TC DOCUMENT

I. Basic Information for TC

- Country/Region: REGIONAL
- TC Name: CAPACITY BUILDING IN THE ECONOMICS OF ECOSYSTEM SERVICES AND CLIMATE CHANGE IN LAC
- TC Number: RG-T2274
- Associated Loan/Guarantee Name: n/a
- Associated Loan/Guarantee Number: n/a
- Team Leader: Michele Lemay (INE/RND); Team Members: Ashley Camhi (INE/RND); Hilen Meirovich (INE/CCS), Maria Claudia Perazza (INE/RND); Sergio Ardila (INE/RND); David Corderi (INE/RND); Javier Bedoya (LEG/SGO); and Elizabeth Chavez (INE/RND).
- Research and Dissemination
- Date of TC Abstract authorization: January 31, 2013
- Donors providing funding: SECCI (SCI) Fund
- Beneficiary: REGIONAL
- Executing Agency and contact name: CATIE (Spanish acronym for Tropical Research and Higher Education Center)
- IDB Funding Requested: US\$600,000
- Local counterpart funding, if any: 150,000
- Execution period: 24 Months
- Disbursement period (which includes execution period): 24 Months
- Required start date: March 2013
- Types of consultants (firm or individual consultants): Firm
- Prepared by Unit: INE/RND
- Unit of Disbursement Responsibility : INE/RND
- TC Included in Country Strategy: n/a; TC included in CPD: n/a
- GCI-9 Sector Priority: Climate Change and Environmental Sustainability

II. Objectives and Justification

This TC has been designed to strengthen the regional capacity in the economic analysis of ecosystem services and climate change as a fundamental element for effective policy for sustainable and inclusive development. This will be achieved by supporting and expanding the activities of the Latin American and Caribbean Environmental Economics Program (LACEEP), hosted by CATIE (Spanish acronym for Tropical Research and Higher Education Center), whose main objective is to create research capacity in environmental and natural resource economics among LAC research and policy making institutions while improving the management of natural resources and contributing to a better understanding of the causes and effects of environmental degradation and its relationship with development and poverty, particularly as it relates to climate change. LACEEP is the network that groups the main researchers in environmental economics in LAC, thus the proposed TC will have a significant, catalytic effect in the Region.

This TC will support applied research, courses, workshops, communications and networking, and scientific backstopping and management aimed at: (i) generating new and valuable economic data on climate change, biodiversity, and ecosystem services and the role that they play in the economic sectors within LAC; (ii) training researchers and policy makers in economic valuation tools necessary for the analysis of climate change, biodiversity, and ecosystem services; (iii) creating a space for collaboration and cooperation on the generation and use of valuation data on climate change,

biodiversity, and ecosystem services; and (iv) providing a forum for advanced communications to be able to more effectively disseminate information supporting the need to value climate change impacts, biodiversity, and ecosystem services.

The proposed TC will contribute to the following GCI-9 lending program priority targets: (i) poverty reduction and equity enhancement, as the TC will bolster IDB projects with the necessary economic data to value biodiversity and ecosystem services and the impacts of climate change needed to promote sustainable and inclusive growth; and (ii) climate change, sustainable (including renewable) energy, and environmental sustainability, as the TC will focus on biodiversity and ecosystem services specifically related to climate change mitigation and adaption (i.e., carbon sequestration, coastal erosion control, long-term effects of climate change, and climate change impacts on agriculture). 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." Through this TC, the Bank will create the capacity to help countries better understand environmental protection and design policies necessary for the transition to a green economy and enhance the institutional ability to implement those policies. The proposed TC supports the Climate Change and Sustainability (CCS) division and the biodiversity and ecosystem services program, as the TC will support LACEEP as a center of excellence in generating critical information needed to support the integration of climate change, biodiversity, and ecosystem services into the productive sectors within LAC. Lastly, the operation meets the criteria for funding special grants from OC resources, including in terms of the beneficiaries of the operation, country eligibility and program execution (GA-220-12). After all potential sources of funding from the Bank were examined, it was decided that the SECCI IDB Fund was the most appropriate given the regional scope of the operation, its research focus on climate change, and strong synergies with the Climate Change Action Plan.

