

## Appendix I The Questionnaire



### Dynamics of Mobile Phone Use and Women Empowerment: A Study of Women Participation in Household and Community (Descriptive documentation of families and mobile phone uses by women)

Name of the head of the Family .....		Reference year
Place of Residence (Urban, Rural): <b>RELIGIOUS affiliation</b> Are you a native resident of the community? Yes_____ No_____	CASTE affiliation	
Mobile phone no		Code: 1,2,3,4..... .....
Name of the Village		
Panchayat		
Block		
Tehsil/Sub-Division		Remarks
District and State		
<p>1. Household composition or profile</p> <p>1.1 Which composition of families/household you fall into</p> <ol style="list-style-type: none"> <li>1) Conjugal</li> <li>2) Nuclear family</li> <li>3) Nuclear family Female headed</li> <li>4) Joint Extend</li> <li>5) Joint Extended Female Headed</li> <li>6) Joint family Female headed or Single parent</li> </ol> <p>1.2 Educational level of the head of family</p> <ol style="list-style-type: none"> <li>1) Illiterate</li> <li>2) Literate-up to Primary</li> <li>3) Middle complete</li> <li>4) High school and above</li> </ol> <p>1.3 Ages of the members of family</p> <ol style="list-style-type: none"> <li>1) Number of members less than 18 years</li> <li>2) Number of members 18- 35 years</li> <li>3) Number of members 36-60 years</li> <li>4) Number of members above 60</li> </ol> <p>1.4 Mention the Size of family</p> <ol style="list-style-type: none"> <li>1) Small; Nuclear family of 1-3 members</li> <li>2) Medium; Nuclear family of 4-6 members</li> <li>3) Semi-Large; joint type of family of 7-9 members</li> <li>4) Large: joint extended family of 10 and above</li> </ol> <p>2. Employment status of the household</p> <ol style="list-style-type: none"> <li>1) Self employed</li> </ol>		

- a. Agricultural sector Farmer/poultry farm/pig farm/cow farm
- b. Non-agricultural sector shop keepers , carpentry, contractor
- 2) Salaried employee/regular wage
  - a. Agricultural sector Govt. job holder /private job holder
  - b. Non-agricultural sector Govt. job holder/private job holder
- 3) Rural labourers daily wage earner including daily wage earner mechanics
- 4) Unemployed between age 15-24
- 5) Not in labour force/pension holders

*2.1 Mention the labor supply per farming household*

- 1) Number. of men farm workers
- 2) Number of women farm workers

*2.2 Mention the occupation of the women members of the household*

- 1) Formal.....
- 2) Informal.....

*2.3 Mention the household income per month*

- 1) Less than 3000
- 2) 4000-9000
- 3) 10000-15000
- 4) 16000-21000
- 5) Above 21000

*2.4 Additional income a household receive from Secondary / Unorganised / Informal source*

- 1) 2000-3000
- 2) 4000-6000
- 3) 7000-9000
- 4) Above 10000

*2.5 Mention the ratio of income earned from primary and secondary occupation.*

- 1) 20: 80
- 2) 40: 60
- 3) 50:50

*2.6 The proposition of income of a household -*

- 1) Cash
- 2) Others

*2.7 Put the distribution of monthly household expenditure on the Information and communication sources and basic needs more or less approx. as per the following margin [100 ±(1) 500±(2)*

*1000±(3) 2000±(4) 3500±(5) 5000±(6)]*

- 1) Books and Journals
- 2) Newspapers & Periodicals
- 3) Library Charges
- 4) Education
- 5) Tuition Fees
- 6) Transport
- 7) Food & Clothing
- 8) Health
- 9) TV
- 10) Internet
- 11) Mobile phone

*3. Allocation of time per day, male and female members of families spend in household and*

market

		Female member	Male member
1)	Time spend in labor force/ market/working		
2)	Time spend in household/ caring/informal activities		

4. Poverty indicators of families

4.1 Do you hold APL/BPL cards? 1) APL

2) BPL

4.2 Tick the structure of your Household? Temporary/Semi-temporary/Permanent

4.3 Mention available household facilities

- 1) Electricity for lighting
- 2) Kerosene for lighting
- 3) Use LPG
- 4) Firewood
- 5) Sanitary/toilets
- 6) Sources of drinking water

5. Information Related to Availability, Accessibility and Affordability of Mobile Phone Technology

5.1 Does each member of the household possess a mobile phone ? Yes \_\_\_\_\_ No\_\_\_\_\_

5.2 Have you often suffered from network connectivity loss? Yes \_\_\_\_\_ No\_\_\_\_  
Further comment \_\_\_\_\_

5.3 Have you often suffered from power shortage while using mobile phone? Yes \_\_\_\_\_  
No\_\_\_\_\_

5.4 Do you think that mobile phone is more beneficial than other means of communication?  
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5.5 Have you ever borrowed a friend's cellular phone for use ? Yes \_\_\_\_\_ No \_\_\_\_\_

