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Role of E-Governance in Indian Rural Areas

Abstract

In the modern decades, the concept of e-governance has received exceptional importance in the field of Rural Development and its successful execution of various welfare programs under taken for the development of rural areas. The objective behind e-governance is to provide SMART (Simple, Moral, Accountable, Responsible & Transparent) Government to the common masses. As we know that a large proportion of India's population lives in villages, it is crucial that our e-governance model make sure that it is accessible to the rural masses in the country. E-Governance is the mechanism for providing and managing government services electronically which also leads to citizen empowerment through easy access to information. In this paper Researcher analysis the role of various projects and initiatives of e-governance as a mechanism of rural development in India. In this paper it is also trying highlight the various limitations and issues including security issues different language issues, geographical areas issues etc. being faced by e-governance system in Rural India.

Key Words: E-Governance, Security Issues, Rural Development, SMART, Rural masses

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Introduction

We are in the midst of a knowledge revolution where technological excellence, Intelligence and power are making a comprehensive impact on almost everything we do, and revolutionizing our lives as a person, a society and a nation. Information and Communication Technologies (ICTs) has emerged as a vehicle to bring people together and deliver services at the people's doorsteps, irrespective of where they live. The phenomenon is manifesting itself across different areas in the shape of e-commerce, e-education, e-governance and so on. Since the delivery of these services is through electronic means, many pitfalls of yesterday's systems and practical limitations faced by physical infrastructure have been rendered irrelevant by the modern age technology. From Government services perspective, this is an advantageous situation, understandably, the government of India has prioritised a large scale implementation of e-Governance projects in the country.

As we know that a large part of India's population lives in villages, it is crucial that our e-governance model makes sure that it is accessible to the rural masses in the country. Without that, we cannot claim to have leveraged the full potential of information technology for public good. The rural connect brings both opportunities and challenges for our e-governance strategies and the overall mechanism. If we are able to deliver results at the grass roots level, we can be sure of not only covering a large part of Indian population but can also build foundation for a more technologically aware and empowered society. We have made significant progress in this regard even though many challenges still exist.

Electronic Governance or e-governance can be defined as the usage of information and communication technology (ITC) by the government to provide and facilitate government services, exchange of information, communication transactions and integration of various standalone system and services. In other words, e-governance is the mechanism for providing and managing government service via electronic means and is expected to help in ensuring a smart government.

According to world Bank- "E-governance refers to the use by government agencies of information technologies (such as wide area networks, the internet and mobile computing) that have the ability to transform relations with citizens, businesses and other aims of government. These technologies can serve variety of different ends: better delivery, of government services to the citizens improved interactions with business and industry, citizen

Innovation The Research Concept

empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased and or cost reductions."

The term E-governance has different connotations:

E-Administration

The use of ICT to modernise the state the creation of data repositories MIs, Computerization of records

E-Services

The Emphasis Here Is To Ring The State Closer To The Citizens For Eg. Provision Of Online Services. E-Administrations And E-Services Together Constitute What Is Generally Termed E-Government

E-Governance

The use of IT to improve the ability of government to address the needs of society. It includes the publishing of policy and programme related information to transact with citizens. It extends beyond, provision of online service and covers the use of IT for strategic planning and reaching development goals of the government

E-Democracy

The use of IT to facilitate the ability of all sections of society to participate in the governance of the state. The remit is much broader here with a stated emphasis on transparency, accountability and participation. For e.g. online grievance redress forums and e-referendums.
The main focus of the e-governance or electronic governance is to provide transparent, equitable and accountable service delivery to the citizens:
Ø G2C (Government to Citizen)
Ø G2G (Government to Government)
Ø G2B (Government to Business)
Ø G2E (Government to Employee)

Objectives of the study

1. To recognize the essential components helping towards Indian rural development through ICT.
2. To investigate and examine the different E-governance Initiative in India.

Methodology

The vital aim of this project is to evaluate and examine the E-governance policies, programs and projects initiated by the government of India. The methodology followed to draft this research paper is Descriptive in nature and the required facts and figures have been collected from different secondary sources like the websites of Ministry of Rural Development, Research articles, books, newspaper reports and periodicals etc.

