

A Case Study on Evaluation of E-Governance Initiatives on Agricultural Economic Development in India

Dr. Zahid Husain Ibne Hasan Ansari

Assistant Professor,

Department of Accountancy,

DRTs A. E. Kalsekar Degree College. Mumbra, Thane, Maharashtra- India

(Affiliated to the University of Mumbai)

Abstract

Agriculture is the backbone of a nation as it feeds animals, and human beings and generates employment opportunities for the people. Earlier farming activity undertaken for consumption purposes presently shifted to commercial purposes as the extension of agricultural activities known as agri-business came more prominent in society. Good governance or administrative setup played a dominant role in formulating appropriate policies and programs, rules, and regulations for the development of a nation's agriculturally -preferred priority sector as more population followed their main occupation. The adoption of ICT in public administration setup is to implement administrative reform, bring SMART governance to deliver public services at their doorsteps, and encourage public participation in the decision-making of public policies. In rural areas, digital divide glitches can be resolved by facilitating physical and digital infrastructure, technical updatable digital literacy, digital education, research, and innovation to get the information on time-related to land, production, marketing, and processing of farming activity. The research paper evaluates the e-governance initiative of Karnataka state confined to the BHOOMI project impacts on agricultural development in the research area.

INTRODUCTION

Agriculture is the backbone of a nation as it feeds animals, and human beings and generates employment opportunities for the people. Earlier farming activity undertook for consumption purposes it now shifted to commercial purposes as the extension of agricultural activities known as agri-business. Good governance or administrative setup played a dominant role in formulating appropriate policies and programs for the development of a nation's agriculturally -preferred priority sector as more population followed their main occupation. The adoption of

ICT in public administration setup is to implement administrative reform, bring SMART governance to deliver public services at their doorsteps, and encourage public participation in the decision-making of public services. In rural areas, digital divide glitches can be resolved by facilitating physical and digital infrastructure, technical updatation, digital literacy, digital education, research, and innovation to get the information on time-related to land ownership, soil test, different cropping methods, production, innovative technology implements, marketing, prices, subsidies, procurement price and processing of farming activity.

Objectives

1. To evaluate the BHOOMI project's impacts on the agricultural development in the study area.
2. To retrospect the benefits of e-governance initiatives in the study area.

Research Methodology

An exploratory study on the impact of e-governance initiatives on agricultural development limited to the BHOOMI project in Karnataka state. The secondary sources of data were gathered from various sources to enrich the research area. Internet articles, books, magazines, and research articles are taken for the evaluation of the research study.

Review of literature

Nagaraja K(2016): A descriptive study named **E-Governance in India; Issues and challenges**. The article study about the evolution of E-Governance in India. Recent initiatives adopted in the governance sector like G2B, G2C, G2C, and G2E models are analyzed. Enlisted the state-wise-governance projects in India. The issues in e-governance covered the area like Technical, economic and social issues. The paper also highlights the challenges and future prospects of e-governance in India.

Dr.S.D.Yogaraju and Dr.Yoganarasimhachari(2015): A descriptive study named **E-Governance initiatives in Karnataka state: A note**. The article emphasizes E-governance in Karnataka. The benefits of E-governance are retrospect here. Some of the initiatives of the Karnataka government E-governance projects such as the Bhoomi project, Bangalore one, Kaveri, etc are discussed. It focuses on the problems and challenges of E-governance in the Karnataka economy.

Research question

Are the e-governance initiatives fruitful for the development of the agricultural sector in an economy?

Research gap

The comparative evaluation and its successful performance study are not analyzed in the earlier research work.

Historical development of E-governance in India

Earlier ICT existed only in defense, planning, and some of the major departments at the internal level in an efficient and effective manner. The establishment of NIC in 1977 was a greater stepping stone in the area of information and communication technology where greater encouragement was given for extending computerization in a horizontal and vertical manner. The government of India established a separate department known as the Department of Electronics in 1970 in order to stimulate ICT development in the nation. In the later period, NIC NET was launched in 1987 the network facilities provided in all the states to adopt ICT in different levels of administrative mechanisms.

The district information system of the National informatics center was extended to set up or computerize all the districts throughout the nation to have e-governance. The importance of ICT in the administration mechanism was identified for this purpose a separate ministry was constituted in 1998, known as the Department of Information and technology. This department has taken budgetary policies and grants to develop a software package, and network facilities at the grass-root level. The government understood the benefits of ICT as it found in the private business where transparency, accountability, and responsiveness an act that was passed in 2000 known as the Information technology Act in India.

