UNIT 10 DELIVERY OF CITIZEN SERVICES: ROLE OF ICT

Structure

10.0 LEARNING OUTCOMES

After studying this Unit, you should be able to:

- explain the role of ICTs in rendering citizen services;
- describe the various service delivery points for citizen services; and
- discuss the major essentials to render effective public service delivery.

10.1 INTRODUCTION

ICTs are transforming the way life goes about. They have a huge potential to transform the paradigms of governance. ICTs entail connectivity and networking thereby making the delivery of services offered by governments better. While talking of governments, local self-governments deserve maximum attention as they are at the cutting edge and immensely affect the daily lives of citizens.

Local governments are the principal users and disseminators of information at the local level. However, the general perception is that they are not able to do a good job of it. Just as the survival of any business depend upon the material and mental satisfaction of its customers, survival of local bodies hinges on the contentment of its citizens. The exploration of this interface - the areas where government and citizens meet- is vital to our understanding of where and how technology should intervene to make this interface more transparent and less bothersome for both the partners.

In this Unit, we will be discussing the vital areas of citizen-government interface at the local level and how ICTs can be used in making this interface effective.

10.2 CITIZEN SERVICES: AREAS OF ICT INTERVENTION

There are number of areas in citizen services where ICTs can make a marked difference, especially, in the quality and speed of delivery. These services are encapsulated below:

- **Access to Public Documents**

Various government orders, schemes, programmes, annual budgets, gazette notifications, legislation materials like ordinances and bills, etc. can be accessed through the net. This category would cover all those areas where the citizens need information, quick and accurate from the government, which at present they get it with great difficulty. With ICTs citizens get information in real time without exorbitant communication costs.

- **Authentication Statements**

This would include the areas where the citizens need certificates of authentication from competent authorities in government like the copy of land records, registration certificate of sale and property deeds birth/death certificates, and other permissions required under various acts of government. This requires comprehensive database, which are sorted, consolidated, maintained, calculated and read with the help of computers. Hence, retrieval of certificates becomes easy and less cumbersome.

- **Online Payments**

Payment of taxes, duties, rents and rates including user charges for facilities offered by government departments is possible through internet. Payment of electricity, telephone, and water charges would also come under this.

- **Complaints, Grievances and Suggestions**

Filing, redressal and follow up of complaints pertaining to the facilities offered by government can be done online. ICTs can enable citizens to ventilate their grievances online and also help government to get feedback of their policies, pronouncements and actions.

10.3 DELIVERING CITIZEN SERVICES: ROLE OF ICT

ICTs play a crucial role in delivering citizen services. We will discuss this role in some of the vital areas.

- **Online Filing of Complaints and Grievances**

This will enable online filing, redressal and follow up of complaints pertaining to services offered by government. It will help citizens to ventilate their grievances online and also help government to get feedback on their policies, pronouncements and actions.

Hence, it becomes possible for departments to attend to grievances and complaints with alacrity and promptness. Every grievance gets acknowledged and transferred online for field level action. This can also provide for forwarding and transfer of complaints from one officer to another thereby minimising time which it would take in the normal course. One can also find out the number of grievances pending with various officials at a given instant that would prove to be very useful in monitoring the efficiency of various sections.

As internet connectivity and linking is there, it becomes possible for any officer to monitor the complaints received by him from anywhere and allows him the facility to issue virtual instructions for taking immediate remedial actions. Equally, citizens can also verify and track online the status of grievance disposal.

- **Online Application Registration**

There are hosts of services and programmes for which citizens approach various tiers of government. These services range from getting a loan under self-employment schemes to applying for an old age pension or asking for subsidised agricultural inputs. Instead of moving from offices to offices and getting harsh responses, citizens can use the net for availing information and downloading applications of various programmes. This facility can provide for online forwarding, transmission, handling and disposal of such requests and therefore minimise the disposal time.

- **Issuance of Certificates Online**

There are many kinds of certificates citizens require from governments, the important ones' being of caste, nativity and income. Online facility will permit hospitals to send the births and deaths information online to municipal departments. Information from the registrant would come through the virtual mode instantly without any mediation. Citizens will be able to get their certificates delivered to them in real quick time. By maintaining the database of births and deaths on the computer, the process of sorting, searching and accessing the database becomes very simplified. The citizens will be able to get their records updated as they have the facility of checking whether their name is registered or not through the web site.

