

Chapter 8

Discussion and Conclusion

Mobile phones are instrumentally, socially and emotionally important for women, however, few have problematized the hedonic or pleasure seeking uses and safety or security issues ascribed to the phone uses. Drawing on data from rural urban divide, the chapter focuses on how do the roles, identities and practices of housewives and the women of rural dwelling households develop and rework with the use of mobile phones. Some recommendations are put forward for the improvement in the scenario of NGO-SHG backed women empowerment in the wake of mobile phone technology. The chapter also delineates the future research prospects that emerge from the study and provides the implications and recommendations for the realization of NGO-SHG backed women empowerment following the acceptance of mobile phone technology and mobile phone enabled services.

8.01 Role and Identity of Housewives and Women of Rural Dwelling Households

Mobile phone by aiding to experiment individuality allows women to present situational-self independent of conventions which is not likely to many in the same household. Women are free to decide who they want to be, when they want to be after accepting and using a mobile phone, the attitude which is not acceptable for many in the same household.

According to Martin (2004), interaction with significant others helps to form a person's identity. It is found that the way many housewives were perceived as 'other' at household has been altered and a new identity has been shaped on the basis of her relationship with her 'self'. By accepting and using mobile phones, women of rural dwelling households could continue to connect with likeminded 'others' over distance which would help them learn to adopt the role of others by adjusting themselves to other's environment.

It is found from the survey of two wards in Sonitpur District that acceptance of a mobile phone can lead to use of prolong voice communication with both known and the unknown ones. This could be viewed as an obsession among some women who consider

themselves as smart users. These women, remarkably, belong to the group of technology enthusiast who accept a technology, admire a technology and use it for endless, incessant communication and socialization, both voice and data. They while delighting their individuality and freedom to project their own self, however could even annoy other members of the family.

On the other hand, findings reveal a sharp dichotomy in the views and opinions of the members of some households regarding the acceptance of mobile phone technology. The negative attitude of the male head of the households towards the owning of mobile phone by housewives or other women members has provided insights on the actual empowerment of women by questioning the assertion if accepting a technology could lead to women empowerment in real sense. Or is it due to the patriarchal bindings and the indoctrination of patriarchy by both male and female that has driven to form a docile, 'good women' attitude. Woman's perception on her role as a housewife and of her social role has been largely influenced by lack of information and awareness of rights that she enjoys general inhibitions and lack of skills and confidence. However, the careful study on the acceptance of mobile phone technology by women does reveal some significant distinctions regarding factors that drive the uses of phone among women and men.

The point of view of one of the male member of the surveyed households implies significance regarding the hedonic use of mobile phone by his wife and the space his wife share in the neighborhood community, reveals a negative behavioral disposition towards his wife accepting a technology.

"My wife just after wakes up in the morning leaves a good morning message on facebook and leaves a good night message at night. She post different photographs, for instance, the flowers in the garden, of meeting, of the place she visited and hook on to facebook for the entire day to find out the number of comments she receives, who says what, in what way, how other users react to her post. My wife is not that responsible enough to maintain a household. Sometimes, I feel like to throw her mobile phone. Then I think that it is of no use. Even if I do so, she will not realize why I have done that. She is active in our neighborhood community. She participates in the activities of the neighborhood community, organizes puja, and does naam (prayer) and all. I don't like her all time involvement in community activities as she ignores her own household. I am the one who manage and maintain the household, cook for all, make pickle for my kids, do gardening, do other repairing activities in the household, drive my wife to places

whenever she wants to go. I had to take voluntary retirement. We don't have a permanent maid too."

A woman's perspective on another woman's uses of mobile phone, at the same time, which does not confine her to housework, says so.

"She did morning walk; prepare tea for herself and then she engaged herself for the entire day in talking, gossiping, chatting, and texting over the phone. She does not know how to cook, so she can't serve us with food. She does not do other household work also. She does not engage in critical political discussion over the phone. She hates politics as she says. Her talks are so trivial. Her worries are limited only on how many cloths she purchases, of which brand, the colour of lipstick she uses, whether she has started wearing latest design or not."

Girl's perspective on Mother who is an active user of mobile internet shows her frustration towards the pleasure seeking attitude of use of phone by her mother.

"My mother is different. I don't realize why she is of such kind. Yes, she is a technology enthusiast. She lost two phones so far. My working brother gifted my mother another mobile phone worth Rs. 10000. She is an active facebook and whatsapp user. She engaged herself throughout the day and night with chatting, talking, texting. She only pushes my brother to do the recharge of her mobile phone when balance of the phone draws off. However, she is an active member of Mahila Samiti and lekhika Santha. It was my father who managed the household. My mother does not co-operate him in household activities. We don't have a full time domestic worker too. I was severely ill and was hospitalized by my husband, but my mother was so busy posting photographs of her attending marriage parties on facebook that she did not find time to see me once in the hospital. It has saddened me more when I realize that she made a haircut just after three months of my papa's death."

Above statements are collected from the surveyed households of town area of Sonitpur District. It is found that class backgrounds of the women influence the hedonic uses of mobile phone as those women are belong to middle class households from Sonitpur Town.

