Book of Abstracts

Parallel session 8a - Forest management and biodiversity

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Session 8 – Parallel sector perspectives: Alignment of policy mixes for conservation and sustainable use of biodiversity across scale

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Parallel session 8a – Forest management and biodiversity

Session chair: Dr Carlos Manuel Rodriguez Echandi, Vice President, Conservation International

Aligning Payments for Ecosystem/Environmental Services (PES) in a policy mix: Costa Rica

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Aligning economic instruments with regulation in a policy mix for REDD+: Brazil

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16:30 Discussion
Title of presentation | PES: The political process. The case of Costa Rica, Ecuador and Mexico
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Name of presenter | Dr Carlos Manuel Rodríguez Echandi

**Abstract**

Between Mexico, Costa Rica, and Ecuador there are decades of experience with implementing payments for ecosystem services (PES) and conservation incentive programs. Yet, many aspects of their experiences remain poorly understood and would require special attention in any new or expanded use of these types of incentives. As these countries, along with many others, get ready to implement integrated approaches to Reduced Emissions from Deforestation and Forest Degradation (REDD or REDD+ with conservation, sustainable management of forests, and enhancement of forest carbon stocks), nations seek to understand how the lessons and challenges from their past experiences, as well as the wider lessons from similar initiatives around the world, can inform their emerging REDD+ strategies, policies, institutional frameworks, and tools for integrated landscape management.

Costa Rica introduced the concept of “Payment for Environmental Services” (PES) in its Forestry Law No.7575, which was enacted in 1996. The law provides the regulatory basis for the government to contract landowners of forests, tree plantations and agro forestry systems for the ecosystem services provided by their lands, and established a financing mechanism for this purpose, all under the primary responsibility of the National Forestry Financing Fund (FONAFIFO). This innovation resulted of the prior experience developed in the country regarding incentives to the forestry sector but was also influenced by the Rio Conventions. Current legislation recognizes and allows compensating four environmental services1: (1) greenhouse gas mitigation; (2) hydrological services; (3) scenic value; and (4) biodiversity.

By law it is provided that an amount representing three and a half percent of the revenues from the fossil fuel sales tax is presently allocated to FONAFIFO for funding its programs and operations, principally in making payments to participating land users for carbon offsets. Other sources of financing derive from voluntary programs and very recently by the internalization of environmental services associated to water use and production in the water fees.

The central principle of PES is that those who provide environmental services should be compensated for doing so and that those who receive the services should pay for their provision. This approach has the further advantage of providing additional income sources for poor land users, helping to improve their livelihoods by generating new mechanisms for national income redistribution.

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1 The Law for the management and conservation of soils also recognize environmental services but it has not been duly developed.
The Government of Costa Rica intends to continue the expansion of the Program and ensure the complete synergy between national and global objectives in PES implementation through: a) scaling up the successful PES program and its activities; b) covering the areas of biodiversity of global significance where buyers for environmental services do not exist; and c) provide long term financing for conservation of globally significant biodiversity.

Some of the main characteristics and positive impacts of the PES program in Costa Rica are:

- The program is conceived as an ongoing process of building capacities that must have flexibility to introduce the proper adjustments and better respond to changing conditions (socio-economic and environmental)

- As an instrument that could be used to address different needs, the mechanism of payments for environmental services can be used for the development of common agendas between the agricultural and forestry sector without having to go into deep competitions for the use of the soil, thus providing opportunities to enhance cross-sectorial approaches.

- It has demonstrated to be a fabulous instrument for the recovering of degraded lands and has produced very good results in the country and can be a useful tool to enhance the achievement of the objectives in the fight against desertification and land degradation.

- The mechanism does not necessarily requires that the beneficiary be the owner of primary forests, but only his will to devote their lands to conservation, that is, setting into regeneration areas that have accomplished a productive function for years on.

- The way the mechanisms has evolved in Costa Rica makes it the unique case in the world to have a national dimension and which has generated a very important capability for designing, monitoring and assessment of nation-wide projects with multi-stakeholders participation.

- The implementation of the PES program in Costa Rica as a national strategy for conservation has also lead to discover a powerful tool to “show up” to the population and decision-makers the additional values of forests (not just wood) and thus helping creating the enabling conditions to the internalization of them into final costs of goods and services. We must continue demonstrating the great contribution of forest ecosystems to the national economies.

- The PES Program as implemented in Costa Rica is not merely a financial instrument but a complex mechanism for the management, conservation and sustainable development of the forest and biodiversity resources, and is based on five fundamental pillars: a) Institutional capacities, b) Legal frame, c) Sources of Financing, d) Political framework and, e) Transparency and accountability.

