

REGIONAL

Climate Change Consultant to assist with research on the strengthening of the national political economy to increase its resilience while enabling economic recovery options

Terms of Reference

Background of this search: The Climate Change Division of the Climate Change and Sustainability Sector is looking for a professional with background in political sociology, political science, climate change policy, conflict management, or a related discipline to support the division in research pertaining to the active participation of youth in the sustainable development agenda.

The team's mission: The Climate Change and Sustainable Development Sector advises Management on climate change and sustainable development and develops overall Bank policies, strategies, operational guidelines and programs in these areas. It is also responsible for conducting relevant sector research, analytical work, sector best practices and case studies on climate change and sustainability and provides specialized technical sector support to climate change and sustainability-related operations and activities.

What you'll do:

The objective of this consultancy is to support CSD/CCS in the preparation of a research product that will help to guide the bank and governments with the end objective of assisting LAC countries in a better mainstreaming of mitigation and climate resilience policies while enabling quick economic recovery policies, in line with the country's sustainable development agenda.

Specifically, the consultant will:

- Conduct a thorough review of existing best practices in terms of political economy arrangements that allow for the mainstreaming of mitigation and resilience policies while enabling economic recovery models to include youth in the policy-making decision process;
- Map out critical economic sectors in the subject country, as well as opportunities for the development and implementation of further resilient and sustainable policies which enable job creation;
- Formulate a series of concise policy recommendations which will enable the country to shift towards more sustainable development pathways.

Deliverables and Payments timeline:

- **Product 1:** The first product will consist of a consultancy Gantt and proposed research schedule.
- **Product 2:** The second product will include a research note summarizing existing best practices, as well as critical sectors for intervention.
- **Product 3:** The third product will include a first draft of a technical note including policy recommendations.
- **Product 4:** The fourth and final product will include the final version of the policy recommendation note.

The consultant is expected to liaise and coordinate in order to submit the expected deliverables. To complete each deliverable, the Bank will review and submit to the consultant and then the consultant will incorporate the comments.

Product #	Deadline	Payment %
1	5 days after signing the contract.	20%
2	two months after signing the contract	20%
3	five months after signing the contract.	30%
4	Nine months after signing the contract	30%

What you'll need:

Citizenship: You must be 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.

Education: Master's degree or equivalent and a minimum of ten years of relevant professional experience or the equivalent combination of education and experience in civil and environmental, disaster risk management, climate change adaptation, risk modeling, information systems engineering, or a related discipline.

Experience: At least ten years of experience in economic analysis with some experience in public budgeting and management. Experience working with the Caribbean is required. Work experience in multi-hazard risk assessment is an advantage.

Languages: Fluent in English and Spanish. Knowledge of Portuguese or French is a plus.

Core and Technical Competencies:

Areas of Expertise: Experience in climate adaptation, resilience, disaster risk management, data systems management, multi-hazard risk assessments, engineering and infrastructure projects and relevant work experience with projects in multilateral or bilateral cooperation institutions.

Skills: Advanced level in data management and experience understanding risk modelling.

Competencies: (i) Planning and Organizational Skills: Demonstrated organizational capability and ability to carry out multiple and detailed tasks, and demonstrated capacity to operate with minimal supervision; (ii) teamwork: Ability to take initiative and lead others, share knowledge and information, express disagreements tactfully and ability to lead interdisciplinary and a multicultural team; (iii) communication: Ability to present concise, clear and precise analysis and recommendations. The post requires the ability to communicate effectively with multiple stakeholders.

Opportunity Summary:

- Type of contract and modality: Products and External Services (PEC) Consultant.
- Length of contract: 9 months.
- Starting date: October 15th, 2020.
- Location: Consultant's place of work/ residence.
- Responsible person: Climate Change Specialist (CSD/CCS).
- Requirements: You must be a citizen of one of the [IDB's 48 member countries](#) and have no family members currently working at the IDB Group.

