the organization	40%	40
2	Proposed Methodology, Approach and Implementation Plan	20%	20
3	Management Structure and Key Personnel	40%	40
Total			100

Criteria	Weight	Max. Points
Technical	70%	
1. Overall experience and Expertise of the organization/Firm (Form1)		40
1.1- Organization Reputation and staff credibility and Years of Establishment as a firm- Number of years' experience as a firm		15
1.2- Relevant Experience on Similar Program / Projects		20
1.3- Experience on working with UN organization/ World Bank/ Other International agencies		05

	2. Methodology proposed in the technical proposal (Form 2)		20
	2.1- Relevance and appropriateness of methodology and approaches in responding the ToR		05
	2.2- Appropriateness and relevance of tools and methodology		05
	2.3- Overall understanding of the proposed assignment in terms of work planning and Proposed work plan and timeline relevant to the assignment as per the Terms of Reference		05
	2.4- Risk Management & Overall flexibility, Monitoring, quality assurance technique		05
	3. Expertise of Key personnel (Form3)		40
	3.1- Qualifications and Relevant experience of Team Leader		10
	3.2- Qualifications and Relevant experience of Disaster Risk/Climate Resilience Expert		07
	3.3- Qualifications and Relevant experience of Hazard Specialist/Expert		07
	3.4- Qualifications and Relevant experience of Meteorologist		05
	3.5- Qualifications and Relevant experience of IT/Simulator Specialist		05
	3.6- Qualifications and Relevant experience of Engineer		04
	3.7- Qualifications and Relevant experience of Natural Hazard and Disaster Specialists		02
	Financial	30%	100
Financial Proposal (30%) To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.			
UNDP will award the contract to:	☒ One and only one Service Provider		
Contract General Terms and Conditions	☒ General Terms and Conditions for de minimis contracts (services only, less than \$50,000) Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html		
Annexes to this RFP	☒ Form for Submission of Proposal (Annex 2) ☒ General Terms and Conditions / Special Conditions (Annex 3) ☒ Detailed TOR (Annexure-4) ☒ Others Written Declaration Form Annexure-05		

Contact Person for Inquiries (Written inquiries only)	bd.procurement@undp.org Please mention the following in the subject while sending any query to UNDP regarding this RFP on or before 30 September 2019. "Queries on RE-RFP-BD-2019-037" Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers
Other Information <i>[pls. specify]</i>	

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL¹

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery²)

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date] , and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :

- a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;
- b) Business Licenses – Registration Papers, Tax Payment Certification, etc.
- c) Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation, etc. ;
- d) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
- e) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
- f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

¹ This serves as a guide to the Service Provider in preparing the Proposal.

² Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes



C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide :

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

**(THE FOLLOWING TWO SECTION {D & E } SHOULD BE SUBMITTED AS
PASSWORD PROTECTED FINANCIAL PROPOSAL)**

D. Cost Breakdown per Deliverable* - Price including all Direct and Indirect cost (VAT & TAX)

	Deliverables [list them as referred to in the RFP]	Percentage of Total Price (Weight for payment)	Price (Lump Sum, All Inclusive)
1	Deliverable 1- First Installment- Submission of a detailed workplan and methodology by	20% of the total contract amount shall be paid upon submission of deliverables-01	
2	Deliverable 2- Second Installment- Submission of draft report	30% of the total contract amount shall be paid upon submission of deliverables-02	
3	Deliverable 3-Third Installment- Submission of shape files of maps and soft copies of databases underpinning the model	20% of the total contract amount shall be paid upon submission of deliverables-03	
4	Deliverable 4 Final Installment- Submission of final report	30% of the total contract amount shall be paid upon submission of deliverables-04	
	Total	100%	

**This shall be the basis of the payment tranches*

E. Cost Breakdown by Cost Component [This is only an Example]:

Description of Activity	Remuneration per Unit of Time	Total Period of Engagement	No. of Personnel	Total Rate
I. Personnel Services				
1. Services from Home Office				
a. Expertise 1				
b. Expertise 2				
2. Services from Field Offices				
a. Expertise 1				
b. Expertise 2				
3. Services from Overseas				

a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
6. Others				
III. Other Related Costs				

*[Name and Signature of the Service Provider's
Authorized Person]*
[Designation]
[Date]



General Terms and Conditions for Services

1.0 LEGAL STATUS:

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis the United Nations Development Programme (UNDP). The Contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of UNDP or the United Nations.

2.0 SOURCE OF INSTRUCTIONS:

The Contractor shall neither seek nor accept instructions from any authority external to UNDP in connection with the performance of its services under this Contract. The Contractor shall refrain from any action that may adversely affect UNDP or the United Nations and shall fulfill its commitments with the fullest regard to the interests of UNDP.

3.0 CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES:

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this Contract, reliable individuals who will perform effectively in the implementation of this Contract, respect the local customs, and conform to a high standard of moral and ethical conduct.

