

Importance of Information Technology in Increasing Agricultural Income

Anita Meena*, Nirupama Singh and Jitendra Kumar Meena, *****
*ICAR. : Central Institute of Arid Horticulture, Beechwal, Bikaner, ** ICAR. : Indian Agricultural Research Institute, New Delhi, ***.SRF, PPVFRA, Ministry of Agriculture, New Delhi

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Agriculture is the main source of income of the population in developing countries and in our country agriculture has a very important contribution to the economy. Even today the prosperity of the villages depends on the agricultural production. For this reason, the government is also promoting the use of new technologies to improve agriculture. So that by increasing the production of agriculture, the condition of the farmers can be improved and necessary changes can be brought in their living conditions. In this direction, the government is also making continuous efforts to provide equipment and services to the farmers to provide information about advanced farming and with the help of telephone, computer radio, doordarshan, etc.

The use of information technology to develop villages is improving day by day. The current situation shows a slow change in this progress. Still, some areas are showing good results. The increasing use of mobiles is proving to be very useful for the farmers. Nowadays agriculture is being promoted in the rural area through information and communication technology and smart phones and its applications are working effectively in the development of agriculture. Smartphones and their applications are useful with great innovations to help reduce the stress of farmers and get relevant information on good farming practices, weather, quality, inputs and trends of markets etc. Through social media, web sites and other applications, farmers can improve their skills, share experiences and sell their products online using their smart phones.

Mobile phone is especially helping farmers to reduce the cost of production and get good price for the crop. There are three stages during farming where mobile phones prove useful in increasing their income by ensuring that the necessary information reaches the farmers immediately.



- When farmers consider which crop to be sown and what kind of seeds should be selected considering the soil type.
- The proper time of sowing of the crop and measures to protect the growing crop.
- The choice of market for the sale of the crop.

Steps taken by the Government of India in the field of Telecom:

- Due to the ever-increasing utility of mobile, the government is also continuously developing in telecommunication resources. The Government of India had planned to import equipment, etc., worth 10 billion dollars, for the expansion of telecommunications. India is estimated to add 18 to 20 million new customers every year. In view of the increasing population of rural areas, the government has announced to increase the telecom density from 35 percent to 60 percent by the year 2017 and to 100 percent by 2020. Similarly, a target has been set to provide good internet access to 600 million people by 2020.
- With the revolution in the field of information technology, information is reaching the farmers through many mediums. SMS on mobile and voice message is the latest technology to reach the information to the farmers. More than 25 lakh farmers are getting benefit from this technology. Agriculture Weather SMS Provides farmers with information on weather forecast and other agriculture related topics in less than 60 characters. Its content is tailored to the local conditions and needs.
- This advisory is sent twice a week and farmers receive it in their local language.
- To further increase the use of information technology, the government has opened many Kisan Call Centers across the country. Where farmers can get the solution of their problem by phone only.
- Kisan Call Centers were started in the year 2004. Today there are about 144 Kisan Call Centers working in India. Kisan Call Center keeps on giving information about the care of various crops as well as to avoid various diseases of crops that occur according to the changing season.
- How the farmer can earn maximum profit through farming. Kisan Call Centers are proving to be very useful in this direction. Farmers get the solution of their every problem by just making a phone call.
- Due to the number of phones being more than before, the number of farmers calling on these centers has also increased. This is the reason that now experts of different



subjects are also being deployed at the Kisan Call Centers so that every question of the farmer can be answered correctly. Farmers are getting information about the use of land irrigation, fertilizers etc. from Kisan Call Center.

- Any farmer of the country can get the solution of his problem by dialing 1551 number. For this he does not have to pay any kind of bill.
- Indian Council of Agricultural Research also makes available useful information to the farmers on its website immediately by proper use of information technology. Through the website itself, it gives information to the farmers about how much water to be given to different crops. Which fertilizer is useful for which crop? Farmers also get this information. The meteorological information received from the satellite also gives proper information for prevention of diseases in crops.
- The problems of farmers' fields are being resolved by forming a WhatsApp group of agricultural experts and agricultural officers. The Ministry of Agriculture and Farmers Welfare is providing internet based information to farmers across the country through the App Kisan Portal. Keeping in mind the power and potential of information technology, there is a need to make meaningful efforts to reach the farmers through its maximum use.

Best Top 5 Android Apps ever made for Indian Farmers:

These agriculture apps are very useful for the Indian farmers and farming community to keep up to date with the latest technology of agriculture. These apps provide assistance to Indian farmers and help fill the gap between the rural people and the governments for rural development. These are android apps for Indian farmers used for agriculture which provide latest market rate, weather forecast, government policies and schemes for farmers, latest technology videos, news related to agriculture etc. Farmers can directly ask query to agriculture experts by using these apps to solve their query instantly they can also watch their videos related to new technology, machinery for successful farmers etc.

