

REGIONAL

RG-T3415 - DEVELOPMENT OF THE NATURAL CAPITAL LAB

INDIVIDUAL CONSULTANT – SUPERVISION AND OPERATIONAL SUPPORT

TERMS OF REFERENCE

1. Background

Established in 1959, the Inter-American Development Bank (“IDB” or “Bank”) is the main source of financing for economic, social and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.

The Climate Change and Sustainable Development Sector (CSD) main activities include lending operations, technical assistance, and knowledge generation to ensure the mainstreaming of sustainability and climate change consideration in Bank operations.

Recognizing a need to create a space where the public and private sectors can work together in innovative projects, and where partners can be mobilized to support the region’s national capital agenda, in 2018 the IDB created a Natural Capital Lab within CSD, jointly with its Multilateral Investment Fund (MIF) Innovation Lab. This Lab focuses on the natural resources that provide a diverse array of ecosystem services to the planet. It is only recently that these natural capital assets have been viewed as economically important. Replacing the services that these ecosystems provide would require large investments in traditional structures, or, in some cases they are irreplaceable. Methodologies exist to value ecosystem services, but few investors or governments have calculated or reported on these values in a systematic way, and trading these values is still difficult.

The Natural Capital Lab serves as a one-stop shop for the IDB Group to drive innovation in the conservation, landscape, biodiversity, and marine ecosystem finance spaces. Building from existing IDB group partnerships, the Lab is creating a network of cutting-edge partners from the technology, finance, government, academic, and international organization communities. The Lab convenes these actors in multi-sectoral dialogues to examine issues such as the valuation of ecosystem services, methodologies to trade these values, innovations in sustainable landscapes, nature-based solutions, ocean conservation, pollution, and territorial approaches.

The Natural Capital Lab also leverages funds to support initiatives with departments across the IDB group. It can access a full range of instruments, including grants, loans, and equity, which it will deploy to private and public clients. Projects supported by the Lab prove new concepts that will be transformational for a country or sector, with scalability potential. The Lab emphasizes the use of innovative finance for the achievement of its purpose, including an extensive use of blended finance and results-based solutions. It is developing projects to accelerate and incubate natural capital entrepreneurs, deploy new technologies in the natural capital space, and fund conservation through new instruments.

2. Consultancy objective(s)

In this consultancy, the DTC will provide support to several functional tasks related to the programmatic, technical, and project-related work of CSD and the Natural Capital Lab work program.

3. Main activities

- Support the NCL team leader in developing the strategy, operational program, fundraising, and communication materials related to the Lab.
- Support the development of projects designed within the Natural Capital Lab, including undertaking financial and technical due diligence of operations, drafting project documents, and sourcing new innovations.
- Support supervision of projects designed in partnership with IDB Lab and the Social Entrepreneurship Program.
- Support the coordination, monitoring and evaluation of the NCL portfolio, including the UK Defra Blue Carbon portfolio and other donor-funded initiatives.
- Develop working partnerships across IDB departments and sectors, including IDB Lab and IDB Invest.
- In conjunction with IDB Lab and IDB Invest cultivate relationships with value chain actors to advance the Lab's work program.
- Support the Lab's public policy program, creating persuasive materials that showcase natural capital values, innovation in the natural capital sector, and potential solutions of interest to governments, including the preparation of studies.
- Participate in missions, as required.
- Represent the Lab Team Leader in meetings.
- Support all initiatives in the Lab's knowledge program and dissemination, such as seminars, meetings, workshops, and other events, including the preparation of presentation materials.
- Work on PowerPoint, Excel and other statistical tools to produce analysis and build charts, info-graphics and other visual material for dissemination. Other duties as required.

4. Reports/Deliverables

The DTC is expected to contribute to various items in the CSD and Natural Capital Lab work program. Contributions will be delivered on the basis of a bi-weekly schedule which will be defined monthly by the consultant's supervisor.

5. Qualifications

- Minimum requirements: Master's degree or equivalent with at least 5 years of relevant professional experience, or the equivalent combination of education and experience working in financial and technical innovation in natural capital, environment, agriculture, biodiversity and conservation. Experience working on value chain issues and with corporate anchors encouraged. Demonstrated experience in financial analysis. Experience in blended finance and impact investment a plus.
- Academic Degree/ Level: Master's degree in economics, finance, public policy, environmental economics, sustainability, or related field. Candidate should have a strong finance and natural resources/environmental background.
- Languages: English, Spanish.