E-Governance in Indian Rural Areas

As we know that India in a nation with 69.8% of total population lives in rural areas. With such large rural population government is required to make concrete efforts for the development of Rural areas. Undoubtedly government of India has made considerable efforts like Digital India campaign initiated in 2015 to reduce the digital divide ICT has proved to be a tool for its successful implementation. Mr. Singh defines Rural Development as a process which leads to sustainable improvement in quality of life of poor people residing in rural areas. The percentage of rural population in India is decreasing since last two decades but still it accounts for major proportion of total population. In 1991 the percentage of rural population was 74.3% which reduced to 72.2% in 2001 leading to 69.9% in 2011. This decrease in rural development could be understood as an indication that there is a need to provide better facilities in rural areas. It indicates that more people are migrating to urban areas in past two decades in order to get access to better facilities/services available in cities.

TaTable-1 : Literacy Rate (Rural)

	Persons	Males	Females
2001	58.74	70.7	46.13
2011	67.77	77.15	57.93
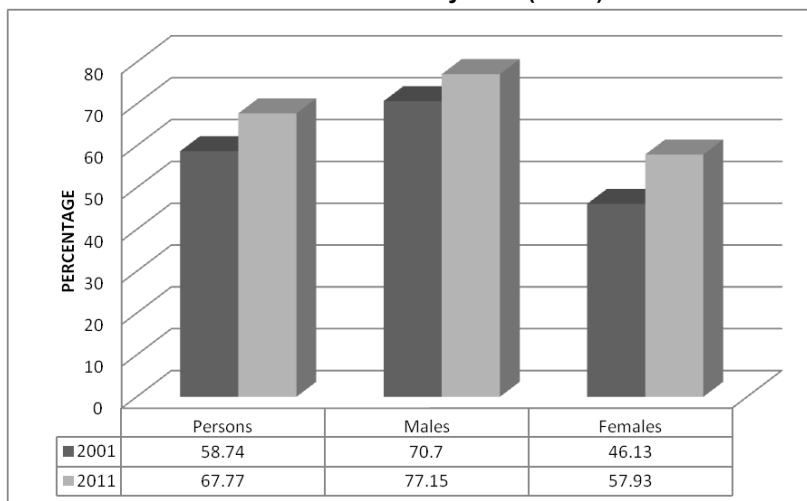
Source: Census (India)

Table 1 shows that literacy rate among rural males above 10 years of age has increased by 6.8% from 2001 to 2011 and among rural females has increased by 11.8%. So it is a supportive element for the implementation of various e-governance initiatives and Digital India campaign as it aims at providing internet access to people residing in rural areas for which more literates will be required.

Since the time India has adopted e-governance as a part of its policy. E-governance is using information communication technologies in order to improve the interactions within the government departments between citizens and government. Prabhu states that the motto behind e-governance is to provide SMART (Simple, Moral, Accountable, Responsible and Transparent) Government.

S	-	Simple
M	-	Moral
A	-	Accountable
R	-	Responsible
T	-	Transparent

Digital India Campaign

Communicating with the citizens has been a big challenge for the government of India with extensive geography, immense population and vast linguistic and cultural diversity. The most efficient way for communicating with all the people of world's largest democracy is through connectivity at a Digital platform. Government of India has aimed at effectively using the improvements in ICT to reduce the digital divide in the country.

Pillars of Digital India Campaign		
Universal Access to Mobile Connectivity	Public Internet Access Programme	e-Kranti-Electronic delivery of service
Information for All	Electronics Manufacturing	IT for Jobs
Early Harvest Programmes	Broadband Highways	E-Governance Reforming Government through Technology

Source: Deloitte Report

Its nine pillars is called "Government process re-engineering which is indicative of Union Government's resolve to not just use electronic delivery systems but carry out some fundamental changes in the way government services and processes work. Such structural reforms and changes are essential in order to establish a result oriented, sustainable and long term mechanism of e-governance. The government is using information technology to simplify and transform government processes, across all ministries and departments in a way that they can be delivered in an effective manner across various government domains.

