

Video Documentary Film as ICT tool for Agricultural Extension

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Abstract: *Video documentaries are fact based films designed to be educational, informational and instructional with the use of audio-visual inputs. Video documentary has the advantage of sound and sight that can catch, retain and sustain attention for a long period of time. Since number of extension personnel in rural areas is getting reduced in recent years, these documentary films are used as effective extension tool for communicating to farmers. A study undertaken to know the Effectiveness of documentary films in communicating technologies to dairy farmers in Karnataka revealed that more information was gained through documentary film when compared to other sources of information and it was found to be effective mode of technology transfer. In recent years, since mobile penetration has increased in rural areas, accessing to social media has become most convenient communication method. You tube which is most preferred channel in Social media for videos has become much popular and effective source for the farmers. Video documentary films transmitted through social media, the most popular ICT tool for agriculture extension has great potential to be used for knowledge sharing and social networking among farmers. There is wide scope for developing short videos using modern gadgets and editing tools.*

1. Introduction

Effective mass communication of farm information to farmers is the key to develop change in socio-economic and human relationships as a whole in a social system in India, where farmers live in less accessible information area and remote isolated villages there should be very effective communication need to be accessible for development. In view of this the electronic mass media communication brings awareness and influence the credible information to the farmers to accept newer ideas and to adopt agricultural practices in order to enhance the agriculture production per unit area of their individual land holding, similarly, these medias have provided more emphasis in expanding the new technologies to the farming systems to brings change in awareness to adopt the credible information.

Among the different sources of mass media, documentary film gains a special status because of its potentiality to communicate to the two sense organs (eyes and ears) simultaneously and to reach a large section of population even those are living in isolated and remote regions.

Audio visual media not only attracts the attention of the audience but also develops interest, creates desire to learn, convinces the learner and promotes action that leads to satisfaction. (Candy, 1988). video film was found to have an upper advantage of bringing in first hand information-viewers saw what other farmers were doing and have achieved without being told by trained extension agent. (Chipientsho Koketso Mphahlele, 2007). video is very effective in imparting knowledge. Extension administrators and trainers can effectively utilize the video medium for successful transfer of technology. (Viswanathan, 1997). Films can be stored and are readily available for use at any given time and area. Combination of audio and visual resulted in more effective learning than audio or visual alone (Phair 1975). They can also be used repeatedly over a long period of time without affecting the production quality.

Video Compact Disc (VCD) could be used as an effective medium for dissemination of information in order to increase farmers knowledge level. (Sandeep Kumar Gupta, 2005). Compared to "lecture only", "audio only" and "literature only" educational methods, the Video Compact Disc (VCD) found to be most effective for imparting knowledge among farmers (Kadian and Gupta, 2006). Documentary video can recall the past, dwell upon the present and peep into the future. Therefore, it is more effective in providing agricultural information and technological know-how to the farmers and helps to bridge the gap between scientists and the farmers and to reach the technology to the farmers door steps in adoption.

Use of documentary film as teaching extension aid could bring possible changes in knowledge level of the farmers. It helps them to adopt innovations and get better benefits in production and productivity.

In conventional practices documentary films were screened to the farmers using DVD Player, projector and also computer. In recent years due to the penetration of mobile usage in rural areas, Social media has become most preferred platform for accessing audio visual videos.

There is a paradigm shift in agricultural extension from a transfer of technology to a demand driven approach has been accompanied by new extension methods.

Information and Communication Technologies (ICTs) can deliver agricultural extension information with greater ease, more rapidly and with higher accuracy (Goyal, 2011, Karthikeyan, 2012 and World bank, 2016). These technologies are reviving agricultural extension and advisory services around the world (World Bank, 2016).

India being a developing country having 720 million mobile phone users, out of which 320 million are rural mobile phone users. With over 560 million internet users, India is

the second largest online market in the world, ranked only behind China. By 2021, there will be over 600 million internet users in India. With such an increased penetration of mobile sets, the access to internet services has also seen a major growth in India. However, a large section of society still does not possess this privilege, which, ironically, involves a segment that contributes to the 58 percent of the working population in India, i.e., farmers, agricultural laborers and other professionals involved in agriculture.

To overcome the difficulties in contacting scientists and extension officers, farmers now have started to access social media for getting required information related to their farming practices. Among the social media platforms, you tube plays vital role in communicating technologies to farming community. Documentary films shared through social media have become most opted source of information by farmers in recent days. These developments have opened up new avenues for improving reach of extension services for the needy farmers and other stakeholders.

