Received : 27.10.2022 | Accepted : 15.12.2022 | Online published : 15.12.2022
https://doi.org/10.54986/irjee/2022/dec_spl/125-128
IRJEE SOCIETY OF EXTENSION EDUCATION

RESEARCH ARTICLE

Knowledge Gain of PJTSAU Agricultural Videos of YouTube Channel in Central Telangana Zone

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ABSTRACT

Electronic media plays an important role in communication and dissemination process. This helps in disseminating the technologies and connect the people from one end to other end by getting them together with media facilities. Through internet the farmers, department officials and scientists can gain instant access to the most advanced research technologies can discuss their research problems with each other. Thus, PJTSAU Agricultural videos of YouTube channel is providing knowledge on crop production and protection aspects of different crops to the farming community. Majority of the respondents had medium knowledge at pre-exposure stage (53.3%) and medium level at post exposure stage (66.6%) with regard to paddy production and protection aspects. A majority of the respondents were in the category of medium level at pre-exposure (71.6%) and high level at post exposure stage (75.0%) with regard to Cotton production and protection aspects. The studyrevealed that there was a significant difference between pre and post knowledge gain of paddyand cotton farmers.

Key words: *Agricultural videos; Knowledge gain; YouTube channel.*

In recent past, the emerging need for the information related to growth and promotions in all fields became important. The day-to-day disasters will be stopped if the information is properly tapped and utilized in agriculture. Out of various media like print media, electronic media, folk media and visual media, the electronic media is playing a crucial role by facilitating the information to large number of people by increasing their knowledge levels and for dissemination of innovations. Mobile phones appeared as widely accessed tool amongst farmers for verbal exchange and additionally gaining access to agriculture related information (*Belakeri, et al. 2017*) As such, Video information are ideal medium for awareness among farmers towards new technologies and it helps in motivation and change in behaviour of the farmers. Many of the farmers exploring books/online classes for the information and ideas in greater depth. Delivery of agricultural information via net publicity to the subjects offline disseminate farm statistics and thereby boom one's information to the favored expectancies (*Vanetha, 2013*). The social media tool, YouTube provides content to the farmers, students, universities, scholars and many more, a sharing platform which helped viewers in many aspects. The content on YouTube is way bigger than anyone could watch and that has been changed the viewing habits of the viewers. *Srinivas (2002)* studied about Annadata-Velugubata farm telecast programme in Andhra Pradesh. It is observed that majority (74%) of the televiewers had low level of knowledge before the telecast and high level of knowledge which is of 61.6 per cent after telecasting the programme. *Anuradha and Archana (2007)* revealed the knowledge regarding post-harvest technology of food grains where in majority of the respondents 86 per cent had medium knowledge followed by 12 per cent had high and 2 per cent had low level knowledge respectively, while in case of posttest 94 per cent had medium level knowledge followed by 4 per cent had high and 2 per cent had low level knowledge respectively. *Swati (2009)* revealed the knowledge level regarding management of organic farming where in case of pretest most of the respondents (45%) had medium level of knowledge followed by 31 per cent

high and 23 per cent low level knowledge respectively, while in case of posttest majority of the respondents (46%) had medium level knowledge followed by 33 per cent had high level knowledge and 20 per cent low level knowledge respectively. *Ankita (2012)* observed the knowledge level of respondents in case of health and sanitation at pre-test where majority (68%) of the respondents had medium knowledge while 16.67 per cent had low knowledge and 15 per cent had high knowledge level whereas at posttest most of the respondents (20%) had medium knowledge while 15 per cent both belonged to low and medium level category. *Mamta (2012)* stated the knowledge level in the aspect of video programme on nutrition education for rural women where most of the respondents (68%) had medium knowledge while 16.6 per cent had low knowledge and 15 per cent had high level of knowledge. *Neelarani (2013)* studied the level of knowledge of farm women at before and after exposure to ANGRAU video programme on castor cultivation. It was found that pre-exposure to video programme majority (71.25%) of the respondents belonged to low knowledge group followed by medium (19.38%) and high (9.38%) categories while after exposure to video programme majority (73.75%) of the respondents belonged to medium knowledge category followed by high and low categories (13.13%) respectively. *Shivani (2015)* studied the knowledge level of different treatments regarding tomato crop production practices whereas in case of television treatment (49%) found to be high while (43.3%) for DVD treatment and (43%) for e-Krishi portal treatment.

In such context of increasing electronic media importance such as videos related to farm information with appropriate content, a detailed study in relation to the content and usage of information through this media was carried out with the following objective.

To examine the knowledge gain of the respondents in selected crops (Paddy and Cotton) due to viewing of PJTSAU agricultural videos of YouTube channel.

METHODOLOGY

The present study was conducted in the Telangana state in the year 2021 by adopting an experimental design (one group pre-test and post-test design) method and was primarily used to study the PJTSAU Agricultural videos-YouTube channel i.e., crop production and protection aspects of (Paddy and Cotton) crop. The locale of the study was in Central Telangana Zone of Telangana consisting Warangal, Khammam & Medak districts. Out of which six mandals (2 from each district) were selected randomly. Two villages from each mandal were selected randomly to make a sample of twelve (12) villages for the study. All the villages were treated as experimental villages according to one group pretest and posttest design. Ten (10) respondents from each selected village were selected randomly, thus a total of one hundred and twenty (120) respondents were selected.

