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Digitalisation and Rural Development in India

Prasanna B Joshi¹ Dr. Abhay M. Patil²

Abstract: Digital revolution is generally considered as the next industrial revolution. Many countries are moving towards cashless economy. The concept of digitalization was initiated & introduced by our Prime-Minister Shri Narendra Modi. The process of digitalization includes the use of technological devices such as internet facility, information & technology tools like the digital platform, websites & mobile applications in various economic & business transactions. The 'Digital India' programme was introduced in 2015 to make India's economy into cashless economy. India is one of the fastest growing economies in the world & being recognized as a knowledge based economy, the present paper tries to analyse the various measures introduced by the Government to make India digital with special emphasis on rural India & how to improve rural internet connectivity & digital literacy. It is a conceptual study that focuses on the measures undertaken by the Government to bridge the digital gap between urban & rural India.

Keywords: Digital India, digitalization, internet connectivity, rural India.

I. INTRODUCTION

In this era of globalization, digitalization is a new technological movement that has made business transactions fast & easy. There are many countries that have superseded the process of digitalization. In India, the campaign of 'Digital India' introduced by the Modi Government is gaining momentum especially emphasizing in the rural districts. Digitalisation relates to the usage of digital technologies with the help of information & communication technological devices. Gandhiji had said India lives in villages, so if Digital India campaign has to become successful, it has to start with rural digitalization. Rural digitalization helps in improving the rural economy & development. The present paper is an attempt to examine the extent of digitalization in rural areas. Digital India is an initiative of the Government of India to ensure that government services are made available to citizens electronically by improving online infrastructure and by increasing internet connectivity. It was launched on 1st July 2015. The initiative includes plans to connect rural areas with high-speed internet networks. Digital India has three core components namely the creation of digital infrastructure, delivery of services digitally & digital literacy. For a country like India where 70% of the population lives in rural areas, economic development can be achieved only when there is an urban & rural development. The policy makers have to formulate strategies & implement considerable efforts to reduce the digital divide between urban & rural areas.

II. REVIEW OF LITERATURE

- **Priyadarshinipadhi (2017)** provides an insight into the challenges in the implementation of the digital India programme & discusses the reasons or causes that led to introduce digitalization in the economy. The main objective being to improve online infrastructure by increasing internet connectivity to digitalise economic & business operations.
- **Kaul & Mathur (2017)** emphasise on the usage of information communication technological devices to introduce digital literacy in India. They also focus on digital financial literacy & analyse the effectiveness of the schemes & measures that are introduced & implemented in Digital India campaign.

- **Gupta and Arora ,(2015)**,they relate to the importance of digital India programme & the preparedness of India to digitalise its economy. They examine the importance & implication of the 'Digital India' campaign on the growth & development of rural Indian economy.
- **Kumar, Prdhi & Bisen (2016)**,analyse the various initiatives introduced by the Government to digitalise India with special focus on rural India. The authors relate to the technological devices like cloud computing & mobile applications. They discuss the significance & benefits of digitalizing India's economy.

III. OBJECTIVES OF THE STUDY

- To understand the concept of rural development
- To ascertain the initiatives undertake to digitalize rural India.
- To assess the extent of digitalization in rural India.

IV. RESEARCH METHODOLOGY

The study is based on secondary sources which include articles & internet sources.

a) Concept of Rural Development

Rural development is one of the strategies where the concept of digitalization can be introduced. 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 population could be understood as an indication that there is a need to provide better facilities in rural areas. Rural development refers to improving the quality of life & economic well-being of people living in rural areas. Generally, rural development is centered on the exploitation of resources relating to agriculture & forestry, but increased urbanization changed conditions in rural areas. Education, entrepreneurship, physical infrastructure, and social infrastructure play an important role in developing rural regions. Rural development is also characterized by its emphasis on locally produced economic development strategies. In contrast to urban regions, which have many similarities, rural areas are highly distinctive from one another. Rural development essentially focuses on action for the development of areas outside the mainstream urban economic system. Rural development is needed because modernization of village leads to urbanization. The Indian economy is predominantly rural with over two-thirds of its population and workforce residing in rural areas. Rural India contributes a substantial part of the total net value added in many sectors, with an overall 46% contribution to our national income. With a population of 833 million people (which incidentally is larger than rural China) residing in 640,867 villages, it is projected that, by 2050, more than half of India's population will still be rural, despite rising urbanisation. Thus, the growth and development of the rural economy is imperative for inclusive development and overall growth of the country. The Government ensured that by 2018 all villages will be covered through mobile connectivity. The aim was to increase network penetration and cover gaps in all 44,000 villages. Initiative was taken to train 10 million people in towns and villages for IT sector jobs within five years. It aimed to train 0.3 million agents to run viable businesses delivering IT services. Additionally, the project involved training of 0.5 million rural IT workforce in five years. Rural India contributes a substantial part of the total net value added in many sectors, with an overall 46% contribution to our national income.

