

## Knowledge of Artificial Insemination and Agribusiness Management for Social Innovation in Rural Populations

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**Abstract :** Introduction: Artificial insemination in bovines helps to promote genetic improvement and can positively impact the rural economy. The Colombian armed conflict has forced a large portion of the rural population to abandon their territory, affecting their education, family integration, and economics. Justification: The achievement of education in rural populations was one of the Millennium Development Goals (MDGs) made by the United Nations. During the last World Summit on Sustainable Development (WSSD), it was concluded that most of the world's poor, illiterate and undernourished population lives in rural areas; therefore, access to education is considered one of the most significant challenges for governments in countries with developing economies. Objectives: To study the effects of training in artificial insemination and rural management on the perception of knowledge and the level of knowledge in rural residents affected by the armed conflict in Nariño, Colombia. Methods: The perception of knowledge and the theoretical-practical knowledge of 63 rural residents were evaluated on the topics of bovine agribusiness management, artificial insemination, and genetic improvement through the application of three surveys. 1) evaluated the perceived level of knowledge each rural resident had about each topic using the Likert scale, 2) evaluated the theoretical knowledge before training, and 3) evaluated the theoretical knowledge upon completion of training. Results/discussion: Of the surveyed rural residents, 54% stated that they knew how business management improved the performance of their bovine agribusiness, 54% answered the pre-training knowledge test correctly, while 83% correctly answered the post-training knowledge test. Only 6% of surveyed residents perceived that they had prior knowledge of artificial insemination and reproductive anatomy topics. Before training, 35% of surveyed residents answered correctly on these topics, while upon completion of training, 65% answered correctly. Regarding genetic improvement, 11% of participating rural residents stated that they knew this subject. The correct answers on this topic went from 57% to 89% before and post-training. Conclusion: Rural extension programs contribute to closing knowledge gaps in relation to the use of reproductive biotechnologies and bovine management in rural areas affected by armed conflict.

**Keywords :** agribusiness, insemination, knowledge, reproduction

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