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Developing strategies to maximize the outreach of PJTAU agricultural videos YouTube channel among the farming community of Telangana

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Abstract

Videos serve as an effective electronic medium for raising awareness among farmers, motivating them, and influencing their behaviour towards adopting new technologies. YouTube, as a digital video platform, is widely utilized to educate farmers across the country. Professor Jayashankar Telangana State Agricultural University (PJTAU), located in Rajendranagar, Hyderabad, developed the "PJTAU Agricultural Videos" YouTube channel to extend its reach and provide comprehensive agricultural knowledge to those previously inaccessible. An experimental research design, employing a one-group pre-test and post-test approach, was conducted to study the impact of the PJTAU Agricultural Videos YouTube channel in Telangana state. The findings revealed that the majority of respondents (85%) recommended increasing the use of vernacular language in the videos rather than relying on scientific terminology. Additionally, 81% of respondents suggested incorporating the field experiences of progressive farmers into the video content. Based on these suggestions, strategies were formulated in consultation with officials from the Department of Agriculture and scientists from DAATTCs, KVKs, and SAUs. These strategies focus on technology enhancement, improving the effectiveness of videos, and expanding knowledge dissemination to further enhance the PJTAU Agricultural Videos YouTube channel's reach and impact.

Keywords: Agricultural videos, farming community, strategies, Telangana, YouTube channel

Introduction

Many economies around the world are based on agriculture, which is also essential for sustaining the world's expanding population. In addition, farmers must devise new strategies to boost productivity and efficiency due to the increasing demand for food. Social media applications have the potential to disseminate information about new technologies and farming practices while connecting with farmers in remote, resource-poor locations across divergent geographical, social, temporal as well as virtual and on-site spaces (Thakur and Chander, 2018) ^[10]. Universities and research institutes are utilizing these platforms to indirectly or directly reach farmers and other stakeholders. Among these social media platforms, YouTube stands out by offering in-depth techniques, procedures, and methods to promote sustainable farming practices. The platform's extensive content library far exceeds what any individual could watch, significantly shaping viewers' habits. YouTube particularly appeals to younger audiences, addressing their diverse needs, interests, and preferences, which vary widely. According to Statista 2021, this video sharing platform has 1.86 billion subscribers and making it the second-largest social networking site where users can share videos (Nivedha *et al.*, 2023) ^[8]. Several studies have found that farmers from multiple countries use YouTube as a

repository of information. Agricultural YouTube channels play a crucial role in empowering farmers by providing accessible and cost-effective knowledge. To optimize their influence and efficacy, these channels must overcome a number of obstacles and constraints. By considering and implementing strategies, agricultural YouTube channels can become more impactful, influential and helping farmers gain actionable knowledge for sustainable agricultural practices.

Professor Jayashankar Telangana Agricultural University (PJTAU), located in Rajendranagar, Hyderabad, has made significant progress in research and developed technologies that benefit farmers. Inadequate infrastructure and slow internet connections in rural areas limit access to information and digital platforms. As a result, the University has created a YouTube channel called PJTAU Agricultural videos in the year, 2017 to provide knowledge about all aspects of farming in accordance with the growing demand for information through electronic media. The channel offers videos regarding success stories, crop production, crop protection, farm innovations and technologies, farm mechanization and community science. The primary purpose of the channel is to deliver timely, updated information that meets the regional needs of farmers. Though the channel is delivering quality content, it is

imperative to refresh and update the content and way of disseminating knowledge for the improvement of PJTAU Agricultural Videos YouTube Channel. For this purpose, a study was conducted with the objective:

To document the suggestions of respondents and suggest strategies to improve the PJTSAU agricultural videos of YouTube channel.

