

Promotion of TANUVAS Mineral Mixture among Livestock Farmers in Karur District

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Abstract: The present study conducted by Krishi Vigyan Kendra, Karur district to give awareness and to promote TANUVAS mineral mixture to dairy farmers for milk production and reproductive performance of their animals. Totally 204 farmers and 516 milch animals from eight blocks were covered in Karur District under SCSP programme. The farmers were given awareness on the importance of mineral mixture for milch animals and were demonstrated the administration of TANUVAS mineral mixture. The results of the study indicated that the milk production was increased about 0.66 litres per day after the supplementation of TANUVAS mineral mixture @ 50 g/day per animal. The fat and SNF were increased by 60 per cent and 20 per cent, respectively. Mineral mixture plays an important role in enhancing the animal production performance.

Key words: Dairy animal, Mineral Mixture, Milk production, Awareness, KVK.

INTRODUCTION

In Karur district, the cattle population is around 1.9 lakhs (Regional Joint Director Animal Husbandry), in that per day milk production was 52, 929 litres (Source: Hand book on Karur District). The present study was focussed among the most downtrodden section of the society under the SCSP programme. Many of these community members were landless and their main source of income was through wage employment. However, around 2 percent of the SC population in Karur district are engaged in milch animal rearing. The problems faced by these farmers are shortage of green fodder, lack of awareness on mineral mixture supplementation, infertility problems and prevalence of diseases. These farmers own two or three animals for milch purpose with low yielding capacity (3 to 4 litres). Due to low income, the farmers resort to open community land grazing with

available grasses that are deficient in nutritional content. Similar observations were also made by Sharma *et al.*, 2008. Mineral and vitamins plays major role in milk synthesis in dairy animals. The reproduction performance was affected by dietary deficiency of mineral mixture in dairy animals (Srivara Buddhi Bhuvaneshwari, 2019). In order to address the above issues, Karur KVK took up the awareness campaign and promoted Mineral mixture among dairy farmers under SCSP programme in all blocks of Karur district.

MATERIALS AND METHODS

Totally 204 farmers and 516 milch animals from eight blocks were covered in Karur District under SCSP programme. The farmers were given awareness on the importance of mineral mixture for milch animals and were demonstrated the administration of TANUVAS mineral

mixture (Table 1). Animal were at different lactation stage (1st to 6th calving). Each two-kilogram (kg) packet given to one dairy animal which were used for a month. The dosage was 50 gm/day and demonstration done for one month period.

During this demonstration, the variation in quantity of milk and quality of milk (Fat and SNF) were assessed. Six animals from each block were selected to analyse the data.

Table 1. Activities Done by KVK To Give Awareness and To Promote Tanuvas Mineral Mixture to Farmers

S. No	Date	Village	Block	Activities done
1	11.07.2023	Rajapuram	Aravakurichi	Awareness and Distribution of Mineral mixture
2	12.07.2023	Neithalur	Thogamalai	Awareness on Mineral mixture
3	17.07.2023	Kumaramangalam	Kulithalai	Training given to farmers
4	21.07.2023	Somur	Karur	Awareness, Demonstration and Distribution of Mineral mixture
5	3.08.2023	Melapalayam	Thanthoni	Awareness, Demonstration and Distribution of Mineral mixture
6	5.08.2023	Renganathapuram	Krishnarayapuram	Awareness, Demonstration and Distribution of Mineral mixture
7	31.08.2023	Kurumbampatti	Kadavur	Awareness, Demonstration and Distribution of Mineral mixture
8	16.09.2023	Pillapayalam	K.Paramathi	Awareness, Demonstration and Distribution of Mineral mixture
9	20.09.2023	Kombadipatti	Krishnarayapuram	Awareness, Demonstration and Distribution of Mineral mixture
10	21.09.2023	Kambiliyampatti	Krishnarayapuram	Awareness, Demonstration and Distribution of Mineral mixture
11	22.09.2023	Papaiyampadi	Kadavur	Off campus training
12	26.09.2023	Pallapalayam	K.Paramathi	Awareness, Demonstration and Distribution of Mineral mixture
13	27.09.2023	Manavasi	Krishnarayapuram	Off campus training
14	30.09.2023	Naganur colony	Thogamalai	Awareness, Demonstration and Distribution of Mineral mixture
15	07.10.2023	Erumanayakanpatti	Kulithalai	Awareness, Demonstration and Distribution of Mineral mixture
16	07.10.2023	Chinnareddipatti	Thogamalai	Awareness, Demonstration

				and Distribution of Mineral mixture
17	19.10.2023	Ammapatti	Aravakurichi	Awareness and Distribution of Mineral mixture
18	15.11.2023	Archampatti	Thogamalai	Awareness and Distribution of Mineral mixture
19	18.11.2023	Archampatti	Thogamalai	Awareness, Demonstration and Distribution of Mineral mixture

The composition of the TANUVAS mineral mixture is as given in the Table 2, below:

Results and Discussion:

Table 2. Composition of Tanuvas Mineral Mixture

S.No	Minerals	Quantity (Percentage)
1	Calcium	20
2	Phosphorous	12
3	Magnesium	5
4	Iron	0.4
5	Iodine	0.026
6	Copper	0.1
7	Manganese	0.12
8	Cobalt	0.012
9	Zinc	0.80
10	Sulphur	2-3

The results of the study indicated that the milk production was increased about 0.66 litres per day after the supplementation of TANUVAS mineral mixture @ 50 g/day per animal. The fat

and SNF were increased by 60 per cent and 20 per cent, respectively. This in turn resulted in increased net return and higher BC ratio (Table 3.)

Table 3. PERFORMANCE OF TANUVAS MINERAL MIXTURE IN DAIRY ANIMALS

Particulars	Before feeding	After feeding
Milk yield (l/d) (Avg)	4.75	5.41
Change in milk yield (l/d)	-	0.66 litres
Milk Fat % (Avg)	4.4	5.0

Milk SNF % (Avg)	8.01	8.21
Gross cost (Rs.)	4150 (feed)	4300 (Feed + MM)
Gross return (Rs.)	11400	12960
Net return (Rs.)	7150	8660
BC ratio (Rs.)	2.74	3.01

The present study results indicated that there is an increase in milk yield and milk quality. Similarly, earlier authors also reported higher milk yield and milk quality during recent years. Vinothraj *et al.*, (2021) stated that TANUVAS mineral mixture has increased the milk production by 1.06 litres, fat by 1.73 per cent and SNF by 0.77 per cent in 30 days. Chitra (2021) reported that similar results were obtained by the trial, wherein there was an increase of 1.45 litres, increase of fat and SNF to 1.21 and 0.67, respectively. Vijaya Nirmala *et al.*, (2022) stated that milk

yield alone has increased up to 1.08 litres in 60 days.

Conclusion

From the present study, it was concluded that mean value of milk yield (lit), Fat %, SNF % and Net return found significantly higher in mineral mixture fed animal. When dairy animals are given TANUVAS mineral mixture supplement their production capacity is increased. Therefore, farmers can profit more from their dairy animals by using its supplementation.

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