On the other hand, we cannot ignore what a nanny from Bhalukekhowa Village (Sonitpur District, Assam) says regarding her granddaughter.

“My granddaughter is twenty years old. She purchases one phone by her earnings. Another high end feature phone is gifted to her by her distant relatives. All day long she speaks to someone or others over the phone, other time, she listens to music and watches cinema on phone. She does not communicate much to us, with the family members. She does not even do the slightest of household work, she does not go to field to grow crop, and she does not wish to study even. Hence, we prefer her to stay at someone else’s home as domestic helper.”

Me (inquirer): “Will she be responsible enough to work at other’s home when she is not willing to share responsibilities at her own home?”

Nanny: “We are poor and uneducated. We can’t correct our daughter. We have to slog for our survival. She did not realize this fact at all. You are educated and you can teach her.”

Above statement contradicts the previous “class” assertion of women who use mobile phone for hedonic purposes. From the two instances, it can be asserted that acceptance of mobile phone technology is primarily driven by the woman’s self-indulgent and social indulgent attitude. It could be assumed from the above statements that free distribution of mobile phone and other mobile phone related subsidized services has to be conditional. Perceived usefulness is different for different users. From the grand daughter’s perspective, mobile phone is quite useful as it helps her to listen to music, watch movie and to interact with so many people. She stays in a family where every other day there are fights, conflicts which demotivate her to co-operate other family members in household task. Mobile phone is a relaxing medium for her.

I would argue that the culture of individuality has sunken the value of utility or usefulness. However, an authority cannot dictate over the purpose of accepting a mobile phone. Women while accepting a technology has unique purpose behind it. For many women, accepting and using a mobile phone involves conflicting dimensions. It is found how after accepting and using a mobile phone, a few women have become a part of active consumption culture. This consuming culture has put them into the race of acquire more and to consume more.

Martin's arguments on the mundanity of everyday experiences (2004) can be applied to women also who apparently make routine use of mobile phone are more dynamic, equally active recipients of commodity culture, an active participant in the creation of cultural meaning. The release of hi-end applications of mobile phone in the market by the capitalist has expanded consumer culture. If I look at the implication of making housewives accept the phone and phone enabled services through the tradition of Frankfurt school, via lens of Steven Miles (1998) and Lefebvre (1981), I may appraise against the acceptance of mobile phone as phone emerges from the interest of Market forces. The phone when accompanying the lives of women could encroach upon everyday aspect of their life. Forces of market, consumerism and capitalist (although it would be wrong to read all private sectors are capitalist) could control the life of rural women and housewives and they will be lacking the radical will for bringing positive change in their life. With a complete absence of consciousness, housewives might be induced only to the appealing features of the mobile phone and make only hedonic use of phones. And a new range of service solutions might make women fail to identify an alternative mode of living beyond the controlled and manipulated market imposed needs. Yet, institutional intervention through NGOs via community village groups, which I have assessed in my thesis, could create new consciousness among them, connect rural women with an extended network of women and experts and phone enabled communication could help women to get informed and learned about new solutions.

Fox argues that mobile phone has the capacity to liberate users from "an alienating and fragmented" community (Kate Fox, 2001). Considering the debate between the uses of mobile phone verses alienation from the social life, mobile phone enables women to organize social life by allowing phone mediated interpersonal interaction muting the barriers of face to face communication (Manceron, 1997). It is found that women of rural dwelling households after participating in community groups and using subsidized mobile phone they receive from the telecom operators (Case studies of GSMA m-women programs, Sanchar Shakti project) have developed a collective sense of being together with a sense of affective warmth among members. Willis (1990) work proposes consumption to be a location of active and emancipating practices instead of manipulation and deception.

Another instance from the field survey: Archana, a housewife (Bora Chuburi, Ratowa village, Sonitpur District) while using her two phones has found herself as an active member of consuming culture and emancipated herself from everyday strain and family disturbances. However, she needs counseling and training for capability development which could be possible only through NGO intervention.

Numerous studies have perceived mobile phone as a personalized technology. The mobile phone allows women to experience the coveted flexibility and spontaneity in their lives by eliminating spatial immobility and constraints of physical proximity. The dichotomous use of personal technologies that involves antisocial (Ling, 2004; Geser, 2005b) or pro-social (Katz et al, 2008) attitude typifies most of the studies during early 21st century. Use of personal technologies in public place embodies increasing individualization of the self and simultaneous erosion of the public self. Women after being capable to get an access to communication and information technology and a mobile phone can practice autonomy. Women by navigating through the mobile phone enabled services and applications, could give an altered representation of an introverted self to be an extroverted one, which is self-serving but more tolerant of other people and of society. It is found from the survey that mobile phone technology combining various modes of communication enables women to break through their isolation at household and in society (Chapter 7).

The extent of other serving self might be limited if necessary training and capability is not provided and self-confidence is not build. It is also noticed from the survey that the skill requirement of women have changed and there is a subsequent need for the incessant up-gradation of skills along the line provided them with better livelihood opportunities which could make the women of rural dwelling households realize the utility use of mobile phone and to help them to make appropriate use of applications and services of mobile phone.

