

Coordination problems of subnational policies for payments for watershed environmental services in Brazil

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Context

- Current proposals for a National Law of Environmental Services (PES) in Brazil
- Several subnational experiences, with many states and municipalities far ahead in terms of specific legislation and implemented policy initiatives, but with no central coordination
- Review of subnational PES ongoing programs and legislation in Brazil

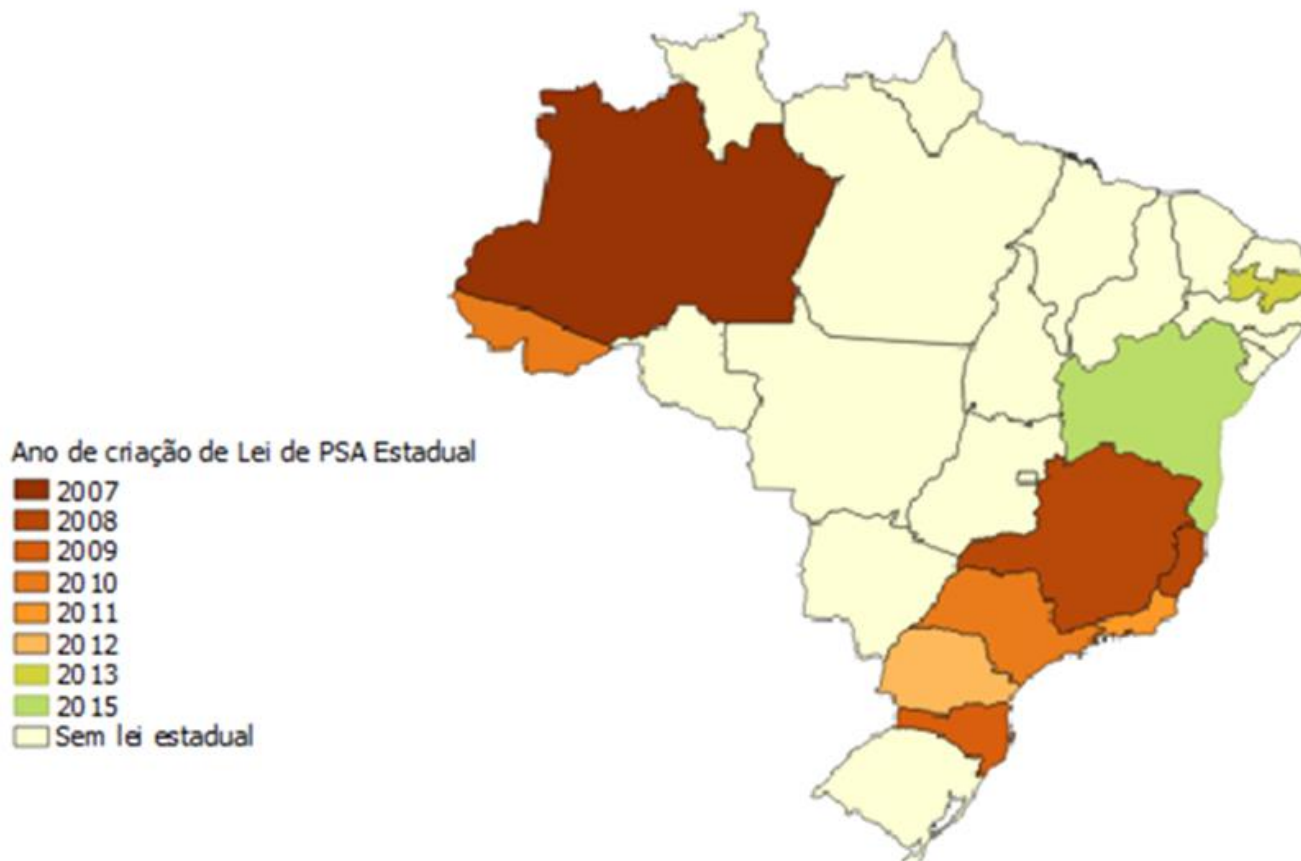
Conceptual framework: Castro & Young (2015)

- Coordination with the productive sector
- Coordination with civil society
- Coordination between powers (Executive, Legislative, Judiciary)
- Coordination with different Federative levels (Municipal, State, Federal)
- Coordination with the management unit
- Coordination with international institutions.

