

An Analysis of India's Need of Capacity Building for E-Governance

**Neena Jindal*
***Anil Sehrawat*
****Y. Medury*

Abstract

Capacity building of municipal functionaries is recognized as an approach to make strong municipal work practices and to improve the achievements of municipalities in India. The main purpose of this paper was to describe the social, economic, and educational status of the people and evaluate their readiness for the e-governance practices and capacity building requirements for the community. The paper attempted to throw light on the need and approaches of the community development by building their capacity. The findings of this research are based on the perceptions of personal observation of the ground realities. The study is an attempt to point that the capacity building initiative is a must for the people in almost all the states local municipalities. People in India need to be empowered by adequate training and education. This paper is based on a randomly selected population scattered geographically in six Northern Indian states. In every state, 150 questioners were distributed; there were a total of 900 questioners distributed among the population, out of which only 710 questioners with a 78.9% response rate were received back. The analysis presents the picture of the demographic status of the citizens. So, at the end, it is concluded that the Central and State government should put extra efforts to find out and tackle the growing needs of municipalities in order to have a greater impact of e-governance.

Keywords : E-governance, local governance, participation, capacity-building, India

JEL Classification: D73, G38, G30

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Capacity Building is defined as 'planned development of (or increase in) knowledge, outturn, administration, ability, and other capabilities of an organization or nation through acquisition, incentives, technology, and/or training (Business Dictionary, 2016). It is also known as Community capacity building (CCB), and capacity development. It is an approach based on a concept to development that focuses on understanding the obstacles that hinder people, governments, international organizations and non-governmental organizations from realizing their goals for the success while increasing the abilities that will empower them to achieve significant and sustainable results (Wikipedia, 2016).

The term community capacity building emerged in the lexicon of international development during the 1990s. Today, "community capacity building" is counted in the programs of most international organizations that work in development, the World Bank, the United Nations and non-governmental organizations (NGOs). Community

**Associate Lecturer, Jaypee University of Information and Technology, Wagnaghat, Solan - 173 234, Himachal Pradesh.*
Email : neena.jindal@juit.ac.in

***Associate Professor, Jaypee University of Information and Technology, Wagnaghat, Solan - 173 234, Himachal Pradesh.*
Email : anil.sehrawat@juit.ac.in

****Vice Chancellor, Bennett University, Tech Zone II, Greater Noida.*

capacity building often refers to strengthening the skills, competencies and potential of people and communities in developing societies so they can overcome the causes of their exclusion and suffering.

Definitions

In the literature concerned, the organizations interpret community capacity building in their own ways and focus on it in place of promoting one-way growth in developing nations. Fundraising, training centers, exposure visit, office and paper support, on the professional training, learning centers and consultants are all forms of capacity building. To prevent international aid for progress from becoming perpetual dependency, developing nations are adopting strategies granted by the organizations in the form of capacity building (Wikipedia, 2016).

The United Nations Development Program (UNDP) was one of the beginners in developing an understanding of community capacity building or development. During the beginning of 70s the UNDP offered support for its staff and governments on what was considered “institution building.” In 1991, the term transformed to be “community capacity building”. The UNDP defines capacity building as a long-term continual process of progress that involves all stakeholders; including ministries, local authorities, non-governmental organizations, professionals, community members, academics and more. Capacity building uses a country's human, scientific, technological, organizational, and institutional and service competence.. The goal of capacity building is to tackle problems related to policy and methods of development, while keeping in mind the potential, limits and needs of the people of the country concerned. The UNDP summarized that capacity building takes place on an individual level, an institutional level and the societal level (UNDP, 2006):

(i) Individual Level : At individual level theCommunity capacity-building requires the progress of the conditions that allow individual participants to build and enhance knowledge and skills. It also requires creating the conditions that will allow people to engage in the “process of learning and adapting to change” (UNDP, 2006).

(ii) Institutional Level : Institutions in developing countries should be involved in aiding community capacity building on an institutional level and it should not involve in creating new institutions, rather modernizing existing institutions and helping them in creating sound policies, organizational structures, and effective methods of management and revenue control (UNDP, 2006).

(iii) Societal Level : Community capacity building at the societal level should support the establishment of a more “interactive public administration that learns equally from its actions and from feedback it receives from the public at large”. Community capacity building needs be used to develop public administrators that are responsive and answerable (UNDP, 2006).

Allan Kaplan, a leading NGO scholar argues that to be effective facilitators of capacity building in developing areas, NGOs must participate in organizational capacity building first. Kaplan (2000), argues that NGOs who focus on developing a conceptual framework, an organizational attitude, vision and strategy are more adept at being self-reflective and critical, the two qualities that enable more productive capacity building. The World Customs Organization (2008), which is an intergovernmental organization (IO) and develops standards for governing the movement of people and goods defines capacity building as “activities which strengthen the knowledge, abilities, skills and behavior of individuals and improve institutional structures and processes such that the organization can efficiently meet its mission and goals in a sustainable way.” It is, however, important to put into consideration the principles that govern community capacity building.

Need for Capacity Building in Indian E-Governance

The e-governance initiatives planned by the centre and state governments have increased the aspiration level considerably. One outcome of these initiatives is major managerial and technological challenges to implement these projects. At state level there is a need to manage the entire programme in a consistent and coherent manner for cost optimization and integration. Governments need to provide a consistent policy, direction, standardization and consistency across initiatives and resources and flexibility to drive capacity building plan.

India has federal structure of governance that brings diversity in local laws, rules and regulation for transacting government business, implementation approach and responsibilities. In the design of the e-governing, Government in its e-governance competency framework (eGCF) recognized the importance of building human capacities in terms of necessary knowledge and skills to conceptualize, initiate, implement and sustain e-Governance initiatives (eGCF, 2014). There is a dire need to foster an attitude and mind-set among the citizens and employees that is receptive to ICT based administration and ICT based delivery of services. The Governments have recognized that only development of e-Governance strategies and induction of technology will not help deliver the quality of services envisaged unless human resources are aligned to provide the right services to the right customers from the right sources with the right tools at the right time.

