# UNIT 12 SAUKARYAM: ICT PROJECT IN VISAKHAPATNAM MUNICIPAL CORPORATION, ANDHRA PRADESH

**Structure**



## 12.0 LEARNING OUTCOMES

After studying this Unit, you should be able to:

- discuss the advantages of ICT applications in urban local self-government bodies, such as, municipal corporations;
- describe the fundamental requirements for initiating an ICT project in municipal bodies;
- explain the online civic services rendered by the Saukaryam Project of Visakhapatnam Municipal Corporation; and
- examine the limitations of the Project.

## 12.1 INTRODUCTION

'Men well governed should seek no other liberty, for there is no greater liberty than a good government.' This in times, when the waves of change point towards a liberal economic framework and exit of state from sectors that could be better done through private enterprise has far reaching implications. While this is so, it definitely does not mean curtains for governments since as long as the civilisations exist, governance of some form has to exist to ensure order and fair play. The areas of operation may change but the societal dependence on state is inevitable and if that is the case, it is important that the state does its task in the manner giving least inconvenience and maximum facility to its citizens. Never before was the craving for looking at options and alternatives to improve governance stronger than now. Though there are many ways of achieving that, one has to find out methods that are easiest and cost effective, and it is here that the tools of ICT score over others.

Everyday when one sees thousands of citizens approach the governments, especially the local government, for various services, one can't help asking a question- whether it is possible to live up to their expectations. The expectations those are huge while the resources at disposal are thin. To make matters worse, the systems to administer the resources are primitive and inefficient. There are constraints; sometimes due to lack of resources and manpower, while many a times there are vested interests not allowing it to be done in a particular way. On many occasions, the general lethargy and casualness that has crept into our system becomes the major impediment.

The vast apparatus of governance that we've got need to be transformed for catering to the requirements of all. If we've to improve the administration of governments anywhere, we would have to do some serious introspection, look inwards, do a system analysis and figure out where the rub lies.

A thorough system analysis would however confirm, that nine out of ten times, both the prevention and cure of these problems is possible only if we allow technology to take precedence over the norm. Internally, technology solutions would ensure that the non-performers can't hide themselves and the decision support systems are on a stronger wicket with properly processed information base. Externally, technology would ensure that the discretionary advantages and favours possible in the tech-less system are eliminated allowing level playing field to everybody, which in essence, is the purpose of all governments. This however, does not mean that technology by itself can make governments transparent, smart and responsive, as there are host of other factors that influence the working of governments. But it is also true that technology is a sine qua non, an indispensable condition for achieving a responsible government- national, provincial, or local.

In this Unit, we will explain and examine the applications of ICT in areas of local self-administration of Visakhapatnam Municipal Corporation, Andhra Pradesh. We will also deal with the ICT based 'Project Saukaryam' (meaning facility) initiated and being implemented by the Corporation.

## 12.2 ICT IN MUNICIPAL CORPORATION

ICT is all about connectivity. Connectivity brings proximity that makes the delivery of services offered by governments become better, and 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.

Dependence of citizens on municipal bodies for multifarious services is huge. But these bodies suffer from lack of transparency, accountability and take excessive time for processing information. This makes the citizens wait in long queues, receive insensitive and harsh responses and bribe officials for getting their things done.

Internally too, the system due to huge paper work leads to inadequate monitoring and wastage of employee hours. For the task as elementary as paying their dues, citizens have to visit various offices and meet insensitive people. They have to visit these local bodies for basic services like drinking water supply, or street lighting, or sanitation, and wait endlessly for getting the things done. They also have no clue as to the status of their respective cases.

The result is an apathetic municipal organisation with no accountability to its citizens.

Just as the survival of any business depends upon the material and mental satisfaction of its customers, survival of local bodies also hinges on the contentment of its citizens. The exploration of this interface - the areas where municipalities 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.

Information is municipality's biggest equity and it is essential that it uses it for greater public good. Quick access to this information is possible by throwing it open into the public domain. It is here that ICT can play an important role in the display and dissemination of information to the citizens. ICT can also improve things in the delivery of civic services by municipalities. These services may include bill payments, certifications and grievance redressal to the citizens. The interface between the municipalities' and the citizens that presents a relationship of a benefactor - beneficiary has to be transformed to a principal-client one. And it is in this regard that technology can act as a strong catalyst and push the representative democracy towards becoming a popular one.

