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A comprehensive study of changed training in SAMETI Uttarakhand mode during Covid-19 pandemic

JYOTI KANWAL, B. D. SINGH, ANURADHA DUTTA and ANIL KUMAR SHARMA

ABSTRACT: COVID-19 pandemic has disrupted the Indian agricultural system extensively. SAMETI (State Agricultural Management and Extension Training, GBPUA&T, Pantnagar, Uttarakhand) has adapted to the changed circumstances and has taken up the mandate of trainings in the online mode with very interesting and encouraging outcomes. The study has revealed that more subjects have been covered in online trainings as compared to offline training. Remoteness doesnot discourage people from availing online trainings on diverse subjects. Observations of extension professionals have put forth the pros and cons of both online and offline mode of trainings. The learning experience is that conducting trainings in HYBRID (both online and offline) mode will definately have better outcome.

Key words: Covid-19 Pandemic, Hybrid Mode, online trainings, offline trainings, SAMETI

It is said that people are visual minded. they retain 20% of what they hear, 50 per cent what they hear and see and probably 100% of what they hear and see and do.

Training plays a basic role in shaping the ever changing world. If we go through history, we find that people have been sharing their knowledge and skills gained through experiences in life, to fellow human beings to enhance productivity. Therefore, to communicate the flow of skill and knowledge, a development process, termed as “training” has become an important vehicle. In today’s dynamic world, the skills of today are going out of the fashion the very next day. People must learn, unlearn and relearn to improve themselves with the advancement of science and technology. Training has been became the most important aspect in Human Resource Development (HRD). It has been observed that nowadays farmers are unable keep abreast with the latest knowledge about knowledge of improved cultivation practices and other income generating occupations in agriculture and training is the major tool to provide them hands on skill.

Training is the platform where farmers get experiential learning and get motivated to apply the gained knowledge practically in field. It is the greatest investment in developing human resource. Training is a short term process that provides a systematic improvement of knowledge and skills

which in turn helps trainees to function effectively and efficiently in given tasks on completion of training. Training provides opportunities to participants to acquire necessary understanding and skills of a subject. A unique effort in this direction is State Agricultural Management and Extension Training Institute.

MATERIALS AND METHODS

In Uttarakhand SAMETI (State Agricultural Management Extension and Training Institute) is situated in Govind Ballabh Pant University of Agriculture and Technology, Pantnagar and is headed by Director Extension Education. Need based annual training calendar is prepared by SAMETI in March consisting of various income generating enterprises of agriculture. This calendar is sent to State nodal officer ATMA/ Director, Agriculture Director, Horticulture Director, Animal husbandry Director, Sericulture Director, Fisheries Director for suggestions/ corrections/ inclusions of any topic etc. and further for approval of the trainings. After approval this training calendar is sent to all the Project Directors, ATMA’s in various districts of Uttarakhand in the first fortnight of April for the wide publicity among extension functionaries, officers and farmers for the participation in training programs. The publicity of trainings is also done with the help of local newspapers, whatsapp groups and other social media platforms. In each training, 30

nominations are considered. During training, free boarding and lodging facility is provided by the SAMETI. Based on the theme of the training, various experts of Govind Ballabh Pant University of Agriculture and Technology, Pantnagar are invited as resource persons. In general, during four days training programme, the schedule of third day is fixed for the field visit/ lab visit of the participants. Apart from this, practical activities are also undertaken for imparting hands on experience to the participants. Due the pandemic of Covid-19, SAMETI Uttarakhand moved to utilize the online platform for organization of trainings. Meantime, with online education chance for interaction among students' increases, instructor can be more approachable and online education also becomes cost-effective choices for students where they can save money by not having to physically attend classes and no more expensive textbooks (<http://www.worldwidelearn.com>).

COVID-19 pandemic has disrupted the Indian agricultural system extensively. The pandemic wreaked a substantial physical, social, economic and emotional havoc on all the stakeholders of Agriculture nationally as well as internationally (Chander Mahesh, 2020). Nearly 85% of India's agricultural sector is made up of small and marginal farmers. Farmers are particularly vulnerable to economic shocks, sparked by disasters such as COVID-19 Pandemic. Many agencies globally are trying to find solutions to these problems which are unprecedented. Farmers need credible information, tips, and advisories to continue their vocation. ICAR and state agriculture universities have accommodated to the current lockdown situation by sharing advisories via various online channels, including social media, facebook, Whatsapp and youtube.