Our culture: Our people are committed and passionate about improving lives in Latin-America and the Caribbean, and they get to do what they love in a diverse, collaborative and stimulating work environment. We are the first Latin American and Caribbean development institution to be awarded the EDGE certification, recognizing our strong commitment to gender equality. As an employee you can be part of internal resource groups that connect our diverse community around common interests.

Because we are committed to providing equal opportunities in employment, we embrace diversity based on gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, and religion. We encourage women, Afro-descendants and persons of indigenous origins to apply.

About us: At the IDB, we're committed to improving lives. Since 1959, we've been a leading source of long-term financing for economic, social, and institutional development in Latin America and the Caribbean. We do more than lending though. We partner with our 48-member countries to provide Latin America and the Caribbean with cutting-edge research about relevant development issues, policy advice to inform their decisions, and technical assistance to improve on the planning and execution of projects. For this, we need people who not only have the right skills, but also are passionate about improving lives.

Our team in Human Resources carefully reviews all applications.

REGIONAL

Climate Change Consultant to assist with research on crisis economic recovery for social and economic sustainable growth

Terms of Reference

Background of this search:

The Climate Change Division of the Climate Change and Sustainability Sector is looking for a professional with background in political sociology, political science, climate change policy, conflict management, or a related discipline to support the division in research pertaining to a post-COVID sustainable economic recovery within the region.

The team's mission:

The Climate Change and Sustainable Development Sector advises Management on climate change and sustainable development and develops overall Bank policies, strategies, operational guidelines and programs in these areas. It is also responsible for conducting relevant sector research, analytical work, sector best practices and case studies on climate change and sustainability and provides specialized technical sector support to climate change and sustainability-related operations and activities.

What you'll do:

The objective of this consultancy is to support CSD/CCS with the identification of the productive and social sectors that are hit with higher magnitude because of the ensuing socio-economic crisis. Research will be conducted to help identify the productive economic sectors which may lead to a faster recovery with a focus on sustainability.

Specifically, the consultant will:

- Identify two sectors which are most relevant for an economic recovery from an economic impact perspective;
- Identify issues which are affecting the sector's competitiveness and which may be answered with a focus on sustainable development;
- Suggest relevant policies and opportunities for Bank intervention in specific countries to be defined.

Deliverables and Payments timeline:

- **Product 1:** The first product will consist of a consultancy Gantt and proposed research schedule;
- **Product 2:** The second product will include a research note summarizing the challenges and opportunities of four key sectors of an national economy (to be defined), for the IDB and XXX to narrow down to two sectors;
- **Product 3:** The third product will include a first draft of the technical note including policies and opportunities for Bank intervention in a country to be defined;
- **Product 4:** The fourth product will include the final version of the aforementioned technical note.

The consultant is expected to liaise and coordinate in order to submit the expected deliverables. To complete each deliverable, the Bank will review and submit to the consultant and then the consultant will incorporate the comments.

Product #	Deadline	Payment %
1	5 days after signing the contract.	20%
2	One month after signing the contract	20%
3	Three months after signing the contract.	30%
4	Six months after signing the contract	30%

What you'll need:

Citizenship: You must be 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.

Education: Master's degree or equivalent and a minimum of ten years of relevant professional experience or the equivalent combination of education and experience in civil and environmental, disaster risk management, climate change adaptation, risk modeling, information systems engineering, or a related discipline.

Experience: At least ten years of experience in economic analysis with some experience in public budgeting and management. Experience working with the Caribbean is required. Work experience in multi-hazard risk assessment is an advantage.

Languages: Fluent in English and Spanish. Knowledge of Portuguese or French is a plus.

Core and Technical Competencies:

Areas of Expertise: Experience in climate adaptation, resilience, disaster risk management, data systems management, multi-hazard risk assessments, engineering and infrastructure projects and relevant work experience with projects in multilateral or bilateral cooperation institutions.

Skills: Advanced level in data management and experience understanding risk modelling.

Competencies: (i) planning and organizational skills: demonstrated organizational capability and ability to carry out multiple and detailed tasks, and demonstrated capacity to operate with minimal supervision; (ii) teamwork: ability to take initiative and lead others, share knowledge and information, express disagreements tactfully and ability to lead interdisciplinary and a multicultural team; (iii) communication: ability to present concise, clear and precise analysis and recommendations. The post requires the ability to communicate effectively with multiple stakeholders.

