

## TC ABSTRACT

### I. Basic project data

▪ Country/Region:	Regional
▪ TC Name:	Managing regional marine and freshwater ecosystems for biodiversity conservation
▪ TC Number:	RG-T2400
▪ Team Leader/Members:	Team leader: Michele Lemay (INE/RND), Team members: Annette Killmer (RND/CBR); Maria Claudia Perazza (INE/RND); Ernani Pilla (VPS/ESG); Ashley Camhi (INE/RND); Benedicte de Waziers (INE/RND)
▪ Indicate if: Operational Support, Client Support, or Research & Dissemination.	Research & Dissemination
▪ If Operational Support TC, give number and name of Operation Supported by the TC:	N/A
▪ Reference to Request: (IDB docs #)	N/A
▪ Date of TC Abstract:	August 19, 2013
▪ Beneficiary:	REGIONAL
▪ Executing Agency and contact name	IDB
▪ IDB Funding Requested:	US\$750,000
▪ Local counterpart funding, if any:	N/A
▪ Disbursement period (which includes execution period):	18 months
▪ Required start date:	September, 2013
▪ Types of consultants (firm or individual consultants):	Firm and consultants
▪ Prepared by Unit:	INE/RND
▪ Unit of Disbursement Responsibility:	INE/RND
▪ Included in Country Strategy (y/n); ▪ TC included in CPD (y/n):	N/A
▪ GCI-9 Sector Priority:	Poverty reduction and equity enhancement; climate change, sustainable (including renewable) energy, and environmental sustainability

### II. Objective and Justification

The Latin America and Caribbean (LAC) Region has been deemed the superpower of biodiversity because it is the Region with the most natural capital in the world. With only 16% of the planet's land, the Region holds 40% of the world's biological diversity, including seven of the world's 25 biodiversity hotspots and six of the 17 "megadiverse" countries. The LAC Region possesses a vast array of terrestrial, freshwater, coastal, and marine ecosystems representing many of the earth's

biomes<sup>1</sup>. For instance, LAC contains 11 freshwater ecoregions considered globally outstanding in terms of biodiversity<sup>2</sup>. Of these, the Amazon River system is the world's largest freshwater ecosystem with nearly 20% of the Earth's freshwater discharge. LAC coastal and marine areas are also rich in biodiversity<sup>3</sup> with several Large Marine Ecosystems (LMEs) such as the Eastern Pacific Tropical Marine Corridor (EPTMC) and the North Brazil – Guianas Shelf LME displaying both very high levels of marine productivity and endemism.

Marine and aquatic ecosystems make an important contribution to national GDPs in the Region, and many communities are highly dependent on small-scale fishing as a source of protein and livelihoods. An estimated 1.3 million people work as fishers or fish farmers in LAC<sup>4</sup>. Outstanding biodiversity and rich waters in LAC suffer from a number of significant resource management challenges. The greatest of these in marine ecosystems are from the impacts of overfishing, fishing practices that damage or degrade habitats and the impact of non-selective gears on non-target species. The largest threat in freshwater ecosystems is from increasing infrastructure, particularly hydropower. As a result, high value species are seriously depleted in many places. The loss of these 'keystone' ecosystem-regulating species causes cascading effects that disrupt economically important services such as fisheries productivity and ultimately reduce jobs, incomes, and food supplies.

Such threats are being observed at the regional scale and are affecting the status of LAC's key ecosystems, of which most are shared by several countries such as the EPTMC, the Amazon River Basin, and the North Brazil- Guianas Shelf LME with potentially significant economic implications. Reducing these threats to the Region's ecosystems requires an understanding of the potential to shift from unsustainable practices to management approaches in productive sectors and infrastructure that conserve the biodiversity of these significant marine and freshwater ecosystems. Despite considerable improvements over the last decade, the lack of information and ability to scale up sustainable activities represents a significant constraint to development in the Region. While successful models have been established, little effort has been made to share experiences and technical expertise between countries that share the responsibility for managing and conserving these marine and freshwater ecosystems.

This TC has been designed to share information between countries in the region on existing best practices in managing marine and aquatic ecosystems for biodiversity conservation and ecosystem services. Three complementary thematic areas for South-South cooperation activities will be supported through this TC, in line with the priorities outlined above: i) basin-scale planning for managing hydropower development to conserve freshwater biodiversity and ecosystem services, including the use

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<sup>1</sup> Bovarnick, A., F. Alpizar, C. Schnell (eds.). 2010. Latin America and the Caribbean: A biodiversity superpower. United Nations Development Program (UNDP) and United Nations Environment Program (UNEP). 2010. Atlas of Our Changing Environment: Latin America and the Caribbean, UNEP.

<sup>2</sup> Blackman et al., 2012. Prioritizing Policies for Biodiversity Conservation in Latin America and the Caribbean: a Rapid Assessment. Resources for the Future.

<sup>3</sup> Miloslavich, P. et al. 2011. Marine Biodiversity in the Atlantic and Pacific coasts of South American. Knowledge and Gaps. PLoSone 6(1): e14631.

