

**Title of the Dissertation**

**Assessing the reach of government services through ICT  
in Indian Villages**

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**Assessing the reach of government services through ICT in Indian Villages**

## **Declaration**

I, Sonu Kumar, student of MBA 2013-15 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that my dissertation on 'Assessing the reach of government services through ICT in Indian Villages' submitted in partial fulfillment of Degree of Masters of Business Administration is the original work conducted by me. The information and data given in the report is authentic to the best of my knowledge. This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship

Name of the student: Sonu Kumar

Place: Delhi

Date:



## **Acknowledgement**

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I would also like to thank all the people who provided me with the facilities being required and conducive conditions for my MBA project.

## **Abstract**

In a time when Honourable Prime Minister of India has launched the Digital India campaign it becomes important to understand the current status of e-governance initiatives taken in rural India. Moreover in the recent time the huge surge in the mobile and internet usage gives an impression that now rural India is also not untouched with this mobile and internet revolution in the age of Information Technology.

The need to understand the ICT initiatives in rural India and its reach is more important considering the population of India which resides in the Indian hinterlands. Its huge and whopping 70% of entire Indian population. So from any angle this population cant be ignored. Every now and then companies, governments are vying for ways to reach this population.

Today ICT has become a hot cake. Hot cake for everyone be it government, private companies, NGOs etc. ICT stands for Information and Communication Technology. It has got into lime light because of its potential to influence a huge chunk of Indian population. The ICT technology itself is evolving regularly be its concepts, methods or application. The present strategy of rural development mainly focuses on poverty alleviation, better livelihood, provision of basic amenities and infrastructure facilities. Even after so many years after independence India have not been able to move to the stage of “developed nation”, the nation is still developing. Public administration, governed by bureaucratic structures built on rationale principles, that dominated the twentieth century, has failed to respond to the changing requirements of the present times. Application of Information and Communication technology is a timely shift taken by the Indian government in order to improve the service delivery to rural population. With the use of ICT, government renders services and information to the public using electronic means. In past government has been using ineffective means to reach to this rural population, now this means are termed as traditional means. With the rising awareness amongst the citizens and their better experiences with the private sector– the demand for better services on the part of government departments became more pronounced. The infusion of Information and Communication Technology (ICT) is playing a prominent role in strengthening such a demand. So in a time when country is talking of 'Sabka Saath and Sabka Vikas' combining Information and Communication Technology in the countryside development has huge potential to not only accelerate the development process but it can also help in bridging the digital gaps that exist between backward and forward sections of the society.

Many of e-governance projects have been launched by government and some of private players in conjugation with government to provide the ultimate users that is citizens of India best service experience. Best service experience with the minimum of cost, best of efficiency and effectiveness, less of intermediary brokers, increased transparency, enhanced reach and base, reduced corruption, simplified processes and reduced cycle time are at the core of ICT initiatives for the citizens.

This research majorly focuses on the reach and penetration of ICT in Rural India, the opportunities and the challenges that can come along.

**Keywords**

Digital Divide, ICT, e-Governance, Rural India, Information Technology



# Chapter 1

## Introduction

### 1.1 Introduction of the study

Saying goes like : Real India lives in its villages. India is a country of almost 6.5 lakhs small and big villages. Out of these villages almost 50% have very poor and pathetic socio-economic indicators. Actually as past as the written Indian history goes it can be observed that the conditions of Indian villages have deteriorated over time. Since India got independence government has been trying to emancipate the Indian village but the real achievement so far has been very little. Mostly this is because of the framework government follow for the policy formulation. Currently it is top to bottom. That is policies are formulated by those who have very little understanding of the culture of Indian villages and without understanding the culture and ethos of these villages you can not think of changing them but instead chances are that you can break the existing equilibrium for the worst and unnecessarily waste resources without any benefit. The five-year plans of the central government also largely aim at Rural Development. The Ministry of Rural Development in India is the apex body for formulating policies, regulations and acts pertaining to the development of the rural sector. Agriculture, handicrafts, fisheries, poultry, and diary are the primary contributors to the rural business and economy.

Rural Development which is concerned with economic growth and social justice, improvement in the living standard of the rural people by providing adequate and quality social services and minimum basic needs becomes essential. The present strategy of rural development mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programmes of wage and self-employment. ICT is the new tool for rural development. Information and Communication Technology, if used properly can be of great advantage for the development at grass root levels. At the same time challenge remains with the administration to capture the minds of the rural masses, mostly illiterate, to make them adapt the new technology which is completely alien to them. There are various Rural development schemes run by the government of India and also organizations are present to look after the implementations of these programmes.

Internet in the Indian hinterlands is slowly catching up. According to a report, rural India had 68 million claimed internet users and 46 million active users by the end of October 2013. The number of active internet users has seen 58% growth since June 2012. It further estimates that by December 2013, there were 72 million claimed Internet users and 49 million active Internet users in rural India. An

active internet user is one who has accessed internet at least once in the last one month. The number of computer literates in rural India by June 2013 has risen nearly two-fold to 125 million. As of June 2013, there were 59.6 million users in Rural India who have accessed internet at least once in their lives. Although country is witnessing a steady growth, the penetration of 6.7% among the total rural population is still very low considering the huge rural population of 889 million. By June 2014, claimed internet users in rural India were almost 85 million and active internet users 56 million. Like the trend across regions in India, rural India too has witnessed a surge in mobile internet usage. There are 21 million active mobile internet users in rural India in June 2013 – a huge 5.3 times growth in 2013 over 2012 and nearly 47 times over 2010. By October 2013, there were 25 million active mobile internet users and 27 million by December 2013. Mobile usage and hence, mobile internet usage has seen huge jump from the 2012 penetration levels. Compared to the 0.4% mobile internet users in 2012, the penetration has grown to 2.4%, indicating a substantial growth in the mobile internet user penetration levels. Nearly 42% of the internet users prefer to access Internet only in Local languages. With more content becoming available in the local languages, more users will start using the internet. Majority of the rural internet population is not comfortable in accessing Internet in English and this is holding them back from using internet fully for other purposes than online entertainment. According to a report, only 9% of the active internet users transact online. With a very low awareness level, online transaction is still in its infancy and there is a pressing need to educate and inform the user of the benefits of the internet services to drive the growth of internet usage.

When the current surge in the internet usage and mobile penetration are integrated with the government policies there is huge opportunity to transform the Indian villages to its true potential. In doing so government has launched and undertaken many activities. Some of them are as below: Supply of consumer produce & services, Knowledge & info useful for economic activities, Entertainment & info for social needs, Delivery of health & educational services, Education, training to enhance employment & economic opportunity, Access to Markets, Development info projects, programs, schemes & feedback, Procurement of Produce, Issue of Certificates and Licenses. In order to gauge the condition of rural India and to make policy inputs and to take actions India has several institutions. Some of them are as below:

*Department of Rural Development in India:* This department provides services such as training and research facilities, human resource development, functional assistance to the DRDA, oversees the execution of projects and schemes.

*Haryana State Cooperative Apex Bank Limited:* The main purpose of the Haryana State Cooperative Apex Bank Limited is to financially assist the artisans in the rural areas, farmers and agrarian unskilled labour, small and big rural entrepreneurs of Haryana.

*National Bank for Agriculture and Rural Development:* The main purpose of the National Bank for Agriculture and Rural Development is to provide credit for the development of handicrafts, agriculture, small scaled industries, village industries, rural crafts, cottage industries, and other related economic operations in the rural sector.

*Sindhanur Urban Souharda Co-operative Bank:* The main purpose of the Sindhanur Urban Souharda Co-operative Bank is to provide financial support to the rural sector.

*Rural Business Hubs (RBH):* RBH was set up with the purpose of developing agriculture. The Rural Business Hubs Core Groups helps in the smooth functioning of the Rural Business Hubs.

*Council for Advancement of People's Action and Rural Technology (CAPART):* The main purpose of this organization is to promote and organize the joint venture, which is emerging between the Government of India and the voluntary organizations pertaining to the development of the rural sector.

ICT has been evolving continuously and the recent development has really opened news landscape of opportunities for development in every conceivable area. Today be it rural India or urban, it is not possible to imagine a single aspect of life which is entirely untouched by the ICT. ICT has broken all bounds of cost, distance and time acting as an enabler. Business process re-engineering has been utilizing the ICT to make great advantages. In the age of internet, additional inputs of computing and mobile communications has really converted the world into a digital village.

One of the major components and driving force of rural development is communication. Conventionally, communication includes electronic media, human communication & now information technology (IT). All forms of communications have dominated the development scene in which its persuasive role has been most dominant within the democratic political frame work of the country. Persuasive communication for rural development has been given highest priority for bringing about

desirable social and behavioural change among the most vulnerable rural poor and women. Initially, the approach lacked gender sensitivity and empathy of the communicators and development agents who came from urban elite homes. Added to these constraints is political will that still influences the pace and progress of rural development. Technological changes further compounded the direction of rural development as information and communication technology (ICT) has been thought by communication and development workers as a panacea for other ills that obstructs the development process. It has led to indiscriminate applications and use of ICT in every aspect of information dissemination, management & governance of development. While there are few shining examples of achievements of ICT in development, there are a large number of failures and unauthenticated claims.

The last decade of twentieth century was the opening of historic information and communication technology interventions for development. This period has witnessed enormous and unprecedented changes in every aspect of communications technologies policies, infrastructure development and services. The ICT boom in India has already started changing the lives of Indian masses. The role of ICT in Rural Development must be viewed in this changing scenario.

Since the dawn of independence, concerted efforts have been made to ameliorate the living standard of rural masses. So, rural development is an integrated concept of growth, and poverty elimination has been of paramount concern in all the five year plans. Rural Development (RD) programmes comprise of following: Provision of basic infrastructure facilities in the rural areas e.g. schools, health facilities, roads, drinking water, electrification etc. Improving agricultural productivity in the rural areas. Provision of social services like health and education for socio-economic development. Implementing schemes for the promotion of rural industry increasing agriculture productivity, providing rural employment etc. Assistance to individual families and Self Help Groups (SHG) living below poverty line by providing productive resources through credit and subsidy.

Communication has been seen by a large number of development planners as a panacea for solving major social evils and problems. Apart from development, the introduction of communication in the educational process for open and distance learning is seen as step towards improving the quality of education and bridging the social and educational gap. ICT can be used towards betterment of education, agriculture, social awareness and health and hygiene.

## **1.2 Research Objectives**

The primary objectives of this research are as below:

1. To understand the penetration of government services through the Information and Communication Technology (ICT) facilities like Common Service Centres, Panchayat Bhawans, Village kiosks etc.
2. To understand the efficiency and effectiveness of service delivery through ICT and CSC.
3. To understand infrastructural challenges and hurdles which are hindering the uninterrupted and effective and efficient delivery the government services.
4. To understand the psychological and soft barriers to uninterrupted and effective and efficient delivery the government services.
5. To understand the issues with sustainability of the initiatives.