2. Materials and Methods

As part of the research work to measure effectiveness of documentary film, it was planned to prepare an exclusive educational video documentary film on dairy farming practices. Different stages of video film making were followed to meet the technical requirements of the documentary film. It included script preparation in consultation with veterinary doctors, video shooting to capture visuals as per the script, recording background voice narration, video editing and conversion of final out put of the video into DVD and MP4 format for screening purpose. Random sampling method was followed with pre structure questionnaire to collect data from 520 respondents spread across Karnataka. Six districts were selected for the study which included Bangalore urban and Rural District, Kolar, Chikkaballapur in southern Karnataka and Belagavi and Bagalkot in northern part of Karnataka.

DVD's were distributed to the selected dairy farmers who have access to DVD player and TV at their home. Apart from this, film screening was also done to the group of farmer trainees in livestock breeding and training Institute based at Bangalore. After viewing the film, respondents were asked to fill the structured questionnaires and data was analyzed with statistical tools.

As part of research work , You tube channel was launched on 21st sept 2018. Documentary video on dairy farming was uploaded to the channel for public access. For more publicity and connectivity among the farmers, video link was shared in different social media platforms like whatsapp, facebook, and mobile messages. Social media access by farmers for information on dairy farming particularly YouTube was studied over one year.

Table 1: Demographic data

Sub Variable			Gender		Total
			Male	Female	
Age	20-30 years	F	92	42	134
		%	68.7	31.3	100
	31-50 years	F	189	95	284
		%	66.5	33.5	100
	>50 years	F	73	29	102
		%	71.6	28.4	100
Education	Primary	F	81	72	153
		%	52.9	47.1	100
	Higher	F	110	33	143
		%	76.9	23.1	100
	degree	F	115	15	130
		%	88.5	11.5	100
	illiterate	F	48	46	94
		%	51.1	48.9	100
Occupation	Agriculture	F	308	89	397
		%	77.58	22.42	100
	Non agriculture	F	46	77	123
		%	37.40	62.60	100
Total		F	354	166	520
		%	68.08	31.92	100
Sub Variable			Gender		Total
			Male	Female	
practicing dairy farming	1-5years	F	162	107	269
		%	60.22	39.78	100
	5-10years	F	68	29	97
		%	70.10	29.90	100
	10-20years	F	61	9	70
		%	87.14	12.86	100
	> 20years	F	63	21	84
		%	75.00	25.00	100
Number of dairy cows owned	1-5	F	301	145	446
		%	67.49	32.51	100
	6-10	F	31	16	47
		%	65.96	34.04	100
	>10	F	22	5	27
		%	81.48	18.52	100
Milk production / day /liters	<10L	F	242	128	370
		%	65.41	34.59	100
	11-20L	F	52	29	81
		%	64.20	35.80	100
	>20L	F	60	9	69
		%	86.96	13.04	100
Income/day	<250	F	243	127	370
		%	65.68	34.32	100
	251-500	F	42	27	69
		%	60.87	39.13	100
	501-1000	F	19	7	26
		%	73.08	26.92	100
	>1000	F	50	5	55
		%	90.91	9.09	100
Total		F	354	166	520
		%	68.08	31.92	100

3. Results and Discussions

Dependency of farmers for information

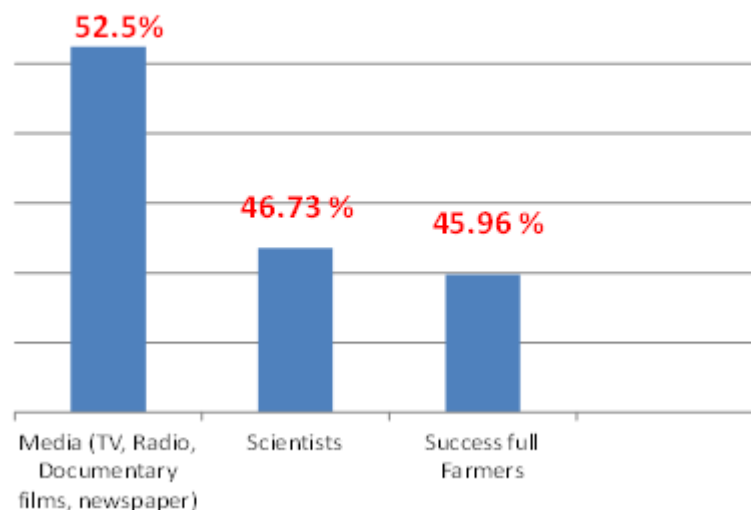


Chart 1

From this research outcome it shows that media which includes television, radio, news apper and documentary films plays key role in transferring information to farmers. When compared to other modes of information resources, media ranks first in the order. This strengthens the opinion of lack of extension personnel in the rural areas. Here mass media gained importance in filling the extension gap. Chart 1 proves that more number of respondents are depended on media (52.5%) for getting required information. Due to the non availability of extension officers in rural areas majority of farmers are depended on media followed by this

neighboring successful farmers. Neighboring successful farmers were the next source for the information (45.96%). Since farmers believe more on the neighboring farmers they take advise from the fellow farmers to adopt the new technology or new inventions followed by the progressive farmers. Percentage of farmers depended for information on scientists is 46.73%. It is observed that disseminating information through media can make effective communication to strengthen farmer's knowledge.