Capacity Building Scheme of ₹ 313 Crores for all the States/UTs to promote National e-Governance Plan (NeGP) was approved by the Cabinet Committee on Economic Affairs (CCEA, 2008). This scheme aims to provide technical and professional support to State level policy and decision-making bodies and to develop specialized skills for e-governance. What is more important to understand that ensuring effective use the e-services by citizens will be a big challenge even if e-Government initiatives are implemented successfully? In last two decades India has emerged as a major player in the sphere of IT enabled services and the knowledge industry but this movement is limited to urban areas, with the exception of some rural initiatives in some States. Bridging the digital divide between rural and urban areas in the country in an integrated and holistic manner is urgently required. This is only possible by developing ICT infrastructure in the rural areas, awareness among the citizens about the e-Governance initiatives and by enabling and motivating them to use it in their day-to-day affairs.

↪ **Approaches for Capacity Building :** Most of the States and Union Territories lack trained staff with the skill-sets needed to handle the challenges that are likely to be faced in implementing vision and objectives of e-governance (CCEA, 2008). These include:

- ↪ Alignment of projects to electronic services orientation,
- ↪ Standardization and consistency across the initiatives,
- ↪ Training of human resources and change management,
- ↪ Reengineering and redesigning of government processes,
- ↪ Optimized utilization and cost-effective resource,
- ↪ Leveraging external resources,
- ↪ Implementation of best practices,
- ↪ Monitoring of projects and programmes.

Capacity building scheme is aimed at addressing the above challenges in a holistic manner and supporting e-governance and its goals through various means as engaging experts, developing skills and imparting specialized training. The scheme identifies areas of capacity building support to the States/UTs through various activities like empanelment of agencies for temporary staffing and recruitment, facilitating States in recruitment and providing orientation courses for decision making bodies, training initiatives, curriculum & content development and human resource management (CCEA, 2008).

Scope of the Study

After a preliminary survey, it was found that the Government office of following six states of North India, Chhattisgarh, Delhi, Haryana, Himachal, Punjab, and Uttarakhand are having ICT components for different services to the people. Therefore, it was decided to go through the social demographical status of the people under these states.

Objectives of the Study

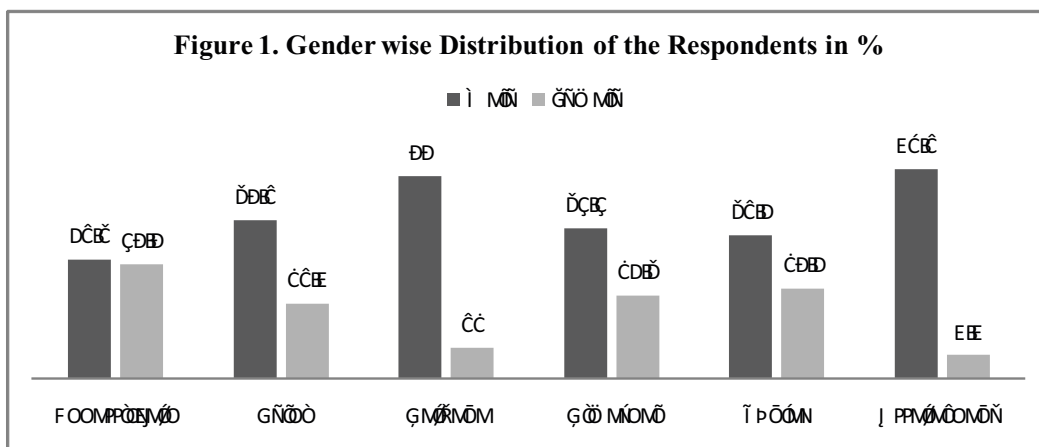
The study was initiated keeping in mind the following objectives:

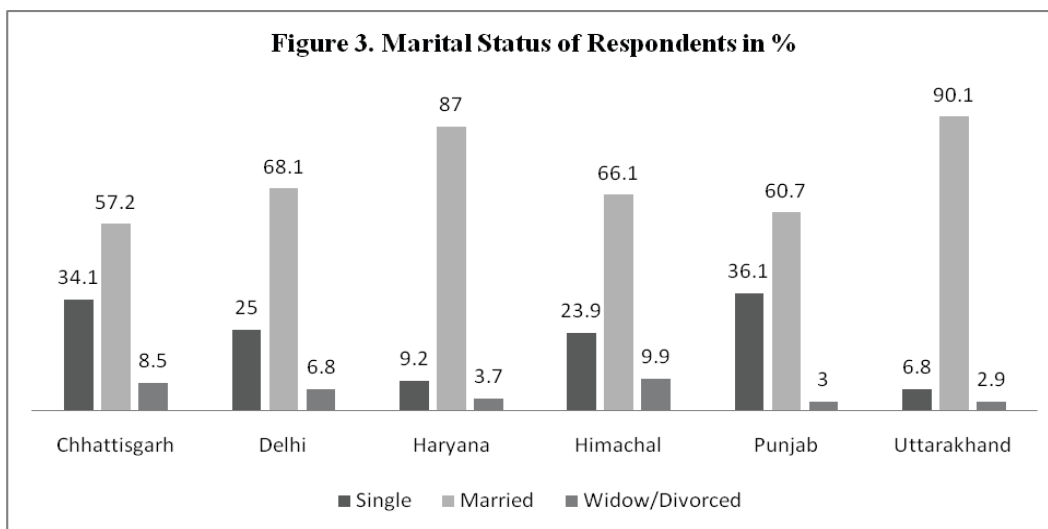
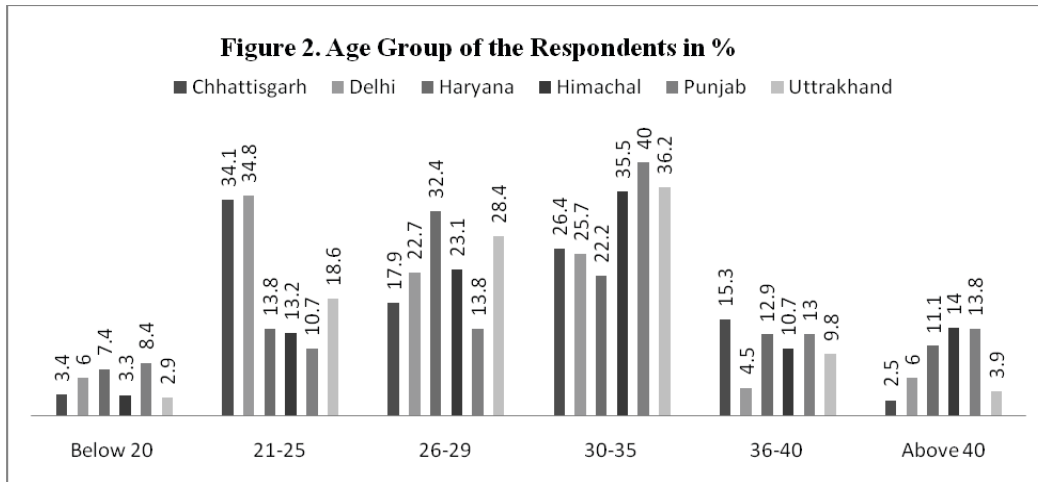
- (1) To know how people are capable to use the e-services being offered by the local governments in northern states.
- (2) To know about the availability of computers and internet accessibility for using the ICT based services among the people in northern India.
- (3) To know the social and educational background of the people for handling the e-governance facilities and their awareness with the e-services.
- (4) To know how people communicate to get information and use that for their benefits.
- (5) To find out major hindrance associated with the using e-facilities.