Opportunity Summary:

- Type of contract and modality: Products and External Services (PEC) Consultant.
- Length of contract: 9 months.
- Starting date: March 15th, 2021.
- Location: Consultant's place of work/ residence.
- Responsible person: Climate Change Specialist (CSD/CCS).
- Requirements: You must be a citizen of one of the [IDB's 48 member countries](#) and have no family members currently working at the IDB Group.

Our culture: Our people are committed and passionate about improving lives in Latin-America and the Caribbean, and they get to do what they love in a diverse, collaborative and stimulating work environment. We are the first Latin American and Caribbean development institution to be awarded the EDGE certification, recognizing our strong commitment to gender equality. As an employee you can be part of internal resource groups that connect our diverse community around common interests.

Because we are committed to providing equal opportunities in employment, we embrace diversity based on gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, and religion. We encourage women, Afro-descendants and persons of indigenous origins to apply.

About us: At the IDB, we're committed to improving lives. Since 1959, we've been a leading source of long-term financing for economic, social, and institutional development in Latin America and the Caribbean. We do more than lending though. We partner with our 48-member countries to provide Latin America and the Caribbean with cutting-edge research about relevant development issues, policy advice to inform their decisions, and technical assistance to improve on the planning and execution of projects. For this, we need people who not only have the right skills, but also are passionate about improving lives.

Our team in Human Resources carefully reviews all applications.

Climate Change Consultant to assist in the development of the space telemetry service industry while leveraging LAC installed capacity in such sector, and contributing to the economic and physical resilience of the region

Background of this search:

The Climate Change Division of the Climate Change and Sustainability Sector is looking for a professional with background in political sociology, political science, climate change policy, value-chain value creation, innovation and competitiveness, or a related discipline to support the division in research pertaining to a post-COVID sustainable economic recovery opportunities tied to the innovation and climate change adaptation sector, specifically in space based telemetry services.

The team's mission:

The Climate Change and Sustainable Development Sector advises Management on climate change and sustainable development and develops overall Bank policies, strategies, operational guidelines and programs in these areas. It is also responsible for conducting relevant sector research, analytical work, sector best practices and case studies on climate change and sustainability and provides specialized technical sector support to climate change and sustainability-related operations and activities.

What you'll do:

The objective of this consultancy is to support CSD/CCS with specific research regarding the development of high added value economic opportunities deriving from existing installed and idle space-based telemetry idle capacity, and which may be used to develop environmental services.

Specifically, the consultant will:

- Map existing space based environmental telemetry services and business development models;
- Identify one LAC Southern cone country with the highest potential for the development of said services in the region using an exhaustive set of criteria that include opportunities as well as threats;
- Suggest an agenda for the development of said innovation clusters in these specific industries.

Deliverables and Payments timeline:

- **Product 1:** The first product will consist of a consultancy Gantt and proposed research schedule;
- **Product 2:** The second product will include a research note justifying the choice of one or two LAC countries, in function of their potential to house an innovation ecosystem which helps spur space based environmental telemetry services;
- **Product 3:** The third product will include a first draft agenda for an action plan;
- **Product 4:** The fourth product will include the final version of the suggested action plan, including policy reform suggestions.

The consultant is expected to liaise and coordinate in order to submit the expected deliverables. To complete each deliverable, the Bank will review and submit to the consultant and then the consultant will incorporate the comments.

Product #	Deadline	Payment %
1	15 days after signing the contract.	20%
2	Six weeks after signing the contract	25%
3	four months after signing the contract.	25%
4	nine months after signing the contract	30%

What you'll need:

Citizenship: You must be 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.

Education: Master's degree or equivalent and a minimum of ten years of relevant professional experience or the equivalent combination of education and experience in civil and environmental, disaster risk management, climate change adaptation, risk modeling, information systems engineering, or a related discipline.

