

## TC Document

### I. Basic Information for TC

▪ Country/Region:	Regional
▪ TC Name:	Developing PES Guidelines for the Amazon Region through the experiences of the <i>Bolsa Floresta</i> PES Program
▪ TC Number:	RG-T2545
▪ Team Leader/Members:	Team Leader: Maria Claudia Perazza (INE/RND); Team members: Michele Lemay (INE/RND); Enrique Ibarra (INE/RND); María Elisa Arango (LEG/SGO); and Yolanda Valle (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:	January 23, 2015
▪ Beneficiary:	Countries of Latin America and the Caribbean
▪ Executing Agency and contact name	Inter-American Development Bank (INE/RND)
▪ Donors providing funding:	BIO Fund - Special Program for Biodiversity and Ecosystem Services
▪ IDB Funding Requested:	US\$320,000
▪ Disbursement period (which includes execution period):	28 months (including a 22-month execution period)
▪ Required start date:	May 2015
▪ Types of consultants (firm or individual consultants):	Consulting firm and consultants
▪ Prepared by Unit:	INE/RND
▪ Unit of Disbursement Responsibility:	INE
▪ Included in Country Strategy (y/n); ▪ TC included in CPD (y/n):	N/A
▪ GCI-9 Sector Priority:	Poverty reduction and equity enhancement; and Regional cooperation and integration

### II. Objectives and Justification of the TC

- 2.1 The general objective of the proposed Technical Cooperation (TC) is to improve and expand the knowledge basis on Payment for Ecosystem Services (PES) in Latin America and the Caribbean (LAC) as a viable tool for biodiversity conservation and reducing environmental degradation. The specific objectives are: (i) assess the state of the art in PES in LAC, in particular the results and effectiveness of the six year experience of *Bolsa Floresta* Program

(BFP)<sup>1</sup>; (ii) to design a set of guidelines and procedures to implement, monitor and evaluate viable public-private proven-based PES schemes in the context of the Amazon region; and (iii) to disseminate field-proven strategies, guidelines and best practices for PES in tropical forest ecosystems of similar underlying conditions to present and future PES program managers in LAC.

- 2.2 PES are market-based instruments used for biodiversity conservation in LAC, which involve cash transfers from users of ecosystem services to providers of those services, conditional on continued provision. The market failure to recognize and compensate landowners for the environmental services that forests in their lands provide to society has been – since at least the mid-90s – considered a significant underlying cause of forest loss.<sup>2</sup> Therefore, PES is envisioned as a market-based mechanism through which this market failure could be addressed.<sup>3</sup> In its most simple form, PES are voluntary transactions in which a well-defined environmental service (or land use likely to deliver that service) is bought by at least one buyer from at least one provider of the environmental service under the condition that the provider secures the provision of the environmental service or desired land use.<sup>4</sup>
- 2.3 In spite of its relative straight-forward definition, monitoring the effectiveness of PES schemes to ascertain the provision of environmental services has been challenging. Many PES initiatives have been tested and implemented in Latin America targeting deforestation, watershed and biodiversity protection. There have been some efforts on mapping and analyzing PES initiatives, and also their relation to public policies on climate change, across Latin America.<sup>5,6</sup> Furthermore, efforts such as CIFOR's research on PES mechanisms<sup>7</sup> and Forest Trends PES matrix<sup>8</sup> are a step further and would contribute towards a network to promote experience exchange.
- 2.4 Nevertheless, many PES schemes, particularly public payment schemes for private landowners and communities in developing countries, have been implemented without the establishment of well-defined baselines and monitoring mechanisms that could have enabled sound performance assessments over time.<sup>9,10</sup> The establishment of baselines and monitoring mechanisms of PES schemes to determine added value and enforce conditionality has been inconsistent in many cases. This inconsistency is attributed partly to lack of financial and human resources, and political will, but also to the lack of proper

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<sup>1</sup> *Bolsa Floresta* is a PES program implemented in the Amazon Region

<sup>2</sup> Pearce, D. 1996. Global Environmental Value and the Tropical Forests: Demonstration and Capture. In: W. L. Adamowicz, P. Boxall, M. K. Luckert, W. E. Phillips and W. A. White. *Forestry, Economics and the Environment*, pp. 11-48. CAB International. Wallingford.

<sup>3</sup> Gómez-Baggethun, E., R. de Groot, P. L. Lomas and C. Montes. 2010. "The history of ecosystem services in economic theory and practice: From early notions to markets and payment schemes." *Ecological Economics* 69(6): 1209-1218.

<sup>4</sup> Wunder, S. 2005. Payments for environmental services: Some nuts and bolts. CIFOR, Occasional Paper No. 42.

