The Role of Digital India in Rural Areas

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Abstract*: Science & Technology can play a major role in bringing about social and economic transformation in our country, especially in the rural areas. , to implement this vision in a country where most of the population resides in rural areas is very challenging. It can best be done by creating Digital, which will be tower-based sites that enable the Smart Village and would become the focal point for the providing information, social, e-learning and e-governance services to villages. This can become the spring board for rapid economic growth in the rural areas.*

Keywords: Digital India, E-Kranti, Rural Areas, E-portal

1. Introduction

Digital India is a Programme to prepare India for a knowledge future. Bharat with our rural folk. Since the majority of the population live in rural areas often called Bharat, we actually need a Digital Bharat programme to ensure that Bharat is as connected and digital as India, which lives in its metros and cities. The Government's ambitious "Digital India" plan aims to digitally connect all of India's villages and gram panchayats by broadband internet, promote e-governance and transform India into a connected knowledge economy. In this program 250,000 Indian villages will enjoy broadband connectivity, and universal phone connectivity This is a truly visionary and commendable initiative. The Programme symbolizes the Government of India's vision for connecting and empowering 125 crore citizens; creating unprecedented levels of transparency and accountability in governance; and leveraging technology for quality education, health care, farming, financial inclusion and empowering citizens. Under the 'Digital India' Programme, technology will play a central role to achieve easy, effective and economical governance.

2. Concept of Digital India In Rural Areas

The purpose of Digital India is to create a digitally knowledgeable populace that will empower every citizen with their own voice. Consequently, as a part of the plan there will be increased internet connectivity which means that even rural people and small scale businesses will have an outreach that surpasses limitations of every kind. The vision is to create a digitised country that welcomes a whole new world full of untapped potentials besides also making way for investments in many niche industries and furthermore possibilities for the technology sector. Digital India uses areas are-

- Broadband Highways,
- Universal Access to Mobile Connectivity,
- Public Internet Access Programme,
- e-Governance: Reforming Government through Technology,
- e- Kranti - Electronic Delivery of Services,
- Information for all,
- Electronics Manufacturing,
- IT for Jobs
- Early Harvest Programmes

3. Scope of Digital India In Rural Areas

The overall scope of this programme is:
To prepare India for a knowledge future.
On being transformative that is to realize IT (Indian Talent) + IT(Information Technology) = IT (India Tomorrow) Making technology central to enabling change. 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. Each individual element stands on its own, but is also part of the larger picture. The weaving together makes the Mission transformative in totality.

- The Digital India Programme will pull together many existing schemes which would be restructured and re-focused and implemented in a synchronized manner. The common branding of the programmes as Digital India, highlights their transformative impact.
- 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'.

4. Approach And Methodology

- The existing/ ongoing e-Governance initiatives would be revamped to align them with the principles of Digital India. Scope enhancement, Process Reengineering, use of integrated & interoperable systems and deployment of emerging technologies like Cloud & mobile would be undertaken to enhance delivery of Government services to citizens.

- States would be given flexibility to identify for inclusion additional state-specific projects, which are relevant to their socio-economic needs.
- e-Governance would be promoted through a centralised initiative to the extent necessary, to ensure citizen centric service orientation.
- Successes would be identified and their replication promoted proactively.
- Public Private Partnerships would be preferred wherever feasible.
- Adoption of Unique ID would be promoted to facilitate identification, authentication and delivery of benefits.
- Restructuring of NIC would be undertaken to strengthen the IT support to all government departments at the Centre and State levels.
- The positions of Chief Information Officers (CIO) would be created in at least 10 key ministries so that various e-Governance projects could be designed, developed and implemented faster.
- Central Ministries / Departments and State Governments would have the overall responsibility for implementation of various Mission Mode and other projects under this Programme. Considering the need for overall aggregation and integration at the national level, it is considered appropriate to implement Digital India as a programme with well defined roles and responsibilities of each agency involved.

5. Applications of Digital India in Rural Areas

5.1 'e- pathshala'

The Ministry of HRD has launched 'e-pathshala' as a part of the **Digital India Campaign**.

It is a **single point repository** of e-resources containing, NCERT text-books and various other learning resources.

It will also **reduce the cost of books** as there will be cost of only internet to download the book.

Figure 1: e- pathshala in Rural Areas

5.2 Regional languages are the lynchpin to India's Internet boom

- The users will reside in **smaller towns and villages** and will access the Internet through local languages.
- The Indian languages account for less than **0.1% content** on the worldwide Web.
- This could **change rapidly** as companies are investing heavily in building up the Indian language Internet.
- Last year, Google India initiated an **Indian Language Internet Alliance**, a group of companies who will help push regional language content online.