It is found that majority of women do not necessarily make a clear distinction between their market and domestic activities, or between their roles as workers, mothers, wives, and members of their community. Moreover, it is seen that women confirm or reinforce broad social perceptions of their work as lacking value. For housewife or home maker, work-based identity is always secondary. These women (home-makers or housewife) primarily consider their responsibilities at home. Hence, they also perceive that their

engagement in paid work itself could aid them to discharge domestic responsibilities at ease. Majority of women are less likely to aspire for an identity for their work as they are psychologically beset by biased tradition and inequalities in society. The past history of oppression and discrimination of existing patriarchal customs are found to contribute to shape the perception of women about their lives, occupations and of their future.

8.02 Role of Community Organizations in Shaping Identity of Rural Women

Attitude towards collective action to bring change in the current situation is not seen that prominent among middle class women (from the field survey of two wards in Sonitpur District). It is only those poor marginalized women of rural dwelling households who endeavor to claim their rights and due through collective organization. Course of identity formation is the source of rights and privileges to women. Hence, raising the status of women and to facilitate behavioral change to get rid of stigma around work-based identity is found to be the part of the effort and process of building a shared and valued identity for many organizations. It takes time to build social recognition and self-recognition of the work that the women of rural dwelling households do. In order to build common interests among housewives of rural dwelling households otherwise divided by the social hierarchy and by location, the actual needs and priorities of those women have to be taken care of along with sharp institutional intervention towards allocation and efficiency. After participating and having a stake in the community organization, women of rural dwelling households could win the smaller or larger gains and could be committed to bring change in their life for the betterment.

Initial strategies to mobilize the weaker section of women by the NGOs (select NGOs in the study) use to be economical, gentler, and less confrontational. NGO chairperson Khalid Mehmud says that “Women come together around the more practical concerns of their daily lives; as their identity as a ‘collective’ starts to grow and strengthening, they appear to become more willing to have a take on political issues.” Political empowerment would be possible once women in groups become more self-confident and assertive, with a greater willingness to engage in open debate, to take legal action against those in power who violate their rights, to use their organizational clout to influence political and policy processes and to assert the role of citizens of the country. The

institutional intervention through NGOs could de-center and reproduce power relation between male-female, between upper class/caste and lower class/caste women, between educated and uneducated women.

CCE (Citizen Centre Enterprise) model or SHG (Self Help Group) model employed by select NGOs is evidently an effective method to integrate local stakeholders including local government, community groups and enterprises with mobile phone operators and women entrepreneurs. It is observed that many women are willing to take up skill training under the guidance of NGO to start microenterprises as a means to augment their income and livelihood. NGO intervention could connect rural women with experts and help to inform women by the trajectories of successful women, deepen their perspectives on global movements of women that have strengthen and validated the claims of women by representing them. The fear that housewives and rural women might be succumbed to the pleasure seeking use of phone with endless variety of solutions to confuse them, if given free phones to them, could be abolished as institutional intervention through NGOs are found to create new consciousness among them towards how to lead a confident and chaos free life.

Community organizations have major potentials to provide stability and support to women of rural dwelling households whenever the problem arises. Community organization or village SHGs could be the source of nurturance and socialization for women and a link between continuity and change for them. Women, while become economically and financially independent after their participation in community enterprises (From the fields of Tamil Nadu, Uttar Pradesh and Uttarakhand), an emotional bonding is seen to have developed that could work as one of the major factors for their healthy survival and self-development. After participating in community groups or organizations, housewives and rural women with a mobile phone can make continuous communication with the group members as well as with the family members.

Owing to the narrow economic base of rural areas, there is a dearth of employment and self-employment opportunities for the women of rural dwelling households. The NGOs are playing important role in promoting Self-Help Groups among women of rural dwelling households, who are mostly middle aged, poor, low-educated, and unable to get employment in organized sector and unable to go for self-employment at large scale on their own. It is noted that Self-Help Groups are the hope for new socio-economic life of

this section of women. NGOs are acting as guiding force to promote and manage Self-Help Groups.

Select NGOs are seen to have achieved success in empowering women through entrepreneurship development approach by focusing selectively on utilizing the talent of women, appropriately developing through training intervention and linking women with relevant business opportunities.

Mobile phone with its multiplier effects enable to ensure higher productivity of women and can support to raise the income of the users. Mobile phone has proved to raise the demand for farm and non-farm products and services of the rural farmers of Sonitpur District, thereby, surge the opportunity for the farmers to sell the products outside their locality and to earn some extra money. Interactive and easy interfaces of online job portal in mobile phone reduce the cost and time of searching for jobs and thus, provide on time relevant information to those more specifically unorganized women workers of villages of Tamil Nadu , Uttarakhand and Uttar Pradesh who are hitherto excluded from such information pool.