Perhaps, it will be worthwhile for us to mention few areas where ICT can make a material difference to the quality and speed of delivery of services by municipalities:

- **Access to Public Documents**: this category would cover all those areas where the citizens need quick and accurate information from the government. This may include documents pertaining to various schemes, orders, programmes, annual budgets, gazette notifications, ordinances, bills, examination results, etc. This would enable the citizens to get information in real time without exorbitant communication costs.

- **Authentication Statements**: this would include the areas where the citizens need the certificates of authentication from competent authorities in government like the copy of land records, registration of sale and property deeds, birth/death certificates, and various other permissions required under various acts of the central, state and local self governments. The entire process of sorting, calculating and reading through a huge database is best done with the help of software and hardware.

- **Online Payments**: payment of taxes, duties, rents, rates, etc. including the payment of user charges while using the facilities offered by government departments, come under this category. 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 are included here. This may act as an online forum for government to get the feedback about their policies and actions, and for citizens to render their opinions and ventilate their grievances.

- **Partnering with Government**: this would include areas where government does business with the private sector-outsourcing work contracts, leasing out services or making purchases. An online and transparent government would inspire confidence resulting in improved communication in such partnerships.

- **Within the Government**: the gains of technology can be applied equally to improve the systems within the government. Various departments and wings of the government

depend on and feed into each other. Time and energy taken to process and send information between various sections within a department and between various departments can be immensely saved and this can curtail corruption and render effective decision-making.

The list is exhaustive, as the areas where technology can make governments do their job better are endless. In fact, it is difficult to find anything that government does, which can't be improved by using technology. The good news is that most governments have woken up to it and let us hope that this is not going to be too little or too late.

An example of how ICTs could impinge upon human lives and can help governments perform better, is a Project called 'Saukaryam' (meaning facility), which the author could help conceive, develop and implement in Visakhapatnam Municipal Corporation in Andhra Pradesh. Project 'Saukaryam' is about delivery of civic services online at the Municipal Corporation level of the urban local-self government, and is a vibrant example of how community informatics can improve the lives of citizens. This Project is first of its kind in this country built on a public-private partnership platform and improves the delivery of municipal services through ICTs. On one hand, the Project uses the medium of internet through its utility website, while on the other hand, it provides local broad basing through call centres connected through a broad band network spanning all over the city in an area of over 120 square kilometres. The guiding principles while developing the Project has been complete internal computerisation and networking, and at the same time putting the intranet application in a user friendly format on the net for public use.

We will now briefly discuss some of the fundamental requirements in initiating such projects.

## 12.3 PROJECT SAUKARYAM: FUNDAMENTAL REQUIREMENTS

The following fundamental requirements have to be kept in mind before a project like Saukaryam is initiated and implemented:

- **Connectivity and Networking**: as Municipal Corporation deals with huge database, the first and foremost requirement is using computers to store database, and connecting and networking them for sorting, querying, and manipulation of the data for improved delivery of services to citizens. The priority should be to create an internal backbone by computerising the data and networking. 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.

- **Multi-stakeholder Approach**: connectivity and networking can then be followed by thorough brain storming sessions with all stake holders to get into the root of the problem and a core team can then be put into place for data computerisation and software and hardware support. There is also a need to look for private entrepreneurs ready to invest as stakeholder in the project. This is sometimes necessary due to paucity of funds but becomes a major catalyst for broad basing and early completion of the project.

- **Citizen-Centredness**: computerisation should not be the end in itself; it should also be the means for a larger goal. The larger goal here would be to maximise citizen satisfaction by efficient delivery of civic services. Design of the system should, therefore, keep citizens as the centre-point and every process should be designed keeping them in view. Attempts to improve internal efficiency should also be directed at citizens. Priority should be to create front end through web site, and civic centres for citizens to have access to data for various services.

- **Web-Enabled**: design of the system would be such that it is amenable to web enabling, as web offers the easiest method of citizens gaining access to information they need. Website, instead of carrying reams and reams of static information, would therefore be utility driven and would carry dynamic linkages to the office intranet. This would help citizens avail host of civic services online without leaving the comforts of their homes.

- **Involvement of Insiders in System Designing**: the biggest challenge for any computerisation exercise is meeting of the minds of the system designer who may be external to the organisation and the system developer who is internal to the organisation. The system developer knows the nitty-gritty of the system much better but lacks skills. The insiders possessing computer skills, therefore, need to be involved to develop the model for the computerised system improvement plan in a much better manner.