III. Description of activities/components and budget

Expected outputs and results are fully consistent with the IDB's Integrated Strategy for Climate Change Adaptation and Mitigation and Sustainable Renewable Energy (GN-2609-1) and its Action Plan (2012-2015)(GN-2609-3), specifically its strategic line to strengthen institutional capacity through the economic assessment of climate change vulnerabilities to the Region and benefits of alternative adaptation measures¹ and the Biodiversity and Ecosystem Services Program².

The proposed TC project entails the following activities, outputs and results:

Activity 1. Applied research in environmental economics

This activity entails issuing small grants in a competitive process to Latin American and Caribbean environmental economists conducting applied research in a range of topics related to the environment, climate change, ecosystem services, and biodiversity. This research will be done with the overall aim of raising the quality and scope of environmental economics in LAC.

Since lack of funds and lack of proper interaction with more experienced researchers are the two most important reasons why research in environmental and resource economics in the LAC region lies behind international standards, this activity will fund quality proposals and will allow junior researchers to work closely with a scientifically recognized tutor, in order to enrich the experience and increase the likelihood of a successful research contribution. In addition to making the research potentially

¹ IDB Action Plan – Climate Change

² Biodiversity and Ecosystem Services Initiative

publishable, this mentorship will stress the need to have policy implications for the region. Policy relevance will be a condition for accepting a proposal. All proposals in a round will be pre-screened by the Program Secretariat, who will choose the most promising to be presented at one of the two biannual workshops. The *ad hoc* Scientific Committee will then recommend the 7 best proposals to be funded by the program in each round. The final selection will be the responsibility of the Program Director.

Following LACEEP procedures briefly described above, Grants (under US\$15,000) will be awarded on a competitive basis through a peer review process and expected to cover research expenses (evaluation and tutoring) for up to one year. During this year, the grant holder will work closely with a specially appointed advisor who will not only support the researcher but will also be responsible for approving intermediate results. Each grantee is expected to attend an average of 3 workshops (1- to present proposal, 2- to present advances of research, and 3- to present final results).

LACEEP will be encouraging specific research topics related to the environment and natural resource management that are of particular importance in the region and follow the needs of the Climate Change and Sustainability Division and Biodiversity and Ecosystems Services Program, taking into account past research conducted by the Bank. These topics will build off of the work that the Climate Change and Sustainability Division has already done in the region, particularly on the past studies and work done on the economics of climate change. The calls for proposals will ask specifically for applicants interested in working on the following topics.

- **Climate Change** (Indicatively 40% of the grants): LACEEP will encourage proposals looking at the effects of climate change on local livelihood strategies, and specifically on the impact of climate change on agriculture and water availability, adaptation strategies to cope with extreme events as well as slow onset impacts such as sea level rise, the economic impacts of climate change and the related costs for adaptation, and evaluation of effectiveness of REDD initiatives.
- **Biodiversity** (Indicatively 60% of the grants): Using common methodologies typically used to analyze renewable natural resources and common pool resources, LACEEP will open call for proposals looking specifically at ecosystem valuation.

The IDB funds in this activity will be used to fund seven (7) research grants, including the process of external reviews and tutoring (honoraria and per diem for advisors).

Activity 2. Advanced coursework in environmental economics

To create and strengthen capacity in environmental economics, the LACEEP team will carry out advanced courses in environmental economics once a year and will facilitate short courses in coordination with the workshops. Advanced courses will be open to all Latin American and Caribbean citizens; however Central American applicants will be specifically targeted. This activity includes three types of courses: (i) Two short courses (3 days per course) a year on state of the art practice, research and policy making using environmental economics concepts and tools; (ii) One annual long course (10-12 days) on the analysis of ecosystem services and their valuation, and (ii) One annual long course (10-12 days) on the basic methods of environmental economics. The content of these courses will take into account past, pertinent courses organized by the Bank, particularly on the economics of climate change. In addition, lessons learned from past Bank courses will be taken into account. The Bank's Research Department (VPS/RES) will be consulted to ensure that the course and research content complements past efforts.