6. Characteristics of the Consultancy

- **Consultancy category and modality:** PEC or Consultant.
- **Contract duration:** 24 months
- **Place(s) of work:** IDB Headquarters. Washington DC, U.S.A.
- **Responsible person:** Sector Senior Specialist, CSD/CSD.

Payment and Conditions: Compensation will be determined in accordance with Bank's policies and procedures. The Bank, pursuant to applicable policies, may contribute toward travel and moving expenses. In addition, candidates must be citizens of an IDB member country.

Visa and Work Permit: The Bank, pursuant to applicable policies, may submit a visa request to the applicable immigration authorities; however, the granting of the visa is at the discretion of the immigration authorities. Notwithstanding, it is the responsibility of the candidate to obtain the necessary visa or work permits required by the authorities of the country(ies) in which the services will be rendered to the Bank. If a candidate cannot obtain a visa or work permit to render services to the Bank the contractual offer will be rescinded.

Consanguinity: Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce consultants, will not be eligible to provide services for the Bank.

Diversity: The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

REGIONAL - USA

CSD/CSD CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT SECTOR

NATURAL CAPITAL LAB WORK

TERMS OF REFERENCE

1. Background and Justification

Recognizing a need to create a space where the public and private sectors can work together in innovative projects, and where partners can be mobilized to support the region's national capital agenda, in 2018 the IDB created a Natural Capital Lab within CSD, jointly with its Multilateral Investment Fund (MIF) Innovation Lab. This Lab focuses on the natural resources that provide a diverse array of ecosystem services to the planet. It is only recently that these natural capital assets have been viewed as economically important. Replacing the services that these ecosystems provide would require large investments in traditional structures, or, in some cases they are irreplaceable. Methodologies exist to value ecosystem services, but few investors or governments have calculated or reported on these values in a systematic way, and trading these values is still difficult.

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Plastic pollution in the ocean has surfaced recently as a prominent environmental concern. We know now that plastics reaches the farthest depths of the ocean and can have impacts on ocean life from the smallest plankton to the largest whales. Also 4.8 million to 12.7 million metric tons of plastic enter the ocean each year (Jambeck et al., 2015) that some). UN Environment has estimated that the socio-economic costs of ocean plastics pollution is US\$13 billion per year globally. This could be considered as a lower bound estimate because nowadays there is not enough research to fully understand the potential human health impacts of plastics in the oceanic food chain.

In addition, there is another major ocean pollutant; that is nitrogen. The magnitude of nitrogen that is disposed in the oceans is about 13 million metric tons per year (Seitzinger, 2010). The sources of this nitrogen are diverse and includes a

combination of fertilizer and manure run-off to rivers, untreated sewage, and atmospheric deposition. The main consequence of nitrogen pollution in the ocean is the formation of hypoxic areas. Thus, given nitrogen pollution has grown rapidly since the 50s, this has produced an exponential growth in the occurrence of hypoxic areas, now estimated to more than 500 around the world (WRI 2016). Therefore, UNDP (2012) estimated the global socioeconomic damage from ocean hypoxia due to nitrogen run-off at between \$200 billion and \$800 billion per year.

2. Objectives

The overall objective of the study is to identify the main sources of marine pollution in three LAC countries: Chile, Peru and Barbados and to assess the economic losses due to marine pollution on the economy of those three countries .

3. Scope of Services

The firm will identify relevant data sources and apply new and proven methods from academic literature to conduct an Assessment of Economic Losses due to Marine Pollution that includes a thorough analysis of the sources of that contamination and the level of participation of each source in the total emissions.

