



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

The Role Of Mobile Apps In Enhancing Farmer's Access To Government Information And Agricultural Services In Karnataka State

Dr. Mala M

Associate Professor

Department of Economics

GFGC Hoskote

Bangalore Rural District

Abstract

In the present scenario, the development of mobile phones is the strongest digital tools that enables farmers to avail government beneficiary schemes, status, information, and services, facilitating in farmers' empowerment in rural areas. The mobile phones ensure accessibility of information and services, interactive, user-friendly even helps to small and marginal farmers to get familiar with accessing through Apps. The government services are available through web portals, login with the help of an internet connection through computers and laptops. Smartphones with net facilities are facilitating two-way login to government websites. Firstly, in smartphones, farmers can log in through the Google search engine can visit the official website address of the concerned government departments. Secondly, Mobile Apps applications are developed by the government for farmers with user-friendly features, which can be accessed directly through login to the apps. These Apps are downloaded from Play Store and installed on their smart phone can easily access information services. This paper analyse role of Mobile apps in enhancing farmers access to government information and agricultural services in Karnataka state.

Key words: Mobile Apps, Farmers, Agriculture information and services

Introduction

In the present scenario, the development of mobile phones is the strongest digital tools that enables farmers to avail government beneficiary schemes, status, information, and services, facilitating in farmers' empowerment in rural areas. The mobile phones ensure accessibility of information and services, interactive, user-friendly even helps to small and marginal farmers to get familiar with accessing through Apps. The government services are available through web portals, login with the help of an internet connection through computers and laptops. Smartphones with net facilities are facilitating two-way login to government websites. Firstly, in smartphones, farmers can log in through the Google search engine can visit the official website address of the concerned government departments. Secondly, Mobile Apps applications are developed by the government for farmers with user-friendly features, which can be accessed directly through login to the apps. These Apps are downloaded from Play Store and installed on their smart phone can easily access information services. This paper analyse role of Mobile apps in enhancing farmers access to government information and agricultural services in Karnataka state.

Objectives:

- To study the role of mobile Apps facilitating farmers in accessing agriculture information and services in the study area.
- To analyse benefits of mobile applications to farmers in digital empowerment at the local level.

Methodology

Secondary sources of data have been collected from different sources such as magazines, newspapers, books, research articles, and website sources.

Review of Literature

Goria Sunil, Bihani. K. Sanjay and K.L. Mahawar, (2018), ‘Empowering farmers community through digital media for achieving sustainable development goals (SDGs) in India. Focus on digital tools assists farmers empowerment.

Pratik S Dhumol (2015), E-governance – An application of information and communication technology depicts on ICT in agricultural development.

Subrat Kumar Mahapatra (2020), Smart Phones Apps For Agri-Information Dissemination During Covid-19 Lockdown focus on smart phone and agricultural information to the farmers.

User-friendly features of mobile phones

Mobile phones are now becoming a part of farmers to contact people, and nowadays shifted towards accessing information and services. Due to its familiarity with respect to services, timely information user services are enhancing day by day.

- The mobile phone services are operated with easy picture icons to identify, text message, voice message, images, and videos are easily accessible by even illiterate farmers with low digital literacy.
- The mobile phones are operated in multiple languages to facilitate farmers' access to government websites and information, easily understood by the local people.
- Some apps are also operated without a network with the help of downloaded data and can store data in the mobile phone and can use that information.
- The apps are structured as two-way communication features, farmers can ask queries, receive alerts, and share feedback.
- Recently, Artificial intelligence-based apps developed can answer any questions, queries and can upload image also provide information to the farmers.

How Mobile phone Apps benefitted to the farmers

The handy small device ensures easy to carry anywhere, access information and service at any time, real-time information leads to farmers now engaged in access to information and services for agricultural purposes. Some of the benefits availed from the Mobile apps are listed below

- The weather based apps are providing timely information on rainfall alerts, occurrence of rainfall, chance of rainfall, drought conditions etc facilitated farmers to take right decision at right time.
- The eNAM and REMSL apps are providing daily information on market rates, facilitate farmers to decide sell the crops for better prices.
- Apps on soil health card scheme provide advisories in fertilizers and pest usage management regularly helps the farmers in adopting best agricultural practices.

- eSAP apps will provide information on entire crop management and advisories through images, videos, messages, voice messages and chatbot features makes more farmers engaged in farming advisories.
- The government beneficiary schemes like PM KISAN, Crop insurance, BHOOMI, subsidies, FRUITS registration are communicated through Apps and farmers can even check updates, status, and message alerts provide real-time information to the farmers.
- The integration of banks with Aadhar number, mobile number facilitates farmers in Digi payments, and BHIM apps facilitates in easy way of financial transaction to the farmers. The message alerts on each financial transaction helps to know their banking status ensure as transparent and accountable delivery of services.