At least one of the short courses will take place in Central America to also promote the participation of researchers, university trainers and trainees and government officers. Nowadays, few practitioners in environmental economics at universities or governmental institutions in the region have formal training in the field. Even if a number of them might already possess formal training in economics or quantitative methods, the proposed courses will provide them with tools that lie closer to the practice of environmental and natural resource economics.

The planned courses will hopefully also have a direct impact on the teaching of environmental economics in the region, thereby having a multiplicative effect on the formation of local capacity. Furthermore this activity will raise the capacity of government officials in ministries and other agencies, thereby acting to improve current environmental policy making. Courses will be promoted in the host country and neighboring countries to capture the attention of those working in the field at universities, NGO's and in governmental institutions.

The IDB funds in this activity will be used to:

- Fund one (1) basic long course on environmental and resource economics. Expenses that will be covered includes: honoraria, travel costs and per-diem of two professors and one assistant, travel costs and per-diem of 25 students, and course materials
- Fund travel costs and honoraria of a professor lecturing in two short courses and per-diem for 20 participants
- Fund travel costs and per-diem of two professors and one assistant lecturing one (1) advanced long course on environmental and resource economics, and travel costs and per-diem for 18 students

Activity 3. Research proposal workshops and capacity building sessions

Workshops will take place twice a year and will have several purposes. First, the list of pre-screened candidates for the grants will present their research proposals to the *ad hoc* Scientific Committee which will study them and make recommendations to improve the potential of the research. Depending on the timing of the workshop, some researchers will present work in progress and some will present final results. Second, some members of the Scientific Committee will be invited to give short, one-two day capacity-building sessions according to their areas of expertise. Third, these workshops have proven to be key elements in building a community of researchers in environmental economics in the region. The network activities of grant holders extend beyond LACEEP and serve to foster more frequent interactions, requests for help, calls to present papers, etc.

The workshops will be open to everyone interested in the short courses and discussions with internationally recognized environmental economists. In order to reach as many professionals as possible, the courses will be organized in different countries, particularly those that require more attention and capacity-building initiatives, such as those in Central America and the Caribbean. LACEEP will cover the expenses of the Scientific Committee, the grant holders, those presenting reviewed proposals, the pre-screened candidates for the following year's scholarship, and the Advisory Committee.

The IDB funds in this activity will be used to:

- Fund per-diem and travel cost of 44 participants (out of 114), including applicants, members of the Scientific Committee, the secretariat, and grant holders for 3 workshops
- Partially fund material and logistics for 3 workshops

Activity 4. Dissemination and communication of state-of-the-art research results

Six activities will be carried out through this component: (i) a periodical newsletter; (ii) a constantly updated web page; (iii) the continuing publication of the working paper series; (iv) policy briefs; (v) creation of a policy makers' mailing list; and (vi) the preparation and publication of an indexed systematic review of research in environmental and resource economics from Latin America and the Caribbean, detailed as follows.

• <u>Indexed systematic review</u>: In order to provide researchers in the region and practitioners with an updated source of information about the activity on environmental and resource economics, we propose to prepare an indexed systematic review of all the available studies done by researchers on Latin America and the Caribbean, with a structure that facilitates the recognition and access to the accumulated research in the region, including research on the economics of climate change impacts and biodiversity and ecosystem services. This document will be prepared and published in a way that keeps it available for wide audiences interested in the topics on the field of environmental economics. The publication will be available for dissemination by the Bank.

The IDB funds in this activity will be used to:

- Fund the dissemination of an indexed systematic review on environmental and resource economics for the LAC region.
- Fund the language review, peer review, diagramming and printing of seven (7) working papers produced by the grantees. This cost is not covered as part of the grants.