Figure 2: Regional languages in online

5.3 Govt. to introduce portal to support innovation

A separate portal would be established under Department of Electronics and IT, aiming to **push innovation** in the country. It will enable innovators to **seek govt. support** for their ideas and products. Anyone who innovates can put up his innovation on the portal and the department will follow it. The **grassroots level innovation** built in such a manner will lead the way towards achieving a truly Digital India

Figure 3: Govt.Portal uses in Rural Areas

2 The Rural Health Connect initiative of New Digm Healthcare Technologies.

They have taken the initiative to utilize the large pool of Village Health Workers (VHW) that provides a wide variety of health care support to the last mile areas of rural India. Creating a mobile platform to collect, streamline, analyze,

offer medical advice and the next course of possible action to the VHW. The results are well documented. In a field trial conducted with the National Rural Health Mission, is going to significantly increase with its impact on both healthcare and rural incomes. launched an initiative to introduce women to the internet especially those in the rural areas.

Figure 4: Health Care Technology in Rural Areas

3 Another initiative from Human Welfare Association called Mahila Shakti.

HWA works with underserved, disadvantaged and minority communities in the Varanasi area through education, literacy and livelihood by using personal contact programs, group meetings, SMS, education hubs etc. Their other well recognized projects are PES Project, Global Fund for Children, e-NGO National Program and Rajiv Gandhi Foundation amongst others. They have launched a website 'Helping Women Get Online'**.** The site also offers information on a variety of topics such as cooking recipes, childcare, financial, healthcare, maternity, relationship and style & beauty. They also offer a Toll-free helpline.

Figure 5: Helping women get online in Rural Areas

4. Rural BPO Scheme

To facilitate ICT enabled employment generation throughout the country, BPOs would be set up in the north-eastern states under North East BPO Promotion Scheme (around 5000 seats) and in Tier II and Tier III cities of the country under the India BPO Promotion Scheme (over 48,000 seats). The India BPO Promotion Scheme will create an employment opportunity for about 1,45,000 persons. In the Expression of Interest issued, 78 companies have shown interest for 1,25,000 seats in 190 locations of the rural areas.

Figure 6: **Rural BPO Scheme**

6. Rural India is the future of Digital India

The Digital India agenda has created opportunities for many ministries and departments of the government to come together and develop integrated solutions. But many technology providers, and indeed even some policy planners, have begun to consider Digital India opportunity as synonymous to the development of smart cities and the "Internet of Everything". In reality, the benefits of a truly Digital India for rural areas are even more significant than the more trendy applications that urban planners can envisage. During a discussion on the National Digital Literacy Mission (NDLM) and the excitement at making over two hundred million citizens and families access and disseminate information for building better livelihoods, it emerged that the vehicles that could drive the digital literacy agenda could be used to provide various other services to the rural population.

- The e-Panchayat software installed in the village that helps keep track of all critical parameters of village health may not be core to the success of this remarkable village, but certainly is a catalyst for its ongoing progress. The possibilities to deploy the next level of technology in Hiwre Bazar, the six hundred thousand villages with two hundred and fifty thousand panchayats that dot the country's rural landscape are mind-boggling.
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- The very well run primary school that has been the fountainhead of change in the Hiwre Bazar community could become the hub for digital literacy and digitally enabled skills – for agriculture, basic healthcare and repair and maintenance training. It could also train the elected members of the panchayat in the excellent software applications already developed and deployed by the ministry and enable self-help groups to flourish with access to information and sharing of knowledge enabled at their fingertips. Hosted at the state's data centre.

- The project aims at creating a state manufacturing applications cloud. Software-as-a-service deployment and the engagement of all eco-system players through the cloud platform will make transactions between companies, as well as government transparent and friction free. This will substantially improve productivity and help reduce cost. This is an example of Digital India creating an inclusive culture rather than just catering to the urban.

7. Achievements of Digital India in Rural Areas are

7.1 MyGov Platform

This unique platform for citizen engagement in governance has been implemented as a medium for citizens to exchange ideas/ suggestions with the Government. Through this platform, the Government of India gets feedback, inputs, advice and ideas from citizens for policy decisions, new initiatives like Digital India, Swachch Bharat, Clean Ganga, Make in India, Skill Development, etc

7.2 Jeevan Pramaan

Pensioners can now conveniently submit their life certificates online through this portal. The certificates are stored in the Life Certificate Repository for making it available anytime & anywhere for pensioners and the Pension Disbursing Agencies.

