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RURAL DEVELOPMENT AND DIGITALIZATION CHALLENGES IN INDIA

Dr. GANESH T. PATIL
Principal
Smt.Vatsala Naik Mahila Mahavidhalay, Pusad.

SANDIP B. RATHOD
Ph.D Research Student
Dept. of Commerce & Mgt.

ABSTRACT

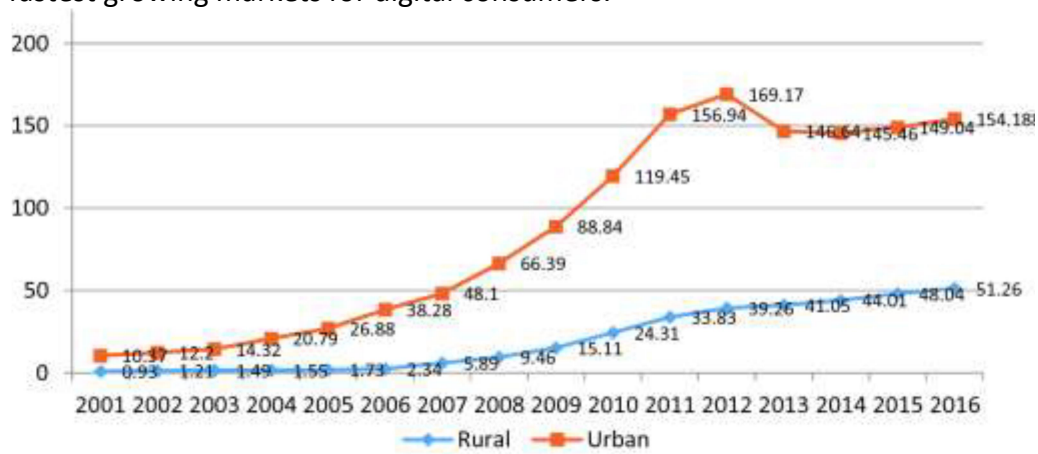
The scope of the mission "Digital India" for rural India is immense. From the thrust in agriculture, to the support in the health care services to the transparency in the monetary transactions-all these initiatives are bound to improve the living conditions of the majority of the population. The planning stage has laid down the objectives to be accomplished and it clearly reflects the intention of the policy makers when they envisage an inclusive and sustainable growth model for the country.With the vast applications of the digital media to boost agriculture, it provides avenues to bridge the rural urban gap in terms of availability of basic facilities. It provides immense opportunities for enhancing the rural productivity and thereby augmenting the household incomes. With opportunities and facilities provided in the rural setup, a sense of security may blossom so as to prevent migration to the towns and cities. In India, agriculture contributes about 14% to the GDP; and the aspiration to become $5-trillion economy by 2024 needs roughly 20% contribution of agriculture. To achieve this, we must recalibrate our agriculture policy or in simple words prepare for another green revolution. The implementation of the different schemes requires a synergistic approach of all the stake holders ranging from the Central government, the State government to the Gram Panchayat levels, notwithstanding the role of different NGOs and the local population. All these bodies need to play their roles as effective change agents in fostering sustainable and inclusive development of the nation.

KEYWORDS:

digitalization, rural, India, schemes, government, development, mission, challenges.

INTRODUCTION:

With more than 600 millioninternet users in 2019, India is one of the largest and the fastest growing markets for digital consumers.



