

DAIRY SERVICE DELIVERY SYSTEMS IN NAMAKKAL DISTRICT OF TAMIL NADU

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Abstract: The present study was conducted in Namakkal District of Tamil Nadu to explore the various dairy service delivery systems like dairy cooperatives, private integrators, public departments, private veterinarians, para-veterinarians and their extent of share in delivering the dairy services to farmers. A total of 120 respondents were selected for the study by stratified proportionate random sampling method and the data were collected by personal interview method using pre-tested interview schedule. Most of the respondents predominantly availed the curative (99.17 per cent) and preventive (95.00 per cent) services from the private veterinarians than other dairy service delivery systems. The para-veterinarians are the major source for the 75.83 per cent of the respondents for availing artificial insemination services. The respondents were mainly depending on dairy cooperatives for getting concentrate cattle feed (73.33 per cent), mineral mixture & other supplements (73.33 per cent), training & extension services (60.00 per cent), insurance services (57.78 per cent) and fodder seeds and slips (33.33 per cent).

Keywords: Dairy, Health, Production, Service, Private, Cooperatives, Veterinarians.

INTRODUCTION

India is the largest milk producing nation in the world. Dairying has emerged as an important secondary source of income for millions of rural agricultural families and has assumed the most important role in providing employment and income generating opportunities, especially for landless, marginal and small farmers.

Dairy Service Delivery System is an agency or institution that delivers various inputs and services pertaining to milk production to the intended clientele either free of cost or charging according to the service rendered by them. According to Umali *et al.* (1992), livestock services can be grouped into two major functional categories: health and production services. Health services consist of curative and preventive services; while production services include

training and extension services and input supplies such as seed, concentrates, nutritional supplements, credit, insurance and artificial insemination (AI) facilities.

Consequent to the economic liberalization, the ability of dairy sector to capitalize the new market opportunity is constrained by the availability of quality dairy services which are critical for enhancing productivity and competitiveness. Hence, there is a need to understand the significance of various dairy service delivery systems like dairy cooperatives, private integrators, public departments, private veterinarians, para-veterinarians, educational institutes, etc and their extent of share in delivering the dairy services to farmers.

MATERIALS AND METHODS

The study was undertaken in Namakkal district of Tamil Nadu state which falls under Salem District Co-operative Milk Producers Union, which is one of the largest milk procuring union of Tamil Nadu Cooperative Milk Producers Federation. Apart from cooperatives, various private dairies, vendors and cream separation units are also procuring milk from the farmers. All the four taluks of Namakkal district were purposively included for the study. For each taluk, the revenue villages which are having a female bovine population of above 1000 animals were listed out. From this list, one village from each taluk was randomly selected for the research study. Respondents were selected based on the criteria that the farmers should have milch animal either a cow or a buffalo in milking condition and availing services from different dairy service delivery systems aforementioned. The different milk procurement channels available in the selected villages were considered as different stratum. A total of 30 respondents from each village were selected by using stratified proportionate random sampling method. Thus, a total of 120 respondents were selected for the study. The data were collected by personal interview method using a pre-tested interview schedule.

RESULTS AND DISCUSSION

The services availed by the dairy farmers from dairy service delivery systems were studied and presented in Table 1.

1. Dairy cooperatives

In case of health services, 75.55 per cent and 84.44 per cent of the dairy farmers received curative services and preventive services respectively from dairy cooperatives. But the respondents expressed that the health services offered by the dairy cooperatives was not available on day-to-day basis as the doctors visited once in a week and responded to the emergency cases as and when required on call basis. Among the production services, around three-fourth (73.33 per cent) of the dairy farmers received the concentrate cattle feed and the

similar finding was also reported by Sharma (2001). Also 73.33 per cent of the dairy farmers received the mineral mixture and other supplements from dairy cooperatives, whereas 57.78 per cent of the dairy farmers received artificial insemination and insurance services from the dairy cooperatives. The researcher observed that in some places the cooperatives arranged concentrate feed for their members even from the local merchants during shortage at cooperative societies. The artificial insemination services were provided by the trained inseminators or by the secretary of dairy cooperatives who had been trained for this purpose. Insurance facility was arranged by the dairy cooperatives and the premium charges were deducted from the milk amount paid weekly by the cooperative society. But this practice was followed only to a limited extent in all the dairy cooperatives of the study area. The training & extension services and fodder seeds & slips were received by 60.00 per cent and 33.33 per cent of the respondents respectively. The services received by the farmers for training & extension and fodder seeds & slips were also reported by Rathod *et. al*, (2012) and Sharma, (2001) respectively. The dairy farmers were given hands on training on scientific cattle management, fodder cultivation and clean milk production by the officials of cooperative milk union. Further, the farmers reported that the training and extension programmes were not communicated properly by the dairy cooperative officials. Only a small percentage of the dairy farmers (11.11 per cent) availed the credit facilities from the dairy cooperatives.

