

Identification of Factors Affecting Milk Production of Dairy Cattle at Galenbindunuwewa Veterinary Region in Anuradhapura District

N.L.K Ilangasingha^{1*}, J.M.P Jayasinghe¹, J.M.D.R Jayawardana¹, W.A Nihal Wedasingha²

¹*Department of Animal Science, Uva Wellassa University, Badulla, 90000, Sri Lanka*

²*Department of Animal Production and Health, Anuradhapura, Sri Lanka*

Dairy cattle farming is a key sector in livestock subsector which plays a crucial role as a source of income and a source of nutrients to the Sri Lankan community. This study was carried out to investigate the present status of milk production and to identify the main factors affecting daily milk production at Galenbindunuwewa veterinary region in Anuradhapura District. Total of 300 dairy farmers were selected using Stratified and Simple Random sampling techniques. Milk production and socio-economic data were collected using a pre-tested structured questionnaire covering 41 Gramaniladari divisions in this region. Data were analyzed for descriptive analysis followed by Regression Analysis model using Minitab 17 statistical software. Results of the study revealed that the dairy cattle farming is operated as the major income source of this area (69.4%). With average wean age of 3.14 months, Jersey Sahiwal cross breed was the major breed (28.5%) accounts for 14.8 Liherd average daily milk production. The best fitted multiple linear regression model predicted that of the value of 74.66% daily milk production suggesting that the number of milking cows in the herd, type of breeds, supply forage type, amount of night feeding supply, amount of mineral supplement, roughages feeding methods, concentrate feeding frequency per day, amount of concentrate supply, concentrate type, feed and water availability in cattle shed significantly ($P < 0.05$) affect the daily milk production. However, lack of housing facilities, poor quality feeds and water, less success in artificial insemination (AI) were reported as key constraints which need to be properly focused in future to increase milk production in Galenbindunuwewa veterinary region in Anuradhapura District.

Keywords: cattle farming, constraints, milk production, regression analysis