

## Farmers Prefer Shorter Videos: Vibrant Method to Promote Transfer of Technology using YouTube Media Platform

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### SUMMARY

Videos are good media to communicate information or knowledge among many people without any distortion of information. Watching video allows viewers to utilize senses of seeing and hearing which improves the retention of information. Therefore, videos are good means to transfer of technology (ToT) in agriculture and allied sectors for their greater impact. Through this article, we made assessment of the experiences for ToT via YouTube channel and the most preferred length of video for targeted audience.

### INTRODUCTION

The ICAR-Agricultural Technology Application Research Institute (ATARI), Zone-VII, Umiam (Barapani), Meghalaya is the nodal institute to implement the transfer of Technology projects via *Krishi Vigyan Kendras* (KVKs) of Manipur, Meghalaya, Nagaland, Mizoram and Tripura states. This institute was earlier called as the Zonal Project Directorate, Zone-III, Umiam, Meghalaya and was operational in all eight North Eastern states.

### Approach of Participatory Video Production Model

One of the mandated activities of this institute (ICAR-ATARI, Umiam) was to empower Human Resource working in KVKs by organizing location specific, need-based and client-oriented training programs. Accordingly, this institute organized training program for almost 95 KVK professionals to implement participatory video production model through digital video production. The trainee groups consisted of Subject Matter Specialists (SMSs), Farm Managers, and Programme Assistants (Computer Science) of KVKs in the region. The Training programs covered key areas like taking good action photographs, recording videos in field conditions, recording voice and creating videos with the help of windows movie maker etc. The Open Source (free license) software was used to train the participants in the training and videos were prepared without any additional cost. All trainees were assigned to prepare one video clip of 2-4 minutes on any one of the thrust areas in agriculture and allied sectors. All the videos produced in these sessions were screened by the experts, and Field Extension Officers and Subject Matter Specialists. Then, in later phase some of the selected clippings have been uploaded on the YouTube channel of ICAR-ATARI Umiam website ([www.icarzcu3.gov.in](http://www.icarzcu3.gov.in)). Conveniently, anyone can download these videos from web in computers, tablets or even in smart phones to access the information. As Information / knowledge in multimedia format enhances the retention capacity of learner, an attempt was made by the first author and course director to communicate scientific information available with KVKs of zone-III through Participatory Video Production Model.

### Salient Findings of Using Participatory Video Production Model (2014-2021)

The YouTube channel was named as Director ATARI Umiam and during the span of two years almost 83 videos were uploaded on it (i.e. during 2014 to 2016).

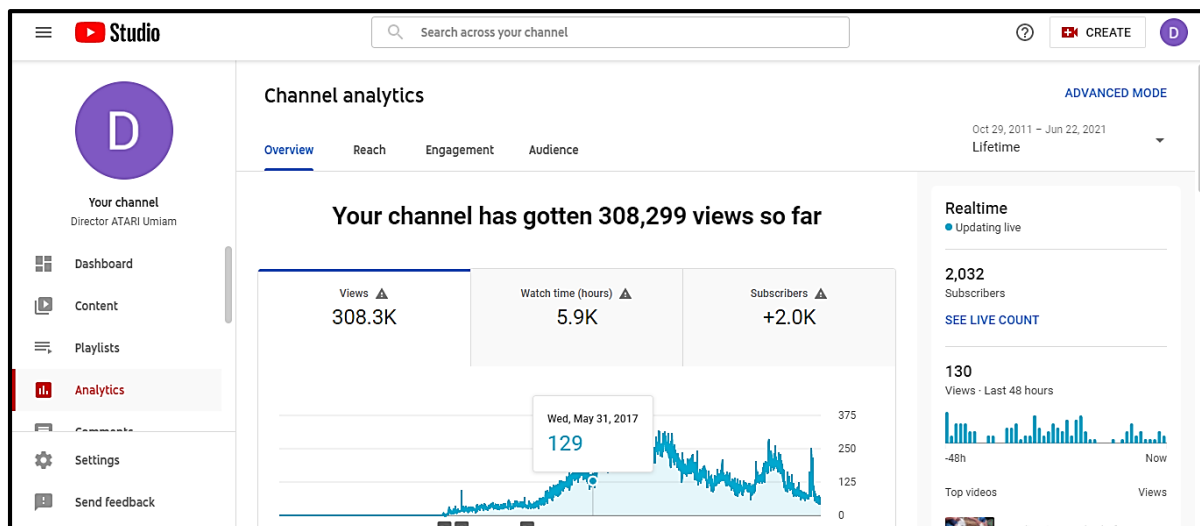


Figure 1. The channel statistics shown by YouTube studio that indicates the total views and watch time in hours, for the entire duration (*first video was uploaded in 2014*).