4.0 ASSIGNMENT:

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof, or any of the Contractor's rights, claims or obligations under this Contract except with the prior written consent of UNDP.

5.0 SUB-CONTRACTING:

In the event the Contractor requires the services of sub-contractors, the Contractor shall obtain the prior written approval and clearance of UNDP for all sub-contractors. The approval of UNDP of a sub-contractor shall not relieve the Contractor of any of its obligations under this Contract. The terms of any sub-contract shall be subject to and conform to the provisions of this Contract.

6.0 OFFICIALS NOT TO BENEFIT:

The Contractor warrants that no official of UNDP or the United Nations has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

7.0 INDEMNIFICATION:

The Contractor shall indemnify, hold and save harmless, and defend, at its own expense, UNDP, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the Contractor, or the Contractor's employees, officers, agents or sub-contractors, in the performance of this Contract. This

provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of this Contract.

8.0 INSURANCE AND LIABILITIES TO THIRD PARTIES:

- 8.1** The Contractor shall provide and thereafter maintain insurance against all risks in respect of its property and any equipment used for the execution of this Contract.
- 8.2** The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or the equivalent, with respect to its employees to cover claims for personal injury or death in connection with this Contract.
- 8.3** The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the provision of services under this Contract or the operation of any vehicles, boats, airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees or sub-contractors performing work or services in connection with this Contract.
- 8.4** Except for the workmen's compensation insurance, the insurance policies under this Article shall:
 - 8.4.1** Name UNDP as additional insured;
 - 8.4.2** Include a waiver of subrogation of the Contractor's rights to the insurance carrier against the UNDP;
 - 8.4.3** Provide that the UNDP shall receive thirty (30) days written notice from the insurers prior to any cancellation or change of coverage.
- 8.5** The Contractor shall, upon request, provide the UNDP with satisfactory evidence of the insurance required under this Article.

9.0 ENCUMBRANCES/LIENS:

The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with the UNDP against any monies due or to become due for any work done or materials furnished under this Contract, or by reason of any other claim or demand against the Contractor.

10.0 TITLE TO EQUIPMENT:

Title to any equipment and supplies that may be furnished by UNDP shall rest with UNDP and any such equipment shall be returned to UNDP at the conclusion of this Contract or when no longer needed by the Contractor. Such equipment, when returned to UNDP, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear. The Contractor shall be liable to compensate UNDP for equipment determined to be damaged or degraded beyond normal wear and tear.

11.0 COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS:

- 11.1** Except as is otherwise expressly provided in writing in the Contract, the UNDP shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for the UNDP under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract, and the Contractor



acknowledges and agrees that such products, documents and other materials constitute works made for hire for the UNDP.

- 11.2 To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the Contract, the UNDP does not and shall not claim any ownership interest thereto, and the Contractor grants to the UNDP a perpetual license to use such intellectual property or other proprietary right solely for the purposes of and in accordance with the requirements of the Contract.
- 11.3 At the request of the UNDP; the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring or licensing them to the UNDP in compliance with the requirements of the applicable law and of the Contract.
- 11.4 Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of the UNDP, shall be made available for use or inspection by the UNDP at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to UNDP authorized officials on completion of work under the Contract.

12.0 USE OF NAME, EMBLEM OR OFFICIAL SEAL OF UNDP OR THE UNITED NATIONS:

The Contractor shall not advertise or otherwise make public the fact that it is a Contractor with UNDP, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of UNDP or THE United Nations, or any abbreviation of the name of UNDP or United Nations in connection with its business or otherwise.

13.0 CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION:

Information and data that is considered proprietary by either Party and that is delivered or disclosed by one Party ("Discloser") to the other Party ("Recipient") during the course of performance of the Contract, and that is designated as confidential ("Information"), shall be held in confidence by that Party and shall be handled as follows:

- 13.1 The recipient ("Recipient") of such information shall:
 - 13.1.1 use the same care and discretion to avoid disclosure, publication or dissemination of the Discloser's Information as it uses with its own similar information that it does not wish to disclose, publish or disseminate; and,
 - 13.1.2 use the Discloser's Information solely for the purpose for which it was disclosed.
- 13.2 Provided that the Recipient has a written agreement with the following persons or entities requiring them to treat the Information confidential in accordance with the Contract and this Article 13, the Recipient may disclose Information to:
 - 13.2.1 any other party with the Discloser's prior written consent; and,
 - 13.2.2 the Recipient's employees, officials, representatives and agents who have a need to know such Information for purposes of performing obligations under the Contract, and employees officials, representatives and agents of any legal entity that it controls controls it, or with which it is under common control, who have a need to know such Information

for purposes of performing obligations under the Contract, provided that, for these purposes a controlled legal entity means:

13.2.2.1 a corporate entity in which the Party owns or otherwise controls, whether directly or indirectly, over fifty percent (50%) of voting shares thereof; or,

13.2.2.2 any entity over which the Party exercises effective managerial control; or,

13.2.2.3 for the UNDP, an affiliated Fund such as UNCDF, UNIFEM and UNV.

