Original Research Article

A STUDY ON EFFECTIVENESS OF DAIRY FARMING RELATED FRONT LINE DEMONSTRATIONS OF KRISHI VIGYAN KENDRA SHIVAMOGGA ON KNOWLEDGE LEVEL OF DAIRY FARMERS

ABSTRACT

The lack of transfer of technology from research system to the client system is the main problem in increasing animal husbandry production in the developing world. The quality and quantity of milk production can be increased if farmer fallows scientific dairy farming practices. This is possible through the FLDs as it is an important and appropriate extension method which makes it possible to disseminate technology to the final user. It has played significant role in increasing the knowledge and adoption of scientific dairy farming practices by dairy entrepreneur. The knowledge level of respondents about scientific dairy management practices were checked in following subheadings viz knowledge about breeding, feed and feeding practices, health of dairy animals and other management practices in dairy farming and it is found that FLD beneficiaries had more knowledge in scientific dairy farming than non-beneficiaries. The probable reason for high knowledge among beneficiaries might be that the beneficiaries have been benefited by different extension activities, input supply and acquired guidance from research scientists of KVK through FLD's showing that the FLD's conducted by KVK were effective.

Comment [1]: The abstract can be improved. Sample and sampling techniques was missing . the objective(s) and major findings were missing too.

KEY WORDS: Knowledge level, Front line demonstration, Krishi Vigyan Kendra, Dairy farming

INTRODUCTION

Krishi Vigyan Kendra plays a vital role in improving contribution of agriculture and allied sector to Indian GDP. This scheme was designed and nurtured by ICAR with the ideal features of Creation of good resources in terms of technical manpower and assets, Development of locally suitable specific technologies, Showcasing the frontier technologies, Capacity building of farmers and extension workers, Front runner in technological application, providing information and supply of inputs, participatory approaches in planning, implementing, executing and evaluation of programmes.

Front Line Demonstration is one of the important mandates of KVK through which KVK demonstrate the importance of technology at the farmer's field every year. Various new technologies related to agriculture and allied activities, like release of new varieties,

fertilizers and micronutrients and infertility treatment protocol, clean milk production and feeding practices in dairy animals etc. The Frontline Demonstrations were started in the year 1991-92. In order to increase pulse production per unit area and also to create awareness among farming community. These Frontline Demonstrations were conducted directly involving the scientists and have provided the impetus to the scientists to involve themselves with the farmers to test the research results on farmer fields and this will also facilitate to provide direct feedback from the farmers so that the scientists can reorient their research, education and training programmes for transfer of all the technologies through these Frontline Demonstrations.

Frontline demonstrations are organized in a block of two to four hectares involving all those farmers whose plots fall in the demonstration block, Only critical inputs and training are provided from the scheme budget, remaining inputs are borne by the farmers themselves, training of the farmers associated with the frontline demonstrations is a pre-requisite for conducting such demonstrations, the target audiences of frontline demonstrations are both farmers and the extension officers. The purpose is to convince extension functionaries and farmers together about the potentialities of technologies for further wide scale diffusion, frontline demonstrations are used as a source of generating data on factors contributing for higher crop yields and constraints of production under various farming situations.

MATERIAL AND METHODS

Comment [2]: Sample size? Sampling method?

Knowledge is operationalized as the amount of information understood by respondents about scientific dairy management practices. The knowledge level of respondents about scientific dairy management practices were checked in following subheadings viz knowledge about breeding, feed and feeding practices, health of dairy animals and other management practices in dairy farming. Each section consists of 8 questions, total 32 knowledge questions framed to check the knowledge of respondent. The question and answers were carefully framed in consultation with subject matter specialists of KVK, extension experts, based on analysis of available literature, field level interaction and discussion with different stakeholders. The answer elicited from the respondent were quantified by assigning one score to correct answer and zero to wrong one. Thus, one can score maximum of 8 in each section. Based on the total scores, the respondents were classified into three categories viz., low (0-2), medium (3-5) and high (6-8) by exclusive class interval method, mean and standard deviation as measures of check. The data collected was

subjected to T-test by using SPSS (Version 16.0) were calculated and the inferences were drawn in light of the results obtained, keeping in view the objectives laid in the study.