As of now, since last six years a total of 3 lakh (3,08,299 views as on 23.6.2021) views are received and even today the videos are watched by stakeholders of agriculture (Figure 1). In other words, it can be stated that almost three lakh individuals approached this channel to seek information on various video topics. The channel is subscribed by 2032 individuals who are seeking relevant information related to agricultural technologies.

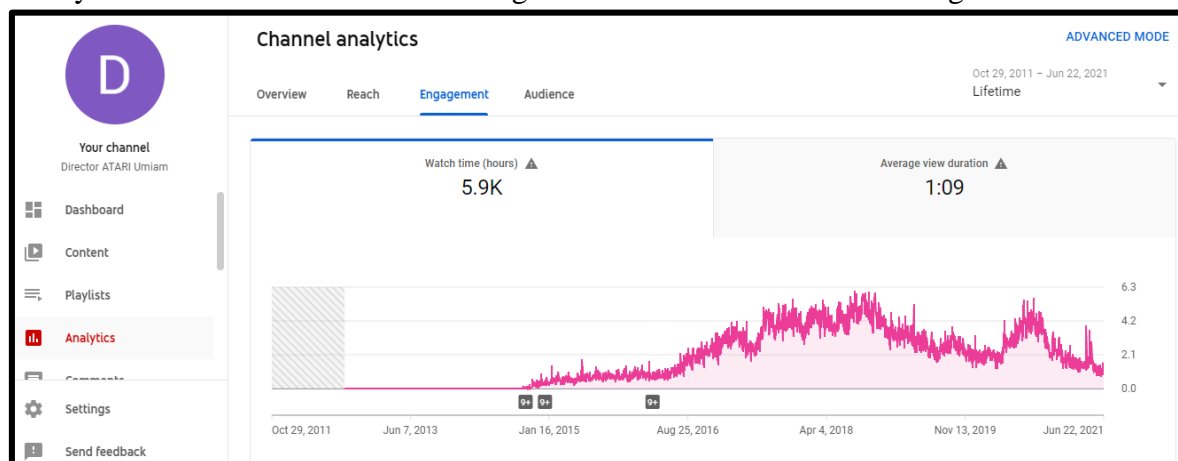


Figure 2. The channel statistics shown by YouTube studio that indicates the average view duration for all videos.

The total watch time for all videos of this channel (*Director ATARI Umiam*) reached 5924.21 hours. However, the average view time was 1.09 minutes (Figure 2). This underscores that the stakeholders such as farmers, agripreneurs, agricultural students, line department officers, change agents etc. are interested in shorter videos and also from many other disciplines (Snelson, 2011). Therefore, a modification is required in the Participatory Video Production Model for putting much emphasis on producing videos of 1 to 2 minutes, rather than 2 to 4 minutes of duration (Cheng, Dale, & Liu, 2007). In fact, videos up to duration of 1 to 1.5 minutes would be much more appropriate. This finding is also substantiated by scientific studies which show that individuals attention span is lesser and prefer short videos (Cheng, Dale, & Liu, 2008). In addition, it would be pertinent to say that all videos do not get views immediately. In general, it takes a while for them to get noticed on YouTube and then gradually number of viewers increase. In fact, not all videos get views uniformly. Some videos that are produced on relevant topics, with maximum relevance to the stakeholders get more views. For instance, in this case Application Method of *Trichoderma Spp.* received maximum of 54208 views.

