

## RURAL E-GOVERNANCE: PROBLEMS AND PROSPECTS

Dr. Rakesh Singhal and Dr. Madhu Rathore

Rural India has exclusive problems that are peculiar and not present in the developed world. Lack of connectivity, inadequate power supply and low literacy are some of the major problems which require deep introspect and proactive action on the part of the government. Lack of infrastructure and innovative software solutions designed especially for rural needs is another aspect which needs to be focused upon. Disjointed efforts have been made to develop software solutions which cater to specific problems which have resulted in avoidable duplication of efforts leading to wastage of precious resources in terms of time and money. Although many models are applied to showcase ICT interventions for rural development and many NGO's and governmental agencies are collectively working in this regard, most pilot projects are facing adequate infrastructural challenges like lack of electricity, sufficient trained technical manpower and financial resources to implement them effectively. Inaccessible terrain and geographically dispersed villages as well as inadequate communication infrastructure are added obstacles to the rural

population for generating sustainable income generating opportunities at the local level.

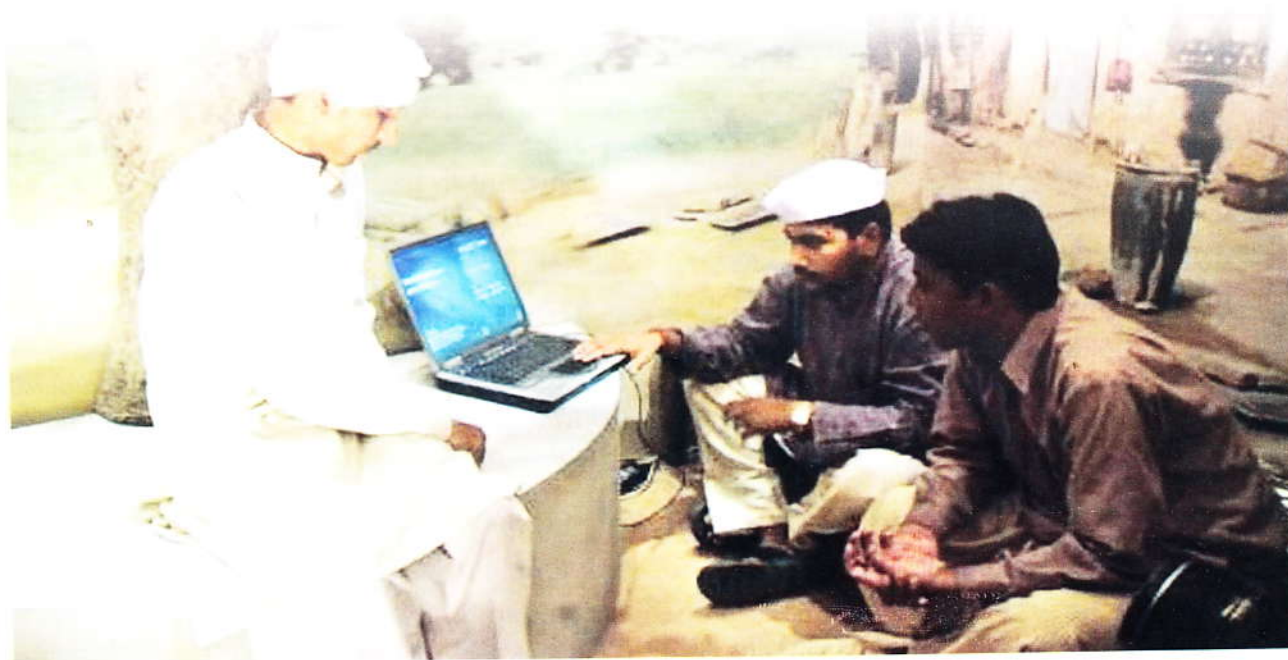
To achieve Millennium development Goals (MDGs), effective new strategies will have to be developed. An alignment of e-government with the needs of the poor will make e. government politically more attractive in most developing countries.

The objectives focused on rural information and communication technology include:-

- a. Challenges of governance such as participation, decentralisation and accountability,
- b. Role of market, state and civil society organisation in realising good governance.
- c. Strategies for effective governance which enhance human capabilities.

A national e-government plan (NeGP) has been formulated to address the above issues. It aims to:

- a) implement mission mode projects in key departments that focus on development or serve rural population.





