J. Farm Sci., 33(4) : (542-545) 2020

RESEARCH PAPER

Impact of the radio dramas on knowledge gain of dairy farmers

SIDDAPPA HONNIHALLI AND D. A. NITHYA SHREE

Department of Extension and Communication Management, College of Community Science, Dharwad
University of Agricultural Sciences, Dharwad - 580 005, Karnataka, India
E-mail: nityashreeda@uasd.in

(Received: January, 2020 ; Accepted: October, 2020)

Abstract: Krishi Community Radio Station (KCRS) is serving the agricultural and rural sector of Dharwad taluka. This is the first radio station in India, under the state agricultural universities set up and first community radio station in Karnataka. Dairy is one of the important subsidiary enterprise taken up by farmers in India. The milk productivity is very low in India compared to other countries. Keeping this in view the present study was planned to improve the knowledge of farmers about dairy management practices. The study was conducted in eight villages of Dharwad taluka with selected 120 dairy farmers who possessed mobile / radio sets and listened to Krishi CRS as respondents. To study the impact of drama format on knowledge gain, before and after experimental design was used. Based on identified needs, five audio dramas were planned, recorded and broadcasted through KCRS. Study indicated that there was significant difference between pre test and post test knowledge. The post knowledge was greater than pre knowledge, which clearly indicates that there is increase in knowledge of dairy farmers. This shows that drama format is effective in disseminating the information to the farmers.

Key words: Dairy farmers, Knowledge gain, Krishi Community Radio, Radio drama

Introduction

Dairy is one of the subsidiary enterprise taken up by Indian farmers to support a stable income. India ranks first in milk production accounting for 18.50 per cent of world dairy cow population with an annual output of 146.30 million tonnes. But the productivity is very low in India with 1284 kg/cow/year whereas it is 6212 kg/cow/year in European Union and 9117 kg/cow/year in the United States (jagranjosh.com). Thus there is a significant variation in production. To fulfill this gap there is a need to increase the knowledge of dairy farmers regarding management practices as most of the farmers do not follow recommended package of practice for dairy animals. Radio is considered as an effective tool to disseminate agricultural information among the farmers and it is the most powerful mass media for broadcasting information quickly.

Krishi Community Radio station (KCRS 90.4MHz) is serving the agricultural and rural sector. This is the first radio station in India, under the state agricultural universities set up and first community radio station in Karnataka. KCRS was launched on May 17th, 2007, by the University of Agricultural Sciences, Dharwad. The coverage of this community radio station is 75 villages with 2.5 lakh population, airing the programmes eight hours/day with 4 hours in the morning and 4 hours in the evening. The main aim of KCRS is to educate the farmers on cropping pattern, improved agricultural practices, animal health, poultry farming, horticulture, environment, nutrition, climate change, soil health, organic farming and allied activities. As community radio or KCRS provides area specific information, it is assumed to be more effective in transferring information than the main stream radio. Keeping this in view the present experimental study was taken up to plan, record and broadcast dramas on dairy management and assess its impact on knowledge gain of dairy farmers.

Material and methods

The study was conducted in Dharwad district of Karnataka state during 2017-18. Out of 75 villages covered by Krishi CRS eight villages were randomly selected for the study *viz.,* Narendra, Malapur, Marewad, Kamalapur, Kanavi Honnapur, Chandanamatti, Kavalageri, Amminabhavi. From each village 15 dairy farmers who possesses mobile / radio set and listen to the Krishi CRS were purposively selected for the study. Thus the total sample size was 120 dairy farmers. To study the gain in knowledge due to the drama format, before and after experimental design was used.

Based on the identified needs, five radio dramas on the topics viz., Animal feed and fodder, Breeds, Animal and shed management, Care of animals and pregnancy care, Clean milk production and document maintenance were scripted, recorded and broadcasted through Krishi CRS after informing the selected respondents to listen. Data was collected through personal interview with the help of pre tested structured interview schedule. The knowledge test was conducted twice, that is before and after broadcast of the drama. The collected data was analyzed with the help of suitable statistical tests.