Data Analysis

The data collection for this study was conducted between July 2015 and September 2015. The analyses of 710 questionnaires received from the respondents from the six states under study are given in the subsequent figures.

(1) **User Demography** : Delhi is the state where, maximum i.e. 88% responses were received for the study while the responses from Himachal Pradesh were received as 80.7%. From Uttarakhand the lowest i.e. 68% responses rate was received for the study. This shows that in Delhi, the people are as proactive and aware about their rights and other facilities of the government is concerned. They are frank enough to fill the form and providing information about the government. Analysis of Figure 1 revealed that in Chhattisgarh 51.2% respondents were



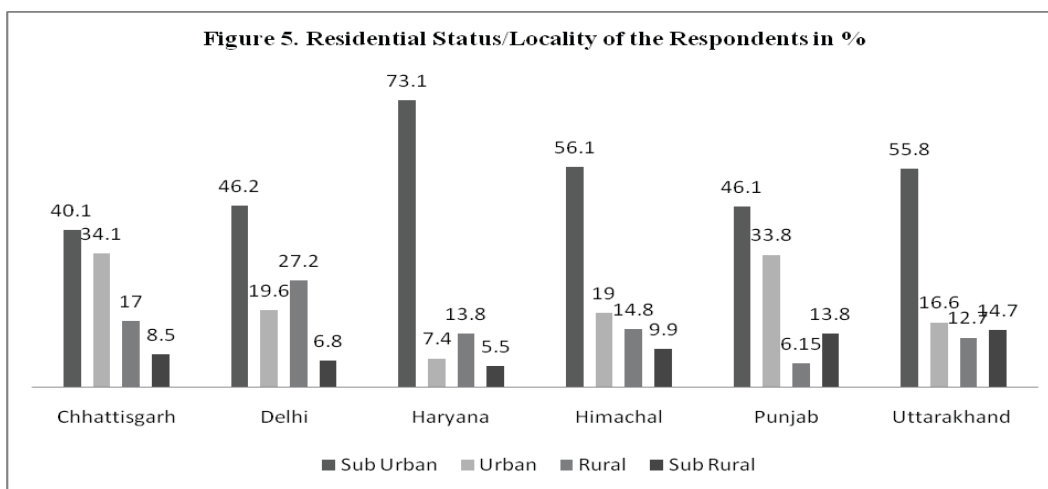
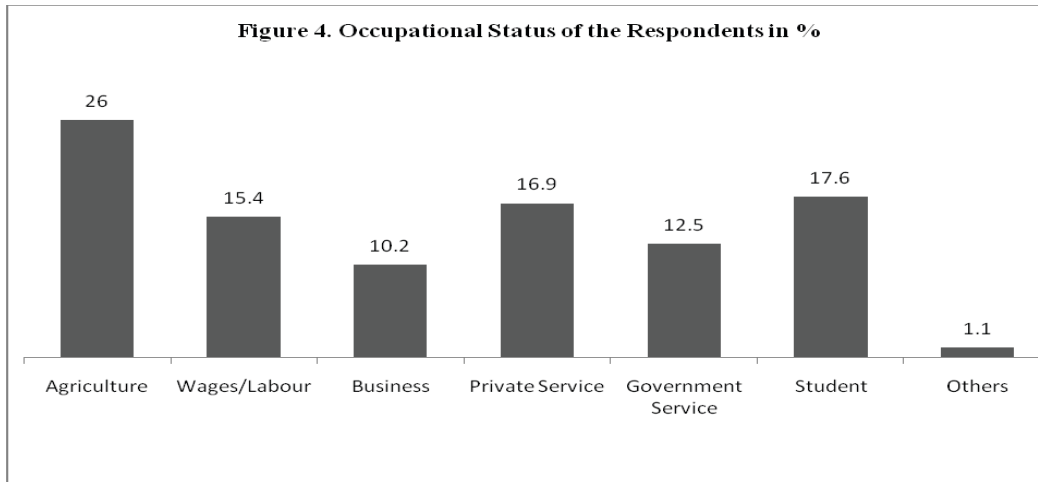


males and 48.8% were females, in Delhi 68.1% respondents were males and 31.9% were females, in Haryana 87% respondents were males and 13% were females, in Himachal Pradesh 64.4% respondents were males and 35.6% were females, in Punjab 61.5% respondents were males and 38.5% were females, in Uttarakhand 90% respondents were males and 9.9% were females. In the sample of the study, there were 494 male and 216 were female participants. It shows that male member of the family is preferred to visit the government offices.