- 13.3** The Contractor may disclose Information to the extent required by law, provided that, subject to and without any waiver of the privileges and immunities of the United Nations, the Contractor will give the UNDP sufficient prior notice of a request for the disclosure of Information in order to allow the UNDP to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made.
- 13.4** The UNDP may disclose Information to the extent as required pursuant to the Charter of the UN, resolutions or regulations of the General Assembly, or rules promulgated by the Secretary-General.
- 13.5** The Recipient shall not be precluded from disclosing Information that is obtained by the Recipient from a third party without restriction, is disclosed by the Discloser to a third party without any obligation of confidentiality, is previously known by the Recipient, or at any time is developed by the Recipient completely independently of any disclosures hereunder.
- 13.6** These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract.

14.0 FORCE MAJEURE; OTHER CHANGES IN CONDITIONS

- 14.1** In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNDP, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify the UNDP of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance of this Contract. On receipt of the notice required under this Article, the UNDP shall take such action as, in its sole discretion, it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a reasonable extension of time in which to perform its obligations under this Contract.
- 14.2** If the Contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this Contract, the UNDP shall have the right to suspend or terminate this Contract on the same terms and conditions as are provided for in Article 15, "Termination", except that the period of notice shall be seven (7) days instead of thirty (30) days.
- 14.3** Force majeure as used in this Article means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force.
- 14.4** The Contractor acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in or for any areas in which the UNDP is engaged in, preparing to engage in, or disengaging from any peacekeeping, humanitarian or similar operations, any delays or failure to perform such obligations arising from or relating to harsh conditions within such areas or to any incidents of civil unrest occurring in such areas shall not, in and of itself, constitute force majeure under the Contract..



15.0 TERMINATION

- 15.1** Either party may terminate this Contract for cause, in whole or in part, upon thirty (30) days notice, in writing, to the other party. The initiation of arbitral proceedings in accordance with Article 16.2 ("Arbitration"), below, shall not be deemed a termination of this Contract.
- 15.2** UNDP reserves the right to terminate without cause this Contract at any time upon 15 days prior written notice to the Contractor, in which case UNDP shall reimburse the Contractor for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.
- 15.3** In the event of any termination by UNDP under this Article, no payment shall be due from UNDP to the Contractor except for work and services satisfactorily performed in conformity with the express terms of this Contract.
- 15.4** Should the Contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, the UNDP may, without prejudice to any other right or remedy it may have under the terms of these conditions, terminate this Contract forthwith. The Contractor shall immediately inform the UNDP of the occurrence of any of the above events.

16.0 SETTLEMENT OF DISPUTES

- 16.1 Amicable Settlement:** The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of this Contract or the breach, termination or invalidity thereof. Where the parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the UNCITRAL Conciliation Rules then obtaining, or according to such other procedure as may be agreed between the parties.
- 16.2 Arbitration:** Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably under Article 16.1, above, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, shall be referred by either Party to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The decisions of the arbitral tribunal shall be based on general principles of international commercial law. For all evidentiary questions, the arbitral tribunal shall be guided by the Supplementary Rules Governing the Presentation and Reception of Evidence in International Commercial Arbitration of the International Bar Association, 28 May 1983 edition. The arbitral tribunal shall be empowered to order the return or destruction of goods or any property, whether tangible or intangible, or of any confidential information provided under the Contract, order the termination of the Contract, or order that any other protective measures be taken with respect to the goods, services or any other property, whether tangible or intangible, or of any confidential information provided under the Contract, as appropriate, all in accordance with the authority of the arbitral tribunal pursuant to Article 26 ("Interim Measures of Protection") and Article 32 ("Form and Effect of the Award") of the UNCITRAL Arbitration Rules. The arbitral tribunal shall have no authority to award punitive damages. In addition, unless otherwise expressly provided in the Contract, the arbitral tribunal shall have no authority to award interest in excess of the London Inter-Bank Offered Rate ("LIBOR") then prevailing, and any such interest shall be simple interest only. The Parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute, controversy, or claim.

17.0 PRIVILEGES AND IMMUNITIES:

Nothing in or relating to this Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations, including its subsidiary organs.

18.0 TAX EXEMPTION

18.1 Section 7 of the Convention on the Privileges and Immunities of the United Nations provides, inter alia that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the United Nations exemption from such taxes, duties or charges, the Contractor shall immediately consult with the UNDP to determine a mutually acceptable procedure.

18.2 Accordingly, the Contractor authorizes UNDP to deduct from the Contractor's invoice any amount representing such taxes, duties or charges, unless the Contractor has consulted with the UNDP before the payment thereof and the UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide the UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized.

19.0 CHILD LABOUR

19.1 The Contractor represents and warrants that neither it, nor any of its suppliers is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical mental, spiritual, moral or social development.

19.2 Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, at no cost to UNDP.