<sup>5</sup> <http://idesam.org.br/wp-content/uploads/2013/04/Guia-de-Projetos-de-REDD-na-America-Latina.pdf>

<sup>6</sup> <http://www.imazon.org.br/publicacoes/livros/marco-regulatorio-sobre-pagamento-por-servicos-ambientais-no-brasil>

<sup>7</sup> See the most important publications at: [http://www.cifor.org/pes/\\_ref/publications/all\\_publications.htm](http://www.cifor.org/pes/_ref/publications/all_publications.htm).

<sup>8</sup> Further information at: [http://community.forest-trends.org/about/brazil\\_matrix](http://community.forest-trends.org/about/brazil_matrix).

<sup>9</sup> Tacconi, L. 2012. "Redefining payments for environmental services." *Ecological Economics* 73: 29-36.

<sup>10</sup> Ferraro, P. J. and S. K. Pattanayak. 2006. "Money for nothing? A call for empirical evaluation of biodiversity conservation investments " *PLOS Biology* 4(4): e105.

guidance on how to design, establish and monitor PES schemes.<sup>11</sup> Few guidelines have been developed to establish and conduct PES schemes.<sup>12</sup> However, in order to provide innovative, practical PES schemes in LAC, beyond the market approach, a closer look into the process of adapting PES schemes to local circumstances and issues relevant for their design, establishment and monitoring are needed, taking into account institutional and cultural diversity, and issues such as equity and fairness that are key for long-term success of PES schemes in regions such as the Amazon.<sup>13</sup>

- 2.5 A recent study was conducted on a large-scale and fully implemented PES scheme in the Amazon region - BFP.<sup>14</sup> BFP is currently the largest public-private financed payment for environmental services program in LAC and possibly in the world. Established in 2007, the program benefits over 38,000 people covering 10.8 million hectares in 16 protected areas in the State of Amazonas, Brazil. It has developed innovative approaches to carry out the program, overcoming communication and logistical challenges and applying a widely participatory approach and local empowerment strategy. The study suggests that BFP may contribute to reduce deforestation within its target areas while maintaining livelihood strategies of local communities, although the findings are preliminary and non-conclusive since the sample was small and not representative.<sup>15</sup> Nevertheless, the study lays out the foundation to undertake an in-depth analysis of the BFP, and derive lessons for the establishment of future PES schemes in the Amazon Region.
- 2.6 This project will contribute to address these challenges and advance PES programs in LAC by further assessing how well the instrument is delivering on its promise in the Amazon region and by providing a stepwise and tested approach of PES implementation in similar contexts of tropical forests with relatively low internal land use change pressure, low to moderate external pressure for land use change, which is likely to increase contingent on infrastructure development (particularly roads). Such PES “toolbox” will build on the experience and lessons learned from BFP.
- 2.7 As a result, this project would contribute to expand the implementation of preventive measures in areas bound to soon be impacted by agricultural frontiers, which is the case in many places in the Amazon, enabling others to adapt and replicate such strategies to their specific contexts.
- 2.8 The proposed TC will contribute to the following GCI-9 lending program priority targets:  
(i) poverty reduction and equity enhancement, as the TC will provide guidance on the

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<sup>11</sup> Wunder, S., S. Engel and S. Pagiola. 2008. "Taking stock: A comparative analysis of payments for environmental services programs in developed and developing countries." *Ecological Economics* 65(4): 834-852.

<sup>12</sup> Available from: [http://www.unep.org/pdf/PaymentsForEcosystemServices\\_en.pdf](http://www.unep.org/pdf/PaymentsForEcosystemServices_en.pdf)

<sup>13</sup> Corbera, E., K. Brown and W. N. Adger. 2007. "The Equity and Legitimacy of Markets for Ecosystem Services." *Development and Change* 38(4): 587-613.

<sup>14</sup> Börner, J., S. Wunder, F. Reimer, R. K. Bakkegaard, V. Viana, J. Tezza, T. Pinto, L. Lima and S. Marostica. 2013. Promoting forest stewardship in the Bolsa Floresta Programme: Local livelihood strategies and preliminary impacts. Center for International Forestry Research (CIFOR). Manaus, Brazil: Fundação Amazonas Sustentável (FAS). Bonn, Germany: Zentrum für Entwicklungsforschung (ZEF), University of Bonn. Rio de Janeiro, Brazil. [www.cifor.org/publications/pdf\\_files/Books/BBorner1301.pdf](http://www.cifor.org/publications/pdf_files/Books/BBorner1301.pdf).