Another objective of the study was to know the age group of ICT users among respondents. Six age groups were identified and the results are presented in Figure 2. The analysis of Figure 2 revealed that the majority of the population consists of the youth. In the state Delhi & Chhattisgarh age group 21-25 was more involved in the offices. In Haryana age group 26-29 were more active. The analysis reveals that in Himachal Pradesh 35.5%, in Punjab 40% and in Uttarakhand 36.2% respondents were in the age group of 30-35 years. It reflects that major part of ICT users is below 40 years of age, it means people above 40 years are reluctant to use ICT.

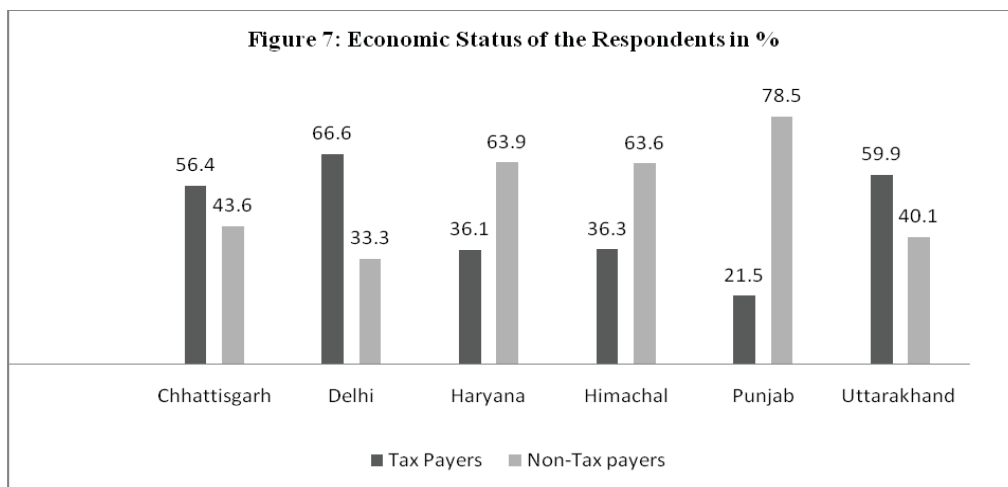
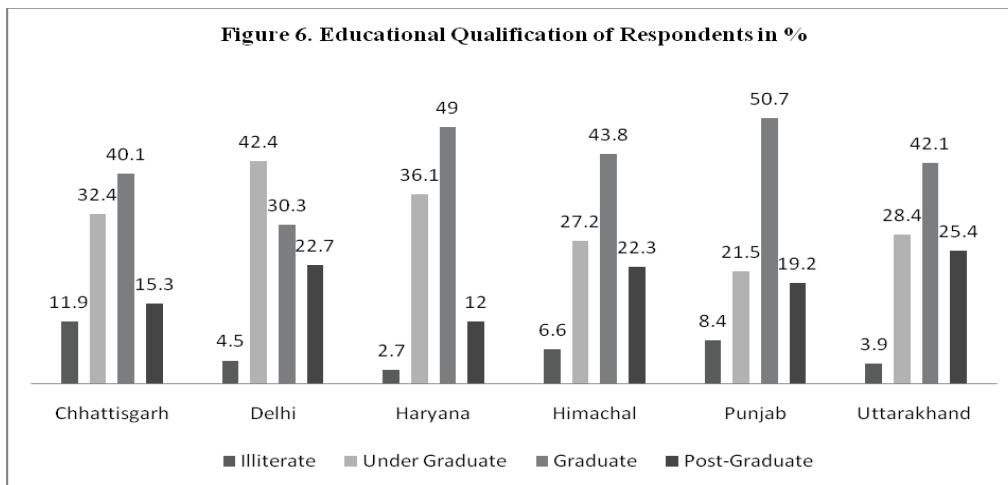
The results of marital status of the respondents are given in Figure 3. Analysis of Figure 3 reveals that the majority of the respondents were married; on the other hand 25% respondents were single. The analysis in the figure also revealed that there is a small percentage of the divorced/widow respondent, so the results shows that the married people have various needs and responsibilities for which they approach the government offices.

To know the occupational status of the respondents, question related with their broad occupational areas was



asked in which different options were given. The analysis is given below in Figure 4. The analysis of Figure 4 shows that mostly 26% of the respondents were associated with the agricultural occupation directly or indirectly, 15.4 % were labour or daily wagers, only 10.2% were businessman, 12.5% were government servants, 17.6% were students and 16.9% respondents were associated with private sectors and only 1.1% were related to other jobs. It reveals that the government policies affect the lower classes of the citizens, and also they also need a system where they can utilize the facilities offered by the government. It was also observed that if government allows easy access to ICT application and good governance initiative that will definitely affect the people in a positive manner. Therefore the government should encourage and introduce such type of policies and try to motivate people to use ICT based facilities.

To know the locality and residential status of the respondents a question was asked. The responses are given in the Figure 5. The analysis of Figure 5 reveals that majority of respondent 40.1 % in Chhattisgarh, 46.2% in Delhi, 73.1% in Haryana, 56.1% in Himachal Pradesh, 46.1 in Punjab and 55.8% in Uttarakhand were belonging to semi-urban areas. 34.1% respondents in Chhattisgarh, 19.6% in Delhi, 7.4% in Haryana, 19% in Himachal Pradesh, 33.8% in Punjab and 16.6 % in Uttarakhand were belonging to urban areas. 17% respondents in Chhattisgarh, 27.2% in Delhi, 13.8% in Haryana, 14.8% in Himachal Pradesh, 6.15% in Punjab and 12.7 % in Uttarakhand were belonging to rural areas. 8.5% respondents in Chhattisgarh, 6.8% in Delhi, 5.5% in Haryana, 9.9% in Himachal Pradesh, 13.8% in Punjab and 14.7 % in Uttarakhand were belonging to sub-rural areas. It reflects that participation of rural and semi-rural areas is significantly less.