- **Public-Private Partnership and Mobilisation of Resources**: to take up the project of this scale, huge financial and material resources would be required. The major constraint is paucity of funds as the case is with most of the public bodies in India. This exactly is the reason why such projects could be taken up as public-private initiative, getting private entrepreneurs to invest in the project. This would involve cost and revenue sharing with the private sector.

  The project 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 offered. The same could be broken up into manageable tasks and outsourced to private partners. While the data entry and updation can be carried out by Corporation staff, the software and programme development can be taken up as joint action by the in-house team and private developers. Although every municipal body has its own requirements, it is always possible to implement a software programme available in generic modes after adequate customisation. Networking all across the city is the most important part of this technology exercise. It can either be done through internal resources or can be a part of the MOU with the private stakeholders. 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, project could be completed in a faster time without putting any additional burden on the stretched financial resources of the Corporation.

  The Municipal Corporation being the central stakeholder would have to invest the major bulk of the resources in creating the back end involving hardware/software, and the front end through civic centres. Website could also be developed as a joint

venture for sharing the cost, allowing the stakeholders to share the accrued revenues. Such a model being self-sustaining is more accountable with the presence of multiple stakeholders.

All the above-mentioned requirements would then form the backdrop against which such projects of municipal information systems can be conceived and started.

## 12.4 SAUKARYAM: ICT PROJECT OF VISAKHAPATNAM MUNICIPAL CORPORATION

Based on the fundamental principles mentioned above, Visakhapatnam Municipal Corporation went ahead with the task of setting up a utility driven Website - www.saukaryam.org. All the services rendered online by the Project are with the facility of the World Wide Web and the internet, rendering the most cost-effective method of reaching out to the people. The Corporation Website www.saukaryam.org is being done on a public-private partnership platform and is not merely be an information driven Website. It acts as a window to the outsiders to gain access to the Corporation's Intranet and Local Area Network. While the static page information has been hosted on the foreign server, the dynamic pages are being hosted on the Corporation server and also being accessed through it. By doing this, the necessity of continuous updation and uploading of information, which becomes the bane of most websites, has been avoided. All the dynamic pages take their inputs regularly, as part of the in-house computerised network and get updated in the process.

The Project also set up City Civic Centres – One Stop Civic Shops. Being well aware of the fact that not everybody in the country, like ours, have an access to the internet and a basic knowledge of computers, it decided to establish computerised City Civic Centres, which could act as an outlet for the citizens to have access to civic services. The Civic Centre has a string of computers on the network and allows the citizens to avail facilities like getting birth and death certificates, filing a water tap/ drainage connection request, applying for building plan approval, lodging a complaint/grievance, making miscellaneous payments, etc.

As the Civic Centre is on the network and is connected to the main server, which in turn, is connected through the Global Internet Protocol, the citizens can track the status of their application on the Corporation Website. For doing so, a unique registration number is allotted to every applicant, which can be later used to track the status. The system also helps Corporation managers to carry out internal monitoring about the disposal of such applications and check delay, harassment and corruption. Also, these Centres bring in transparency about the number of applications received and the concerned department to which they relate.

The popularity of the Civic Centres can be gauged by the responses that they get from the citizens everyday. A City Civic Centre is frequented by not less than 200 persons everyday seeking various services. As the broadband network is being used for the Local Area Networking, the geographical expansion by opening more of such Centres would not be very difficult for meeting the future needs.

The Vishakapatnam Municipal Corporation renders the following services through its Website and City Civic Centres:

- **Online Payment of Municipal Dues**

  All governments depend on the taxes and charges they raise from the citizens. Financial management of governments hinges on a sound, transparent, efficient and foolproof tax collection system, and the ease and flexibility with which the citizens are able to pay their dues. Before the Project was put into place, citizens were required to go to the ward office and get in touch with the tax collector for calculating and preparing the payment challans. As the entire operation was done manually, searching through the records and carrying out the required calculations would invariably take time, and in the event when the tax collector was not present, the citizens had no option but to waste their precious time and energy. The citizens also did not have any idea about the calculations the Corporation made while determining their dues. They had to visit various Municipal Corporation offices for such calculations. The system, also, led to a huge amount of paper work at all levels, entailing huge costs and time delays. Reconciliation and remittance of the amount to the Municipal account was also a time consuming job.