Activity 5. Scientific backstopping and management

This component would cover all costs related to scientific and administrative management of the program. The Program Secretariat is hosted by CATIE.

The IDB funds in this activity will be used to:

- Partially fund the Secretariat functioning, including partial time of the directors of the program.

Project Activity	Outputs	Results
General		TC General Outcome: Strengthening of support for rigorous analysis and trained and capable environmental economists in biodiversity and ecosystem services, particularly as they relate to climate change
Activity 1: Applied research in environmental economics	Output 1A: 7 research grants	Outcome 1: Support to students, including external reviews and tutoring
Activity 2: Advanced coursework in environmental economics	Output 2A:1 basic long courseon environmental and resourceeconomics,1 advanced longcourse on environmental andresource economicsOutput2B:Provision of1professor for 2 short courses on	Outcome 2A: 25 environmental economists with advanced training on environmental and resource economics, and 18 economists trained on environmental and resource economics. Outcome 2B: 20 participants trained in
	state of the art practice, research and policy making using environmental economics concepts and tools.	short courses in environmental economics.

Indicative Results Matrix

Activity 3: Research proposal	Output Preparation and	Outcome 3: Feedback on research proposals
workshops and capacity building	provision for 3 workshops	and participation and gained skills of 44
sessions		environmental economists
Activity 4: Dissemination and	Output 4A: Systematic review	Outcome 4A: Provide researchers in the
communication of state-of-the-art	of environmental economics	region and practitioners with an updated
research results publications		source of information about environmental
		and resource economics.
	Output 4B: 7 working papers	Outcome 4B: Dissemination of cutting edge
		research in environmental economics.
Activity 5: Scientific backstopping and	Output 5A: Technical and	Outcome 5: Streamlined functioning and
management	financial annual reports,	management of LACEEP.
	increased management	
	_	

Indicative Budget (Detailed Budget: IDBDOCS #)

Activity	Bank Funding (US\$)	Local Funding (US\$)*	Total Funding (US\$)
Applied research in environmental economics	125,500	24,000	149,500
Advanced coursework in environmental economics	145,800	21,300	167,100
Research proposal workshops and capacity building sessions	121,840	31,351	153,191
Dissemination and communication of research results	31,720	43,080	74,800
Scientific backstopping and management	115,140	19,260	134,400
Administrative and indirect costs	60,000	11,009	71,009
TOTAL	US\$ 600,000	US\$ 150,000	US\$ 750,000

*Cash

IV. Executing agency and execution structure

The Executing Agency for the TC will be CATIE (Spanish acronym for Tropical Research and Higher Education Center).CATIE is an internationally recognized institution for knowledge management on sustainable development. It is highly commended in the region because of its ability to strengthen the skills of future environmental economists and policymakers in the Region and its aim to improve the management of natural resources at all levels (government, nongovernmental and private organizations, and its current and future catalytic impact on the Region.

CATIE legally represents LACEEP. CATIE provides a state of the art research infrastructure to guarantee LACEEP's technical, physical, and administrative development. CATIE has a long history in the region. Contracts and agreements to conduct research and create capacity in environmental economics between the IDB and CATIE have been signed in the past.

LACEEP is the Latin American and Caribbean Environmental Economics Program, established in 2005. LACEEP is a capacity-building effort that provides research grants to Latin American and Caribbean (LAC) researchers. It provides not only financial support but also close advice and follow-up by specifically appointed scientists, meetings with peers, access to literature, publication outlets and opportunities for comparative research. In addition, LACEEP offers a variety of courses ranging from the basics of environmental economics to advanced methodologies and approaches. With the continuous support of the International Development Research Center (IDRC), and up to 2012 from the Swedish International Development Cooperation Agency (SIDA), LACEEP has found a niche for researchers that come with real, urgent questions framed in research proposals that are both policy relevant and deeply rooted in their understanding and beliefs.

