



Supporting Ecosystem Services provision by Agricultural System: potential and limits of policy instruments in Costa Rica and France

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Objective and methodology

- Draw insight on the implementation of two policy instruments thanks to empirical evidences confronted to theoretical references
- Comparative analysis of two policy instruments and their implementation in local case studies:
 - Agri-environmental measures (*Mesures agri-environnementales*, **MAE**) in France, case of Guadeloupe
 - Program of recognition for environmental benefits (*Reconocimiento for beneficios ambientales*, **RBA**) in Costa Rica, case of Guanacaste
- A two level analysis
 - ✓ Description of policy design and implementation
 - ✓ Effect analysis based on primary data at households level

A framework of analysis based on the literature on PES instruments

	Engel et al, 2008 ; Wunder, 2013	Muradian et al., 2013 ; Corbera et al., 2007
Criteria of analysis of PES	Effectiveness (and efficiency) Additionality	Legitimacy (implementation organization, beneficiary)
	Distributional implications	Equity

Two cases studies

	RBA Costa Rica / Guanacaste	MAE France / Guadeloupe
Implementation	From 2007	From 2007
Budget	17,6 M\$ for 2006-2010	22,4M\$ for 2007-2013
Design and administration	Extension service of Ministry of agriculture	Extension service of Ministry of agriculture
Objective	Increase productivity + improvement of water and soil	Reduce the use of pesticides
Actions	<p>Direct incentive to farmers' "environmental-friendly" investments (within a list of 81 eligible technology), from 20 to 30% of the total cost excluding labour costs.</p> <p>Conditional payment (ex-post)</p>	<p>Direct incentive: 100 % of the cost of change of practice to adopt "environmental-friendly" practices</p> <p>Practice of fallow (from 658€ to 900€/ha/year)</p>

Local context and material

RBA in Costa Rica

- Case of North of Guanacaste region
 - Dry area – Water issue
 - Livestock extensive raising
 - Main sub sector and area for RBA use
- Survey (in march – may 2014)
 - Civil servants
 - 63 households random from RBA database

MAE in France

- Case of Guadeloupe
 - Dominant agricultural sectors (banana, sugar cane) that benefit from political support coexist with a pluriactive agriculture oriented to local market
- Survey (in February – April 2012)
 - Civil servants
 - 44 beneficiaries in a selection of agri-environmental operators

Implementation process, use of the instrument

- **RBA and MAE** : Lack of demand from potential beneficiaries
 - Lack of information, of promotion
 - Administrative complexity
 - Low financial amount (**RBA**)
- **MAE**: marginal funding compared to financial support to production
- **RBA**: almost the only direct financial support to farmers from the Ministry of Agriculture

Effectiveness (to provide ES) and additionality

- Effectiveness
 - **RBA and MAE:** Often limited because low contracting, spatial dispersion of parcels under contract
 - **MAE:** higher when involvement of agri-environmental operator from environmental institution or association in implementation
- Additionnality
 - **RBA Guanacaste:** Clear positive effect on fixed capital (building, equipment, machine). No significant effect on specific investment for environmental practices adoption (silvopastoral management, pasture optimization, fodder production), (Le Coq *et al*, 2014)
 - **MAE Guadeloupe:** No additionality, financial support for existing practices (Bonin *et al*, 2013)

Distributional implications - Equity

- **MAE Guadeloupe:**
 - Problem of access for small and pluriactive farmers
 - Maintain the existing unequal distribution of agricultural subsidies. Concentration of the budget on the dominant sectors (banana): 56% of the global budget of MAE (2009) / 10% of farms producing banana
- **RBA Guanacaste:**
 - Limited restrictive access condition to program
 - Clear orientation towards small and medium holders.

Legitimacy

	Agri-environmental issues	Distribution of economic outcomes
Organizations in charge of the implementation	<p>MAE and RBA : Legitimacy of public intervention on agri-environmental issues arise from negative environmental externalities that are not regulated by the market (public good), need for public policy in a context of market liberalization, removal of barriers to international trade (MAE in “green box” of WTO, RBA in the rural development pillar of agricultural sector strategy)</p>	<p>MAE (Guadeloupe) : unequal distribution of agricultural subsidies as a result of power asymmetry (agricultural lobbys). No implementation of aid capping</p> <p>RBA: program addressed to small and medium-sized farms. Aid capping implemented</p>
Beneficiaries	<p>MAE : raising awareness of the need to reduce the use of pesticides by banana producers in Guadeloupe following a serious pollution (chlordecone)</p> <p>RBA: diversity from awareness of preserving natural resources to an opportunity of intensification of cattle raising</p>	<p>MAE (Guadeloupe) : Denunciation from small and medium producers of the concentration of public funds on the largest farms in Guadeloupe</p> <p>RBA : no distribution issue denunciation, but negative perception of the very limited supports regarding investment done</p>

Conclusion

- Proximity of the two instruments (RBA and MAE)
- Efficiency and additionality are limited
- Difference regarding equity and legitimacy issues (although Guadeloupe is different from France conclusion)
- In Costa Rica, RBA is the main policy instrument / in France, MAE is a policy instrument among others
- In Costa Rica, RBA: global approach with investment at farm level / In France, alternating between global approach at farm level and MAE contract at plot level
- Research perspective: RBA and MAE as part of a policy mix (conservation and agricultural policies).