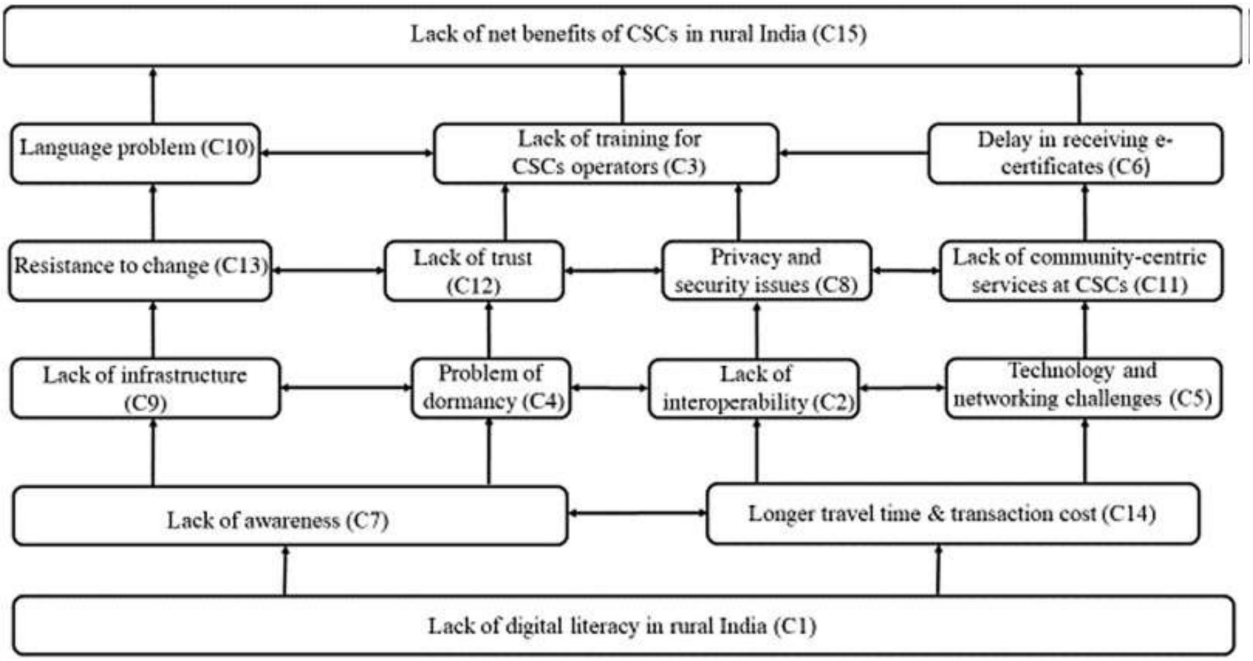
Digitalization rural vs urban markets:

This substantial growth of digital economy was largely led by consumers in the urban region. However, with the government‟s push towards financial inclusion, rural India have also started embracing the digital economy. As per the TRAI report, rural internetsubscribers account for more than 38% of the total internet subscribers in the country as of March 2020, increasing from about 32% in March 2017.Rural India is an important part of the country‟s economy and contributes about 46% of the national income. It is estimated that about 66% of India‟s population is rural and despite the rapid rise of urbanization, rural India will continue to account for a significant portion of India‟s population in the next decade.Despite the growing number of internet users in rural India, there exists a significant digital divide between urban and rural India.

As per the latest TRAI report, internet penetration in rural India was only about 33% compared to 99% in Urban India. This gap mainly stems from two factors – lack of infrastructure and awareness.To bridge the gap, the Indian government has launched the “Digital India” programme One of the major objectives of the programme is to improve digital infrastructure in the country and particularly in Rural India. Digitalization is changing dynamics not only in many industries but also in terms of how society functions. The digital transformation or perhaps we should call it the “digital revolution,” in accordance with the Industrial Revolution that probably influenced our society as much as this new transformation is already happening. Big data, collaboration tools, new (required) competencies – all of these are both opportunities as well as challenges for everyone, including people, governments, companies, organizations, living environments, and the like. Before Rural communities differ from urban communities in ways that are relevant to intelligent infrastructure considerations. Most obviously, rural communities have sparse population density in comparison to cities. Sparse population densities drive many of the challenges facing rural areas; these are problems that differ from high density urban areas. They often lack the range of services that a city can provide to residents, such as robust public transit, and diversity of options, such as choices for healthcare.