The underlying principle behind this is that citizens always loathe approaching a government department for the fear of getting discourteous behaviour and being subjugated to corrupt practices. Such modules can, therefore, improve this interface, making it more accountable, open, transparent and subject to public scrutiny.

- **Online Tracking of Building Plans**

Municipal corporations engage in the task of approving building plans, sub-division of plots and regularisation of structures within city limits. With this facility citizens are able to know the status of their respective cases. With municipal websites, all information pertaining to building plans are made available to public. They are able to know the status of their application at a click of a button.

With this module, entire process of scrutinising, processing and sanctioning of building plan can be computerised. This would allow online tracking and monitoring of movement of any concerned paper within the town planning section. This would also allow the section in meeting statutory deadline set for release of plans and would also allow citizens gain access to status of disposal of their applications. In longer run, it would be important to create the building plan data base so that citizens are able to know the exact nature of approvals given and are not lured into buying unapproved buildings creating future complications for themselves.

- **Issuance of Land Records Online**

Information relating to land plays a very important role. These may include primary information about land presented in terms of its geological information like the shape, size, landforms and soils; economic information related to land use, irrigation and crops; and information pertaining to legal rights, registration and taxation. The manual system of land records maintenance is highly opaque wherein village accountants maintain land records and they enjoy a virtual monopoly over these records. Records are not open to public scrutiny and are updated many a times only on various considerations. Many a times, farmers face harassment and extortion at the hands of village officials for provision of land records and also for processing requests for change in land titles.

The Seventh Five-Year Plan document rightly opined, 'land records form the base for all land reforms and therefore, regular periodic updating of land records is essential in all states.' This module aims to fulfil this statement and supports development of a citizen-centric land records system. It places land records data into the public domain and provides for a transparent and effective land record delivery system fully addressing the insecurities and concerns of farmers.

Now farmers are able to get records in time by applying for it online. Updating has become easy and the process of mutation (change in land title) has also become manageable. It is now even easy to check the pendency of such applications.

- **Online Auction and Bidding**

One fundamental reason for rural-urban divide is lack of well-developed markets in rural areas, hindering efficient sale and purchase of goods by rural people. As a result, most of the decisions made by farmers and rural poor are based on insufficient information and are, therefore, sub-optimal and in majority of cases go against them. The online auction and bidding facility can try to fill in these information gaps and allow the farmers and rural folks the facility to post their products for online auctions. This would also allow online bidding. With the portal being vertically integrated through internet, online queries from other parts can improve the available choices.

The kind of products that can be put for auction may include agricultural commodities, farm implements, land or buildings, etc. that is, literally anything that a rural household would like to buy or sell in rural areas. It also opens possibility for self-help groups to market their products directly, without any middlemen, to people horizontally within the district and vertically outside. This can open windows of opportunities to rural populace to have more informed choices in their trades.

- **Online Mandi (Market) Rates**

Ideally, average households make a decision to buy or sell goods and products on the basis of information they collect locally. Communication facilities like telephone, television, etc. has widened their information base. Nonetheless, it would have been much better if they had an easy access to rates prevailing as on that moment in various other markets within the district and elsewhere. Such modules can help do that. The rates in other markets can be available for citizens to watch the trends and make right decision after weighing all options.

- **Online Payment of Dues**

Financial management of governments hinges on a sound, transparent, efficient and foolproof tax collection system. Equally, citizens require an easy and flexible system to pay their taxes and dues. This module enables a friendlier environment for both government and citizens through online collections. This would provide the benefit of expeditious collections, collection costs saving and collection performance monitoring.

- **Easy Access to Information**

In pursuance of the Right to Information Act, this facility allows access to all kinds of valuable information to citizens with respect to government programmes, databases pertaining to old age pensions, ration cards, multi purpose household survey records, beneficiaries under various self-employment schemes, civil works, etc. This induces transparency in the implementation of these programmes and facilitates weeding out of ineligible cases, so that corresponding benefits can be passed down to the needy. Such mechanisms would reaffirm that real right to information is possible only if the information is put into the public domain and new technologies provide the most cost effective solutions for doing that.