The guiding principles for reforming government through technology are:

Form Simplification & Field Reduction

1. Forms should be made simple and use friendly and only minimum and necessary information should be collected.
a. Online Applications and Tracking of their status should be provided.
b. Use of online repositories e.g. for certificates, educational degrees, identify documents etc. should be mandated so that citizens are not required to submit these documents in physical form.
c. Integration of services and platforms e.g. Aadhar Platform of Unique Identity Authority of India (UIDAI), Payment gateway, mobile seva platform, sharing of data through open Application Programming Interfaces (API) & middle ware such as National and State Service Delivery Gateways (NSDG/SSDG) should be mandated to facilitate integrated and interoperable service delivery to citizens and businesses.
d. All databases and information should be in electronic form and not manual. The workflow inside the government departments and agencies should be automated to enable efficient government processes and also to all on visibility of these processes to citizens. It should be used to automate, respond and analyse data to identify and resolve persistent problems. These would be largely process improvements

E-Governance Initiatives For Development Of Rural India

There are lots of e-governance initiatives, which are engaged in the development of Rural India. For instance, e-governance applications such as CRISP, NEGP, NIC, E-Chopal, Gyandoot, Jagriti E-sewa, Akashganga, TKK, Kisan Call center are functioning for rural development in India. Implementation of various tools or techniques of e-governance in rural India will promote rapid, transparent, accountable, efficient and effective communication among rural citizens, not only fostering development in rural areas but also saving time and transaction costs of the government.

Computerised Rural Information System Project (Crisp):

The Government of India has launched CRISP to assist the District Rural Development Agency (DRDA) in the successful implementation of poverty alleviation programs through a computer-based information system. So far the government have developed four versions of CRISP application software packages and the Rural soft 2000 was the latest one. Rural Information endeavours marked the beginning of e-Governance in India. Through Rural Soft 2000 common people can access all information on government portals and it also enabled the government to monitor working of various agencies. The latest in the series is Rural soft, which is a scalable solution that helps in web-based monitoring of the poverty alleviation schemes. It has been implemented in 15 districts of the country which have been wired using state of the art VSAT (Satellite based) network by the ministry.

Negp: National E-Governance Plan

For the success of e-governance, the Government launched the National e-governance plan and with the help of the National Information centre set up a central repository for all e-governance initiatives. National e-governance plan was launched to "Make all public service accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable cost to realise the basic needs of the common man." NEGP was first introduced on 18 May 2006 by the Department of Electronics and Information Technology (DEIT) and Department of Administrative Reforms and Public Grievances (DAR & DG). NEGP was set up with 27 Mission Mode Projects (MMPs) and 8 components. It

was especially designed for rural areas and the easy access of the services provided by NeGP state wide Area Network (SWAN) and common service centre (CSC) was set up.

The vision statement of the NeGP takes a holistic view of e-governance initiatives across the country, integrating them into a collective vision a shared cause. Around this idea, a massive countrywide infrastructure reaching down to the remotest of villages, is evolving and large scale digitisation of records is taking place to enable easy reliable access over the internet.

Nic

NIC is a part of the Indian Ministry of Communications and Information Technology's Department of Electronics & Information Technology and came up in 1976. It is a website designed for all the e-governance initiatives taken by the Government in one place. This includes blocks, districts, state government and central government. The ICT network of NIC is called NICNET.

Some E-Governance Projects in Rural India:
E-Governance Projects in India
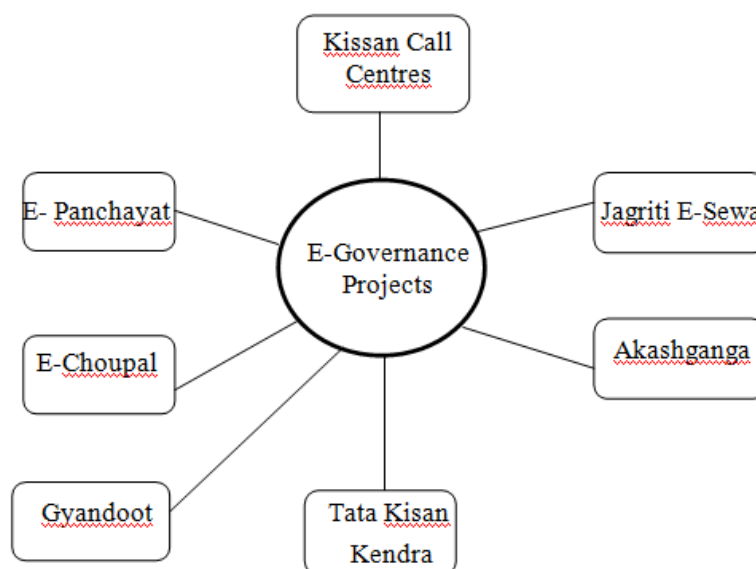
E-Panchayats