20.0 MINES:

20.1 The Contractor represents and warrants that neither it nor any of its suppliers is actively and directly engaged in patent activities, development, assembly, production, trade or manufacture of mines or in such activities in respect of components primarily utilized in the manufacture of Mines. The term "Mines" means those devices defined in Article 2, Paragraphs 1, 4 and 5 of Protocol II annexed to the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects of 1980.

20.2 Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind of UNDP.

21.0 OBSERVANCE OF THE LAW:

The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this Contract.

22.0 SEXUAL EXPLOITATION:



22.1 The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of anyone by it or by any of its employees or any other persons who may be engaged by the Contractor to perform any services under the Contract. For these purposes, sexual activity with any person less than eighteen years of age, regardless of any laws relating to consent, shall constitute the sexual exploitation and abuse of such person. In addition, the Contractor shall refrain from, and shall take all appropriate measures to prohibit its employees or other persons engaged by it from, exchanging any money, goods, services, offers of employment or other things of value, for sexual favors or activities, or from engaging in any sexual activities that are exploitive or degrading to any person. The Contractor acknowledges and agrees that the provisions hereof constitute an essential term of the Contract and that any breach of this representation and warranty shall entitle UNDP to terminate the Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind.

22.2 The UNDP shall not apply the foregoing standard relating to age in any case in which the Contractor's personnel or any other person who may be engaged by the Contractor to perform any services under the Contract is married to the person less than the age of eighteen years with whom sexual activity has occurred and in which such marriage is recognized as valid under the laws of the country of citizenship of such Contractor's personnel or such other person who may be engaged by the Contractor to perform any services under the Contract.

23.0 AUTHORITY TO MODIFY:

Pursuant to the Financial Regulations and Rules of UNDP, only the UNDP Authorized Official possesses the authority to agree on behalf of UNDP to any modification of or change in this Contract, to a waiver of any of its provisions or to any additional contractual relationship of any kind with the Contractor. Accordingly, no modification or change in this Contract shall be valid and enforceable against UNDP unless provided by an amendment to this Contract signed by the Contractor and jointly by the UNDP Authorized Official.

UNDP BANGLADESH – COX'S BAZAR

Disaster Impact Modelling for Ukhia and Teknaf sub-districts

(Disaster Risk Management in Cox's Bazaar District project)

TERMS OF REFERENCE (ToR)

A. Project Title:

Disaster Risk Reduction in Cox's Bazaar District

B. Introduction

Cox's Bazaar is highly exposed to cyclones and storms. In the past three years, the district has been affected by cyclones Mora in May 2017, Roanu in May 2016 and Komen in July 2015. Since 2017, the risk landscape of Cox's Bazaar has changed significantly with the mass influx of Rohingya refugees, double in number compared to the local population, and posing significant additional demands on local government functions, the natural resources, and on the infrastructure.

During cyclone Mora, 70% of the shelters in the then much smaller refugee camps were found to have been damaged following the cyclone. In 2018, relatively mild wind events such as kalbaishaki/Nor'wester storms affected 27,005 people in the refugee camps, while 37,167 people have been affected till July 2019. In 2018, it was estimated that the majority of the household shelters and facilities in the camps are unable to bear wind loads over 50 km/hour. All factors indicate that the camp population should be considered at higher risk of trauma, fatality and asset loss related to storm winds than what is usual for the country. Multiple factors exacerbate the risks from wind, including (a) extremely dense settlement, (b) use of bamboo for household shelter construction and the vast majority of other structures in the camps, (c) the known low wind resistance of the majority of the household shelters in the camps and (d) the practice of drying firewood on top of household shelters. There are at present no cyclone shelters or other large concrete buildings in the Rohingya camps. In this environment, the majority of the population is at all times surrounded by a large volume of poorly secured objects which have the potential for causing acute trauma if thrown by extreme winds.

While the Kutupalong camps in Ukhia sub-district are not exposed to storm surges or inundation risks, most of the camps in Teknaf sub-district are separated from the eastern river Naf by only a less than 1 km wide coastal plain protected by embankments along the river. A breach or overflow of those embankments during a cyclone event may cause flooding of the eastern Teknaf camps. One Teknaf camp – Shamlapur/camp 23 – is on the western coast of the Teknaf peninsula and is at direct risk of storm surge. Unlike the rest of Bangladesh, the terrain of Cox's Bazaar is hilly, consisting of poorly consolidated sand and silt deposits that are vulnerable to erosion processes, landslides and flash floods during rainfall. Vegetation removal for cooking fuel and hill cutting for shelters, facilities and new roads exacerbates the pre-existing landslide susceptibility of the sandy soil hills. The 2018 and 2019 monsoon seasons demonstrated that immediate heavy rainfall impacts in the camps include impediments to road access and navigability, shelter, NFI and asset loss, and additional barriers for refugees to access services and distribution points. Similar impacts can be anticipated in the case of a depression or cyclonic storm, independently of wind.