## **Chapter 2**

### **Literature Review**

A number of studies have examined the reach, impact and penetration of ICT in rural India. An existing summary and assessment of Common Service Centres or any such entity which is involved in dissemination of government services has been conducted by Kuriyan and Toyama (2007). The existence of such centres has been almost for more than a decade now. So there has been researches about the impact, sustainability, reach etc. The results of such research has not been very surprising considering the ground realities which are existing in the villages. It has been noted that majority of ICT projects have failed. Some of them have succeed partially in achieving their stated objective (Heeks, 2003). Investigators have proposed a number of theoretical frameworks for understanding the impact, penetration and reasons for success or failure of such projects, including the critical success factor (CSF) and critical failure factor (CFF) models (Heeks & Bhatnagar,1999); the “design-actuality” (Heeks, 2002) or “design-reality” gaps (Heeks, 2003); scenario analysis for long-term sustainability problems (Aichholzer,2004); economic and financial sustainability models (Best & Maclay, 2002); and political and institutional models that underline the lack of commitment on the part of political leaders and public managers (Bhatnagar, 2000). In a previous work (Kumar & Best, 2006a) have presented a sustainability failure model built upon the work of Heeks and Bhatnagar to help explain why projects that succeed initially can still fail. While researchers have proposed a number of theoretical frameworks to help understand the reasons for the failure of such projects, there are relatively few empirical case studies that examine the recent impact of ICT and e-governance. The few examples that do exist include a study of the Gyandoot rural e-government project in India, which found that although service satisfaction was high, usage over time was low, and the poorest people were not using the services (Cecchini & Raina, 2003). It was also observed that lack of regularly updated content and interactivity could also led to the failure of a e-government despite its initial success (Benjamin, 2001). Heeks (2002) has offered brief overviews of several more cases of total or partial failure of ICT initiatives in developing countries. In SARI project (Kumar & Best, 2006) have studied a subset of facilities and have shown that, in their communities, 5% of the population had been telekiosk users (a significant increase in usage compared to villages without a facility). This community described a predictable diffusion of use pattern. In particular, diffusion was biased along lines of gender (more males than females), age (users are usually younger than 30), caste (scheduled caste members are less likely to use the facilities save in those villages where the facility is located in a scheduled caste area), religion (Muslims and Christians are under-represented as users in some villages), educational

attainment (with few illiterate users), and income (users are richer as measured by standard surrogate indicators). In another study, diffusion of use (or lack thereof) among females (Best & Maier, 2007) was discussed. Through ICT facilities, village members were able to access various citizen services, such as birth and death certifications, old age pension services, public grievances, and more. A research demonstrated that the presence of these services over the Internet served to increase access to these important government programs and that this access was particularly pro-poor.

## Chapter 3

### Research Methodology

#### 3.1 Sampling and data collection

The study will be conducted on select villages. The pattern of usage of ICT in availing government services will be captured through a questionnaire. The data will be collected through face to face interview. This is essential because of the high illiteracy rate among the rural India. The data will be collected by personnel who could speak local dialect. Participation in this study is voluntary and anonymous in case response giver asks for that. The field study will be mainly conducted in the some villages of Delhi. In total 5 villages will be covered. Villages will be chosen such that the ICT facilities and CSC are not overlapping with each other. From each village data will be collected from almost 20 respondents.

The initial selection of villages is based on purposive sampling. That is mainly because of constraints of travelling, time and money. So ten villages are selected in the nearby area of Delhi Technological University area. ICT and CSC facilities of these villages will be considered in selecting the ten villages. All villages need to have separate ICT and CSC facilities. Due care was taken so that this study is conducted with a diverse sample. After that these ten villages were numbered one to ten. This study used online random number generator and then five randomly generated number were taken to select the five village for this study.

#### 3.2 Measures

Data is collected through a questionnaire which consists of 26 questions including the demographic details. Very simple measure of analysis(average, percentage distribution) was undertaken. Mostly all the variables were analyzed independently. In order to verify the propositions apart from the empirical evidence other indirect variables were discussed. These variables were based on the available literature and expert views. No unique measures were employed in analyzing the available data.

While exploring objectives of this study following propositions are verified:

*P1: Nearby ICT facilities increases the chance of accessibility to the government services.*

*P2: Higher income increases the chance of accessibility to the government services.*

*P3: Gender has no implication on accessibility to the government services.*

*P4: The income level of citizens has no implication on accessibility to the government services.*

*P5: Nature of occupation has no implication on accessibility to the government services.*

*P6: Education level has no implication on accessibility to the government services.*



### **3.3 Implication of this Study**

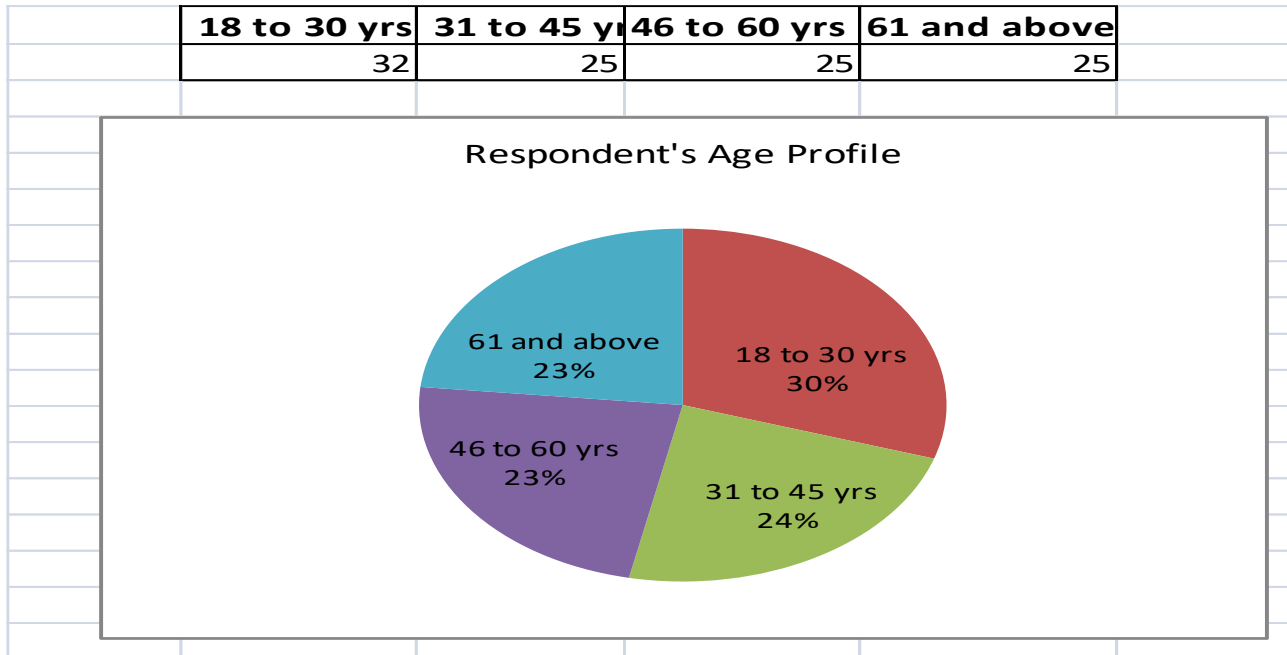
Today very often government has been rolling out many service for the benefit of rural and semi urban areas. And important thing is most of these services and facilities are being rolled out through the digital media. Now these ICT and CSC centres become very vital to avail the services. So it is really important for policy makers to know what is the actual efficiency and effectiveness of the services government is rolling out. Moreover today district and state administration are looking for studies which has been conducted in these far flung areas and which are showing the true picture of ground realities. Apart from that now private players are also mooting to avail some of their services through ICT and CSC centres. So this study will also help all the above mentioned stakeholders to decide that should they really be dependent on this delivery mechanism or not. So there could be many stakeholders of this study and this study could help them in making more informed policy and business decisions.

## Chapter 4

### Data Analysis

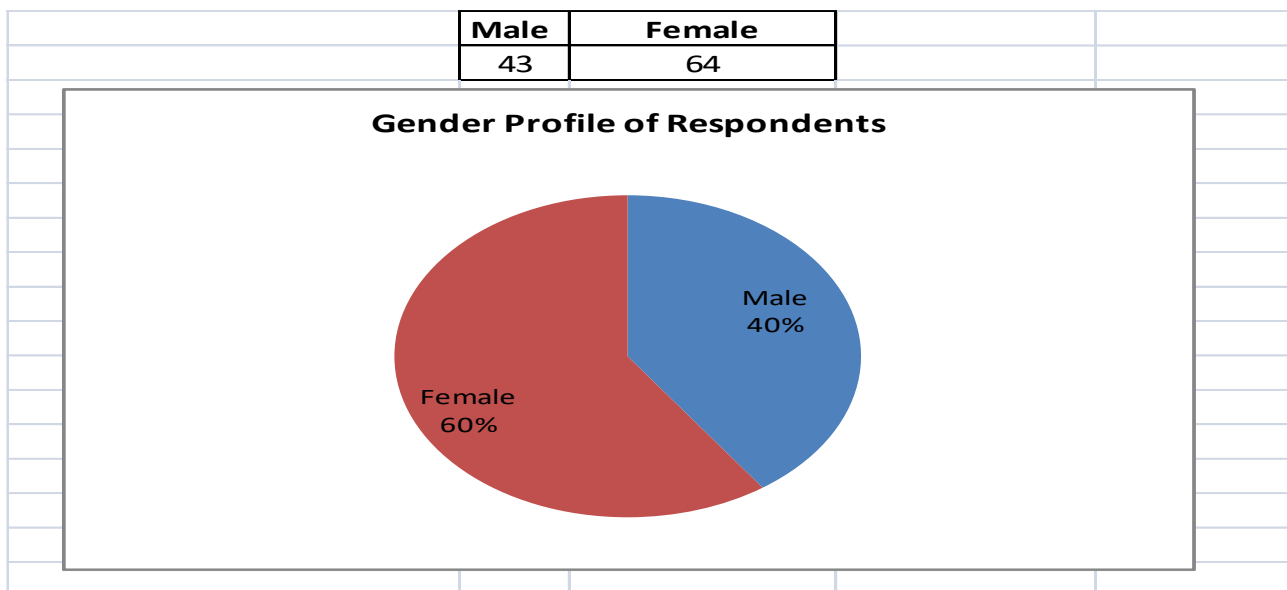
#### 4.1 Analysis of the demographic profile of the respondents

##### 4.1.1 Analysis of Respondent's Age



From the above data it is clear that the data which we have collected is representative of almost all age group. This will help us in getting more realistic picture of ICT usage.