Means a web based dynamic digital interface created for each and every panchayat in India, giving information about particular panchayat in a two away flow of content. The objective is to facilitate and improve panchayat functioning on day to day basis through two away flow of information and content. This is a Mission Mode Project (MMP) in which 2,50,000 Panchayati Raj Institutions were identified to deliver e-governance services to rural populations. The project developed by NIC, provides a host of services as a part of its 30 modules and 150 sub-modules. They include information on topics such as agriculture, irrigation, fisheries, loans, se

E-Choupal

E-Choupal is an India based business initiative by ITC Limited that provides Internet access to rural farmers. The purpose is to inform and empower them and as a result to improve the quality of agricultural goods and the quality of life for farmers. In other words this is a private sector project launched by ITC Limited to address various requirements of farmers including selling their produce directly to the buyers and ruling out the role of middleman in the process. Under the project, internet Kiosks have been set up in villages where farmers can access services and important information relevant to farming. There are 6100 E-Choupals in operation 35,000 villages in 10 states (Madhya Pradesh, Haryana, Uttar Pradesh, Uttarakhand, Rajasthan, Karnataka, Kerala, Maharashtra, Andhra Pradesh and Tamilnadu) benefitting around 21 million farmers.

Innovation The Research Concept

Gyandoot

The Gyandoot project was initiated in January 2000 in Dhar district of Madhya Pradesh as an e-commerce and e-governance activity with the objective of providing useful information to people in rural areas and also to act as an interface between the district government and ordinary people. Gyandoot is very beneficial economical and is owned by rural internet system that is soochnalaya as it helps to fulfill the needs of villagers in the district. Rural youth manage 35 such centres which were established since January 2000. The unemployed educated youth were trained and they ran the soochnalaya and are known as soochaks. The provide various types of services information related to agriculture, education, health, issues related to women, information about market and user fee is changed for all this.

Jagriti E-Sewa

Jagriti E-Sewa is an effort to establish and help operate sustainable community owned, people centred Information and Communication Technology (ICT) projects in rural and semi urban areas throughout India. The services are brought to the people by computer Kiosks located at places in the villages where there is a sizeable flow of people on a regular basis. Each kiosk is set up to serve approximately 25,000-30,000 people or a radius of about 3 km. Bus stands, banks, revenue offices and link roads have been identified as good location for the kiosks. Each kiosk is owned and operated by a 'Kiosk Franchisee' typically an educated youth or an ex-serviceman from that area. Sufficient revenue is to be generated by the franchisee to meet the cost.

Akashganga

Akashganga (meaning 'The Milkyway') Project was conceptualised more than six year ago, when IT awareness in the country was limited big urban centres only. Akashganga had developed two unique systems to automate all the milk procurement operations of village milk collection centre. 'Akashganga' is being used at the DCS which is a farm-owned, grass-root level unit in the cooperative structure. All the farmer (members) of the DCS congregate twice a day at its premises to sell milk. The simple technology used in this product has enabled the timely collection of Milk and thus, generated higher profits for the producer, now paid well on time. A basic milk collection transaction done by Akashganga comprises (1) measuring weight of milk with electronic weighing scale (2) fat testing using Milko Tester (3) Capture of unique member ID by the PC Software

(4) Printing of pay slip, with all this data and the amount to be paid.