It is found that lack of credit facilities usually affects rural women workers especially those who are self-employed. The role of banks to respond to the credit needs of this section of society is worth mentioning. At the same time, it is also important to assist women to get access to family resources by insisting on joint ownership of land and house including their names in identity cards, ration cards and photo-passes so that they could get access to formal credit sources. This is found to be made possible for women through intervention and easy with the communication through mobile phone.

Community organizations by putting coercive pressure on women members to adopt a mobile phone technology and through some training could guide the actual use of mobile phone in woman's life. It is also the community organization to monitor the effective utilization of various empowerment centric government schemes which comes through gram panchayats. On the other hand, gram panchayat has to see that women are not cheated while setting up their own saving schemes in SHGs. Here, the involvement of local government to monitor the actual consumption of government schemes might make women subordinate to state authority. Hence, the role of local self-government should be limiting to the extent of supporting the intervening NGOs by providing detail information about the village and managing and keeping appropriate database about

every details of the village with frequent upgradation. It is onto local government or gram panchayat to keep the detail of demographic status, occupation, educational status, gender based and socio-economic status of inhabitants of village households, number of existing community groups and enterprises and its actual roles in villages, to survey the challenges that inhabitants of village households face and to provide a solution via community groups and organizations through partnering with NGOs.

Absence of access to information, lack of education or no education have a direct connection to woman's use of mobile phone technology for utility purpose. Illiterate rural dwelling women have been dubbed down into the prevailing socio-economic prejudices, biases, which obstruct them to take a decision on their own. Limited participation in community activities, inadequate access to right information made women to become the victim of unfavorable socio political circumstances, societal taboos, belief and superstitions. Access to sound network is important so that women could interact with ten other women, get to know their problems and be aware of the law, civil codes and good practices.

Moreover, in a situation of extreme widespread poverty, rural households often have to fall upon their own resources. Hence an extended family and community support is prerequisite not only to eradicate poverty but also to develop capabilities of poor. Studies suggest that intra-familial networks are critical to informal social security in both urban and rural areas, while extra-familial social networks support livelihood strategies and function as informal relationships of mutual support between different households (Moser, 1993; Bossert,1988; Cockburn,1980). Both intra and extra familial networks can function as community-based organizations (CBOs) to mobilize common resources of a community (Moser, 1996 ; Leach et al 1997).

Intra-household relationships in a patriarchal society are often characterized by gender inequities and that are often stemmed from within (Voicu et al, 2008). Hence, importance of informal social networks at the household and community level cannot be denied although those informal social networks could rarely able to radically alter the position of housewives and rural women.

Women can leverage more from social networks in order to produce goods and services at a lower cost. Applied sustainable livelihood (SL) framework in the study has broaden

the scope of development by encompassing in its fold the priorities, needs and means to improve livelihood options of the housewives of rural dwelling households. The framework has taken into consideration of the strategies which are adopted by rural poor in order to maximize their income. Benefits of adopting livelihood strategies through project intervention can be embodied in increasing income and savings, improved well-being, reduced vulnerability to risk, and the sustenance, or even replenishment of natural resources. Acceptance and use of mobile phone technology could increase or minimize the loss of their existing asset base.

8.03 Future Research Prospects

The study is about the dynamics of mobile phone use and women empowerment at home and in community. For this, I carried out survey across the fields Assam (Sonitpur District), Tamil Nadu, Uttar Pradesh and Uttarakhand, took 705 households for questionnaire survey, took women through in-depth interviews and focus groups. Interview with personnel from telecom operators, private mobile companies; NGO chairperson and representatives of NGOs; members of Gram Panchayats were also carried out. Magnitude of gathered data has enlarged the scope to deliberate on broader-ranging themes; however, the study has been very specific to the issues of housewives and rural women. This thesis could be considered as a starting point for a more extensive study of use of mobile phone by young and old cohorts.

In the following section, I have drawn certain areas that emerge from this thesis as a subject for further investigation.

First, I have studied many western scholars' literature as well as literature from south Asian, academic tradition of both north and south has provided access to a range of critical literature on women empowerment and development. Feminism, the ideas itself is generated from west. In India and what is also emerged from the thesis is the importance of the community. If a woman has to accept mobile phone or mobile enabled information services, community intervention is the most essential method. Hence, I would make a call to design an organization with an appropriate institutional strategy to function efficiently and effectively, and which could draw in (and do not exclude) bulk of women. The study has established the scope for further research on the applicability of

conceptual model that I have provided in Chapter 6. The design of an organizational apparatus should be such that would work most effectively to elicit voluntary compliance from the majority of women.

Second, it is getting clear from the reviewed literature that western feminist concepts and gender theory cannot be always translated successfully to the Indian context and perspective. Therefore, I would implore to develop a separate approach for studying Indian feminism beyond third world feminism, an approach that highlights the different specificities of “rural women”, “housewives” and “working women” and is shaped and informed by their unique trajectories and could engender critical reflection.

Third, the empirical evidence from Sonitpur town area suggests that there are career-minded women. This study serves as a basis for further studies for policy makers to design policies through more joined up and meetings to draw a balancing edge between work-home for working women and to bring the necessary transformation in both societal structures and people’s attitudes towards working women and towards sharing equal responsibilities between working women and men in childcare and household labour.