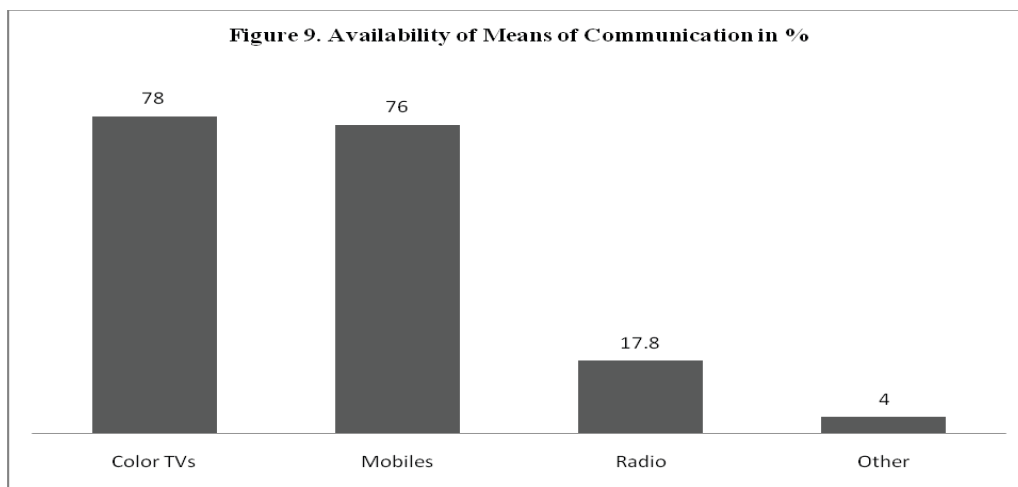
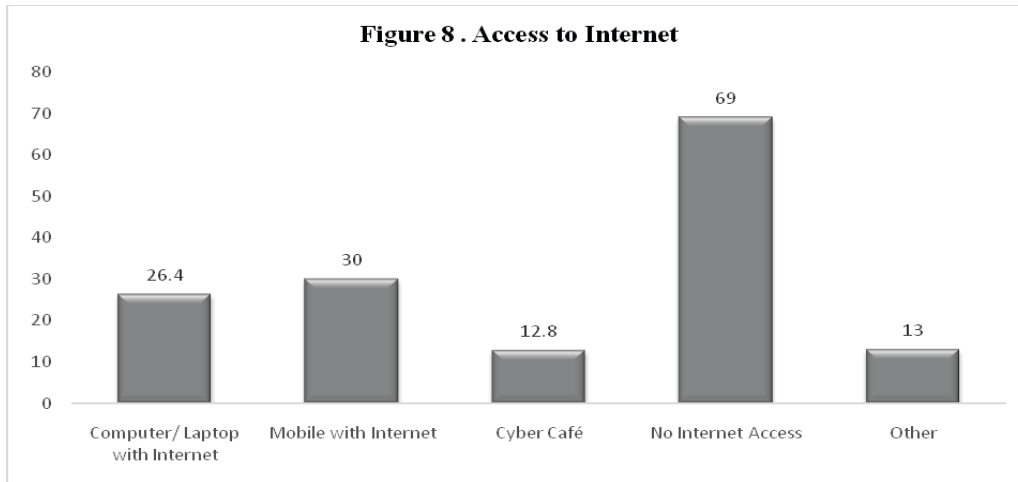


In this study, it was essential to know the educational background of the respondents; therefore a question seeking their qualification was included in the study. Four options (as given in Figure 7) were given. For the illiterate respondent, a mediator or self-explanatory help was provided to the respondent. However, a freedom to fill up the questionnaire at their convenient was also offered to them. Analysis of Figure 6 reveals that the maximum of the respondents i.e. 42.5% were graduated, whereas 31.4% respondents were under-graduate. However the figure also reveals that 19.5% respondents were Post-Graduate and only 6.4% were illiterate who visits to the government offices for different purposes. It shows that most of the people are educated and a small percentage of visitors is illiterate.

To know the economic status of the respondents, a question was asked in the questionnaire. The results are given in Figure 7. Analysis of Figure 7 reveals that majority i.e. 66% respondents in Delhi were tax payers followed by Uttarakhand 66.6% and Chattishgarh 56.4%. On the other hand, 78.5% respondents in Punjab, 63.9% in Haryana and 63.6% in Himachal Pradesh were Non-Tax Payers.

(2) ICT Practices and Capacity Building : The most important requirement for e-governance is a good ICT infrastructure and access to computer and internet facilities among the respondent. The second part of the questionnaire was constructed to assess the capacity building and skills required to handle the e-governance.

