

## A9f: GOVERNING FARM-FOREST INTERFACES: LESSONS FROM PRACTICE AND METHODOLOGICAL ADVANCES TO IMPROVE POLICY

### Effective inclusion of family farmers in the forest sector of Peru requires a multi-sectoral approach

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This paper seeks to identify the key ingredients of the transition towards agroforestry and sustainable land management (including small-scale forestry) by farmers living at the tropical forest-agriculture interface. It takes the case of Agroforestry Concessions (AC) in Peru, a promising legal mechanism in the last national Forest Law, that seeks to slow down deforestation in public forest land by formalising land and tree rights of encroaching smallholders, enabling their inclusion in the forest sector. The concession consists of a 40 years contract that commits the farmers to avoid deforestation and manage land sustainably. First, we map the multiple sectorial policies and institutional arrangements that regulate smallholders' land trees and production systems at the forest margin. Then we assess the coherence of their articulation in light of the challenges to comply with AC requirements and to manage or market forest products. We do so by analyzing data from a study of livelihoods and land and trees resources management by 120 potential beneficiaries of the Agroforestry Concession in 8 communities at the forest margin, complemented by focus group work on local governance and land cover and use dynamics, and on local actors' perceptions of risks and opportunities related to AC. We conclude that AC successful implementation depends on household level factors (such as farm size and composition), on the performance of the agricultural component of the farm, in particular on productivity, and ultimately on a set of complementary incentives, regulations and institutional arrangements from different sectors, besides, of course, the forestry one.

### Jurisdictional approach of farm-forest interfaces in Paragominas, PA: a municipal strategy to guarantee agricultural sustainable intensification and forest conservation in Amazonian landscapes

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In the Brazilian Amazon, since the last ten years, federal policies and value chains private commitments have been successful in reducing deforestation. However, the Amazonian landscapes are facing remaining challenges at the farm-forest interfaces such as halting forest degradation, restoring degraded lands, intensify and diversify land uses. Innovative local governance mechanisms are needed. This contribution will present a jurisdictional initiative in the Municipality of Paragominas (19342 km<sup>2</sup>), the first green municipality of the Brazilian Amazon. A geographic information system (GIS) has been developed, combining several data such as soils texture, slope, hydrographic and transport networks, land uses, forest cover including several level of degradation. It allowed to identify, for the whole municipality, land suitability for agricultural intensification and diversification, forest conservation and restoration and to support participative forward-looking scenarios. A municipal plan to reorganize land and forest uses has then been elaborated. Such plan allow to preserve or restore 9000 km<sup>2</sup> of forests and to reforest 3500 km<sup>2</sup> of land strategic for the production of ecosystems services. More 3500 km<sup>2</sup> of degraded forest could be converted into productive agricultural systems and 4200 km<sup>2</sup> of productive deforested areas could be intensified. Conversely to the classical opposition between production and conservation, this win-win strategy allows to build efficient landscapes and engage public and private actors. More, the GIS allows to monitor a large set of indicators that can be verified by third parties, such as certifying bodies, to transparently attest to the municipality's progress towards sustainability beyond the end of deforestation.

### Turning words into actions: analyzing forest interventions and their effects on land use and welfare in rural settlements in Acre and Northwestern Mato Grosso, Brazil / Transformando palavras em ações: analisando intervenções florestais e seus efeitos no uso do solo e bem-estar em assentamentos rurais no Acre e noroeste do Mato Grosso, Brasil

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Os estados amazônicos comportam 81% da área destinada para a reforma agrária no Brasil. Se estes assentamentos rurais teriam potencial de formar bolsões de baixa concentração de terra e gestão sustentável dos recursos florestais, a realidade aponta um contexto de desigualdade, informalidade e invisibilidade, levando ao fracasso, migração e a reconcentração da terra em sistemas de agropecuária extensiva com alto impacto ambiental e baixa rentabilidade. Para reverter a trajetória de desmatamento em assentamentos rurais o Brasil tem contado com apoio financeiro internacional para a implementação de intervenções florestais, definidas por iniciativas introduzidas ou apoiadas por entidade não comunitária que busca influenciar direta ou indiretamente a maneira como comunidades gerenciam suas florestas. Parte de um estudo comparativo global do CIFOR, este estudo identifica intervenções florestais e avalia seus efeitos no uso do solo e bem-estar com dados empíricos coletados em assentamentos com delineamento antes/depois e com/sem intervenção florestal. Os resultados indicam que as intervenções do Acre melhoraram o bem-estar familiar, mas não foram capazes de conter o desmatamento. Já nos assentamentos do Mato Grosso observou-se uma redução do desmatamento, aparentemente sem afetar o bem-estar familiar. Em todos os casos o desmatamento está associado com a área de floresta, apontando um custo de oportunidade com relação ao potencial de desenvolvimento de base florestal. Ou seja, mesmo para um País tropical relativamente capaz, como é o caso brasileiro no período estudado, o desenvolvimento de base florestal enfrenta desafios para se estabelecer como o uso do solo mais atraente, especialmente no contexto dos assentamentos rurais.

### Cerrado Biome: agricultural production and territorial dimension of environmental preservation areas registered in the Brazilian rural environmental registry

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In this study we analyzed the territorial occupation of the Brazilian Cerrado biome considering the areas within rural properties that are dedicated to environmental preservation – such as Permanent Preservation Areas (APP), Legal Reserves (RL), and additional vegetation areas –, ADPs, and areas occupied with agriculture,