Forth, Chapter 1 mentions the growth of mobile phone and its fast growing penetration in rural India. A vast section of rural population in Assam takes up agriculture or farming as a source of livelihood. My thesis has made some reflections on the tie ups between NGOs with VAS (value added service) solution providers for empowering women by bridging the information gap. Further investigation could be made on the effective application of such VAS solution to agriculture and allied field such as horticulture, animal husbandry, and fishery sectors.

From market perspective, my thesis has provided some insights on the domestication of mobile phone and using it for certain information purpose. This enlists the scope for further investigation on the specific needs of women, young and old regarding the utility VAS and to provide technical solutions by designing M education or M learning tools for the women of community organization, young and aged cohort irrespective of rural and urban areas.

8.04 Implications and Recommendations

Certain implications for the improvement of the scenario of NGO-SHG backed women empowerment following the acceptance of mobile phone and mobile enabled services are discussed below.

- It is important to design appropriate strategy and programs to lower the cost and access barriers to mobile phone for customers especially for women. To bring lower cost handsets to women and to introduce more creative and transparent pricing have been a key area of public private partnership. The initiative of Central Government to rationalize taxes on mobile phones by considering it as goods of special importance (chapter 1) is highly encouraging. It is also an imperative to create a conducive regulatory environment for partnership between public and private bodies that could allow an active and voluntary infrastructure sharing and release sufficient spectrum at an affordable cost.
- Key areas for collaboration between public and private bodies include making mobile phone and services affordable for women. In order to attain universal access to telecommunication, it is an imperative to improve network quality and coverage to reduce dropped calls and to expand the services into rural areas.
- It is found from the survey that locational disadvantage, inappropriate opening timing (14 percent) which is often not consistent with the household time schedule, issues related to security and lack of requisite transport facilities (9 percent) pose to be major constraint on the access to internet facilities for women (Figure 9.2.1). The multiple roles and responsibilities of women may at times limit them to find time to use services of internet kiosks or internet café. Survey finding reveals women's comfort with women-only training environments. Avenues such as free of cost training programs and incentive to participation are to be introduced to increase women's interest to participate in such program. It is necessary to address security and harassment concern for women while using the mobile phone.
- It is found from the survey that many male heads of the household refuse to allow the women of the household to use a mobile phone concerning the phone related

security on uses. Hence, another inference would be to design applications and services for mobile phone that increases women's safety e.g. emergency alert services, call blocking, private credit top-up and to ensure that women are safe while using mobile services including mobile internet.

- There is a requirement to invest in consumer insights research to better deliver services that meets the needs of women. In order to make a mobile phone easy to use for women, it is important to integrate user centric design in handset and services including user testing, pilot testing, and product iteration with women.
- Lack of native contents in vernacular languages continue to be a major barrier in effective use of internet and mobile phone by women, developing a keypad that includes vernacular language and simple iconic or symbolic interface in order to experience ease of use of the technology will be instrumental for accepting mobile phone technology by rural women. Creation of local content could be promoted through local institutions such as schools, local self-government and community organization. The cost effectiveness and potential of local contents must be weighed against the advantages of preexisting global information system.
- In order to minimize the gap in literacy among rural women and to improve the quality of life of women, the challenge is to promoting and implementing multiple literacy modules including technical literacy, digital literacy and skill promotion through community organization and women SHGs in villages and the development of learning material for multiple literacy programs.
- It is important to design intervention to address the underlying gender disparities that influence women access to mobile phone and improve education and employment.
- Literacy and learning programs centering on empowerment have to be evolved from identified needs of women specially those women who don't have formal education. Skill development has to be equally supplemented by personality development, life skills, leadership skills etc. in the scope of their education. It is also important to assess if the skills imparted to women have led to good jobs, decent salaries which would contribute to holistic empowerment of women.

- The access point of social services in each District/ Block/ Panchayat, for instance, community centers, rural libraries, PHC (Public Health Centre), Arunoday Kendra have to be made functional and strengthened.
- Alongside, it is also necessitated to improve the understanding of the members of Panchayati Raj Institution (PRI) of the village about the key empowerment issues of women.
- It is also a requirement for the provision of financial assistance to states of India to conduct state wide survey on underprivileged women along with BPL survey, to study the vulnerability of those women and to identify their potentialities for making them target beneficiaries for various schemes and programs of Government and Private Sectors.
- Any telecommunication and ICT-related investments have to be complemented with other poverty alleviation strategies and social security schemes under the proper monitoring and assessment mechanism. Otherwise, the risk of investment might be deepening by the consumption of inappropriate applications which cannot fit to the needs of the users. Complementary measures, such as reducing taxes, tariffs and trade barriers on imported telecommunication goods, ICT goods and services have to be taken in order to improve access to mobile phone with reduced costs.
- Another requisite is to carry out a state wide survey on telecommunication needs of all section of population irrespective of age, gender, rural-urban divide and to create awareness about mobile phone related benefits in order to improve the learning and skills on mobile phone technology, application and services.
- Separate statewide survey on the role and activities of NGOs and SHGs towards women empowerment so that the capacity of NGOs and SHGs could be harnessed optimally for social mobilization of housewives or rural women, existing resources could be effectively utilized, social capital could be built and additional income generating activities for women could be promoted.