Massive shelter loss and damage, casualties from flying debris, damage to facilities, and loss of NFIs and facility equipment due to wind, flooding and erosion is therefore anticipated in the case of a cyclone happening in the camps in 2019. To adequately respond to the medical and humanitarian needs of the 900,000 people living in the camps, as well as affected Bangladeshi host community members, robust emergency planning is needed. Determining the risk of disaster and its potential impact, as well as understanding the existing vulnerabilities and capacities of a population, is necessary to ensure informed and appropriately scaled planning.

In support of the Inter-Sector Coordination Group (ISCG) coordinating the UN and NGO response to the Rohingya crisis, UNDP is therefore seeking consultancy services of a firm to develop a Disaster Impact Model (DIM) and generate two

impact scenarios which can be used to support humanitarian contingency planning for responding in the Rohingya camps and host community (i.e. Ukhia and Teknaf sub-districts), with the aim of improving contingency planning of critical stakeholders. As part of its ECHO and SDC-funded "Disaster Risk Management in Cox's Bazaar District" programme, UNDP is providing technical support to local government and humanitarian stakeholders in Cox's Bazaar on disaster risk management. In support of ISCG contingency planning for cyclone, UNDP is now seeking bids from experienced firms/institutions for an assignment to develop a cyclone impact model and produce resulting impact scenario for two categories of cyclone.

C. Objective of the Assignment:

The objective of the assignment is to develop a Disaster Impact Model (DIM) using existing data for the impacts on Ukhia and Teknaf upazila and generate two impact scenarios which can be used to support contingency planning for response in the Rohingya camps and host community (i.e. Ukhia and Teknaf sub-districts).

The two scenarios are:

3. A Category 1 cyclone (Saffir-Simpson scale) making landfall between midnight and 4 AM at the border of Chittagong district and Cox's Bazaar district, during high tide.
4. A Category 4 cyclone (Saffir-Simpson scale) making landfall between midnight and 4 AM on the coast between Cox's Bazaar Sadar and the southern end of the Teknaf peninsula, at king tide, with the storm surge entering the Naf river.

(Scenario 2 is intended to produce the worst-case scenario; the hazard variables may be adjusted following discussion between UNDP, government counterparts, ISCG and service provider during the inception of the work.)

D. Scope of Work

The required consultancy service shall include the following tasks but not be limited to:

11. Coordination and communication with UNDP and ISCG throughout the duration of the assignment
12. Maintain the confidentiality of data and results throughout the duration of the assignment and after
13. Assess current situation and develop work plan and methodology accordingly
14. Review existing data and confirm the technical methodology for cyclone impact modelling
15. Hazard assessment for 2 scenarios based on cyclonic wind, storm surge, landslide and precipitation models, including landslide and debris-associated hazard
16. Exposure assessment
17. Vulnerability assessment
18. Prepare report including relevant maps and annexes
19. Submit draft report and present findings to UNDP and key response stakeholders in Dhaka and Cox's Bazaar
20. Revise and submit final report and Shape files of all maps generated

The draft and final report should include but not be limited to:

- Non-technical executive summary
- Detailed description of the hazard and risk assessment methodologies and results
- Detailed description of the hazard scenarios and corresponding impact assessment
- Hazard and risk maps at the appropriate scale
- Recommendations for improving cyclone impact assessment
- Detailed catalogue of the datasets used and annexes.

As proprietary data from other UN agencies will likely be necessary to complete the assignment, the contractor is expected to maintain confidentiality at all stages of the work, including after completion of the assignment. Sharing of the final report with other actors will be at the discretion of UNDP and ISCG.

E. Approach and Methodology

The contractor is expected to use geospatial and planning tools to provide estimates of possible impacts of disaster, needs for commodities, number of people and households likely affected, and possible humanitarian needs.

The service provider is expected to consider the impact as a function of the Hazard x Vulnerability x Exposure for:

- Hazard: wind speed, rainfall, and storm surge should be utilized;
- Vulnerability: damage curve for the buildings in the camps, housing data regarding the host communities;
- Exposure: position and number of buildings, and the population living in them.

The likely impact of the debris flying around will have to be evaluated.

The service provider is expected to consider the following factors affecting the cyclone risk scenario of Ukhia and Teknaf and ensure that the impact modelling takes into account the effect of:

- Due to the hilly terrain characterizing Ukhia and Teknaf, rainfall associated with the cyclone system is likely to induce landslides and cause flooding in addition to wind and storm surge impacts.
- Severe deforestation in the Rohingya camps will compound wind and rain impacts in these areas.
- The vast majority of structures in the Rohingya camps cannot withstand wind-loads of above 50 km/hour winds, the majority of the camps are extremely densely populated, and there is a common practice to dry firewood on roofs. The potential volume of flying debris (including splintered bamboo from shelters and facilities, corrugated iron sheets from latrines, and firewood) is high and needs to be accounted for in modelling of affected population.

