



THE IMPACT OF E-GOVERNANCE INITIATIVES ON AGRICULTURAL DEVELOPMENT IN KARNATAKA-AN OVERVIEW

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Abstract

Agriculture is the primitive, age old occupation followed by the population for their livelihood contributing food and fodder to animals and human beings. The agriculture involves production, processing and marketing of the goods and services as major source of revenue to the government contributing 14% to GDP and major supplier of exporter in the economy. The development agriculture sector needs the people participation and the efforts of the government involvement in formulating and implementing appropriate policies and programmes which induces favorable environment to enhance the production. Presently information and communication technology has been applied in all the sectors of the economy as the whole world has become a global village in faster delivery of services. The agricultural development needs the application of ICT promoting production, marketing and processing integrating and disseminating information. The research paper attempts to study e-governance initiatives of the government of Karnataka in developing agricultural sector and tries to analyses impact of e-governance on the farming development and challenges faced in the economy.

Key words: Agricultural development, E-Governance initiatives, impact, challenges.

Introduction

Agriculture is the primitive, age old occupation followed by the population for their livelihood contributing food and fodder to animals and human beings. The agriculture involves production, processing and marketing of the goods and services as major source of revenue to the government contributing 14% to GDP and major supplier of exporter in the economy. The development agriculture sector needs the people participation and the efforts of the government involvement in formulating and implementing appropriate policies and programmes induces favorable environment to enhance the production. Presently information and communication technology has been applied in all the sectors of the economy as the whole world has become a village in faster delivery of services. The agricultural development needs the application of ICT promoting production, marketing and processing integrating and disseminating information. The research paper attempts to study e governance initiatives of the government of Karnataka in developing agricultural sector and tries to analyses impact of e-governance on the farming development in the economy.

Objectives

1. To study the E-governance initiatives of the Karnataka government to promote and develop agricultural sector.
2. To analyze impact and challenges faced in farming sector in implementing e-governance initiatives.

Review of Literature

Sumitha thankachan and Dr.S.Kirubakasan(2014): A stastical survey study named **E-Agriculture information management system** highlights the technological importance in agricultural sector. The E-Agriculture only enhances the food production and food security in our economy. The mobile phones are easily accessible to farmers for providing information. The farmers are sensitized to create awareness on agri-business activity. The illiteracy is one of the problems among the farmers, so farmers should be insisted to learn state (local) languages.

Dr.N.Bharathi dasan(2015):A descriptive study named **E_Agriculture an excellent opportunity for Indian farmers in India** focus on the ICT in the rural domain leads to rural development especially agricultural



development. The agriculture through the internet will increase the efficiency and productivity in the agricultural production.

Bibhu Santhosh Behra, T.K.Das, Jishnu, K.J, R.A.Behra, A.C. Behra, S.Jena(2015);A descriptive study named **E-governance mediated Agriculture for sustainable life in India** focus on the ICT application in the agriculture sector. The recent initiatives of the e-governance activities adopted in the Indian economy are discussed. The concept of e-agriculture led to the sustainability in the agricultural practices are analysed. The management of portals, e-kiosks, common service centers at the grass root level disseminate the information leads to development in the farming sector. The farmers are benefited and get the information from the globe on the new methodology, practices, innovation in the agricultural practices.

Research Question

The e-governance initiatives of the government of Karnataka indeed in agricultural development.

Methodology

The research study has been confined to secondary sources of data gathering information from sources like research articles, newspapers, magazines, books, government reports and publications. The website sources also provide a good source of information for the research study.

Scope of The Study

The research study has been limited to the area of only Karnataka state. The information and communication technology adopted by the government confined to the agricultural sector.

Changing Scenario in The Agricultural Sector

The origin of the civilization gave impetus for man to invent new occupation for consumption of food known as farming, emerged nearby river basin for their settlement. In the earlier stage traditional food crops were grown with limited use of tools and implements, animals on the basis of trial-and-error method. The experience made him to prediction on weather, cropping pattern, sowing, harvesting, cultivating on the part of food crops. In the later stage of development, the prominence given for the commercial crops rather than food crops as the trade, commerce, finance developed in the economy.

In the 18th century industrial revolution has changed the scenario of farming sector as the improvement in the usage of tools and implements, technological application has been started. The invention and innovation of new techniques, machines, population increases gave rise to produce more food crops and special attention has been diverted to commercial crops as it was needed by the growing new industries.

In the beginning of the 20th century commercialization, industrialization, diversification, international collaboration, population explosion leads to extension of land for the cultivation purposes. The production of chemical fertilizers, pesticides, insecticides, inventing of hybrid seeds, and use of technology has a new dimension opened up in farming sector. The Prominence gave for the production more to meet the needs of growing population and intended towards to earn more profits. The new scientific revolution has begun in 1980s in the field of information and communication as it was started using in all the sectors even in agriculture field also adopted. The information and communication technology succeeded in private sector in achieving their target stimulated the government in implementing public services to the citizens efficiently and effectively in a transparent manner. Presently, artificial intelligence introduced in monitoring weather forecasting, fertilizer and pesticides spray, seed sowing etc. to enhance and improve these sectors.