It is also expected that with the results derived from the Economic Evaluation to conduct a simulation of the future impact of this problem under different scenarios and policy regimes. The results of this simulation analysis will be used as an input for a cost-benefit analysis related to the formulation of policies and investments aimed at controlling, reducing or eliminating marine pollution in the three countries selected (i.e. Chile, Peru and Barbados)

4. Key Activities

- a. Conduct a literature review of the different methods that can be applied to assess the economic losses derived from marine pollution, as well as previous studies that have been carried out regarding the assessment of the impact of this problem.
- b. Identify the different ecosystem services that the ocean provides to the three countries and that are affected by marine pollution.
- c. Determine the impact that marine pollution produces on the possibility of generating such ecosystem services or their quality.
- d. Estimate a loss function that serves as a basis for simulation and impact analysis of marine pollution on the economy of the three countries.
- e. Identify sources of pollution and their share of total emissions.
- f. Simulate the economic loss derived from different pollution scenarios and policy regimes.
- g. Provide recommendations on policy changes or investment schemes that can address marine pollution and stimulate economies.

5. Expected Outcome and Deliverables

- a. Report on the literature review of economic loss assessment methodologies due to marine pollution and its applications in other countries.

- b. Report of pollution sources and analysis of participation in the total of pollutants present in the ocean.
- c. First draft of the global evaluation of economic losses due to marine pollution (not including the simulation chapter).
- d. Final draft of the global evaluation of economic losses due to marine pollution (including the simulation chapter).

6. Project Schedule and Milestones

- a. 10% upon contract signature.
- b. 10% upon delivery and approval by the IDB of literature review.
- c. 20% upon delivery and approval by the IDB of pollution sources analysis.
- d. 20% upon delivery and approval by the IDB of the first draft of the global evaluation of economic losses due to marine pollution.
- e. 40% upon delivery and approval by the IDB of final draft of the global evaluation of economic losses due to marine pollution.

Products/Milestones	Months after Contract is Signed
Literature Review	2
Pollution Source Analysis	9
First draft of the global evaluation of economic losses due to marine pollution (not including the simulation chapter).	21
Final draft of the global evaluation of economic losses due to marine pollution (including the simulation chapter).	24

7. Reporting Requirements

- a. The consultant will prepare reports in English language and deliver then in Microsoft Word .docx format; and fill deliver the numerical results of the presentation in the Microsoft Excel .xlsx format.

8. Supervision and Reporting

- a. The consulting firm will be reporting weekly to Gregory Watson, (CSD/CSD) (e-mail: gregoryw@iadb.org) who will give comments to any reports, approve reports, documents, work, and give comments or any instructions for changes. It shall be Firm's responsibility for ensuring that such meetings are conducted, and such reports are submitted to the Bank.

9. Schedule of Payments

Payment Schedule	
Deliverable	%
1. Upon contract signature	10
2. Literature Review	10
3. Upon presentation of the Pollution Source Analysis report	20
4. Upon presentation of the Pollution Source Analysis report	20
5. draft of the global evaluation of economic losses due to marine pollution	20
6. Upon delivery and acceptance of final draft of the global evaluation of economic losses due to marine pollution and recommendations	40
Total	100

REGIONAL – USA

CSD/CSD CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT SECTOR

GIS TOOLKIT

TERMS OF REFERENCE

1. Background

The Climate Change and Sustainable Development Sector (CSD/CSD) is looking for a consulting firm to provide the necessary services to help CSD leverage Geographic Information Systems (GIS) to foster digital transformation, by unlocking the full potential of spatial data, and enhance the effectiveness of CSD programmatic, technical and project-related work.

The use of spatial information is critical in any operation related to the sustainable use and conservation of natural capital, the services it directly provides (carbon, water, biodiversity, recreation), and sectors such as infrastructure, urban development, agriculture, and tourism. The IDB, as a public institution, has generated a wealth of geospatial data that should be housed in an open-source platform to enable analysis of natural capital impacts of projects, spark innovation in the development of new models and businesses, provide inputs to policymakers, and be reused in operations across sectors. Similarly, governments and local organizations are generating volumes of data layers that can be added to this database, making analysis even richer. There is clear demand from staff and consultants for GIS capabilities, and there should be a corporate GIS strategy or capability that can support IDB's work across every project, avoid duplication of efforts, and maximize impact and return on investment.

