EFFECTIVENESS OF DIFFERENT TRAINING MODES IN THE TRANSFER OF MINERAL MIXTURE FEEDING TECHNOLOGY AMONG DAIRY FARMERS

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ABSTRACT

The present study was conducted on 100 dairy farmers selected from four villages of Vellore district of Tamilnadu to ascertain the effectiveness of different training modes for transfer of mineral mixture feeding technology. Gain in knowledge was evident in the sub domains viz., quality of ingredient, preparation of concentrates, storage and feeding of concentrates. There was a significant gain in knowledge of the respondents who taught with the help of short- films than other modes and the calculated t"value was greater than tabulated and found significant. Therefore, it can be concluded that short- films had increased the knowledge of rural farmers.

Key Words : Dairy cattle feeding, mineral mixture feeding, communication media, short film

INTRODUCTION

Dairy enterprise plays a significant role, in terms of their contribution to human nutrition (milk and butter fat), plant nutrition (farmyard manure) and energy (bullock power). Dairy farming is a reliable source of livelihood for the rural poor since it has the potential to provide gainful self-employment and sustainable income. In addition, it can be maintained with minimum capital investment and labour. Feeding of dairy cattle has a direct impact on the reproduction and production of the animals.

Tamilnadu is a state with less green fodder availability which has resulted in difficulty in brings out the full potential of the dairy animals. Hence, addition of mineral mixture becomes essential to achieve the full potential of milk production and productivity of the animal. Dairy farming being the key industry to develop the rural sector, scientific knowledge and information on important farm technologies, methods and practices need to be imparted to the farmers at the right time for adoption.

Knowledge, a cognitive domain of human mind, is the first stage in the innovation – decision process (Rogers & Shoemaker, 1971). The communication of farm information is sin-quo-non for bringing about change in the rural social system. There is wide gap between technology generation and its utilization. The gap

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is more pronounced in farm sector and it needs to narrow down so as to enhance the adoption of technologies. Communication media play a vital role in the diffusion of new technology.

In developing countries, the low "extension worker – farmer" ratio is resulting in less direct contacts between the change agents and farmers (Chandrashekara, 2001). Hence, extension worker employs extension teaching methods that help in making the farmers learn more, better, faster and remember longer. The extension worker faces many problems related to the selection of available aids for the varied learning situations. If the communication aids are to be useful, their selection and use must be based on facts rather than hunches and intuition. The effectiveness of the extension method in terms of gain and retention in knowledge differs from method to method, audience to audience and even practice to practice. Naturally, extension worker is forced to depend on the researches in audio visual aids for guidance. Fakunle (2008) declared that people generally remember 10 per cent of what they read, 20 per cent of what they hear, 30 per cent of what they see, 50 per cent of what they hear and see. Isiaka (2007) who researched on the effectiveness of video as a teaching aid found that video group performed better than the group without instructional media. According to Kumar et al., (2005) the farmers gained more knowledge trained by visual media along with discussion than lecture + discussion method.

Studies concerned with the effectiveness of audio visual aids in transfer of technology to rural farmers conducted in India are limited and not able to provide ample guidance to the extension worker in this direction. Keeping these facts in view, the present study was undertaken to find out the effectiveness of a different communication media for transferring knowledge on feeding of mineral mixture among the dairy farmers.

MATERIAL AND METHODS

The study was conducted in Vellore district of Tamil Nadu during 2013. By adopting random sample selection method, four villages viz., Kammavar pudur, Sakkarakuttai, Nettari and Iyderpuram were selected from the two blocks, Katpadi and K.V.Kuppam. Experimental research design was followed. A sample of 25 dairy farmers was selected randomly from each village to form a total sample size of 100 farmers.

The pre knowledge level of the farmers was measured by specially framed questions which consisted of all important recommended technological component of mineral mixture feeding. Four different types of training modes viz., printed material, lecture, projected visual aid, and short film modes were used to impart knowledge on mineral mixture feeding. A discussion session was used along with all the four modes of training.

