

production, and the gross value of the main agricultural products (soybean, maize, cotton, coffee, sugarcane, citrus and beans). With the aim of making the physical boundary of the Cerrado biome compatible with the country's political-administrative structure, all microregions featuring at least 25% of Cerrado areas within their coverage were considered, which amounted to a total of 234.9 million hectares under 132 microregions and 1,394 municipalities. This Cerrado clipping encompasses 1,047,898 rural properties registered under SICAR (in January 2019), amounting to a total of 166 million hectares or 70.7% of the total Cerrado area. These rural properties preserve 66.9 million hectares of ADPs and 40.2% of their land, which accounts for 28.4% of the Cerrado study area. The gross value of the selected agricultural products – soybean, maize and cotton – accounts for more than 50% of the total produced in Brazil. The agricultural production in this territory, when compared against the country's total production is: soybean (55%), maize (58%) and cotton (98%). The areas planted with soybean, maize and cotton cover 28.7 million hectares. In this study we verified that the implementation of the Brazilian Forest Code is ensuring the preservation of ¼ of the Cerrado biome in this very important agribusiness region.

A multi-faceted approach to overcoming obstacles to the uptake of sustainable agricultural practices - outcomes of the low carbon agriculture project

Luis Tadeu Assad¹, Gracie Verde Selva¹

¹Instituto Brasileiro de Desenvolvimento e Sustentabilidade, Brasília, Brasil (assadmar@iabs.org.br; t-gracie@iabs.org.br)

Reducing carbon emissions from the agricultural sector is a key component of Brazil's national climate strategy. Low-carbon agricultural practices include many forest-centric activities including forest restoration and management. The implementation of low-carbon agricultural technologies by small and medium sized land holders faces many barriers including insufficient knowledge of available technologies, access to technical support and a lack of incentives for farmers to invest the necessary time and energy. The low-carbon agriculture project was implemented with the aim of promoting sustainable rural development in the Brazilian Amazon and Atlantic Forest biomes. It reached over 3000 small and medium sized private land-holders, supporting the implementation of sustainable agricultural practices such as integrated crop-livestock-forestry systems. The Project, the result of technical cooperation between the British Government, the Ministry of Agriculture and the Inter-American Development Bank and executed by IABS, utilised a three-prong approach. First the project provided access to information, through demonstration units, field days and the distribution of educational and technical materials. Second it offered rural producers a financial incentive for the implementation of one or more of four low-carbon agricultural practices promoted by the Project, prioritizing those with a forest component. Third the project provided training opportunities to local technical assistance agents that supported land-owners throughout implementation. This presentation will explore some of the results of the project in promoting sustainable rural development. It offers insights on how to combine governance interventions at national, state and local levels to achieve environmental and socio-economic development goals at the farm-forest interface.


Relationship between farmers and the forest within Machadinho D'Oeste/RO's settlement project: using fauna as a bioindicator

Angelo Mansur Mendes¹, José Roberto Miranda¹, José Paulo Franzin¹, Bruno Scarazatti¹, Fernando Antonio de Pádua Paim¹, Jaudete Daltio¹, Gisele Freitas Vilela¹

¹Embrapa Territorial, Campinas, Brasil (angelo.mansur@embrapa.br; jose-roberto.miranda@embrapa.br; jose.franzin@embrapa.br; bruno.scarazatti@embrapa.br; fernando.paim@embrapa.br; jaudete.daltio@embrapa.br; gisele.vilela@embrapa.br)

Monitoring farms in a settlement project in Amazônia for a period of 100 years is an initiative that produces a series of data on soil use and occupation dynamics by small farmers. These data enable producing sustainability indicators, which offer elements for understanding the consequences of the articulations among local strategies and public policies which aim to strengthen small farming in Amazônia. The aim of this study was to analyze the data collected in the survey carried out in 2018, 36 years after the settlement of the farmers in PA Machadinho D'Oeste-RO, using fauna as an ecological indicator. The survey was carried out in 414 lots. Their farmers were interviewed regarding their visual perception of the fauna: frequency of spotting (often; regularly; occasionally; once; and never); predation (animal attacks on crops or livestock); accidents (harmful effects on health); and consumption (fishing and hunting). The data collected enabled analyzing the distance between the forests and the lots, and also separating the forest's indirect effects through the fauna as positive (food security) or negative (accidents and predation).

Quality management of agroforestry products focusing on cultivated mountain ginseng

Tae Hoon Kim¹, Mi Sun Park¹ 

¹Seoul National University, Pyeongchang, Republic of Korea (switch-thkim@snu.ac.kr; mpark@snu.ac.kr)

Forest farming is the most common type of agroforestry in the Republic of Korea. Agroforestry products are recognized as cleaner products comparing with other agricultural products in the Korean market. Accompanied with positive market perception, demand on agroforestry products is expected to increase. This paper focused on cultivated mountain ginseng as a non-timber forest product. It aims to scrutinize the current status of producing cultivated mountain ginseng and policies for improving production of cultivated mountain ginseng in the Republic of Korea. Policy instruments for supporting production of cultivated mountain ginseng were analyzed. Policy instruments include regulatory, economic, informational, organizational and planning instruments. In particular, traceability scheme of cultivated mountain ginseng as an innovative policy instrument was introduced. This study indicates combination of multiple policy instruments for supporting cultivated mountain ginseng producers and consumers in the Republic of Korea. Base on the research results, this research suggests policy recommendation to reduce institutional barriers and facilitate agroforestry activities in the Republic of Korea.

Facilitating women's participation to improve management of the forest farm interface: participatory lessons from Northern Ghana and Southern Burkina Faso

Peter Cronkleton¹

¹CIFOR, Lima, Peru (p.cronkleton@cgiar.org)

In the Sahelian landscapes of Southern Burkina Faso and Northern Ghana, the integration of agriculture, forestry, and livestock within the natural resource management systems used by smallholder households makes it difficult to separate agricultural land use from forest and tree use. Women play integral roles in these systems, particularly in the management of trees. However, customary systems of land and tree tenure differentially constrain women's access to resources, while national policies do not acknowledge or support their roles as resource managers. In such context, multi-stakeholder dialogues could be an effective strategy for assisting policy makers to better understand these complex production systems. However ensuring that such fora include the perspective of both male and female managers is crucial and creating conditions in which women can share their resource management knowledge and experience is