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RESULTS AND DISCUSSION

1.1 Knowledge level of FLD beneficiaries and non-beneficiaries about scientific breeding practices.

The result revealed that 55 *per cent* of FLD beneficiaries have high level of knowledge about scientific breeding followed by medium level (45%). Whereas among non-beneficiaries' majority (50%) were having medium level of knowledge followed by high (37%) and 13 *per cent* have low level of knowledge.

The results of T- test in table .1 indicated that there is significant difference ($p < .016$) between beneficiaries and non-beneficiaries of FLDs related to scientific dairy farming practices. The knowledge level about scientific breeding practices is higher in beneficiaries as compared with non-beneficiaries. The results are in line with findings of Choudhary and Yadav (2012). Chaurasia, S. and Mazhar, S. H. (2018)

Table 1 Distribution of respondents according to their knowledge-level about scientific breeding practices.

N=60

Sl. No	Knowledge level	Beneficiaries		Non-beneficiaries	
		F	%	F	%
1	Low (0-2)	0	0	8	13
2	Medium (3-5)	27	45	30	50
3	High (6-8)	33	55	22	37
Total		60	100	60	100
Mean		5.87		4.58	
Standard deviation		1.30		1.81	
t-Test		.003			

1.2 Knowledge level of FLD beneficiaries and non-beneficiaries about scientific feed and

feeding practices.

From the table 2 it is revealed that 58.33 *per cent* of FLD beneficiaries have high level of knowledge about scientific feed and feeding practices followed by medium (41.67%), there were no beneficiaries in low level knowledge group. While among FLD non-beneficiaries' majority (46.75%) were having medium level of knowledge followed by high (38.25%) and 15 *per cent* have low level of knowledge. These findings are similar to the findings of Chodavadia *et.al* (2013).and Bhagwanrao, (2015)

Table 2 Distribution of respondents according to their knowledge about feed and feeding practices.

N=60

Sl. No	Knowledge level	Beneficiaries		Non-beneficiaries	
		F	%	F	%
1	Low (0-2)	0	0	9	15
2	Medium (3-5)	25	41.67	28	46.7
3	High (6-8)	35	58.33	23	38.3
Total		60	100	60	100
Mean		5.75		4.61	
Standard deviation		1.14		1.75	
t-Test		.000			

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The results revealed that there is significant difference ($p < .000$) between beneficiaries and non-beneficiaries of FLDs related to scientific feed and feeding practices in dairy farming. The knowledge level of scientific feed and feeding practices was higher in beneficiaries as compared with non-beneficiaries.

1.3 Knowledge level of FLD beneficiaries and non-beneficiaries about scientific health management practices.

From the result observed that 53 *per cent* of FLD beneficiaries have high level of knowledge about scientific health management practices in dairy farming followed by 47 *per cent* medium level and among non-beneficiaries' majority (46.67%) were have high level of

knowledge fallowed by medium level of knowledge (40%) and 16.67 *per cent* have low level of knowledge.

The T- test shows there is significant difference (p< .000) between beneficiaries and non-beneficiaries of FLDs related to scientific health management practices in dairy farming. The knowledge level about scientific health management practices was higher in beneficiaries as compared with non-beneficiaries as revealed in table 3. These findings are similar to findings of Dheraj *et.al* (2013) and Singh (2015

Table.3 Distribution of respondents according to their knowledge-level about scientific health management practices.