In this study, the knowledge level of the respondents was tested at pre-exposure before the treatment given and at post exposure after the treatment. Data on knowledge gain with the help of constructed statements was collected from 60 paddy farmers and 60 cotton farmers before and after viewing the videos separately. Frequency and percentages were calculated separately in selected crops and possible range of knowledge gain was given. Knowledge gain among the respondents on production and protection aspects of paddy and cotton crop was tested for its significance with the help of paired t test and values are computed with table values at 0.05 level of significance at pre-exposure and post exposure of the videos in each crop.

RESULTS AND DISCUSSION

Paddy : The results in the Table 1 indicated that, at pre-exposure stage, majority of the respondents (53.3%) had medium level of knowledge followed by 45.0% of low and 1.7% of high-level category respectively and at post exposure stage, majority of the respondents (66.6%) had medium level category followed by low (20.0%) and high (13.3%) respectively.

Table 1. Overall distribution of respondents based on their knowledge gain (Preexposure) due to viewing of PJSTAU Agricultural videos-(n=60)

Category	Pre exposure		Post exposure	
	No.	%	No.	%
Low	27	45.0	12	20
Medium	32	53.3	40	66.6
High	1	1.7	8	13.3
Total	60	100.00	60	100.00

Hence from the Table 1, it could be concluded that most of the respondents had medium knowledge (53.3%) before the treatment and had medium knowledge (66.6%) after the treatment. This might be due to their medium level of social media viewing behaviour, medium level of Audio-visual material

Table 2. Difference in knowledge between the pre and postknowledge gain of paddy respondents

Category	Mean	Standard deviation	Standard Error mean	df	t	Sig. (2-tailed)
Paddy (pre-knowledge)	12.4167	2.56635	0.33131	59	-2.097	0.040
Paddy (post-knowledge gain	12.9333	2.64810	0.34187			

*Significant at 5% LOS

possession and medium level of source of information utilization. This possibility might be due to some of the respondents who had knowledge about traditional practices being followed since times immemorial and not on par with the recently recommended practices customized for the particular zone or area in the state.

It could be clearly observed from the Table 2, that pre-exposure to the videos of paddy production and protection aspects, mean knowledge score was 2.5, the mean knowledge score immediately after exposure was 2.6. It could be seen from the Table 2, that there was significant difference between the pre and post knowledge gain of paddy respondents as the p significant value is <0.05 LOS. The probable reason for this might be due to that the group of respondents were not exposed to the paddy videos regarding recommended practices in specific aspects. It is essential and need for the extension officials to make effective use of the YouTube videos for changing the knowledge level and behaviour of the farmers.

Cotton: The results in the Table 3 indicated that, at pre-exposure stage, majority of the respondents (71.6%) had medium level of knowledge followed by 25.0% of high and 3.3% of low respectively and at post exposure stage, majority of the respondents (75.0%) had high level of knowledge followed by 21.66% of medium and 3.3 of low-level category respectively.

Hence from the Table 3, it could be concluded that most of the respondents had medium knowledge level (71.6%). This might be due to medium level of social media viewing behaviour. Further the data clearly indicated that most of the respondent had high knowledge (75.0%) after exposure to the PJTSAU

Table 3. Overall distribution of respondents based on their knowledge gain (Preexposure & Post exposure) due to viewing of PJSTAU Agricultural videos (n=60)

Category	Pre exposure		Post exposure	
	No.	%	No.	%
Low	2	3.3	2	3.3
Medium	43	71.6	13	21.66
High	15	25	45	75.0
Total	60	100.00	60	100.00

Agricultural videos on crop production and protection aspects. This might be due to package of practices of the crop in study area could register an encouraging gain in knowledge. The respondents having average knowledge should be kept in view and also providing the scope to them in gaining full knowledge which should be done by local extension functionaries.

It could be clearly observed from the Table 4, that pre-exposure to the videos of cotton production and protection aspects, mean knowledge score was 10.6, the mean knowledge score immediately after exposure was 12.3. The gain in knowledge score was 1.7.

It could be seen from the Table 4, that there was significant difference between the pre and post knowledge gain of cotton respondents as the p significant value is <0.05 LOS. The probable reason for this might be due to that the group of respondents were not exposed to the cotton videos in specific aspect.

CONCLUSION

The study concluded that there was a significant difference between pre-exposure and post exposure stage to a treatment i.e., (paddy and cotton-crop

Table 4. Difference in knowledge between the pre and postknowledge gain of cotton respondents

Category	Mean	Standard deviation	Standard error mean	df	t	Sig. (2-tailed)
Cotton (pre knowledge)	10.6167	2.53178	0.32685	59	-6.474	<0.001
Cotton (post knowledgegain	12.3500	2.71733	0.35081			

*Significant at 5% LOS.

production and crop protection) video of PJTSAU agricultural videos of YouTube channel and understood that majority of the respondents gained knowledge when exposed to the videos. As Agriculture is playing a crucial role in the economy of developing countries, it needs innovation. The future of agricultural videos plays an essential role in the process to make agriculture more efficient. And there is scope for communication of farm information, innovation and technologies in the form of video techniques to reach out to large number of farmers.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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