Experience: At least ten years of experience in economic analysis with some experience in public budgeting and management. Experience working with the Caribbean is required. Work experience in multi-hazard risk assessment is an advantage.

Languages: Fluent in English and Spanish. Knowledge of Portuguese or French is a plus.

Core and Technical Competencies:

Areas of Expertise: Experience in climate adaptation, resilience, disaster risk management, data systems management, multi-hazard risk assessments, engineering and infrastructure projects and relevant work experience with projects in multilateral or bilateral cooperation institutions.

Skills: Advanced level in data management and experience understanding risk modelling.

Competencies: (i) Planning and Organizational Skills: Demonstrated organizational capability and ability to carry out multiple and detailed tasks, and demonstrated capacity to operate with minimal supervision; (ii) teamwork: Ability to take initiative and lead others, share knowledge and information, express disagreements tactfully and ability to lead interdisciplinary and a multicultural team; (iii) communication: Ability to present concise, clear and precise analysis and recommendations. The post requires the ability to communicate effectively with multiple stakeholders.

Opportunity Summary:

- Type of contract and modality: Products and External Services (PEC) Consultant.
- Length of contract: 12 months.
- Starting date: October 15th, 2020.
- Location: Consultant's place of work/ residence.
- Responsible person: Climate Change Specialist (CSD/CCS).
- Requirements: You must be a citizen of one of the [IDB's 48 member countries](#) and have no family members currently working at the IDB Group.

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REGIONAL

Climate Change Risk and Adaptation Measures Study to inform the development of Uruguay's Long-Term Strategy for adaptation in the Energy sector

Terms of Reference

1. Context and justification

- 1.1. Adaptation and climate resilience enhancement are strongly emphasized in the Paris Agreement (Article 7) and includes a call for all countries to engage in national adaptation planning processes. Additionally, Governments are expected to submit a new iteration of NDCs by 2020. The early design of Long-Term Strategies for adaptation and resilience, and the design of aligned NDCs represents an opportunity for raising ambition and anticipating costs, managing trade-offs, and ensuring a just transition¹, while identifying immediate policy reforms and investment priorities necessary to effectively plan and accelerate adaptation. Long-Term Strategies for adaptation are especially relevant for the LAC region as it is one of the most vulnerable regions to the impacts of a changing climate, and Governments are starting to incorporate climate resilience and adaptation into their planning processes and projects. However, the region is still facing significant challenges, including limited institutional capacity, lack of comprehensive information to orient decision-making, limited access to new and additional financial resources for adaptation and the need to strengthen coordination among relevant stakeholders. Efforts and results continue to vary largely across different countries.
- 1.2. The design of LTS is an opportunity to inclusively discuss the future development of a country that includes climate resilience, and should be discussed and co-designed with a wide range of stakeholders so as benefits are maximized for both climate resilience and the society in a shared vision of the future. Co-construction of LTS does not only builds a sense of ownership, but also allows to develop plans accordingly to the social and economic reality of countries.
- 1.3. Adaptation is a priority for countries in the region. The latest LEDSenLAC study³ found that, from 21 analyzed countries, 91% included adaptation on their NDCs, and it is expected that this trend will increase both in scope and depth. As such, governments of the region have been increasingly requesting support to the IADB on different strategies to include climate resilience into their development planning processes, institutional systems and also into infrastructure projects.
- 1.4. Long-term planning for adaptation will require profound institutional, economic and cultural transformations. These transformations, in alignment with long-term development goals and the Sustainable Development Goals, can and should bring significant economic and social benefits. According to the report "*Adapt now: a global call for leadership on climate resilience*"⁴, investing US \$1.8 trillion between 2020 and 2030 globally in early warning systems, climate-resilient infrastructure, improved dryland agriculture crop production, global mangrove protection, and investments in making water resources more resilient could generate US \$7.1 trillion in total net benefits. The transformation will also bring new challenges and costs that need to be anticipated to develop lines of action around them. For instance, making infrastructure more resilient can increase upfront costs in 3%, but has benefit-cost ratios of about 4:1⁵. In addition, long-term planning for adaptation needs to incorporate uncertainties associated to the projections of climate change impacts'

temporal and spatial distributions, as well as uncertainties that can also affect the successful implementation of structural and non-structural measures to increase climate resilience, such as technology costs, international markets, demand and supply of different services, land-use changes and conflicts, among others. In the face of such complexities, Governments are not only in need of better understanding of climate hazards, exposure, vulnerability, and risks, but as well of analytical support that can inform decision-making processes for long-term planning for climate resilience.