Locale of study: Uttarakhand

Period of study:

Mode of training	Online	Offline
Training period(7 months)	Nov. 2020- Jan 2021 June 2021- Sep. 2021	Nov. 2019- Feb. 2020 Feb. 2021- March 2021 Oct. 2021
No. of trainings held	31	19
No. of participants benefitted	1544	406

Data Source: SAMETI official records, **Statistical analysis:** Percentage were calculated

The pandemic has compelled us to explore these channels intensively to remain connected with the farmers and other stakeholders. SAMETI too has adapted to the changed circumstances and has taken up the mandate of trainings in the online mode with very interesting and encouraging outcomes. In addition to this, broadening geographic distribution, flexible learning environments and variety of educational models that are offered by online training which is similar to distance learning facilitate improved education, and if universities do not embrace this technology they will be left behind in the pursuit for globalization and technological development (Gurmak *et al.*, 2005). This study discusses in detail the conversion of training delivery system from offline to online mode in the past one year, with the aim of strengthening the extension delivery system in agriculture.

An effective training whether online or offline depends on communication skills of trainer. Communication is the foundation of perceiving and expressing a person's thoughts. It means how effectively we are understanding each other either verbally or through visual indications. For this there are various communication aids available to help people to communicate more effectively. Multimedia helps us to address a mass of people and share any information simultaneously among them. It includes different media which convey information by audio aids i.e., radio and cassettes etc., visual aids i.e. brochures, pamphlets, posters etc. and audio- visual aids i.e. moving pictures, film, and video. A well designed, effective training is more than just a tool to alter people's behavior; it is a highly concentrated and efficient form of communication. Certificates is given to participants

RESULTS AND DISCUSSION

Analysis of data indicates that, during online mode, in seven months of training, total 31 trainings were conducted while in offline mode of seven months only 19 trainings were conducted. This indicates that more respondents could be reached through online mode of training. Number of trainees attended the training in online mode were far more than the number of trainees attended the training in offline mode i.e., total 1544 trainees had attended the training in online mode in seven months of training during pandemic while only 406 trainees had attended the training in offline mode in seven months of training.

The above figures clearly indicate that more subjects have been covered in online trainings as compared to offline training. Interestingly the percentage of people opting for training in agriculture has gone down in offline mode of training (48.23 per cent) as compared to online mode (75.62 per cent). The percentage of trainees in horticulture has increased marginally from 8.13 (offline) to 16.26 per cent (online). Similarly, the percentage of trainees in medicinal and aromatic plants (MAP) has increased marginally from 2.46 (offline) to 5.85 per cent (online). Similarly, in soil science, percentage of participants is enhanced from 4.68 (offline) to 6.53 (online). Subjects like animal science and entrepreneur generation have been added to online

trainings on demand of the participants. It may be noted that as per SAMETI norms trainings have to be need based. Prior to the Covid pandemic farmers did not feel the necessity for gaining knowledge of entrepreneurial subjects; they felt that agriculture is the most important area for which expertise is required. However, due to the covid pandemic there was a loss of livelihood opportunities for many of the residents of Uttarakhand. They realized that self-employment is the only alternative for sustaining their livelihood. Graph B supports this fact.

Districtwise data

Figure 2(a) and (b) show the districtwise participation of farmers in trainings conducted in offline and online mode. Districts have been placed as per their remoteness. It can be seen that trainees from Pithoragarh took part in training in one subject only i.e. agriculture in offline mode; and their numbers also were very low. In contrast, in online mode farmers availed training in entrepreneurial generation, horticulture, MAP and soil science. A similar trend is seen in district Uttarkashi also where the training subjects increased from 2 to 6. The same trend can be said to be true for all districts. Interestingly Nainital district which is not so remote shows training in agriculture, fisheries and horticulture in offline mode. The district has added animal science, entrepreneurial generation, MAP and soil science in offline mode. The same stands true