<sup>4</sup> FAO. 2010. The State of World Fisheries and Aquaculture.

of instruments such as aquatic offsets; 2) pilot assessment (including economic valuation) of freshwater ecosystem services in selected sub-basins of the Amazon, with a focus on sustainable freshwater fisheries management regimes; and 3) supporting the recovery of small-scale fisheries in selected LMEs including the Eastern Pacific Tropical Marine Corridor (EPTMC) and the North Brazil-Guianas Shelf (NBGS) LMEs. Under each thematic area, South-South cooperation activities will encompass regional workshops, seminars, study tours and other types of exchanges (e.g., webinars) with the specific objective of producing either regional work plans for continued cooperation, best practice manuals as well as harmonized guidelines and methodologies for replicating experience to other marine and freshwater ecosystems (or for instance other parts of the Amazon Basin). All South-South activities will actively seek to engage governments (national, local), academic and research institutions, conservation organizations and associations of the private sector (e.g., hydropower and fisheries) within the Region. In all thematic areas, this TC is expected to leverage funds for future Bank operations (e.g., for GEF projects) as well as generate opportunities for future green investments in sustainable hydropower, fisheries and green infrastructure.

The proposed TC will contribute to the following GCI-9 lending program priority targets: (i) poverty reduction and equity enhancement, as the TC will promote information exchange between countries that will support development and environmental protection and (ii) climate change, sustainable (including renewable) energy, and environmental sustainability, as the TC will promote environmental sustainability within marine and aquatic ecosystems. In addition, the proposed TC will contribute to the sector priority, “Protect the environment, respond to climate change, promote renewable energy, and ensure food security.” Lastly, the proposed TC supports the Biodiversity and Ecosystem Services Program, as the TC will support capacity building within the Region on the mainstreaming of biodiversity and ecosystem services into key productive sectors and infrastructure.

### III. Description of activities

The proposed activities are described in the following table. Expected outputs and results are fully consistent with the IDB’s Biodiversity and Ecosystem Services Program<sup>5</sup>.

ACTIVITY	DESCRIPTION	EXPECTED OUTPUTS	EXPECTED RESULTS
<b>1. Basin-Scale Planning for Hydropower Development</b>	This South-South exchange includes a multi-day, multi-country workshop(s) with a focus on hydropower and aquatic offset compensation. Phased approach to developing best practice document targeting government permitting offices, private sector and scientific community. Countries to include CO, PN, PE, CH, BR, PR.	Targeted regional workshops  Draft of best practice document on hydropower and aquatic offsets	Increase capacity, collaboration, and skills related to marine and aquatic environments.
<b>2. Regional conservation of</b>	This South-South exchange will support: (a) pilot assessments of freshwater fish	Assessment of freshwater	

<sup>5</sup> <http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37444118>

<b>biodiversity and sustainable fisheries in freshwater ecosystems in the Amazon</b>	biodiversity; (b) analyses of associated freshwater ecosystem services (including valuation of provisioning and other services); and (c) best practice for ecosystem-based freshwater fisheries management in selected sub-basin(s) of the Amazon to be impacted by infrastructure, including hydropower. Countries to include PE, BR, CO.	biodiversity and ecosystem services in a selected sub-basin of Amazon. Regional proposal for a larger scale project related to freshwater fisheries in the Amazon	
<b>3. Supporting recovery of small-scale fisheries in the Pacific and Atlantic LMEs of LAC (EPTMC and NBGS)</b>	Activities will include: (a) regional workshop to support the preparation of a sustainable fisheries project in the ETFS that will utilize an integrated approach to address the primary drivers behind unsustainable fishing; (b) regional seminar to promote harmonization of ecosystem-based fisheries management regimes in the NBGS. Countries to include: CR, PN, CO, EC and BR (States of Amapa and Para), SU, GY.	Regional workshop and proposal for larger scale project on the recovery of small-scale fisheries in EPTMC  Regional seminar and proposal for a larger scale project on ecosystem based fisheries management in the NBGS LME.	

#### IV. Budget

The total budget for this technical cooperation has been estimated at US\$ 750,000 as shown in the following table:

##### Indicative Budget

Activity/Component	Description	IDB/Fund Funding US\$	Counterpart Funding	Total Funding US\$
<b>Activities</b>				
<b>1. Basin-Scale Planning for Hydropower Development</b>	Workshops and consultancies to develop best practice document on hydropower and aquatic offset compensation.	150,000		150,000
<b>2. Regional conservation of biodiversity and sustainable fisheries in freshwater ecosystems in the Amazon</b>	Consultancies for pilot assessments of freshwater fish biodiversity, analyses of freshwater ecosystem services and best practice in ecosystem-based fisheries management regimes for a selected sub-basin(s) of the Amazon.	350,000		350,000
<b>3. Supporting recovery of small-</b>	Workshops and consultancies to support the preparation of sustainable fisheries	250,000		250,000

scale fisheries in the Pacific and Atlantic LMEs of LAC (EPTMC and NBGS)	projects in the ETPS and the NBGS.			
<b>TOTAL</b>		<b>US\$750,000</b>		<b>US\$750,000</b>

**V. Executing agency and execution structure**

This TC is the Bank’s initiative. Given the strategic objectives of the TC and its regional nature, the TC will be executed by the Bank. Additionally, the Bank is able to create capacity, serve as a fomenter of knowledge and innovation, and impact policy on multiple scales within the Region, thus making the regional coordination of the IDB a necessary aspect of this TC.

**VI. Project Risks and issues**

The risk exists of a lack of participation of critical countries within the Region. To mitigate this risk, state and local governments with a direct economic interest in freshwater and marine fisheries will be invited to participate in the activities as partners. This risk will also be mitigated by utilizing key staff in IDB country offices to engage the Bank’s country counterparts. In addition, funds will be available to bring key stakeholders to participate in the South-South exchanges.

**VII. Environmental and Social Classification**

It is not anticipated that the activities to be financed in this TC will have negative direct or indirect social or environmental effects. Therefore the team considers that, according to the Bank’s Safeguards Screening Toolkit, this operation should be given a classification of “C”: (i) no environmental or social risks; (ii) direct contribution to solve an environmental issue.