THE SUCCESS STORY OF RKVY- SLBP CALF FEED SUBSIDY SCHEME IMPLEMENTED IN AYYAPPANCOVIL GRAMA PANCHAYATH, IDUKKI DISTRICT

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INTRODUCTION

More than 75% of the female calves are born to the weaker sections of the society in Kerala and majority of them reach production stage only by 3 to 4 years (Agriculture(AHG)Department, 2001). Inadequate feeding and unscientific management practices are the major constraints identified, for this delay in attaining puberty in dairy animals of Kerala (Agriculture(AHG) Department, 2001). Profit from dairy farming can also be increased, if milk production starts at an early age and thereby increasing the productive life of dairy animals (Kurian, *et al.*, 2012).

The Calf Feed Subsidy Scheme (CFSS) under Special Livestock Breeding Programme (SLBP) is the most prestigious scheme implemented through the Department of Animal Husbandry (AHD) of Kerala. The main objective of this scheme is the early attainment of age at first calving in dairy animals and thereby, increasing their productive life and improving the milk production status of the state, leading to self sufficiency (Agriculture(AHG) Department, 2001).

The CFSS aims at providing good quality feed to ensure health, proper management, scheduled vaccination against common diseases, insurance coverage for unforeseen loses, and better monitoring of calves, in order to bring the age at puberty, down to 14 – 16 months from the current state's average.

This study aims at evaluating the effectiveness of CFSS under RKVY-Special Livestock Breeding Programme implemented in Ayyapancovil Grama Panchayath, Idukki District.

Implementation and Evaluation of the scheme

100 crossbred healthy female calves, of the age 4 to 6 months born through artificial insemination, were enrolled under the scheme in September, 2011. The calves selected were ensured to be healthy and free from physical abnormalities. The calves were ear-tagged for identification and monitoring.

The subsidy for the envisaged Scheme under RKVY was INR 11395 for individual animals. The feed was distributed at subsidized rates to the calves enrolled in this scheme on monthly basis. The prescribed cattle feed ration for this scheme is as given in Table. 1

The calves were regularly monitored every three months and also on and then whenever possible. These calves were de-wormed at regular intervals under standard protocols, vaccinated against common diseases, and the owners were advised of proper management.

Table. 1 Schedule of Ration for different age groups

Age (Months)	Quantity of Feed (Kg)
4	30
5	45
6	52.5
7 to 18	60
19 to 32 months	75

The reproductive parameters like age at first heat, age at first artificial insemination (A.I), age of first conception and age at first calving of the individual animals were periodically recorded and evaluated. The averages of these values were compared with average values for the same for Kerala state and the effectiveness was evaluated. Moreover, the recording of milk production was done for possible animals using purposive sampling method and the average milk production was assessed.

The reproductive parameters under consideration were evaluated based on the age in months and the results are shown in table. 2. The average milk production of these animals was 16 liters per day.

The average age at puberty, age at first AI, and age at first conception for the 100 animals in this study were 14.88, 16.05, and 17.01 respectively. The age at first calving for 8, 42, 31, 13 and 6 animals were 22 months, 24 months, 27 months, 30 months and 33 months, respectively. The average age at first calving for these 100 animals was 26.09 months. These averages were compared to the averages for the state (Cattle Sterility Office Bulletin, 2010-11) and is graphically depicted in graph.1.

CONCLUSION AND DISCUSSION

Six animals which had age of conception ≥22 months were identified to have infertility issues like defective oestrous cycle or first degree endometritis, which were treated using standard protocols. The average age at first conception and age at first calving would have been lower, if there were no such infertility problems for the animals in this study.

The milk production in these animals was higher when compared with the animals not included in the scheme, in the same locality. In addition, the off springs produced by the animals in the scheme were healthier and the body weight of these animals were higher, to those born to animals not included in the scheme, but using the same batch of frozen semen for artificial insemination.

The results of this study revealed that better feeding and proper management of the dairy animals from the younger ages, can decrease the age at puberty, age at first AI, age at first conception and age at calving to considerably lower values, thereby maximizing the productive potential of dairy animals in Kerala, under prevailing conditions. The outcome emphasizes the fact that, heritable characteristics of age of puberty, age at first conception and age at calving is low but are more influenced by environmental factors (Mukasa-Mugerwa,

Table. 2. The recorded reproductive parameters of the 100 animals in the scheme

	Age in months				
Reproductive parameters evaluated	9-12	13-15	16 -18	19-21	> 21
Age at first heat	28	52	16	4	0
Age at first AI	12	49	35	4	0
Age at first conception	8	48	26	12	6

1989). The scheme was a complete success, as it achieved all the objectives intended. The success of this programme, points out that, the genetic potential of the dairy animals in Kerala in the present scenario can be exploited to the maximum, by better feeding and management practices.

The authors recommend widespread implementation of the Calf feed Subsidy Scheme by enrolling all the female calves born in the state, thereby decreasing the age at first calving of dairy animals and maximizing the productive life of dairy animals. This eventually increases the milk production of the state leading to self sufficiency.

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Graph.1. Comparison of the reproductive parameters of the Scheme with State's average