Further, for many years most rural communities have seen a decline in employment opportunities, and while that trend has slowed recently, the employment options are not the same as found in cities. That said some rural communities are seeing improving employment opportunities as the recreation industry grows, and it would be a mistake to take a deficit-only view of rural communities. Historically, agriculture has undergone a series of revolutions that have driven efficiency, yield and profitability to previously unattainable levels.Market forecasts for the next decade suggest a digital agricultural revolution‟ will be the newest shift which could help ensure agriculture meets the needs of the global population into the future. Digitalization will change every part of the agrifood chain.

Management of resources throughout the system can become highly optimized, individualized, intelligent and anticipatory.It will function in real time in a hyper-connected way,driven by data. Value chains will become traceable and coordinated at the most detailed level whilst different fields, crops and animals can be accurately managed to their own optimal prescriptions. Digital agriculture will create systems that are highly productive, anticipatory and adaptable to changes such as those caused by climate change. This, in turn, could lead to greater food security, profitability and sustainability.In the context of the Sustainable Development Goals, digital



In the context of the Sustainable Development Goals, digital agriculture has the potential to deliver economic benefits through increased agricultural productivity, cost efficiency and market opportunities, social and cultural benefits through increased communication and inclusivity and environmental benefits through optimized resource use as well as adaptation to climate change. The potential benefits of digitalizing the agrifood sector are convincing but it will require major transformations of farming systems, rural economies, communities and natural resource management. This will be a challenge and requires a systematic and holistic approach to achieve the full potential benefits.

METHODOLOGY :-

The methodology is incredibly needed to construct the analysis work equally qualitative and quantitative ways in which were used within the study. This text has required secondary data, secondary data has been collected from written offer, like varies periodicals, articles, reports, books, journals, and literatures, on the subject. For the aim of gathering the most recent updated information's on the topic e-sources to boot sharp-eyed.

OBJECTIVES OF THE STUDY:-

1. To study the digitalization concept in Rural India.
2. To discuss the various schemes launched by the Government regarding Digital India.
3. To know the extent to which rural people has been uplifted from this programme.
4. To enumerate the major obstacles being faced by the rural people while implementing Digital India.

DISCUSSION:

Prime Minister, Narendra Modi has prioritized radical digitalisation to induce economic inclusiveness through a host of initiatives." Digital India ","Make in India‟ and" Skill India" provide for impetus and opportunity to rural citizens, to ensure they are equal participants in India growth story. The work undertaken include the digitalisation of land records; the single-window handling of grievances and maintenance of essential services;

easing tax payments and government dues; along with internet-based citizen delivery of services. A lot of these directly impact a vast rural consumer base.

Digitalisation is slowly reshaping every aspect of life Digitalisation is slowly reshaping every aspect of life in villages by introducing accessible e- Governance, banking and financial services,educational and healthcare services, mobile/DTH recharge, e-Ticketing services and yes, even online shopping. „Brick and click" centres are today evolving basis the new, emerging needs of rural citizens. With an intent to stabilize agricultural production, the Geographic Information Systems (GIS) has helpedb improve productivity, and empowered farmers by using sustainable, economical and ecofriendly technology. GIS applications are being used to understand and manage crop yield estimates. As farming relies heavily on natural inputs, which cannot be controlled, GIS applications can be used to understand and manage crop yield estimates.

In May 2017, Amnex Infotechnologies Pvt Ltd was awarded the project of Crop area estimation and loss assessment using remotebsensing & geospatial technology for the country. The Government of India has adopted the idea of Digital India. Under this campaign, digitalization of the entire banking system is a key task of the whole campaign.The government is looking to digitalize the entire banking infrastructure where digital transactions will be promoted over other forms of conventional transactions such as cheque, withdrawal, and so on. However, this campaign faces several issues, and among them the two biggest issues are: First, the rural infrastructure of India is severely back dated, and even the basic forms of internet are absent in most part of rural India, which is the basic necessity of digital banking. Second, almost 65 per cent of mobile users" population in India is smartphone users, and most of the users from rural areas even lack the basic knowledge of operating smartphones and even ATMs, and still to this day they rely only on basic banking instruments such as cheques, withdrawal, and so on.

