



Effectiveness of WhatsApp Messages Regarding Improved Agricultural Production Technology Disseminated by KVK, Dewas(M.P.)

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Abstract: *New agricultural technologies are generated by research institutes, universities, private companies, and by the farmers themselves. The role of research and advisory services is to give highly accurate, specific and unbiased technical and management information and advice in direct response to the needs of their clients. Due to poor linkages between research and advisory services, the adoption of new agricultural technologies by farmers is often very slow and research is not focusing on the actual needs of farmers. As social networking (Whatsapp) continue to grow and attract more users, it is important to research the possible and perceived opportunities, benefits, and risks of using this technology. So keeping this in mind proposed the ongoing study with 120 farmers (whatsapp beneficiaries) of Dewas district. It is revealed from the study that the higher number of the whatsapp beneficiaries found sometime effective regarding overall whatsapp messages followed by never effective and always effective of overall whatsapp message in agricultural development.*

Keywords - *WhatsApp Messages, Agricultural Production Technology, Disseminated*

Introduction-

India is a land of diversity and thus package of practices for raising crops differ significantly from place to place, today most of the farmer do not have access to information at right time, so farmers' approach towards receiving agricultural information has been completely changed by getting ICT base-tool mobile learning in their hand. This innovative method utilize ICTs in delivering information to farmer by personal calls, voice and text SMS. The role of mobile learning (smart phone) in agriculture for management decision in modern farming require to be up to date and local



information of weather forecasts, regional recoding of crop disease and pests, plant protection, irrigation management, harvesting and proper marketing.

New agricultural technologies are generated by research institutes, universities, private companies, and by the farmers themselves. The role of research and advisory services is to give highly accurate, specific and unbiased technical and management information and advice in direct response to the needs of their clients. Due to poor linkages between research and advisory services, the adoption of new agricultural technologies by farmers is often very slow and research is not focusing on the actual needs of farmers. In many countries low agricultural production has been attributed to poor linkages between Research-Extension-Farmers and to ineffective technology delivery systems, including poor information packaging, inadequate communication systems and poor methodologies. Therefore, the information systems which integrate farmers, agricultural educators, researchers and extension agents should be introduced for agriculture sector. As social networking (**Whatsapp**) continue to grow and attract more users, it is important to research the possible and perceived opportunities, benefits, and risks of using this technology. So keeping this in mind proposed study was finalised.

Objective- To evaluate the effectiveness of WhatsApp messages regarding improved agricultural technology disseminated by KVK

Review of Literature-

Jayade (2014) it is concluded that Farmers need information on six stages of crops through the agricultural cycle: (i) Crop planning (ii) Buying seeds (iii) Planting (iv) Growing (v) Harvesting, Packing and storing (vi) Selling. The application of Information and Communication Technology (ICT) in agriculture is increasingly important to find the solutions for all 6 stages of agriculture. E-Agriculture is an emerging field focusing on the enhancement of agricultural and rural development through improved information and communication processes.

Patel (2015) reported that the study leads to the understanding that the phenomena with regards to the utilization pattern of communication channels among the farmers community would be related higher number of farmers 50.00 per cent found to least user of overall communication channel followed by 27.00 per cent farmers used it occasionally and 23.00 per cent farmers used it regularly at overall level.

Patidar (2015) reported that the higher percentage 38.33 per cent of the online communication services users had sometime extent of use regarding online communication services followed by



36.67 per cent online communication services users had always extent of use and 25.00 per cent had never extent of use.

Method & Material-

For achieving the above mentioned objectives the present study was conducted in Dewas, Tonk khurd, Bagli, Khategaon, Kannod and Sonkachh block of Dewas district of Madhya Pradesh on the basis of online beneficiaries in the district. A representative sample of 120 farmers (whatsapp beneficiaries) was drawn from 10 purposively selected villages having whatsapp beneficiaries.

Survey method of enquiry was used for data collection. The data were collected through a well structured and pre tested interview schedule. The researcher was personally meet to the respondents and explained to them about the purpose of the study.

Result & Discussion-

Effectiveness of whatsapp messages regarding improved agricultural practices.

The role of information with use of whatsapp in agriculture development has its own importance with development of technology and sources of information. The role of whatsapp to disseminate the agricultural research, education and extension to improve technological development of agriculture is well established. Data in respect of effectiveness of use of whatsapp messages in agricultural development was collected and presented in table;

Table: Effectiveness of use of whatsapp messages in improved agricultural practices.

S.No.	Effectiveness of whatsapp	Low	Medium	High
1.	Understanding of the message	40 (33.33)	50 (41.67)	30 (25.00)
a.	The language of messages is simple and understandable	39 (32.50)	58 (48.30)	23 (19.20)
b.	The technical terms used in the message are sent by translating them into your regional language	39 (32.50)	45 (37.50)	36 (30.00)
c.	Pictures and videos are useful in messages	41 (34.50)	44 (36.70)	35 (29.20)
d.	Full knowledge is obtained by collecting messages	45	49	26