Several studies conducted in the past have examined viewer suggestions to improve agricultural and rural television programmes. Chitra (1990)^[1] found that 80% of televiewers in Maharashtra were satisfied with agricultural and home science programmes, while 20% suggested improvements, including eliminating flickering (11.34%), clearer pictures (5.3%), and clearer voice (3.3%). Sivanandan (2002)^[9] observed that Tamil Nadu farmers preferred short evening programmes (56%), repetition of "Indru Oru Seithi" in the evening (38%), and extended morning programmes (36%). Geeta (2005)^[4] highlighted rural women's suggestions to increase programme duration, include agricultural scientists and successful women entrepreneurs, use local language, and reduce commercial breaks. Ganesh (2005)^[3] reported that 63.3% of Chittoor district viewers of Rythu-Mitra programmes requested region-wise live sessions, specific answers from scientists (53.3%), translation of technical terms into Telugu (33.3%), inclusion of success stories (30.5%), and rescheduling and repetition of important programmes (28.89% and 27.22%, respectively). Manasa (2012)^[6] noted that viewers of "Mee Arogyam Mee Chetullo" recommended time changes, live phone-in sessions, colloquial language, and increased programme duration. Kishore (2013)^[5] found that 83.3% of respondents advocated using local language in farm advertisements, followed by location-specific recommendations (75.8%), electronic media advertisements (57%), and cost-benefit details (30%). Neelarani (2013)^[7] revealed that 40% of respondents suggested dramatizing farmers' field experiences, 38% recommended more local area coverage, and 35% highlighted the inclusion of cultivation costs. Waghmare (2013)^[11] noted that 46.8% of rural women

preferred fewer commercial breaks, 46.09% suggested longer informative programmes, and 30.46% advocated for more programmes featuring agricultural scientists, successful women entrepreneurs, and government policies.

Materials and Methods

The current investigation was conducted in Telangana state, employing an experimental design method based on one-group pre-test and post-test design. The study aimed to gather the suggestions regarding PJTAU Agricultural videos of YouTube channel and also develop suitable strategies to enhance the agricultural videos focusing on crop production and crop protection aspects. The study was carried out in the central Telangana zone, encompassing Warangal, Khammam and Medak districts. Six mandals were randomly selected from these three districts, and two villages from each mandal were chosen randomly, resulting in a sample of 12 villages which were designated as experimental villages under the one-group pre-test and post-test design. Ten respondents (paddy and cotton farmers) were randomly selected from each village, making a total of 120 farmer respondents. Additionally, 30 officials from the Department of Agriculture, Telangana, and 30 scientists from DAATTCs, KVKs, and SAUs were included, bringing the total number of respondents to 180.

In the study, suggestions and strategies to improve the PJTAU Agricultural Videos YouTube channel were identified during the post-exposure phase. Data on suggestions and strategies were gathered using semi-structured interviews and open-ended questionnaires from 60 paddy farmers, 60 cotton farmers, and 60 agricultural scientists and officials, each group surveyed separately. Frequency and percentage analyses were performed, and the possible ranges were determined.

Results and Discussion

Suggestions to improve PJTAU agricultural videos YouTube channel

Table 1: Suggestions with reference to the videos expressed by the respondents (n=60)

S. No.	Suggestions	Frequency	Percentage
1.	Usage of local/vernacular language instead of scientific terminology	51	85.0
2.	Progressive farmers should be considered	49	81.6
3.	Give more importance to local/area-based coverage	48	80.0
4.	Repetition of important topics on seasonal basis	46	76.6
5.	Uploading videos at regular weekly/fortnightly intervals	43	71.6
6.	Inclusion of location-specific and timely recommendations	41	68.3
7.	Clarifications should be given to the queries posted under the videos (via comments)	38	63.3
8.	Timely videos on government schemes and subsidies to be released	35	58.3
9.	Provide information regarding nearby agro-company and custom hiring centers	32	53.3
10.	Videos on quality standards of produce acceptable for export need to be uploaded	29	48.3
11.	Conduct live sessions on relevant topics with farmers during evening hours	27	45.0
12.	Videos should be interesting with included illustrations and voice modulations using traditional media and folk songs instead of a monotonous voice-over (informal touch)	23	38.3
13.	More videos on technology advantages to be uploaded	20	33.3
14.	Precautions while using new technology need to be mentioned along with the reasons why they have to be followed	15	25.0
15.	Videos on cost of cultivation of major crops grown in Telangana state to be uploaded	12	20.0

