

How can AEMs be more successful as instruments to promote biodiversity conservation?

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Agro-environmental measures (AEM) are designed to encourage landholders to adopt more environmentally friendly practices in the management of their land. Many different types of measures are included under the AEM umbrella, ranging from measures aiming at promoting improved farming practices, to measures oriented to promote biodiversity conservation in agro-forestry mosaics, and afforestation measures that do not have specific biodiversity conservation objectives. Different AEM are analysed for three case study countries, in particular AEM payments integrated into the EU Common Agricultural Policy (CAP) framework, for Portugal and Germany, and the adoption of integrated conservation and development projects (ICDPs) in agrarian reform settlements in Brazil, framed by the Brazilian federal Forest Code.

The Portuguese case focuses on the identification of the reasons for the lack of success of a conservation oriented AEM (applied to areas such as Natura 2000), including also an ex-ante analysis, with a spatial targeting exercise and a choice experiment to investigate how compensation levels and other contract features influence farmers' willingness to join. The German case focused particularly on an ex-post analysis of an existing, but unsuccessful, AEM for afforestation. A choice experiment and a follow-up questionnaire were used to investigate the compensation required by landowners for converting some of their land into forest and other relevant contract design features. The analysis in Brazil examined the effectiveness of a sequence of ICDPs and respective AEM promoted for deforestation mitigation, in Northwest Mato Grosso. The analysis sought to identify those measures that appeared to have been most effective at the individual household or lot level, and at the "policyscape" scale, using data from programme evaluations, sequential satellite imagery, farmer interviews and focus group discussions.

Experience with AEM in Portugal and Germany has not overall been favourable, while in Brazil, although the scheme seems to have been relatively successful at the individual plot level, the overall Amazon land use trends of widespread deforestation and biodiversity loss were not reverted. In all cases, the factors that appear most important include participatory design and continuous technical support to disentangle the complexity of multiple land use incentives and practices. This is particularly true in a policy environment in which changes are introduced erratically over time, and discontinuities in funding prevail, provoking uncertainty and unwillingness to adopt permanent measures. The ex ante analysis contributed to identify further aspects that can make AEM more cost effective and attractive to farmers and better integrated into the conservation policy mix.