TRAINING NEEDS OF DAIRY FARM INSTRUCTORS IN FODDER PRODUCTION AND MANAGEMENT *

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Abstract

The study was carried out on the training needs of Dairy Farm Instructors (DFIs) of the Dairy Development Department of Kerala. The data were collected from a sample of 75 DFIs by means of structured questionnaires. Knowledge and skill needs were assessed in the subject matter area of fodder production and management. Knowledge (78.99) and skill (78.99) needs of fodder production ranked first followed by knowledge (77.55) and skill (76.44) needs of fodder preservation. Under fodder production, knowledge (82.66) and skill (80.88) needs of fodder disease management and fertilizer application ranked first. The most preferred type of training was institutional learning (58.67%). Practice in demonstration (76.00%) was the most preferred method of training. Experts from outside the parent organization were the most preferred trainers (58.64%). The most preferred durations for short term and long term training programmes were one to seven days (76%) and fifteen days to one month (48%) respectively.

Key words: *Training needs, Dairy Farm Instructors, Dairy Development Department, Dairy extension, Training strategy.*

One of the major constraints to dairy production in Kerala is the shortage of quality fodder. The marginal and small farmers who are the predominant cattle owners of the state have either limited or no land at all for fodder production. The lack of fodder and high cost of cattle feed result in increased cost of milk production. Realizing this precarious situation, the State Dairy Development Department (DDD) gives thrust to the implementation of fodder promotion schemes. The Dairy Farm Instructors (DFIs) of the department being the educators and change agents at the block level need to be updated with advances in fodder production and preservation technologies through regular in-service training programmes.

The present study was therefore designed to identify the perceived training needs of the Dairy Farm Instructors in the subject matter area of fodder production and management and also to explore the training strategy preferred by the respondents.

Materials and Methods

At the time of data collection, 120 DFIs were actually in position with the DDD and structured questionnaires were either sent to them by post or distributed in person during the district level monthly meetings. Out of them, 75 DFIs returned the filled in questionnaires within the stipulated period of one month. Hence the sample of the study comprised of 75 DFIs.

Determination of training need

In the present study, **training need**

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was operationalised as the perceived training needs of the DFIs, obtained in a checklist of items in the subject matter area of fodder production and management under which selected items to assess the knowledge needs of the respondents and those to assess the skill needs were given separately. The respondents were asked to rate both the knowledge and skill need items separately on a three point continuum *viz*., required, somewhat required and not required with scores of three, two and one respectively.

The Training Need Index (TNI) for each item was calculated using the formula, Sum of scores obtained for an

$$\text{TNI of an item} = \frac{\text{item by all the respondents}}{\text{Maximum possible score for the item}} \times 100$$

The items were ranked based on the training need indices.

Training strategy preferred

The respondents were asked to mention the type, method, trainers, duration and venue of training they preferred the most from among the given categories, for the subject matter area of fodder production and management and preference ranking was done accordingly.

Results and Discussion

1. Perceived Training needs

Table 1 illustrates the perceived training needs of the DFIs with regard to knowledge and skills in the subject matter areas of fodder production and fodder preservation. For both knowledge and skill needs, fodder production stood first followed by fodder preservation. Under the domain of fodder production, fodder disease management and fertilizer application received top priority for both knowledge and skill needs. With regard to the domain of fodder preservation, hay making received precedence.

The fodder production programmes implemented by the Department of Dairy Development envisage training to farmers in fodder production and management as a priority area. Lack of scientific knowledge of fodder cultivation was viewed as the major constraint by 40 per cent of rural respondents as per a study carried out among the livestock farmers of Belgaum district of Karnataka by Pushpa (2006). In a study conducted in the Mahabubnagar and Anantapur districts of Andhra Pradesh and Tumkur district of Karnataka, Misra *et al* (2007) found that through exposure visits and farmer-to-farmer interaction, many farmers realized that integration of livestock and fodder production within their limited land and water resources provided a better livelihood option in dry lands.

As the training sessions for farmers in fodder production are dealt by the Dairy Farm Instructors, they need to be equipped with advanced knowledge and skills in this realm. Training need analysis among the DFIs in terms of both knowledge and skill requirements reveal higher preference for fodder production than preservation. Further, under fodder production, disease management and fertilizer application was assigned the topmost priority as against the

Table.1. Training needs of Dairy Farm Instructors in the domain of fodder production and management

Sl. No.	Subject matter areas	TNI	
		Knowledge	Skill
	I. Fodder Production		
1.	Disease management &fertilizer application	82.6 6 (I)	80.88 (I)
2.	Suitable fodder varieties	81.33 (II)	80.44 (II)
3.	Fodder harvesting	79.11 (III)	78.22 (III)
4.	Fodder cultivation practices	77.33 (IV)	76.44 (IV)
	Mean TNI	78.99(I)	78.99(I)
	II. Fodder Preservation		
1.	Hay making	77.77 (I)	76.88 (I)
2.	Silage making	77.33 (II)	76.00 (II)
	Mean TNI	77.55 (II)	76.44 (II)

Table. 2. Type of training, method and trainers preferred in the domain of fodder production and management

