Perspectives of Crop-livestock-forest systems (ILPF) in System of Payments for Environmental Services (SISA) of state of Acre

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Introduction
The deforestation area in the Acre state correspond to 14% of the territory. The pasture are responsible for 84% of the land use or 1.9 millions of hectares used to create a cattle of 2.7 millions in a extensive system. This activity is responsible for the main income of the rural productive sector. The Crop-livestock-forest systems can contribute decisively to increase the sustainability of the local livestock, increasing significantly the carbon and water on soil and vegetation, recovering of areas in different stages of environmental degradation, increasing the biodiversity, restoring landscapes and enabling of farmers to receive of payments for environmental services from SISA. The aim of this work is analyze the potential the ILPF like income generator and provider the environmental services.

Material and Methods
We will be analyzed the ILPF System, the SISA and program of Incentives for Environmental Services (ISA) in 22% of pastures areas during 20 years. The analysis economic ex-ante was realized presuming values of cost and incomes to three production systems livestock: Traditional livestock System, with ILPF and ILPF with payments for environmental services on the costs and incomes and without. The gross cost average of the traditional system and ILPF are respectively US$ 654 ha.year-1 and US$ 1.435 ha.year-1. The gross income average are US$ 752 ha.year-1 and US$ 2.053 ha.year-1 for traditional system and ILPF respectively. We estimated an additional income the 3% over the incomes from the payments of ES, distributed in 20 years. to make the economics analysis were used like indicators: benefit-cost relation (BCR) and Net Present Value (NPV), according Hoffmann et al. (1987). Likewise was evaluated the SISA operation and the ISA politics.

Results and Conclusions
The outcomes of the ILPF analysis showed that under interest taxes the 6%, 8% and 10% BCR would be 1.21, 1.17 e 1.13 and NPV would be US$ 3.595,4 ha.year-1, US$ 2.417,7 and US$ 1.585,3 ha.year-1, respectively. To ILPF + payment of ES, BCR would be 1.25, 1.20 and 1.16, and NPV could be US$ 4.205,4, US$ 2.920,2 and S$ 2.007,6 ha.year-1, respectively. BCR is less than 1 in the traditional system and the NPV is negative at the interest taxes used. There is potential to implement 420 000 ha of ILPF in 20 years at the 7000 farmers in Acre with a significant increase of income and provision of SA. It was found that the government of Acre has a legal-institutional framework of innovative governance that can leverage the fee for provision of ES. Was created Institute for Climate Change and Regulation of Environmental Services of Acre (BMI), SISA, the Development Company of Environmental Services (CDSA), ISA, follow advice and analysis, promoting the mechanisms and investment instruments SA and sharing of benefits to providers, recognized and legitimized, with participation and social control by the State Commission for Validation and Monitoring of SISA, the Scientific Committee and the Ombudsman System.

References cited
Hoffmann, R. et al. (1987) Administração da empresa agrícola. 3.ed. São Paulo: Pioneira.

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