Results and discussion

Table 1 reveals the profile of listeners. Little more than half of the respondents (56.67 %) were middle aged, 32.50 per cent were educated up to high school, 88.34 per cent had nuclear family and half of the respondents had small size families. 91.66 per cent had agriculture and dairy as main occupation., 39.17 per cent were having low income and little more than half of respondents (52.50 %) were small farmers. The findings are in line with the findings of Pattanshetti (2010) and Talwar (2011) In case of farming experience, 43.33 per cent and in the dairy experience 86.67 per cent were in low category. More number of

Table 1. Profile of respondents n= 120

Variable	Category	Respondents	
		F	%
I.Personal characteristics			
Age	Young (< 35 years)	28	23.33
	Middle (36 – 55 years)	68	56.67
	Old (56 years and above)	24	21.00
Education	Illiterate (0)	40	33.34
	Primary school (1 – 4)	12	10.00
	Middle school (5 – 7)	39	32.50
	High school (8 – 10)	16	13.34
	PUC (11 – 12)	08	6.66
	Degree (> 12)	05	4.16
Family type	Nuclear	106	88.34
	Joint family	14	11.66
Family size	Small (up to 4 members)	60	50.00
	Medium (5-8 members)	54	45.00
	Large (above 9 members)	06	5.00
II. Socio-Economic Characteristics			
Family occupation	Dairy + Agriculture	110	91.66
	Dairy + Agriculture + Business	07	5.84
	Dairy + Agriculture + others	03	2.50
Family income	Low (Upto Rs. 17,000/-)	47	39.17
	Semi medium (Rs. 17,000/- to Rs. 34,000/-)	38	31.67
	Medium (Rs. 34,000/- to Rs. 51,000/-)	22	18.33
	High (› Rs. 51,000/-)	13	10.83
Land holding	Marginal farmers (d” 2.5 acres of dry land)	15	12.50
	Small farmers (2.5 to 5.0 acres of dry land)	63	52.50
	Medium farmers (5 – 10 acres of dry land)	30	25.00
	Big farmers (e”10 acres of dry land)	12	10.00
Farming experience	Low (up to 10 years)	52	43.33
	Medium (11-20 years)	46	38.33
	High (21 years and above)	22	18.34
Dairy experience	Low (up to 10 years)	104	86.67
	Medium (11-20 years)	10	8.33
	High (21 years and above)	06	5.00
Extension participation	Low	42	35.00
	Medium	57	47.50
	High	21	17.50
Mass media participation	Low	62	51.67
	Medium	43	35.83
	High	15	12.50
Innovative proneness	Low	58	48.33
	Medium	15	12.50
	High	47	39.17
Risk orientation	Low	40	33.33
	Medium	27	22.50
	High	53	44.17
Listening behaviour	High	39	32.50
	Medium	55	45.83
	Low	26	21.67

respondents (47.50%) had medium extension participation and 51.67 per cent had low mass media participation. The findings are in line with the findings reported by Yelvattimath (2012). With respect to innovative proneness 48.33 per cent belonged to low and 39.17 per cent belonged to high category whereas in case of risk orientation 44.17 per cent belonged to high and 33.33 per cent belonged to low category. As most of the respondents are middle aged during their time there was no rule of compulsory education, hence there is low literacy level and 33.34 per cent are illiterates. Due to the increase in nuclear families, the size of the families is also small and land holding is also divided. Being less scope for employment in non-agricultural sector, therefore, majority of respondents engaged in agriculture and dairying. Most of the respondents had only dry land and cultivated one crop in a year. So, the income from single crop was certainly low. But as all the respondents had dairy as subsidiary enterprise, it has added to their income and hence most of them fall in medium income

category. With respect to listening behavior 45.83 per cent of the respondents possess medium listening behavior followed by high (32.50%) and low (21.66%) listening behavior. Pattanshetti (2010) had reported that majority of the women and men listeners of Krishi CRS had medium listening behavior, Yelvattimath (2012) reported that 42.50 per cent of women had medium listening behavior and Krishnamurthy *et.al.* (2008) documented that around two thirds of the farmers (67.50%) exhibited medium to high level of radio listening behavior.