		(37.50)	(40.80)	(21.70)
e.	Messages are factual and concise	38 (31.70)	55 (45.80)	27 (22.50)
2.	Need and time based information	38 (31.66)	50 (41.66)	32 (26.67)
a.	The knowledge gained at the right time is beneficial for you	41 (34.20)	48 (40.00)	31 (25.80)
b.	Time limit is shown	37 (30.80)	57 (47.50)	26 (21.70)
c.	Weather related messages to your area are useful	34 (28.30)	59 (49.20)	27 (22.50)
d.	Provide localized agricultural information can help to reduce crop losses	39 (32.50)	46 (38.30)	35 (29.20)
e.	WhatsApp offers a communication approach that can be quite flexible	40 (33.30)	42 (35.00)	38 (31.70)
3.	Dissemination of technical information	35 (29.17)	64 (53.33)	21 (17.50)
a.	The easiest way to expand technical knowledge	38 (31.70)	60 (50.00)	22 (18.30)
b.	Techniques can be popularized after application	35 (29.20)	66 (55.00)	19 (15.80)
c.	Can be easily transmitted in comparison to books or other means	32 (26.70)	71 (59.20)	17 (14.20)
d.	By this means yours problems are resolved	32 (26.70)	68 (56.70)	20 (16.70)



e.	It increases the scope and coverage of agricultural extension	36 (30.00)	55 (45.80)	29 (24.50)
4.	Visibility of the content (image/audio quality)	41 (34.16)	50 (41.66)	29 (24.17)
a.	Text content is sufficient	37 (30.80)	60 (50.00)	23 (19.20)
b.	Suitable for reading	41 (34.20)	48 (40.00)	31 (25.80)
c.	Successfully learning through image and video	43 (35.80)	58 (48.30)	19 (15.80)
d.	It is easy to tell other member/friends	44 (36.70)	42 (35.00)	34 (28.30)
e.	It is an easy and convenient way of communicating with the farmers	40 (33.33)	43 (35.80)	37 (30.80)
5.	Applicability of the message	35 (29.16)	56 (46.66)	29 (24.17)
a.	It is easier for farmers to communicate with peers, extension professionals and experts in real time	32 (26.70)	68 (56.70)	20 (16.60)
b.	Whatsapp has the potential to enhance the coverage and scope of extension	32 (26.70)	51 (42.50)	37 (30.80)
c.	The understanding of the message would be relatively high, through this medium.	40 (33.33)	50 (41.70)	30 (25.00)



Effectiveness of whatsapp messages regarding improved agricultural technology.

It is revealed from the study that the higher number of the whatsapp beneficiaries found sometime effective regarding overall whatsapp messages followed by never effective and always effective of overall whatsapp message in agricultural development.

Effectiveness of whatsapp:

1. It increases the scope and coverage of agricultural extension:

Whatsapp as an extension tool does not have such limitations. It has already a huge user base globally as well as in developing countries. Within few seconds, one can disseminate information to a large number of intended and unintended recipients beyond limitations of time and geographical boundaries. Opportunities for further feedback and clarifications are high through this tool. Thus, Whatsapp has the potential to enhance the coverage and scope of extension.

2. It is an easy and convenient way of communicating with the farmers:

The current forms of extension education methods (face to face, mass media, etc.) require a substantial amount of time and complexity of efforts to communicate with the farmers. Mass media methods demand high infrastructure requirements, content preparation, refinement and delivery to produce the desired effect. Similarly, modern ICT based advisory services require greater infrastructural availability on the part of provider and user. On the other hand, Whatsapp seems to be a relatively easier and simpler ICT tool for farmers. This does not require much of ICT skills. It can be easily operated through mobile internet compared to other web-based portals, which are primarily computer based. This is important given the fact that farming requires long hours of diligence and work. Similarly, office hours of work are limited to extension educators. Whatsapp offers a communication approach that can be quite flexible, as at any time and any place, interaction is possible. Beyond normal discussions, sufficient snippets of information dissemination can also be delivered through Whatsapp.

3. It is information enriched medium of information delivery:

In other methods of information delivery such as verbal methods, including IVR based mobile call centre services; chances of loss of vital information are high. Information may be incompletely understood, retained, forgotten during face to face and mass media (Television, Radio) extension methods. In Whatsapp, the information storage, archival and transfer to hard data-storage devices such as a computer is also possible. Further, information can be delivered in multiple ways such as audios, texts, visuals, and audio-visuals. The understanding of the message therefore, would be relatively high, through this medium.



4. It is more participative and demand driven extension tool:

Current extension education activities are largely one way of information delivery. Training lectures, mobile based agro advisory services offer fewer opportunities to farmers to respond and ask queries. The farmers may remain hesitant to clarify his doubts, and many of his queries may remain unanswered. Whatsapp has the potential to reduce these limitations. Even hesitant and shy farmers can participate through encouragement and support. User feedback is easier to receive, and it is prompt. One can communicate instantaneously through multiple ways in one to one, one to many and many to many ways.

5. Whatsapp is more advantageous than Kisan Call Centers:

The government of India uses Mobile Kisan Portal in which farmer queries are addressed through the inflow of calls in Kisan Call Centers. These centers along with SMS based services offer a good piece of information to the farmers. However, there are certain limitations of this mechanism. The resource persons rely only on the voice mode of query sought by the farmer. Many times he has little time to reflect or refer to locale-specific aspects of information sought by the farmer. As a result, many of the farmers report that the information offered through these centers is sometimes very general in nature. After the query has been once replied, there remains no direct mechanism to ascertain the extent of utilization and adoption of information by the farmer. These limitations can be overcome through the use of Whatsapp. The queries can be posted in type of pictures and audio-visual format. This arrangement can improve diagnosis and advice to the farmers. Further, farmers can post a query at any time and at any place irrespective of background ambience noises and other disturbances. The resource person has ample time to think and refers to the query in detail. The assessment of farmer's query is better through this platform. Thus, the possibility of relevant and accurate information delivery remains much higher through this platform. Furthermore, there are greater chances of peer discussions and learning, which are impossible through mobile advisory services. Furthermore, important answered queries and discussions can be archived for future reference.

Conclusion-

Study showed that higher percentage 45.00 per cent of the whatsapp beneficiaries found sometime effective regarding overall whatsapp messages followed by 31.66 per cent whatsapp beneficiaries found never effective and 23.34 per cent found always effective of overall whatsapp message in agricultural development.



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