

TECHNOLOGY MANAGEMENT INITIATIVES IN AGRO-BASED INDUSTRIES OF COLOMBIA AND BRAZIL: THE ROLE OF GOVERNMENT, NATIONAL AND REGIONAL AGENCIES

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Purpose of the paper

This paper aims to compare and contrast some of the technology management initiatives aimed at improving the development of agro-based rural industries in the emerging economies of Latin America.

Related work

The research complements existing studies of technology management and technology transfer in developing countries (Hoekman et al, 2005; Abd Rahman and Bennett, 2009). Its focus is on rural and agro-based enterprises, which are acknowledged to be a cornerstone of economic development in countries and regions that are still in the early stages of industrialisation (da Silva et al, 2009; Lee, 2005).

Design/Methodology/Approach

For the purpose of providing a comparative analysis, two regions in Colombia and Brazil have been selected for study. They are Cauca in the southern part of Colombia and Rio Grande do Norte in the north east of Brazil. Desk research has been undertaken to ascertain the role of national and regional governments as well as other agencies in promoting and assisting technology management initiatives among rural enterprises. As supplementary empirical evidence, data have also been drawn from earlier research undertaken by the authors in the two regions (Nunes et al, 2014; Theodorakopoulos et al, 2014).

Findings

From the study undertaken in two rural regions of Colombia and Brazil there are a number of important findings relating to technology management and technology transfer in small-scale agro businesses.

1. Technological solutions are often sub-optimal compared with those of large companies.
2. There is little room for experimentation projects due to the continuous pressure for survival.
3. There is difficulty in managing risk (exogenous initiatives are easily rejected - sometimes legitimately as the business environment is considered quite unique).
4. Transfer of technologies may require significant adaptation and local content.
5. There are difficulties in achieving scalability of successful technologies (e.g. through credit shortage, lack of adequate skills, relative large investment needs, etc.)

Research limitations

The research has been undertaken in a small number of agri-businesses in only two rural provinces of Colombia and Brazil. The findings are therefore restricted to similar industries and regions in other developing countries.

Practical implications

The findings have practical implications for small agro-based industries in developing countries as well as policy making.

Originality/value of the paper

The paper is based on original desk and empirical research. It makes a contribution to the extant work on economic development in rural economies.

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