

ROLE OF CELLULAR PHONE IN RURAL DEVELOPMENT IN INDIA**Dr. Sanjeev Gupta:** Sr. Asst. Professor, MCRPV, Bhopal, India**Mr. Arvind Kumar Pal:** Research Scholar, MCRPV, Bhopal India**Introduction**

According to Census report 2011 nearly 70 per cent of the India's population lives in rural areas. Out of 121 crore population, 83.3 crore live in rural areas while 37.7 crore stay in urban areas. Development of rural people will only lead to the real development of India. Nowadays cellular phone is playing a vital role in solving people problems like monitoring of crops, reaching out to potential markets, from last mile delivery of government and private services to addressing domestic violence issues ingeniously, mobile phones are being used in a host of ways to uplift and empower rural India. Think for a need you will have an app for that need. The smartphones are loaded with the apps. The apps play very important role in helping rural and urban people.

World is looking India as a centre of big mobile phone market. Technologies in mobile phone are upgrading every instance all across the globe. Everyday new research and development taking place around the world in the field of mobile phone. Mobile phone is a very essential technology not only in Urban but also in rural areas.

More than 850 million active mobile subscribers in India, the next growth segment is rural areas, believed by mobile app developers, and the key to success is innovation. Translating human needs into effective tools paves the way for a host of apps that are expected to debut on your handsets soon: Helping farmers remotely control motors, teach new languages and even narrate bedtime stories to children in local languages are some of the targets of mobile app developers.

The rapid technological growth makes ease of use and the falling call rate, cost of mobile phones and user friendly tool makes the mobile in reach of common men. Cellular device ownership is increasing very rapidly in India.

This paper explores the role of smart phone in rural development in the country.

History of Telecom Sector

World's 2nd largest Internet users are residing in India and Telecommunication network of India is the largest in the world by number of telephone users with 1.053 billion subscribers.

Indian telecom industry underwent a high pace after new economic reform (Liberalisation, Privatisation and Globalisation) reform in the year 1991. The Indian telecom industry grown over 20 times in just one decade, from under 37 million subscribers in 2001 to 846 million in the year 2011.

Source: (TRAI Jan-March 2016)

RURAL wireless 42.01%

URBAN wireless	55.61%
RURAL wireline	0.41%
URBAN wireline	1.97%

Out of the total subscription, the share of the Rural subscription increased from 42.04% at the end of Dec-15 to 42.42% at the end of Mar-16.

Mobile Apps transforming Rural India

Dimagi APP

Dimagi app is launched for ASHAs works to reduce maternal and new born deaths in Uttar Pradesh. The main aim of this app is to increase and improve the quality of visits of ASHAs to the pregnant women and newborn children in the villages.

Dimagi app monitors the performance of ASHA workers effectively. So far 1.39 million pregnant women and children have taken advantage from this app.

Kisan Suvidha App

Information like weather updates, crop prices and expert advice were the biggest problems of Indian farmers. Prime Minister Narendra Modi launched 'Kisan Suvidha' app to facilitate farmers.

India is the second largest mobile phone market in the world with 87 million mobile internet users in Rural India. Kisan Suvidha app provides information on five critical parameters—weather, input dealers, market price, plant protection and expert advisories.

Before purchasing the Agriculture produce from dealers who's contact details are also available on Kisan Suvidha app they can compare the prices and availability before heading to purchase these inputs. This app is developed by Agriculture Ministry.

Arogya Sakhi

Villagers across the nation cover long distances to access the medical facility. Many casualties reported because the lack of first aid and in time medicine. This mobile app helps rural women entrepreneurs deliver preventive health care at rural doorsteps.

ArogyaSakhi activists visits rural homes with latest medicine and equipments like glucometers, blood pressure checking machine and collect data from the village women. Doctors can also access the same data at any location who could provide relevant advice to the patients remotely.

Mobile app to monitor rural employment

A mobile application developed by the Karnataka Rural Development and Panchayat Raj Department has drawn the attention of the Union government.

'MGNREGA M-platform,' app allows the continuous progress at all stages. This will increase the transparency in the system, decrease fund diversion and middlemen interference. It will also ensure electronic payment of wages to workers of MANREGA by transferring data to the central server.

'Himmat'

Delhi Police launch 'Himmat' app for the safety for women on Jan 1, 2015. It is freely available on Delhi Police official website (www.delhipolice.nic.in) for Android mobile phones. This app will be also available on other platforms in future.

In the same direction largest populated state Uttar Pradesh police has also launch the similar kind of mobile app with the 'Nirbhaya' name for the women safety. This app is presently launch only in Noida by Noida Police.

E-pathshala

e-Pathshala provides lots of educational resource online. This is an online digital platform on which all subject books and materials are available. It is mainly useful for school children and teachers. It is very useful for student who stays at distant rural area where no good teacher or books is in access. E-Pathshala is a well researched innovative and comprehensive pedagogy of learning through technology.

E-CHOUPAL

E-Choupal initiative links directly with rural farmers for the procurement of agricultural and aquaculture products. Village Internet kiosks managed by farmers (called sanchalaks) enable the agricultural community access to information in local languages on the weather and market prices, disseminate knowledge on scientific farm practices and land risk management, and facilitate the sale of farm inputs.