##### 4.1.2 Analysis of respondent's gender

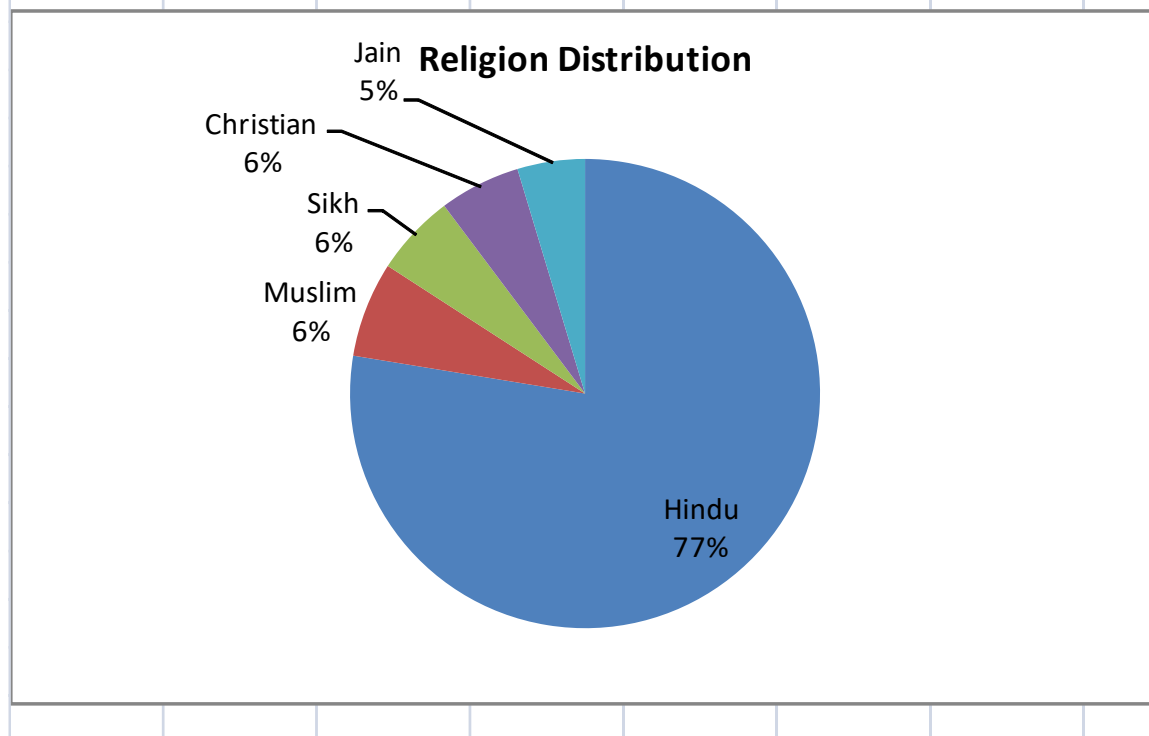


We tried to make the participation of male and female as equal as possible. But as we visited the different localities in day time so we found that many men are out on their work. But women were

mostly present in their home. So here we have slightly more representation from the females. But nonetheless difference is very small and it should have negligible impact on our analysis.

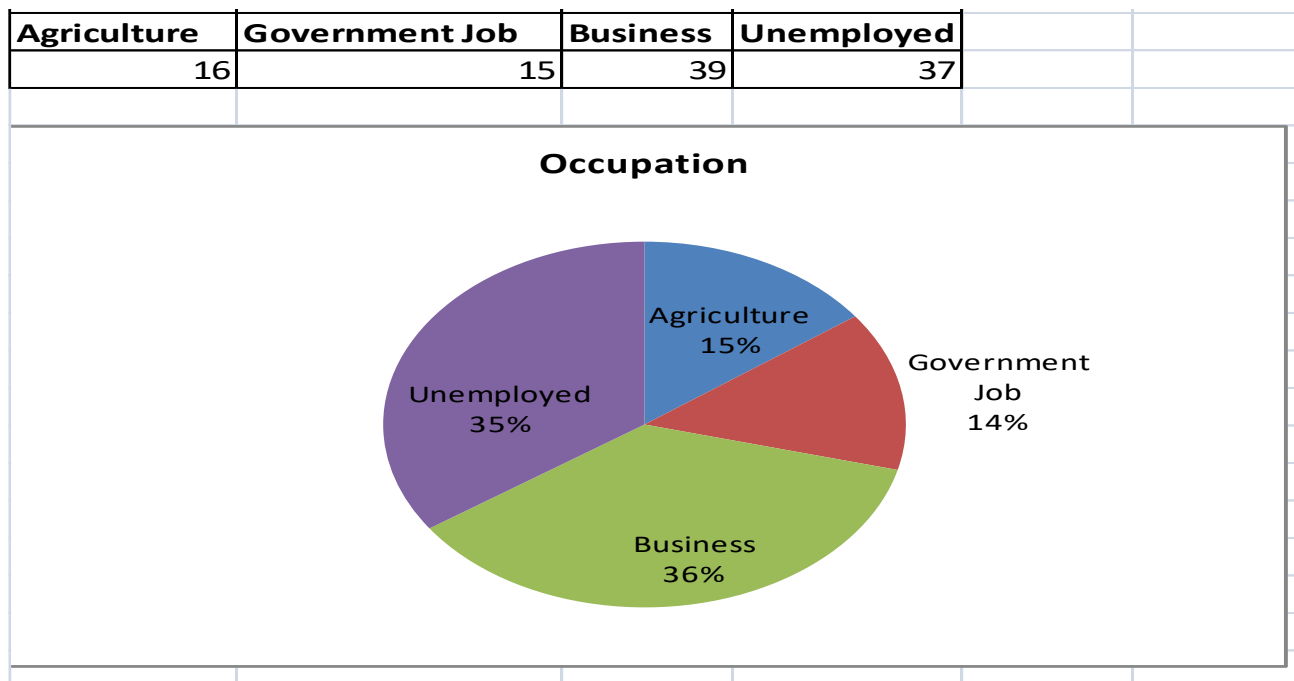
### 4.1.3 Analysis of respondent's religion

Hindu	Muslim	Sikh	Christian	Jain
83	7	6	6	5



As obvious from the general population distribution in India majority of respondents were from Hindu religion. Because of this fact it would have been inappropriate to draw any inference on the basis of religion.

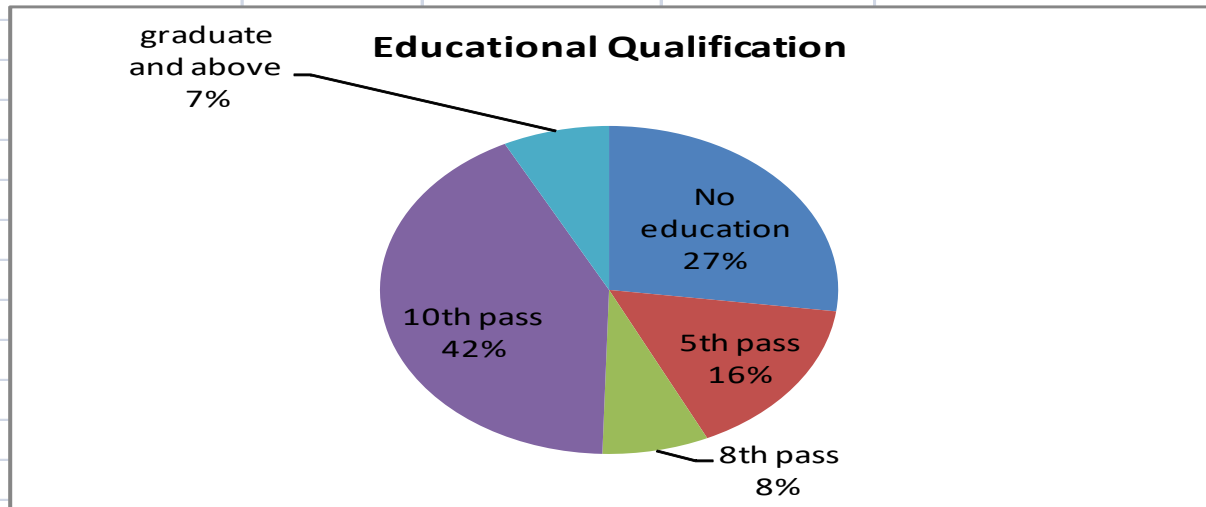
#### 4.1.4 Analysis of respondent's occupation



As per the data collected majority of people are either unemployed or in some kind of small businesses. Businesses mostly includes small kirana shops or small street vendors or vegetable shops etc. In Delhi agriculture land is very limited and so very few representation came from the families who are in agriculture.

#### 4.1.5 Analysis of respondent's educational qualification

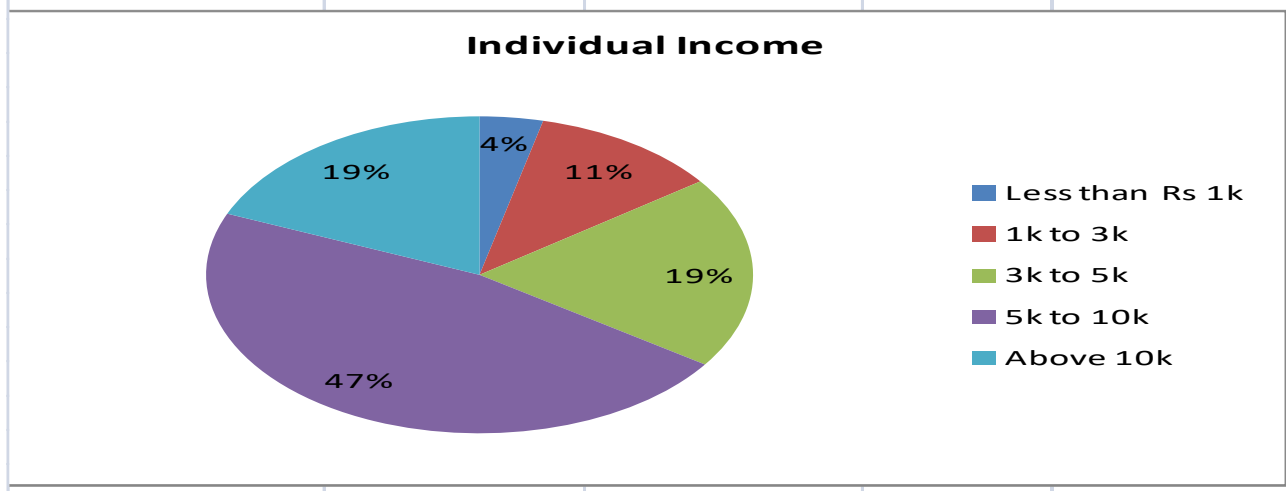
No education	5th pass	8th pass	10th pass	graduate and above
29	17	8	45	8



It is clear from the above plotted graph that majority of the people are 10th pass. If we consider any one who can read and write as literate then almost 70% of our collected sample are literate. This is pretty consistent with the overall literacy rate of Delhi which is near about 70% as per various government estimates.

