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Use of Some Important ICT Tools in Renovating Agriculture

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Abstract

Agriculture is the backbone of India. Information and Communication Technologies (ICTs) in agriculture is an emerging fields focusing on the enhancement of agriculture and rural development. It includes applications of innovative processes to use ICT in rural areas. The improvement in ICT can be utilised for providing accurate, timely, pertinent information and services to the farmers, thereby facilitating an environment for more lucrative agriculture.

Introduction

Agriculture is one of the key sectors in our country. It is well known fact that ICT can transform agriculture in many ways. ICT projects are yet to make any breakthrough in agricultural information dispersal and other areas. Deployment of ICTs needs to be stressed more. It is an ultimate need to evaluate ICT for agricultural projects and compared precisely. It is need of hour to obtain relevant information through ICTs and to place advanced ICTs in agriculture. Information and Communications Technology (ICT) in simple terms, can be defined as the basket of technologies, which help or support in storage, processing of Data Information, or in spread communication of Data Information, or both. Thus ICT includes technologies such as laptop and desktop computers, peripherals and software connection to the Internet that are intended to fulfil information processing and communication functions.

Role of ICT Tools

- This is the way of available easy all knowledge, technology, marketing *etc*. about agriculture sector.
- ICT has a main role as decision support system to the farmers.
- ICT has the great potential to widen marketing horizon of farmers directly to the customers or other appropriate users for maximum benefit.
- ICT technologies can help for strengthening farming communities through wide networking and collaborations with various institutes, NGO's and private sectors.

eNAM

National agriculture market called eNAM is an online trading platform for agricultural related commodities in India. Small Farmers Agribusiness Consortium is the lead agency for implementing eNAM under the aegis of Ministry of Agriculture and Farmers' Welfare, GOI, India. The market is helping in better price discovery and provides all facilities for improve marketing system. Here listed about more than 90 commodities including staple food grains,

vegetables and fruits are currently available for trade. eNAM promote uniformity in agriculture marketing by making smooth procedures across the integrated markets, removing information imbalance between buyers and sellers and enhancing real time price discovery based on actual demand and supply.

Kisan Rath Mobile App

The Government of India has launched Kisan Rath Mobile App that will ease farmers and traders to identify suitable transport facilities for the movement of farm produce during lockdown of pandemic era of corona virus. The App will permit transportation of farm product from farm gate to mandi and from one mandi to another mandi. It will facilitate consistent supply chain between farmers, FPOs, APMC mandis and intra-state and inter-state buyers. This app will also reduce wastage and contribute to better pricing of perishable commodities. This app has been developed by the National Informatics Centre (NIC), and it will facilitate searching for transport vehicles for primary and secondary transportation for movement of agriculture and horticulture produce.

RiceXpert

The ICAR-National Rice Research Institute (NRRI) has developed 'ricexpert' app, that provides information about rice cultivation to farmers in immediate on insect pests, nematodes, nutrients, weeds, and disease-related problems, for various ecological zone, farm implements for different field and post-harvest operations. It is an internet or web-based application systems which allows flow of information from the farmer to the farm scientist and get their better solution. Farmers can use this app as a diagnostic tool in their rice fields and make customize queries for quick solution of their problems.

mKisan

This is an SMS portal set up by the President of India for farmers that empowers all central and state government organisations in agriculture and allied sectors to give information or services to farmers concerning agricultural practices. Under mKisan Unstructured Supplementary Service Data (USSD), Interactive Voice Response System (IVRS) and Pull SMS are value-added services which have enabled farmers and other stakeholders to receive not only broadcast messages but also to get web-based services on their mobile without having internet facilities. This portal serves as the two-way communication portal which is not only for providing information or services to the farmers but also farmers can raise specific queries through Pull SMS or USSD. Using a Centralized system wherein different modes of information flow are channel and spread to the farmers in their own language.