In order to deliver the services mentioned above, multiple service delivery points are needed. We will now discuss these delivery points individually.

10.4 SERVICE DELIVERY POINTS

Websites, internet and civic service centres are delivery points of citizen services. These are discussed as below:

- **Websites**

The world wide web or the internet provides the most cost-effective method of reaching out to people. The web not only helps in speedy dissemination of information but also enables citizens to gain access to various services, which hitherto required their physical presence. In order to realise this objective, a web site for an organisation is must.

Evolution, development and maintenance of web site can be done on a public private partnership platform to infuse more energy, ideas and vibrancy in the effort. While developing web site, it should be made clear that it should not merely be information driven but should be utility driven and should act as a window to the outsiders to gain access to the organisation's intranet and local area network. While the static page information can be hosted on a foreign server, the dynamic pages should be hosted in the organisation and should be accessed through it. By doing this, the necessity of continuous updating and uploading of information, which has become the bane of most web sites, can be avoided. All the dynamic pages would take their inputs regularly as part of the in house computerised network and would get updated sub consciously.

Website at the click of a button should enable the citizens to see, for example, their property dues as on that moment or access birth and death records to check their entries. Citizens can also look at the infrastructure works being taken up in their cities while contractors can access the various tender notices. A builder can check the status of disposal of building application made by him while citizens should be able to track the

status of disposal of complaints or grievances made by them through the site. All relevant government rules and procedures should be notified in the web. In addition, it should provide the entrepreneurs possibilities and business opportunities, which the town entails. Web site can also carry linkages to the office intranet for the management, allowing them to gain access to it from any where by using their specific password.

Besides all these utilities, web site should also give the citizens information relevant to their city like weather, news, places to visit, train and bus timings, etc.

- **Civic Service Centres - A One Stop Civic Shop**

Not everybody in the country like ours has access to internet or much more so the knowledge of computers. To mitigate this, it would be necessary to establish computerised civic centres, which can act as an outlet for citizens to have access to civic services. The civic centres would have string of computers on the network and would allow citizens to avail facilities like getting a death/birth certificate, filing a water tap/ drainage connection request, applying for building plan approval, lodging a complaint/grievance, making miscellaneous payments, etc.

A unique registration number can be allotted to every applicant, which can be later used to track the status of his or her application. The system would also enable system managers and management to carry out internal monitoring about the disposal and redressal of such applications, thereby putting an end to delays, harassment, nepotism and corruption. The operations of the city civic centre can also be connected to the web thereby bringing in transparency about the number of applications received and the concerned department to which they relate.

With networking in place, the geographical expansion and spread of such centres should not be very difficult for meeting future needs. In rural areas, such centres can be opened through self-help groups, entrepreneurs, NGOs or corporate interested in expanding their rural market base.

10.5 MAJOR ESSENTIALS

To render the citizen services effective, the following essentials or principles must be kept in mind:

- **Networking**

Networking is essential to maximise gains. ICT rests on connectivity; a stand-alone computer can offer only minimal utility. As interactions go digital, they can be coordinated over greater distances, creating new communities of interest and new challenges for governance. While talking of networking, speed and security should be the prime concerns.

- **Computerisation**

Computerisation should not be an end in itself; it should only be the means for a larger goal. The larger goal here would be to maximise citizen satisfaction about delivery of civic services. The design of the system should, therefore, keep citizens as the centre-point and every process should be designed keeping them in view. This meant that the back-

end computerisation should not be attempted unless it has a public outreach. The attempts to improve the internal efficiency should also be directed at citizens.

- **Web Enabling**

Design of the systems should be such that it is amenable to web, as web offers the easiest method to citizens gaining access to information they need. Website, instead of carrying reams and reams of static information, should be utility driven and carry dynamic linkages to the office intranet. This would also help citizens avail host of civic services online without leaving the comforts of their homes.