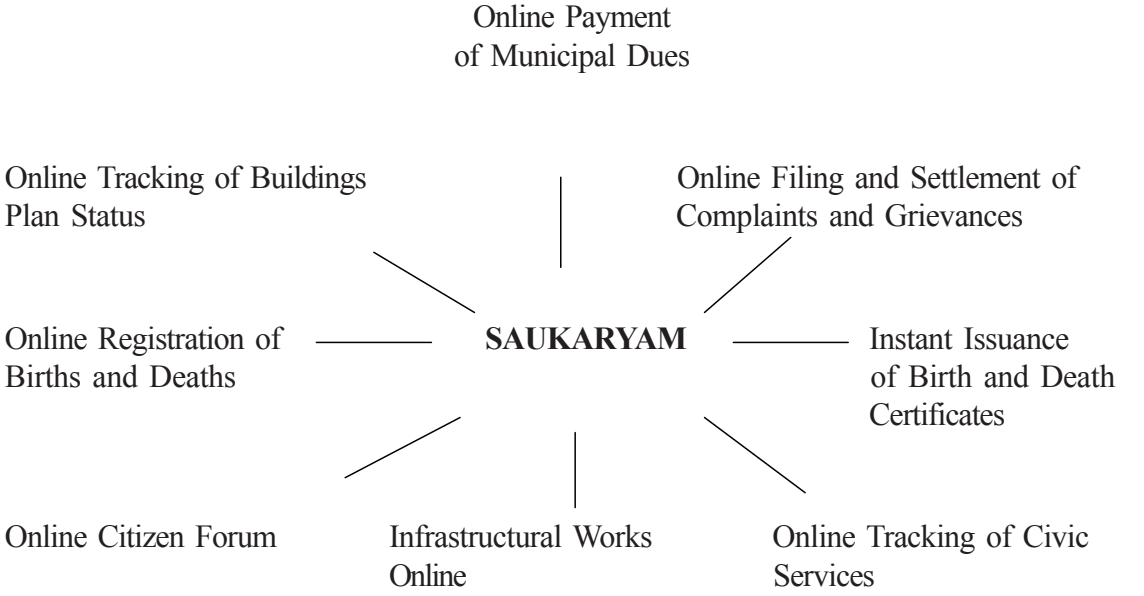
  But with the adoption of ICT, the system of payment has become easy. Corporation has computerised all the assessments. All records are being maintained in a server available in the Municipal Corporation office. The server has been connected through a LAN with computer nodes available in the local bank branches. Only those banks have been handpicked, which have voluntarily come forward to provide the necessary hardware required for this facility. A private partner has connected these nodes to the main server through a broadband network running in the city. The assessees now carry the demand notice to any of the earmarked bank branches, where after entering the assessment number, they instantly get full information with updated calculation of the demand and the arrears along with the interest, if any. Once the citizen pays the amount, the bank just updates the records, at the click of the mouse, on the main server. The bank is able to acknowledge the payment through a printout receipt issued to them on the spot, all in real time. All partners are benefited-the banks get ready cash, the net worker gets business, and the citizens are provided with easy mode of payment.

  The system enables the Corporation to get real time Demand Collection Statement, ward-wise, which helps in clear monitoring of the backlog cases, and prevents delinquents from escaping the tax net. As the system also provides for automatic posting of penal interests for delayed payments, the discretion of the tax collectors in waiving such amounts gets eliminated. The system has also led to improvement in tax collection efficiency, which is corroborated by the figures for this year, as we could collect 50 per cent over and above the last year with the same staff and similar costs.

  The updated information is also listed on the Corporation Website so that the citizens, if need be, can avail the updated version of their property taxes by entering their assessment number.

**Saukaryam: ICT Project of Visakhapatnam Municipal Corporation, Andhra Pradesh**

**Online Services**




- **Online Filing and Settlement of Complaints and Grievances**

  The Municipal Corporation's Website provides the citizens the facility to lodge their complaints and grievances online. The grievances get forwarded to the concerned officer for necessary action and also go into the database for monitoring grievance settlement. An important feature of this facility is that all the complaints and grievances, which the Corporation receives, either through internet, or through the Civic Centre, or in person, go into a common database and are available for rigorous monitoring. The module also provides the facility for forwarding and transferring of complaints from one officer to the other, thereby minimising the time, which it used to take in the normal course.

  One can also find out the number of grievances pending with various officers at a given instance, which is proving to be very useful in monitoring the efficiency of various sections. The entire status of the complaints and its disposal process also gets instantly communicated to the complainant, so that he or she can see the action being taken in order to give the necessary feed back. Although the disposal of any complaint has to be done at the field, the Project provides a mechanism to monitor such disposals in order to prevent hardships to the people. As the whole module is linked through the internet, it is possible for any officer to monitor the complaints received by him from anywhere. It allows all the officers the facility to issue virtual instructions for taking immediate remedial actions.

