

**Kaushambi Kisaan Vani- An Experiment for Integrated Use of Information
Communication Technology for Farmers in KAUSHMBI**

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ABSTRACT

Purpose: This research paper discusses the use of Integrated Information Communication Technologies for farmers to advance the delivery of required information about Modern Agricultural techniques, Government policies related to farmers & agriculture and Market.

Background: Kaushambi Kisaan Vani as a project for experiment was established on 11 Nov. 2013 in Tulsipur village of Kaushambi district with the objective to evaluate the impact of on delivery of information to farmers. Farmers from nearby villages were contacted and requested to participate in the research process.

Design: Data was collected from a sample of 78 farmers from 5 different villages in Kaushambi district of Uttar Pradesh, India. Experimental research design is used to compare the effect of ICT – Kaushambi Kisaan Vani. This study was restricted for 3 months from 11 Nov. 2013 to 11 Feb. 2013.

Result: Results of the study showed a positive impact of Kisaan Vani on farmer. Those farmers, who were under Kaushambi Kisaan Vani, have more accurate information about modern agriculture, government policies and market.

Key Words: Government Policies, Information Communication Technologies, Modern Agriculture.

Introduction

India is a country of farmers, around 65% of population is dependent on farming. Indian farmers has shown in recent past a positive sign in development and started linking its old farming techniques with modern development in technologies. Farmers in different parts of the country are engaged in cultivation of different crops as per the increased demand. Government also adopted new policies to promote this segment and launching various schemes to assist farmers financially as well as functionally. Various government bodies launched several program to educate farmers for different modern farming techniques with the help of Public Private Partnership model.

In spite of all the fact and figures, there are several problems that need to be addressed at both micro and macro level (Aker, J.C, 2008). This research paper deals with the micro level issue that restricted to the use of information communication technologies (ICT) to gather and use needed information on various key domains area for farmer's development.

An archetypal Indian farmer in a small town with basic education level or with no formal education is involved in farming with traditional techniques that he acquired over time from his ancestors and this practice of learning is continued generation over generation with little or no value addition. Value addition in farming can be describe as any improved performance either in productivity, farming techniques, cost of production or quality of production. This can be done by acquiring knowledge and information about latest development in this field. For this purpose the use of information communication technologies are playing a vital role. Not only in process, ICT can help to find a most significant market for the farmers (NPF, 2007). Information about different domain of market can help farmers to identify the opportunities in the markets and react in the most profitable (Batchelor, 2002).

Literature Review

Literature on modern farming techniques for Indian perspective s are limited and restricted to some functional domain only. (Gandhi, 2008) discussed the various development in different green agricultural projects improved the variety of new agricultural practice compare to traditional farming. The use of different sources of information communication technology from analysing the demand of market to finally satisfying the demand of the market can be done in such a way that crate synergetic effect in terms of improved performance and productivity. Not only this farmer's education level will also increase and indirectly it will help to reduce poverty at macro level of economy (Torero and Braun, 2006).

(Ali and Kumar,2010) explained the initiatives taken by Indian tobacco Company as a common centre E – Chaupal for farmers to discuss their problems and find solution by using information technologies. (Shukla, 2012) explain the use of product placement in films and television programs can be a good practice by the government to increase the awareness of various government policies and schemes for the farmers.

Kaushambi Kisaan Vani-KKV

Kaushambi Kissan vani (KKV) is a concept centre which will works for the development of farmers of India. It will assist farmers with some new techniques and needed information related to market, farming and government support and policies for development of them. The main objective of KKV for the Indian farmers was to provide a platform for

communication and assistance and facilitate them by up to date information about above mention domains so that their development can be assured.

Kissan vani's main focus was on farmer's knowledge development and for this reason following strategies was formulated for KKV,

1. Established and run by farmers for the achievement of common goals and objectives.
2. Primary strategy is to provide required information on different domain to farmers by using different online and offline sources of ITC. Online access enables farmers to acquire information on Bazaar Bhav and Modern agricultural techniques & agricultural inputs like seeds and fertilizers.
3. Educating the rural people about Modern Agriculture techniques, the best fertilizers, tools and techniques available in the market & modern techniques of harvesting and others useful system.
4. Work as a centre of interaction between farmers, government representatives, Banks, Societies and Markets for the development of the farmers.

Design of the Experiment

Farmers were contacted and explained about the idea of Kaushambi Kisaan Vani. First experimental unit of Kaushambi Kisaan Vani was established in Tulsipur village on Friday 1 Nov. 2013 with 78 farmers as its founder members. Centre was equipped with a small library, Audio and Visual room with Computer and Internet connection and one meeting room with capacity of 100 people. Experimental research design is used to compare the effect of ICT – Kaushambi Kisaan Vani.