- **Technology**

Intranet applications could be developed by using tools like ASP, SQL Server, Visual Basic, and Oracle on Windows NT operating system. Internet applications have to be developed by using ASP on IIS 4.0, JSP, SQL Server 7.0, and Oracle 8.0. The operating system can comprise of Windows NT, Windows 98, Unix, and Linux, while the Relational Data Base Management Systems can either be on SQL Server 7.0, or Oracle 8.0. The Component Object Module can be used as a middle ware while the front-end can be on Visual Basic 6.0, ASP 2.0, and JSP. The entire system for a local body of one million population can comprise of over 10 server class computers and over 100 nodes with peripherals connected through a broadband network. There is a movement on to reduce the accent on proprietary software and to use the open architecture policies and the freely available Linux platforms.

- **Public-Private Partnership**

Public-private partnership model should be adopted that would involve cost and revenue sharing with the private sector. As e-government projects require huge financial and material resources, government may feel the resource crunch. Thus, for this reason, such projects should be taken up as public-private initiative and entrepreneurs can be invited to invest in the project.

The citizen-based e-projects would involve many distinct areas ranging from data collection to computerisation to networking and establishment of civic centres as outlet for citizens to access the services. The same could be broken up into manageable tasks and outsourced to entrepreneurs ready to work as partners in the project. While the data entry and updating can be carried out internally, the software and programme development can be taken up as joint exercise between the in house team and private developers ready to take stakes in the project. Although every organisation has its own set of requirements, it is always possible to implement a software programme available in generic modes after adequate customisation. Many of the call centres can be opened in the local bank branches that are interested to invest in the provision of necessary hardware in lieu of which they can be allowed to retain collected funds for a fixed period giving them liquidity advantage. By roping in many stakeholders, the project can be completed in a faster time without putting any additional burden on the stretched financial resources of the government.

Such a model will, therefore, not only help in mobilisation of resources, but by being self-sustaining it will lead to more accountability due to multiple stakeholders.

- **Public Awareness**

The process of empowering the citizens by using ICT involves many areas ranging from creating conducive environment within the organisation to stimulating positive responses outside. The challenge is to develop public awareness about ICT and making the citizens use the medium created by the project for accessing civic services.

- **Political Acceptability**

Political acceptability to citizen-based e-projects is another point that has to be met in a democracy. This can be successfully met by sensitising the political leadership and involving them right from the beginning and explaining to them the benefits that citizen would derive from such projects.

- **Bureaucratic Acceptability**

The resistance to change is inevitable, especially so, if the status quo gives the vested interests additional clout. These projects can also meet with a similar response as the bureaucracy ever so reluctant to open up may create many hurdles to see that the power they wield over the information they control is not reduced by bringing it into public domain through net. Besides this, the openness and transparency in administration, which the project would attempt to achieve, could also be feared by those sections of employees who do not want to get exposed for their inefficiency. It would require sustained pressure and coercion for taking out the desired information from them. Bureaucracy need to be reoriented through training and refresher programmes for implementing technological applications in their day-to-day working.

- **Security**

One important consideration during the digital maintenance of any database in network is protection and security. Every user sharing this database through intranet would, therefore, have to be given a secret password without which access to database would be denied. Access to database would also have to be limited to the requirement of the individual user. Day to day transactions would have to be posted in an encrypted format in a separate database so that the existing information is available for comparison with the encrypted information for detecting and avoiding any tampering, hacking or misuse. In future, the possibilities of introducing additional firewalls and other security measures would also have to be explored and implemented.

- **Sustainability**

While taking up the projects of this type it is important that these are sustained eternally. The service delivery agencies and the project should become inseparable. On one hand, management should internalise the project while citizens should embrace it on the other. There should be no going back to old ways, as citizens once used to a better delivery of services would settle for nothing less. The project should generally have huge political acceptability because of its citizen centred focus. Although the levels of computer literacy and penetration are still not very high, presence of civic centre and collection centres would alleviate this need to a large extent.

Most of the resources should either be internal or complimentary with no future commitments. The project may, however, need additional resources for up scaling which

may come from the user charges that can be put for such projects. It is definitely true that the citizens are ready to pay more if they get the commensurate ease of getting the services.