Opinions about the video documentary

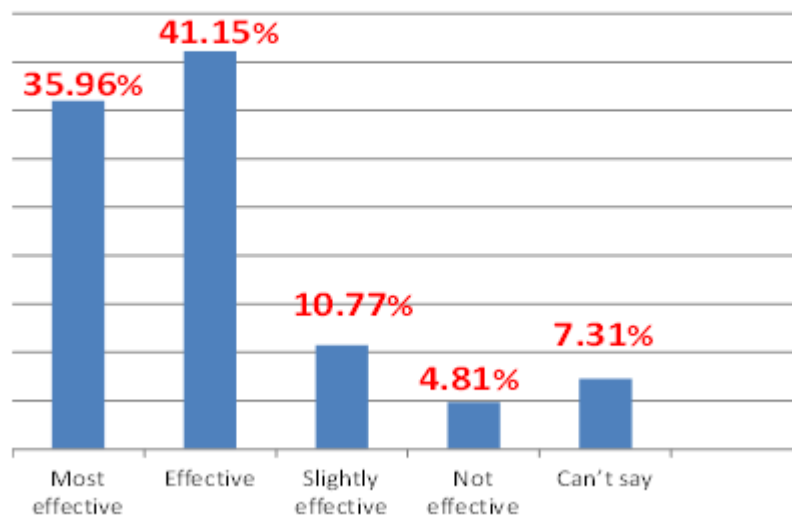


Chart 2

Chart 2 shows that Video documentary film screened to the respondents found to be effective (41.15 %). But still it can be improved by providing need based information to make it

most effective. One hour long duration film with huge information was found most effective for those who have limited access to information by other sources.

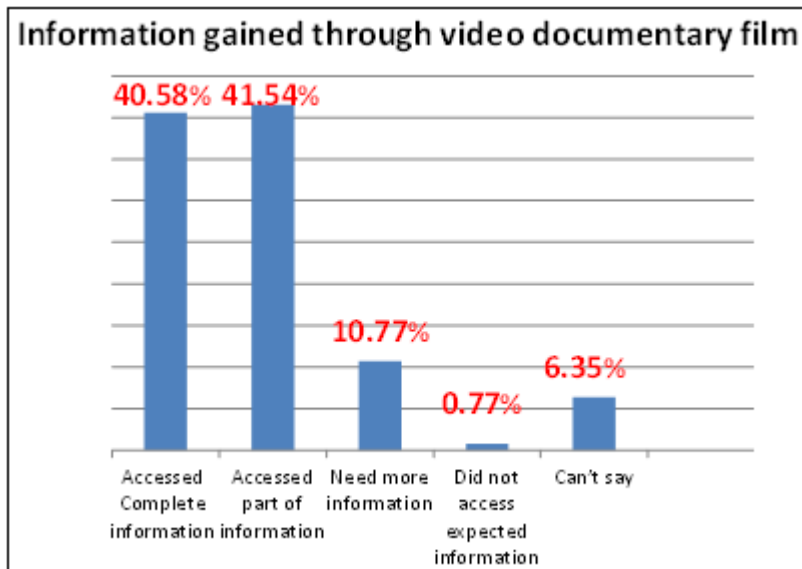


Chart 3

From chart 3 we noticed that about 40.58 % of people were satisfied with the information provided in documentary film. Whereas 41.54 % of respondents accessed part of the information instead of the detailed information which they were expecting. Even though film duration was beyond one

hour farmers are in need of some more information. This shows that documentary films can be focused on providing the need based information what the farmers are expected. Duration does not matter when there is an urge for the information.