Meaning of E-Governance

The term E-governance refers to the application of information and communication technology in delivering governmental services to the public encouraging people's participation and fastest delivery of governmental



services in the economy. The government intention is to facilitate faster, efficient, effective, transparent, accountable SMART governance to public through electronic means as it enhances efficiency management system.

E-Governance Initiatives on Agricultural Development in Karnataka Bhoomi

The Karnataka government was first in the country to initiate e governance initiatives as a major sector of administrative reforms in the land record management system in the country. The BHOOMI project was started in 2002, with intention of automation of land record system in order to bring efficiency, effectiveness, transparency in order to overcome from the problems of delay, inefficiency existed in the earlier manual system. Presently computerization of land records till now 200 lakh record of land ownership and 70 lakh farmers data are automated in the state. The farmers are able to get record of rights at any time by visiting KVK centers paying Rs.15 to get the printout copy. The government of Karnataka has linked the BHOOMI with KAVERI, BHOOSWADEENA, banks in order to bring vertical and horizontal integration of all the departments to get all the documents in easier and faster. The beneficiaries are farmers, citizens, those banks connected, revenue departments, stamps and registration etc.

2.NEMMADI (800 Village tele centre project)

In the initial stage of implementing BHOOMI project, the farmers have to visit the taluk centres in order to get the services. In order to facilitate e-governance services at their door steps under public-private collaboration started NEMMADI tele centres in every village to avail the facility of not only getting land records and other services like income, caste certificates, birth-death certificates in these centers.

Some of the websites helpful to the farmers are as follows

1. Farmer portal <http://farmer.gov.in/>
2. State Institute of Agriculture extension and training <http://siaet.nic.in/>
3. mKisan: A portal of government of India for farmer <http://mkisan.gov.in/>
4. Krishi Vigyan Kendra <https://kvk.icar.gov.in/>
5. ICAR-Query Management System <https://qms.icar.gov.in/> etc.

Digitalization Of Farmers In India - M-Governance

The digitalization or digital government helps to build sustainability and resilience society. In 2005 the government of India launched the Digital India programme, aimed at the digitalization of the economy. It has three components, 1. Creation of digital infrastructure.2. Delivering services digitally.3. Digital literacy. The digitalization of farmers includes through the mobile phones disseminating information to the farmers by extending information on the agriculture activities by message alerts and apps. The new technologies are emerging in the market like cloud computing which has made mobile browsing and access to the network by the people. The accessing and utilization of government services through the mobile phones and wireless devices are called as M-governance. Recently the government has developed several apps related to agriculture in the mobile phones in extending easier way communicating and disseminating information.

Apps Developed Related to Agricultural Sector

The information and communication technology has made life so faster that we get all the information through mobile phones with the help of network facility. In order to upgrade the public services, the government has developed several apps related to that area of services. The important apps developed by the government are as follows; BHOOMI app, Bij aadhar app, Krishi yantradhare, Crop insurance app, KISAN SUVIDHA, Spray guide, PUSA, Krishi mithra, E-NAM, Krishi missionary guide etc.



Impacts

1. The faster delivery of governmental services at their doorsteps in a right a time enables the farmers applied in their farming activities to enhance production and continues to follow agriculture as their main occupation.
2. The online marketing has benefitted the farmers even during pandemic situation like COVID-19 to sell their products and aware about prices in different parts of the world through electronic means.
3. In the case of land resource management, automation of land record system and integration of BHOOMI and KAVERI, BHOOSWADHENA, banking sector, benefitted to farmers, citizens, revenue administration, land acquisition etc. Especially the farmers are able to get RTC through electronic means faster as compare to traditional method of manual system.
4. The horizontal and vertical integration of the governmental departments leads to easier way communication, uploading documentation, verification and extending to provide loan facility, crop insurance, remittance of the amount by the government, agricultural prices etc.
5. The development of Apps related to farming sector has made the farmers to get information on their fingertips in all the areas from production to selling their products.

Challenges

1. Majority of the farmers in rural areas are illiterate unable to understand the services facilitated by the government through electronic means.
2. The availability of the smart phone with internet facility is the pre-condition to avail the facility provided by the government. Most of the farmers not avail the net facility especially in remote areas where they face signal issues.
3. The public participation is the key role in successful enact of the initiatives but due to the ignorance farmers, negligence, traditional and rationale attitude is the major obstacle for the government in implementing policies and programmes on farming sector.
4. The easier way of communication process is essential pre condition to understand and use the ICT in disseminating information. Here the government plays a predominant role to take services at the door steps of the government.
5. The rationale, traditional attitude of the rural people unable to accept the new technology, attached to the traditional method greater challenge before the government in successful implication of modern technology.

Conclusion

The e governance initiatives indeed encouraging and providing effective, efficient, transparent, public services to the farmers at their doorsteps in a faster way. The disseminating information at a right time regarding weather, agricultural inputs, marketing, and prices are pre condition required by the farmers, the adoption of ICT by the government in delivering its services are successful in Karnataka. The fruits of successful implementation need the active participation of the government, farmers, stakeholders etc in utilization the ICT in a better manner.

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