Chapter –VI
Findings and Conclusions

6.1 Findings

Some findings were as expected, such as **poor infrastructure, high deployment and maintenance costs of the ICT infrastructure** and inadequate content for e-Governance.

1. The data presented on the table 4(i) reflects that in Tinsukia district; only 21 (25.6%) working computers are available in the four Block Devleopment offices whereas the number of total staff is 82(eighty two). In Dhemaji district; 20 (24.09%) computers are working in the three Block Development offices and the strength of total staff of those is 83(eighty three).

2. The problem of technical manpower is quite visible in the Block offices. Because of the low literacy level along with people's negative approach towards rural areas, it is difficult to find qualified people for operating the system in those areas. According to data presented in figure 4(a) in Tinsukia district out of total 82 office staff, only 26 (31.7%) are computer trained in the four Block Development offices whereas the data presented in figure 4(b) indicates in three Development Block offices of Dhemaji, out of total 83; 41(49.3%) staff are computer trained. Less number of computers and untrained staff (computer literate) in the Block Devlelopment offices make the employees little tuff perform their task and it affects the service delivery process.

3. As reflected in Table-4(ii) the infrastructures of the Block Development offices in the two districts are more or less are of same category yet some good aspects cannot be

undermind. For example Each Block office has provided separate room or building to run the computers.The Block offices are equipped with the Local Area Network (LAN) and Wide Area Network (WAN) facilities.

4. The connectivity problem is there in both districts. Appropriate bandwidth is one of the major requirements for the efficient operation of Internet facility. Due to advances in tele-communication and satellite technology, connection can be made from anywhere. The cost of installing such a set-up, however, could be significant and therefore unfeasible for a Block Development area.Though the infrastructure is there but irregular electricity supply cost the connectivity as reflected in Table-4(ii). In most of the Block Development offices, the internet run through Private Data Card which is expensive also.

5. Table no 4(ii) refers that none of the Block Development offices in the two districts has the air-conditioning computer rooms and regular electricity supply. The energy or electricity is the common problem. Without an adequate amount of energy, any e-Governance initiative cannot even be considered. Electricity is the prime requirement to run computers. Energy supply non-existent or highly erratic. Generally, batteries or generators are used as a source of off-grid power.

6. The Block Development offices are not yet fully computerised. Most of the activities in those offices done manually.

7. The data presented in Table 4(iii) shows that the official websites of the the Block Development offices are not up-to date; infact In Tinsukia district websites of the Block

Development offices have not been developed. In Dhemaji districts, the websites are there; but those carries the older Data.

8. According to the of Table 4(iv), each Developmpment Block office in the two district has a Community Information Centre (CIC) in its campus. In the study, it is found that most of the official staffs in the two districts are quite unaware of the fact about the existence of CICs in the Block Development dffices. Only In Dhemaji district; office staffs of two Block Development office have the knowledge about the presence of the CIC.

9. In the study, it is found that in both the districts; office staff or employee's have similar views regarding Speed of the services offered by the Development Block through e-Governance mechanism. As reflected in Table-4(vi), 81% staff in Tinsukia and while 59.39% staff of Dhemaji regarded the e-Governance service as fast.

10. Problem of low education is common to all rural areas. The study shows that average literacy rate of the Development Block of Tinsukia is less than Dhemaji district Literacy rate. Rural areas have yet not been able to achieve 100% literacy level. Low literacy rates resulted in peoples unawarness towards utilisation of available ICT resources. It is noticed in both districts ; even the office employees are unaware of the existence of CIC in their campus. 37% office staff of the Block Development offices in Tinsukia district using computers while the number of same in Dhemaji district is 61%. Table-6(i)

Table-6(i)

District	District Literacy rate	Avg Literacy rate Surveyed Development Block	% of Staff using Comouters Development Block offices
Tinsukia	60.11	55.78	37%
Dhemaji	61.65	66.55	61%