b) Concept of Digital India in Rural Areas

The purpose of Digital India is to create increased internet connectivity amongst rural masses & help in their small businesses through the application of digital technologies such as digital infrastructure, e-commerce etc.

Digital India Programme is categorized into nine support systems which are as follows:

Broadband Highways: Web based portals and Mobile apps will be developed to access online information while on the move. High speed broadband highways will be provided through fiber optics that connects all the remote areas, Government departments, Universities, R&D etc.

- **Universal Mobile Access:** With Digital India programme nation is ready to be well-connected, efficient, and more productive in every aspect. Network technologies like 3G, 4G and upcoming 5G will storm the speed.
- **Public Internet Access:** The two sub components of Public Internet Access Programme are Common Service Centres and Post Offices as multi-service centres. Common Service Centres would be made viable and multi-functional end-points for delivery of government and business services. DeitY would be the nodal department to implement the scheme. Post Offices are proposed to be converted into multi service centres.
- **E-Governance:** This governance will transform every manual work into fully automation system through these measures. Online access to applications i.e. availability of all databases and information in electronic format. Effortlessly tracking of assignments. Interface between departments for superior production of work.
- **E-Kranti:** This e-kranti will fully focus on digital knowledge program where education, health, farming, rights, financial and many more services will be delivered on a very high bandwidth. Physical boundaries no longer are a limitation when almost everyone and everything is a digital handshake away.
- **Electronics Manufacturing:** This milestone will create a huge base for electronics manufacturing in india with the aid of digital technologies and skills. The empowerment of manufacturing through the Internet of Things will enable intelligent workshops that demonstrate data driven operational excellence and decentralized production control systems within and beyond the physical factory walls.
- **IT for Jobs:** The government is preparing to provide training and teaching skills to the youth for employment opportunities in the IT sector.
- **Early Harvest:** The Govt. has set up Aadhaar Allowed Fingerprint Presence Program in all central government workplaces situated at Delhi. A web based application software system will allow online documenting of attendance and its watching by the involved stakeholders.
- **Information for All:** Websites and mobile apps will convey data and realistic participation and through social media. Everything is connected through virtual networks. Swift work flow and no delays due to wait in queues.

Scope of Digital India in Rural Areas

The overall scope of Digital India in rural areas is to prepare India for a knowledge future & realize IT (Indian Talent) + IT (Information Technology) = IT (India Tomorrow) On being an Umbrella Programme - covering many departments weaves together a large number of ideas and thoughts into a single, comprehensive vision, so that each of them is seen as part of a larger goal. The Digital India Programme will pull together many existing schemes which would be restructured and re-focused and implemented in an organised manner. A wide range of applications and content relevant for rural consumers must be accessible on mobile devices and the operators must provide service packages affordable to the target user. Broad based availability of broadband services, through handheld devices, is a pre-requisite for the achievement of the goals of Digital India. It has been found that the socio-economic potential and impact of electronic governance software and mobile applications in rural India is much more than urban India. The digital platform will open a new era for rural citizens through a variety of services like improved governance, land records, jobs, health, education and agriculture and digitization of personal and public records for safekeeping.