Agri App:

Agri App is one of the most liked app by farmers. Its rating is 4.3 out of 5. It is an online farming market place to bring farmer farming input and output, government service on online platform. It also provides chat option for farmers. Farmers can easily chat with expert



in agriculture using this app. This mobile application provides various videos of agriculture work. Around 0.1 million users downloaded this agriculture app.

IFFCO Kisan App:

IFFCO kisan app is the best app almost among agriculture apps for farmer. It is a small Android app in terms of memory with an easy to use interface. This android application provides information about latest agriculture advice, latest mandi prices and various farming tips. It also provides weather forecast information. It also provides agriculture alerts to farmers in 10 Indian languages. Farmers can easily take help of agriculture experts by using this app. About 50 thousand users downloaded this app.

Agri Media Video App:

Agri Media Video App is one of the most popular mobile app for farmers in video category. Its rating is 4.8 out of 5. It is an online marketplace that brings farmers, agricultural inputs and outputs, farming retail and fulfillment services on an online platform. It also provides chat service for farmers to resolve their query related to agriculture with option to upload images of infected crops.

Farmers can easily interact with agriculture expert and discuss their problems. This smartphone application also provides various videos related to agriculture practice, new technologies, successful farmers, rural development and agriculture.

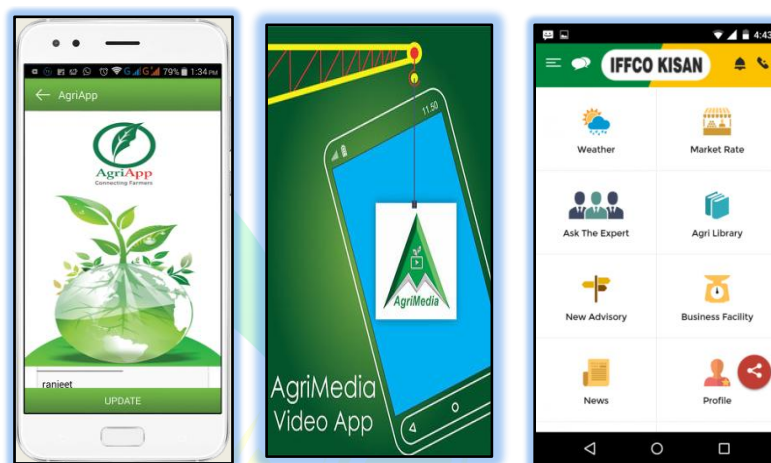
Form BRML Farmer

It is amazing in the list of agriculture android apps and has a rating of 4.3 out of 5. It is a small app in terms of memory with easy user interface. It is available in 10 different Indian languages. It provides fertile agricultural material and information at every stage of the crop life cycle. A farmer can choose from 450 crop varieties, 1300 markets, 3500 weather locations. It also provides mandi price and weather forecast based on the location of the user. About 0.5 million users have downloaded this app

Kisan Scheme:

Kisan Yojana is another popular android agriculture app which is available for free. It provides information about all government schemes to the farmer. It bridges the information gap between the rural people and the government. It also provides various relative state plans. This mobile application also saves the farmer's time and travel expenses to reach the state government office. About 50 thousand users downloaded this app.

Presently ICAR. has made many agri apps, which is ICAR. It has been made by all the institutes, which are related to all types of crops, vegetables, fruits, milk production and animals, which will be beneficial in increasing the income of the farmers.



Agri App Agri Media Vedio App IFFCO Kisan App

Benefits of information technology to farmers:

- **Negotiation with middlemen will be more effective:** Mobile also serves to establish a direct communication between farmer, supplier and buyer by reducing the chances of exploitation and fraud by middlemen. Farmers can also use mobile based services to get information about loans, government schemes, crop insurance policies.
- **Increase the use efficiency of various inputs:** Mobile phones can also be used to improve mechanization facilities. Such as water pumps and diesel engines can be controlled by mobile based remote control systems to improve water use efficiency. At the same time, this technology will also help in better irrigation scheduling and time saving. Nano-Ganesh technology is an example of such a system. In case of non-availability of electricity, farmers can control irrigation even from far-flung areas through Nano-Ganesh. Extension services can be given to farmers in the local language on their mobile phones. Farmers can do any need without wasting any time and resources.
- **Selection of beneficial crops and higher profits:** It is well known that mobile phones are continuously making more and more reach among the rural masses, as well as their use in transmitting information and also increasing with time.



Therefore, in the future, the use of mobile phones and related technology will become more effective and small farmers will also be able to take advantage of it, so that farmers will get opportunities to make agriculture more profitable.