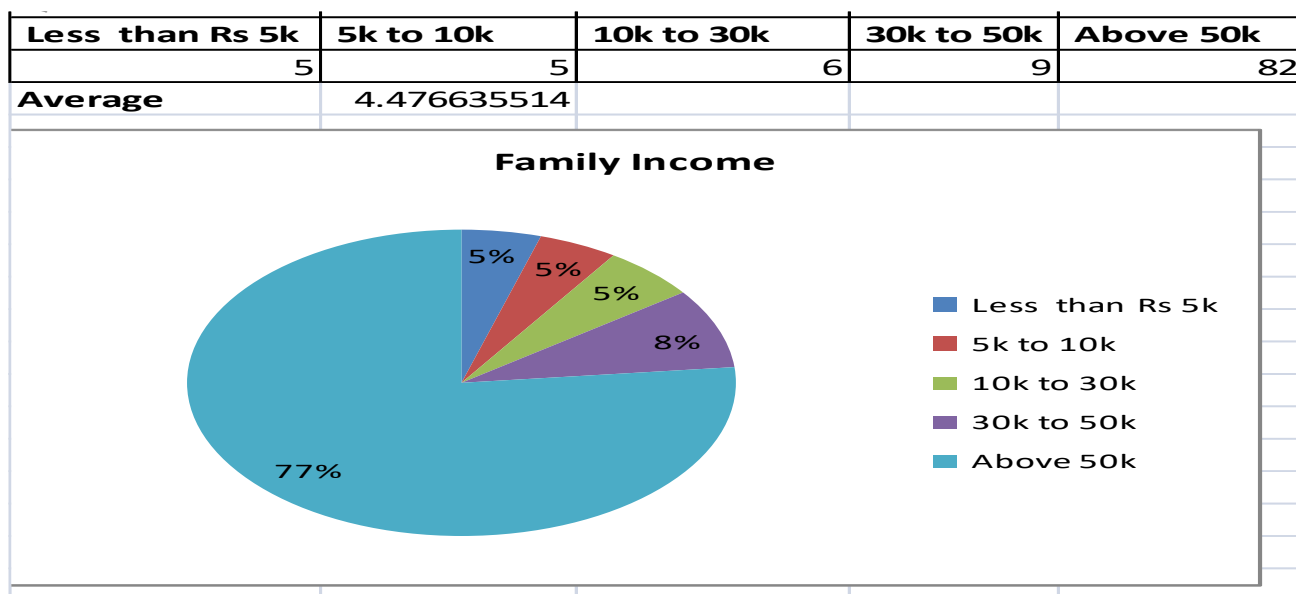
#### 4.1.6 Analysis of respondent's individual income

Less than Rs 1k	1k to 3k	3k to 5k	5k to 10k	Above 10k
4	12	21	50	20
<b>Average</b>		3.654205607		



As clear from the above pie chart almost 70% respondents were earning more than Rs 5000 per month. Nonetheless there was representation from almost all the income group. Now from one of the previous questions we came to know that there is good chunk of population which is unemployed and hence there should have a chunk in this pie also which earns almost negligible. But here we see that chunk to be very small. This fallacy may be explained from the fact that there is ambiguity related with the definition of unemployment. Many people are inclined to term themselves as unemployed if they are earning relatively less amount. Many don't see agriculture as employment. As while collecting the data this much in depth discussion was not held with the respondents and hence the above fallacy might have arisen.

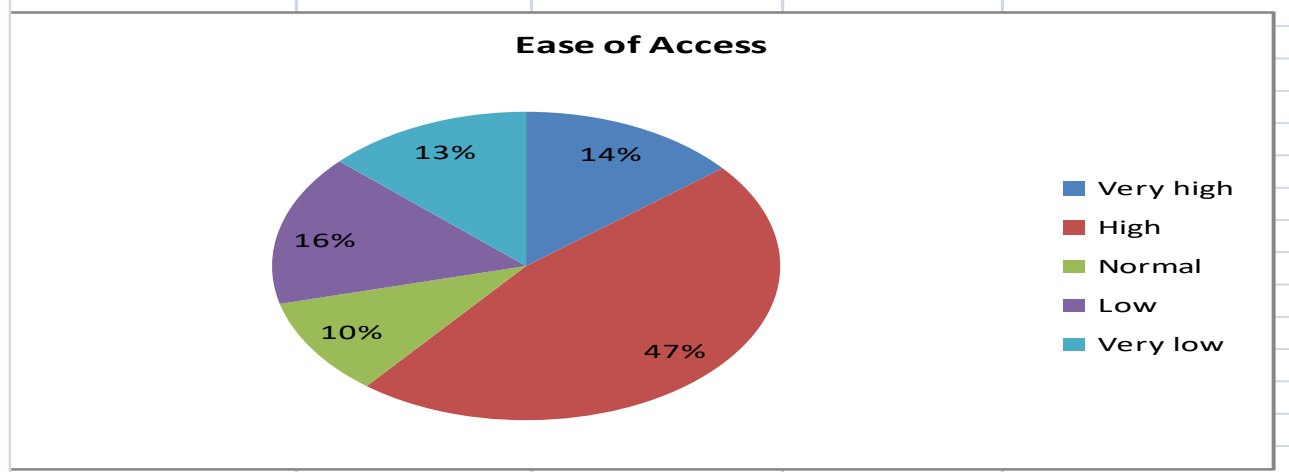
#### 4.1.7 Analysis of respondent's family income



## 4.2 Analysis of access of government services through ICT facilities

### 4.2.1 analysis of ease of access

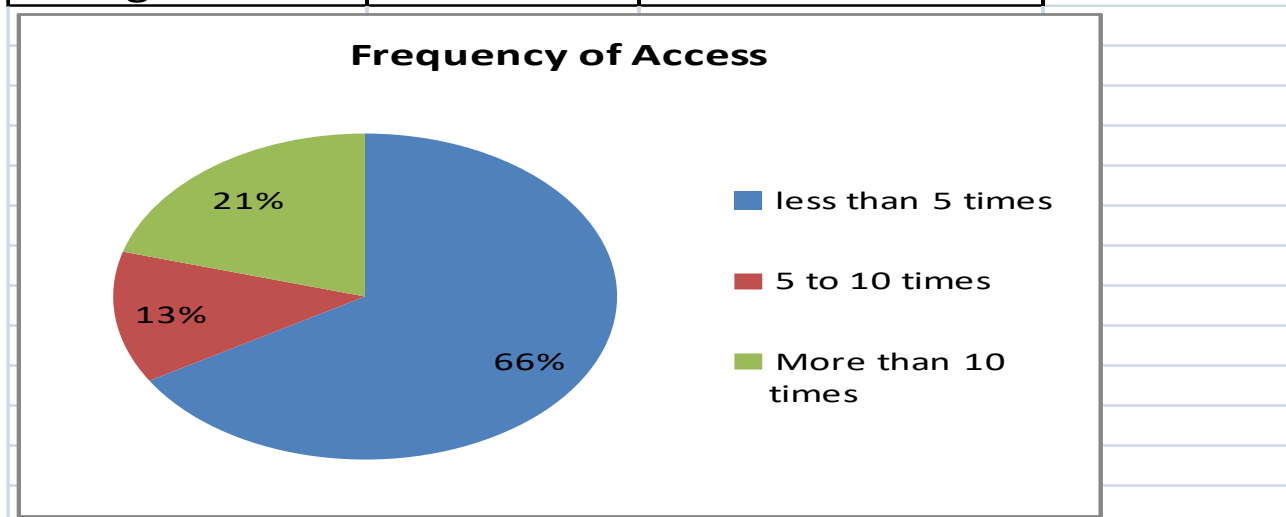
Very high	High	Normal	Low	Very low
15	50	11	17	14
<b>Average</b>	2.672897196			



As clear from the pie chart almost 70% of respondents are saying that they are able to access the ICT service easily. Now ease of access will be dependent of multiple factors. One of that is distance. Higher the distance lesser the ease. In the question number eleven we saw that almost 80% of respondents were from lesser distance and hence they are finding it convenient to access the ICT facilities.

### 4.2.2 Analysis of frequency of access

less than 5 times	5 to 10 times	More than 10 times
71	14	22
<b>Average</b>	1.542056075	

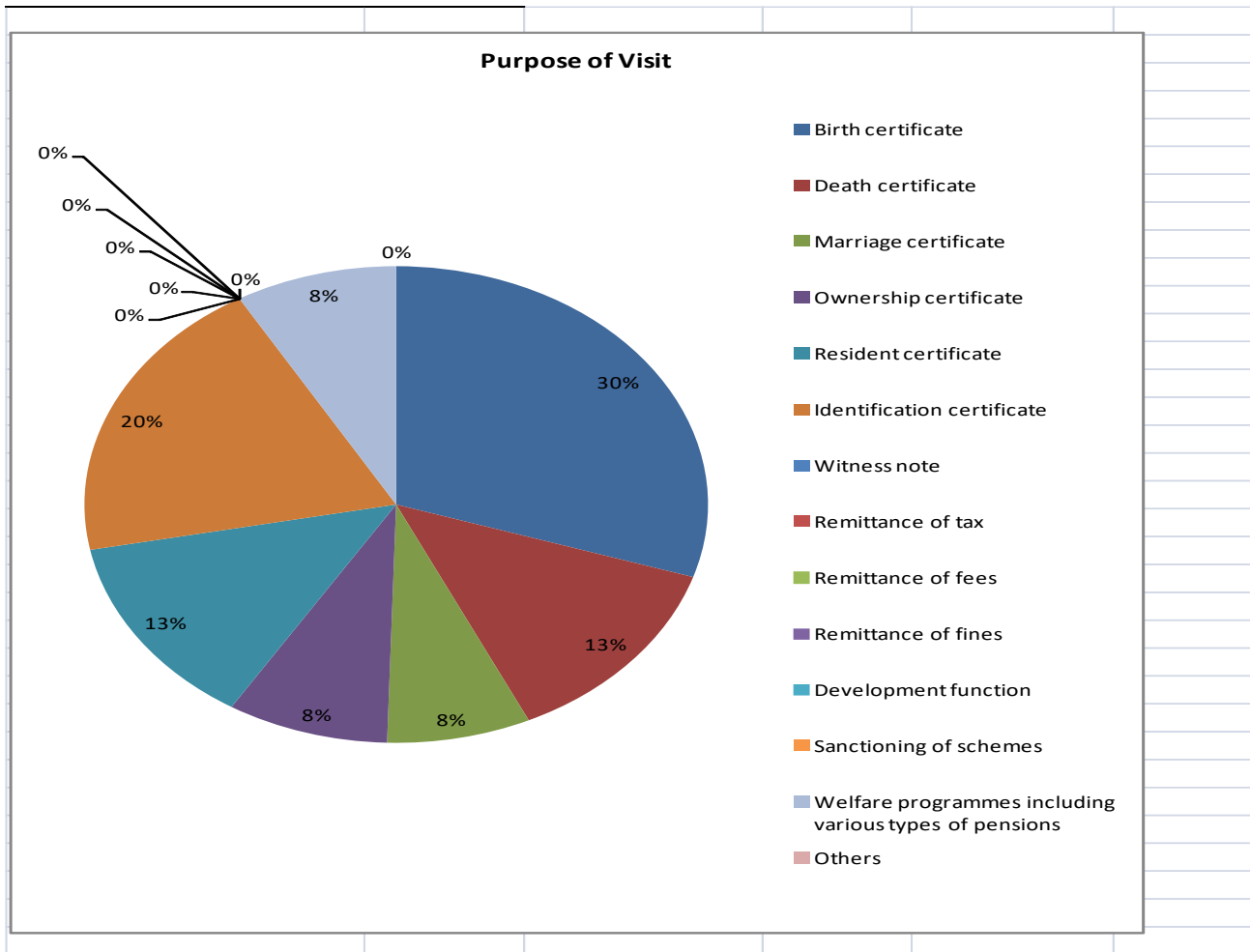


So it is clear that frequency of access is very low for majority of respondents. Now this frequency of access is a constituent parameter to decide the penetration of government services through the ICT facilities. Lower frequency points towards a scope of considerable improvement.