The major steps taken by the government in the area of information and communication technology was formulating and implementing a National e-governance plan in 2006 identifying 29 Mission Mode Projects consisting of 8 components where e-governance can be effectively implemented. The Digital India program was launched in 2014 by the Government of India to digitalize the economy all manual work has to be transited to mechanization.

Evaluation and Analytical Framework

As a part of administrative reform, ICT in the governance system will enhance efficiency and effectiveness, Transparency, and faster delivery of services to the different stakeholders on their doorsteps. The second administrative reform strongly profounded the adoption of ICT at the administrative level to reach the benefits of governmental services to the citizens and encourage public participation in the decision-making process.

After India got independence the land record management system was manually maintained by village accountants at the village level. The farmers face problems on RTC of their land ownership because of the possibility of cheating, misappropriation, etc problems on one side, and on another side, the farmers face problems in getting land record copies, and delays in services. In order to get a loan facility from the banks, crop loans and partition of land, the transformation of land ownership, etc also faced many problems because of the nonexistence of a reliable land record management system in the state. Even after the various land reform measure introduced by the government in the late 1960s and 70s, the redistribution of land due to the law of tiller is the owner of the land, redistribution of land to the landless laborers where an excess of the land took from the rich landlords, the recording of land management is a great problem for the state.

As agriculture is a state subject the state government only took measures for the development of the agricultural sector. The state government faced many problems while formulating policies and programs, developmental measures to enhance agricultural production, and water resources availability, and mainly to identify the different types of landholders like small, marginal, and large farmers. The beneficial measures were not at all reached to the small farmers and used only by rich farmers. Again, society was divided into two classes haves and have-nots. The land dispute leads to quarrels in the village premises more than 30 lakh cases were registered in the court related to the authenticity of land records, negative impact on the agricultural sector, and socio-economic, and political factors influenced to divert their attention. To resolve all these issues proper land record management was indeed needed.

The Karnataka government 2001 started the computerization of land records in the in the name of BHOOMI project as a part of e-governance initiatives by the revenue department introduced by 1986 IAS batch officer Smt.Latharau. It is the first successful e-governance project implemented and induced other states to adopt public governance in other states. The NIC has

developed a separate updated software package for the consolidation of data. The obstacle in social, economic, technical, psychological, and political issues are successfully resolved, and took the help of NIC, and KIONICS to computerize the land record of all the lands in rural areas. The farmers are able to get RTC by paying Rs,15 at the local KIONICS center, and the authenticity of the record sheet is available at their places.

When BHOOMI project was implemented only computer entry land records were available in the software but the major problem arises when the transfer of property, division or fragmentation, and sale of the property did not come under notice to the revenue department at all. The vertical and horizontal integration of the department indeed for the success of this project, for this purpose in 2011 KAVERI and in 2012 BHOOSWADINA (registration department) was integrated.

The BHOOMI was successfully implemented and getting benefits to the various stakeholders is a live example for other states to follow and implement e-governance projects in various other fields.

Policy implications

The systematic, transparent land record management mechanism benefitted the main stakeholders like farmers, the revenue department, and the banking sector. The government policy formulation on the target group can be made with accurate data available to them. Natural calamities like drought, floods, or other situations can be handled very conveniently, and quarrels in the land dispute, transfers of land, sale, and registration problems are avoided. In Karnataka 60 lakh farmers' land records are computerized. The vertical and horizontal inclusion of all the departments especially BHOOMI with KAVERI, and BHOOSWADHINA helps in the faster delivery of public services in an effective manner. The linking of banks to land record management systems leads to easy accessibility of credit, crop insurance schemes any information relates to farming activity easily accessible to the farming community. The updates of land are extremely easy for the government in dividing the land ownership on the basis of soil, measures can be taken up for different kinds of land on the basis of the availability of physical infrastructure, water resources, and soil patterns enabling the farmers to adopt a scientific method of cultivation, mixed farming, commercial crops to enhance production and income of the rural community.

The farmers due to the authenticity of land records through ICT and incorporation with the banks i.e, direct link of BHOOMI with KAVERI removed obstacles in credit, internal land dispute problems, and information from time to time to enable them to follow as their main occupation. The R & D, technological upgradation, usage of artificial intelligence, marketing price, warehousing, weather condition, and soil test facility through appropriate public policy to the farmers directly or indirectly helps in raising production level. The authenticity of land records leads to identifying the different levels of land that existed, soil and water availability helpful for the government and research institutions to undertake technological upgradation to enhance production.