- During 1997-2013 around US $300 millions were invested by the program including over 760,000 Has. of forests and forestry plantations protected and that have contributed indirectly to the well-being of over 8,000 beneficiaries.
• The achievements that the country has fulfilled are complemented with a series of associations or partnerships both at the national and international level which have provided the opportunity to enlarge the scope of the program and that we keep on strengthening with the aim to achieve the long-term financial sustainability.

In summary, the PES program in Costa Rica has contributed to the reduction of the rate of deforestation, recovery of forest cover and degraded lands, fight against illegal logging, reactivation of the forestry industry, contribution to rural development and national strategies to combat poverty and to the fulfillment of the environmental global goals.

The Costa Rican PES program attracted the attention of nations from the Region. Ecuador launched in 2009 Socio-Bosque (forest partners) with the intention of a direct yearly monetary incentive/ha of forest provided by the Government to beneficiaries interested in conserving their forest. It is a voluntary program and has the intention to protect forests and their ecological, economic, and cultural values (4 million hectares, reduce deforestation rates & their associated GHGs emissions and improve the living conditions of 1 million people, particular indigenous communities and remote villages. As of today it has almost half a million hectares of forest in conservation agreements with 9 thousand beneficiaries. Annual budget is of $3 million.

In 2002 Mexican authorities visited Costa Rica and in 2003 officialized their PES national program. This is operated by Conafor, the National Forest Commission

And has developed initiatives to pay for hydrological ecosystem services in the mountains of Coahuila and Veracruz, for carbon sequestered in the tropical forests of Chiapas. In addition, the Federal Government, through Conafor, has spearheaded efforts to preserve ecosystem services through several programs that have been modified and updated in order to improve their operation and enhance their impact.
**Title of presentation**
"Seeking innovation for financial schemes that value ecosystem services in the face of global changes."

**Name of presenter**
Felipe Carazo

**Abstract**

Even though PES has proven to be an effective tool for the conservation of forest coverage in the country; demand has increased and additional resources are required to maintain the sustainability of the program and, more important, to face contemporary environmental and development challenges. PES has traditionally been financed by governmental funds and international loans or donations. However, the positive response to Costa Rica’s C-neutral program shows a growing interest of the private sector to mitigate greenhouse gas emissions, moreover to commit with the protection of environmental services. This reaction opens an opportunity for applying direct approach: those who receive and use the environmental services can proportionally finance the provision of the services.

FUNDECOR is a Costa Rican NGO, established in 1989 to promote integrated natural resource management in the country’s Central Volcanic Mountain Range. The organization’s work enhances landscape management, assuring long term ecosystem service provision that prompts sustainable and equitable development and contributes to achieve the country’s water, energy and food security. To date FUNDECOR holds more than 400 technical assistance agreements with private owners of 42,000 ha of forest. These agreements facilitate the design, prove and implementation of new technical-financial schemes, including Costa Rica’s Payment for Environmental Services (PES) program.

**Key considerations**

- FUNDECOR has played a key role in the design and implementation of Costa Rica’s Payment of Environmental Services mechanism, with special focus in the Central Volcanic Mountain Range Conservation Area. For example, FUNDECOR implemented CARFIX, the first joint implementation project for the international trade of emissions reduction.

- Besides contributing to development of Costa Rica’s forestry sector and reduction of the deforestation rate, the locally focused approach of FUNDECOR has harvested a series of complementary results:
  - A network of forest owners
  - A field-proved PSE program with an integral landscape management perspective
  - Digitally-validated, field-verified and georeferenced database of forest units.
  - A direct impact in the socioeconomic development model of the local community: from livestock and agriculture exclusively to wood production and ecotourism.

- As long as forest continues to provide economic benefits in terms of goods and services, people will keep protecting their forest.
Key discussion points and conclusions

- FUNDECOR is constantly exploring other finance mechanisms through agreements with touristic sector, hydroelectrical generators and the beverage industry. In this practice questions arise:
  - Which is the added (economic, social and environmental) value of our forests?
  - How can the benefits in connectivity, biodiversity, livelihoods, reduction of vulnerability and strengthening of indigenous communities be quantified and incorporated into the scheme?
  - Can the PES scheme be re-conceptualized as a transaction rather than as a subsidy?
  - Does the Solidary Payment of Environmental Services has the potential to become an opportunity for the participation of private actors in forest conservation?
Title of presentation | Policy mixes over time, the case of Costa Rica: from agricultural frontier expansion to a modern PES scheme  
Name of presenter | Adriana Chacón-Cascante  

