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Critical Assessment of Capacity Needs among Field Extension Functionaries in the Dairy Development Department of Kerala State

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Abstract

The study was carried out on the capacity need assessment of field extension functionaries (FEFs) of Dairy Development Department (DDD), Kerala. The data were collected from a sample of 120 FEFs by means of a structured interview schedule. Knowledge and skill need of FEFs were assessed in the subject matter area of dairy extension. The findings of the study revealed that with regard to the perceived capacity need for knowledge in the domain of dairy extension, preparing scripts for radio talks/TV shows with a mean score of 2.350 was ranked first, followed in the rank order by organising seminars, exhibitions, cattle-shows, demonstrations and field trips for farmers (2.125) and preparation of audio-visual aids (2.017). While regarding the perceived capacity need for skill in the domain of dairy extension, preparing scripts for radio talks/TV shows with a mean score of 2.267 was ranked first, followed in the rank order by preparation of audio-visual aids (2.133), organising seminars, exhibitions, cattle-shows, demonstrations and field trips for farmers (2.042).

Keywords: Capacity Need Assessment, Field Extension Functionaries, Knowledge, Skill Needs.

Introduction

The DDD provides rural dairy extension and advisory services through block level Dairy Extension Service units and 5 dairy training centres, as well as a specialised Dairy Entrepreneur Development Centre, Quality Control Offices, Office of Deputy Directors and the Valiyathura Fodder Farm. The scheme's major goal is to provide transfer of technology effectively to farmers via an internet platform, personal interactions and aid to farmers in the event of emergencies and natural disasters (DDD, 2022).

Technology development, diffusion and supportive services are vital for productivity enhancement and must be prioritised. It is also vital to bring all stakeholders together on a single platform in order to maximise each player's contribution to the achievement of the goal. Livestock keepers are the essential stakeholders who must connect with other stakeholders and undertake appropriate activities to increase productivity and profit margins. More and more entrepreneurs are now venturing into the country's dairy sector and Kerala is not an exception. It is critical that marginal and small-scale farmers be organised through well-planned dairy extension activities in order to enhance livestock productivity and develop a sustainable dairy industry (DDD, 2021). FEFs of DDD's are the grass-roots personnel in charge of both extension and management of primary dairy cooperative societies in their jurisdiction. FEFs, as extension officials at the Block level, must be well acquainted in dairy technology and science as well as its suitable application. They ought to be capable of serving as instructors as well as change agents. Their professional expertise can pay significant dividends in gaining the trust of dairy producers and motivating them to embrace appropriate technological tools (Kumar, 2003). As a result, it is critical to keep their skills and knowledge up-to-date in the relevant activities on a regular basis through systematic and ongoing in-service training programmes. To be successful, any training session must be based on the requirements of the employees, which must be evaluated through a systematic approach and accurately laid out for the assistance of the individuals in charge of these training programmes. Bearing this in mind, the study was conducted with the goal of assessing the perceived capacity needs of FEFs in the subject area of dairy extension.

Materials and Methods

The study was confined to the FEFs of DDD in Kerala. An exploratory research design was adopted. A sample of 120 FEFs were selected randomly for the study through non-proportionate stratified random sampling method, of which 60 were DEOs and 60 were DFIs. Data collection was done through personal interviews, google forms and telephone interviews and secondary data was gathered from reliable sources such as government official websites and annual reports. The data were analysed using appropriate statistical procedures.

Capacity need assessment (CNA) was operationalised as the identification of existent gaps of the respondents in terms of knowledge and skills required for them in order to achieve the pre-specified objectives. The interview schedule was developed with all the items needed to elicit sufficient information in accordance with the knowledge and skill needs of FEFs. The items were subjected to relevancy rating by a panel of 33 judges. The selected items were then subjected to validity and reliability test. The final items were administered to the respondents of the study. The respondents were asked to rate knowledge and skill need items on a three point continuum viz. required, somewhat required and not required, with scores of 3, 2, and 1 respectively.

