



3rd
INTERNATIONAL WORKSHOP
ADVANCES IN CLEANER PRODUCTION

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

Technological Innovation and Sustainability in the Sugar Cane Chain

Z. A. I. de Miranda

Independent Researcher - zoraideamarante@gmail.com

Abstract

This paper assesses the present pattern of interactions between universities, public research institutes and industrial firms in Brazil and the sugar cane business chain. The proposal is to identify and analyze possible links between universities, research institutes and enterprises for the scientific, technological and economic activity of the so called “sugar cane territory”, as well as the existence of some kind of link between these activities and sustainable management of this territory. This is done in light of a context of a late development of institutions and industrialization. Recent research points to a depletion of incremental improvement in the production of ethanol by the current route of fermentation of sugar cane, restricting the increase of production to increase in area planted. The expansion of sugarcane may result in increased deforestation, fire, contamination of aquifers, and the historical problematic work relations in the field. The databases analyzed in this research are: CNPq Directory of Research Groups and FAPESP-BIOEN Program. The relevance of this study is based on the strong expansion of cane cultivation, and the need to produce knowledge directed to social and environmental sustainability of this activity to support the definition of public policies for technological innovation and environmental management.

Keywords: *Technological innovation, environmental management, sugar cane business chain.*