- 1.5. This project aims to provide support on the development of analytical studies for the long-term resilience of the energy sector in Uruguay.

2. Objectives

The general objective of this project is to enrich the climate and disaster risk management processes at the national and sub-national level in Uruguay by evaluating different adaptation measures, using a wide range of plausible future scenarios and including changes in climate, socioeconomics and land-use. The specific objectives of the study are: i) use the Robust Decision Making (RDM) method to identify a group of robust adaptation measures/strategies and group them into different short, medium and long-term priority “pathways” (15, 45 and 60 years respectively); ii) characterize the vulnerability of each of these measures/strategies and evaluate trade-offs between them; iii) estimate costs and benefits associated with each of the prioritized adaptation “pathways”; iv) connect the data and information available at the national level regarding quantified hydro-climatic risks and adaptation measures in the NDC; v) conduct a detailed assessment of Uruguay’s current energy infrastructure system including its possible evolutions and its vulnerabilities to different climate change scenarios; and vi) contribute to the strengthening of the dialogue between decision makers and stakeholders so that their priorities, preferences and performance criteria of the different adaptation strategies identified can be presented openly in order to create consensus.

3. Scope

- 3.1 The study should carry out a risk calculation for hydroclimatic threats including the effects of climate change and considering the existing conditions in the country in terms of adaptation strategies and measures in the energy sector. The risk calculation should apply a comprehensive risk view, quantifying the physical risk (on infrastructure assets –economic damage and loss on ecosystem services (damage and loss) - and on the population - affected and loss of life) and incorporating the possible socioeconomic and adaptive capacity factors that can modify or exacerbate the physical risk to obtain the total risk. The analysis of these results should allow the proposal of possible structural and non-structural measures, gray and green, including measures focused on Nature-Based Solutions (adaptation measures and Nature-Based Risk Reduction - ECORRD), of a high level and with greater impact for the country, which will be evaluated in a second risk analysis.
- 3.2 For this, the Probabilistic Risk Analysis (APR) and Robust Decision Making (RDM) approach should be applied to evaluate the performance of the measures and for the prioritization process.
- 3.3 The study should be carried out for the whole country for meteorological-climatic threats in the energy sector. Regarding the elements exposed to be evaluated, these

could include all relevant sectors including public and private assets, urban and national infrastructure, and ecosystem assets. The vulnerability of the energy sector will be modeled against the threats described above in terms of levels of damage or direct and indirect damages related to redundancies, interconnections, interruption of services and lost profits, among others. In the same way, for these same sectors and for the different territorial levels, direct and indirect damages and losses will be calculated, and strategies and action measures for adaptation will be proposed.

- 3.4 Finally, the study will contribute the energy sector's contribution to Uruguay's Long-Term Strategy under its adaptation chapter.

4. Key Activities

- 4.1 To carry out the quantitative climate risk analysis, the following activities must be followed.
- 4.2 Carry out a probabilistic analysis of multi-threat climate risk from the baseline (current conditions in the country regarding adaptation measures). This activity consists in building the risk model that will quantify the risk in terms of expected economic and human losses and in carrying out a first baseline analysis. The risk assessment should apply two configurations of the risk model: with and without the incorporation of the effect of climate change on meteorological and climatic threats. This activity also includes establishing more specifically the performance measures to be used to evaluate results. Since this activity corresponds to establishing the baseline risk as a non-action scenario, its run will not contemplate the implementation of actions. This activity is made up of the following activities in particular:

- Threat evaluation: probabilistically evaluate the threats established in the Scope of Services section of these Terms of Reference (Section 3) in terms of spatiality, intensity and frequency of occurrence. For this, appropriate probabilistic models must be applied for each type of threat and special care must be taken in the modeling of slow-growing (climatic) threats, since these may require different methods than those used for rapidly developing threats (meteorological). For all threats, the effect of climate change should be incorporated into the model. Future projections taken from climate models that recreate local conditions in the best way should be used; and statistical downscaling should be carried out to obtain even more local projections adjusted to local conditions for the areas of analysis that require a higher level of detail. These projections should be used to modify the hydrological analyzes carried out with the historical records. The Consultant should consult and review existing methods for doing this and should propose an approach or method to use.

The products of this activity are:

- a. Set of stochastic threat scenarios or events for each of the threats evaluated probabilistically for conditions (i) without the effect of climate change and (ii) with the effect of climate change.
- b. Threat curves for each of the threats evaluated in a probabilistic way for the departmental capitals (i) without the effect of climate change and (ii) with the effect of climate change.
- c. Set of threat maps for each of the threats evaluated, which must include (i) integrated threat maps corresponding to different return periods, (ii) exceedance probability maps for different threat intensity values, both for

the condition without and with the effect of climate change, and (iii) maps of the differential threat between the condition without and with the effect of climate change.

- Exposure assessment: build a geo-referenced database of all the country's physical assets by sector/portfolio and the distribution of the country's population by different territorial levels. The sectors/portfolios of physical assets to be included will correspond to the sectors established in the Scope of Services section of these Terms of Reference (Section 3). All exposed assets should be characterized through the physical attributes that determine the behavior of these assets against the different threats identified that include the effects of climate change (for example, attributes such as the sector, the type of asset, the current physical conditions, materials and structural typologies are important, but this varies from sector to sector) as well as the replacement value.

The product of this activity is a georeferenced exposure database containing all the attributes collected.

- Vulnerability assessment: assess the vulnerability conditions of the elements exposed to different threats. Vulnerability functions or curves can be used that indicate the corresponding levels of damage for different levels of threat intensity (including the effects of climate change). These curves should be assigned by type of asset. Vulnerability functions existing in the literature can be used for different threats. Particular care should be taken in modeling the vulnerability of assets against slow-developing threats.

The product of this activity is a set of structural and human vulnerability curves for direct and indirect losses.

- Risk assessment: probabilistically assess the risk resulting from combining the threat, exposure and vulnerability analyzed in the previous activities. Following the previously established for the threat modeling, this risk calculation should be carried out twice, the first using the threat conditions without climate change and the second with climate change. The results of the risk assessments carried out should be expressed in terms of estimated direct and indirect economic and human losses, in addition to any other selected performance measure, and these should be compared with each other, analyzing the difference in losses between the case with and without the effects of climate change to identify incremental risk from climate change. The expected economic losses should be expressed through the standard risk metrics for a probabilistic evaluation such as the Annualized Loss Expectancy (ARO), the Loss Exceedance Chart (LEC) and the Probable Maximum Loss (PML) for different return periods. Human losses should be expressed through these same metrics for affected, injured and deceased (the latter two especially for rapidly developing threats).

The products of this activity are:

- a. Summary of risk results (the metrics described above) including the loss exceedance, maximum probable loss and exceedance probability curves for different exposure times, this at national and sector levels for conditions without and with the effect of climate change.
- b. Georeferenced exposure database with risk results (the metrics described above) for conditions without and with the effect of climate change.

- c. Risk maps illustrating the metrics described above for the conditions without and with the effect of climate change, both in absolute value (in dollars and number of affected, injured and deceased for economic and human losses, respectively) and relative (percentage of exposed value and percentage of the population for economic and human losses respectively).

4.3 **Analyze the risk results of Activity 4.1., Propose and evaluate a series of high-level adaptation actions or measures using the Robust Decision-Making Framework (RDM).** This activity consists of using the results of the baseline risk analysis (no action) to propose high-level measures of greater impact for the country to reduce this risk. Actions at different scales and belonging to the different dimensions of risk management (prospective, corrective and compensatory actions) should be considered, may include both structural and non-structural measures and should consider nature-based solutions. Holistic actions related to environmental, social and economic issues should also be considered. In this activity, a second run of the risk model will be carried out to evaluate the performance of these high-level measures.