DigiLocker

Indian Government launch "digital locker" service to to provide a secure dedicated personal electronic space for storing the documents of Indian resident.

The storage space is extended to 1GB is linked to the Unique Identification Authority of India (Aadhaar number) of the user. The space can be utilized for storing personal documents like University certificates, Permanent account number (PAN) cards, voter id cards, etc., and the URIs of the e-documents issued by various issuer departments. This is launched to facilitate for e-signing, minimize the use of physical documents, to provide authenticity of the documents, reduce expenses of govt.

This locker helps the rural and urban youth to keep their documents on the digital platform. As these documents are required some time in a very short span of time so can be access from anywhere on just a click.

eduVARTA: Notifying rural youth about various jobs

In Rural areas, students not get the right job oppurtunities due to lack of information. India is growing with a large base of mobile internet users mostly the youth. Indian youth have access to mobile phones this app has decided to start an app who notify the unemployed youth about various job, educational, career oriented information through sms alert with the help of eduVarta. This service has presently One lakh 20 thousand beneficiaries.

Hello Sakhi: Supporting victims of domestic violence

A report says, nearly 70 percent Indian women are victims of domestic violence, The “Hello Sakhi” initiative by Kutch Mahila Vikas Sangathan (KMVS) and the Gujarat police is helping the victims of domestic violence through mobile phones.

This mobile app support women in distress and helping them with legal assistance, counseling and rehabilitation support.

Hello Sakhi service is in reached till date to over 11,000 women across 940 villages so far in Gujarat.

A familiar voice at the other side of the phone assure to help is all the women in need ask for.

Public–Private Initiatives

The Ministry of Agriculture is working with IFFCO to serve the farming community through the IKSL initiative. IFFCO Kisan Sanchar Limited, which is a mobile telephone information service to empower people in rural India delivered by the Indian Farmers Fertiliser Cooperative Limited, Bharti Airtel, a mobile network operator and Star Global Resources Ltd, a non-banking finance company.

Market Information (Commodity Prices And Stocks)

To stabilize the rising prices in the country the Ministry of Agriculture has linked wholesale agricultural produce markets through its Agricultural Marketing Information Network (AGMARKNET)¹⁴ initiative.

Nearly 3000 markets around the country connected to AGMARKET database. It is used to input real time information from the markets, which then makes market price information through a call centre and through a Web site.

Advisory Services

Real-time advisory for agriculture is one of the most challenging information services. The creation of a comprehensive knowledge bank and the availability of qualified agricultural officers to address farmers’ queries constitute a heavy investment at the onset but in the long run they reduce costs and increase efficiency. The knowledge bank can also be accessed by farmers and extension workers in the field to support their diagnosing of problems or decision-making. The following were cited during the workshop discussion as examples of such systems.

Early Warning Systems (Natural Disasters, Pest Outbreaks Etc.)

Information is the key to preparedness; for agriculture, this could mean the difference between a successful or a failed harvest. Many effective models of early warning and disaster information systems to mitigate risks are found around the world, especially for natural disasters, such as tsunami, flood and earthquake warnings. In many instances, combined information advisories culled from very localized information received from people in close vicinity to an event is used to generate information/warning services. One of the most effective ways to disseminate such information is through the use of SMS. However, the

challenge of using various language character sets in certain mobile handsets remains a problem.

Chinh India

This mobile app engages and educates children in a unique way. It is an tool which gives platform for the young one to show case their hidden talent in shooting small films. The films educate students which are made by other students. The main aim of this app is to enable child to think critically, and communicate effectively.

Kissan Call Centre

Kissan Call Centre provides advisory service to farmers. It is an national initiative taken by the central government. It is operated by an outsourced company called IKSL. Several private sectors have created their own knowledge banks to support agriculture extension services, such as Reuters Market Light, Nokia Life, ITC (e-Choupal), IIT Bombay, (aAQUA), Krishi Vigyan Kendra Baramati and Vigyan Ashram, AGROPEDIA.

Sehat Saathi

IIT Kanpur has develop telemedicine system at its Media Lab Asia research hub. This technology can be used to extend medical care to the patients in the rural areas of the country. This model provides for front-end contact through a suitably trained non-medical professional; back end support from doctors, pathologists and other health professionals for diagnosis and treatment.

Conclusion

The paper highlights significant potential for mobile technologies role in facilitating rural people. Mobile-services focus on farming and market information, services are becoming more comprehensive, offering more diverse and multiple functions that support farmers at different stages of agricultural production – a trend that will need to continue to increase the effectiveness of m-services in agriculture.

According to Center for Knowledge Societies (CKS), Mobile Technology boosts economic and social life in rural India. Mobile sector develops local entrepreneurs and creating greater access to social services.

Music, videos and Entertainment content on mobile is significantly high in rural India. Smart phone has huge potential to transform rural people lives by providing timely weather updates.

Mobile phone has potential to change rural lives in many ways. However rural communities mostly favour online entertainment, the future for rural market digitization looks bright as weather, farming and news sites are gaining eminence in the rural market. No one can deny that Rural internet market have huge demand and potential for growth. Mobile phone has helped to increase the transparency of governance with the introduction of e-governance in India.

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