Agricultural production is very low due to improper or faulty methods of cultivation, subdivision, and fragmentation of land holding, very difficult for the farmers to adopt modern technology. The accuracy of the land management record system possible for the government to approach the farmers to go for cooperative farming, mixed farming, and the concept of economic holding.

Benefits

1. The land record authentication available through ICT and GPS, farmers land dispute problems avoided indirectly helpful in raising productivity.
2. Convenient for the government to implement appropriate policies and programs for sustainable agricultural development.
3. From the side of the farmers, easy accessibility of credit from banks, in order to get subsidized seeds, fertilizers, and insurance schemes very easier convenient mode.
4. The government has the opportunity to extend basic physical infrastructure in remote areas too.
5. The sustainability of the environment can be achieved when a perfect land record management system existed, the government can identify the areas of forest, land available for cultivation, dry land, and semi-arid region, and easier to convert dry, a wasteland for the forest areas.
6. The cost-effectiveness of the BHOOMI project has been that farmers can get the RTC/RC at a very affordable price.

7. During the time of natural calamities like floods, drought, and earthquake situations, identification of land ownership is very easier as it was saved in the cloud.

Limitations

1. digital illiteracy is a major problem in rural areas where the majority of the population is unable to get the accessibility.
- 2, Illiteracy, unawareness, and negative attitude toward new technology are the major problems still found in rural areas.

Conclusion

E-governance has a better impact on society bringing all public services efficiently, and effectively in a transparent, accountable manner. The BHOOMI project in Karnataka state has a systematized land record management and helps in agricultural development directly or indirectly.

References

- Aggarwal Dr.Sandeep (2017), Overcoming the challenges in implanting E-governance in rural India International journal on recent and innovation trends in computing and communication. ISSN:2321-8169-1252-1255
- Dr.Deveshkumar(2014), E-governance: Good governance in India. Gajraula , U.P.
- D.kumar and N.Panchanatham(2017), A study on E-Transcations in E-Governance of Tamilnadu. International journal of pure and applied mathematics, Volume 116 No.22 2017, 81-88. ISSN:1314-3395.
- Dr.S.D.Yogaraju and Dr.Yoganarasimhachari(2015), E-Governance initiatives in Karnataka state: A note .International journal of research in engineering ,IT and social sciences (ISSN2250-0588), Impact factor: Volume 5, Issue3, March 2015.
- Dibakar ray, Sibilisirajee and Shefali dash(2017), A study on E-government readiness of Indian states. . Global institute of flexible system management ,New Delhi. ISBN:81-903397-5-3

- Dr.N.BhartiDasan,(2015), ‘E Agriculture an excellent opportunity for Indian farmers in India’, Vol.7, No.1 Pp 27-31 ISSN: 0976-2698, International journal of enterprise innovation management studies(IJEIMS).
- Elsa Estevez and Tomasz Janowski(2013), Electronic governance for sustainable development – conceptual framework and state of research. Government information quarterly 30(2013)S94-S109 Journal home page www.elsevier.com/locate/govinf.
- Farhadhossain, (2005), E-governance initiatives in developing countries; Helping the rich? Or creating opportunities for the poor.Asian affairs, vol. 27, No: 5-23, Oct-Dec,2005 CDRB publication.
- Gorla Sunil, Bihani. K.Sanjay and K.L. Mahawar, (2018), ‘Empowering farmers community through digital media for achieving sustainable development goals(SDGs) in India.
- Himanshu sangrola and Rahul palaria(2017), E-governance in India. International Journal on Emerging Technologies (special issue NCETST-2017) 8(1):318-321(2017) ISSN No.(print):0975-8364 and ISSN No(online):2249-3255.
- Gunchahashmi and Pooja khannaE- governance;A journey of challenges, failures and success in India(2016), International journal of innovative research in computer and communication engineering Vol.4, Issue 5Issn :2320-9801.
- Harssimratkaur and Hamrajsingh(2016), E-governance and its challenges inclusion of women in E- governance in India
- HimadriBarman(2009), E-governance in India: How citizens benefit?.
- I.D. Variyani(2013), E-governance for good governance; Emerging technology and new opportunities. Prashasnika, volume XXXXI Number2.
- Jaspreet kaur C and Dr.Vijaysingh rather(2012), Importance of ICT and E-governance security in Panjab .Global journal of computer science and technology, Volume 12 online ISSN:0975-4172 and print ISSN:0975-4350.
- Karunamaysububbhi(2006), E-governance in Rural India for poverty alleviation and development administration: A approach towards administrative reforms. . Global institute of flexible system management ,New Delhi. ISBN:81-903397-5-3.
- Kiran preetkaur and Dr.Sawtantarsinghkhurmi(2016), Implentation of E-governance in India: opportunities and challenges. UCST Vol. 7, Issue 1, Jan-March 2016, ISSN:0976-8491.

