



A Study of Agriculture related mobile apps and its impact on farming System

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Abstract

Farmers are known as 'Anna data' in our country. Despite being in a big position, they are facing problems like poverty, unemployment, illiteracy, low per capita income, unstable socio economic condition. Agriculture sector has an important role in strengthening the economy of our country. More than half of our population is dependent on farming. If we want to connect to the people of the village with the main stream, then we have to make them aware of the ICT. Telecommunication services are expanding all over the rural India. It believed that telecom services in rural territory improve the performance and efficiency of the growers. The Internet and Mobile Association of India report the number of users in rural India at 227 million. Various agriculture applications are introduced by mobile service providers for empowerment of farmers

Keywords; Growers, Rural, Applications, ICT

1. Introduction;

Telecommunication services becomes the major part of today's time. People cannot imagine their life without a mobile phone. India has seen an extraordinary growth in telecommunication sector in the last few years. India has the second largest network in the world, next only to China.

Now consumer is more educated and well informed about latest and high-tech technologies, but still the rural territory is backward and untouched by ICT. Rural population in India was reported at 65.07 % in 2020, according to World Bank, but there is huge gap between rural and urban territory regarding the use of mobile services. To bridge this gap, have to enable India's transition in to a digital economy, for this huge investment in infrastructure, both in optical- fibre cables and towers for wireless connectivity are required.

In the early days, mobile was operated only for the medium of communication but now it is also being used by government to convey our development programmes and planes to the people. Telecom services are the directly linked with the all digital India programmes. Mobile services are available in reasonable and affordable rate and do not need more technical knowledge to operate it.

This study is based on to find out the, what kind of challenges are faced by farmers in using mobile services. Mobile service provider companies supported farmers by introducing various types of apps for improve their cultivation system. Rural peoples depend on agriculture. Therefore it is necessary to operate new technology in farming for intensify productivity and earning capacity of farmers.

Unavailability and insufficient information about market, farmers getting suffers for the best price of their crops. Lack of details regarding marketing, high cost of transport, role of mediator, illegal check points are major issues behind low profit margin. Because of dull communication system, farmers did not have proper information about, what kind of quality and quantity demanded in market and price rate prevails in market.

2. Literature Review;

Farmers are taking advantage of mobile phone technology in farming, mobile services provide them fundamental information, like commodities prices, weather report, use of pesticides, government schemes related to farming, use of farming related equipments and machinery, to growers. Digital platform increase the revenue of farmers and improve their economic condition. The farmers get fair price of their crops. ICT enables the adoption of updated technologies, seed varieties and farming process. Mobile technology reduced time and money wastage of growers by facilitating the spread of information and decreases the transaction cost. (Surabhi Mittal and Mamta Mehar, 2012).

Mobile phone services enhance the productivity of farmers by introducing various online based apps. Every app has their own importance, like marketing related apps provide market information from brokers and customers. Telecom services could save the time and money of growers, consuming in travelling. Farmers directly contact with metrological department to get the necessary information related to weather condition before spraying pesticides on their crops. (Abdul Razaque Chhachhar & Md Salleh Hassan, 2013)

The study was conducted I Phillipine, telecom services is useful for farmers in market related information, when negotiating with dealers and customers over the price of their commodities. Furth more, growers could get price related information from Nabors, friends and relatives or to get over estimate from traders or brokers for selling their crops in fair value. Similarly after adoption of telecom services, farmers do not have to wander from one market to another to get fair price for their produce, they came to know sitting at home, and it's reduce their travelling cost. (Patel et., 2010).

The study was conducted in Kenya. The paper was based on use of mobile phone to identifying and management of livestock dieses. Farmers get information from concern authorities. Further study Uganda farmers had to travel miles for searching buyers for selling dairy products, so that the they get the right cost, but after the arrival of mobile apps they get the fair price for their dairy products in few minutes. (FARM Africa, 2007, Karamagi, & Nalumansi, 2009).

The use of telecom services provides cultivation regarding details to grower, its connecting the growers with online technologies, which has to prove to be very useful for them. Now farmers know the information related to the market in very less time and effort. (Mittal and Tripathi, 2008).

3. Objectives and methodology;

This study is based on to indentify the various cultivation related applications introduced by the Mobile Service Providers and their impact on growth and development of cultivation system. For this purpose secondary data has been collected through journals, reports, articles etc.

4. Agricultural related apps;

Nifco kisan app, this application provides information about mandi price and farming tips in ten languages.

Agri Media Video app, this app provide video related to farming, government scheme for farmers, latest equipment for crop cultivation and fertilizers.

Farm Bee-RML Farmers, this app get informed about weather forecast for sowing of any crop or vegetables.

Kheti- Badi, for promoting organic farming this app is introduced, it is moves farmers away from chemical farming to organic farming.

Pusa Krishi, this android application gives information related to various varieties of crops developed by Indian Council of Agriculture Research.

IFFCO Kishan Agriculture, its provide customized information as per requirement of farmers, like weather report, market price, pesticides, use of farming equipment in the form of text, video, audio. This application also offers Kishan Call Centre Services.

Crop Insurance, it's calculate the insurance premiums on due dates and informed about policy status and protect the farmers against natural disasters such as drought and floods or dropping in prices of farming commodities.

Kishan Yojana, the aim of that app to informed farmers about all the government schemes. With the help of that android app farmers do not have to make rounds of government offices to get information about government schemes, its save both time and money of growers.

Meghdoot mobile app, through this app, farmers get information related to rainfall, wetness, and wind speed direction, this app gives information about taking care of animals along with farming.

5. Conclusion;

Mobile phone becomes very useful machinery for providing farming related information to formers. Online apps reduce the role of middle man, and increase the revenue of farmers, its gives the best price of crops. There is transparency in all the money based transactions done through the online app and there is negligible chance of fraudulent act. These digital platforms assist farmers in selling, buying, and exchange their crops without any obstacle of middle man. It connects growers as a network and provides a unified national market by bringing them together.

ICT could play a significant role in agriculture services. In the context of telecom services has also given a perquisite for getting weather related details to growers. These apps are effective in weather forecasting, and what will be the atmosphere or weather condition is likely to be happening at a particular place and time. Cultivation is depending on season's weather conditions, its affect major on the crops. With the help of apps, farmers get information about the right time of harvesting, so that they can protect their crops by sudden incident like natural disaster and losses are minimize.

The telecom services also provide helps of cattle farmers to communicate with veterinary officers to get the advice about cattle animal dieses. With the help of online app, farmers are able to consult veterinary doctors about dieses, medicine and vaccination related to their livestock in form of text message, online call or videos.

6. Suggestions;

- * Government should organise short term training programmes for farmers, and guide them, applications of these mobile apps, they can overcome their farming related difficulties and increase their productivity.
- * Improve wireless internet service quality and coverage in rural area.
- * Uplift the power connection in rural area, so that farmers do not face any inconvenience in charging mobile phones.
- * Established the mobile service centre nearby the village area so that farmers can remove the technical issues and recharge their mobile without any delay.
- * Government should available mobile and recharge for farmers at concessional and affordable rate.
- * Agricultural related apps are must be available in multiple languages and technically not difficult to execute.

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