



Implementation of TRU of iCLF as means of socioeconomic and environmental suitability of rural establishments.

Narliane de M. MARTINS¹, Thomás L. FERREIRA*¹, Carlos E. MARTINS², Marcelo D. MULLER², Willian F. BERNARDO², Anderson S. TEODORO³.
¹ IBIO, Rua Café Filho, 76, 35160-250, Ipatinga, MG, Brazil. 2- Embrapa Gado de Leite, 36038-330, Juiz de Fora, MG, Brazil. 3- Instituto Estadual de Florestas, Av. Olegário Maciel, 448, 35300-000, Caratinga, MG, Brazil.

Introduction

The integrated management of rural establishments is an imperative need to reconcile effectiveness and economic efficiency with social and environmental parameters. In this presentation the impacts of the implementation of integration Crop-Livestock-Forest systems - iCLF in the role of farmers as managers of rural areas.

Material and Methods

The *BioAtlântica* Institute - IBIO, in partnership with *Embrapa Gado de Leite* and the State Forest Institute - IEF-MG, guides the implementation of a technological reference unit -TRU with the iCLF in a family production unit - FPU. The receiving FPU has 22.13 ha, which dairy farming is the main source of income. The FPU is located in the watershed of the Ribeirão do Boi, belonging to the watershed of *Rio Doce*, in the city of Caratinga - MG. The performance of the UPF was evaluated by Agroecosystems Sustainability Indicators -ASI, an assessment tool and monitoring of agro-ecosystems sustainability (Ferreira et al, 2012).

Results and Conclusions

The watershed of *Ribeirão do Boi* has 35 hundred hectares and 347 watercourses with 35.8% of the area covered with Atlantic Forest and 35.3% occupied by grassland. The ISA has assigned an index of 0.51, below the suggested sustainability threshold (0.7). In other words, the FPU has unwanted/unhealthy condition if compared with its sustainability, a fact that led to the adoption of good practices by the producing family, with the support of partner institutions. A process of restoration of integrated forest cover change in the management and design of agro-ecosystems of FPU was began. 3.5 ha were allocated for the implementation of iCLF, 0.71 ha of riparian forest were surrounded and recovered by planting native species and 7.9 ha of native forest had their natural regeneration induced by fencing. These practices were aimed at better economic, social and environmental performance of the property, bringing the sustainability index to 0.53 in the first year after the interventions described.

Results and Conclusions

FERREIRA, J. M. L.; VIANA, J. H. M.; MONTEIRO DA COSTA, A.; VIEIRA DE SOUZA, D.; FONTES, A. A. Adequação socioeconômica e ambiental de propriedades rurais. Informe Agropecuário, Belo Horizonte, v. 33, n.271, p. 12-25, nov./dez. 2012.

Acknowledgments

To Embrapa Gado de Leite, to IBIO, to IEF, Mr. Sebastião Rocha, Mrs. Neusa de Fátima and his sons and to all partners and Ribeirão do Boi Sustainable Land Use Project.