- India ranks at HDI with ranking of 128 among countries with medium development out of 177 countries of the world. This indicates a relatively lower level of human development in terms of health and education. Similarly India ranks 113 out of 157 countries in gender development index (UNDP's global human development report). This necessitates the budgetary allocation and planning for development which could ensure access to health, education and better physical infrastructures with an aim towards reducing poverty and all forms of disparities across regions.
- At the national level, it is important to ensure a better inclusive approach by integrating gender dimension into the policies of food and agriculture, water, energy, infrastructure and industry. In order to ensure the policy benefits to all irrespective of gender, gender sensitive STI (Science, Technology and Innovations) policy for development requires impact assessment. Integration of a gender perspective into telecom policy is important in order to ensure fair access to information irrespective of gender. Gender sensitive STI (Science, technology and innovations) policy would not only reflect the aims, concerns, situation and abilities of women, but also ensure to make women involve in each part of technology related innovation- right from designing to implementation.
- So far, there are various ICT based projects that are implemented in North East for short term duration. No communication strategy has been employed to ensure direct involvement of local community into these projects. Once the projects end, there is no evidence of further continuation of the institutional intervention or up-gradation of employed communication technology. Hence, an institutional approach with a communication strategy that connects the members of the community directly to such programs has to be prioritized.
- Outlay of expenditure for telecommunication for 2016-17 in India is amount to Rs. 5800 crore. However, the details of spending of expenditure on telecommunication for social or rural development has not been schematized or strategically planned for an integrated policy approach towards telecommunication for rural development or telecommunication for women.

Therefore, funding pattern of schemes under social security policies should include provision by which women empowerment could be promoted.

- One of the priorities of the Government would be to directly involve itself in funding to NGOs in order to reduce the dependency syndrome of NGOs on funding agencies and to continue the project. The NGOs should be accountable for the funds on the one hand and the beneficiaries on the other. The government (central, state or local) support at all level is inevitable for NGOs to reach the goal of women empowerment.
- Organizational framework of NGOs has to be strong and NGOs have to be prepared to face the new challenges like shortage of funds, stoppage of funds in order to effectively sustain.

It is also noticed that the usual mood of policy makers has not changed and policy makers are still beset by the tendency to take up and bring telecommunication and mobile phone into use within the old routines and procedure of social and organizational fabric. Technological innovations are the result of political decisions that is strongly influenced by world's leading economic players. Policy makers while taking policy choices will have to look after social choices to convert the impending potential technology to the needs for human development.

The existing literature concentrated on the consequence and implications of the use of mobile phone technology, individual or collective emancipation of the user community of mobile phone as well as elevated national growth and development. In many poor countries of South Asia and Africa, the market or commercial approach to ICT promotion has excluded the poor who cannot afford to pay for services (Milek and Gillwald, 2011; Blumenstock and Eagle, 2010; McNamara ed. 2008). Free access to the services will be the pre-condition to the popularity of the services among women. In recent years many non-commercial community-based initiatives supported through external funding (i.e. NGOs, international development centers, or bilateral donors) have flourished throughout Africa and South Asia with the purpose of extending mobile phone and internet access to poor. In many instances, external funds from USAID and other donor agencies have supported government, non-government and private organizations

in working with the poor such as enterprise development institutions, educational establishments, clinics and health centers, agricultural extension services, etc.

ICT has been conceptualized in the agendas of International Agencies, NGOs, Government and private sectors as an instrumental solution to a range of social ills in developing countries. Mobile phone has become the most widely used interactive ICT. In case the competent and interested private sector services are not commercially viable in rural areas, a small government subsidy to private sectors can make the business of service provider financially sustainable. Government of India has already employed information technology to rural development through various intervention programs such as school computerization schemes, computerization of district offices, installation of satellite communication services to provide citizens easy access to services monitoring of the Integrated Rural Developmental Program with inclusion of computer and so on (Chhabra, 2009; Ahuja and Habibullah, 2005). However, highly centralized approach to bring change with the help of computerization in district administration and rural development has recorded marginal efficiency. In addition to this, non-utilization or underutilization of computers of district government, underestimated value of use of ICTs for administrative reforms and lack of interest for various ICT centric development programs posit challenges to the various intervention programs introduced by the Government.

An examination of numbers of projects on telecommunication for development leads to indicate that any failure of Government sponsored projects accrue to human resource constraints, capital constraints, institutional constraints, weak planning, and management commitment and so on. Moreover, highly centralized approach to bring change, non-utilization or underutilization of freely distributed equipment and infrastructures by the recipients, underestimated value of use of mobile phone and ICTs for administrative reforms and lack of interest for various programs specific to using mobile phone for development posit challenges to the various intervention programs introduced by the Government.