Comparative opinion about the information gained through TV and documentary film

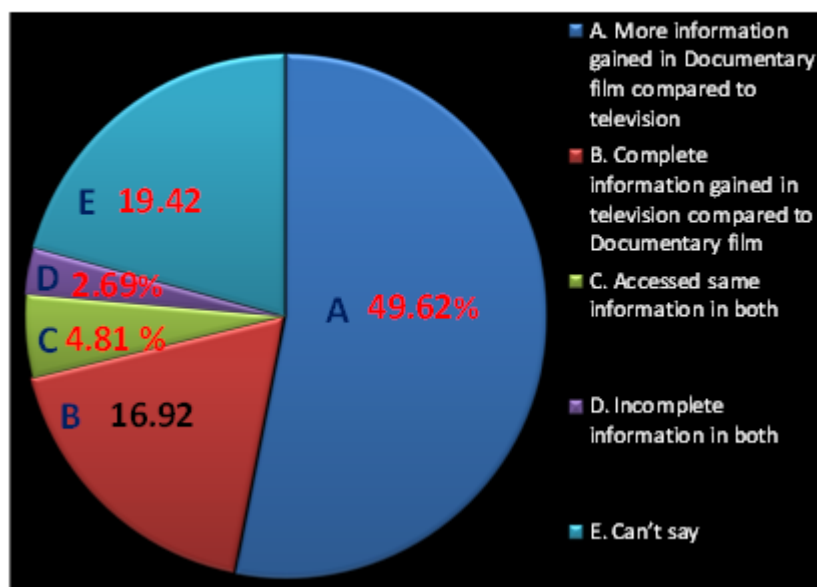


Chart 4

There are several TV channels which are transmitting agricultural programmes with different programme pattern. These programmes are telecasted at different timings. But duration or time slot allotted for the agricultural programmes is very less in TV channels. Hence farmers are unable to get more information with the limited duration. This has made farmers to look for more information. At this juncture documentary film can be used to provide more information

expected by the farmers. As shown in the chart 4, respondents (49.62%) were able to get more information through documentary film when compared to the existing agricultural programmes telecasted in Television channels. Hence documentary film can be utilized as one of the important extension tool to transfer the needful information.

