

## **Factors Affecting the Reduction of Milk Production under the Nomadic Pastoral System in Murunkan Veterinary Region from 2018-2020**

**Bandara<sup>1</sup>, R.M.U.S., Dias,<sup>2</sup> V.C., Fernando<sup>3</sup>, A.P.S. and  
\*Somasiri<sup>1</sup>, S.C.**

<sup>1</sup>Department of Animal and Food Sciences, <sup>3</sup>Department of Agricultural Systems  
Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura

<sup>2</sup>Department of Animal Production and Health, Mannar

\*sharinisc@agri.rjt.ac.lk.

Murunkan veterinary region in Mannar district is one of the leading milk-producing regions in the Northern province. However, data shows a drastic reduction in milk production in the area from 2018-2020. A survey was conducted involving 100 dairy cattle farmers selected from Murunkan veterinary region using a questionnaire to explore the causes of the drop in milk production. Additionally, Murunkan Veterinary Officer and the Livestock Development Officer were also interviewed for more information. According to the results, 78% of the farmers reared cattle under an extensive system. The sources of feeding grounds were roadsides (77%), government lands (45%), uncultivated paddy fields (28%) and marginal forest areas (27%). One farmer may have used more than one source of feeding ground. According to the data obtained from the Murunkan Veterinary Office, the estimated drops in milk production in 2018-2019 and 2019-2020 were 146% and 17% respectively. Similarly, annual per cow and daily per cow milk production were also reduced by 133% respectively during the 2018-2019 period. The ultimate reason for the production drop in 2018-2019 was the flood that occurred during this period that affected the available grazing lands. Moreover, the total number of milking cows declined by 6% in 2018-2019 compared to the 2017-2018 period due to the death of cows from an unidentified disease outbreak, worm infestations, bloat and foot and mouth disease. During the 2019-2020 period, the COVID-19 pandemic affected milk production as a result of mobility restrictions. The cattle reared in the extensive management system were restricted to grazing lands in Manthai-west which was far away from farmer dwellings and cows were not milked. In addition, labour shortage, less availability of medicines and other supplements, lack of transportation facilities and difficulty in selling milk were the other problems faced by livestock farmers during 2019-2020 period. All these factors together affected cow milk production leading to a drastic drop in milk production during the period from 2018 to 2020 in Murunkan Veterinary region.

**Keywords:** COVID-19 pandemic, Extensive management system, Grazing lands, Low milk production, Scarcity of feeds