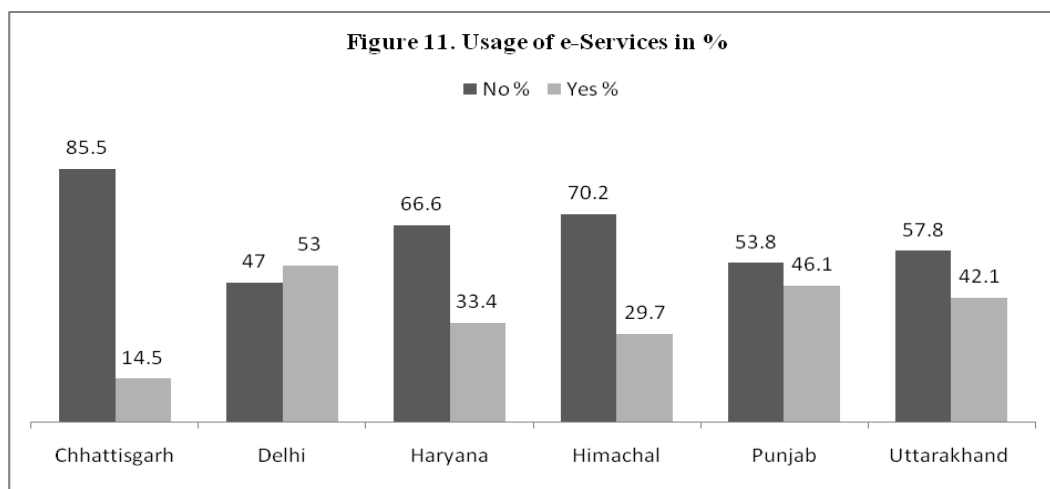
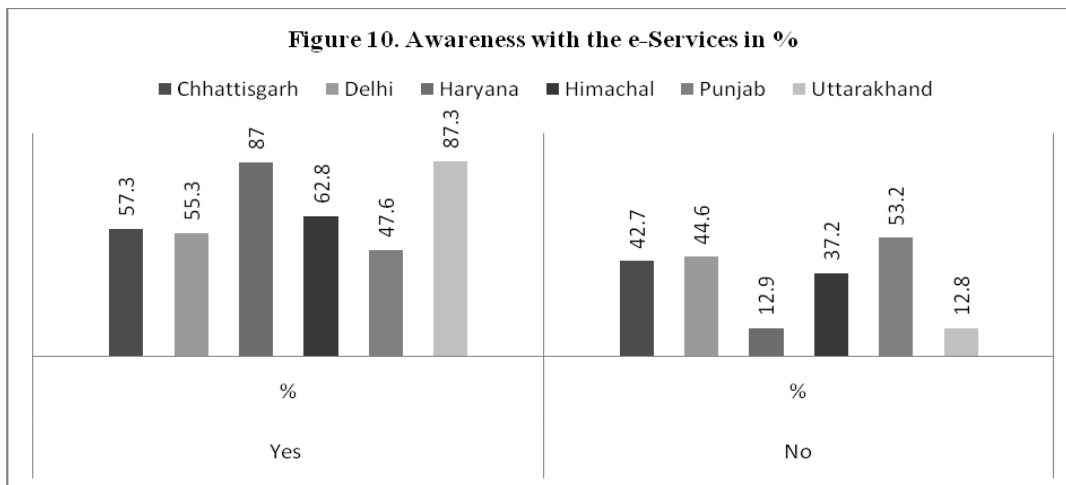
(i) Access to the Internet : In order to find out the availability of the internet among the respondent a question



was asked in the questionnaire, whether they have computers and internet accessibility. The analysis is given in the Figure 8. The Figure 8 reflects that 69% of the respondents have no internet access. Only 30% of the respondents have instant internet access and 26.4% respondents access internet on their computers, however, 12.8% go to cyber cafe for internet access. So, it is a big challenge for the government to install ICT based services that can help people to use these facilities.

(ii) Means of Communication : Another important requirement for good governance is availability of means of communication. To know the availability of means of communication used by the respondents a question related to means of communication was included in the questionnaire. The results are given in the Figure 9. Analysis of Figure 9 reveals that 78% respondents have TVs as mean of communication 76% respondents use mobile phone as a communication, 17.8% people depend on radio and 4% use other means of communication.

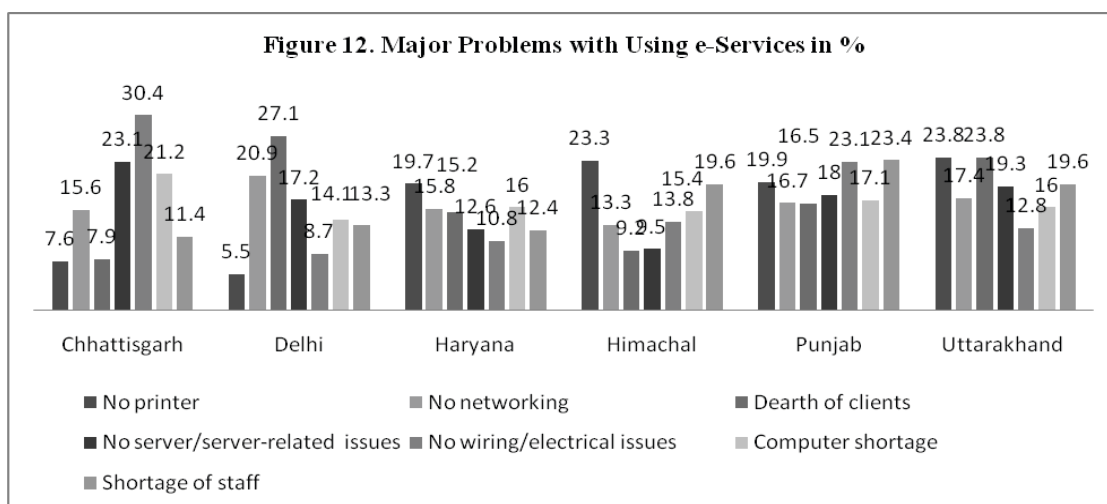
(iii) Awareness Regarding the E-Services : Next important requirement for good governance is awareness among the masses about e-services offered by the different state governments. The results are given in Figure 10. Analysis of Figure 10 reveals that the majority of the respondents 87% in Haryana, 87.3% in Uttarakhand, 62.8% in Himachal Pradesh, 57.3% in Chhatisgarh, 55.3 % in Delhi and 47.6 % in Punjab were aware about the e-services of municipality of the concerned states. Though a significant number of people are aware about different e-services but it is also true that a large number of people are still unaware about these services in some states.