It is critical task to design an organization with an appropriate institutional strategy that function efficiently and effectively, and which could draw in bulk of women. An organizational apparatus would work most effectively when it elicits voluntary compliance from a majority of women. An organization in a community could command

allegiance and obtain compliance towards certain behavior through formal and informal pressure or influence. Attaining technical excellence is only one part of the successful institutional design of an organization.

A community organization in a village could put coercive as well as normative pressure on rural women to accepting a technology. In order to perform efficiently community organization needs to get the support from local government in a village. Social capital e.g. trust, friendship, cooperation could be harnessed through the acceptance and use of mobile phone technology. The stock of social capital is brought to bear more effectively upon institutional performance when community engages with government programs at the local level.

Relying on NGOs to provide basic services to women of rural dwelling households is not free from difficulties. Some NGOs have successfully employed integrated approach combining micro-credit service delivery to women of rural dwelling households. However, securing cooperation from the local village authority to connect basic services to the needy households of villages is not that easy and is usually delayed. Select NGOs are seen to take village upliftment initiative and help to improve governance at the local level. It is carried out by enhancing communication and information flows in both directions, from local government to community and from community to local government. Local government can enhance the utility and effectiveness of community organizations (Tendler, 1997; Abers, 2000). Community driven development is premised on the local demands of assets and control over decisions and resources by community groups. Community based intervention does not only imply achieving self-sufficiency at community level. Success of such approaches depends on establishing a framework of responsive external support agencies. Community based projects typically work in parallel with local governments. This is often perceived to be necessary for the local authorities who are particularly weak and their legitimacy is highly contested. The key element of any NGO intervention signifies the necessity to work with the most disadvantaged groups, and to support them to deal with their own issues. This brings the vexed question of accountability of the involved NGO to the community of housewives and rural women.

Repeated interactions through mobile phone can help to create webs of functional interdependence among women members of the community organization. Communities

that have high level of trust and cooperation can form effective project organizations somewhat quickly and efficiently, but communities that have low level of this asset would need active assistance from external bodies, i.e. NGOs and so on. Here, the importance of acceptance of mobile phone comes which could help to build reciprocity, trust and co-operation among households and in community through repeated interactions.

8.05 Conclusion

Different perceptions on the acceptance and use of mobile phone that are elicited from the qualitative study have one common underlying thread that mobile phone is a normal facet of modern life, be it in rural or urban areas, among men or women, young or old. It is found that the concern, needs and benefits ascribed to the mobile phone are more of a reflection of the existing societal, familial and gender norms prevalent in the society.

The findings suggest some main conclusions: (1) rural women in this study find mobile phone useful; (2) there are gender-specific uses, patterns and perceptions of mobile phone and internet; (3) obstacles to use of mobile phone use for housewives are both personal (e.g. prohibition from husband or other family members) and structural (lack of time, remote location due to which ubiquitous network accessibility is not possible, illiteracy which dissuade rural women for using advanced applications of mobile phone). The decision maker is generally the chief wage earner or the male head of the households. Housewives would often solicit advice from their spouses before purchasing a mobile phone, whereas husbands generally would make this decision independently. (4) The change of behavior of women is seen in terms of improved cognitive and imaginative faculty of women with increasing capabilities and expanded choices. (5) The acceptance of mobile phone can help women to reconcile home and work with better daily co-ordination. (6) In the lower social classes, the women's contribution to the family income is usually crucial for the survival of the family. In the extended families of rural Sonitpur District, the surplus labour is utilized many a times for the wellbeing of the family or sometimes for the well -being of other families in the same vicinity.

(7) There is lesser awareness among women folk of the households irrespective of rural and urban regarding existing gender needs, gender interests, gender biases and other gender issues.

In rural dwelling households, there is less motivation and interest for education and more stress on paid employment from the childhood. The question of balancing work and home amounts to more complex than who earns what income or travels away from home to work. Majority of surveyed women prefer to choose the role of primary caregiver and have accepted the social norm towards family management and child care with valuing tradition. There are ‘thin’ class differences, certain generational gaps and other structural and personal characteristics to distinguish among the opinions of housewives on domestic work and paid work. Both educated and uneducated women are morally and legally bound to the institutions of marriage, motherhood and the powerful cultural expectations of the society.

The women’s acts of sociability, leisure and entertainment, security and safety, and the need for information are socially and functionally defined while using mobile phone. Women who are confined to the boundaries of four walls of the household, acceptance of mobile phone technology essentially functions as a tool to develop and maintain external social networks with friends and other acquaintances and to generate social capital. Both mobile phone and internet have the potential to break down the perceived isolation of women by connecting them to other likeminded ones. Access to outside home social networks by participating in a community organization also provided them a sense of identity outside the family. Many women are found to have identified mobile phone technology as a channel for emotional relief during hard times. Support network generated through the mobile phone has helped to ease a stressful situation by facilitating instantaneous contact with their loved ones, simultaneously without violating their privacy. The emancipating effects of mobile phones find reflection in the gradual erosion of physical, spatial temporal boundaries that was socially constructed for women by forming a mobile mediated free space for them.