5.6 The maximum and minimum recharge you purchase for a month level of spending on mobile phone

- 1) Maximum \_\_\_\_\_ 2) Minimum \_\_\_\_\_

5.7 Since how long have you used a mobile phone?

- 1)2-6 years 2)7-11years 3) More than 11years

5.8 Which connections you prefer most ?

- 1)Reliance 2)Aircel 3) BSNL 4) Airtel  
5) Vodafone 6) Other

5.9 Have you met any problems in registering a SIM number for your mobile phone ?

Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, mention \_\_\_\_\_

5.10 Has your income level increased after using mobile phone? Yes \_\_\_\_\_ No\_\_\_\_\_

5.11 What is the approximate scale of your increased income after using a mobile phone?

- 1)10%                      2)30%                      3) 50%                      4)80%

5.12 Is economic development of your household possible without the mobile phone use?

Yes \_\_\_\_\_ No \_\_\_\_\_

*6 Uses of mobile phone by Women Residents of families*

6.1 Educational Qualification of the Female Members of Household

- 1) Primary Education
- 2) Secondary education
- 3) Higher education
- 4) Vocational training

6.2 SMS Literacy as per English literate

- 1) Read English and Can View Text Messages but Cannot Send Text Messages
- 2) Write English and Can Send Text Messages
- 3) Write English but Can't Send Text Messages

6.3 SMS Literacy

- 1) View Text Message But Can't Send
- 2) View and Can Send Text Messages

6.4 Degree of SMS literacy as per level of education

- 1) Primary education and can send text messages
- 2) Primary and can only view text messages
- 3) Primary education but cannot send SMS
- 4) Secondary education and can send text message
- 5) Secondary education and can view text messages
- 6) Secondary education but cannot send SMS
- 7) Higher education and can send text messages
- 8) Higher education and can view text messages
- 9) Higher education and cannot send text messages

6.5 Parameters to assess the domestication of mobile phone technology by Women Residents of Families ( A comparison with Men of families)

- 1) Are you friendly with the mobile phone key buttons/key pad? Yes\_\_\_\_\_ No\_\_\_\_\_
- 2) Do you know how to save number in the phonebook? Yes \_\_\_\_\_ No\_\_\_\_\_
- 3) Do you know how to set date, time and an alarm? Yes\_\_\_\_\_ No\_\_\_\_\_
- 4) Do you know how opening a Menu button ? Yes \_\_\_\_\_ No\_\_\_\_\_
- 5) Do you know how to write a message or SMS and to send it ? Yes\_\_\_\_\_ No\_\_\_\_\_
- 6) Do you know how to use Bluetooth? Yes No
- 7) Do you know how to use calculator? Yes No
- 8) Do you know how to use a touch navigation when there is a touch screen? Yes \_\_\_\_\_  
No \_\_\_\_\_
- 9) Do you know how to search internet through google, open a you tube video and to check internet connection ? Yes\_\_\_\_\_ No\_\_\_\_\_
- 10) Do you know how to use social media and instant messaging applications ? Yes\_\_\_\_\_  
No\_\_\_\_\_
- 11) Do you know how to record and send a video through Bluetooth and social media and instant messaging applications ? Yes\_\_\_\_\_ No\_\_\_\_\_
- 12) Do you know how to use camera, click a photo and send the photo through Bluetooth and social media and instant messaging applications ? Yes\_\_\_\_\_ No\_\_\_\_\_



6.6 What are the specific telecommunication needs of women residents of household? (Tick in order of preference as 1, 2, 3 ....for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> .....preference)

- 1) Best priced handset/subsidized
- 2) Connectivity offer
- 3) VAS offer
- 4) Free SIM
- 5) Lower call rate
- 6) Full talktime on all recharge
- 7) Free SMS

6.7 What are the challenges women residents of household face in accessing MVAS ( avoid if not applicable)

- 1) Illiteracy
- 2) Not trained or skilled enough
- 3) Language difficulty
- 4) Conspicuous content
- 5) Handset screen difficulty
- 6) Not consistent with the need or no relevance
- 7) Format of the content video/text/audio is not compatible
- 8) Not delivered timely

6.8 Share your experience on trade on mobile phone-related goods and services (Women only)

- 1) Selling recharge voucher
- 2) Selling air time (making other call and SMS)
- 3) Charging phone batteries
- 4) Repairing mobile phones
- 5) Selling mobile phones

*7 Availability and Usability of Applications and service Components of Mobile Phone Technology*

7.1 Mark or tick on numbers of applications in your mobile phone that are (1) Not available (2) Available but not Used (3)

		Female			Male		
		Not Available	Available but not used	Available and used	Not Available	Available but not used	Available and used
1	Calling purpose						
2	Use of SMS						
3	Use of beeping services						
4	Use of camera						
5	Use of recorder						
6	Use of calculator						
7	Use of headphone to listen to music						
8	Use of touch screen						
9	Use of internet or google						
10	Use for communication-social media, what's app or Hike						
11	Use of Bluetooth						
12	Use of calendar						
13	Use of clock						
14	Game						
15	GPS						
16	Video						
17	Book Reading						
18	Use of Online Shopping						

### 7.2 Gender Based uses & connectedness of Mobile Internet

		Female	Male
1	Are not aware of mobile internet		
2	Aware of mobile internet but have not accessed it		
3	Access to job portal		
4	Browse social networking site or What's app		
5	Taking part in discussion on mobile discussion sites or forum		
6	Google through mobile to retrieve information/news reading		
7	Mobile shopping		
8	Paying bills through mobile phone		

7.3 Gender distribution of Uses of Mobile phone to update information as per explicit individual information needs of families [ Mark (multiple pick) of the following instances when you use mobile phone to update yourself with information.]