It is true that informatics by itself cannot surpass social, political and economic barriers to development and good governance, but one should plan to use it as a sina qua non condition, as an indispensable step for any social project that attempts to do so. The widening knowledge and information gap has a potential to widen the already existing class gap in this country. It is, therefore, desirable that such projects should play a major role in reducing the gap through unhindered access and become a harbinger for uniting the communities and making them feel better.

10.6 CONCLUSION

There are major learning lessons when it comes to implementing citizen-based e-projects. Such projects should recognise that citizens are the central focus and this should be the guiding principle. Computerisation may improve the internal efficiency of organisation but it holds no meaning unless there is utility to public out of that improved efficiency. Such projects should throw open information relevant to people and use it for greater public good.

For such projects to be successful, there is need of will and persuasion to tag along partners by giving them stakes in a seemingly public non-commercial activity. Paucity of funds and limited understanding of IT solutions are a major constraint in implementing projects of this nature. This should be resolved by involving multiple stakeholders and explaining to them the monetary and other benefits accruing to them out of the project. The project should be an example of how big tasks are easily done if broken down into small doable tasks and assigning them to various stakeholders at the right time.

The biggest challenge for any computerisation exercise is meeting of minds of the system designer who may be external to the organisation and the system developer who is internal to the organisation and knows the nitty-gritty much better but lacks skills. The insiders possessing computer skills with some professional support can develop a better model in limited time than external consultants. There is a hidden lesson in this.

Another important issue is to ensure that such projects are done with transparency and financial propriety. This is very important while dealing with public money so that there is no criticism on this account. Such criticisms would always have the possibility of sabotaging and jeopardising the progress and the project would not even be able to take off. Resistance of employees and their associations should also be tackled by firmness and strict resolve.

10.7 ACTIVITY

1. Narrate some of the ICT initiatives taken up in your State for rendering citizen services.

2. Please let us know whether the citizens are using the ICT based services. Ask them as how they are benefiting from such services. Also give their comments and suggestions.

10.8 KEY CONCEPTS

ASP : Active Server Pages is Microsoft's server-side technology for dynamically generated web pages that are marketed as an add-on to Internet Information Services (IIS).

SQL : commonly expanded to Structured Query Language is the most popular computer language used to create, modify and retrieve data from Relational Database Management Systems.

SQL Server : Microsoft SQL Server is Relational Database Management Systems produced by Microsoft. It supports Microsoft's version of Structured Query Language (SQL), the most common database language. It is commonly used by businesses for small- to medium-sized databases and also large enterprise databases.

Oracle : based in Redwood, California, Oracle Corporation is the largest software company whose primary business is database products. Historically, Oracle has targeted high-end workstations and minicomputers as the server platforms to run its database systems. Its relational database is the first to support the SQL Language, which has since become the industry standard. Oracle has been one of the leading champions of network computers.

Window NT : a version of the Windows operating system, Windows New Technology is a 32-bit operating system that supports preemptive multitasking. There are actually two versions of Windows NT: Windows NT Server, designed to act as a server in networks, and Windows NT Workstation for stand-alone or client workstations.

UNIX : pronounced yoo-niks, a popular multi-user, multitasking operating system developed at Bell Labs in the early 1970s. Created by just a handful of programmers, UNIX was designed to be a small, flexible system used exclusively by programmers. UNIX was one of the first operating systems to be written in a high-level programming language, namely C. This meant that it could be installed on virtually any computer for which a C compiler existed. This natural portability combined with its low price made it a popular choice among universities. (It was inexpensive because antitrust regulations prohibited Bell Labs from marketing it as

a full-scale product). Bell Labs distributed the operating system in its source language form, so anyone who obtained a copy could modify and customise it for his own purposes. By the end of the 1970s, dozens of different versions of UNIX were running at various sites. Due to its portability, flexibility and power, UNIX has become a leading operating system for workstations.

LINUX : pronounced lee-nucks or lih-nucks is a freely distributable open source operating system that runs on a number of hardware platforms. The LINUX kernel was developed mainly by Linus Torvalds. Because it's free, and because it runs on many platforms, including PCs and Macintoshes, LINUX has become an extremely popular alternative to proprietary operating systems.

10.9 REFERENCES AND FURTHER READINGS

- www.encyclopaedia.thefreedictionary.com
- www.webopaedia.com