Table 2 shows all the dramas broadcasted under special programmes of animal husbandry practices by Krishi CRS along with date and time. Based on the assessed needs five dramas were planned under the heads: Animal feed and fodder, Breeds, Animal and shed management, Care of animals and pregnancy care, Clean milk production and document maintenance. The script for the dramas was prepared in the local language that is Kannada with the help of package of practices for animal husbandry of University of Agricultural Sciences, Dharwad and experts in the field. The dramas were enacted by artists and recorded. The recorded audio dramas were broadcast by KCRS from March 06th , 2018 to March 11th, 2018. As indicated in the table, the duration was 22.48 minutes, 21.00 minutes, 24.12 minutes, 22.01 minutes and 13.53 minutes for Animal feed and fodder, Breeds, Animal and shed management, Care of animals and pregnancy care, Clean milk production and document maintenance respectively. Each episode was broadcast twice, once in the evening and once the next day morning for the benefit of the respondents.

Table 3 depicts the mean gain in knowledge of all the topics due to dramas broadcast through Krishi CRS. Mean gain in knowledge was highest in case of Animal feed (3.77) followed by Animal and shed management (3.00). The reason may be that these two practices they have to do every day and hence create more interest. The third and fourth were pregnancy and care (2.83) as well as breeds (2.69) which are necessary to increase their production and productivity. Maintenance of documents ranked fifth (2.54) as most of them had not maintained any documents and were with low literacy level hence it was little difficult for them to understand, this followed by fodder (1.97) and clean milk production (1.08). As most of them were with small land holding, they were unable to allocate land for fodder production, hence they had to feed with available fodder in the market, thus their interest towards this topic may be little less, hence fodder gained 6th rank. As most of them sold the milk immediately after milking, they were not much bothered about storage; hence it has got seventh rank. But on the whole there was gain in knowledge, as the dramas were effective in making the respondents understand various topics.

The results in Table 4 clearly shows that there is significant difference between the pre and post test means of all the topics of broadcast with 't' value for Breeds (24.14), Animal feed (47.59), fodder (23.29), Animal and Shed management (31.94), Pregnancy and care (25.33), Clean milk production (15.80), Maintenance of documents (39.27). It means that there was gain in knowledge of the respondents after listening to the programme. This shows that drama format has played a vital role in giving knowledge to the respondents. As dramas are nearer to the life situation and farmers feel they are a part of it. They listen to it with more involvement, hence the result. Therefore we can say that drama format is an effective medium for information dissemination. Nityashree *et.al (2013)* revealed that the listeness of KCRS Programmes on women, health and nutrition had gained knowledge about these topics due to the result of listening.

From Table 5 it is clear that majority of the respondents (90.83 %) said that the information given was good and sufficient. As dramas are replica of real life situations and topics

Table 2. Delineation of the dramas n= 12

Episode No.	Dramas	Duration (minutes)	Broadcast date and timing	Repeat date and timing
1	Animal feed and fodder	22:48	06-03-20188.30 pm	07-03-20188.45 am
2	Breeds	21:00	07-03-20188.30 pm	08-03-20188.45 am
3	Animal and shed management	24:12	08-03-20188.30 pm	09-03-20188.45 am
4	Care of animals and pregnancy care	22:01	09-03-20188.30 pm	10-03-20188.45 am
5	Clean milk production and document maintenance	13:53	10-03-20188.30 pm	11-03-20188.45 am

