



Research Article

ICT BASED INITIATIVES FOR EXTENSION ACTIVITIES

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Abstract- Agriculture plays an important role in development of our country's economy. Agriculture is the mainstay of our rural economy. Agriculture supports 50 percent of population. Its contribution in GDP (gross domestic product) is 13.7%. Food grain production in India is 272.00 million ton in 2016-17 which is second in the world. As today India supports 17.9 per cent of population on 4.2 per cent of world's water resource and 2-3 per cent of global land. India's 64% lands are dependent on monsoon. This was made possible by the transfer of latest technology to the farmers's field in agriculture and allied areas. In India such transfer of technology programmes of Indian Council of Agricultural Research is implemented by Krishi Vigyan Kendra at the district level. Krishi Vigyan Kendra provides farm advisories using ICT and other media means on varied subjects of interest of farming community. Krishi Vigyan Kendra started various ICT based initiative for transfer of technology. Recently three major ICT initiatives namely mKisan Portal, web portal Krishi Vigyan Kendra Knowledge Network Portal and KVK mobile app started by ICAR. These are assisting farming community to connect with Krishi Vigyan Kendra for transfer of technology. Present study describes how these initiatives are helping farmers to learn and explore the latest technology in the field of agriculture and allied subjects.

Key words- mKisan, Portal, Advisory, ICT.

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Introduction

The process of technology generation and dissemination in agriculture must be understood in systems perspective including its four components viz. technology generation, technology transfer, technology utilization and agriculture policy. The scientific organization has the responsibilities of technology generation consist of planning, administration and implementation of research activities for developing, assessing/adoption and testing of improved technologies and its transfer to the users. In India such transfer of technology programmes of ICAR are implemented by Krishi Vigyan Kendra at the district level [1]. Today, information disseminates in many ways. The collection of information in electronic as well as paper form. However, there is massive increase in online access of information and organizations publish their progress reports and other documents on their websites. Most of the people are having mobile phones and internet access. One of the main functions of Krishi Vigyan Kendra is agro-advisory to farmers. For this purpose, Ministry of Agriculture and Farmers Welfare launched mKisan portal [2]. ICAR has launched a unique portal named Krishi Vigyan Kendra Knowledge Network. It is a unique portal for all Krishi Vigyan Kendra running in the country. ICAR has also launched KVK Mobile App for android mobile users.

mKisan Portal

Pervasive and extensive use of the ICT is an important tool of agricultural extension. Under the National e-Governance Plan-Agriculture (NeGP-A), various modes of delivery of e-enabled services have been envisaged. The project conceptualized, designed and developed in-house within the Department of Agriculture & Cooperation. It has widened the outreach of scientists, experts and Government officers posted from district level to village level to disseminate

scientific advisories through their mobile phones. SMS portal was inaugurated by the then Hon'ble President of India Shri Pranab Mukherjee on 16th July, 2013 [2]. The SMS Portal has unique features like database to sift farmers down to Block level & to select specific agricultural commodities/animal/bird/fish, rating/correction of messages by the supervisory officers, searchable database of previous advisories, phone number-wise status report on a dashboard. Since then the need-based consultancy on selection of varieties of fruits, vegetables, crops and different aspects of dairying, plant protection measure suited to farmers microclimatic condition in different season is being made by Subject Matter Specialists of KVK Ghazipur through SMS services regularly, so as to spread information quickly into the villages. Details of SMS advisories sent through mkisan portal is as under-

| Year | No of Messages Sent | Farmers Benefitted |
|---------|---------------------|--------------------|
| 2011-12 | 45 | 10350 |
| 2012-13 | 59 | 18147 |
| 2013-14 | 201 | 59729 |
| 2014-15 | 171 | 100456 |
| 2015-16 | 68 | 648333 |
| 2016-17 | 169 | 1978495 |

Krishi Vigyan Kendra Knowledge Network:

The Union Minister of Agriculture and Farmers Welfare, formally launched Krishi Vigyan Kendra (KVK) portal (<http://kvk.icar.gov.in>) on 8-Jul-2017 [4].

Features of the Portal

1. The portal provides provisions for online monitoring of KVKs which will include reporting of major events on regular basis and submission of monthly reports online.
2. The portal will also provide information on different services being provided by different KVKs.
3. Weather and Market related information can also be accessed by the farmers and others.
4. The forthcoming programmes is also being available on the website which will benefit farmers and youth in joining different training programmes being organized by KVKs.
5. Question and answer facility is also being available for the farmers.
6. Agriculture related information of the districts is also being available on the portal.
7. The farmers and the Agricultural Officers may register themselves and seek different information related to KVKs.

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Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

References

- [1] www.kvk.icar.gov.in
- [2] www.mkisan.gov.in
- [3] <https://apkpure.com/kvk-mobile-app/com.icar.iasri.kvkapp>
- [4] www.pib.gov.in/
- [5] www.iasri.res.in/

KVK Mobile App

Mr Radha Mohan Singh, Union Minister of Agriculture and Farmers Welfare Inaugurated Data Centre and Mobile App at Indian Agriculture Statistics Research Institute (IASRI) in PUSA Complex on December 21, 2016. Mr Singh said that this Data Centre of Indian Council of Agricultural Research (ICAR) will play remarkable role to encourage Digital India Campaign in agriculture Field [5]. The KVK Mobile app has been interlinked with KVK portal at national level. Therefore, it becomes easy to access the information from KVK portal. This app provides necessary information regarding agriculture trading and Farming practices. By this app, the farmers will be benefitted with complete knowhow generated in Krishi Vigyan Kendras. Also, farmers will be capable enough to access all sorts of information viz., seed production, crops, fisheries farming, price of agricultural commodities in the market, weather, and other announcements and notifications related to farming sector through KVK app. Through this app, the farmers will also be able to receive information about different agricultural programmes and schemes being run by the Government. There is an option for suggestions and frequently asked questions including assembled list of many questions and their answers related to farming and their solutions, training programmes etc.

Conclusion

- mKisan portal(mkisan.gov.in) found to be very useful for sending agro-advisory to farmers. Dissemination of scientific information becomes very easy for Krishi Vigyan Kendra. Thus, the farmers' income is increasing and may be land mark in doubling the farmers income through mobile advisory
- Krishi Vigyan Kendra Knowledge Network(kvk.icar.gov.in) is unique ICT initiative for strengthening of Krishi Vigyan Kendra across the country. It is single portal serving 680 Krishi Vigyan Kendra working in India.
- KVK Mobile App is very useful for the farmers for getting information of Krishi Vigyan Kendra, Agro-advisory, agro-meteorological information

Application of research: It has ICT initiative for farm extension in India. Mobile phones are having key for this research.

Research Category: Review Article

Abbreviations:

KVK - Krishi Vigyan Kendra,

ICT - Information and Communication Technology

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