2. Private integrators

Most (81.82 per cent) of the respondents received the both curative and preventive services provided by the private integrators. The respondents expressed that adequate veterinary doctors were not available with the integrators to treat the regular cases but they attended only the emergency cases. Hence, the farmers relied on private veterinarians and para-veterinarians for the needed health services. It was found that 68.18 per cent and 45.45 per cent of the dairy farmers received artificial insemination services and concentrate cattle feed from the private integrators respectively. Even though the integrators had appointed the trained inseminators to look after the artificial insemination services, but the services were least utilized by the respondents due to the non-availability and poor response of inseminators. About one-fifth (18.18 per cent) of the respondents received the training and extension services on scientific management of dairy animals offered by the integrators. Only 9.09 per cent of the respondents received the fodder seeds & slips and mineral mixture & other supplements from the integrators. A very small percentage (4.54 per cent) of the dairy farmers utilized the insurance and credit facilities offered by the private integrators.

3. Public departments

Two-third of the dairy farmers (66.67 per cent) received the preventive services and 46.67 per cent of them received the curative services from the public departments. The public departments are providing their health services through veterinary dispensaries and veterinary sub-centres which are regularly functioning from 8.00 AM to 12.00 Noon and 3.00 PM – 5.00 PM. One-third of the respondents (34.17 per cent) availed the artificial insemination services; whereas 28.33 per cent, 21.67 per cent and 15.83 per cent of the dairy farmers received training & extension services, insurance and mineral mixture & other supplements from the public departments respectively. A meagre 1.67 per cent of the respondents received the fodder seeds and slips from the public departments. The public departments organize health camps in all the villages which are funded by the state government. In this, treatment of animals, vaccination and deworming are carried out by the veterinarians. In addition to that the best calf is selected through cattle shows and the calf owner is rewarded to motivate the other dairy farmers to adopt better management practices. Also the department is providing insurance facilities to the respondents with subsidy to the premium charges. The dairy farmers were also provided with mini kit for propagating high yielding fodder varieties.

4. Private veterinarians

An overwhelming majority of the dairy farmers had availed the curative (99.17 per cent) and preventive (95.00 per cent) services from the private veterinarians of the study area. The dairy farmers are unable to take the animals to hospital during illness and they depend mainly on private veterinarians due to non-availability of service providers of cooperatives and private integrators in an appropriate time. Though the charges of private veterinarians are expensive, the farmers seek them because they reach the farmers door step in time. Pallavi *et. al.*, (2011) and Bardhan *et. al.*, (2015) also stated that majority of the dairy farmers availed the treatment services from private veterinarians. More than half of the respondents (57.50 per cent) availed the artificial insemination services from private veterinarians but only 8.33 per cent of the dairy farmers purchased mineral mixture and other supplements from the private practitioners in the area. Apart from health services, the private veterinarians were also providing artificial insemination services to 57.50 per cent of the respondents and 8.33 per cent of the respondents purchased supplements from them for their dairy animals on cost basis.

5. Para-veterinarians

The curative and preventive services offered by the para-veterinarians were utilized by 46.67 per cent and 42.50 per cent of the respondents respectively. The services of the para-veterinarians are preferred by the respondents next to private veterinarians since they are readily available when needed. Also most of them are local persons, they have credibility with the farmers and the fees charged by them are less as compared to that of private veterinarians. Interestingly, three-fourth of the dairy farmers (75.83 per cent) utilized the artificial insemination services from the para-veterinarians, whereas only a meagre percentage (0.83 per cent) of the dairy farmers purchased mineral mixture and other supplements from them.

CONCLUSION

Most of the respondents predominantly availed the health services from the private veterinarians than other dairy service delivery systems. The para-veterinarians are the major source for the respondents for availing artificial insemination services. The respondents were mainly depending on dairy cooperatives for getting fodder seeds, fodder slips, concentrate cattle feed, mineral mixture & other supplements, insurance and training & extension services. The private integrators and public departments need to take necessary efforts to provide adequate and timely health services to reduce the expense or cost of production to increase the net profit of the dairy farmers. Hence, there is a need to restructure the delivery mechanism of service providers for efficient and essential service delivery in tandem with the requirement of rural dairy farmers.

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Table 1: Services availed from different Dairy Service Delivery Systems

S. No.	Type of Service	Dairy Cooperatives		Private Integrators		Public Departments		Private Veterinarians		Para-Veterinarians	
		n = 45		n = 22		n = 120		n = 120		n = 120	
		F	%	F	%	F	%	F	%	F	%
1	Curative Services	34	75.55	18	81.82	56	46.67	119	99.17	56	46.67
2	Preventive Services	38	84.44	18	81.82	80	66.67	114	95.00	51	42.50
3	Supply of Fodder Seeds and Slips	15	33.33	2	9.09	2	1.67	0	0.00	0	0.00
4	Supply of Concentrate Cattle Feed	33	73.33	10	45.45	0	0.00	0	0.00	0	0.00
5	Supply of Mineral Mixture and other supplements	33	73.33	2	9.09	19	15.83	10	8.33	1	0.83
6	Credit Facilities	5	11.11	1	4.54	0	0.00	0	0.00	0	0.00
7	Insurance Facilities	26	57.78	1	4.54	26	21.67	0	0.00	0	0.00
8	AI Services	26	57.78	15	68.18	41	34.17	69	57.50	91	75.83
9	Training and Extension Services	27	60.00	4	18.18	34	28.33	0	0.00	0	0.00

n = Total no of Respondents

F = Frequency