Table 3. Mean gain in knowledge after intervention

n= 120

Programme	Mean gain in knowledge	Ranking
Breeds	2.69	4
Animal feed	3.77	1
Fodder	1.97	6
Animal and Shed management	3.00	2
Pregnancy and care	2.83	3
Clean milk production	1.08	7
Maintenance of documents	2.54	5

Table 4. Impact of intervention on gain in knowledge

n=120

Programme	Mean pre test	Mean post	test't' value
Breeds	4.58	7.27	24.14**
Animal feed	5.87	9.64	47.59**
Fodder	4.41	6.37	23.29**
Animal and Shed management	5.61	8.61	31.94**
Pregnancy and care	9.35	12.2	25.33**
Clean milk production	5.02	6.11	15.80**
Maintenance of documents	3.05	5.59	39.27**

Table 5. Opinion of the respondents about dramas on animal husbandry practices n= 120

Opinion	Number	%
Dramas were Interesting	78	65.00
Easily understood	85	70.83
Information given was good and sufficient	109	90.83
Difficulty to understand	33	27.50
Dramas were lengthy	10	8.33

*Multiple responses

were well covered in the dramas, hence the opinion was good. 70.83 per cent opined that they easily understood but around one forth (27.50%) felt that dramas were difficult to understand, the reason may be due to the use of some technical words. According to 65.00 per cent dramas were interesting whereas only 8.23 per cent felt that dramas were lengthy. Only 8.33 per cent opined that the dramas were lengthy and this may be due to their individual liking and is negligible. Overall it shows that the respondents had a good opinion about the dramas broadcast through Krishi CRS.

Age is negatively related to knowledge gain, as the age increases the capacity of learning decreases, hence the result. Listening behaviour has positive and significant relation with knowledge gain; the reason is better listening leads to better understanding and gain in knowledge. But knowledge has no significant relationship with all other variables like education, income, land holding farming experience, dairy experience and livestock possession (Table 6).

Table 6: Correlation of socio economic factors with knowledge gain n= 120

Variables	Correlation coefficient
Age	-0.30 **
Education	0.01 NS
Income	0.14 NS
Land holding	0.17 NS
Farming experience	0.10 NS
Dairy experience	0.14 NS
Livestock possession	0.12 NS
Listening behaviour	0.33**

** significant at 1 % level

NS: Non significant

Conclusion

Various means can be used to diffuse knowledge but its effectiveness is important to result in higher gain in knowledge. The study clearly revealed that the dramas broadcasted on animal husbandry practices had significantly increased the knowledge of dairy farmers. Majority of the listeners opined that the dramas were easy to understand and were interesting. Hence it is to conclude that drama is an effective format and thus Krishi CRS can use drama format wherever possible to diffuse information about agricultural and allied subjects.

References

https://www.jagranjosh.com/general-knowledge/top-10-countries-by-milk-production- 1318490243-1

Krishnamurty A T, Ramesha Y S, Kumar V S , Manjunatha R and Ahmed B Z, 2008, Personal socio-economic psychological and communication characteristics with their radio listening and televiewing behavior of the farmers of Bangalore rural district, Karnataka. *Environment and Ecology*, 26(3):240-1248

Madhu Pattanshetti, 2010, Awareness and Listening Behaviour of the Listeners of Krishi Community Radio Station. *M. H. Sc. Thesis,* University of Agricultural Sciences, Dharwad, Karnataka (India).

Nithyashree D A, Devendrappa S and Shobha Nagnur, 2013 Impact of KCRS Programmes on science for Women, Wealth and Nutrition, *Journal of Global Communication*, 6(2):116-119

Talwar Sneha, 2011, Perceived usefulness of Krishi Community Radio Programmes by farm women. *M. H. Sc. Thesis,* University of Agricultural Sciences, Dharwad, Karnataka (India).

Yelvattimath Gowri, 2012, Knowledge gain of rural women through environment and health programmes of Krishi Community Radio Station. *M. H. Sc. Thesis,* University of Agricultural Sciences, Dharwad, Karnataka (India).