

## A B S T R A C T

The general objective of this project was to study the comparative economics of cattle and buffalo production under rural farming conditions. This included a determination of the management practices, analysis of herd profitability, and the estimation of the multiple regression equations consisting of milk production function, demand for feed and the use of animal power. The field survey was carried out in 3 A.G.A's divisions namely Kuliypitiya, Polgahawela and Nikeweratiya in the Kurunegala district, using a structured questionnaire from November 1986 to May 1987, with randomly selected 210 cattle and/or buffalo farmers.

The mean herd size of the indigenous cattle and buffalo herds in the study area were 9.3 ; 16.7 respectively. The sex distribution of the buffalo herds was found to be nearly 1 : 1. The proportion of females were higher in cattle herds and comprised nearly 60 percent of the herd. The predominant method of feeding in the study area was free grazing. The mean milk yield of cattle and buffalo herds was found to be 1.53, 2.01 litre/cow/day, respectively.

The draught cattle and buffaloes were used for farm work only for 50 - 65 days only per year. The draught capabilities of cattle and buffalo were almost the same. All types of cattle farms (i.e draught/milk/milk and draught) recorded a net herd loss. The dual purpose and milk buffalo herd recorded a net herd profit. In the mixed herd, only dual purpose herd recorded a similar profit. The results clearly

indicated apparent diseconomy of rearing indigenous cattle in the study district.

The concentrate feeding significantly increased the milk production of cattle and buffalo herds. The result suggested that the milk yield of rural cattle and buffalo could be increased by providing better housing facilities. The highland ownership, lowland ownership farm gate prices of milk, distance to milk collecting centre, and availability of credit facilities were some of the major factors affecting the animal ownership in the rural cattle and buffalo herds.

The price of concentrates, availability of concentrates in the locality, farm gate price of milk and availability of common property resources in the area were the significant factors affecting the demand for feed.

The future development of the cattle and buffalo subsector in rural economy will depend to a great extent on bringing about a change in the attitude of the farmers. In order to achieve this, it is necessary to make the cattle and buffalo a regular cash income to the farmer.

Encouragement of the use of buffalo as a milk and draught animal rather than "draught only" animal will be the most important step towards such a change. The farmers will require assistance for this to overcome the constraints, mainly supply of quality feed at affordable price and provision of adequate marketing facilities.