The respondents were divided into four equal groups and they were taught by the above said four different modes about the technology of mineral mixture feeding.

Group I = Printed material + Discussion (Sakkaraikuttai village)

Group II = Lecture + Discussion (Netteri village)

Group III = Projected Visual aid + Discussion (Hyderpuram village)

Group IV = Short film + Discussion (Kammavarpudur village)

The pre exposure knowledge level on mineral mixture feeding in the sub domains viz., Quality of ingredient, preparation of concentrates, storage and feeding of concentrates of all the respondents was calculated by using a specially designed interview schedule. The same schedule was applied after the training programme to find

out the post exposure knowledge level of the farmers. Difference in pre and post exposure scores was considered as knowledge gain. The statistical tool "t" test was used to find out the significant difference among the four groups.

RESULT AND DISCUSSION

The data were analysed and mean values of the knowledge scores on the knowledge about quality of ingredient, preparation of concentrates, storage and feeding of concentrates were converted into percentage. The results thus obtained are presented in Table 1. Analysis regarding knowledge gain by using different teaching modes revealed that the short film + Discussion (Group IV) mode of teaching showed the maximum effect in knowledge gain to the tune of 57.6 per cent, followed by visual aid + Discussion mode Group III (29.6 %) and lecture + Discussion mode Group II (18.5 %). The lowest knowledge gain (1.1 %) was obtained by the group I which was taught by printed materials along with lecture mode.

The result showed that short film, simulating real life activities and situations and emotionally, attracts the learners so as to have better effect than non - projected visual aids like charts in transfer of information. Lecture method had provided lesser knowledge gain when compared to visual aid. Printed material + Discussion mode was found to provide least knowledge gain owing to the fact that due to the low education level of the farmers, they may not be able to comprehend / understand the written information.

The result showed that involvement of more sense organs resulted in high knowledge gain. Studies had reported that lecture + Discussion was the least effective mode of presentation (Mangat and Hansra, 1986, Narwal et al., 1998, Kumar et al., 2005). An attempt was made to find out the significant difference in mean scores of knowledge gain among the four different modes of teaching and the results showed that the Short film + Discussion mode emerged as the most effective method for transfer of technology related to mineral mixture feeding followed by visual + Discussion and lecture + Discussion. Printed material was found to be the least effective method of training which might be due to the fact that majority of the respondents were illiterates.

CONCLUSION

From the present study, it was inferred that respondents had gained significant knowledge on feeding of mineral mixture when Short film + Discussion mode of training followed. This study suggested that farmers should be educated through audio visual aids which involve more sense organs. To make it possible, training programmes may be organised to extension personnel on production and effective use of short films, documentary, docudrama and other effective audio – visual aids. This will enhance the rate of knowledge gain. An audio visual lab can be established at district level and Audio visual kit should be provided to every extension worker through which the required transfer of technology can be done. The extension team should be trained in preparation of simple charts / posters related to the latest technology that need to be transferred. Lecture can be accompanied by visual and audio visual aids for effective dissemination of technology. Printed material can be provided as additional reference material after providing training by using different teaching aids along with the lecture method. With the right assistance the farmers can strengthen their capacities besides adding to their income and national productivity.

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Table 1

Gain in knowledge on feeding of mineral mixture (Quality of ingredient, preparation of concentrates, storage and feeding of concentrates)

(n=100)

S.No.	Aspects	Pre exposure mean score	Post exposure mean score	Knowledge gain	"t" value
1	Printed material + Discussion (Sakkaraikuttai village)	1.80 (16.4%)	1.92 (17.5%)	0.12 (1.1%)	2.58*
2	Lecture + Discussion (Net-teri village)	1.94 (17.6%)	3.98 (36.2%)	2.04 (18.5%)	13.50**
3	Visual aid + Discussion (Hy-derpuram village)	1.82 (16.5%)	5.08 (46.2%)	3.26 (29.6%)	14.63**
4	Short film + Discussion (Kammavarpudur village)	1.90 (17.3%)	8.24 (74.9%)	6.34 (57.6%)	15.75**