11. Through the study, it is found that in both the districts G2G service is running with some drawbacks. Availability of modern technologies in the Block offices do not seem to helped the needy people a lot. Certain loopholes in the system like infrastructural, shortage of trained manpower, communication and energy problems are common to all the block offices in both districts. However in case of G2C services, people (specially beneficiaries) seemed to be satisfied with available e-Governance resources. The researcher found that in response to the most of the queries people provide positive answers such as -the empoloyment of electronic devices in order to run the service of the Development Block is very helpful for them. Table-5(iv) reflects the information is useful to beneficiaries, Table-5(v) Shows e- mechanism provides relevant information to user's need, Table-5(vi) reflects the people believe that e-mechanism provides up-to-date Information. But in the study, it is found, in response to some queries like “does the e-mechanism provides understandable information” as it is shown in Table-5(ix) reflects that (38%) in Tinsukia and (22%) in Dhemaji people offer their negative views. Again the Table-5(xi) reflects that 60% people in Tinsukia and 64.4% people in Dhemaji receive the information, which is not in an appropriate format.

12. When emphasis is given on three particular schemes (MGNREGA, IAY, Old Age Pension) the researcher find that in Tinsukia 64.7% and in Dhemaji 61.1% people have come to the Block office in search of a solution to their problem. Table-5 (xiii) .

13. The data presented in table-5(xv) reveals that in these three selected schemes, 78.9% in Tinsukia and 77.7% beneficiaries in Dhemaji district have faced the problem for technical reason as they are informed by the Block authority.

14. The Table-5(xvi) reveals that in Tinsukia 73.8% beneficiaries say that their problems have been sort out within a sort span of time while in Dhemaji 77.7% says the same.

15. Table –5(xvii) shows that 73.6% beneficiaries of Tinsukia district categories the presence of electronic device and their service level as average while 21% says that the quality of service is good. In Dhemaji, 61.1% beneficiaries says that the existence of electronic devices in the Block and its service quality as average and only 3.8% says it as good.

16. The data presented in table –5(xviii) refers that in Tinsukia district out of total 38 beneficiaries: 84.2% beneficiaries have no idea about presence of a Community Information Centre (CIC) in their Block office, however it is seen that in Dhemaji district, 100% beneficiaries have no idea about the presence of CIC in their Block.

17. The study also reveals the advancement of e-Governance in the field of Agriculture and land record. The researcher considered a rough observation on the activities of Krishi Vigyan Kendra (KVK), e-Publications and Cell phone related services for agriculture. Presently every district of Assam has a KVK. The prime goal of KVK is to provide training as per needs and requirements in agriculture and allied enterprises to all farmers, farm women and youths. In both the districts, the KVK regularly organize awareness generation programmes and provides agriculture related informations regarding crop production, crop protection, crop improvement, sustainable agriculture, organic farming

indigenous farming etc. It is found that the KVK centre use social media and newsletters to popularize its activities. Likewise presently a number of agriculture related applications are available in government and other websites. General people can easily go through it. But lack of education, electrification and tele-communication network, people face problem to use those. So far government initiatives are seem to be good, but time will tell, how far these facilities will reach to the common man.

18. The study also reveals the present status of computerization of Land Record in both districts. One revenue circle from each district has been selected for study. Table-5(xx) reflects that during the period of April 2015 to April 2016 in Doom Dooma circle of Tinsukia, 1475 No. while in Dhemaji circle of Dhemaji 402 No. field mutation have been done. The table-5(xxiii) shows that in both the Revenue Circle Offices, of two districts, Citizen Centric Services are offered regularly under Dharitee Scheme. Among those: Copy of Scent Roll , Certificate of Land , Income Certificate ,and Land Value Certificate are very popular. However from April 2015 to April 2016 period, Dooma Dooma Revenue Circle office is lagging behind far from Dhemaji Revenue Circle Office in respect to provide the Citizen Centric Services to the people.

G2G and G2C are two most important aspects of e-Governance system. If these aspects are undone then how can we expect that it will bring development to an area specially the rural one? However, e-Governance brings a bit of change in the agricultural field as well as in process Land Record maintenance in the two districts. It is mentionable that the new generation of youth specially in Tinsukia use agricultural mobile applications and informations in their tea plantation. It is a good sign that gradually they understand the utility of available IT resource. With the

increase awareness and education it is hope that e-Governance will achieve new dimension in the two districts. .