The initiative will be led by the Natural Capital Lab, a space created within CSD and the Multilateral Investment Fund (MIF) Innovation Lab where the public and private sectors can work together in innovative projects, and where partners can be mobilized to support the region's national capital agenda. This Lab focuses on the natural resources that provide a diverse array of ecosystem services to the planet. It is only recently that these natural capital assets have been viewed as economically important. Replacing the services that these ecosystems provide would require large investments in traditional structures, or, in some cases they are irreplaceable. Methodologies exist to value ecosystem services, but few investors or governments have calculated or reported on these values in a systematic way, and trading these values is still difficult.

2. Objective

The main objective of this consultancy is to define a vision and roadmap for CSD to establish a location platform as a strategic asset to enhance all aspects of its work. A complete, integrated platform that allows users discover, create, use, and share maps and location-based insights anywhere, anytime, and on any device. The ArcGIS platform will serve as:

- a. A system of record that allows to store, manage and share authoritative data about projects and programs.
- b. A system of insight that lets visualize, integrate and analyze data to support decision making.

- c. A system of engagement that helps to effectively communicate, inform and collaborate on projects and initiatives within IDB and with external clients.

3. Scope of Services

In particular, the selected firm will contribute to:

- a. Scale-up IDB staff ability to make and share maps and perform spatial analysis, helping them more quickly apply data to support development projects.
- b. Deploy configurable apps to streamline and standardize workflows throughout the project life cycle.
- c. Make data more available to external stakeholders by providing open data and establishing federated collaboration and data sharing networks with countries.
- d. Create communication initiatives that digitally transform IDB decision-making.

4. Key Activities

- a. Review existing IDB/CSD use of GIS systems
- b. Complete a needs assessment to increase value of GIS in IDB Group operations and with countries.
- c. Develop an implementation plan to increase the use of existing ArcGIS and GIS web tools in the IDB, beginning with a pilot in CSD.
- d. Implement pilot, including training IDB/CSD staff.
- e. Create a geoportal for LAC.
- f. Complete a knowledge product using GIS tools.

5. Expected Outcome and Deliverables

In order to establish an ArcGIS location platform within CSD, the following key GIS capabilities will be the starting point:

- a. Launch the Enterprise GIS Program
- b. Perform a Location Value Assessment
- c. Identify the most needed geodata in IDB operations
- d. Deploy and enable the ArcGIS Platform
- e. Provide access to GIS Web services to a number of CSD staff
- f. Design and configure GIS solutions for priority business needs
- g. Build capacity and support operations
- h. Help identify a geographic information officer to be directly hired by the Bank
- i. Create a knowledge product, chosen in collaboration with the bank, that demonstrates the value

The firm will work in partnership with the IDB/CSD to transfer knowledge and capacity to the organization, so the CSD can become self-sufficient in carrying out the enterprise GIS implementation. Consequently, CSD will be better equipped to

identify, build, and scale appropriate GIS solutions across its practice areas and core business units.

6. Project Schedule and Milestones

- a. 10% when the contract is signed.
- b. 10% upon delivery and approval by the IDB of needs assessment.
- c. 20% upon delivery and approval by the IDB of implementation plan.
- d. 20% upon commencement of implementation plan.
- e. 40% upon completion of the integration of the tool.

Products/Milestones	Months after Contract is Signed
Needs Assessment	4
Implementation plan submitted	6
Commencement of Implementation plan	7
Completion of integration of GIS into CSD operations and knowledge products.	15

7. Reporting Requirements

The consultant will prepare reports in English language and deliver then in Microsoft Word .docx format; and fill deliver the numerical results of the presentation in the Microsoft Excel .xlsx format.

8. Supervision and Reporting

The consulting firm will be reporting weekly to Gregory Watson, (CSD/CSD) (e-mail: GREGORYW@iadb.org) who will give comments to any reports, approve reports, documents, work, and give comments or any instructions for changes. It shall be Firm's responsibility for ensuring that such meetings are conducted, and such reports are submitted to the Bank.

9. Schedule of Payments

Payment Schedule	
Deliverable	%
1. Upon contract signature	10%
2. Completion of needs assessment	10%
3. Upon presentation of the implementation plan	20%
4. Upon commencement of the implementation plan	20%
5. Upon delivery and acceptance of final of GIS tool and knowledge product.	40%
Total	100%