The model and resulting scenarios are required to include projections for:

- Geographical areas at high/moderate/low exposure to hazards associated with the cyclone
- Number and location of people and households affected (disaggregated by sex, age, and disability to the extent possible by existing available population data)
- Number of fatalities and injuries, segregated by location, sex, origin
- Number and location of host community houses destroyed, damaged
- Number and location of refugee household shelters destroyed
- Expected requirements for temporary shelter for displaced people
- Expected impact on access (roads, bridges, etc.), telecommunications, and public infrastructure (i.e. power plants, fuel depots, field hospitals, and other local government buildings and infrastructure).

Appendix A provides initial guidance on the availability of baseline data. The consulting team is anticipated to review these and adapt/complement them according to their knowledge and experience and to the local context as required.

F. Expected Outputs / Deliverables

Timeline
(starting from the date of contract signing)

Below are the required activities and expected outputs/deliverables based on the objectives and scope of work stated above:

- Prepare and submit a detailed workplan and study methodology describing total implementation process of the mentioned assignment.
- Develop and share Disaster Impact Models (DIMs).
- Submit all raw copies of models and assessment reports in soft and hard copies.

Activities

Estimated Completion

Review and Approval By

Duration



Work plan and methodology	3 days	Review by UNDP and EPR advisor ISCG, approval by UNDP Project Manager DRR
Hazard assessment: 2 scenarios run based for cyclone, storm surge and inundation models and drafting of corresponding report chapter	12 days	
Exposure assessment and drafting of corresponding report chapter	10 days	
Vulnerability assessment and drafting of corresponding report chapter	10 days	
Presentation in Dhaka and Cox's Bazaar of findings to key stakeholders	3 days	
Finalization of report and shape files of all maps generated	5 days	
Total	43 days over a period of 02 months	
G. Impact of Results		
Experience of conducting preparedness and response has shown that secondary data can be effectively utilized to build an accurate picture of vulnerabilities, even before a disaster occurs. Using data such as shake maps, typhoon tracks and wave patterns, alongside logistics, population and housing data, disaster impact models can be created during the preparedness phase that can be updated when a disaster occurs. These models assist the humanitarian community to calculate estimates of the number of people affected by a specific disaster, as well as how many would most likely require humanitarian assistance, as a means of informing more accurate initial response planning. Operational readiness is central to optimizing the speed, volume and quality of humanitarian assistance to be delivered during a large-scale disaster. The way that emergency responses are operated has a massive impact on the speed and quality of the assistance provided to disaster victims. Key outputs relevant to this consultancy will directly provide Government duty-bearers and key humanitarian stakeholders with the knowledge needed to manage residual risk through risk-informed planning in their roles.		
H. Governance and Accountability/ Institutional Arrangement		
The team leader of the contracted firm/institution/organization will report to the Project Manager DRR in UNDP CXB, and coordinate with the UNDP Project Manager DRR, UNDP Project Officer, the assigned ISCG focal point, and the chair of the ISCG Natural Hazards and Risk Analysis Task Force. The contractor will report to the Project Manager DRR every three weeks on the progress of the assignment. The deliverables shall be submitted to the Project Manager DRR in the UNDP Cox's Bazaar sub office and are subject to the approval of the Project Manager DRR to process payments to the Contractor. A performance evaluation will be carried by out at the end of the assignment, with these key stakeholders' feedback taken into account. Key performance indicators include: ▪ Completeness of detailed workplan describing total implementation process of the assignment ▪ Completeness of detailed study methodology including instrument based environmental data collection method ▪ Completeness and quality of Disaster Impact Models (DIMs) developed ▪ Completeness and thoroughness of assessment reports submitted ▪ Completeness of required maps (in shape files) generated		

- Completeness and thoroughness of the Final Report submitted

The assignment will be guided and reviewed by the Project Manager-DRR of UNDP CXB, with support from the Emergency Coordinator of ISCG.

I. Duration of the Work and Duty Station

The proposed time plan to complete the assignment is estimated to be 43 days over a period of 02 months.

The contracted organization/institutions/agency will undertake field travel to Cox's Bazaar as deemed necessary for the methodology and will be required send a representative to Cox's Bazaar and Dhaka to present findings to key stakeholders but is otherwise expected to complete the majority of the work from its main base. The financial proposal should encompass all costs related to these requirements.

ISCG and UNDP will facilitate the necessary introduction to Site Managing agencies and the RRRC office to gain approval for camp visits as part of any field work deemed necessary.

J. Qualification of the Successful Agency/Firm

This is a high-profile assignment requiring senior and professional advice based on substantive experience and qualifications of the contracting firm(s)/organization(s)/research institute(s), based on a team approach comprising several experts. The firm(s)/organization(s)/research institute(s) will be invited to submit a detailed delivery proposal along with suitable methodologies and CVs for the team leader and any other key experts (see below).