Abstract

Today’s Costa Rica’s Payment for Environmental Services Program is the result of an evolving policy process. Although it would be difficult to define an exact starting date, the promulgation of the first Forest Law in 1969 is a good reference point. Even though this law was not implemented, it set the basis for a future forest conservation culture that characterizes the country nowadays. The need for establishing a forest law comes as result of years of perverse incentives in favor of agricultural production and expansion at a high deforestation cost. Forest coverage went down from 75% in the 1950’s to a lowest 26% at the beginning of the 1980’s. As result of the accelerated deforestation rates, economic (market based) mechanisms started to be implemented since the 1980’s. They started as soft credits and tax exceptions to incentivize reforestation as well as the establishment of forest plantations. However, in the early 90’s the country had to eliminate its subsidy system in response to the Structural Adjustment Programs negotiated with the International Monetary Fund. In 1996, a new Forest Law was promulgated prohibiting forest land use changes and launching the national PES program.

Key considerations

- Costa Rican Payment for Environmental Services Program is the result of an evolving policy process.
- The mid 1900’s economic policy favored deforestation justified by a grow model based on agricultural production.
- Several market based mechanism were launched before the PES program. They can be considered a practice lab which lessons were later incorporated into the 1996 Forest Law.

Key discussion points and conclusions

- Although forest land use change is prohibited, the PES program has being successful in making the prohibition more acceptable.
Abstract

The CBD strategic plan for biodiversity 2011-2020 calls for further development of positive incentives for biodiversity conservation and the mobilization of financial resources for effectively implementing biodiversity targets, while duly taking into account the needs of sub-national governments, cities and other local authorities. In developing and transition countries, about 60% of sub-national public expenditure is financed by fiscal transfer schemes, under which public revenue is redistributed through transfers from higher to lower levels of government. Ecological fiscal reform and “getting the prices right” as important corner stones of a green economy and sustainable development also require appropriate conservation indicators, next to the traditionally used economic and social indicators, for redistributing tax monies to lower levels of government. Thus far, only Brazil and more recently Portugal have introduced protected areas as an indicator to redistribute tax revenues to local levels. In this presentation, we analyse this innovative policy instrument, building mainly on a review of existing experience as well as suggested design options. We will discuss ecological fiscal transfers (EFT) in terms of their effectiveness, cost-effectiveness, social impacts and institutional requirements, and specify their role in a wider policy mix for conservation. Finally, we will present in more detail the Portuguese scheme of introducing protected areas in intergovernmental fiscal transfers from the national to the local level, leading over to the next presentation in this session.

Key considerations

- What is the policy-mix of economic and regulatory instruments that must be in place for ecological fiscal transfers to work as a conservation incentive?
- How can ecological fiscal transfers work as an economic incentive for biodiversity conservation at local or state government levels?
- What are the future design challenges of ecological fiscal transfers?
- What are alignment challenges between ecological fiscal transfers and other instruments?

Key discussion points and conclusions

- Ecological fiscal transfers close a gap in the policy-mix of most countries as rewarding conservation benefits needs to consider both private and public actors.
- The choice of ecological indicators to be included in fiscal transfer schemes is important for the effectiveness and the incentive effect of EFT.
- Intergovernmental fiscal transfer systems are highly context-specific and ecological fiscal transfers need to be designed in the context of existing financial constitutions.
Title of presentation | Economic and financial incentives in the Portuguese conservation policy: role of and challenges for ecological fiscal transfers
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Name of presenter | Paula Sarmento

Abstract

21% of Portugal land area is integrated in the Natura 2000 network, which also includes protected areas, illustrating the size and strategic importance of these areas for sustainable and inclusive growth. Accordingly, while national authority, it is a strategic bet for Institute of Nature Conservation and Forestry (ICNF, IP) to support a management oriented to the promotion of resources available in protected areas, adding value through active management of these areas and encouraging partnerships with local agents, facilitating the establishment of economic activities compatible with the objectives of nature conservation and biodiversity.

Considering also the challenges posed by the implementation of the EU Biodiversity Strategy 2020, particularly as regards financing of actions for achieving the established goals with which Portugal is committed, the ICNF, IP is strongly committed to promoting a holistic approach for the implementation of the necessary financial instruments for resource mobilization.

In this perspective, we have been deepening the exercise of using economic and financial instruments under the legal regime of nature conservation (RJCN), and considering also the use of fiscal instruments. Various instruments will be identified in this area for promoting nature conservation and biodiversity, including contractual instruments, instruments of environmental compensation, funds, regulatory fees and the recently implemented ecological fiscal transfers (EFT) scheme integrated in the Portuguese Local Finances Law. We considered relevant to identify these different instruments and sharing the results of the experience acquired in projects and activities in progress in Portugal, through the demonstration of successful cases. These financial instruments play a differentiated role in implementing nature conservation and biodiversity policy in the overall policy mix, through the co-responsibility of all stakeholders, including the business sector, civil society, the administration and local governments, becoming a stimulus for the development of activities consistent with the objectives of promoting and boosting classified areas, safeguarding the integrity of natural values.