Time of the experiment

This experiment was carried out for a time period of 90 Days from 11 Nov. 2013 to 11 Feb. 2013. Generally farmers used to interact with each other every day between 6pm to 7 pm. Informative gatherings were organized on every Saturday and Sunday at 2.30 to 5.30. Interaction with Government organization and Banks were organized on Monday or Tuesdays as per the schedule of their representatives.

Programs or Treatments of the experiment

Before starting the information sharing at KKV, each sample's awareness level was measured on different parameters / areas with structured questionnaire. After that in three months duration every respondent was given the membership of KKV and allowed to participate in knowledge sharing process through by using different information communication technologies. At the end of third month, respondents' awareness level were measured again by using the same parameter and compared with their previous scores.

Observations or Measures of the experiment

All the measures in the experiment were classified on three broad categories as Modern farming techniques, Market information and Government support & schemes. Above categories of measures were again classified in different sub categories to gain the in-depth knowledge of respondents.

Individuals or Groups of the experiment

One group with 78 members from five different villages was selected for the study. The group was classified based on gender, education & farm size.

Result and Discussion

Data was collected from a sample of 78 farmers from 5 different villages in Kaushambi district of Uttar Pradesh as follows,

Table 1: Classification of Data Based on Gender, Education & Farm Size

| | | Village | | | | |
|----------------------|-------------------------|----------|-----------|----------|----------|---------|
| | | TULSIPUR | BAMBOOPUR | GAMBHIRA | FATEHPUR | CHAKIYA |
| Gender | Male | 21 | 11 | 11 | 9 | 13 |
| | Female | 5 | 2 | 3 | 3 | 0 |
| Education | No Education | 0 | 1 | 3 | 3 | 0 |
| | Up to Primary Education | 7 | 8 | 8 | 4 | 7 |
| | Up to Senior Secondary | 15 | 4 | 2 | 4 | 6 |
| | Up to Higher Secondary | 3 | 0 | 1 | 1 | 0 |
| | Graduation or Above | 1 | 0 | 0 | 0 | 0 |
| Size of Farms | Less than 1 Acre | 11 | 2 | 4 | 0 | 4 |
| | 1 to 5 Acre | 9 | 7 | 8 | 5 | 6 |
| | More than 5 Acre | 6 | 4 | 2 | 7 | 3 |

Source: Primary Data

Sample demography of the study

Shaikh Meera found that Age and Education have significant positive impact on relationship between farmers working on similar projects. Kaushambi Kisaan Vani was initiated to promote the similar ideology among young and educated farmers. (Shaikh Meera at all, 2004).

Samples awareness about different measures was collected before and after the experiment. These measures were classified in three categories as Modern agriculture techniques, Market in formations and Government support and schemes. All the responses were recorded on one

to one basis with a structured questionnaire. Results of the study showed the positive impact of the KKV initiative on all different measures.

Table 2: Mean of Aggregate Score of All the Measures Were Calculated and Compared

| Measures (Scale of 10) | Before KKV | | After KKV | | Change % |
|---|------------|---------|-----------|---------|----------|
| | Mean | SD | Mean | SD | |
| Aggregate score on Modern Farming Techniques | 3.3462 | 1.57766 | 5.3846 | 1.14223 | 61% |
| Aggregate score on Market Information | 4.2179 | 1.47399 | 5.1538 | .83863 | 22% |
| Aggregate score on Government support and Schemes | 3.8205 | 1.89150 | 5.4359 | 1.07619 | 42% |

Source: Primary Data

Above comparison of mean showed the maximum impact of KKV on Modern information (increased by 61%) followed by Government support & schemes (increased by 42%). There was positive but comparatively less increase in market information of respondents (Increased by 22%). The reason for this may be the dynamic nature of the market that should be updated regularly. These differences in mean were tested with pair sample t test with 95% level of confidence. The summary of the test is as below,

Table 3: Summary Report

| T test | | | | | |
|--------------------|--------------------------|---------------------------|--------------------|--------------------------------|----------|
| | | Pair 1 | Pair 2 | Pair 3 | |
| | | Modern Farming Techniques | Market Information | Government support and Schemes | |
| | | Before KKV & After KKV | | | |
| Paired Differences | Mean | -2.03846 | -.93590 | -1.61538 | |
| | SD | 1.82652 | 1.69292 | 2.14555 | |
| | SE Mean | .20681 | .19169 | .24294 | |
| | 95% CI of the Difference | Lower | -2.45028 | -1.31759 | -2.09913 |
| | | Upper | -1.62665 | -.55420 | -1.13164 |
| t | | -9.857 | -4.882 | -6.649 | |
| df | | 77 | 77 | 77 | |
| Sig. (2-tailed) | | .000 | .000 | .000 | |

