Type: Invited speaker

53. ES in Agricultural Ecosystems to enhance ecosystem services: specificities in concepts, measurement methods and promotion tools (OPEN) & 54. Managing Biodiversity and ES in Agricultural Habitats (OPEN)

## Supporting Ecosystem Service provision by Agriculture System: a review of available policy instruments, their potential and limits

Presenting author: Muriel Bonin

Other authors: Jean-François Le Coq, Olivier Aznar

Institution: CIRAD/UNA

Contact: muriel.bonin@cirad.fr

Ecosystem Services based mechanisms, such as Payment for Environmental Services (PES), have been largely analyzed in relation to forest conservation or management. However, PES schemes to promote ES derived from agricultural activities are still limited; existing agricultural policy instruments have been poorly analyzed in relation to the provision of ES. In this communication, we identify the opportunities and limitations to support ES provision of two agriculture oriented policy instruments: agri-environmental measures (AEM) in France and the program of *recognition for environmental benefits (REB)* in Costa Rica. Based on interviews with the institutional actors in charge of the implementation of the policies and with the beneficiaries at national and local level, we draw insights of their application using an analysis framework based on PES literature. Several criteria of analysis are selected (Engel et al, 2008, Muradian *et al.*, 2013): effectiveness and efficiency, additionnality, legitimacy, distributional implications, crowding-out effect of monetary incentives on intrinsic motivations, trap of compensation logic.

Using these criteria, we identify similarities and differences between these two policy instruments. The issue of additionality and payment for existing practices arise for both instruments. AEM remain in a compensation logic, while REB pay an investment for the provision of ES. AEM tend to reproduce the unequal distribution of agricultural subsidies. Several variables show a democratization of the use of the REB to the most disadvantaged agricultural populations (but the results remain contradictory for some variables).

We finally highlight the main debates that are facing the agricultural policy instruments to better promote ES provision by agricultural system. We identify lessons that may be learnt from this analysis to improve the articulation between agricultural and conservation policies.

## References

Engel S., Pagiola S., Wunder S., 2008. Designing payments for environmental services in theory and practice: An overview of the issues ecological economics. *Ecological Economics*, 65, pp.663–674

Muradian R., Arsel M, Pellegrini L., Adaman F., Aguilar B. Agarwa B., Corbera E., Ezzine de Blas D., Farley J., Froger G, Garcia-FrapolliE., Gómez-Baggethun E.,Gowdy J., Kosoy N., Le