	Training strategy	frequency	%	Rank
1.	**Type of training**			
	Institutional learning	44	58.67	I
	Integrated learning	26	34.66	II
	Distance learning	5	6.67	III
2.	**Method of training**			
	Practice in demonstration	57	76.00	I
	Study tour	33	44.00	II
	Workshop	31	41.33	III
	Lecture	20	26.66	IV
	Seminar	18	24.00	V
	Role play	5	6.66	VI
3.	**Trainers**			
	Experts from outside the parent organization but within the state	44	58.66	I
	Experts from the parent organization (DDD)	29	38.66	II
	Experts from outside the state	14	18.66	III

basic cultivation practices that received the least priority. Probably, the respondents were confident of their knowledge and skills pertaining to the basic cultivation practices. Higher preference for disease management and fertilizer application training might be attributed to the devastating impact of fodder diseases, pest incidences and environmentally harmful pesticides and fertilizers on smallholder dairy production. The training need in the subject matter area of fodder production and management for extension personnel is in accordance with that of Saini and Sandhu (1993).

2. Preferred training strategy

a) Type of training, method and trainers

It is obvious from Table 2 that institutional learning was the most preferred type of training followed by integrated learning. The most preferred training method was practice in demonstration followed by study tour, workshop, lecture and seminar. Experts from outside the parent organization but within the state were preferred the most as trainers.

The preference of the respondents for institutional training might be attributed to the opportunities for interactive and face to face learning. This finding is in agreement with that of Sakthivel (2001) but in contrast with that of Patil and Kokate (2011).

It could be noted that practice in demonstration was the most preferred method of training by the respondents. This might be due to their appreciation of the demonstration technique as an effective tool in skill teaching. This finding is in accordance with that of Sudeepkumar and Subramanian (1993). The method of study tour ranked second. The respondents might have perceived the opportunities to visit professional institutes, research stations, farms and dairy plants elsewhere that would widen their practical learning experience. The preference for study tours by trainees was also reported by Sudeepkumar and Subramanian (1993) and Mathiyalagan and Subramanian (1998) .Workshop as a method of training was assigned the third rank. Perhaps, workshop might have been perceived as a better means to exchange ideas, experiences and skills that would in turn help the participants to produce a product, prepare a document, report or programme for future action. In a descriptive study probing into the in-service training needs of extension agents in West Iran, Alibaygi and Zarafshani (2008) observed that cooperative learning techniques were the most preferred training methods (50%), followed by workshops (25.55%), group discussions (15.45%), and lectures (9%). It was interesting to note that role play was the least preferred method of training. This might be because the respondents might have perceived role play as embarrassing since they were required to act roles.

Regarding preference for trainers, most of the respondents liked to invite trainers from outside the parent organization but within the state. The respondents might have probably felt that interacting with experienced persons from outside the parent organization would be beneficial. This finding is in agreement with that of Naik (1982) and Sakthivel (2001).

Table 3. Preferred training duration

	Duration of training	frequency	%	Rank
1.	**Short term training**			
	1 – 7 days	57	76.00	I
	7 – 15 days	10	13.34	II
	15 – 30 days	4	5.33	III
	More than one month	4	5.33	III
	Total	75	100.00	
2.	**Long term training**			
	15 days	11	14.67	III
	15 days – 1 month	36	48.00	I
	1 month – 3 months	16	21.33	II
	3 months – 6 months	4	5.33	IV
	6 months –1 year	4	5.33	IV
	1 year – 2 years	4	5.33	IV
	Total	75	100.00	

b) Duration of Training

Data in Table 3 shows that more than three fourth of the respondents were in favour of short term residential training programmes of 1-7 days duration for which the respondent would probably have to stay away from his/ her home. Almost half of the respondents were in favour of long term residential training programme of 15 days to one month duration for which they would have to stay away from home sometimes.

Duration is an important criterion for the success of any training programme. It is essential that the duration of training is adequate to deliver the content of training. It should be convenient to the trainees as well. The finding that most of the respondents preferred a duration of one to seven days for a short-term training programme and fifteen days to one month for a long-term training programme deserves consideration while deciding upon the duration of training. This finding is in accordance with those of Bhagat (1989), Sudeepkumar and Subramanian (1993) and Khan et al (2011).

c) Venue of Training

Table 4 shows that the most preferred venue for training in fodder production and management was Kerala Agricultural University followed by identified centres of Dairy Development Department (DDD), Kerala Cooperative Milk Marketing Federation (MILMA), Kerala Livestock Development Board (KLDB) and premier institutes outside Kerala such as Tamil Nadu Agricultural University (TNAU) and Indian Agricultural Research Institute (IARI). None preferred any institute other than these.

The physical facilities and environment of training institutes have considerable influence on the learning experience of trainees. The selection of a venue with all the required facilities such as suitable physical environment, teaching aids and resource persons is essential for the success of the training programme. The findings reveal that most of the respondents preferred institutes within Kerala. Attending training programmes outside their home state may not

Table. 4. Preferred venue of training

Sl.no	Venue of training	Frequency	%	Rank
1.	Kerala Agricultural University	36	48.00	I
2.	Identified centres of DDD, MILMA, KLDB,	29	38.67	II
3.	Premier institutes outside Kerala (TNAU, IARI, etc.)	10	13.33	III
4.	Any other	0	0	IV
5.	Total	75	100	

be convenient in view of domestic obligations. This finding is in agreement with those of Naik (1982), Bhaghat (1989) and Mani (1996).

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