Kisan Suvidha

This app was launched by the Prime Minister of India in 2016 to work towards empowerment of farmers and evolution of village. The app design is well disciplined and offers a user-friendly interface. It provides information on current weather and also the forecast for the next five days, market prices of commodities related agriculture in the nearest market, knowledge on fertilizers, seeds, machinery *etc*. It is available in many languages which makes it more widely accessible.

Pusa Krishi

This Pusa krishi app was launched by the Union Agriculture Minister of India in 2016 with aim to help farmers to get information about technologies developed by IARI, which will help in increasing returns to farmers. The app also provides information related to new varieties of crops developed by ICAR, resource conserving cultivation practices as well as farm machinery and its implementation will help in increasing returns to farmers.

Crop Insurance Mobile App

This app helps farmers to calculate their insurance premium for notified crops and provides information cut-off dates and company contacts for their crop and location. It can also be used to get details of subsidy information, normal sum insured, extended sum insured and premium details of any notified crop in any notified area. It is further linked to its web portal which caters to all stakeholders including farmers, states, insurance companies and banks.

Kisan Call Centers

KCCs were commenced on January 21, 2004 by the Department of Agricultural and Cooperation with the main intend of endowing extension services to the farming community in the local languages. The questions of farmers are addressed by agricultural graduates in their local language on toll free help line number. The agricultural scientists also visit the field of farmers or sometimes visit the whole village to get an idea about complex agricultural problems to solve them. Kisan helpline number: 1800-180-1551.

Pashu Mitra Call Centre

The National Dairy Development Board launched a call centre Pashu Mitra for dairy farmers to deals with their queries on animal wellbeing diet and productiveness. Farmers just need to dial '7574835051' and their question will be answered by expert of its concerned subject. The call centre runs five days in a week from Monday to Friday from morning 9.30 am to 6.00 pm in evening. Facing a problem during holidays, Farmers can also leave a recorded message.

Farmer Connect Portal

The Agriculture and Processed Food Export Development Authority (APEDA) has launched a virtual marketing platform farmer Connect Portal which is being pushed hard during the covid-19 crisis to sustain agricultural exports from the country. Farmer connect is an initiative undertaken by APEDA to provide a 24 hours and 7 days online visibility digital platform in the form of a portal and mobile application. It will help to bridge the gap between cooperatives and exporters. Cooperatives can make their profiles and post sell offers. Exporters can post enquiries and views matching sell offers.

e-Gopala App

On 10 Sept. 2020, Prime Minister digitally launched the Pradhan Mantri Matsya Sampada Yojana and he also launched the e-Gopala app that will provide farmers marketplace for livestock. The e-Gopala app is comprehensive breed improvement market place and information portal for direct use of farmers. This app is helpful to enhancing the capacity of fish farming and available suitable marketplace.

Conclusion

Rural India is spectacularly moving towards digitalization and technology these days. Indian Prime Minister Narendra Modi launched 'Digital India' in 2015, which aims towards the promotion of digital literacy and creation of digital infrastructure, is apparently helping Rural India to gain this success of the farming community. Moreover, while 58% of Indian households still depend on Agriculture as their most eminent source of livelihood, it's time to give more focus on Digital Agriculture for a growing and prosperous India. Moreover, farming apps are the most convenient and useful medium to guide farmers in farming. It gives guidelines for doing the proper scientific way of farming, crop cultivation, sowing or harvesting of any crop or vegetables. Farmers can easily solve their farming problems related to pest or insect attack or any problems, track better market for their product, which put them in a difficult situation.

References

Anonymous, 2021. https://krishijagran.com/agriculture-world/top-indian-agriculture-apps-for-successful-farming-in-2021/

Anonymous, 2020. https://www.financialexpress.com/industry/technology/kisan-rath-mobile-app-features-benefits-of-app-to-help-farmers-during-coronavirus-lockdown/1933220/

Singh, S., Ahlawat, S., Sanwal, S., 2017. Role of ICT in Agriculture: Policy implications. *Orient. J. Comp. Sci. & Technol.* 10(3), 691-697.