The results presented in the table 1, revealed that majority of the respondents (85%) felt that using of vernacular language

in the videos is more acceptable instead of using scientific terminology followed by allowing the progressive farmers

to assess the situation and to include their field experience (81.6%), by giving more importance to local/area based coverage (80%), repetition of important topics on seasonal basis (76.6%), uploading videos at regular intervals (71.6%), inclusion of location specific and timely recommendations (68.3%), clarifications to be given to queries under the videos (63.3%), timely videos on government schemes and subsidies to be released (58.3%), providing information regarding nearby agro-companies and custom hiring centers (53.3%), uploading the videos on quality standards of produce acceptable for export (48.3%), conducting live sessions on relevant topics (45.0%), video should be interesting with included illustrations (informal touch) (38.3%), technology advantage videos to be uploaded (33.3%), precautions while using new technology need to be mentioned with the reasons (25.0%) and videos on cost of cultivation of major crops grown to be uploaded (20.0%) respectively. The results were in accordance with the findings of Kishore (2013)^[5] and Neelarani (2013)^[7].

Strategies to improve the PJTAU Agricultural Videos YouTube channel

Based on the findings of the present study, suggestions offered by respondents, a strategy to improve the PJTAU Agricultural videos of YouTube channel has been suggested in the study. The strategy included components i.e., technology, effectiveness of videos and enhancement of knowledge through videos. The following are the steps to be considered by the university for improving the YouTube channel videos.

Technology

Technological adoptions to variability should be included in crop management as it is gaining importance in prevailing conditions.

- Simple, need-based and location-specific technologies need to be produced for wider acceptability among farmers.

- Technology attributes need to be reflected in the videos for wider adoption.
- Videos on interaction with progressive farmers need to be uploaded to build confidence among the other farmers for adoption of technologies.

Effectiveness of videos (Production & Use)

Videos include quality visuals with acoustics without noise and disturbed background music attracts the attention of respondents.

- Hire language experts to produce videos in vernacular language which is understandable to users
- Advertisements on videos through social media is to create awareness among the farmers which should be simple and clear
- Monitoring the comments on the videos uploaded to know the feedback of viewers which helps in developing the videos accordingly.
- Consulting officials from the concerned departments like agricultural economics to upload the videos on cost of cultivation of major crops grown in Telangana.

Enhancement of knowledge through videos: An important strategy for a communicator is to determine how to use the channel in order to affect the receiver’s knowledge and adoption behaviour.

- Videos should be uploaded on government schemes and subsidies to provide timely and accurate information to the farming communities.
- Videos should be uploaded on how to rectify minor technical problems concerned with farm machinery
- Videos on regarding market intelligence need to be uploaded
- Provide Need-based trainings to farmers, AO's, AEO's, progressive farmers, key leaders for creating awareness on usage of social media.