Rural E-Governance Initiatives in India

- **Computerised Rural Information Sytem Project (CRISP)** : aims at assisting the District Rural Development Agency [DRDA] in observing the exercise of poverty alleviation programmes through Computer based Information System. So far four versions of CRISP application software packages have been developed. Rural Soft was the fourth version. Through Rural soft 2000 common man can access all information on Government portals and it also enabled Government to monitor workings of various agencies. 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 of Rural Development.
- **NeGP: National e-Governance Plan** was launched with the following vision: "Make all Public Services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man." This was introduced in May 18, 2006 by Department of Electronics and Information Technology (DEIT) and Department of Administrative Reforms and Public Grievances (DAR&PG). NeGP was set up with 27 Mission Mode Projects (MMPs) and 8 components. It was specially designed for rural areas and for the easy access of the services provided by NeGP State Wide Area Network (SWAN) and Common Service Centre (CSC) was set up.
- **NIC: NIC** is a part of the Indian Ministry of Communications and Information Technology's Department of Electronics & Information Technology introduced in 1976. It is a website designed for all the e-governance initiatives taken by government at one place. This includes blocks, districts, state government and central government. The ICT network of NIC is called NICNET.
- **E-CHOUPAL** : To help the farmers & reduce their dependence on middlemen a scheme known as e-Choupal (which means a village meeting place) was introduced. Under this initiative various e-Choupals were set up in around 6500 villages by 2012 and each e-Choupal was equipped with a computer, internet connection, printer and Uninterrupted Power Supplies (UPS).
- **Gyandoot**: Civil servants consulted various Gram Panchayats in Dhar district in Madhya Pradesh. The project was started in January, 2000 and named as Gyandoot. Gyandoot is very beneficial as it is economical and is owned by rural intranet 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. They provide various types of services information related to agriculture, education, health, issues related to women, information about market and user fee is charged for all this. They further serve in making application for the services provided by the district headquarter for ownership of land. Soochnalaya are connected with dial-up lines through internet. Above 600 villages and approximately 50% of the total population of a district are covered by the network of 31 such Kiosks.

Empowerment of rural entrepreneurs under 'Digital India'

Digital India programme has launched many schemes that focuses on the empowerment of rural entrepreneurs of India. One of such schemes is enhancing Rural Entrepreneurship through Common Services Centres (CSCs). Under this scheme rural entrepreneurs can get loan for setting up their CSCs under the Micro Units Development and Refinance Agency (MUDRA) Yojana. CSCs are information and communications technology enabled service delivery points at the village level for delivery of government, financial, social and private services such as applying online passports, land record, digital locker and Aadhaar cards. Another scheme for promoting rural entrepreneurship under Digital India Programme is through Internet Kiosks. Internet Kiosk is a kiosk with one or more computers, a tablet, Internet connection, with a web cam that can be the set up in villages to be used as the hub of rural connectivity for providing education and training, information about agriculture and health care, employment news and market information. These cyber-kiosks can be run by local entrepreneurs thereby empowering the rural entrepreneurship. Empowerment of women of a nation leads to the successful growth and development of a nation. Digital India

Programme has set the stage for empowering the Rural Indian Women. Arogya Sakhi helps rural women by providing health care at rural doorsteps. Women armed with tablets and mobile healthcare devices like glucometers, blood pressure checking machine visit homes and collect data from the village women. This data can be accessed by doctors at any location who could provide treatment to the patients remotely. Internet Saathi aims to go deep with the internet usage among rural women in India. W2E2 (India) Women for Empowerment and Entrepreneurship, in short W2E2 is helping rural women with digital tools, e-learning, internet connection. Women tend to use the Internet for their own projects in fields like sustainable agriculture and rural health. Some are setting up their own kiosks and shops to provide online services to the local community, while others have taken up work as digital literacy trainers in their own local communities.

c) Extent of digitalization in rural India

Kerala is India's first digital state because of its achievement of high e-literacy & mobile penetration. In February 2016, former President Pranab Mukherjee declared Kerala as the first digital state of India. It was also the first state to complete the National Optical Fibre Network (NOFN) project, granting high-speed Internet access to all its gram panchayats. This achievement is significant especially in the area of rural development. Kerala has been setting benchmarks in terms of achievement of digitalization targets.

Some of the digital initiatives introduced in Kerala are as follows:

1. Aadhaar Enabled Citizen Services (AECS): It is an IT digital tool and the e-district project deliver all district-level services for citizens in a state-owned portal or through Common Service Centres (CSCs).
2. The Accelerating Change and Transformation in Organisation and Networking (ACTION) initiative has been developed to track high-priority projects, their status and areas needing the attention of senior authorities.
3. Computer Emergency Response Team-Kerala (CERT-K) is another important initiative which deals with cyber security threats and issues warnings to concerned departments as and when necessary. It works in coordination with the CERT-In application.

India's first digital village, Akodara, is located in Gujarat. The Government of Gujarat partnered with ICICI Bank, which adopted the village and converted it into a working model for Digital India. From setting up bank accounts and going cashless to installing CCTV cameras, the village is a perfect example of what a digital village would look like.