<sup>15</sup> Börner, J., S. Wunder, F. Reimer, R. K. Bakkegaard, V. Viana, J. Tezza, T. Pinto, L. Lima and S. Marostica. 2013. Promoting forest stewardship in the Bolsa Floresta Programme: Local livelihood strategies and preliminary impacts. Center for International Forestry Research (CIFOR). Manaus, Brazil: Fundação Amazonas Sustentável (FAS). Bonn, Germany: Zentrum für Entwicklungsforschung (ZEF), University of Bonn. Rio de Janeiro, Brazil. Available from: [http://www.cifor.org/publications/pdf\\_files/Books/BBorner1301.pdf](http://www.cifor.org/publications/pdf_files/Books/BBorner1301.pdf).

establishment of PES schemes in environmentally and socially sensitive areas; and (ii) environmental sustainability, as the TC will focus on the provision and dissemination of guidance for the establishment of effective PES schemes in the Amazon region and other tropical forests in LAC. The proposed TC is also aligned with the Biodiversity and Ecosystem Services Program, as it will contribute to three of its four components: (i) assessing and integrating the economic value of biodiversity and ecosystem services into strategic economic sectors; (ii) investing in priority regional ecosystem conservation; and (iii) strengthening and fostering environmental governance.

### **III. Description of Activities/Components and Budget**

- 3.1 To achieve this objective, the TC is structured in three components:
- 3.2 **Component 1. Evaluation of BFP.** This component aims at evaluating the experiences and practices of BFP's six years of operations and its effectiveness, to identify what has worked, or not, and draw lessons learned and best practices. The analysis will be conducted on the program's impact on people and the forest, its achievements and shortcomings, including the effectiveness of financial resource allocation towards securing forest areas which, without a PES scheme, would have been degraded or lost. The methodology for such analysis will include gathering and organizing the program's data, procedures, strategies, and results, and conducting structured interviews and consultations with the program's direct stakeholders. The assessment will take into account the results of a previous study on BFP, building upon and expanding the methodologies applied in such study, including strengthening the participatory approach in native and traditional communities' engagement.
- 3.3 **Component 2. Development of a Toolbox for PES Schemes.** Building on the results of the previous activity, this component will produce a toolbox – a manual with a set of stepwise approaches to organize the strategies to design and implement public-private PES programs in the Amazon region, and the provision of guidelines to monitor and assess their results. The toolbox will lay out strategies, best practices and procedures for steps such as: identifying target areas; establishing baselines; setting up innovative payment schemes (e.g. public-private financial arrangements); negotiating with actors and addressing conflicts; monitoring, reporting and verifying results (from remote sensing to participatory mapping); adaptive planning to achieve expected results; and community empowerment and leadership.
- 3.4 **Component 3. Outreach and Dissemination.** To foster information exchange, stakeholder engagement and building partnerships, this component includes three main activities: (i) publication of the toolbox and its components in three languages - English, Spanish and Portuguese- in both electronic (pdf) and printed formats; (ii) showcasing results and experience in PES schemes in the Amazon, through organization and participation of international, regional and local technical events and workshops that will help sustain rich cross-sector discussions and disseminate the projects outputs; and (iii) dissemination through key web-based platforms, such as SDSN-Amazonia network and the IDB BIO Program webpage and other media outlets to support capacity building, knowledge exchange and networking among PES managers and other stakeholders. The dissemination strategy for the toolbox will involve liaising with the press, specialized websites and blogs including the IDB BIO blog, as well as organizing launch events with several stakeholders in LAC.

**Table 1. Indicative Results Matrix**

COMPONENT	OUTPUTS	OUTCOMES
<b>General</b>		Increased awareness among policy makers, academia and civil society, for the effective design and implementation of public PES schemes in the Amazon region
<b>1. Evaluation of BFP six year operation</b>	1.A. Information compiling, organizing and analysis of six year operations of BFP; and of other PES 1.B. Consultations and workshops with BFP stakeholders (virtual and live) 1.C. External evaluation	Independent peer-reviewed Evaluation of <i>Bolsa Foresta</i> PES scheme, drawing best practices and lessons learned and toolbox outline available for dissemination
<b>2. Development of Toolbox for Public PES Schemes</b>	2.A. One manual/toolbox for PES developed 2.B. Two workshops with key focus groups or stakeholders in LAC (virtual and live)	PES Toolbox: Practical guidance for the design, establishment and monitoring of public PES schemes endorsed for the Amazon region
<b>3. Outreach and Dissemination</b>	3.A. One Digital and physical publication of PES Manual/toolbox in three languages 3.B. At least three regional workshops/ technical meetings organized in major international events 3.C. Customized web-based platform on SDSN-Amazonia for upload all project products	Evaluation of BFP and the PES Manual/Toolbox disseminated to key stakeholders and available to the public through the internet platform SDSN-Amazonia, as well as the IDB/BES web page