During its first seven years, LACEEP found a specific niche, formed a core team and became operational. Focus has been set in the three pre-conditions widely recognized as the most important features that

make networks and communities of practice attractive to members: good management, transparency and trust. LACEEP's governance body and rule design respond to these three pre-conditions. During this first period, they have identified the decision-making flow that complies with these principles while maintaining a dynamic flow of activities. Standardized procedures and follow up guidelines are available upon request.

In accordance with OP-273-2, the project team has determined that audited financial statements will not be required for this project taking into consideration that CATIE will be the executor and has been executing agency for the Bank of similar operations, the nature of the operation as well as its low level of complexity. However, the Bank will request that CATIE submit its annual financial statements audited by a firm eligible to the Bank. Also, it reserves the right to request financial statements audited by a firm eligible to the Bank, whenever deemed necessary.

V. Major issues

The risk exists of a lack of coordination between the IDB's Climate Change and Sustainability Division and Biodiversity and Ecosystem Services Program with the continued research and training that LACEEP is conducting. This risk will be mitigated by increased participation of IDB staff in the selection of research proposals and workshops. Past research and courses conducted by the Bank will be taken into account. In addition, IDB staff will be eligible to attend courses and workshops.

VI. Exceptions to Bank policy –

N/A

VII. Environmental and Social Strategy

It is not anticipated that the activities to be financed in this TC will have negative direct or indirect social or environmental effects. Following ESG's project classification process (Safeguard Policy Filter and Safeguard Screening Form) requirements, it has been determined that this project falls under Category C. No environmental assessment studies or consultations are required for Category "C" operations.

Annexes:

Annex I - Procurement Plan Annex II – Safeguard and Screening Forms Annex III - TORs

Country: Regional Project number: RG-T2274 Period covered by the plan: 24 mon Threshold for ex post review of pro			Goods and serv				nomics of Ecosystem Serv	ices and Climate Ch	Public or private sector: (indicate which applies) ange in LAC
eriod covered by the plan: 24 mon hreshold for ex post review of pro Item Ref.			Goods and serv						
hreshold for ex post review of pro			Goods and serv	vices (in US\$):		Consultir	a convicací in LISÉ).		
Item Ref.	arements.		Goods and serv	nces (in 059)					
						Constant	ig services(in 055)		
No. AWP	Description (1)	Estimated	Procurement	procurement (ex ante or ex-post)		financing centage	Estimated date of the procurement	Technical review by the PTL	Comments
	Description (1) contract cost (US\$) Metho	Method (2)	(3)	IDB/MIF %	Local/other %	notice or start of the contract	(4)	Comments	
1 Component 1									
Goods									
Good 1 (brief desc	ription)								
Non consulting se	vices								
Service 1 (brief de	scription)								
Consulting service	s								
_	1: Support for Latin American Imental Economics (LACEEP)	US\$750,000	SSS	ex-post	80%	20%	May-13		SSS: Centro Agronomico Tropical de Investigad y Ensenanza
Individual consult	ants								
Consultant 1 (brie	description)								
2 Component 2									
3 Project Execution	Unit								
Operating expense	S								
т	otal	US\$750,00	Prepared by:			Date:			

(3) Ex ante/ex post review: In general, depending on the institutional capacity and level of risk associated with the procurement, ex post review is the standard modality. Ex ante review can be specified for critical or complex process.

(4) Technical review: The PTL will use this column to define those procurement he/she considers "critical"or "complex"that require ex ante review of the terms of reference, technical specifications, reports, outputs, or other items.

SAFEGUARD POLICY FILTER REPORT

This Report provides guidance for project teams on safeguard policy triggers and should be attached as an annex to the PP (or equivalent) together with the Safeguard Screening Form, and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