Methodology

- Identification, organization and analysis of the subnational PES experiences in Brazil
- Research within the websites of all State Legislative Chambers, and in selected Municipalities that are involved with PS projects
- Review of the State PES projects, and Municipal projects involved with the National Water Agency (“Water Producers”) and the Oasis Program
- Identification of the expected sources of funding, environmental service, payment scheme and funding capacity
- Simulation exercises on how much can be generated for PES with an extra charge in water & sanitation bills

States with PES legislation



Results by State

State	Program/Project	Period	Environmental service	Beneficiaries (unit)	Actual spending (R\$)	Hectares conserved
Acre	Certificação de Unidades Produtivas Familiares	2009 -2014	Sustainable use of forest resources	4.019 (families)	2,021,050	N. A.
Amazonas	Bolsa Floresta	2009-2014	Sustainable use of forest resources	9.421 (families)	38,596,000	N. A.
Espirito Santo	Reflorestar	2011 (início dos pagamentos 2013) - 2015	Sustainable use of forest resources	1.840 (producers)	30,000,000	12,000
Minas Gerais	Bolsa Verde	2011 -2014	Sustainable use of forest resources	1.860 (producers)	11,415,549	57,077
Rio de Janeiro	PRO-PSA GUANDU	2008-2015	Watershed conservation	70 (producers)	839,204	5,126
São Paulo	CAP-RPPN	2013-2015	Forest conservation	11 (Private Forest Reserves - RPPN)	1,900,000	1,859
São Paulo	Mina D'água	2013-2015	Watershed conservation	51 (producers)	5,300,000	118 springs; 110 hectares
Santa Catarina	Corredores Ecológicos	2011-2015	Sustainable use of forest resources	6 (producers)	466,076	16 hectares

State PES Projects: main issues

- Most projects focus on family farmers, but there many problems to make the payments
- Minimum payment per hectare is in Rio de Janeiro (R\$ 10/ha/yr for forest conservation), and the maximum is in Espírito Santo (R\$ 2,666/ha/yr for forest restoration)
- Some programs do not pay per area, but per property, family (R\$ 600 per year in Acre) or family-community mix (Amazonas, around R\$ 1200 per year)
- Monitoring and control costs are high and usually not considered in the program design
- All programs require the elaboration of projects for maintenance or restoration that demand technical assistance, which is also expensive

Municipal PES projects



Municipal PES Projects: main issues for “Water Producers” (ANA) and Oasis approaches

- Both work with partnerships with local governments, but establishing these partnerships is a big challenge
- They have relatively simple methodologies for estimating payment values, based on the opportunity cost of land, but differing on focus (ANA payment is based on agricultural land, while Oasis is based on conservation area)
- Concentrated in the Southeast/South of the country
- Technical assistance is a challenge due to the lack of local resources
- Difficulties of continuous monitoring
- Absence of municipal rules or laws

Sources of funding identified in subnational PES legislations in Brazil, 2013

TYPES OF RESOURCES	Number of Laws Reviewed		
	States	Municípios	Total
Total of Legislations Reviewed	10	7	17
Budget resources of the State/Municipality	10	4	14
Donations/transfers	10	3	13
Fines	8	1	9
Charging for the use of water	4	5	9
Bilateral or multilateral agreements	10	4	14
Environmental Supervision fee	2	1	3
Carbon projects	2	1	3
Royalties on oil/Natural gas	3	0	3
Environmental Conduct adjustment terms	0	4	4
Ecological ICMS	0	1	1
Other sources of funding	10	6	16

Final Considerations

- The cumulative amount spent with the State programs, 2008 until 2015, was approximately 89.8 million reais, while municipal projects between 2006 and 2013, it is estimated an expense of 31 million reais.
- The State projects are funded primarily by the State budgetary resources or by donations.
- In the case of municipal projects, the main source of financing of the PSA are the charges for water use.

Considerations on the sources of funds

- Budget resources of the State
- Donations and multilateral agreements
- Use of royalties from oil and gas
- Fines for environmental non-compliance/violations of the legislation
- Environmental Fees.

Final Considerations

- The most feasible financing mechanism that follows the “user/polluter pays” principal is the charging for the use of water. This model appears to ensure greater continuity of resources, but has institutional difficulties.
- An exercise was conducted to verify how much would be raised if it were established a value for the PSA on water bill.
- This exercise shows that the value rendered to the PSA would R\$ 718 million a year if the charge of 1.5% lies about water and sewer accounts of all watersheds.
- If this collection was of 2.1%, there would be a R\$ 1 billion annual for watershed PES projects in the country as a whole.

Recommendations

- Federal law should be broad and flexible.
- The continuity of the program It should be considered in its design: how to maintain it after the seed money is finished?
- Programs must simplify the mechanisms for attesting the occupation.
- Programs must be simple too, with territorial dispersion, but with the establishment of priority areas
- Clear and simple methodology for PES values

Thank you!
Muito obrigado!

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