Survey responses show that acceptance of mobile phone has contributed to increasing earnings; increasing employability; changing work ethics with more flexible time and practices in household, thus has created new societal values and ideas. Acceptance and effective use of mobile phone aid to reconstruct household values, to imbibe new gender

discourses regarding women rights and gender equity and has given visibility and transparency to women abuses and injustice. It is through acceptance of mobile phone, women could equally nurture them with their family. Access to and owning mobile phone has proved to increase housewives' connectivity with family members by improving reliability, trust and confidence among family members.

Almost every surveyed household irrespective of rural and urban, rich and poor own a mobile phone. However, most of the women in surveyed households could not relate the benefits of mobile phone into their living. Rural backgrounds, limited or no access to roads or transport, credit and other development inputs are some factors that are responsible for shaping ignorant perception of women towards operating mobile phone and a phone with advanced features.

Access to affordable services and availability of infrastructure such as electricity, transport and proper security mechanism for women are major requirement if mobile phones are to be used for women's economic empowerment. Even to use internet for accessing information and to get the benefit from internet requires a great amount of support from institutions like family, school, government and private sectors to create an enabling environment. Any schemes or sponsored internet facilities by Government and Private Bodies has to be accompanied by additional services and training. Affordability and cost of Information and Communication Technologies has been a greatest barrier to access and use of ICT by women (Figure 9.2.1). Personal ownership of computer and internet may not be feasible in the foreseeable future for the vast majority of women in rural Assam. However, mobile phone technology can surpass the visible constraints which can in fact cater to the information needs and interest of women. Hence, possessing a mobile phone technology and receiving requisite services can possibly address the gender based digital divide. Evenhanded, equitable access to mobile phone and internet facilities will make receiving and producing information at ease and relevant to women, thus render them to desire for autonomy and become independent.

Behavioral intention of women towards accepting mobile phone and mobile enabled services are guided by (1) prejudices among women imposed by patriarchal society, (2) perceived difficulties to operate a technology, (3) technology phobia, (4) cost of handset, (5) lack of trust on operators or agent (5) Poor quality of network and coverage (6) Security concerns and harassment over mobile phones (6) lack of time beyond

household's management, (7) lack of skills, (8) lack of awareness and knowledge regarding the benefits of the technology. Above mentioned factors add on to the variables of applied framework of Technology Acceptance Model (TAM) to the study. Woman although an agent of rational choice, however, social norms and family dynamics use to influence their intention to accept and use mobile phone. In order to develop interest among women towards the acceptance and use of mobile phone and to make them identify benefits of mobile phone enabled services, an intervention through institutional apparatus has to place coercive, normative and mimic pressure to accept mobile phone technology in the daily life of women. The socio-psychological and cultural variables, i.e. subjective norms of the household, community and society; social influence while making decisions; perceived enjoyment are some other identifiable grounds behind the technology acceptance by the surveyed women. The proposed framework of Theory of Acceptance and Use of Technology (Venkatesh et al, 2003) provides justification of uses and acceptance behavior of housewives and rural women.

Women's participation in local community groups and organization could be represented by third places (see Oldenburg, 2009) which could provide beneficial changes to woman's capacity. Woman's participation in neighborhoods, in local community organizations could really work as a therapeutic experience as they get the desired space to realize their desire for change. Acceptance of mobile phone could facilitate this transitional space and to help women to relive the youthful humor, companionship, occasional freedom from social bonds and obligations. I would like to argue similar to Kopomaa (2000) that mobile phone would give a new meaning to dead times. Mobile phone by yielding flexible mobility among women can aid them to negotiate and renegotiate space and situation. With increasing flexibility of time, women could experience temporal efficiency as facilitated by acceptance of mobile phone. Women can postpone and rearrange schedule of meetings and appointments.

The thesis contributes to theoretical literature by providing a conceptual model (Connected Infrastructure Model) that describes hypothetically of a complex process, a representation of an interface between housewives and community of women. The conceptual model was built on TAM, institutional theory and communication infrastructure theory by theorizing SHGs or local community organizations as a unique constituent in a communication infrastructure which facilitate connectivity and

communicative capacity for the essential community components in a rural local environment. Mobile phone is perceived as a connected technology, acceptance of which through institutional intervention could lead to meaningful uses and could be an effective tool to disseminate and diffuse information among women.

The mobile phone is an indirect tool that is used to connect people to infrastructure and services that are not easily accessible. When infrastructure, such as hospitals, schools, etc. are seemingly inaccessible to communities, mobile phones are considered as essential and convenient means of communication for accessing basic services. Case studies of the rural areas of Tamil Nadu, Uttarakhand and Uttar Pradesh made it obvious that villages that had less access to hospitals, education, and government services, mobile phone becomes a tool to connect women to the basic amenities through mobile enabled value added services.

Mobile phone technologies hold great promise for the empowerment of women of rural dwelling households, yet in order to ensure that the entire women community to reap the benefits of these technologies, an intervention through organizational apparatus, i.e. NGOs via community organization or SHGs to provide technical solutions to women in order to bridge the information gap, to guide and encourage women to accept mobile phone and mobile enabled services are of vital important.