7.3 e-Greetings Portal

Is being used to send e-Greetings by Government departments on various occasions like Gandhi Jayanti, Diwali, Teacher day, Independence day, etc. It also serves as an ecofriendly method of sharing joy and good wishes with friends and family.

7.4 eBooks Platform (eBasta)

Is an electronic platform of e-Books for schools. Currently, 501 e-Contents and 15 eBasta (collection of books) are available on this platform.

7.5 Digital Locker System

Ensures that citizens are not asked to provide documents/certificates, which are already available with some department/institution of the government.

7.6 e-Sign

Would facilitate digitally signing a document through online authentication mechanism. e-Mudhra and CDAC are empanelled to offer e-Sign services.

7.7 e-Hospital

Aims to reduce the anxiety of patients and their attendees by making available various online services such as appointment, accessing diagnostic reports, payment of fees and enquiring blood availability, etc.

7.8 National Scholarships Portal

Provides a centralized platform for application, approval and disbursement of scholarships to students under any scholarship scheme. The goal is to bring all scholarship schemes under this portal.

7.9 Approval of new Mission Mode Projects

Thirteen new Mission Mode Projects (MMPs) have been approved to offer citizens a wider range of electronic services. These MMPs include Financial Inclusion, Rural Development, Social Benefits, e-Sansad, e-Vidhaan, Agriculture 2.0, Roads & Highways Information System (RAHI), Central Armed Para Military Forces (CAPF), Women & Child Development, National Mission on Education through ICT (NMEICT), National GIS (NGIS), e-Bhasha and Urban Governance.

7.10 Policies/Schemes announced

Several policies related to Software development, Electronic services and promotion of Electronic Manufacturing have been announced that include –

1. Policy & Framework on adoption of Open Source Software for GoI
2. Policy on Open APIs for GoI
3. Policy on collaborative application development by opening source code of Govt. applications
4. Application development and re-engineering guidelines for cloud-ready applications.

8. Digital Governance Vision for Rural Areas

8.1 Rural population and development quotient

Any country whose rural population is still mired in poverty and unemployment, and faces high rural-urban economic equality cannot be termed as a developed country. In fact, the economic status of the rural population of any country provides a more realistic picture of the development quotient. Thus, development of rural economies is the real challenge for developing countries where large sections of people reside in villages and smaller towns.

8.2 Analysing the reality

The foremost reason is the ineffective public investment being made in rural areas which is not allowing rural areas to develop as rapidly as their urban counterparts. The disparity in rural-urban infrastructure, in terms of roads, power, transport and telecommunications is a severe bottleneck. It hinders private investment in rural areas and fails to provide rural population with key ingredients required to modernise agriculture, and more importantly establish other economic enterprises (including non-farm based enterprises). Consequently rural areas continue to be characterised by agrarian economies, and large section of rural population continue to be employed in agriculture, with high levels of disguised employment. In most developing countries, far greater percentage of population is employed in agriculture than what is required to provide with the current levels of agricultural productivity. And this is because of factors including, lack of alternate job opportunities in rural areas.

8.3 Thinking from a different angle

It is not an area for the faint-hearted and one needs to think innovatively. It starts from thinking from a new angle: Rural areas need not be and should not be characterised solely as agricultural belts and agrarian population. Instead, they should be considered as a human resource: a resource of

young people, of skilled artisans, of innovators, and of entrepreneurs, that is waiting to be tapped to accelerate local and national development. A rural youth may be a son or daughter of a farmer but need not be a farmer herself/himself. Instead s(he) can be a software developer, a call-centre employee, an e-entrepreneur, a lawyer preparing cases for foreign firms, or a potential employee for new forms of employment which have not yet emerge.

8.4 Breaking the traditional perception

There is a need to break the traditional perception and the picture we conceive in our mind when anyone talks about rural areas. We should start envisioning rural areas as potential IT farms where with the right infrastructure and policy support we can raise a new generation of IT-trained youths which will ensure that rural areas provide us with many new products and services, besides agricultural produce.

9. Conclusion

The outcome of Digital India is to produce Wi-Fi locations for people, creating job, universal phone connection, High speed internet , Digital Inclusion, e-Services, e-Governance, Digitally motivated people, National Scholarships Portal ,Digital Lockers System, e-education and e-health making India to be pioneer in IT use solution .Some of the aforementioned projects are under various stages of implementation which may require some transformational process reengineering, refinements and adjustment of scoping and implementation strategy to achieve the desired service level objectives by the concerned line Ministries/Departments at the Central, State and Local Government levels.

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