RESULTS:

In order to motivate illiterate and poor people in the rural area of India, the government is striving hard to promote Aadhaar Pay, which would assist users to make financial transactions with fingerprints. In addition, it would become an alternative mode of the card and online transactions where customers would use PIN and password for transactions. The Government of India has initiated state banks to enroll 30–40 merchants per branch to formulate cashless payments for the customers. This has assisted to promote the concept of Aadhaar Pay among merchants in rural India extensively focusing toward growth and innovation. Syndicate Bank, Andhra Bank, State Bank of India, IDFC Bank as well as Indusind bank are the first five banks to initiate the live services offered by Aadhaar Pay with the effective promotion. Altogether,these changes and shift toward digital world have offered essential benefits to the customers, government,regulators, as well as bankers extensively as it assists to enhance transparency as well as expand the formal economy significantly. However, with such integration of "Aadhaar Pay" system in rural India, it has certain limitations as well. As the system highly requires internet coverage for facilitating person-to-person transfer via a fingerprint scan, the internet connectivity in rural areas is still a critical challenge. In addition, unreliable connectivity of internet can degrade the entire system leading to failure of such an agenda .

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.

1. 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.
2. 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.
3. Broad based availability of broadband services, through handheld devices, is a pre-requisite for the achievement of the goals of "Digital India". The socioeconomic potential and impact of rolling out electronic governance software and mobile applications in rural India is much more than urban 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".

Benefits of Digital India Programme:

1.It makes possible the implementation of digital locker system which in turn reduces paper work by minimizing the usage of physical documents as well as enabling e-sharing through registered repositories.
2.It ensures the achievement of various online goals set by the government.
3.It makes possible for people to submit their documents and certificates online anywhere which reduces physical work.
4.Citizens may digitally sign their documents online through e-Sign framework.
5.It will ease the important health care services through e-Hospital system such as online registration, taking doctor appointments, fee payment, online diagnostic tests, blood check-up, etc.
6. It provides benefits to the beneficiaries through National Scholarship Portal by allowing submission of application, verification process, sanction and then disbursal.
7. It is a huge platform which facilitates an efficient delivery of government or private services all over the country to its citizens.

8.Bharat Net programe (a high-speed digital highway) will connect almost 250,000 gram panchayats of country.
9.There is a plan of outsourcing policy also to help in the digital India initiative.

Implications:

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).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. Those who want to start such service points but do not have funds can start their micro-ventures by taking loans under MUDRA Yojana. Another scheme for promoting rural entrepreneurship under Digitial India Programme is through Internet Kiosks. 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. Following are some of the steps taken by Indian Government under Digital India programme for empowering rural women:

ArogyaSakhi helps rural women developing their own personality in order to providing health care to the rural area. It‟s a mobile application that helps rural women entrepreneurs deliver preventive 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 thepatients remotely.

Challenges & Changes Needed:

1. Program on this scale never conceived.
2. Each Pillar/program has own challenges.
3. Human Resource Issues.
4. NIC - not equipped for a fraction of this task (obsolesce) - needs revamping & restructuring.
5. DeitY – needs program managers – at least 4 more officers at senior levels.
6. Ministries – Need a Chief Information Officer / Chief Technology Officer (CIO/CTO).
7. Could begin with CIOs 10 major Ministries
8. Can be anyone – from within or outside Government
9.To be patterned as AS & FAs – dual reporting.
10.Financial Resource Issues .
11.Mostly structured around ongoing programs : Better focus, need some restructuring.
12.Some others are process improvements or better utilisation of resources.
13.A few new programs may be needed – particularly in Electronics manufacturing and Skill Development.
14.Coordination Issues.
15.Program covers many other departments.
16.Need commitment and effort.
17.Leadership and support critical for success.

CONCLUSION:

With the adoption of Digital India Project, India will have a powerful digital infrastructure. All educational institutions and government services will soon be able to provide digital services round the clock. More employment prospects will open for the youth that will boost the nation‟s economy. Tech giants from all over the world are willing to actively participate in this campaign.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.

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