

IMPROVEMENTS IN THE AGRICULTURE-INDUSTRIAL BEFF CHAIN IN BRAZIL: TECHNOLOGICAL INNOVATION AND QUALITY

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This paper has as its main purpose to analyze the relationship between the innovation process of beef cattle activities in Brazil, its relation with the bio-technological innovation and to make some remarks on its relation to the final meat market. It focuses one of the main aspects of the change process on Brazilian beef cattle industry: some fast changes on the productive process are occurring, which link the advances on the network processes of genetic improvement with a potential improvement on the meat quality.

The main hypothesis is that cattle raising in Brazil went through double transformation in the 90's: a pressure for better use of the natural resources due to the high opportunity cost of the land, base of the extensive cattle raising, and a transformation on the final markets, moved by institutional changes and by the opportunities opened by the growth of the demand during the 90's. This transformation opened room for new forms of articulation along the productive chain, including the formation of research networks that aim at genetic and final quality improvement. The indicators of the productive transformation and its relation to the meat market are dealt with on the second item of this paper. A discussion on the bio-technological innovations is done on the third item, discussing the role of Artificial Insemination and Embryo Transfer on a context of technological diffusion and network constitution mentioned above.

The paper shows two fundamental problems so that the articulation between quality and productive innovation becomes a constant element and create a virtuous dynamic on cattle raising in Brazil:

- a) the still low level of differentiation of the final product, determined by the wealth distribution and by the high income elasticity;
- b) the technological gap and the strategies of the slaughter houses, which create a negative stimulus to product differentiation to the cattle breeders.

The elements that appear as defining the transformations on the direction pointed out on this paper are:

- a) the technological spillover effect in direction to quality, a result of the modernizing strategy in cattle breeding;
- b) the transformation of the institutional environment in relation to the sanitary norms and consumption on the final market. Such discussion is done on the fourth item of this paper, related to the final comments.