Key considerations

- What is the potential for successful implementation of financial instruments for achieving the objectives of nature conservation?
- Which are the experiences, representative of good practices that can be replicated?
- What is (or “can be”) the role of various economic instruments, among them ecological fiscal transfers, in the Portuguese biodiversity conservation policy mix?
- What are design challenges for improving ecological fiscal transfers in Portugal?

Key discussion points and conclusions

- The combination of the various financial instruments should be oriented to the sustainability of areas of high natural value, contributing for the natural heritage to become an asset associated with regional development.
Title of presentation | Ecological fiscal transfers for biodiversity conservation in Brazil: Options for a federal-state arrangement
Name of presenter | Rodrigo Sergio Cassola

Abstract
Biodiversity conservation usually involves costs at decentralized levels of government, whereas benefits reach up to national and global levels. A suitable policy instrument to account for these spillover benefits are Ecological fiscal transfers (EFT). Brazil and Portugal - countries that have so far adopted EFT – exclusively target local governments. In Brazil, 14 states have adopted the instrument as a compensation mechanism for municipalities, using protected areas as a major indicator; an arrangement known as ICMS-Ecológico. Until now, no EFT has been implemented to address the relations between federal and state governments. It is worth considering this, since implementing biodiversity conservation policies is frequently assigned to the state level. In this presentation, the rationale supporting a federal-state EFT in Brazil is explored, building on the analysis of the allocation of ecological public functions and of the biodiversity-relevant regulatory framework in Brazil. Policy options for implementing this federal-state EFT are then considered, especially whether to establish a new transfer scheme or to modify existing arrangements. The latter option is preferred, in the form of an instrument called FPE Verde. Finally, we report on thoughts to link EFT to REDD policy in Brazil and to research in Indonesia.

Key considerations
- Existing EFTs have limits because they only target the local level, whereas in federal states, state governments are important actors in implementing biodiversity conservation policies.
- The proposed rationale for a federal-state EFT in Brazil is: compensating land-use restrictions; compensating direct costs of biodiversity conservation and; rewarding commitment to national biodiversity conservation targets.
- Design challenges are greatly related to the availability of appropriate indicators and to the choice between creating a new transfer scheme and building on existing transfers.
- The author recommends building on an existing federal-state general purpose transfer scheme as the suggested policy option in the case of Brazil.

Key discussion points and conclusions
- As part of a policy mix, a federal-state EFT in Brazil can create incentives that promote better implementation of regulatory biodiversity conservation policies.
- An incentive effect is essential; otherwise the EFT might turn into an uncritical instrument.
- Institutional settings and policy windows can determine the choice for less optimal, but more viable alternatives, as in the case of FPE Verde.
- Emerging ideas on linking EFT and REDD+ bring new perspectives.
Title of presentation | Perspectives of Reducing Emissions from Deforestation (REDD+) and Forest Degradation with the new Brazilian Forest Code
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Name of presenter | André Lima

Abstract

CO₂ emissions from deforestation in Brazil represented, in the first decade of this century, over 60% of all emissions. In Amazon only, between 2000 and 2010, about 50 millions hectares were deforested illegally. Different actions to reduce deforestation, including REDD+ initiatives, are in place in Brazil now. At the same time, the new Forest Law approved in 2012 modified significantly regulatory rules. This presentation aim to explore the main changes of the new Forest Law and the perspectives of Reducing Emissions from Deforestation and Forest Degradation within this context.

Key considerations

- The forest code has two important rules for environmental protection (Legal Reserve “RL” and permanent protection areas “APP”).
- The Federal constitution and the environmental legislation establishes that all illegal deforestation of native forests is penalized with administrative fine and obligation of full recovery of the environmental damage.
- The new law approved in 2012 modified significantly regulatory rules of estates and recovery of RL and APPs amnestying all illegal deforestation until July 2008 (over 50 million hectares of forests and other native vegetation throughout the nation) with consolidation of occupancy and reduced significantly the recuperation obligation.
- With the work of environmental organizations was possible to reduce the losses and get some few progress.