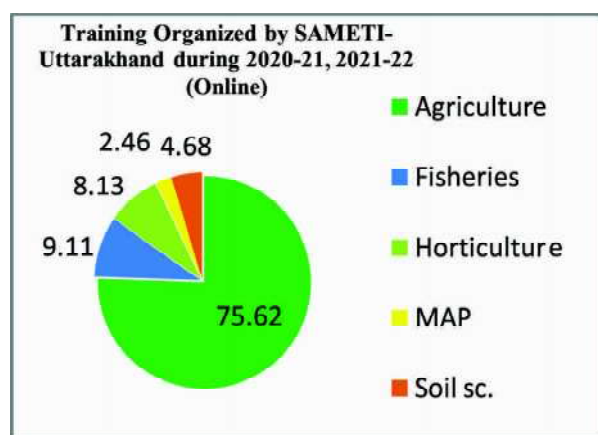
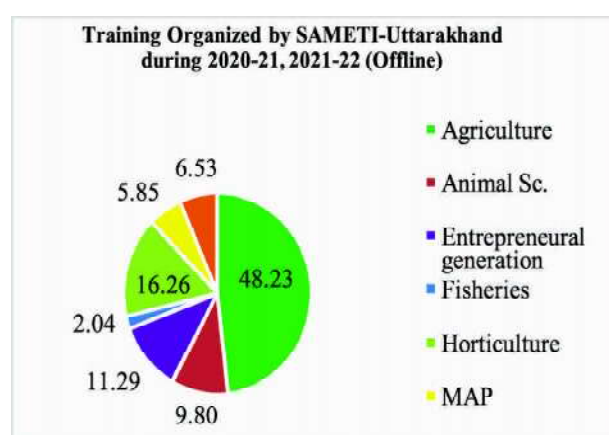


Fig: 1 (a) Training Organized by SAMETI-Uttarakhand during 2020-21, 2021-22 (Online)



(b) Training Organized by SAMETI-Uttarakhand during 2020-21, 2021-22 (Offline)

