PAYMENT FOR ECOSYSTEM SERVICES IN BRAZIL: BETWEEN EFFICIENCY AND EQUITY

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Issues

• Pressures on Brazilian ecosystems;

• PES and its potential to reduce pressures;

• Efficiency and equity in PES schemes;

• Two Brazilian experiences of PES;

• Conclusions.
Pressures on Brazilian ecosystems

- The first megabiodiverse country;
- Six continental biomes: Amazon; Cerrado (Brazilian Savanna); Atlantic Forest; Caatinga; Pantanal and Pampas.
- Loss and fragmentation of those biomes Atlantic forest: less than 7% remains;
- Cerrado: lost of half of original area in last 50 years;
- Pressures in the border of Amazon forest.
How to address ecosystem loss?

• Increase in governance (but I will not discuss that);
• Creation of incentives for preservation in coexistence with command and control policies;
• Payment for ecosystem services as a potential to incentivize preservation and also increase life standards of landowners and landusers;
• PES: Economic instrument;
• PES experiences: Funds (governmental or NGOs) and by markets.
Contribution of PES for sustainability

- Strong potential to increase conservation and improve the relationship of landowners and landusers with the environment;
- Potential to fulfill the conditions for sustainability (environmental, economic and social);
- To assure that contribution: efficient and equitable.
PES and efficiency

Law and economic approach:
- Efficiency as the allocation which brings greatest welfare in society.
- Efficiency as implementation of legal rules for the least cost.

Paper approach:
- Efficiency as additionality. More environmental benefits for the amount invested
- Important question: how to define additionality for PES schemes?
PES and equity

• Poor landowners or land users (small farmers; indigenous and tradicional communities)
• Opportunity to reduce poverty while incentivating preservation
• Equity as assuring access of those groups to PES schemes
• Equity as allowing empowerment of those groups to shape the schemes.
Brazilian experiences

- Experiences in Atlantic forest:
  - Water conservation project (Extrema/State of Minas Gerais);
  - RPPN (Natural Patrimony Private Reserve) (State of Paraná).
Water conservation project (Extrema)

- Volunteer program based on defined goals;
- Four years contracts between supplier and municipality;
- Reforestation of riparian areas and other degraded areas;
- Land use management in order to avoid soil erosion, the fencing of forest areas, etc.
- Monitoring:
  - Suspension of contract if goals are not achieved;
  - Periodical analysis of water conditions.
Water conservation project (Extrema)

- Average month income of landowners between US$ 315,00 and US$ 500,00.
- PES: Income increase;
- Landowners were used to a standard use of the land;
- PES program allows an economic viable alternative which less environmental impacts;
- Future developments. Intention to increase the allocation of the costs to beneficiaries of the services (companies; dairy product certificates, etc).
Natural Patrimony Private Reserve/Paraná

- Percentage of ICMS (state tax) budget is directed to cities which increased protected areas;
- The cities may transfer part of it to land owners of Natural Patrimony Private Reserve (private protected areas);
- Financial resources must be used in conservation;
- Requirement of inscription in association of RPPN landowners.
Conclusions

1) Water Conservation Program
   Efficiency:
   a) improvement in water quality and availability.
   b) rehabilitation of degraded areas.
   Challenges: studies that evaluates reforestation with native species are scarce, impairing monitoring.
   Equity:
   a) Creation of more sustainable alternatives for landuse.
   b) Valorization of landowners as important stakeholders for conservation.
   c) Capacity building for landowners and communities for a sustainable use of natural resources.
Conclusions

2) Natural Patrimony Private Reserve

Efficiency:

a) Increase of the number of private protected areas.
b) Increase of financial resources for conservation.
c) Critics: Lack of flexibility of the use of money may desincentivate the creation of new areas.

Equity:

a) Better distribution of the burden of conservation, since landowners create RPPN voluntarily. Now they get a compensation for the benefits they create.
b) Strengthening of the landowners organization through the associations.
THANK YOU FOR YOUR ATTENTION

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