To meet the Internet for all objective of Digital India, the Andhra Pradesh Government is working on the fibre grid initiative. Also, with the e-Pragati initiative, Andhra Pradesh has embarked on a journey to become the first to have state wide enterprise architecture. Intel India has also announced the launch of 'EkKadamUnnati Ki Aur', an initiative aimed at working with the government to create the blueprint for the digitization of rural India. The first such Digital India 'Unnati' Kendra has been set up at a Common Services Center (CSC) in Nadimpalle village of Mahabubnagar district of Telangana

V. FINDINGS OF THE STUDY

Over 10 years ago, the government, through its flagship National e-Governance Plan, envisaged to empower rural citizens by making available various government services to them via electronic media and created access points, i.e. common service centres run by village-level entrepreneurs (VLEs) at the village and gram panchayat level. Financial inclusion is an important priority of the government. Only 38% of the 117,200 branches of scheduled commercial banks are working in rural areas, and a meagre 40% of the households have bank accounts. Thus, India is home to 19% of the world's unbanked population. Rural Indians have been getting online in increasing numbers, and are expected to catch up with urban India by 2020, when 48% of the online population will be from rural India (up from 36% in 2016). And if Digital India delivers on its promise, rural India will likely soon outnumber urban India online for a more real representation of the country. During demonetisation rural people faced many hardships during the currency crunch and had a crash course on the benefits of digital services.

VI. CONCLUSION

Rural India is expected to constitute nearly half of all Indian internet users by 2020. Digitisation can facilitate some of the key needs of rural India including e-governance services, banking and financial services, educational and healthcare services, mobile recharge, e-ticketing services, online shopping, etc. Digital connectivity is a basic amenity today. Digital India aims to expand the digital infrastructure to connect the entire country and provide a digital platform for banking, governance, healthcare and educational services. Digital literacy should provide knowledge to secure their online data. Massive awareness has to be created particularly in rural areas.

REFERENCES

- Ambika Bhatia & Chhavi Kiran (2015), 'Rural Development through E-Governance Initiatives in India', *IOSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668
- Priyadarshinipadhi (2017), 'Digital India: Issues & Challenges', *International Journal of Research in IT and Management (IJRIM)* Vol. 7, Issue 5, May - 2017, pp.44-49 ISSN(o): 2231-4334 | ISSN(p): 2349-6517(Available online at: <http://euroasiapub.org>)
- Dr. K.Priyadarsini & Dr. N. Vijayaratham, (2016), ' Digitalisation of India: Smart Villages towards Smart India', *International Journal of Innovative Research in Information Security (IJIRIS)* ISSN: 2349-7009(P), Issue 09, Volume 3, (ISSN: 2349-7017(O), (www.ijiris.com)
- Gupta and Arora, (2015), 'Digital India: A roadmap for the development of rural India', *International Journal Of Business Management*, (ISSN NO. 2349-3402) Volume No. 2(2), 1339 (www.ijbm.co.in)
- Moseley, Malcolm J. (2003), *Rural development: Principles and Practice* (1. publ. ed.). London, SAGE. p. 5. (ISBN 0-7619-4766-3)
- Mrinalini Kaul & Purvi Mathur (2017), ' Impact of Digitalisation on the Indian Economy & Requirement of Financial Literacy', *International Journal of Management and Applied Science*, ISSN: 2394-7926 Volume-3, Issue-4, (<http://iraj.in>)
- Tukesh Kumar, Shwati Prdhi & Abhay Bisen (2016), 'Role of Digital India in Rural Areas', *International Seminar On Non-Conventional Energy Sources for Sustainable Development of Rural Areas, IJAERD- International Journal of Advance Engineering & Research Development* e-ISSN: 2348-4470, p-ISSN: 2348-6406
- Ward, Neil; Brown, David L. (2009), "Placing the Rural in Regional Development". *Regional Studies*. 43 (10): 1237-1244. doi:10.1080/00343400903234696.
- Westport, Conn (1996), *Rural development research : a foundation for policy*, Greenwood Press (ISBN 0-313-29726-6)
- Van Assche, Kristof. & Hornidge, Anna-Katharina, (2015) *Rural development. Knowledge & Expertise in Governance*, (Wageningen Academic Publishers, Wageningen)

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