The mean score for each item was computed using the formula given below and the items were ranked based on their mean scores

$$\text{Mean score of an item} = \frac{\text{Sum of scores obtained for an item by all the respondents}}{\text{Total number of respondents}}$$

Results and Discussion

Perception of FEFs Knowledge Based Capacity Need in Dairy Extension

It is apparent from Table 1 that with regard to the perceived capacity need for knowledge in the domain of dairy extension, preparing scripts for radio talks/TV shows with a mean score of 2.350 was ranked first, followed in the rank order by organising seminars, exhibitions, cattle-shows, demonstrations and field trips for farmers (2.125), preparation of audio-visual aids (2.017), organisation of training programmes for farmers (2.008), conducting farm

and home visit (1.908), marketing led extension (1.900), implementation and evaluation of schemes (1.892) and project formulation, appraisal and economic analysis of dairy farming (1.750). The mean score for the eight knowledge need items in the domain of dairy extension was 1.994.

Perception of FEFs Skill Based Capacity Need in Dairy Extension

Data in Table 1 showed that with regard to the perceived capacity need for skill in the domain of dairy extension, preparing scripts for radio talks/TV shows with a mean score 2.267 was ranked first, followed in the rank order by preparation of audio-visual aids (2.133), organising seminars, exhibitions, cattle-shows, demonstrations and field trips for farmers (2.042), marketing led extension (1.942), implementation and evaluation of schemes (1.908), organisation of training programmes for farmers (1.900), project formulation, appraisal and economic analysis of dairy farming (1.892) and conducting farm and home visit (1.858). The mean score for the eight knowledge need items in the domain of dairy extension was 1.993.

The dairy extension is a day-to-day activity of the FEFs. The field of Information Technology is rapidly growing, making it convenient to connect with farmers through their audio-visual devices. For the tight-scheduled farmers, radio is still a better option to reach. Not to speak of TV talks. To transfer technologies utilising the multiple senses of the farmers, TV talks are a better choice. The FEFs of the DDD should be equipped with preparing scripts for radio and TV talks. This was expressed to be the most important capacity need both in knowledge and skill domains. Farm and home visits are the most frequently done extension activities as perceived by the FEFs. Expertise in client dealing as well as communication abilities are mandatory while doing such an individual extension contact method. Proper knowledge in conducting farm and home visits is mandatory for the proper execution of the same. Considering that respondents stated a willingness to learn about making audio-visual aids, organising seminars, exhibitions, cattle shows, demonstrations, and field trips for farmers, it is possible that the FEFs were also aware of their position as educators. Additionally, they might have believed that the capacity requirements for project formulation, evaluation, and economic analysis of dairy farming were only marginally significant. The reason could be that respondents have in-depth expertise and knowledge in project planning and economic analysis of dairy farming. The capacity needs in the subject matter area for extension personnel have also been reported by Rajanna *et al* (2009), Kumaran *et al* (2014), Kalita (2014), Sasidhar and Suvedi (2016) and Raahalya and Sreedaya (2021).

Table 1: Knowledge based capacity need of FEFs in dairy extension

Sl. No.	Subject matter area	Knowledge		Skill	
	Dairy extension	Mean score	Rank	Mean score	Rank
1	Preparing scripts for radio talks/TV shows	2.350	1	2.267	1
2	Organising seminars, exhibitions, cattle-shows, demonstrations and field trips for farmers	2.125	2	2.042	3
3	Preparation of audio-visual aids	2.017	3	2.133	2
4	Organisation of training programmes for farmers	2.008	4	1.900	6
5	Conducting farm and home visit	1.908	5	1.858	8
6	Marketing led extension	1.900	6	1.942	4
7	Implementation and evaluation of schemes	1.892	7	1.908	5
8	Project formulation, appraisal and economic analysis of dairy farming	1.750	8	1.892	7

Conclusion

From the study it was concluded that the respondents perceived to improve their knowledge and skill needs more in preparing scripts for radio talks/TV shows, organising seminars, exhibitions, cattle shows, demonstrations and field trips for farmers and preparation of audio-visual aids. FEFs, as extension officials at the Block level, must be well acquainted in dairy technology and science as well as its suitable application. They should be capable of functioning as both educators and change agents. Their professional knowledge and skills can pay huge dividends in gaining dairy producers' trust and encouraging them to adopt appropriate technological resources. As a result, it is critical that their knowledge and skills in the relevant activities are kept up to date on a regular basis through systematic

and ongoing in-service training programmes.

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Contribution by Authors

All the authors contributed equally to writing the manuscript. The final manuscript was read by all authors and consented to publication.

Conflict of Interests

There is no conflict of interest.

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