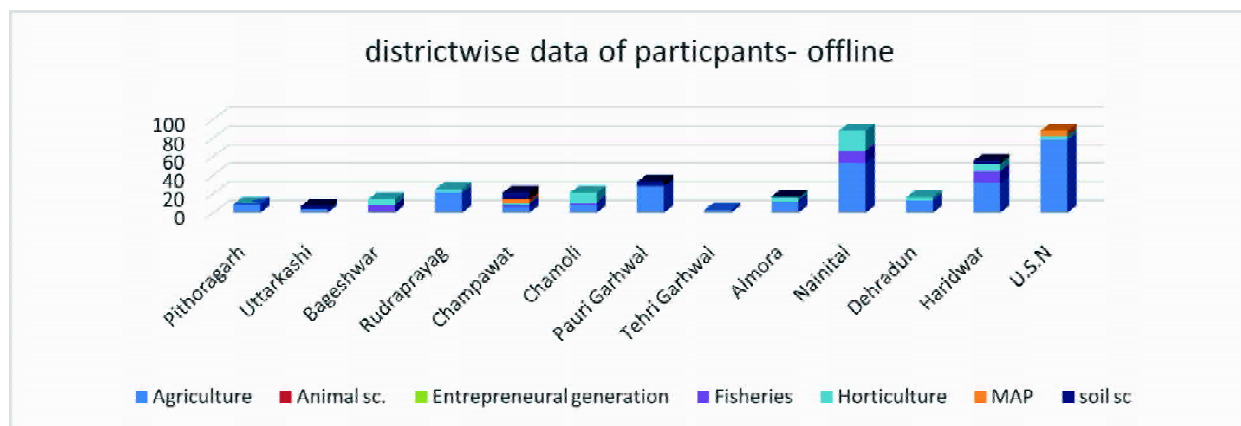


Figure 2(a): Districtwise data of participants- offline

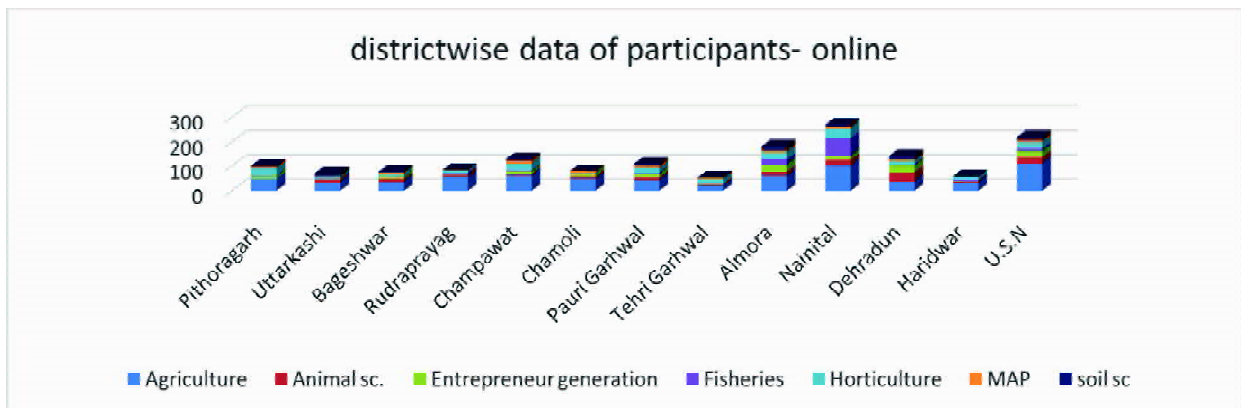


Figure 2(b): Districtwise data of participants- online

for Udham Singh Nagar district which has only three subjects in online mode while there are seven subjects in offline mode. However, the total number of trainees are less in online mode. This information leads us to conclude that remoteness does not discourage people from availing trainings on diverse subjects. As stated above the necessity for exploring diverse avenues for sustenance of livelihood has become even more pronounced due to the COVID pandemic.

Merits of Virtual/ online trainings

- In online mode, there is no expense of accommodation.
- At a time, trainer can interact or address a mass of people simultaneously.
- Trainees can join or leave the training

without causing disturbance to other participants.

- Online session has generated new technical skills in the trainees as well as in trainers.
- It leads to time saving for those trainees who were coming from hilly areas.

These observations are supported by (Fahmeeda and Chiau Ming, 2013) who state that online education is one of the learning methods that can benefit both students and educators as it has become increasingly popular learning approach due to the growth of internet technologies.

Demerits of Virtual/online training

- Online trainings are more prone to technical failures

- In online training, there is little face to face interaction
- Maximum people face signals issues
- People from old age group are unable to handle computer, laptops and mobiles in a proper manner
- It is not easy for a trainer to deal with mass of people during question answer session.

Merits of offline training

- Face to face interaction of trainer and trainees which facilitates a good training hall conversation and helps in understanding the concepts easily.
- It provides hands on skill to the trainees.
- Trainer can judge the level of understanding of each and every trainee.

Demerits of Offline

- It is not easy for a trainee from remote area to reach the venue on time
- It is very expensive to attend the training for the people having financial issues
- Trainings conducted in offline mode are very rigid and are very expensive (cost of lodging and fooding, transportation charges for scheduled visits)
- Longer schedule of lectures are sometimes boring

CONCLUSION

Online education is an alternative for students' learning (Wang, 2014). It can be concluded from the above study that more subjects have been covered in online trainings as compared to offline training. Remoteness doesnot discourage people from availingonline trainings on diverse subjects. Due to the Covid pandemic the necessity for exploring diverse avenues for sustainence of livelihood has become evenmore pronounced. Observations of

extension professionals have put forth the pros and cons of both online and offline mode of trainings. This unusual situation has given us an opportunity to conduct and access online and offline training methodologies in real time situation. The learning experience is that conducting trainings in HYBRID (both online and offline) mode will defenitely have better outcome. Switching over of training system from offline to online mode has been a learning experience for extension scientists, trainers and other extension professionals also. Online learning is capable of supporting a range of educational practices that utilizes the web and communications technology to support individual and group communication (Garrison, 2009).

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