Minimum eligibility criteria of the consultancy firm/organizations/research institutes:

- Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured
- Business Licenses – Registration Papers, Tax Payment Certification, VAT/ BIN, Incorporation Certificate if Limited company etc.
- Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation, etc.; (Last two fiscal years)
- Minimum 05 years of operational experience in disaster risk management, environmental risk management, disaster risk analysis and similar relevant experiences. (Relevant Experience Certificate and work order must be attached with the proposal)
- Experience of conducting minimum two similar type studies/assignments in the field of disaster risk reduction/management, meteorology, earth sciences and communications in last 05 years (relevant Experience Certificate and work order must be attached with the proposal).
- Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

Minimum Eligibility Criteria of the Team:

Based on the conceptual approach and methodology proposed to carry out the assignments described in this ToR, the Contractor shall define the composition of the best possible team of professionals in order to deliver the expected results. The roles and responsibilities of each team member (including the timing of his/her intervention) should be clearly



described. The Contractors should include, besides the CVs of all the team members, a table summarizing their qualifications and competencies with regard to the assigned responsibilities.

The implementation team should include at minimum the following key experts:

C. Team Leader: One Person

Educational Qualification:

- Should have at least a master's degree (preferably a PhD) in any of the following disciplines of disaster management, engineering, coastal/environmental engineering or any other related field of study from a recognized university.

Required Experience:

- Minimum 08 years experiences in climate risk assessment, disaster risk reduction/management, coastal engineering or related field;
- Among the stated 08 years , 05 years' experience as natural hazard resilience specialist and/or coastal hazard Specialist in conducting hazard and risk assessments and designing solutions for coastal and climate processes and developing numerical and physical modelling.

D. Team Combination:

02. Disaster Risk/Climate Resilience Expert: One Person

Educational Qualification:

- At least a master's degree in any of the following disciplines of disaster risk management, climate change, natural sciences or any other related field of study from a recognized university.

Required Experience:

- Minimum 05 years experiences in the field of disaster risk reduction/management and/or climate resilience with extensive experience and expertise in cyclone and early warning system and conducting disaster and climate assessments.

02. Hazard Specialist/Expert: One Person

Educational Qualification:

- At least a master's degree in any of the following disciplines of disaster risk reduction/management, natural sciences, climate change or any other related field of study from a recognized university.

Required Experience:

- Minimum 05 years of related work experience in natural hazard, disaster risk reduction, environmental or natural resource management projects with extensive expertise in conducting hazard assessments specifically and knowledge on various DRR frameworks.

03. Meteorologist: One Person

Educational Qualification:

- At least a master's degree in any of the following disciplines of natural sciences, climate studies and meteorology or any other related field of study from a recognized university.

Required Experience:

- Minimum 05 years of related work experience in field of meteorology, with extensive knowledge and experience in cyclonic storms, forecasting and early warning systems.

04. IT/Simulator Specialist: One Person

Educational Qualification:

- At least a master's degree in any of the following disciplines of computer sciences, software development, engineering or any other related field of study from a recognized university.

Required Experience:

- Minimum 05 years of demonstrated experience in application development and programming, preferably in the field of climate change, disaster, and/or environment.

05. Engineer(s): Number as determined by Contractor necessary for proposed approach/methodology

Educational Qualification:

- At least a master's degree in any of the following disciplines of engineering, geology, geographical information systems, environmental science or any other related field of study from a recognized university.

Required Experience:

- At least 05 years of demonstrated experience in coastal/geotechnical engineering, numerical and physical modelling of coastal projects, conducting hazard and risk assessments.
- Should have civil engineering specialization on infrastructure, telecommunications, etc.

06. Natural Hazard and Disaster Specialist(s): Number as determined by Contractor necessary for proposed approach/methodology

Educational Qualification:

- At least a bachelor's degree in any of the following disciplines of climate change, disaster management, environmental/natural sciences or any other related field of study from a recognized university.

Required Experience:

- At least 02 years of demonstrated experience (preferably 05 years working experience) in conducting hazard and disaster risk assessments.

Note:

- 4) Consultancy firm(s), organization(s), research institute(s), consultant(s) that do not meet the above eligibility criteria shall not be considered for further evaluation. Necessary documentation including Legal documents-such as registration certificate must be submitted to substantiate the above eligibility criteria.
- 5) Consultancy firm(s), organization(s), research institute(s), consultant(s) **must** ensure availability of the technical resource persons in the team (as per proposed team composition) during the period of contract to render technical/oversight services as per requirement.
- 6) Consultancy firm(s), organization(s), research institute(s), consultant(s) who have worked in the project preparation phase and/or different implementation activities in implementing phase of the UNDP DRM Project shall not be eligible for this assignment.

K. Scope of Bid Price and Schedule of Payments

Remuneration of the successful agency will be fixed, and bids should be submitted on this basis. No adjustment will be given for the period and determined by the specified outputs as per this TOR. The price should take into account all HR costs and professional fees, instrument rent, travel costs, DSA, subsistence and ancillary expenses.