#### 4.2.3 Analysis of the purpose of access

Birth certificate	32
Death certificate	14
Marriage certificate	8
Ownership certificate	9
Resident certificate	14
Identification certificate	21
Witness note	0
Remittance of tax	0
Remittance of fees	0
Remittance of fines	0
Development function	0
Sanctioning of schemes	0
Welfare programmes including various types of pensions	9
Others	0



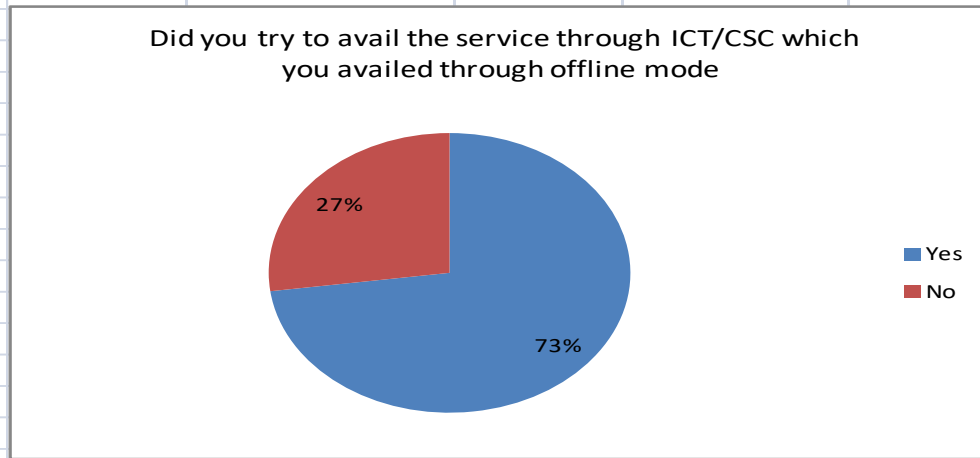


From the above table and pie chart it is very clear that respondents are yet to use ICT facilities for monetary transactions. Majority has been going for birth certificate, death certificate or identification card. For tax payment and remittances no one is using it. This could be explained from the fact that people from villages and less developed areas are yet to trust technology for money related transactions. Moreover we saw in one of the earlier question on the education level of the respondents majority of them were just 10th pass. Also as per the government estimation itself even though they have got certificates of 10th pass their actual education standard is very bad.

#### 4.2.4 Analysis of the mode of access (online/offline)

Did you try to avail the service through ICT/CSC which you availed through offline mode

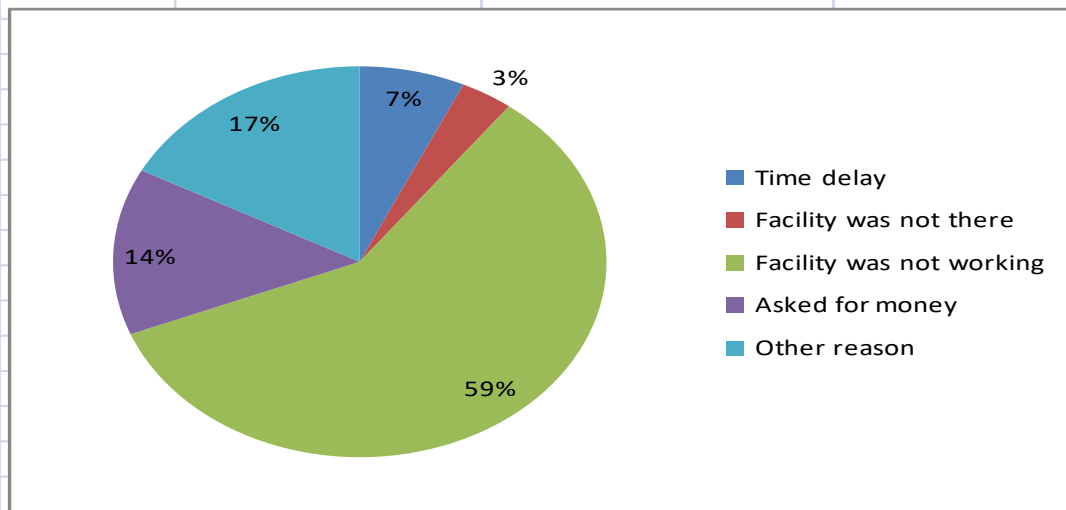
Yes	No
78	29



This pie chart is silver lining in the whole affair. As we see a whopping 73% of respondents did try to avail the services through online mode. Now we need to understand why that 27% of population did not try it through the online mode. Now when we see the pie chart of question number sixteen which investigates the population which did not try through online mode, we see that almost 60% respondents did try to avail it through online mode but as the facility was not working and hence they went to offline mode. This is very encouraging on part. It means that if the infrastructural constraints could be won over then almost entire population will be availing services through the online mode. Moreover we see that some respondents moved to offline mode because they were asked for money. This is an issue of corruption must be dealt with strong hand. As the development of digitization and ICT in rural India is in nascent stage, anything of this sort could badly undermine its development. So government and citizens must try to control this menace as soon as possible.

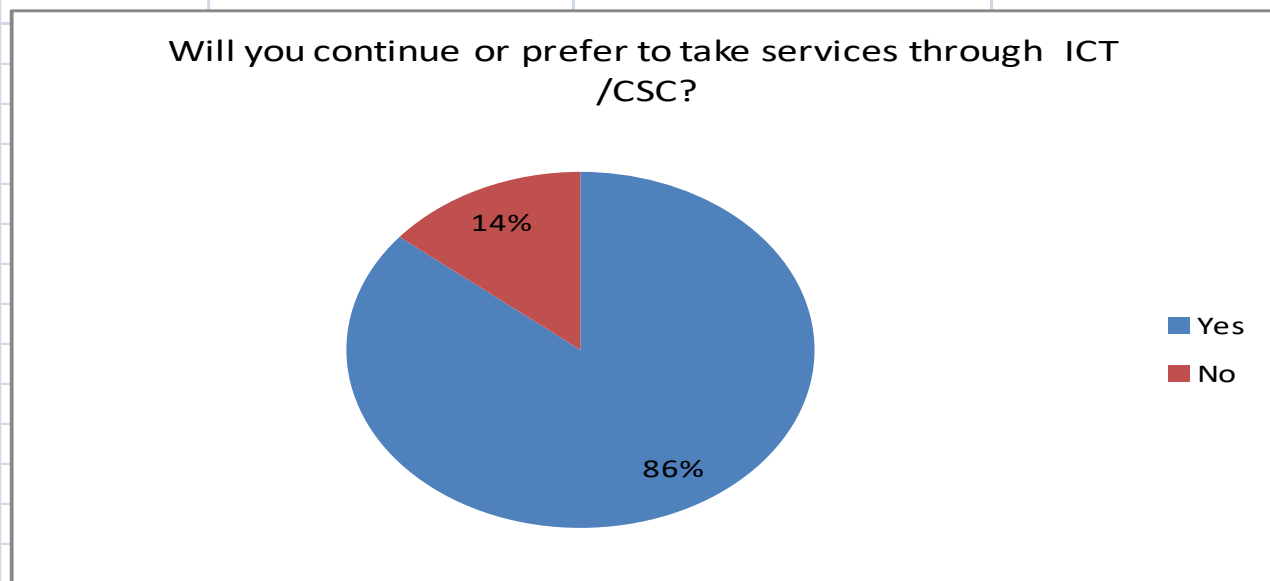
#### 4.2.5 Analysis of the reason for the offline mode of access

If 'No' then what made you to avail it through offline mode				
Time delay	Facility was not there	Facility was not working	Asked for money	Other reason
2	1	17	4	5



#### 4.2.6 Analysis of intention of repeat access of ICT facilities

Will you continue or prefer to take services through ICT /CSC?	
Yes	No
92	15



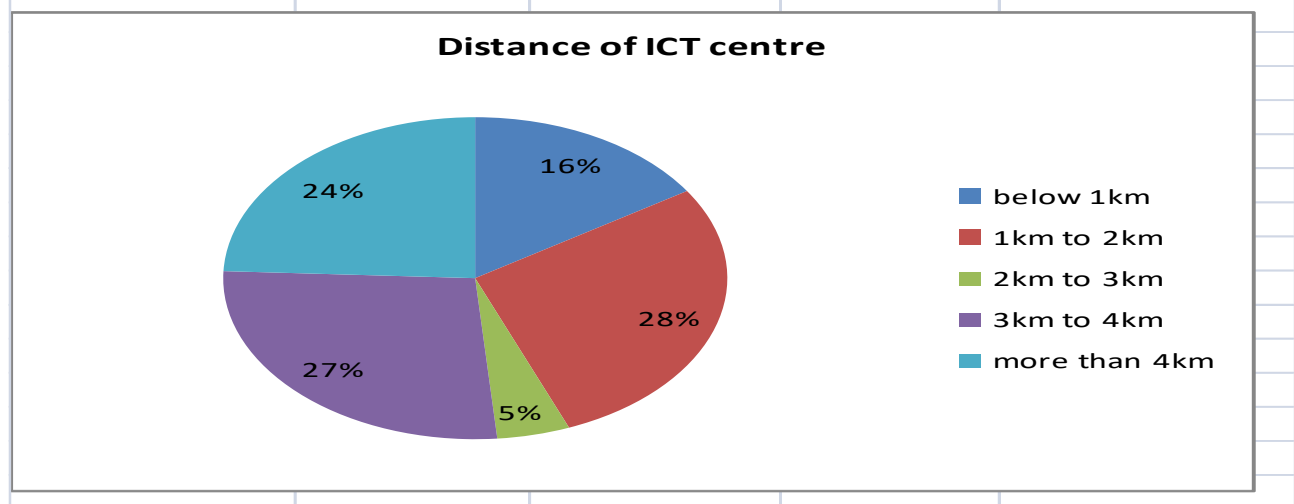
Here also the answer is an overwhelming yes. It means that people are actually willing to take the facilities from the online route. Only thing is that because of some infrastructural issues and corruption the development might be undermined.

Now if we see the questions from thirteen to seventeen we see that all these questions will make a constituent of the reach of government services through ICT. So when we club the results from all these questions we can understand that reach is yet to taken to significant level and if it has to be done then we must take care of infrastructural issues, we must contain corruption and we must encourage the people to go for monetary transaction through these kiosks.