TKK (Tata Kishan Kendra)

Tata Kisan Kendra is an initiative by Tata Chemicals Limited with the following objective:

"To provide the farmer with a package of inputs and services for optimum utilization of balanced primary nutrients; plant protection chemicals, water, seeds, post-harvest services and to develop a genuine partnership with the farmer/" It is one of the initiatives taken up by big business groups aiming towards improving the quality of life of Indian farms. TKKs are designed to be one stop centers for all agricultural problems. They provide the farmers with trusted agro inputs such as seeds, fertilizers, pesticides at affordable prices. They also provide the facility for farmers to lease out farm equipment and implements enabling farmers to use modern machinery even if they cannot afford it. It is currently active in the states of U.P., Punjab and Haryana. An interesting feature of this initiative is that it not only focuses on better information, equipment and knowledge to the farmers regarding agriculture but also aims at an overall development for farming community.

Kissan Call Centres

In order to harness the potential of ICT in agriculture, Ministry of agriculture launched the scheme "Kisan Call Centres (KCCs)" on January 21, 2004. The main objective of this project is to answer farmers queries on a telephone call in their own dialect. These Call Centres are working in 14 different location covering all the states & UTS. A countrywide common eleven digit Toll free number 1800-180-1551 has been allotted for Kisan Call Centre. This number is accessible through mobile phones and landlines of all telecom networks including private service providers. Replies to the farmers queries are given in 22 local languages. Call center services are available from 6.00 am to 10.00 pm on all seven days of the week at each KCC location. KCC agents known as Farm Tele Advisor (FTAs). The possess excellent communication skills in

Innovation The Research Concept

respective local language. Queries which cannot be answered by Farm Tele Advisor are transferred to higher level experts in a call conferencing mode.

Bhoomi

A Karnataka government initiative, Bhoomi has been instrumental in digitisation of land records. The projects have been highly successful as records of 6.7 million farmers dealing with 20 million records in the state have been computerised. The Revenue Department of Karnataka government and National Information center (NIC) had rolled out the project, funded by the central and state governments. Encouraged by its success, some other states have also implemented similar systems. They include Andhra Pradesh, Haryana and Madhya Pradesh

Limitations of Rural India in E-Governance

1. The biggest limitation is related with infrastructure especially telecom/broadband infrastructure and power supply related infrastructure. Even though mobile phones have emerged as an alternative mode of receiving government services, the number of smart phones is still far from covering the entire population. A large number of people in rural areas still use feature phones which limit their ability to access services electronically.

a. Literacy levels vary in the urban and rural areas and we still have a long way to go in terms of ensuring ideal literacy rates, especially among the population 67.67% while male literacy rate stands at 77.15%, female literacy rate 57.93% is even less in these areas. This is in contrast to urban literacy rates where male literacy rate stands at 88.76% and female literacy rate at 79.11% literacy would have a direct link with the ability of masses to leverage e-governance mechanism.

b. t awareness and IT Literacy is another important aspect of the situation as even among those who are literate, a significant numer of people find it difficult to deal with digital equipments and internet. They access ICTs in a very limited manner.

c. India is a country with vibrant diversity and our languages reflect that fact very well. In rural areas, an extremely limited number of people understand English which is the primary language of interaction on e-governance platforms. This seriously hinders people's ability to take advantage of the system. Though government is working to make a these systems available in local languages as well but the process will take time due to the large number of language we have.

d. Most people are not concern about the facilities provided by the government for the welfare of the common people. Although, Government has taken various initiatives in certain cases by broadcasting about their projects on radio, TV and putting banners, etc. to create awareness among the people.

e. People are reluctant to change as e-governance means a change of the system from manual to computerise based; it is generally disapproved by the employees and the general public. People generally dislike it as they need to learn new things in it for which they need to give in more time and effort.

Conclusion

E-Governance is one of the most important way to bridge the digital divide in developing nations like India. Different initiatives by government through development in ICT have helped E-governance to take off since the beginning of millennium. Different building blocks like increasing literacy rate in rural areas, the initiatives like Digital India campaign will help in making the rural people more tech. savvy encouraging them to get in contact with Indian government through just a click of button. So in a nut-shell it can be concluded that increasing digital literacy with the help of technical advancements are leading and will lead to rural development in India.

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Innovation The Research Concept

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