UNDP shall affect payments, by bank transfer to the consultancy firm's bank account, upon acceptance by UNDP of the deliverables specified in the ToR. Payments will be made in tranches based on the following percentages and milestones:

Installments linked with deliverables	Amount	Date
05. First Installment- Submission of a detailed workplan and methodology by	20% of the total contract amount shall be paid upon submission of deliverables-01	By third -October 2019



06. Second Installment- Submission of draft report	30% of the total contract amount shall be paid upon submission of deliverables-02	By 1 st week of November 2019
07. Third Installment- Submission of shape files of maps and soft copies of databases underpinning the model	20% of the total contract amount shall be paid upon submission of deliverables-03	By last week of November 2019
08. Final Installment- Submission of final report	30% of the total contract amount shall be paid upon submission of deliverables-04	By last week-December 2019

Invoices shall indicate the milestones achieved and corresponding amount payable.

The contracting agency should follow the plan and procedures as outlined in the work contract. Payment will be made through Electronically Fund Transfer (EFT) to the account of the consulting firm. For each installment the firm has to submit a request letter duly signed and describing the agreed accomplishment. The final payment will be made upon acceptance of the final reports, soft files and hard data.

L. Evaluation

A cumulative analysis weighted-scoring method will be applied to evaluate the firm. The award of the contract will be made to the tenderer whose offer has been evaluated and determined as:

- a) Responsive/ compliant/ acceptable with reference to this ToR, and;
- b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation, with the ratio set at 70: 30 respectively (this is to reflect the high-level skills mix required).

Only firms obtaining a minimum of 70% of maximum achievable score (i.e. 49 points) in the technical analysis would be considered for financial appraisal, and ultimately therefore, for contracting.

Technical Evaluation Criteria/Basis of scoring:

Summary of Technical Proposal Evaluation Forms		Score Weight	Points Obtainable
1	Overall experience and Expertise of the organization	40%	40
2	Proposed Methodology, Approach and Implementation Plan	20%	20
3	Management Structure and Key Personnel	40%	40
Total			100

Criteria	Weight	Max. Points
Technical	70%	
1. Overall experience and Expertise of the organization/Firm (Form1)		40

1.4-Organization Reputation and staff credibility and Years of Establishment as a firm- Number of years' experience as a firm		15	
1.5-Relevant Experience on Similar Program / Projects		20	
1.6-Experience on working with UN organization/ World Bank/ Other International agencies		05	
2. Methodology proposed in the technical proposal (Form 2)		20	
2.1- Relevance and appropriateness of methodology and approaches in responding the ToR		05	
2.2- Appropriateness and relevance of tools and methodology		05	
2.3- Overall understanding of the proposed assignment in terms of work planning and Proposed work plan and timeline relevant to the assignment as per the Terms of Reference		05	
2.4- Risk Management & Overall flexibility, Monitoring, quality assurance technique		05	
3. Expertise of Key personnel (Form3)		40	
3.1- Qualifications and Relevant experience of Team Leader		10	
3.2- Qualifications and Relevant experience of Disaster Risk/Climate Resilience Expert		07	
3.3- Qualifications and Relevant experience of Hazard Specialist/Expert		07	
3.4- Qualifications and Relevant experience of Meteorologist		05	
3.5- Qualifications and Relevant experience of IT/Simulator Specialist		05	
3.6- Qualifications and Relevant experience of Engineer		04	
3.7- Qualifications and Relevant experience of Natural Hazard and Disaster Specialists		02	
Financial	30%	100	



Appendix A

Baseline data availability include but is not limited to:

- The ISCG and the humanitarian agencies intervening to support the refugees have extensive data at disposal; these include **0.5m resolution drone imagery and digital elevation model (DEM) of the camps**; camp boundaries, shelter footprint, infrastructures, information about number, location, and types of shelters; population figures, including specific vulnerable groups, etc. Besides this data, flood, storm surge and landslides susceptibility maps have been produced in the previous months. Most of this information is accessible via the [Humanitarian Response](#) or [HDX](#) platforms or upon request.
- Bangladesh Meteorological Department and Norwegian Meteorological Institute. Climate of Bangladesh. MET report no. 08/2016. ISSN 2387-4201
- Various GIS data available through the [GeoDASH](#) initiative by the Government of Bangladesh
- [ASTER GDEM](#); 30m resolution (new V3 release 5th August 2019)
- Humanitarian Open StreetMap data (HOTOSM); available on HDX
- [UNISDR](#) Global model of cyclone wind
- International Best Track Archive for Climate Stewardship (IBTrACS)
- Global Weather Forecast Systems such as ECMWF or GFS

Declaration

Date:

United Nations Development Programme
UNDP Registry, IDB Bhaban, Agargaon
Sher-E-Bangla Nagar, Dhaka, Bangladesh

Assignment: *RE-Hiring a firm for Conducting Disaster Impact Modelling for Ukhia and Teknaf sub-districts for UNDP Bangladesh Cox's Bazar Office.*

Reference: RE-RFP-BD-2019-037

Dear Sir,

I declare that is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

Yours Sincerely,