### 4.3 Analysis of Infrastructural challenges

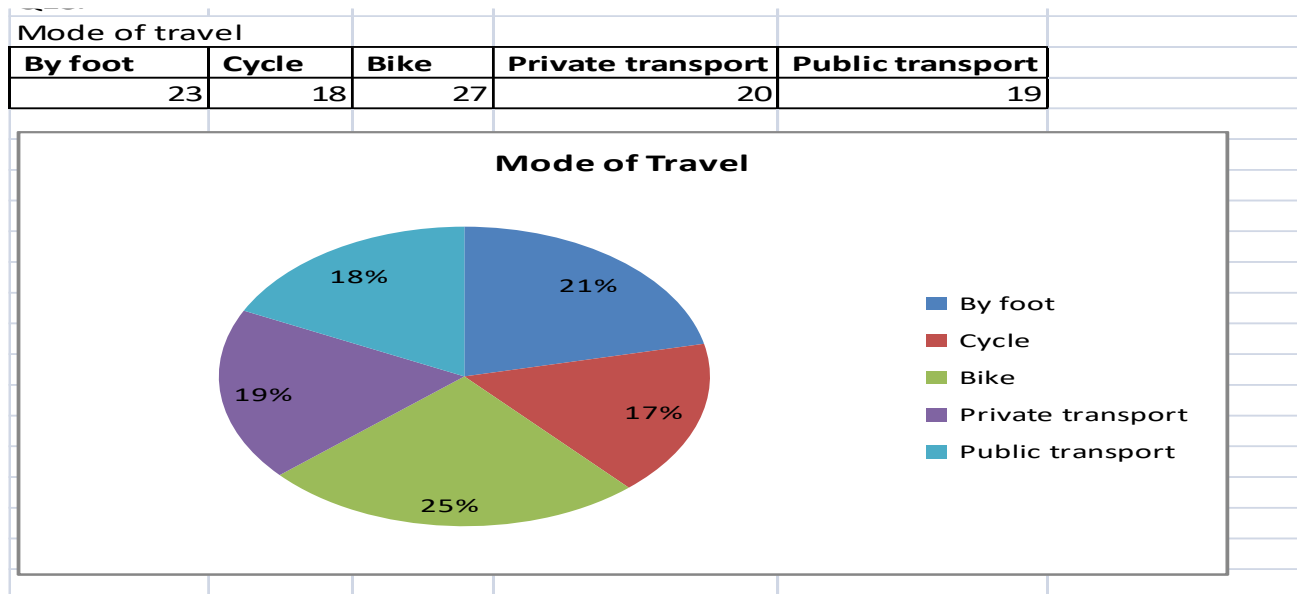
#### 4.3.1. Analysis of the distance of nearest ICT facilities

below 1km	1km to 2km	2km to 3km	3km to 4km	more than 4km
17	30	5	29	26
<b>Average</b>	3.158878505			



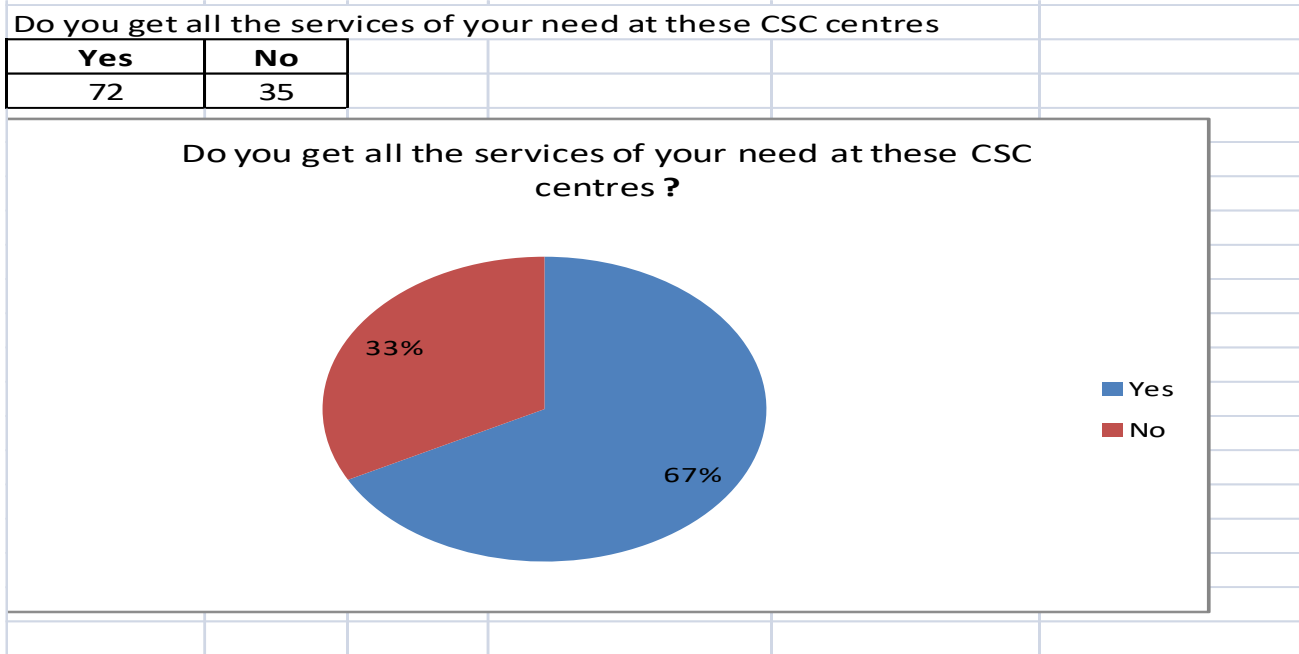
As clear from the pie chart respondents were from all distance range. Now the distance of ICT centre should be a factor in availing government services. So this variable will be tested against the variable measuring the respondent's ease of access to the government services through ICT.

### 4.3.2. Analysis of the mode of travel for the nearest ICT facilities



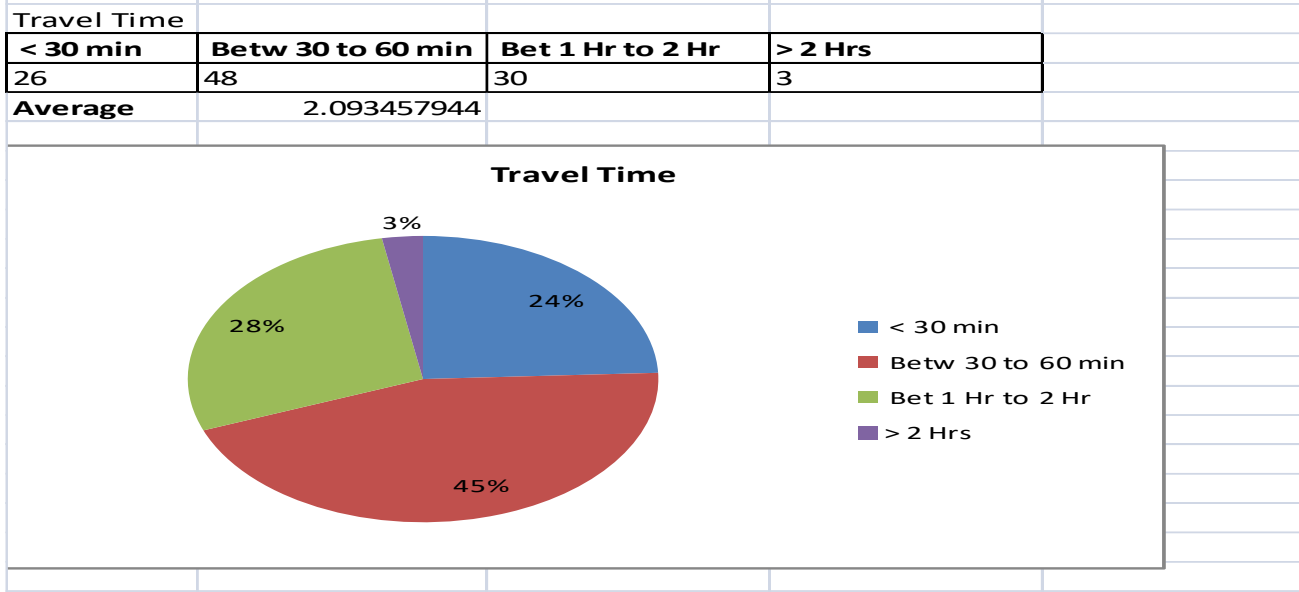
As the case with Delhi, here almost all forms of transportation are well developed and hence respondents are almost evenly distributed through all the modes of transportation. Only discouraging figure in this is that almost 21% people are going by foot. But as we saw in question number eleven that there is a population which lies very close to the ICT facilities and hence they prefer to go by foot. So this is not an issue. So in terms of transportation the citizens are not having any problem and hence this part will not contribute much to the infrastructural challenges being faced by government in providing services to the citizens.

### 4.3.3. Analysis of the availability of different required services in the nearest ICT facility.



Now this could be a major challenge. Here we see that 33% population is saying that they don't get what they need. Now this is a real challenge. Before availing different services through ICT facilities we need to understand the real needs of citizens and then we should try to formulate the offerings.

**4.3.4. Analysis of the time taken to reach the nearest ICT facility.**

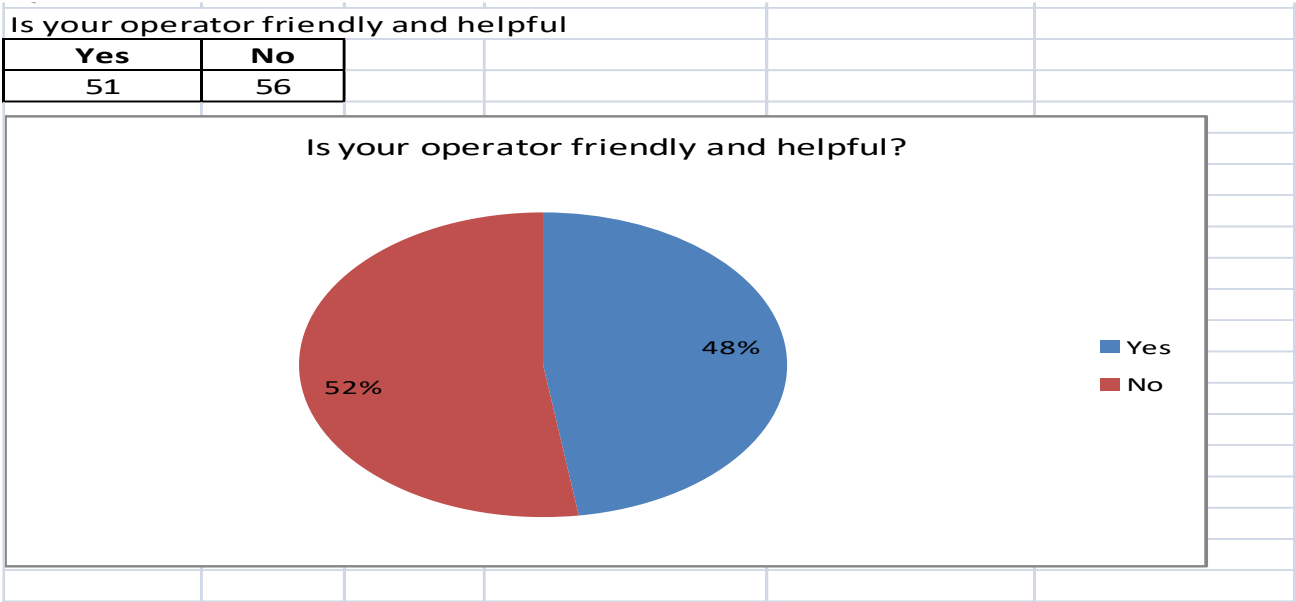


As our respondents were almost evenly distributed in the various location we see that time taken by them to reach ICT centres are also spread in all the four time zones. But still almost 30% population are taking more than 1hr to reach ICT centres. This is sign of stress. In a city like Delhi just to reach ICT centres citizens are spending more than one hour. It means that the concentration of ICT centres

are really poor. For a situation where majority of people are working in their shops and daily wages basis this much time could undermine their earning and hence government must focus to improve this .