- **Online Tracking of Building Plan Status**

  The Municipal Corporation engages in the task of approving the building plans, sub-division of plots, and regularisation of structures within the city limits. The citizens have no information pertaining to such matters. Website has opened the floodgates of information to the public through the internet. Now at the click of the mouse, status of the application is known without running from pillar to post. The entire

process of scrutinising, processing, and sanctioning of building plan approvals has been computerised. This allows online tracking and monitoring of the movement of any such paper within the town planning section. This also helps the section in meeting the statutory deadline set for the release of the plans, and likewise allows the citizens to gain access to the status of their applications. The Project also envisages creation of the building plan data base and its subsequent hosting on the site so that citizens are able to know the exact nature of the approval given and are not lured into buying unapproved buildings/plots, creating future complications for themselves.

- **Online Registration of Births and Deaths**

  Every citizen is a valuable human resource of the country. Registration of births and deaths is, therefore, mandatory. Earlier, the entire task of collecting the information from the hospitals and maintaining it in the master records used to take years together. It was primarily the responsibility of the citizens to ensure that the official concerned sent the required data to the Corporation office. The whole database, which used to be maintained manually, was the preserve of few Corporation officers that used to take a lot of time and effort for searching the required records. But now, the Corporation Website provides to all hospitals registered with them, the facility to send the birth and death information online, with minimal charges of incremental costs. Now, the information from the registrant comes through the virtual mode instantly, without any mediation.

- **Instant Issuance of Birth and Death Certificates**

  By maintaining the database of births and deaths on the computer, the process of sorting, searching, and accessing the database has become much easier. Citizens are able to get their certificates delivered to them in real quick time. They are also able to get their records updated, as they have the facility of checking whether their name is registered or not, through the Website. Likewise, they can now get necessary rectification done in their records without any delay. The City Civic Centre provides the facility to the citizens to collect their certificates on demand instantly.

- **Online Tracking of Civic Services**

  The Municipal Corporation, on one hand is responsible to keep the city clean and sanitised, while on the other, it has to arrange for water supply in the city. The Corporation also provides and maintains street lighting, roads and basic infrastructure. Now, at the click of the mouse, citizens can see the sanitation plan of their street or the water supply plan of their ward, and are now able to know how all this is being done and by whom.

  The process of lifting the garbage from the city and taking it to the landfills was previously not documented and was only manually accounted for. This practice led to corruption, inefficiency and ineffectiveness. With computerisation, the collection of garbage at the landfill and its weight is computerised and the same data is uploaded. It is, therefore, possible for the citizens to check the status of garbage removal from their wards at any specific date. The system has also helped the Corporation to internally streamline its operations and fix responsibility for poor sanitation.

- **Infrastructural Works Online**

  The entire process of sanctioning and processing of infrastructural works has been computerised. This has helped the Corporation to monitor and keep a track of the execution of such works. This has also helped in keeping better control over any excess expenditure, which hitherto used to be the case. The entire module has also been linked to the Website so that the citizens are also able to see and monitor the status of the infrastructural works being taken up in their respective ward areas. This has also brought in transparency, as the furnished details clearly indicate the name of the contractor, the amount sanctioned, and the status of such projects, online. Thus, the entire procedure has become more open, transparent and accountable.

- **Online Citizen Forum**

  The Website is providing a virtual meeting place for the citizens to discuss various issues and problems related to the city and come out with some prospective solutions. They now freely interact with each other, post their ideas and opinions and contribute towards social change. The Project inspires citizens to adopt parks, traffic points and render community development works-actually anything that they wish to do for the betterment of their city.

  The Website provides an opportunity to the citizens to ventilate their grievances. They can have an online chat with the Mayor and the Commissioner about their problems and also render suggestions. They give them feedback of the development works and pursue them for the work not done. With internet kiosks spreading all over, the Project is unifying the communities and making them feel better.

**Security**

Besides the services, one of the most important considerations is that of protection and security. Every user sharing this database through the intranet is, therefore, given a password without which the access to the database is denied. The access to the database is also limited to the requirement of the individual user. Day-to-day transactions are also 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 firewalls and other security measures is also being explored and implemented.