- b) ensure that even the remote areas can benefit from ICT.
- c) provide generic programme components including capacity building.

Four projects under NeGP have a direct focus on serving the rural populations. First is the creation of 1, 00,000 Citizen Service Centres (CSCs) with private entrepreneurship which aim to create access points for one out of six villages for delivery of services as mentioned by CSCs. Each state has been divided into several regions and bids have been invited from private sector and NGOs to formulate the creation of CSCs within the specified regions. The progress of this programme is slow. The two projects on e-district and e-panchayat will support computerisation of the backend in local governments at the district and panchayat level to offer services to rural population. The fourth project is on creating a unique identity for every citizen (UID). This would serve as the basis for efficient and effective delivery of social and welfare services to persons below poverty line (BPL). Institutionalising national e-government plans and designing implementation mechanisms will ensure the development of applications and make them sustainable.

### **Suggestions for Improving e-Governance:**

Various services being offered through e-Governance projects have been successful in delivering benefits to the citizens. All the stakeholders have also gained i.e., direct benefits to consumers in terms of cost and convenience, increased credibility of government, increased employability, providing better services to the citizens by various participating departments. However, there are still some areas of concern which need to be looked into for improving the services offered through these projects. A few suggestions made in this regard include:

### **Re-engineering of Government Processes**

The socially and economically backward communities in the rural areas must also find the scenario relevant and beneficial to them. They must aim at minimising the need for citizen's trips to the district headquarters. The application must record the progress of user transactions and retrieve them on the user's query. They must offer privacy and security to the user data. These call

for significant re-engineering and mechanization of backend processes.

There are numerous instances where with little re-engineering of processes, the system can be made more effective and efficient such as :

- a. Time required to process transactions at service centre can be further reduced by minimising the data entry by taking data directly from the server of the participating agency.
- b. A unique transaction/customer identification number on each bill can be bar coded, so that time taken for manual entry and errors is eliminated.
- c. The e-Governance services may also be made available at places like ATMs, petrol pumps etc; these would help in increasing the number of access points for the services and would enhance the reach.
- d. Services which do not involve financial transactions may also be offered through IVRS or SMS such as intimation about bill or payment or grievances.

### **Change in Mindset of Service Providers**

Objectivity and transparency are not considered important virtues of e-Governance. Service delivery operators and officials must be adequately trained on the application context and all possible services through the service window. There must be a system of record keeping which should measure the service utilization and quality. Periodical reviews to monitor and improve the quality of service will also be helpful.

### **Developing Human Competency / Capacity Building**

An important stakeholder in the rural development domain is the rural citizen who carries a special profile characterised by their remoteness, poor literacy and lack of knowledge of English. If the benefits of ICT diffusion in the rural development sector have to reach the rural people, then special efforts will have to be made to build awareness and capacity among the rural populace.



## Creation of ICT Infrastructure

Usually at the time of identifying software, hardware and networking devices; future upgradability and costs, need for open system environment are not considered adequately. The cost of these projects is turning out to be quite high as proprietary network; proprietary software and infrastructure are being set up, installed and used. Therefore, the use of public domain network, common internet facility and open software (such as Linux) should be used to reduce the cost significantly. The ICT infrastructure available in schools can be used as a pivot for rural ICT services after school hours.

## Supporting Multichannel Service Delivery

Taking advantage of the introduction of devices such as smart phones, tablets, interactive voice response systems, digital television and self-service terminals, the private sector has been making use of multiple channels for a long time. Such initiatives encourage citizens to envision new forms of interaction with the desire that service providers – public and private – be as accessible and responsive as modern technology allows.

## Public Private Participation

All rural e-Government project champions have to involve private agencies for tasks through PPP contractual arrangements like, design and development of application software, tabulation of data, content in the regional language, procurement and installation of computer systems, deployment of software and delivery of services. Such arrangement reduces the burden on the government, brings expertise, enhances the speed of implementation and offers better value proposition to the citizens. However, pure commercial benefit should not determine which services to offer.

Private participation in these applications is likely to put sensitive and valuable data in the hands of the private agencies. Judiciary mechanisms will also have to be worked out and put in place before launching of services to ensure that no injustice is done to the citizens by misuse of such data.

