

Economic impact of the introduction of technology in a traditional livestock production system

R. Macedo^{2,3}, M.A. Galina⁴, J. Zorrilla⁵, J.M. Palma⁴ y J. Pérez-Guerrero⁶

Abstract

Over the past years the development of traditional production systems was achieved taking into consideration the premise that the obstacles that limit productivity can be overcome through the adaptation of the local conditions to technological developments from other environments. The purpose of this research was to evaluate the economic impact of technological introduction and utilization in a traditional livestock production system based on corn stubble (*Zea mays* L.) and Star grass (*Cynodon plectostachyus* P.) in Colima State, Mexico. The study evaluated meat, milk, grain and forage production, as well as the profitability of the system. The results showed that technology inclusion had the direct effect of increasing production costs, and reducing the labour force during corn planting. A reduction of milk production was observed while the production of meat and grain was positively affected. The conclusion was that under the conditions which applied in this study, the introduction and utilization of technological practices had a negative effect on the profitability of the production system.

Key words: Traditional livestock production system, technological adoption, economic impact, profitability.

Recibido el 9-1-2001 ● Aceptado el 2-7-2001

1. Proyecto SIMORELOS 97-03010- 29 financiado por CONACYT.
2. CECAF - APASCO. Km. 1.5 Carretera a Caleras. Tecomán, Colima, México. 28130.
3. PICP-Universidad de Colima. México.
4. CUIDA-Universidad de Colima. México.
5. CIPEJ-INIFAP. México.
6. FIRA - Banco de México. México.