6.2 Recommendations

1. **Need to develop the ICT related infrastructures at the grassroot level (Block Development Office, Panchayat etc) ; which in turn provide the foundation to carry out the G2G services** .The researcher has offered some recommendations-

   a) There seems to be a lack of sufficiently qualified and trained human resources. It would be better if each Block Development Office has a dedicated person in charge of data entry and management of the system. Most of the staff members are not in a position to operate the system on their own.

   b) When the electricity fails due to disruption, damage in the transmission line or low voltage, batteries can be used. If there is no electricity supply, non-conventional means of power will have to be used. In regions that have available firewood and other biomass, technologies such as gasifiers that can be employed for electricity generation may be well-suited.

   c) In the isolated part of the Indian state of Sikkim, the army battalion is operating a computerized reservation centre with the help of the railways. The centre helps in making rail reservations for the large number of army personnel deployed in the region. The modification of this facility, which has good connectivity to serve as a local e-Governance center, will help to save the extra costs that would be incurred in setting up a completely new facility[1]. Modification of a avilable facility to provide

basic e-Governance services to the local communities is a workable and cost-effective solution.

d) The private sector can be a licensed at all stages upto the delivery of the signal to the rural Areas.

e) Regular Maintenance of the ICT infrastructre is utmost.Softweres as well as websites should be updated by time to time.

f) build supporting infrastructures of power and all weather surface transport system to bridge the digital divide between the rural and urban India

2. **Need to improve conditions under which the G2C services runs fruitfully**-

a) In the study is found that None of the Block Development Offices in Tinsukia District has their own websites. Every region has its own socio-economic and political aspects. By creating a website; these aspects can be included. Those should be information based as well as cost efficient to permit the people of the region to easy access. It may serve as a bulletin board of government policies and schemes, institutional informations, a tool of e-learning,health related informations, .agriculture-related information.

b) It is found that Understanding needs and providing services requires low-cost training to enable rural users to become self-sufficient users of ICT. NGOs are best situated to

provide such services, thus requiring them to be a key element of any viable approach.

c) Supplying information to the public in a language that they understand and are comfortable with, and generally, it is the local language. As, technology is available by which transliteration from English into other languages can be made.

d) Guidelines that exist for building a computer network seem to be inadequate or are not followed.

e) Changing the mindset of the government employees who are used to working only in the manual mode. This is a big task and needs patience and careful planning..Regular in service training programmes, refresher course work,workshop should be arranged for the office employees to spread awareness at all level and thus they can be able to handle the ICT resources efficiently at their own and also to carry out the same to the Mass.

f) Regular public awarness programmes should be arranged by Block Development office by utilising available ICT resources.Thus people of the district will be familier with those and can pursue them in their needs.

From the study, it can be said that though e-Governance receives highest level of popularity in rural life, governments have not yet done enough to look-at how Information Technology can address the needs of the poor in general and poor women in particular, towards economic and social empowerment. The ground-level reality reflects attention primarily to the urban-rural divide, and inadequate focus to the concerns of the illiterate, of marginal farmers,

and women. That's why the question of equity comes before implementation of every e-Governance programme. Besides these, poor infrastructure, high deployment and maintenance costs of the ICT infrastructure and prolonged cultural barriers most often restrict the mobility of e-Governancein rural areas. Over the past three decades, a wide range of e-Governance projects are being implemented in different parts of the country including projects aimed at reaching areas and people that had traditionally not been connected to the outside world. In near future, it is hoped that ICT will help in managing rural India's social, political and administrative challenges. A closer look at the entire scenario makes us believe that over the past few years, a number of information systems have been developed and made operational in rural development of Assam and it is a fact that majority of these solutions have been developed by NIC. There is much more scope for other institutions if they want to invest or exercise their potentiality in this region.

References-

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