	IDB Sector		ENVIRONMENT AND NATURAL D CLIMATE CHANGE ADAPTATION	
	Type of Operation		Technical Cooperation	
	Additional Operation	on Details		
	Investment Checklist		Generic Checklist	
	Team Leader		Lemay, Michele H. (MICHELEL@ia	db.org)
PROJECT DETAILS	Project Title		Capacity Building in the Economics Services and Climate Change in LA	
	Project Number		RG-T2274	
	Safeguard Screenin Assessor(s)	ng	Lemay, Michele H. (MICHELEL@ia	db.org)
	Assessment Date		2013-02-22	
	Additional Comments			
	Type of Operation	Technical Coop	peration	
	Safeguard Policy Items Identified (Yes)	Activities to be financed in the project area are located within a geographical area or sector		(B.01) Disaster Risk Management Policy– OP-704
SAFEGUARD POLICY FILTER RESULTS)	The operation is in compliance with environmental, specific women's rights, gender, and indigenous laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).		(B.02)
		The operation (including associated facilities) is screened and classified according to their potential environmental impacts.		(B.03)
			pecifically designed to increase the nan and natural systems to adapt to nate.	(B.04)
			udes activities to close current icits" or to increase the capacity of	(B.04)

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		human climate	and natural systems to adapt to a changing		
		agency. require	nk will monitor the executing /borrower's compliance with all safeguard ments stipulated in the loan agreement and operating or credit regulations.	(B.07)	
		goods a be inco agreem docume	e safeguard provisions for procurement of and services in Bank financed projects may rporated into project-specific loan lents, operating regulations and bidding ents, as appropriate, to ensure mentally responsible procurement.	(B.17)	
	Potential Safeguard Policy Items(?)		ential issues identified		
	Recommended Action:	 Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR. The project triggered the Disaster Risk Management policy (OP-704). A more limited and specific Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704). Please contact a Natural Disaster Specialist in VPS/ESG or INE/RND for guidance. Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please contact a INE/CCS adaptation specialist for guidance. The project triggered the Other Risks policy (B.04): climate risk.Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc);Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies. 			
	Additional Comments:				
	Name of person w completed screen		Lemay, Michele H. (MICHELEL@iadb.org)		
ASSESSOR DETAILS	Title:				
	Date:		2013-02-22		
	1		-		

SAFEGUARD SCREENING FORM

This Report provides a summary of the project classification process and is consistent with Safeguard Screening Form requirements. The printed Report should be attached as an annex to the PP (or equivalent) and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

	IDB Sector	ENVIRONMENT AND NATURAL DISASTERS- CLIMATE CHANGE ADAPTATION POLICY
	Type of Operation	Technical Cooperation
	Additional Operation Details	
	Country	REGIONAL
	Project Status	
PROJECT	Investment Checklist	Generic Checklist
DETAILS	Team Leader	Lemay, Michele H. (MICHELEL@iadb.org)
	Project Title	Capacity Building in the Economics of Ecosystem Services and Climate Change in LA
	Project Number	RG-T2274
	Safeguard Screening Assessor(s)	Lemay, Michele H. (MICHELEL@iadb.org)
	Assessment Date	2013-02-22
	Additional Comments	

	Project Category: C	Override Rating:	Override Justification:
			Comments:
PROJECT CLASSIFICATION SUMMARY	Conditions/ Recommendations	 consultations a Some Categors safeguard or m B.3).Where releases a safeguard, or m environmental a health and safe The Project T containing the B requirements for Environment Point Po	ental assessment studies or re required for Category "C" operations. ory "C" operations may require specific onitoring requirements (Policy Directive evant, these operations will establish nonitoring requirements to address and other risks (social, disaster, cultural, ty etc.). Team must send the PP (or equivalent) Environmental and Social Strategy (the or an ESS are described in the olicy Guideline: Directive B.3) as well as Policy Filter and Safeguard Screening

		Form Reports.
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SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	Identified Impacts/Risks	Potential Solutions	
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	Details	Actions
DISASTER SUMMARY	The Project should include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. Alternative prevention and mitigation measures that decrease vulnerability must be analyzed and included in project design and implementation as applicable. These measures should include safety and contingency planning to protect human health and economic assets. Expert opinion and adherence to international standards should be sought, where reasonably necessary.	A more limited and specific Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704). Please contact a Natural Disaster Specialist in VPS/ESG or INE/RND for guidance. Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please contact a INE/CCS adaptation specialist for guidance. The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.