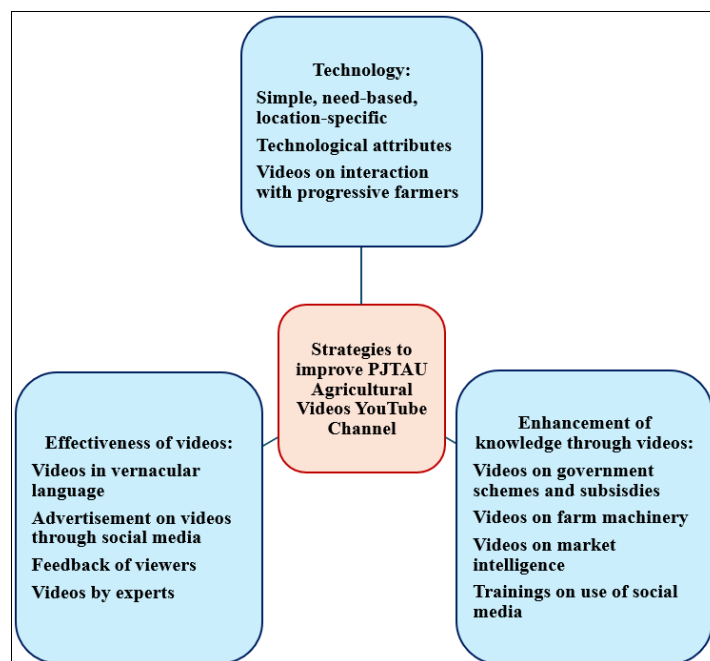


Fig 1: Strategy for improvement of PJTAU Agricultural Videos YouTube Channel

Conclusion

Agricultural videos have emerged as a powerful medium for disseminating knowledge, empowering farmers, and serving as an accessible platform to bridge the gap between technological developments and grassroots agrarian requirements. This study not only offers strategies to enhance the PJTAU Agricultural Videos YouTube channel but also supports the university in developing a broader range of videos covering diverse aspects of agriculture. Partnering with agricultural research institutions, extension authorities, and local farmers ensures the content remains authentic, data-driven, and tailored to the farming community's changing requirements. To be most effective, administrators of the YouTube channels must focus on region specific material/content, clarifying complex concepts and delivering content in local languages. Incorporating engaging visuals, interactive elements, and expert-led presentations can further enhance their effectiveness. Therefore, the university should make timely and informed decisions to improve and release videos at regular intervals or on a seasonal basis, guided by feedback from all stakeholders. This approach will ensure the delivery of impactful and practical information to the agricultural community.

References

1. Chitra MB, Nandapurkar GG. A study on the impact of television programmes with special reference to agriculture and home science technology. M.Sc. Thesis, Marathwada Agricultural University, Parbhani-413402, Maharashtra, India; c1990.
2. Das VJ, Sharma S, Kaushik A. Views of Irish farmers on smart farming technologies: An observational study. *Agri Eng.* 2019;1(2):164-187.
3. Ganesh KP, Prabhakara ST. A study on Rytu mitra television programme for farm televiewers in Chittoor district of Andhra Pradesh. M.Sc. Thesis, Acharya N.G. Ranga Agricultural University, Hyderabad-500030, India; c2005.
4. Geeta M, Chhaya AB. Radio listening and televiewing behaviour of rural women. M.Sc. Thesis, University of Agricultural Science, Dharwad-580005, Karnataka, India; c2005.
5. Kishore NK, Sudha VR. Critical analysis of farm advertisements through print and electronic media in Andhra Pradesh. Ph.D. Thesis, Acharya N.G. Ranga Agricultural University, Hyderabad-500030, Andhra Pradesh, India; c2013.
6. Manasa G, Geetha RR. Perception of rural women on mee arogyam mee chetullo: A television programme on health and nutrition. M.Sc. Thesis, Acharya N.G. Ranga Agricultural University, Hyderabad-500030, Telangana, India; c2012.
7. Neelarani R, Rao IS. Impact of farm video programmes of Acharya NG Ranga Agricultural University on rural women: An experimental study. Ph.D. Thesis, Acharya N.G. Ranga Agricultural University, Hyderabad-500030, India; c2013.
8. Nivedha CK, Sriram N, Balasubramaniam P. Content analysis of agriculture YouTube channels in Tamil Nadu. *Biol Forum Int J.* 2023;15(11):554-557.
9. Sivanandan S, Ramachandra RD. A study on listening behavior of the farmers towards selected farm broadcasts in the district of Tamil Nadu. M.Sc. Thesis, Professor Jayashankar Telangana State Agricultural University, Hyderabad-500030, Telangana, India; c2002.
10. Thakur D, Chander M. Social media in agricultural extension: Benefits and challenges under Indian context. *Asian J Agric Ext Econ Sociol.* 2018;27(2):1-8.
11. Waghmare PG, Suradkar DD. Televiewing behaviour of rural women towards agricultural programme. M.Sc. Thesis, Marathwada Agricultural University, Parbhani-413402, Maharashtra, India; c2013.