## 12.5 PROJECT SAUKARYAM: MAJOR CONSTRAINTS

The major constraints to the development of the Project were as follows:

- resistance to change was inevitable, especially, from the vested interests that preferred to maintain the status quo. This Project also met with a similar response from the bureaucracy, which created many hurdles to see that the power they wielded over the information was not reduced by putting information into the public domain;
- openness and transparency in administration, which the Project attempted to achieve was also disliked by few sections of employees who feared getting exposed for their inefficiency;

- paucity of funds was also a limitation faced by the Project. This exactly was the reason that the Project took up public-private initiative of getting entrepreneurs to invest in the Project. The effort involved in laying the broadband line through the length and breath of the city was a Herculean task, especially so, when it was to be done in such a short time;
- developing public awareness about ICT and making the citizens use the medium for accessing civic services was also a challenging task; and
- political acceptability to the Project was another challenge, but that seemed to be successfully met when the Chief Minister of the State decided to replicate it elsewhere across the State.

## 12.6 CONCLUSION

For projects like Saukaryam, a Metro Area Network would have to be created through broad band/leased circuits. A large number of banks for accepting municipal payments and various municipal offices can be put on this Metro Area Network and connected to each other. A LAN encompassing all wings of the Municipal Corporation should form the backbone to this Metro Area Network. This Network can be, in turn, web-enabled that can provide access to citizens for multiple services. For the citizens who do not have access to the computer or internet, a fully computerised city civic centres on the Network can be created, delivering the same set of services.

Project Saukaryam of the Visakapatnam Municipal Corporation, based on such a network, is unique in the following ways:

- it has thrown open relevant information required by the citizens into the public domain. With this, the Project aims to bring in transparency, accountability and efficiency in service delivery;
- it has hosted a utility driven Website rendering online civic services to the people, hence, mitigating harassment of the citizens at the hands of corrupt and insensitive bureaucracy;
- it has set up one-stop shop providing all services at one place, thereby reducing the unnecessary movement of the citizens to number of government offices;
- it is providing multi-dimensional services, covering all aspects of governance ranging from taxation to public works to city sanitation;
- it has hosted a dynamic Website based on a fully computerised office system that enables instantaneous and automatic updation;
- it is enabling a virtual meeting place for the citizens who are freely taking part in city development; and
- it is rendering unhindered access, closing information gaps and uniting the communities.

The results for the Project have been stupendous. Ever since it has been commissioned, there is a tremendous increase in Corporation's revenue. Rather, it has made community involvement, multi-stakeholders participation, decentralisation, partnership, empowerment,

openness, efficiency and right to information possible at the level of urban local-self government.

The National Institute of Urban Affairs, the nodal agency for urban local bodies in the country has presented the award of 'Best Website' to the Visakhapatnam Municipal Corporation. The Project has also won the National IT Award instituted by the Computer Society of India for 'Best IT Usage' 2001. It has also won the UNDP's prestigious 'Cyber City Award,' and a grant of US $20000 to expand the initiative to other cities.

## 12.7 ACTIVITY

Narrate an ICT project or an experiment of a similar nature being implemented in your State or Region or other states/region. You can highlight the background of the Project and the facilities and services rendered by it.

## 12.8 ANNEXE

**New IT link for Rajasthan District Departments**

**District-level officers now need not send information manually but can update data periodically**

The Hanumangarh district administration in Rajasthan has, with the help of National Informatics Centre (NIC), introduced a web-enabled software named 'District Info way' to collect, compile and consolidate information from various departments within the district. With the 'District Info way' in place, the District Level Officers (DLOs) need not send information manually but can update their data periodically.

The software simplifies the cumbersome procedure of collecting information of various schemes and programmes run in the districts for socio-economic development at grass-roots level. As the State Government frequently demands information from the districts, the administration has to compile and consolidate such information manually and after much paper work.

'Web-enabled District Info way is a new gateway of information at district level. The software consists of features to collect works and baseline notes rapidly with ample amount of purity. The Government Departments located at district and remote areas of the district can be connected to the intranet server using the dial up connectivity and submit the required information in electronic form by just roll of fingers on desktops,' T. Ravikant, Collector of Hanumangarh, observed talking about the IT initiative in his district.

Prior to developing of the software, an extensive survey was conducted to take stock of the IT resources available at all the Government offices in the district. The district administration set a deadline for the offices to install the required hardware. Meanwhile, NIC's District Informatics Officer Vishwanath Sharma and his associate Parvinder Singh prepared the software.

A Linux-based server installed at NIC automatically compiles and consolidates the information. "It is a ready reckoner," asserted Mr. Ravikant.

**The Hindu n. d.**