3.5 The total estimated budget for this TC is US\$320,000 as shown in Table 2.

**Table 2. Indicative Budget**

Activity/Component	Description/activities	IDB/Fund Funding US\$	Total Funding US\$
<b>1. Evaluation of BFP six year operation</b>	1.A. Information compilation and organization 1.B. Consultations and workshops with local stakeholders 1.C. Evaluation of program's experiences and results; best practices and lessons learned; and outline the toolbox	104,000	104,000
<b>2. Development of Toolbox for Public PES Schemes</b>	2.A. Development of Manual/ toolbox for public PES schemes; 2.B. Workshops with focus groups	131,000	131,000
<b>3. Outreach and Dissemination</b>	3.A. Publications; 3.B. Web-based platform for dissemination and outreach; 3.C. Targeted events	85,000	85,000
<b>TOTAL</b>		<b>320,000</b>	<b>320,000</b>

- 3.6 The TC will be financed with resources of the Biodiversity and Ecosystem Services Program. IDB resources will finance services of consultants, workshops and technical meetings and the development of publications and web-based documentation. While no counterpart funding is included for budgeting purposes, the Project Team anticipates that key stakeholders (e.g. research institutions) will make in kind contributions with their time, local venues for workshops and data.

#### **IV. Executing Agency and Execution Structure**

- 4.1 Given its strategic objectives in generating knowledge and promoting South-South cooperation around market based instruments for BIO conservation, the TC will be executed by the Bank. The Bank has the regional ability to promote knowledge and innovation, and to impact policy on multiple scales within the Region. Also, the Bank has the capacity to ensure effective dissemination of best practices developed by this TC throughout the Region, thus making the regional coordination by the IDB a necessary aspect of this TC. As several of the activities, such as the regional workshops, will take place in the territories of beneficiary countries, the Bank will obtain a letter of non-objection from the corresponding country prior to initiating any activity in such country.
- 4.2 INE/RND will execute this TC. The monitoring and supervision of the TC will be carried out by INE/RND with the support of RND specialists in the country offices of participating countries, based on reviews of consultants' reports and other outputs and annual evaluation reports.
- 4.3 The Bank will contract individual consultants, consulting firms and non-consulting services in accordance with Bank's current procurement policies and procedures. The terms of reference for the consultancies and the procurement plan are included as annexes. The project team may directly contract the *Fundação Amazônia Sustentável* (FAS) to develop the project, for the estimated amount of US\$300,000, due to the following reasons: (i) it is a leading independent organization responsible for the implementation of the BFP PES Program with the collaboration of the State of Amazonas; (ii) FAS has extensive knowledge of the BFP and other PES initiatives in the Amazon, and the elements to undertake an in-depth evaluation of the program, having directly participated in a related study on impacts of the BFP (Börner et al. 2013); and (iii) it has the operational experience and a broad network of collaborators to build partnerships with public and private sectors and communities and NGOs necessary to develop operational, proven-based guidelines for PES schemes tailored to the Amazon region, all of which makes FAS uniquely qualified to carry out this project. Annex I presents a more detailed technical justification.

#### **V. Major Issues**

- 5.1 There is a risk of a lack of participation of key stakeholders in the review of experiences, results and challenges in implementing the BFP, as well as in the process of developing the toolbox. This risk is mitigated with the execution arrangements proposed above, and by including a strong emphasis on communications and local engagement from the start of the project, and also in disseminating the final results.

#### **VI. Exceptions to Bank Policy**

- 6.1 None.

## **VII. Environmental and Social Classification**

- 7.1 It is not anticipated that the activities to be financed in this TC will have negative direct or indirect social or environmental effects. According to the Bank's Safeguards Screening Toolkit, this operation is classified with "C": (i) no environmental or social risks; and (ii) direct contribution to solve an environmental issue. [See Safeguard Policy Report](#).

### **Required Annexes:**

- Annex I: [Technical justification for FAS](#)
- Annex II: [Terms of Reference](#)
- Annex II: [Procurement Plan](#)

**DEVELOPING PES GUIDELINES FOR THE AMAZON REGION THROUGH THE  
EXPERIENCES OF THE *BOLSA FLORESTA* PES PROGRAM**

**RG-T2545**

**CERTIFICATION**

I hereby certify that this operation was approved for financing under Special Program for Biodiversity and Ecosystem Services (BIO) through a communication dated January 23, 2015 and signed by Felipe Caicedo (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$320,000** in order to finance the activities described and budgeted in this document. This certification reserves resources for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

ORIGINAL SIGNED

05/12/2015

\_\_\_\_\_  
Sonia M. Rivera  
Chief  
Grants and Co-financing Management Unit  
ORP/GCM

\_\_\_\_\_  
Date

**APPROVAL**

Approved: ORIGINAL SIGNED

05/14/2015

\_\_\_\_\_  
Pedro Martel  
Chief (a.i.)  
Environment, Rural Development Disaster Risk  
Management Division  
INE/RND

\_\_\_\_\_  
Date