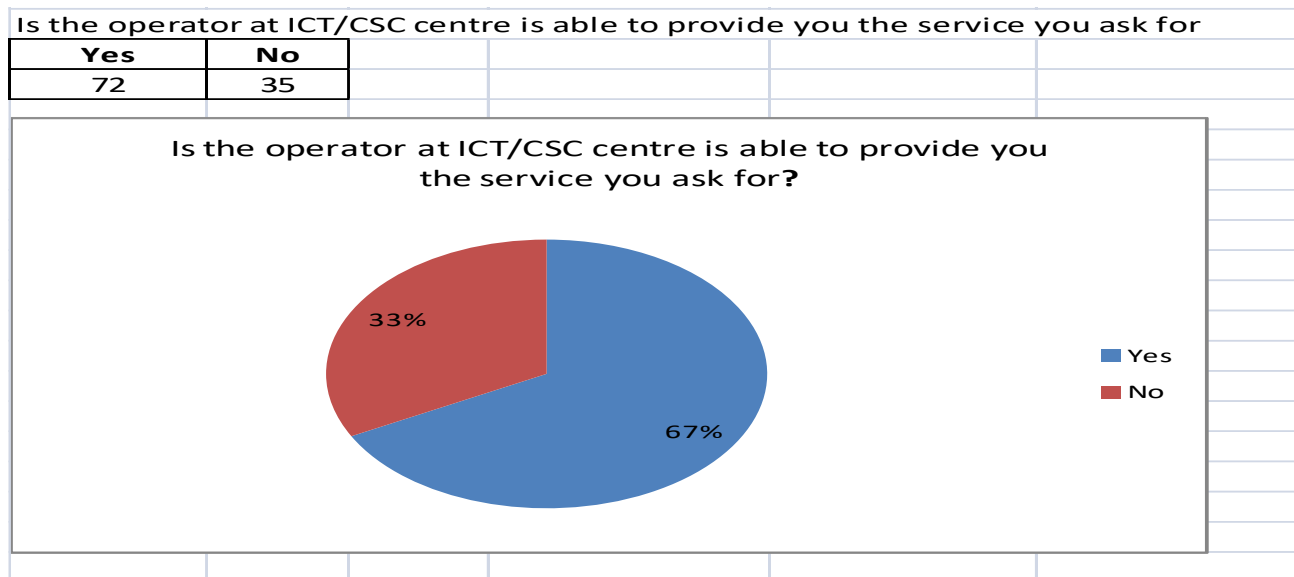
### 4.4 Study of the skills of operator

#### 4.4.1. Analysis of the helpfulness and friendliness of the operator.



This is something in which the personal behaviour of the respondents was also of importance. Moreover how is your relationship with the operator that also decides it. There are other subtle factors deciding upon how an operator is reacting actually. His own personal situation, in what state of mind he is and other things will also decide how the operator is reacting to someone. But as a service provider an operator must be trained to get rid of all his personal issues and being impartial to everyone. He must be capable of putting all his egos and issues aside and should provide the service with humility. So before making someone as the operator of ICT centre government must seek help of a good training institute which could improve the soft skills of the operator.

#### 4.4.2. Analysis of the knowledge of the operator about various services.

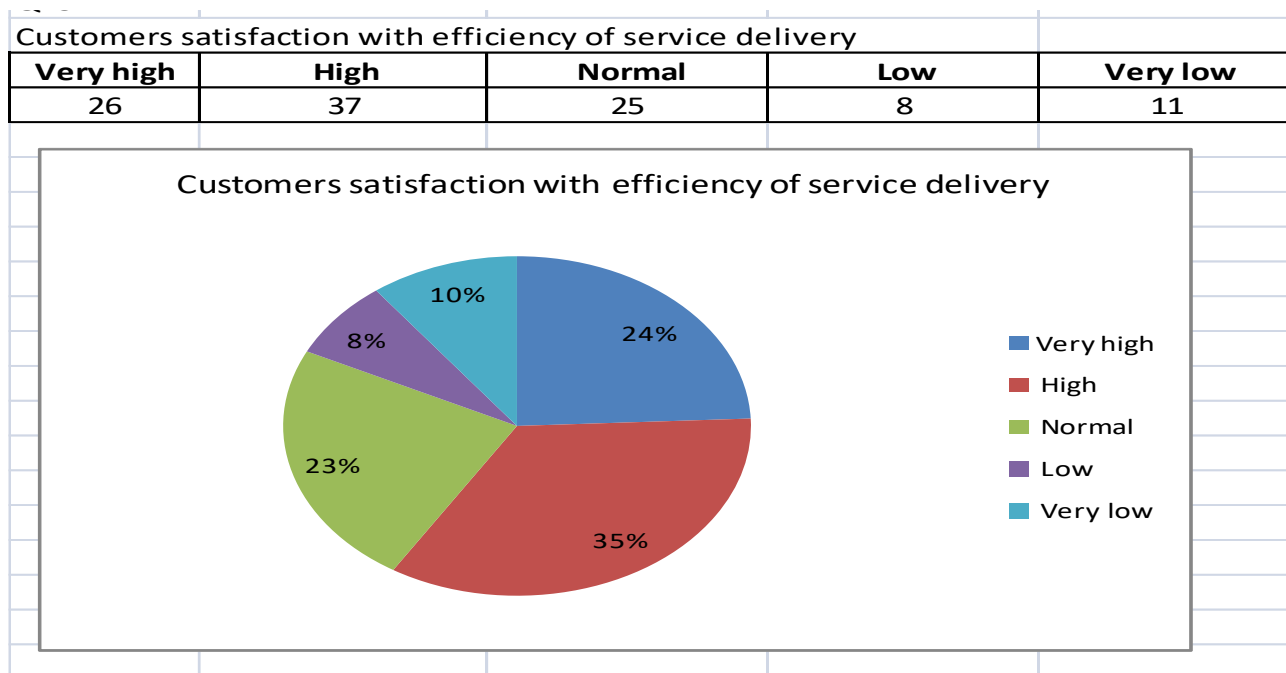


Here again a good 33% population is saying that operators are not able to provide the citizens the asked services. This also has to do with the computer operating skills of the operator. If the operator is not knowing the basics of computer then even because of small issues he might panic and he can stop providing the services. So he must be trained in the basics of computers and what to do in case some issues are cropping in.

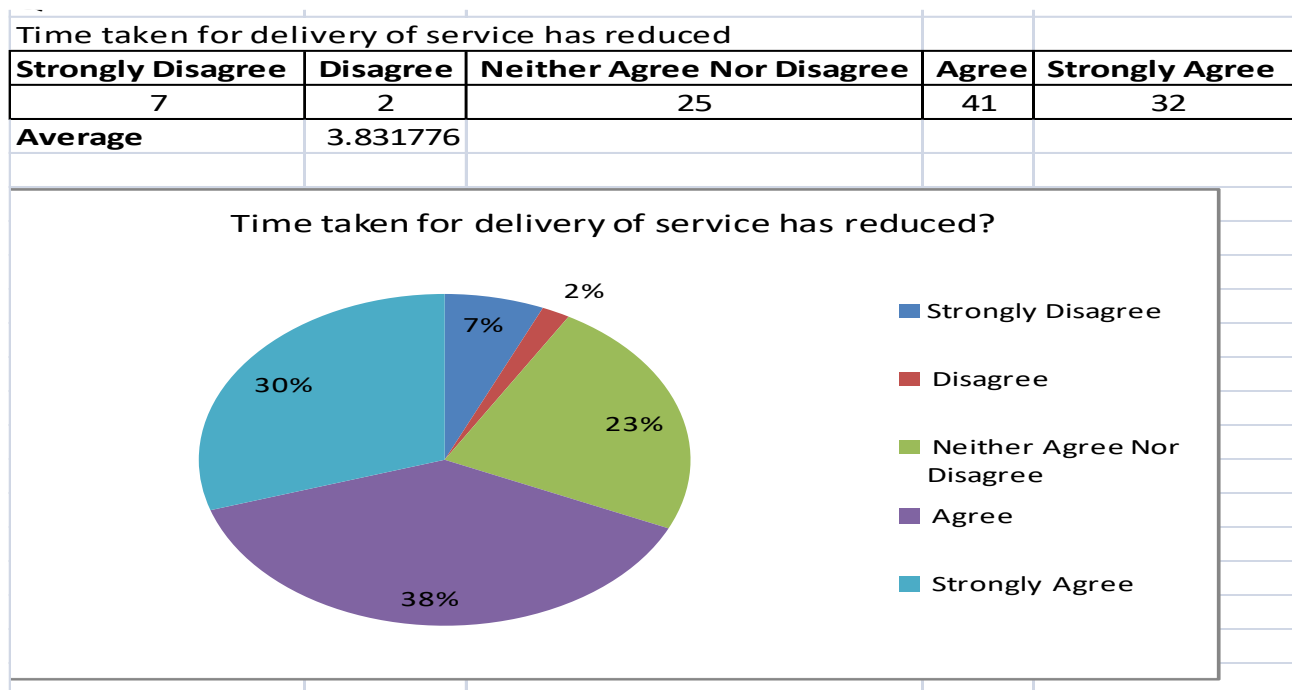


## 4.5 Analysis of efficiency of the services being delivered

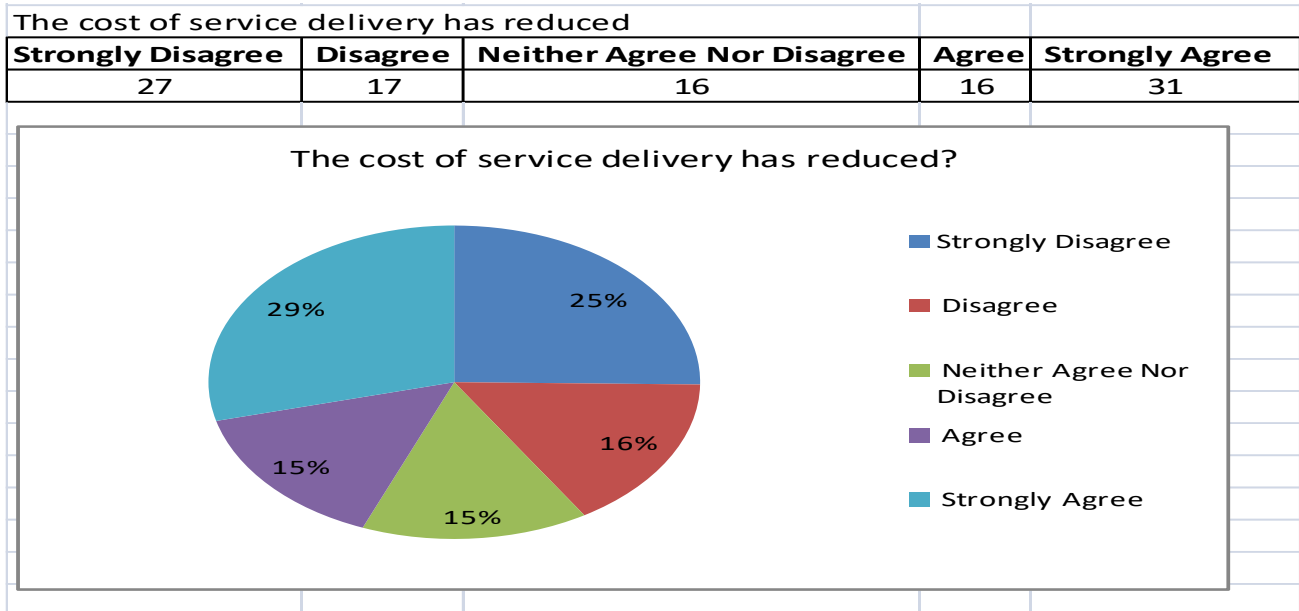
### 4.5.1. Analysis of the satisfaction of citizens