Source: Primary Data

As per the result of the pair sample t test (Sig 0.000), it was concluded that these differences in mean were significant. So it was the impact of Kaushambi Kisaan Vani on respondents' awareness level on different measures. Based on the finding from the KKV and suggestions from the members of KKV i.e. respondents of the study following points are summarized for the Kaushambi Kissan Vani for the continuous improvement.

1. Organizing cultural programmers in some selected villages on various occasion and festivals which will boost farmer's confidence and interest for the participation in KKV.
2. Organizing small level fairs including agricultural trade fairs also for the farmers for their betterment of approach.
3. Imparting education among farmers and their families related to agricultural courses. It will lead to a better Indian future.

Conclusion

Results of the study showed a positive impact of Kisaan Vani on farmer. All farmers, who were under Kaushambi Kisaan Vani, had more accurate information about modern agriculture, government policies and market. Certainly, most of the rural parts of India are in a condition of abandon and found to be less developed, with impecunious community, as outcome of previous policies and lack in our development progression and investment model. But we cannot disagree with the opportunities in these parts. That's why Kaushmbi Kissan Vani is there to help the rural people in any way possible with increasing their knowledge, skills and agricultural marketing. It will ultimately lead to the profit in the farmer's life including their family. The most important thing i.e. internet has been missing from decades in villages. It should be taken care of on first priority. It will not only help farmers get educated but will also help them be aware of the monsoon forecasting and know the right methods to sow which will reduce the wastage to the minimum. Also it is very important to take necessary steps to protect against ailing effects of over irrigation particularly in those parts where water availability is ample. Middlemen should be eliminated from the distribution processes as they don't just manipulate the market prices of vegetables but also it leads in the loss of farmers. Linking each village to the markets & cities nearby is also a challenging task but need to be addressed. Connectivity to market either physical or virtual is important and can be consider as one of the most important critical success factor for such initiatives for better development of farmers. A new and special transport system should be given to the farmers so as to assist them selling their products on first hand basis in the market. This will ensure a higher profit for farmers and will also help them become financially stable in the long run as it will also eliminate the middlemen. Kauhambi Kisan

Vani will give a platform to all its members i.e. farmers to lead better quality of life by improving their knowledge with the help of information communication technologies.

References

- Aker, J. (2008). *Does Digital Divide or Provide? The Impact of Cell Phones on Grain Markets in Niger*. Washington: Centre for Global Development, Washington, USA, Working Paper Number 154.
- Ali, J. K. (2010). ICTs and farmer's decision-making across the agricultural supply chain. *International Journal of Information Management, Volume: 31, Issue: 2* , Pp: 149-159.
- Batchelor, S. (2002). *Using ICTs to Generate Development Content*. The Hague, International Institute for Communication and Development, IICD Research Report 10.
- Gandhi, R. V. (2008 , June). *Digital Green: Participatory video for agricultural extension*. Retrieved from I4d Magazine: www.i4donline.net.
- Krishnareddy, P. R. (2005). A framework of information technology- based agriculture information dissemination system to improve crop productivity. *Current Science, Vol. 88(12)* .
- M.Torero, a. J. (2006). *Information and Communication technologies for development and poverty reduction*. In Maximo Torero and Joachim von Braun (eds.), *The potential of telecommunication*. The Johns Hopkins University Press and IFPRI.
- NPFF. (2007). *National policy for farmers 2007*. Department of Agriculture and Co operation. New Delhi: Ministry of Agriculture, Government of India, New Delhi.
- Rishi Shukla. (2012). Is it Ethical to Place Product With-in Films? The Study of Film Based Merchandising in Indian Films and its Influence on Viewers. *Novel Kaleidoscope , Vol. 1 (2)*, page 13 – 19.
- Senthil kumaran, S. (2011). *Village Knowledge Centres and Village Resource Centres: An overview*. *Information and Communication Technology for Agriculture and Rural Development*. Delhi: New Delhi: New India Publishing Agency.
- Shaik. N. Meera, A. J. (2004). Information and communication technology in agricultural development: a comparative analysis of three projects from India. . *AGREN Agricultural research and Extension Network, Network paper no. 135* , page 13.