ASSESSOR	Name of person who completed screening:	Lemay, Michele H. (MICHELEL@iadb.org)
DETAILS	Title:	
	Date:	2013-02-22

Capacity Building in the Economics of Ecosystem Services and Climate Change in LAC RG-T2274 Terms of Reference Network of Environmental Economists

I. BACKGROUND

- 1.1 According to UNEP (United Nations Environment Program), the Latin-America and Caribbean region (LAC) is among the richest regions in biodiversity worldwide. South America, alone, accounts for half of the terrestrial biodiversity in the world, and the region includes some of the world's most biological diverse countries including Brazil, Colombia, Ecuador, Mexico, Peru and Venezuela and the most biologically diverse area (the eastern slope of the Andes). Twenty percent of the protected areas worldwide are located in LAC and 54% of the Caribbean flora cannot be found anywhere else on the globe. Additionally, the region contains close to 800 million hectares of forested areas, 570 million hectares of wild savannas, 700 million hectares of productive lands and 27% of the planet's available drinking water. Biodiversity is one of the region's most valuable assets and of strategic importance for overcoming poverty and attaining a long-term sustainable development model for LAC.
- 1.2 Following up on a recommendation of the Independent Advisory Group in 2011, the Inter-American Development Bank (IDB) has started the development of the Biodiversity and Ecosystems Services (BES) program aimed at helping countries in the region to achieve more effective policies and investments in biodiversity conservation and the maintenance of ecosystem services, while opening new economic and business opportunities for enhancing the value of the region's natural capital as a contribution to sustainable development. The program recognizes that: (i) Latin America and the Caribbean is among the most bio-diverse region in the world; and (ii) conserving biodiversity and the associated ecosystems services means maintaining ecosystem functions which are not only essential for growth in key economic sectors such as agriculture, but also are critical for stabilizing the world's climate and helping people adapt to unpredictable impacts from climate change. Ecosystem services such as water regulation recharge and filtration, flood mitigation, storm surge protection and carbon sequestration are becoming increasingly valuable given global climate change predictions.
- 1.3 The BES program will be presented to the board in February 2013 and will be launched at the Annual Meeting of Governors in Panama, March 2013. The program has already been included as an OC Special Program in the 2013 budget.

II. OBJECTIVES

This main objective of this consultancy is to strengthen the regional capacity in the economic analysis of ecosystem services and climate change as a fundamental element for effective policy for sustainable and inclusive development.

Specific objectives:

- 2.1 Generate new and valuable economic data on climate change, biodiversity, and ecosystem services and the role that they play in the economic sectors within LAC
- 2.2 Train researchers and policy makers in economic valuation tools necessary for the analysis of climate change, biodiversity, and ecosystem services
- 2.3 Create a space for collaboration and cooperation on the generation and use of valuation data on climate change, biodiversity, and ecosystem services
- 2.4 Provide a forum for advanced communications to be able to more effectively disseminate information supporting the need to value climate change impacts, biodiversity, and ecosystem services.

III. CHARACTERISTICS OF THE CONSULTANCY

- 3.1 *Type of Consultancy*: This is a consultancy of a firm/company or research institution with duration of 24 months.
- 3.2 *Qualifications*: Firm, consortium, or specialized research institution of international standing with demonstrated experience and in-depth expertise in topics related to environmental economics, natural resource economics, and economic development policy, particularly in LAC. This includes aspects related to: (i) climate change, (ii) ecosystem services, (iii) biodiversity, (iv) water resources, and (iv) natural resources. Previous experience with multilateral institutions and projects is desirable. Extensive knowledge of the regional context for creating research capacity in environmental and natural resource economics among LAC research and policy making institutions while improving the management of natural resources and contributing to a better understanding of the causes and effects of environmental degradation and its relationship with development and poverty, particularly as it relates to climate change is strongly desired.

3.3 Expertise required on team: expert(s) in environmental and natural resource economics; expert(s) in climate change, ecosystem services, and biodiversity; and expert(s) in mentoring and capacity building.