Table 4.3 the status of agricultural Mobile Apps user engagement as of 02/10/2025

Name of App	Owned	Reviews	Downloads	Ratings
BHOOMI	Karnataka government	442	1L	4.2
MOJINI	Karnataka government	563	1L	3.1
eNAM	GOI	1K	1L	3.4
eSAP	Karnataka government	118	10K	3.3
PM KISAN	GOI	76	1 Cr	3.8
Crop insurance	Karnataka government	4K	10L	3.7
Bhim Bharat own payment	GOI	16L	10 Cr	3.9
UMANG	GOI	4L	5Cr	4.1
Agri Central	GOI	27K	1Cr	4.3
Big HaatKisanAgri farming	GOI	12K	10L	4.4

Source: play store.org

- Above table depicts Mobile Apps review ratings given by users, along with the number of visitors who have visited the websites and downloaded information, indicate that utilizing these app-based services will enable farmers to make better decisions based on real-time information provided.
- The highest downloads and login status found in BHIM app, a financial related apps but, in the agricultural sector highest downloads found in PM KISAN apps a direct benefit transfer scheme was accessed more crossed 1crore with 3.8 ratings throughout India.
- In Karnataka state, digital apps like BHOOMI, MOJINI, downloads crossed one lakh with 442 and 563 reviews respectively. This clearly reflects that farmers accessed Mobile based apps developed by government to avail public services has increased.

App related services in agricultural sector

BHOOMI App	Land-related information, RTC/RC
KisanSuvida app	Information on weather, soil & water nutrients status, market prices, videos on agricultural practices
PUSA Krishi	The best agricultural practices and new technology, new varieties of seeds, good agricultural practices, conservation of resources, and machinery developed by the Indian Agriculture Research Institute (IRAI)
Cropinsurance app	Assist the farmers to know the crop insurance for their premium for crops, calculation is also done. The different stakeholders, such as farmers, banks, and insurance companies, benefited.
Agri app	The farmers can access the best agricultural practices related videos, messages, and information
IFFCO KisanAgriculture	Launched in 2015 and controlled by IFFCO Kisan is a subsidiary of Indian Farmers Fertilizers Cooperative Limited
KrushYantradhaar e driver app	Assist the farmers with technical assistance, especially with newly invented machinery
e-NAM	Online marketing of agricultural produce assists different stakeholders such as farmers, traders, commission agents, and middlemen's
ReNMs	Assists farmers in providing information related to the marketing of agricultural produce
Agri market	The farmers can get information on the crops sold within 50 KM of their locality and prices
Spray guide	The app will assist the farmers in proper guidance on the usage of pesticides and insecticides for their crops.
Machinery guide	The app related to farm machinery information on the soil types, cropping methods, fertilizers, harvesting, and tilling helps the farmers.
CC Mobile app	The information on weather forecasting, moisture, and wind velocity is available to the farmers on a daily, monthly, and weekly basis, and they also receive alert messages
AG Mobile	The information to the farmers and different stakeholders on the retail markets and agricultural-related news
SIDILU	Information on weather, rainfall, and thunder
Accu weather	Information on weather forecasting, temperature, and rainfall
My ENV(Weather & notification alerts)	Information on weather forecasting, temperature, and rainfall
Mausam	Information on weather forecasting, temperature, and rainfall
Weather forecast	Information on weather forecasting, temperature, and rainfall

Kisanrath	Supply linkages between farmers, FPOs, APMC, mandis, warehouses, and timely supply
PM KISAN	Pradhan Mantri Kisan Samman Nidhi transfers funds directly to the farmers.
Soil health card app	Soil test, know the fertility of soil nutrients, conditions, and advisories from KVK
Tractor Junction apps	Tractor models, implements, and accessories information from different companies
APEDA farmer connect	GPS built and operated, where farmers can apply for farm registration and approval from the state governments, as well as laboratories
riceXpert	Developed by ICAR, information on the latest rice technologies on real real-time basis, agro-advisory, marketing of rice, fertilizer recommendations, Pest management advice.
Decision support system(DSS)	Choice-based options on seasons, variety, soil, water, land preparation, management of nursery, tools and implements, pests and diseases, etc
Crop doctor	Pest and disease diagnosis, nutrient level check through sending images, and get consultation from the scientists and experts.
Khetibadi	Information on chemical-free agricultural produce
Jaivikkheti	Information on organic farming adoption and marketing of the produce is easily.
Farm-o-pedia	Provide information on suitable crops for these season, land, fertilizers, insecticides, irrigation methods, weather information, and animal husbandry.

Source: Economic survey of Karnataka.co.in and www.manage.org.nic.in

Conclusion

The mobile applications are played major role in the agricultural sector by disseminating agricultural information and services from the government to the farmer's in facilitating agricultural development. The faster means of communication and inclusiveness at the grassroots level assists the farmers in enhance their income and empowerment level.

Bibliography

1. Gorla Sunil, Bihani. K. Sanjay and K.L. Mahawar, (2018), "Empowering farmers community through digital media for achieving sustainable development goals (SDGs) in India.
2. Pratik S Dhumol (2015), E-governance – An application of information and communication technology. International Journal of Engineering Research and General Science Volume, Issue 2, Mar-Apr, 2015. ISSN 2091-2730
3. Subrat Kumar Mahapatra (2020), Smart Phones Apps For Agri-Information Dissemination During Covid-19 Lockdown, Research today2(5):116-119, Journal Home: www.bioticainternational.com, Article:RT004.
4. www. Economic survey of Karnataka
5. www.manage.org.nic in