N=60

Sl. No	**Knowledge level**	**Beneficiaries**		**Non-beneficiaries**	
		F	**%**	**F**	**%**
1	Low (0-2)	0	0	10	16.67
2	Medium (3-5)	28	47	24	40
3	High (6-8)	32	53	26	43.33
Total		60	100	60	100
Mean		5.61		4.71	
Standard deviation		1.26		1.86	
t-Test		.000			

1.4 Knowledge level of FLD beneficiaries and non-beneficiaries about other scientific management practices in dairy farming.

The result as shown in table 4 reveals that the majority (58.33%) of FLD beneficiaries have high level of knowledge about other scientific management practices followed by medium level (41.67%). Among non-beneficiaries majority (46.67%) were having high level of knowledge followed by medium level of knowledge (36.67%) and 16.67 *per cent* have low level of knowledge. The results revealed that there is significant difference (p< .000) between beneficiaries and no beneficiaries of FLDs related to other scientific dairy farming practices. The knowledge level of other scientific management practices was higher

in beneficiaries as compared with non-beneficiaries. These findings are similar to the findings of) Kumar *et al.* (2014).and Katole et.al(2017)

Table 4 Distribution of respondents according to their knowledge-level about other scientific management practices in dairy farming.

N=60

Sl. No	Knowledge level	Beneficiaries		Non-beneficiaries	
		F	%	F	%
1	Low (0-2)	0	0	10	16.67
2	Medium (3-5)	25	41.667	22	36.67
3	High(6-8)	35	58.333	28	46.67
Total		60	100	60	100
Mean		5.80		4.78	
Standard deviation		1.29		1.90	
t-Test		.000			

1.5 Overall Knowledge of FLD beneficiaries and non-beneficiaries about scientific dairy farming practices.

Total questions framed to test the overall knowledge-level of the respondents were 32 and for each "correct" answer 1 score and for each "incorrect" answer 0 score was given. Thus a respondent can score maximum score of thirty two and minimum score of zero. For overall knowledge-level of the respondents they are classified in to three categories as "low"(up to 8), "medium" (9-18) and "high" (19-32) by exclusive class interval method.

The result as per table 5 indicated that the majority (58.33%) of FLD beneficiaries have high level of knowledge about overall dairy management practice, followed by medium level (41.67%) and there were no beneficiaries found in low level knowledge, among non-beneficiaries majority (45%) were having medium level of knowledge, followed by high level (43.33%) of knowledge and 11.67 *per cent* have low level of knowledge.

The results revealed that there is significant difference ($p < .000$) between

beneficiaries and non-beneficiaries of FLDs related to scientific dairy farming. The overall knowledge level about scientific dairy farming practices was higher in beneficiaries as compared with no beneficiaries. These findings are similar to the findings of Dholariya (2014) and Rajappan *et al.* (2014)).

Table 5 Distribution of respondents according to their overall knowledge-level about scientific dairy farming practices.

N=60

Sl. No	**Overall Knowledge level**	**Beneficiaries**		**Non-beneficiaries**	
		F	**%**	**F**	**%**
1	Low (0-10)	0	0	7	11.67
2	Medium (11-21)	25	41.67	27	45
3	High (22-32)	35	58.33	26	43.33
Total		60	100	60	100
Mean		23.03		18.70	
Standard deviation		3.70		6.23	
t-Test		.000			

CONCLUSION AND SUGGESTIONS

The study concluded that, FLD beneficiaries had more knowledge about scientific dairy farming practices than non-beneficiaries. The probable reason for high knowledge among beneficiaries might be that the beneficiaries have been benefited by different extension activities, input supply and acquired guidance from research scientists of KVK through FLD's. Moreover, beneficiaries were educated, having good contact with different organizations and received knowledge from farm literature showing that the FLD's conducted by KVK were effective. As observed in research, there is low level of knowledge about scientific dairy farming practices in FLD non beneficiaries. Hence more and more extension activities are needed by KVK and other organizations for improving knowledge about new technologies by dairy farmers. As a smaller number of dairy farmers are covered

in FLDs, creation of more animal scientist posts in KVKs and other related organization may help to cover maximum number of dairy farmers.

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