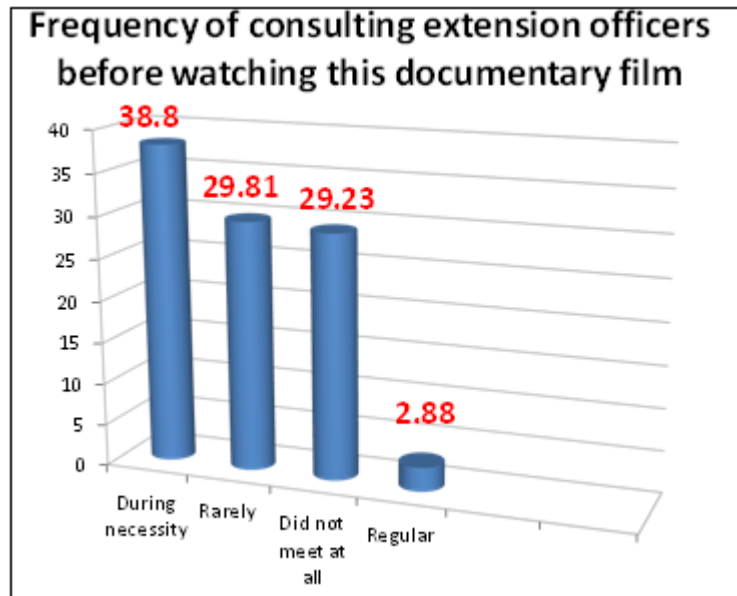


Chart 5

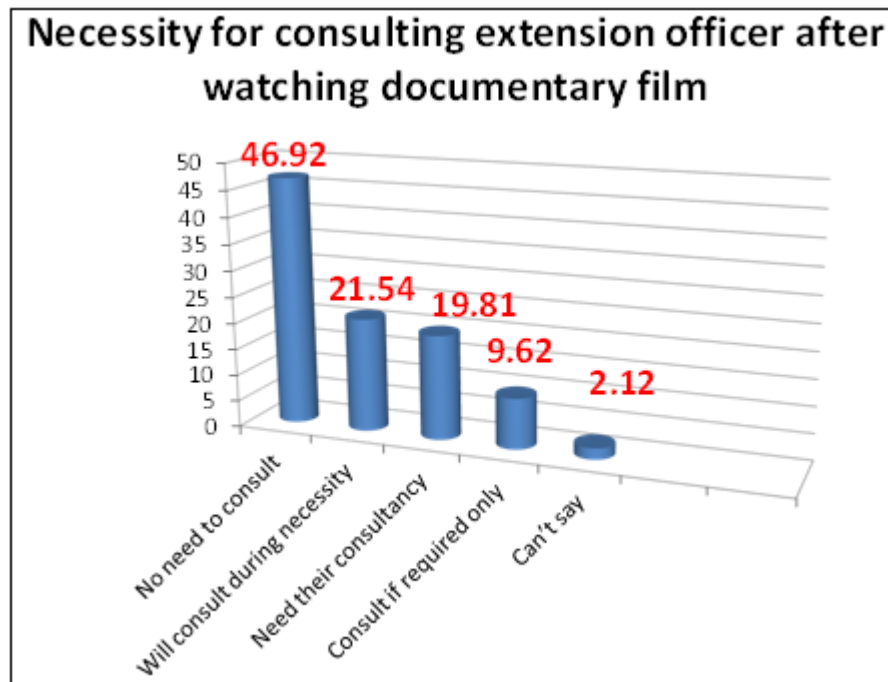


Chart 6

As evident from Chart 5, before screening of the film, 38.8 % farmers were interested to meet extension officers during necessity. But after screening of the film 46.92 % of farmers opined that they accessed complete information and there is no need for them to consult extension officers (chart 6). Due to several reasons 29.23 % of the farmers did not avail the services rendered by the extension officers. Neither they have limited access to extension officers nor extension personnel failed to reach them so far. Documentary film fulfils the lack of extension personnel. Even after screening it is found that 19.81 % of the respondents are looking for guidance from extension officers. Hence Combination of documentary films and extension officer's guidance can strengthen the farm information which in turn improves the farmer's knowledge

Table 2: Viewership in you tube channel

Viewer age	Views (%)
AGE_13_17	1.68
AGE_18_24	31.33
AGE_25_34	46.35
AGE_35_44	17.74
AGE_45_54	2.64
AGE_55_64	0.23
AGE_65_	0.03

With the availability of smart phones and mobile data access at cheaper price in recent days farmers are most familiar with social media usage. Several whatsapp groups and facebook pages have been effectively utilized for the purpose of information sharing. You tube too has become preferable choice by the farmers for video information. Since inception, 3100 subscribers have been registered their names in youtube channel by name srushti media which was

created as part of the research study. This video has got 1,12,076 views and more than 1000 likes. From table 2 it is observed that more number of views was observed in the age group of 25 -34 years. It shows the new generation farming youths are more interested in searching information through social media. It is also observed that 90.74 % of the views are from male farmers and only 9.26 % of the female farmers have viewed the film in you tube.

4. Major Findings

- 52.5% of dairy farmers are depended on Media which includes Television, Newspaper, Documentary films) for the required technical information
- Video documentary film was found to be effective (41.15 %) in communicating technologies related to dairy farming.
- 40.58 % of people were satisfied with the information provided in documentary film.
- 49.62% of Farmers were able to get more information in documentary films when compared to the existing agricultural programmes telecasted in Television channels.
- 46.92 % of farmers opined that there is no need for them to consult extension officers for seeking information since they accessed the required information through documentary film.
- Watching television for farm information “ During free Time “ was most preferred by the respondents
- Majority of the farmers (34.62 %) preferred Agriculture based programmes to be telecasted in Television after 7 PM.
- 55 % pf the respondents opined that Technology conveyed through audio visual format was easy to understand.
- 43.65 % of the respondents opined that educational based documentary films are needed to increase production in dairy farming. While 41.54 % have decided to adopt the information provided in the documentary film.
- 24.04 % are farmers use social media regularly and 31.35 % of farmers access only during necessity
- Increased penetration of mobile communication in Rural areas is found. 88.08 % of respondents opted their mobiles to access internet based information
- Less sized videos are most opted by respondents (60.38) due to the data usage charges
- There is good scope for online Television channel focused for agriculture since majority of farmers (62.12 %) expressed their interest in viewing online channels.

5. Conclusion

It is observed that when compared to the main stream media like television and radio channels, documentary film use to be very ideal ICT tool for communicating technologies to farmers. Documentary film is found to be an effective source of information. With the developments in communication technology, reaching farmers has become very easy as compared to the earlier days. It will minimize the gap in providing information by extension personnel in rural areas. Combination of documentary films and extension officer's guidance can strengthen the farm information which in turn improves the farmer's knowledge.

Social media which is new generation communication platform too plays a key role in taking technology to farmers doorsteps at a very faster rate. Hence documentary films can be hosted in social media to make easy access to farmers where ever they are and whenever they are in need of information.

For effective and authenticated dissemination of information, there is a need to have proper planning in preparation of documentary film right from script making, video shooting and post production of video film making process.. Quality of the information provided in documentary film makes farmer to learn and adopt in his field for getting better returns. To provide season specific and area specific information to the farmers regular production and dissemination of information through short videos is very important. Documentary films can be screened during farmer training programmes, workshops, seminars and conferences. This makes farmers learn better and adopt the technologies to gain better results.

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