(iv) Use of E-Services by the People : To know the Use of different e-Services offered by the government offices by the respondents, the next question was asked. The responses are given in the Figure 11. Analysis in the Figure 11 shows that majority of the respondents under the states were not using e services facilities. The results also shows that 85.5% respondents in Chhattisgarh, 70.2% in Himachal and 66.6% respondents in Haryana, 57.8% in Uttarakhand, 53.8% in Punjab and 47% in Delhi were not using e services offered by government offices. Only a trend of average usage of e-services is noticed.

(v) Major Problems Faced in E-Governance : At the end of the questionnaire, to find out the major problems associated with the ICT application in capacity building for e-governance was asked. There were seven major problems were identified and given in the Figure 12 along with the responses.

The analysis of Figure 12 reveals that 23.4% respondents in Punjab followed by 19.6% in Uttarakhand and Himachal, 13.3% in Delhi, 12.4% in Haryana and 11.4% in Chhattishgarh perceived the Shortage of trained Staff as biggest problem in e-governance. However, No Networking is another major problem perceived by 20.9% respondents in Delhi, 17.4% in Uttrakhand, 16.7% in Punjab, 15.8% in Haryana, 15.6%, 13.3% in Chhattisgarh and Himachal respectively. The another major problem No wiring/Electrical issues with the available infrastructure is reported by 30.4% respondents in Chhattisgarh, 23.1% in Punjab, 13.8% in Himachal Pradesh. As far as the No printer for the output is another problem in 23.8% in Uttarakhand and Himachal with a 23.3% responses. The shortage of computers is also a big problem with response of 21.2% in Chhattisgarh, 16% each in



Haryana and Uttarakhand while the No Sever/ server related issues are the problem that appeared and prove a hindrance in implementing the ICT into government offices. It received 23.1% in Chhattisgarh, 19.3% in Uttarakhand, 18% in Punjab 17.2% in Delhi; however, Dearth of client is a less significant problem that proved less important for ICT applications.

Findings of the Study

In India, attempts are being made to improve quality of life in urban and rural areas by strengthening the local government institutions. A significant initiative undertaken to achieve this challenging task is the capacity building of local government (or municipal) functionaries. It is widely agreed that many of the problems experienced by municipal functionaries in the governance of these areas can be overcome by broadening their knowledge base. The major findings of the study are given below:

- (1) The first major finding of this study is the reluctance of females to visit the government offices.
- (2) Second finding is that majority of the visitors at government offices are young.
- (3) Thought the occupation of the people play a significant role in the capacity building of a community, the study found that there is a mixed nature of works or occupations of people in the northern part of India.
- (4) The result shows there is a big gap among service status of the respondents.
- (5) A significant population of visitors to government offices belongs to rural areas.
- (6) A very small number of visitors to government offices are illiterate.
- (7) The study found that the majority of respondent do not have Internet access.
- (8) Majority of the people are aware about the e-services offered by different state governments in their respective municipality.
- (9) TVs are still the major means of communication used by people.
- (10) It is found that people are reluctant to use e-services.
- (11) It is found that Lack of trained staff, computers, electricity and networking are the main problems for the e-service initiative in northern India. The No wiring and Electricity in the available infrastructure rank first among the listed problems.

Policy Implications

The Government of India in 2006 gave National eGovernance Plan (NeGP) to “takes a holistic view of e-Governance initiatives across the country, integrating them into a collective vision, a shared cause. Around this idea, a massive countrywide infrastructure reaching down to the remotest of villages is evolving, and large-scale digitization of records is taking place to enable easy, reliable access over the internet. The ultimate objective is to bring public services closer home to citizens” (NeGP, 2006). To achieve this aim in 2014 Government of India put forward eGovernance Competency Framework to create the required ICT based infrastructure, training of employees, citizens and other stakeholders (eGCF, 2014). To achieve this aim many National and State level institutes were established by the Indian government at different points of time to train State government officers working in different departments. Gradually, the institutes began to offer courses on local government topics for municipal functionaries for e-governance.

On the other hand, some institutes were set up exclusively to meet the capacity building requirements of local government functionaries. But, it is the interest and the workload that proved to be a big hurdle. After 70 years of the Independent, the government is not able to build the basic infrastructure required for the e-governance. The findings of the study indicates that limited success of e-governance initiatives is not entirely due to lack of offerings but it is because of certain limitations like limited access to internet, high cost of internet usage, low digital literacy (Sapru & Sapru, 2014). Successful leveraging of e-governance depends upon building institutional capabilities and infrastructure, adoption and implementation of a good e-governance policy and penetration of technology in semi-urban and rural areas. The government should think about the community development programs for the people for upliftment of the social, economic and educational status of the people. It is suggested that village development societies should be made to increase participation of local community and implementation of policies (Kalra & Mishra, 2014). The participation of females and older population is very less a analysis of reasons that stop females visiting government offices and accessing e-services is need to be done and on the basis of findings appropriate measure should be taken to motivate them to participate in governance. Once, these become solid, and then only the building of the nation will strong.

Conclusion

The rationale for increased emphasis on capacity building is that management is becoming complex; significant efforts are not being made to broaden the understanding of actors involved in the process of governance. Thus, when new reform measures such as decentralization or private sector participation are initiated, these often meet with limited success because the functionaries are not prepared to handle new and additional responsibilities (Heeks, 2001; Lal, 1999).

One of the important finding of this study is that females are reluctant to visit government offices to get their work done. This challenge can be overcome by the use of m-government (Prasad, 2012). In India illiteracy is also a major challenge to achieve the goal of e-governance. To overcome this challenge we have to adopt innovate forms of ICT that allow citizens to use touch screens, integrated voice response systems, mobile applications etc. (Prasad, 2012).

Another finding of interest is that people are aware about different e-services offered by different state governments and central governments but they are reluctant to use these services (Prasad, 2012; Sapru & Sapru, 2014). Therefore, it becomes imperative to ensure effective use of e-services by citizens for successful implementation of e-governance initiatives.