### 4.5.2. Analysis of the time taken to deliver the services

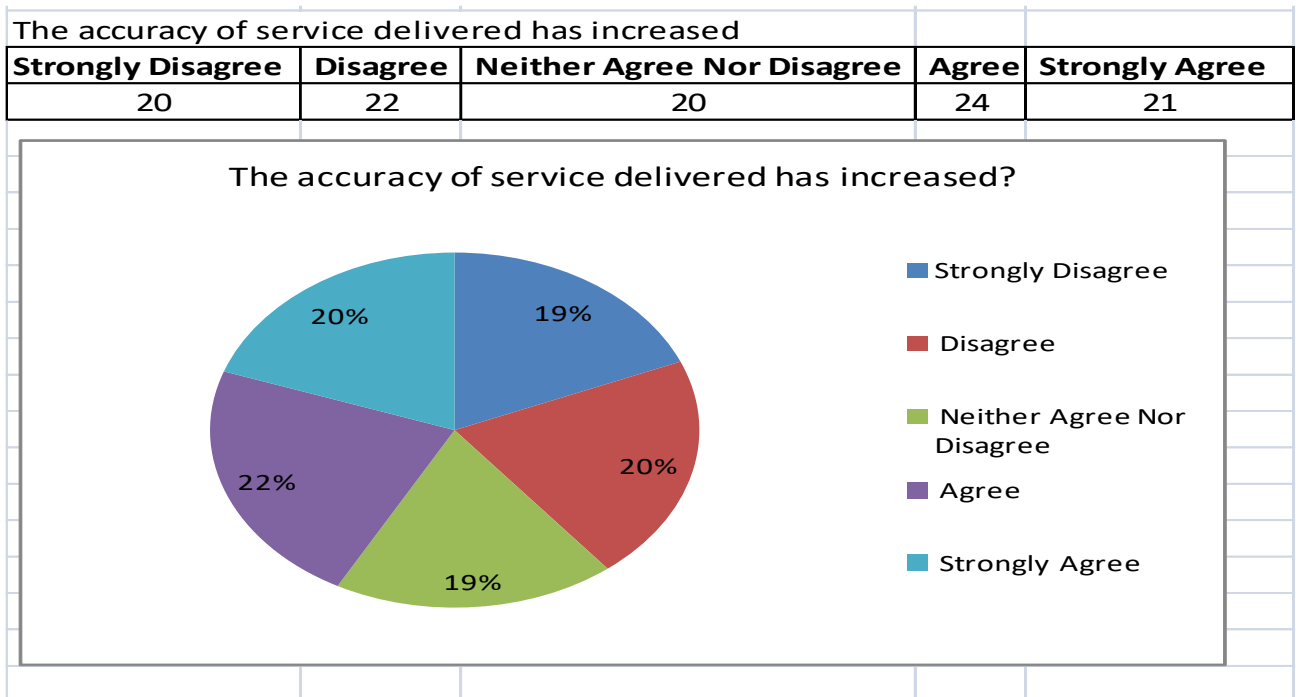


### 4.5.3. Analysis of the cost incurred for taking the services



### 4.6 Analysis of effectiveness of the services being delivered

#### 4.6.1. Analysis of the accuracy of services being delivered.



If we see the questions from twenty three to twenty six we find that accept for the efficiency all the rest three question are pointing towards negative aspect of current delivery mechanism. There is not much

difference in the time, accuracy and cost. Now these things could be explained from our understandings developed from the previous questions and available literatures. We see that accuracy of documents depend mainly on the data entry and understanding of the operator about the various fields of the online form. As there has not been significant improvement in the operators selection and training and hence we are stuck in the same old situation. As one the earlier question suggested many operators are asking for extra money. And hence cost of availing the service is not going to decrease. Most of the time the operator is busy doing his own work and hence citizens are asked to come some other day. Apart from that at times electricity is also an issue. Many a time computer or some other part is not working. At times server is down and all these leads to repeated visit to the ICT centres leading to no significant decrease in availing services through the ICT facilities.

## **Chapter 5**

### **Conclusion**

#### **5.1 Conclusion**

Penetration of government services through the Information and Communication Technology (ICT) facilities like Common Service Centres, Panchayat Bhawans, Village kiosks etc. is yet in its nascent stage in the rural parts of Delhi. Citizens are yet not aware about the all kinds of services available and they need to be encouraged to visit the kiosk more frequently. The density of kiosk are low and that need to be increased so that people will be able to reach there within half an hour. The efficiency and effectiveness of service delivery through ICT and CSC are not very good. If we talk about the efficiency then we see that there are challenges in terms of time. Because of multiple reasons citizens are not getting their services in timely and speedy manner. Customer satisfaction is average. If we talk about the effectiveness of the services then again that is also poor. Citizens are being denied what they need and are being offered what they don't. There are offerings which nobody is using. Infrastructural challenges and hurdles which are hindering the uninterrupted and effective and efficient delivery of the government services are many. Regular power supply, proper concentration of ICT centres, time bound delivery, the good systems, strong server etc. are some of them. The psychological and soft barriers to uninterrupted and effective and efficient delivery of the government services are also playing an important role. Operators are not well trained. They are not able to assign the importance which this setup actually deserves. This comes as a secondary task to them. And they don't treat citizens as their customers. They need to isolate their personal issues. They need to be trained about the different aspects of computers. They need to be trained on how to talk with citizens, how to be prompt and time bound in giving services to people. The issues with sustainability of this initiative mainly lie in the beginning of it. As our analysis pointed out that there is corruption, there is a lack of responsibility on the part of the operator and so on. So if in the beginning itself we are not able to understand and sort out these issues they will surely undermine the sustainability of this initiative.

As we found in our analysis that nearby ICT facilities do increase the chance of accessibility to the government services. There was no significant relationship found between the income and usage and so we can not say that higher income increases the chance of accessibility to the government services. One thing which came out during discussion with the citizens that women are well received by the operators but in terms of service delivery there was not much difference and we need to discard the notion that gender has any implication on accessibility to the government services. We also saw

that higher income group people are more vocal and aware of their rights and hence the income level of citizens do have implication on accessibility to the government services. People who are in government services they are well aware of their rights and government functioning and hence are accessing the services in more better way. Less educated and self employed poor people are not getting the service in a way they should. So nature of occupation do has an implication on accessibility to the government services.

## **5.2 Suggestions and Recommendations**

The endeavour to use ICT to deliver rural services, now about a decade old, has received considerable state support, and the involvement of local and international funding agencies and NGOs, and the private sector. The hope that ICT will improve equity among rural populations has not been realized, and it may even worsen. Some findings from the review were expected, such as poor infrastructure, high deployment and maintenance costs and the lack of content for e-Governance. Some less expected findings are that e-Governance services are overwhelmingly the most needed that content is largely irrelevant to needs (itself indicative of wider problems of user and operator capabilities) but that user interest rises significantly when services can be delivered regularly and efficiently. NGOs play a key role in understanding user needs and increasing awareness and that rural capacity is not being enhanced through ICT. Some problems exist because the strengths of the different stakeholders are not being used optimally. Government should try to understand the real user needs and in increasing awareness. Organizations that are village-focused have missed the opportunity of maximizing coverage through Internet-based provision. All providers must deal with infrastructure problems outside their control, such as power problems. Partnerships in content provision are rare though greatly needed.

## **5.3 Limitations of the study**

The main limitation of the study was to get a diverse and big sample size for the respondents. India being a nation of very complex and diverse demographic choosing the appropriate respondents became even more tough. Many respondents were prone to give wrong information thinking that they will get benefits from the government if they show that they are getting no facilities. So to elicit the right information was also very challenging and tough. Due to economic constraints the sampling and data collection was based on ease and convenience. Also no statistical test was applied in the study and hence making it even more primitive and simplistic study. The questionnaire to collect data was also not based on statistically verified scales and constructs.

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## Appendix Questionnaire

1. Name of Panchayat/Local body :

2. Place of residence of respondent :

3. Name of respondent :

4. Age

1. 18 to 30 yrs

2. 31 to 45 yrs

3. 46 to 60 yrs

4. 61 and above

5. Sex

1. Male

2. Female

6. Religion

1. Hindu

2. Muslim

3. Sikh

4. Christian

5. Jain

7. Nature of occupation

1. Agriculture

2. Government Job

3. Business

4. Unemployed

8. Educational qualification

1. No education

2. 5th pass

3. 8th pass

4. 10th pass

5. graduate and above

9. Monthly income of respondent

1. Less than Rs 1k

2. 1k to 3k

3. 3k to 5k

4. 5k to 10k

5. Above 10k

10. Monthly income of family

1. Less than Rs 5k

2. 5k to 10k

3. 10k to 30k

4. 30k to 50k

5. Above 50k

11. Distance of Panchayat office from residence

1. below 1km

2. 1km to 2km

3. 2km to 3km

4. 3km to 4km

5. more than 4km

12. As per your opinion, to what extent E-governance is helpful to avail the service?:

1. Very high

2. High

3. Normal

4. Low

5. Very low





18. Mode of travel to Panchayat

1. By foot 2. Cycle 3. Bike 4. Private transport like auto rickshaw or bus 5. Public transport like train or government bus

19. Do you get all the services of your need at these CSC centres

1. Yes 2. No

20. Is your operator friendly and helpful

1. Yes 2. No

21. Is the operator at ICT/CSC centre is able to provide you the service you ask for

1. Yes 2. No

22. Travel Time

1. Less than 30 minutes 2. Between 30 to 60 minutes 3. Between 1 Hr to 2 Hr 4. More than 2 Hrs.

23. Customers satisfaction with efficiency of service delivery

1. Very high 2. High 3. Normal 4. Low 5. Very low

24. Time taken for delivery of service has reduced

1. Strongly Disagree 2. Disagree 3. Neither Agree Nor Disagree 4. Agree 5. Strongly Agree

25. The accuracy of service delivered has increased

1. Strongly Disagree 2. Disagree 3. Neither Agree Nor Disagree 4. Agree 5. Strongly Agree

26. The cost of service delivery has reduced

1. Strongly Disagree 2. Disagree 3. Neither Agree Nor Disagree 4. Agree 5. Strongly Agree