



3rd INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

Study on Clean Technology Energy Production and Feed the Use of Agricultural Residues on Sugarcane and Integrated Biosystems

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Abstract

Economic activity divorced from production of energy and agro animal feed production in Brazil has low sustainability technologic, economic and ecological. The main objective of this proposal is the development of innovative technologies, seeking solutions for these problems with the use of residual biomass for use in the production of bioenergy and clean pet food on a small scale. The proposal involves the multidisciplinary study of the production chain with clean technology, both in feed production cost down, as in the process of obtaining raw materials with the participation of sugarcane mills of newborns in all phases of the project. This study will be selected communities and designed micro plants to feed production, bio-hydrogen and biogas. Through a case study of utilization of solid waste, this study uses innovative methods of analysis and synthesis processes both for power generation in small rural communities as the processing of waste into feed low cost solar power and biogas integrated way for drying food. Results were obtained on various parameters related to the economic viability and the use of clean energy from biogas and solar energy to replace the wood. Technology designed for each route, we will analyze various scenarios of feed production, based on raw material bagasse of sugarcane. This innovative system design will be released via internet and the diffusion of technology will be in partnership with collaborating companies through the implementation of a pilot plant for the community, including micro-entrepreneurs and farmers. Producers will be able to build and operate micro feed production plants in order to reach the local market to improve the nutritional characteristics of bagasse and production of nutritious meal of animal protein and vegetable waste sludge digester, with innovative formulas using low-cost computational tool as a way to replace the conventional diets.

Keywords: *digester, sugarcane, bio-energy.*

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