IV. ACTIVITIES

- 4.1 To achieve the objectives, the Consultancy will complete the following activities:
 - a) **Applied research in environmental economics:** This activity entails issuing small grants in a competitive process to Latin American and Caribbean environmental economists conducting applied research in a range of topics related to the environment, climate change, ecosystem services, and biodiversity.

This Should Include:

- 7 grants to junior researchers to cover research expenses (evaluation and tutoring) for up to one year
- Support to junior researchers by scientifically recognized tutors

Topics Should Focus On:

- <u>Climate Change</u>: Encourage proposals looking at the effects of climate change on local livelihood strategies, and specifically on the impact of climate change on agriculture and water availability, adaptation strategies to cope with extreme events, and evaluation of effectiveness of REDD initiatives.
- <u>Biodiversity</u>: Using common methodologies typically used to analyze renewable natural resources and common pool resources, open call for proposals looking specifically at ecosystem valuation.
- b) Advanced coursework in environmental economics: This activity entails creating and strengthening capacity in environmental economics, by carrying out advanced courses in environmental economics once a year and facilitating short courses in coordination with the workshops.

This Should Include:

- One basic long course on environmental and resource economics. Expenses that will be covered includes: honoraria, travel costs and per-diem of two professors and one assistant, travel costs and per-diem of 25 students, and course materials
- Travel costs and honoraria of a professor lecturing in two short courses and per-diem for 20 participants

- Travel costs and per-diem of two professors and one assistant lecturing one advanced long course on environmental and resource economics, and travel costs and per-diem for 18 students
- c) **Research proposal workshops and capacity building sessions:** This activity includes workshops that will take place twice a year and will serve as a place for junior researchers to present their research proposals and for scientifically recognized professors to give short, one-two day capacity-building sessions according to their areas of expertise.

This Should Include:

- Per-diem and travel cost of 44 participants, including applicants, members of the Scientific Committee, the secretariat, and grant holders for 3 workshops
- Materials and logistics for 3 workshops
- d) **Dissemination and communication of state-of-the-art research results:** This activity includes the preparation and publication of an indexed systematic review of research in environmental and resource economics from Latin America and the Caribbean and preparation of seven working papers.

<u>Indexed systematic review</u>: In order to provide researchers in the region and practitioners with an updated source of information about the activity on environmental and resource economics, an indexed systematic review of all the available studies done by researchers on Latin America and the Caribbean should be prepared, with a structure that facilitates the recognition and access to the accumulated research in the region, including research on the economics of climate change impacts and biodiversity and ecosystem services.

This Should Include:

- Dissemination of an indexed systematic review on environmental and resource economics for the LAC region.
- Language review, peer review, diagramming and printing of seven (7) working papers produced by the grantees.
- e) **Scientific backstopping and management:** This activity would support the scientific and administrative management of the consulting firm.

V. DELIVERABLES AND PAYMENTS

5.1 The Consultant will produce the following products:

- a) Seven contracts based on peer-review and approved proposals to be executed during years 2014-2015.
- b) Five working papers with IDB acknowledgements.
- c) Course syllabus for three long courses and four short courses.
- d) List of participants to the seven courses.
- e) Course material in easily accessible magnetic media.
- f) Agenda and list of participants, including grantees and members of the committees (scientific, advisory and donor).
- g) Report on systematic review of environmental economics publications.
- h) Technical and financial annual reports.
- i) All documents must be delivered to the IDB in electronic form.

5.2 Timeline:

- a) 12 months after contract is fully executed: Report #1 on status of activities executed
- b) 24 months after the contract is fully executed: Report #2 on all activities executed
- c) 24 months after the contract is fully executed: All deliverables in Section 5.1

VI. SUPERVISION AND COORDINATION

6.1 Responsibility for coordination of the Consultancy will rest with Michele Lemay (<u>michelel@iadb.org</u>) (INE/RND) with the support of Ashley Camhi (<u>ashleyc@iadb.org</u>) (INE/RND).