

CHARACTERISTICS AND FACTORS INFLUENCING REPRODUCTIVE EFFICIENCY OF DAIRY CATTLE IN THE JAFFNA DISTRICT OF SRI LANKA

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Abstract

The purpose of this study was to explore the key factors affecting the reproductive efficiency of cattle, including conception rate and breeding methods. It also seeks to understand some basic aspects of cattle management in the Jaffna district of Sri Lanka. Out of the fourteen veterinary divisions, five veterinary divisions, viz. Nallur, Chavakachcheri, Vaddukoddai, Point Pedro, and Kopay were selected for the study, where AI was performed at a higher rate than the rest of the divisions. Data was collected through primary and secondary sources using questionnaires, personal interviews, and veterinary records. Results revealed that majority of the dairy farmers were males, middle aged with primary education level. Major sources of animals were bred on the farm or other sources such as neighbours and private farms. Cattle were mainly managed under an extensive system of management. Predominantly men managed the herds. The majority of farmers (90%) possessed Jersey, Jersey crosses and indigenous cattle. Age at first calving of most of the breeds relied within the optimum range of 2 to 2.5 years except Sahiwal which had the longest age at first calving. Indigenous cattle recorded the lowest milk yield. Except indigenous cattle all other breeds recorded longer calving interval than the optimum calving interval of 12 to 13 months. Higher conception rates were observed in cows aged 2–2.5 years across all veterinary divisions. Most of the farmers mentioned no seasonal differences pertaining to conception rate. Conception rate was high when inseminations were carried out during morning or afternoon hours. Demographic factors like gender, age, education level and family size influenced the number of animals served and breeding methods. It could be concluded that the reproductive performance is not up to the standard in the study area. There are factors which influence reproductive performance, conception rate, number of animals served and breeding methods. Action should be taken to improve the reproductive efficiency which will enhance the productive performance of cattle.

Keywords: Age at first calving, Artificial insemination, Calving interval, Conception rate.

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