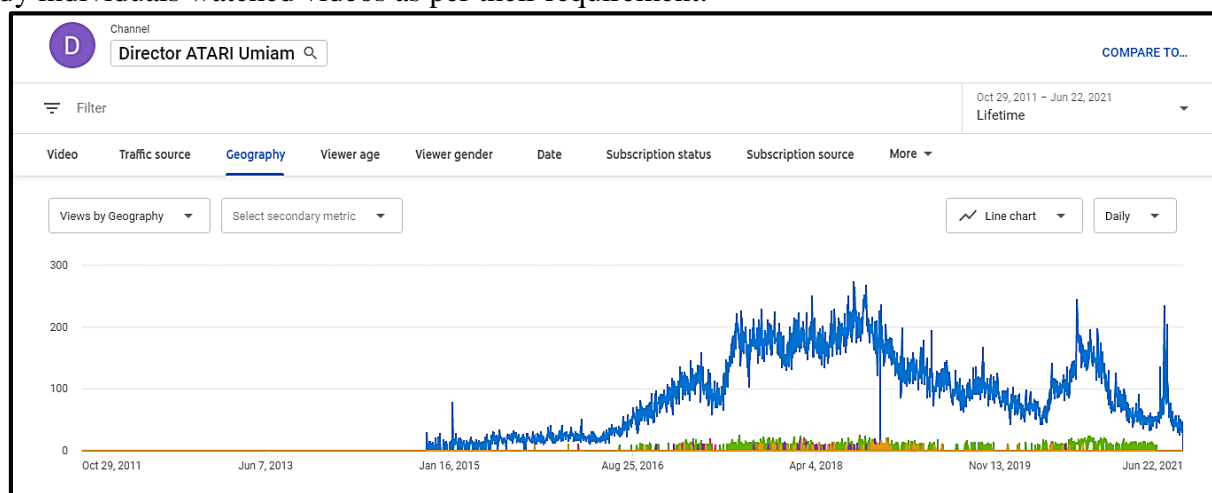
Whereas a video titled *How to Speed Up Your Computer System* got almost 12 views in the last six years. In fact, it was found that a very significant correlation is found in between total number of views, number of subscribers, watch time, and number of impressions on YouTube channel (Table 1). These finding highlights that in order to engage a greater number of stakeholders on digital platform one should attempt to produce videos on participatory mode that has higher relevance. In fact, the Table 1 findings reveal that good and relevant videos have potential to engage maximum number of stakeholders on digital platform.

**Table 1. Correlation between views, watch time, number of subscribers and Impressions on YouTube channel (n=83 videos)**

Variables		Views	Watch_time	Subscribers	Impressions
Views	Pearson Correlation	1	0.981**	0.975**	0.976**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	83	83	83	83
Watch_time	Pearson Correlation	0.981**	1	0.949**	0.968**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	83	83	83	83
Subscribers	Pearson Correlation	0.975**	0.949**	1	0.981**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	83	83	83	83
Impressions	Pearson Correlation	0.976**	0.968**	0.981**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	83	83	83	83

\*\*Correlation is significant at the 0.01 level (2-tailed)

Moreover, during 2017 to 2021, i.e. almost for five years no video was uploaded on this YouTube channel to see the behavior of viewers. It was found that the channel was regularly visited by various stakeholders and needy individuals watched videos as per their requirement.



**Figure 3. The views received by channel from different geographic locations. The blue colored line indicates India whereas the other color lines show views from different nations.**

According to the Figure 3, maximum number of views were received from Indian viewers. Besides India, viewers from many other countries such as Philippines, Bangladesh, Indonesia, United States, Pakistan, Nepal, Myanmar, Shri Lanka etc. also got engaged with the content of this channel. These findings highlight that majority of the stakeholders are from India only but the stakeholders living in the similar kind of agro-ecological settings (*such as Nepal, Bangladesh, Myanmar, Indonesia, Philippines etc.*) also got actively engaged with this channel. These finding highlights the immense potential of Participatory Video Production Model and information dissemination via YouTube that can reach to many needy individuals. On the contrary, the authors

do not have a data for number of times particular video got downloaded and then number of times it got circulated on social media platforms such as WhatsApp.

## CONCLUSION

The farmers are interested in seeking information via social media platforms. The video format is popular among farmers because they get information in their own language as well as a rate of information retention is high. However, the experience of YouTube channel at IACR-ATARI, Umiam shows that farmers prefer shorter videos i.e. around 1 to 1.5 minutes. Therefore, it is concluded that it would be much appropriate to produce several videos of shorter length rather than creating longer video for transfer of technology among the farmers and other concerned stakeholders. Good quality videos have potential to engage stakeholders from adjoining countries who have similar information / ToT needs.

## REFERENCES

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