5. Expected Results and Products

- 5.1 Report 1: detailed work plan and methodology.
- 5.2 Report 2: results of the baseline risk assessment (activity 4.1.):
 - Results of the threat analysis: the modification of the patterns (frequency and intensity) of the threats of meteorological origin (floods, forest fires) and climatic (droughts and sea level rise) due to the effects of climate change.
 - Results of the analysis of exposure and vulnerability to new threat conditions.
 - Results of the risk assessment based on the relationship between the new threat and vulnerability conditions at the departmental level.
- 5.3 Report 3: proposal and evaluation of possible high-level adaptation measures (activity 4.2.)

6. Project Calendar and Milestones

- 6.1 Report 1 must be delivered within 10 calendar days after signing the contract.
- 6.2 Report 2 must be delivered within 90 calendar days after signing the contract.
- 6.3 Report 3 must be delivered within 150 calendar days after signing the contract.

7. Reports' requirements

- 7.1. All physical information and digital files must be delivered following the order of each process and the analysis carried out according to the specific objectives of the project (inputs and outputs).
- 7.2. All reports must be submitted as follows: (i) the relevant electronic files in MS Word, Excel, or other acceptable applications (must include all annexes and appendices); and (ii) a PDF file for each complete report. These reports and electronic files must be delivered within the deadlines mentioned above.
- 7.3. Functional copies of all digital and GIS files (.shp, .tiff, .grd, .gdb, .mxd, etc.), models, databases and any other files created during the consultancy must be provided.

- 7.4. Additionally, the main results and conclusions of the consultancy must be collected and delivered in a presentation in MS PowerPoint format.

8. Other requirements

- 8.1. The consulting firm must have experience in vulnerability assessments to climate change, disaster risk assessments, climate modeling, hydrological and hydraulic modeling, land use planning, and statistical analysis. Having a member of the local team is desired. At least one member of the team should have proven knowledge of the area of study and local issues. The team can be made up of any number of members as long as together they have the following experience:

- Team Leader: Professional in engineering, environmental or climatic sciences or related, with a minimum of 10 years of proven professional experience leading multidisciplinary teams in disaster risk assessments, specifically meteorological and climate risks, and experience leading and coordinating teams, assessments of climate change and risk management. You should have experience in conducting risk analysis and preparing adaptation and resilience actions. Postgraduate degree related to job functions.
- Disaster Risk Specialist: Professional in engineering, environmental or climatic sciences or related, with a minimum of 5 years of proven experience in disaster risk management and climate change. Demonstrated experience in developing hydrological models and probabilistic risk models. Experience using risk modeling platforms such as CAPRA, Hazus or similar. Demonstrated knowledge of Geographic Information Systems (GIS) such as ArcGIS, QGIS, Autodesk or similar. Postgraduate degree related to job functions.
- Climate Change Modeler: Professional in engineering, environmental or climate science or related. With knowledge of global and regional climate models and management of climate data. You must have demonstrated experience in developing climate change projections and scenarios using statistical or scientific methods. With at least 5 years of proven experience in the use of downscaling models or software and platforms for climate change projections.
- Natural source threat modeler: Professional in engineering, environmental or climate science or related, with a minimum of 5 years of proven experience in modeling hydrometeorological threats such as floods, droughts and forest fires and experience in hydrological modeling and experience using models and software such as , HEC-RAS, SWMM, Autodesk, ArcGIS or the like.
- Exposure and vulnerability modeler: Professional in engineering, environmental or climatic sciences or related with at least 5 years of proven experience in developing exposure models and vulnerability models applied to disaster risk models. Postgraduate degree related to job functions.

9. Schedule of Payments

Product	%
1. After approval of deliverable	25%
2. After approval of deliverable	35%
3. After approval of deliverable	40%
TOTAL	100%