



SMART APP: A WAY TO IMPROVE FARMERS' ABILITY

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Introduction

India is an agricultural nation about 58.00 per cent of households depends upon agriculture as their main source of livelihood. The rural India is currently moving fast towards digitalization and use of information communication technology. The timely access to information is crucial requirement for decision making for farmers in agriculture and allied sectors. Due to the penetration of smartphones in rural India, the Indian Council of Agricultural Research in New Delhi, State Agricultural Universities, and Private Institutes developed mobile applications, assisting in the closing of the digital divide. Mobile Application is most convenient and useful medium to guide the farmers regarding various crop production technologies. Through using this mobile application we can get scientific guidance how to carry out operation, sowing method, post harvest management of any crops or vegetables. Farmers can also easily solve their farming problems, related to insect/pest infestation or any other problems.

A farming app can be a farmer's best friend in agriculture, which can increase their

productivity without spending single rupees. The farmers can easily download this app from Google play store without paying a single rupee. Agricultural expansion can be greatly accelerated through modern tools and techniques that are now relatively cheap as compared to beginning. The development of mobile communication technology is opening up many doors for farmers to become more powerful. It is necessary to raise awareness of the particular data and services that this application offers. It's also time to give digital agriculture greater attention in order to support India's economic growth.

Mobile Application: Is software on mobile phone handset and tablet computer that enables users to access specific information related to agriculture.

Advantage of Mobile Applications in Agriculture

- Mobile Application is convenient source of information to farmers.
- Identification of diseases and provide solution to overcome it
- Get information at any point of globe.
- Save time and money.

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- To educate farmers on soil management practices to optimize crop production.
- The commodity price can be delivered in real time mode.
- All information related to farming viz, soil, climate, rainfall, seeds and machinery, weather forecasting and lighting alert at any time is available on finger tips of farmers.
- The information is compiled in such a way that farmer's do not waste time while retrieving and obtained information quickly.

DIFFERENT MOBILE APP IN AGRICULTURE AND ALLIED SECTORS

1. Kisan Suvidha

Kisan Suvidha app was developed by Ministry of Agriculture and Farmers Welfare to help farmers for getting relevant information of agriculture and allied activities. This app provides information about current weather as well as next five days forecast, market prices of agricultural commodities in nearby areas, plant protection, dealers, fertilizers, seeds, expert advisory, machinery equipment, cold storage and integrated pest management practices and through using this app farmers call directly connect to Kisan Call Center.

2. Crop Insurance

The Department of Agriculture and Farmers Welfare has developed an app to assist farmers in calculating crop insurance premiums based on coverage, area, and loan amount. The app also provides sum insured, premium details, and subsidy information.

3. Umang

It is an initiative component of Digital India developed into 13 different commentaries in 2017. The objective was to make government services available online and round clock to all people in country. The app provides facility of payment, registration, searching information along with total 162 different services.

4. Turmeric Cultivation Technology

The Turmeric Cultivation Technology app, developed by Vasant Rao Naik Marathwada Krishi Vidyapeeth, provides farmers with information on turmeric's uses, types, tillage operations, growing stages, rhizome selection, treatment, sowing methods, fertilizer management, irrigation, pest and disease management, harvesting, storage, post-harvest technology, and Indian turmeric production and processing research.

5. IIFCO Kisan Agriculture

The app was developed by a subsidiary of Indian farmer fertilizer cooperative Ltd. 2015 in 11 languages. The app enables access to various modules like weather, market prices, expert advice, news, agricultural information

library in form of video and audio format and provide facility of Kisan Call Center services.

6. Aatmnirbhar Krushi Application

The app is designed to facilitate early weather alerts to farmers. The data related to soil type, soil health, moisture, climate and water are integrated into chart whereas, at same time it has been analyzed to generate individual insights regarding crop selection, fertilizer requirements.

7. Shetkari Masik Mobile App

Shetkari Masik is popular magazine related to agriculture developed by Department of Agriculture, Maharashtra in 1956. The app has simple interface which require mobile internet and Wi-Fi connectivity to register in app. Once you download, we are able to read magazine with internet connectivity.

8. e-Krishi

e-Krishi provides personalized crop calendar for popular agricultural fields as well as useful agricultural information like land preparation, crop sowing, crop planning, fertilizer management, seed treatment, pest and disease management, weed treatment and irrigations.

9. Damini Lighting Alert

Damini Lightning Alert application is developed to warn user about lightening alert on user's location. Using this application we can see light happened in last 5 and 10 minutes.

10. Plantix

The app is developed by PEAT, Germany for providing plant disease diagnostic and monitoring. The app provides users worldwide with customized information about best practices, information on preventive measure. The app provide the possibility to send damage or affected plant parts via directly with smart phones and guides farmers through identification of diseases in simple manner its enable real time monitoring of pest and diseases.

11. Bhuvan Hailstrom App

The app was developed by Ministry of Agriculture and farmer welfare, Government of India. This app takes photograph with geographical location to capture crop loss which has happened due to hailstorm. The captured data goes directly to bhuvan portal

12. Krishi Video Advice mobile app

The application was developed b National Institute of Agricultural Extension Management MANAGE with NIC, Hyderabad. The aim is to provide advisory services related to agriculture and allied sectors on issue related to farming. The farmer/extension officer can used this app to capture three images of crop live from farmers filed itself and upload the same.

13. APEDA Farmer Connect

This app is developed by agricultural and processed food products export development authority it's allow farmer to apply online for farm registration and approval by state government. The farmer can track status of application also and authorized government officer and farmers can login to access information. The app has in-built GPS capabilities to identify farm location.

14. Pashu Poshan

It was developed by National Dairy Development Board (NDDDB). This app is helpful to calculate balanced ration of through which we can optimized cost considering to animal profile. The dairy farmers can know the correct quantity and mix of feed and fodder to be fed to milch animals.

15. Meghdoot

The Ministries of Earth Science and Agriculture developed this mobile application to provide information regarding weather forecast relating to temperature, humidity, rainfall, wind direction and wind speed which plays a crucial roles in agricultural operation and to provide advisories to farmers on crops and livestock.

16. e-Nam Mobile App

The app was developed by Small Farmer Agribusiness Consortium (SFAC), ministry of Agriculture and Farmers Welfare, Government of India. It is electronic trading portal promoted by GOI which network

existing mandis to create a unified national market for agricultural commodities. The farmers are able to view State wise list of e-NAM mandis, arrivals in mandis and maximum/minimum price prevailing in any mandi.

Conclusion

The emergence of digital revolution and penetration of internet in rural areas has motivated farmers to access new app that would keep pace with modern technology. The mobile application related to agriculture and allied sectors provide need based, credible and current information and meet requirements of farmers/farm women/rural youth and extension functionaries. Hence, the application should aim at holistic development of agriculture with link between farmers and consumer through a gender sensitive technology.

References

1. Anonymous (2017). Mobile Apps for Empowering Farmers. *Extension Digest* 1 (2).
2. Mandi K. and Mandal R. Mobile Apps in Agriculture: A Boon for farmers. *AGRIALLIS* A monthly e-Newsletter 2 (1) 19-24.
3. Saravanan Raj (2014). Mobile Phones for Agricultural Extension; Worldwide mAgri Innovations and promise for future. New Delhi, NIPA.

- Sarkar S., Kumar B and Kumar S.
(2021). Mobile Applications for Indian
Agriculture and Allied Sector: An
Extended Arm for farmers.
*International Journal of Current
Microbiology and Applied Sciences* **10**
(03): 1913-1920.