- Kiran yadav and SanatanTiwari(2014), E-governance in India – opportunities and challenges. Research India publications ISSN 2231-1297, Volume 4, Number 6(2014), pp 675-680.
- Lee Komito(2005), E-Participation and governance: Widening the net.The electronic journal of e-government volume3, Issue 1, pp39-48. ISSN:1479-439X.
- Laxmikanth(2014): Governance in India.
- M.V.Rajeev Gowda, Chaitra .S. Narayan and Joseph ollapally(2006), E-electoral reforms in India. Global institute of flexible system management ,New Delhi. ISBN:81-903397-5-3.
- Mohammed asaduzzaman and petri(2016), Governance theories and models, springer international publishing Switzerland.
- Muhammad muinulislam and Abu Mumtaz saaduddinAhmed(2007), Understanding E-Governance: A theoretical approach. Asian affairs, vol.29, No.4: 29-46, Oct-Dec, 2007 CDRB publication
- N.S.Kalsi, Ravi Kiran and S.C.Vaidya(2009), Effective e-governance for good governance in India. International review of business research papers vol.5 No.1 pp212-229.
- Nagaraja K(2016), E-Governance in India; Issues and challenges.IOSR Journal of Economics and Finance(IOSR-JEF) e-ISSN: 2321-5933,p-ISSN:2321-5925.Volume7, issue 5 ver.IV(sep-oct 2016),PP 50-54.
- Nidhi srivasava(2015), E- governance in rural India. International journal of computer science and information technology Vol. 6(1), 2015, 741-744
- Panjab Singh, "Indian agricultural development in changing scenario- past, present and future",
- patel, suryakant Adarsh , Bhrantavnishendubhaivora and Pravin kumarrameshbhaivorapatel(2012), Importance of E- governance in India and challenges to implement.ISSN:0976-8491(online), 2229-4333(print).
- Payal Sharma, Anushumaanmishra and Prof. Pavan mishra(2011), E-governance in India is the effectual and challenging approach to governance. Vol 2(5), 2011,297-304 ISSN: 2229-6247.
- Poonam malik ,Priyanka Dhillon and Poonam verma(2014), A analytical study named Challenges and prospects for E-governance in India.

- Priya Sharma(2016): Facts and abstracts of E-governance in India.International Journal of commerce and management research ISSN: 2455-1627, Volume 2; Issue 11; page No.34-37.
- Pratik S Dhumol(2015), E-governance – An application of information and communication technology. International Journal of engineering research and general science volume3, Issue 2, Mar-Apr,2015. ISSN 2091-2730.
- Rajbir Singh dalal(2011), The conceptual dimensions of good governance, Prashasnika, volume XXXIX Number1.
- Rama Krishna das and Manas ranjanpatra(2013), A service oriented design approach for E-governance system.
- Singh Chandan (2011), A analytical study named E-governance challenges and success factors of projects-An Indian perspective.
- Swarna lata and Somnath Chandra(2006), Challenges of taking E-governance to grass-root through localization: An Indian perspective.Global Institute of Flexible systems management. New Delhi. ISBN:81-903397-3-7
- Sachdev sameer(2006), Twenty-five steps to successful E-governance. The 25 steps are retrospect for the successful implementation of E-governance in the economy. Global Institute of Flexible systems management. New Delhi. ISBN:81-903397-3-7
- Sanjay Malhotra(2013), E-governance for good governance; Emerging technology and new opportunities. Prashasinika, volume XXXXI Number 2.
- Stephen Zavestoski and Pradip Swarnaker(2017), ISBN: 978-864-4604-6(HB) SAGE Publications India private limited
- Suhasinisrivastava(2017), Role of ICT in E-governance and rural development; An Indian scenario New Delhi publishers.