Training needs to be given to all government functionaries on behavioral issues dealing with themselves, citizens and private agencies so that

they can accept the changed transparent environment facilitated through ICT based processing which reduces paper transactions.

## Local Language Support

It has been observed that most of the applications running for e-Governance projects are in English and there are users who do not find themselves comfortable in English. Therefore, the applications running should also have option of displaying forms in Hindi or other local language and also allow user to do the data entry in Hindi. Thus, following steps may be taken:

- a. All the applications should be multilingual.
- b. Training Programmes may be conducted to train different classes of users for the use of local language technologies.
- c. Existing Speech-to-text and Text-to-speech prototypes/products may be tested for their usability in addressing localisation-issues.
- d. Various features of the Internet like voice, touch screen technology should be used.
- e. Use of graphics for the illiterate should be extended.

## Emerging Technologies for the last minute connectivity

The Wind Energy and Solar energy solutions may be provided for electricity in the rural areas, which is slightly expensive in the initial stages and difficult to maintain.

The light weight applications for providing various citizen centric services may be designed, so that they can be easily used on mobile phones, as the mobile phones may be most reliable media in coming days due to increased availability.

## Enhancing Awareness of e-Governance Services

Publicising and creating awareness about the usefulness of e-Governance is of utmost importance. This can be done through advertisement in newspapers, TV, radio, hoardings, live demonstrations etc. The publicity by way of having information displayed in the offices, bus stands, railway stations etc., can be very helpful. Special awareness campaigns/ sensitisation programs may



be organised in the rural areas. Private sector and NGO participation in the publicity campaign may also be sought.

### Monitoring and Regular Assessment of the Service Centres

Even though e-Governance projects are generally rolled out after testing them at the pilot stage, owing to the scale and complexities of the roll-out, such projects need continuous monitoring. Such monitoring could be based on a variety of parameters – financial viability, ease of use, assessment of in-house capacity, volume of transactions, appropriateness of technological solutions, adequacy of business process re-engineering, ability to handle difficult situations etc. The basic objective would be to identify problems in a timely manner so that corrective measures could be taken.

### Complaint and Grievance Cell with Toll Free Number

If government wants to move towards Smart governance or e-Governance, where citizen also participate in the governance, it is important that grievance handling mechanism should function properly. This could be done by establishing complaint and grievance cell having a toll free number, where consumer can file their grievance. Simultaneously, a web portal can be developed

where the complaints related to such projects can also be filed. The government has already taken initiatives by introducing *e-Sugam*, where users can file their complaints for various departments, but the experience is not very encouraging. The complaints received from consumers are forwarded to the concerned department, which takes long time to resolve the issue and there is no system of feedback to the consumer. Due to delay in response or no feedback, users lose their interest or are no more concerned with it. It is therefore, recommended that:

- a. Service providers may be oriented towards customer care by providing them training. This provision should be part of MoU.

- b. There should a public grievance cell set up, so that consumers can register their grievances and suggestions, which should be looked and resolved by the authorities in a time bound manner to earn goodwill of the public.

### On-line Service Integration

At present various government departments create their own infrastructure, database and applications for providing services to citizens. While most of the data are common about citizens, most of these applications used by various departments cannot interact with each other due to various issues, such as compatibility with database, platform used for developing applications etc. It is therefore important for government organisations to share and integrate information by using common standards so that the systems deployed throughout government are able to communicate with one another.

### Conclusion:

Panchayat Raj institution ought to be the prime mover for achieving e-Governance in the true sense. Development of local content and appropriateness of technology is a non-negotiable condition for social change and moral progress in rural communities. Computers are still a luxury in rural India where safe drinking water is a scarce resource.

Freezing of computer technology is another matter as obsolescence rates for computer hardware is more than radio. Availability of spares and resources to maintain ICTs are also challenging. Language and culture pertinence is also another non-negotiable condition. Competences of developing local content, provide the fusion to meet with local needs and to develop "citizen networks" are essential success factors. 'e' in "e-Governance/development" should connote 'effective', 'empowered' and 'efficient' rather than 'electronic'.

*[Dr. Rakesh Singhal is Professor (Computers), HCM Rajasthan State Institute of Public Administrations, Jaipur and Dr. Madhu Rathore is a Post Doctorate Fellow at ICSSR, New Delhi. E-mail id: singhal.rakesh@gmail.com]*