Key discussion points and conclusions

- Strength the Amazon Fund becoming a great fund for REDD+, allowing direct transfers to governmental, local communities and non-governmental organization according to their performance in protecting forests and reducing deforestation.
- Develop a tax incentives program in large scale for preservation, sustainable use and forest recuperation (ecological ICMS and tax exemption for chain forest recovering).
- Without giving forests the same support and differentiated treatment it gives to large sectors of the economy such as agroindustry, energy, mining and manufacturing, the Brazilian government will not fulfill the promise it has made to society of integrating production and protection and of making Brazilian agriculture more sustainable, as well as more efficient and competitive in the long run.
**Title of presentation**  | REDD+ and economic instruments implementation on the ground: Lessons from Mato Grosso.  
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**Name of presenter**  | Laurent Micol  

**Abstract**

REDD+, understood as a set of integrated strategies and financing mechanisms designed to sustainably reduce emissions from deforestation and forest degradation of large territories, directly relates to national and subnational policies – including command and control policies as well as economic instruments. In Mato Grosso state, in the Brazilian Southern Amazon, the prospect of implementing new economic instruments for forest conservation such as the Environmental Reserve Quota (CRA) or the Ecological Value-Added Tax allocation (ICMS-E) is very promising. Tough, these instruments are highly interdependent with the resolution of remaining governance gaps regarding land tenure, management of forest activities, land use planning and financial management of forest-related funds. Mato Grosso has made decisive steps towards the setting-up of a state REDD+ framework, that will help progress in an integrated way on these issues. However, its implementation will require alignment with the National REDD+ strategy and effective international financing arrangements.

**Key considerations**

- The implementation of economic instruments highly depends upon and can contribute to the strengthening of traditional, command and control policies such as the environmental licensing of forest-related activities.
- Jurisdictional nested REDD+ frameworks are a promising approach to support integrated sets of actions to sustainably reduce deforestation at large scales.

**Key discussion points and conclusions**

- Governance gaps in terms of transparency, participation, accountability, coordination and capacity in the different areas of forest policies, resulting in low effectiveness and widespread illegality and corruption, need to be faced within the scope of REDD+ implementation.
- National REDD+ strategies need to be designed to integrate subnational efforts with their own approaches and priorities, varying according to the local conditions. International carbon finance will be a key source of revenues, though not the only one, in order to implement the policies and instruments included in REDD+ frameworks.
Abstract

Since 2007 parties to the UNFCCC have been negotiating policy approaches and positive incentives for Reducing Emissions from Deforestation and Degradation (REDD+) for the post-2012 (post-Kyoto) period. The hope lies in the Parties expanding the role of forestry practices in the climate regime through the creation of incentives for avoided deforestation and forest degradation, sustainable management of forests and conservation and enhancement of carbon stocks. This presentation will analyze economic and political instruments that are governing REDD+ initiatives in Brazil – the largest global emitter of greenhouse gases from deforestation and forest degradation. The presentation focuses attention on existing instruments (such as the ICMS-Ecológico, PES, sectorial plans and environmental compensations) and how REDD+ is inserted in this policymix.

Key considerations

- Economic instruments are usually introduced and applied in contexts in which various command-and-control regulations pre-exist.
- Complementarities between instruments have been noted.
- Vatn (2005) distinguishes between three main categories of policy measures: Economic instruments, based on the assumption that agents, be they individuals or institutions, are rationally calculative; Legal instruments, assuming both rationally calculative and social or normative reasoning; Informational instruments, operating through cognitive and normative processes, and an assumption of agents’ bounded rationality.
- In Brazil, it is important to look at the degree to which national and regional policy instruments with conservation aims have been effective in reducing the pace of deforestation.
- Given the priority of deforestation avoidance in national climate policy, as well as the sensitivity to Brazil’s historical rates of deforestation in the global context, the evolution of such policy instruments is of general interest for the study of biodiversity conservation in the tropics.
- With the objective of analyzing the interaction between different instruments the presentation aims to answer how different policy instruments interact to both reduce deforestation and generate positive outcomes for biodiversity conservation and sustainable use.

Key discussion points and conclusions

- The majority of the instruments at the disposal of decision makers working at the interface of agribusiness expansion and biodiversity conservation in the Brazilian
Amazon may be complementary in principle but reliant on institutional coordination at all levels – both horizontal and vertical – to be effective in stemming further massive land use change.

- There is a great need for increasing capacities of public managers regarding public policies and instruments available for conservation.
- Public managers believe that the mix is very important to achieve the goals that the instruments proposed, but in practice it is very difficult to apply the mix.
- Absence of legal and governance structures may make it impossible to implement the mix.
- Monitoring of these instruments and management of information on impacts and their relative effectiveness on the ground is essential so that public managers can make a better choice of instruments to include in the mix.