This study makes the point that capacity building is a noteworthy initiative that should be undertaken by the Indian government for improving efficiency of local government. It is proposed that appropriate infrastructure required for the training; collaborates with various national and international agencies to obtain financial support

and technical expertise; initiate workshops in consultation with the people and by giving due consideration to local issues of governance; and lays emphasis on interactive class room lectures, documentaries, and field visits for personal observation of the ground realities and the new initiatives carried out by the municipality (Kalra & Mishra, 2014).

The impact of capacity building initiatives will be judged from the feedback received from participants. The study has also thrown light on a number of problems, such as training program intended for local functionaries, lack of interest among some functionaries in attending programs, and shortage of basic infrastructure (Kalra & Mishra, 2014). At the same time, the central and State government should make extra efforts to identify and attend to the growing manpower, equipment, and financial needs of the local government. A visit to the office of the local municipality should be organized to equip and to handle the duties efficiently. So, it is concluded that the central and State government should put extra efforts to the growing needs of municipalities in order to have a greater impact of e-governance. Another finding suggested that either people are reluctant in using e-governance facilities or they are not having resources and skills to use these facilities. The reasons for this reluctance in using these facilities may be illiteracy, lack of awareness or lack of necessary IT skills. This finding is supported by the results of the study conducted by Yadav and Tiwari (2014). The shortage of staff and the computers need to be removed among the offices to implement the ICT applications and online based services to the public (Singh & Sahu, 2008). The centre and state governments could not achieve the desired goal of penetrating internet, ICT based e-services to the grass root level as indicated in the findings of the present study (Bhattacharya & Goswami, 2011; Upadhyay & Kumbharana, 2012).

Limitations of the Study and Scope for Further Research

No study is perfect in itself and always has certain limitations. The present study is a cross-sectional exploratory study in which data is collected at one time that may limit the accuracy of this research. In addition, the scales used to evaluate the current status of ICT and good governance was self developed and included the common facilities available. Different states have different models to implement ICT in governance; therefore, it would be desirable to develop a scale to measure ICT and good governance on the basis of facilities available in that specific state. So many ICT initiatives are being implemented by central and state governments to achieve good governance; therefore, such studies need repetition to gauge the actual scenario.

However, the limitations of the present study are opportunities for future research. A more comprehensive study on the basis of individual state's e-Governance model should be conducted to understand the real picture. The sample size of the present study is relatively small due to time factor and focused on capital of these states a study covering all the district headquarters may be conducted. In the present study the perspective of the public is considered in future study the perspective of politicians, NGOS, employees and officers who are dealing with the public may be considered.

References

- Bhattacharya, S. & Goswami, J. (2011). Study of E-Governance: The attractive way to reach the citizens. *International Journal of Computer Applications, Special Issue*, 29-33.
- Business Dictionary. (2016). *Capacity building*. Retrieved from <http://www.businessdictionary.com/definition/capacity-building.html#ixzz3yi9Vi4r3>

- CCEA. (2008). *Capacity building scheme. Cabinet Committee on Economic Affairs*. The Economics Times. Retrieved from <http://economictimes.indiatimes.com/topic/CCEA/6>.
- eGCF. (2014). *eGovernance competency framework*. New Delhi: National e-Governance Division.
- Heeks, R. (2001). *Understanding e-Governance for development* (Working Paper). iGovernment Working Paper Series, IDPM Working Papers. Retrieved from <http://unpan1.un.org/intradoc/groups/public/documents/NISPAcee/UNPAN015484.pdf>
- Kalra, B. S., & Mishra, A. K. (2014). Integrating social and business case approaches to implement watershed development projects in India. *Prabandhan: Indian Journal of Management*, 7(5), 47-52. DOI: 10.17010/pijom/2014/v7i5/59322
- Kaplan, A. (2000). Capacity building: Shifting the paradigms of practice. *Development in Practice*, 3-4 (10th Anniversary Issue): 517 - 526. DOI: 10.1080/09614520050116677
- Lal, B. (1999). *Information and communication technologies for improved governance*. African Development Forum ADF '99. Retrieved from <http://www.abtassociates.com/reports/ict.pdf>
- NeGP. (2006). *National e-Governance Plan*. Department of Information Technology, Ministry of Communication & Information Technology, Government of India. Retrieved from [https://negp.gov.in/templates/pdfs/Framework_for_Citizen_Engagement_in_NeGP_4_0\(1\).pdf](https://negp.gov.in/templates/pdfs/Framework_for_Citizen_Engagement_in_NeGP_4_0(1).pdf)
- Prasad, K. (2012). E-governance policy for modernizing government through digital democracy in India. *Journal of Information Policy*, 2, 183-203.
- Sapru, R. K., & Sapru, Y. (2014). Good governance through e-governance with special reference to India. *Indian Journal of Public Administration*, 60(2), 313-331.
- Singh, A. K., & Sahu, R. (2008) Integrating Internet, telephones, and call centres for delivering better quality e-governance to all citizens. *Government Information Quarterly*, 25(3), 477-490.
- UNDP. (2006). *Definition of basic concepts and terminologies in governance and public administration*. United Nations Committee of Experts on Public Administration. United Nations Economic and Social Council.
- Upadhyay, A., & Kumbharana, C. K. (2012). Perceptual study of behavioural implications of usage of ICT for sustainable e-Governance in rural India. *International Journal of Scientific and Research Publications*, 2(4), 1-5.
- Wikipedia (2016). *Definition of capacity building*. Retrieved from https://en.wikipedia.org/wiki/Capacity_building
- World Customs Organization. (2008). *The WCO Capacity Building Development Compendium*. Retrieved from <http://www.wcoomd.org/en/media/newsroom/2008/january/the-wco-capacity-building-development-compendium.aspx>
- Yadav, K., & Tiwari, S. (2014). E-Governance in India: Opportunities and challenges advance in electronic and electric engineering. *Research India Publications*, 4(6), 675-680.