- 1) 'Talk only' use
- 2) Market information such as use of market light app
- 3) Mobile Krishi
- 4) Weather information
- 5) Mobile Health or use for Health information

- 6) Talking to clients ( business purpose)
- 7) mobile phone as a substitute to transportation
- 8) Information about Disasters
- 9) Checking Examination Results
- 10) Searching employment Opportunities
- 11) Mobile phone to reach new contacts and opportunities.
- 12) M-banking or money transfer
- 13) Other service subscription
- 14) Use mobile phone to communicate with children's school teachers

7.4) Share your experience regarding the use of mobile phone so far

- 1) It delivers timely information
- 2) It helps to understand and analyze market prices
- 3) It facilitates trade and informs business decisions
- 4) It reduces transaction time, travel and costs by bridging distances
- 5) It promotes recreation
- 6) It promotes social networks
- 7) It promotes community's health progress
- 8) It promotes safety
- 9) It promotes employment

7.5) Reason for choosing the brand of mobile phone

- 1) Low price
- 2) Easy to use
- 3) Light weight/compact size
- 4) Enhance technological features

7.6) Factors of choosing a particular cellular network

- 1) Good connectivity and coverage
- 2) Cheap call rates
- 3) Quality service
- 4) Fair prices
- 5) Attractive scheme

8. *Uses effects of Mobile phone technology in exceeding capabilities of women residents of families*

8.1) Use of mobile has enhanced self-esteem and made more independent. Yes \_\_\_\_\_ No \_\_\_\_\_

If agree or disagree, mention why \_\_\_\_\_

8.1.2 Capability indicators that define increased self-esteem of women residents of families. Mark or tick (Yes= 1, No=2) of the following indicators

- 1) Go out of home freely
- 2) Meet officials
- 3) Attend village meeting
- 4) Actively participate in local political process
- 5) Gain family respect
- 6) Gain influence in society

8.2) Use of mobile has increased accountability. Yes \_\_\_\_\_ No \_\_\_\_\_

If agree or disagree, mention why \_\_\_\_\_

8.2.1 Capability indicators that define increased sense of accountability of women residents of families. Mark or tick (Yes= 1, No=2) of the following indicators

- 1) Listen to each other more
- 2) Discuss issues together
- 3) Sense of reciprocity enhanced
- 4) Help to oversee family responsibility

8.3) Use of mobile phone has improved the standard of living. Yes \_\_\_\_\_ No \_\_\_\_\_  
If agree or disagree, mention why \_\_\_\_\_

8.3.1 Capability indicators that define improved standard of living of women residents of families. Mark or tick (Yes= 1, No=2) of the following indicators

- 1) Increased economic stability
- 2) Reduced cost of credit
- 3) Increased income
- 4) Increased safety and security
- 5) Reduced boredom

8.4) Use of mobile phone has increased the level of your participation in your community? Yes \_\_\_\_\_ No \_\_\_\_\_  
If agree or disagree, mention why \_\_\_\_\_

8.5) Use of mobile phone increased scope of entrepreneurial activities in the residing community? Yes \_\_\_\_\_ No \_\_\_\_\_  
If agree or disagree, mention why \_\_\_\_\_

8.6) Use of mobile has made my/our life more independent. Yes \_\_\_\_\_ No \_\_\_\_\_  
If any member agrees or disagrees, mention why.....

8.7) Use of mobile has made me more productive. Yes \_\_\_\_\_ No \_\_\_\_\_  
If any member agrees or disagrees, mention why.....

8.8) Use of mobile has helped to oversee family responsibility. Yes \_\_\_\_\_ No \_\_\_\_\_  
If any member agrees or disagrees, mention why.....

9. Gender Distribution of Access to Communication Infrastructure at Home and in Community

9.1 Mark or Tick on the Access Parameters Given Below

		Female	Male
1.	Access to Communication Technology at home as well as at community setting, CIC, SAHAJ, Aronoydoy Kendra		
1.1	Access to Communication Technology at home but don't access at community setting, CIC, SAHAJ, Aronoydoy Kendra		
1.2	Access to Communication Technology at community setting, CIC, SAHAJ, Aronoydoy Kendra but don't access at Communication Technology at home		

2	Access to Communication Technology at home but don't participate in SHGs				
2.1	Participate to SHGs but don't access to Communication Technology at home				
3	Access to Communication Technology at home but don't access to library,				
3.1	Access to library, but don't access to Communication Technology at home				
4	Access to Communication Technology at home but don't access to cooperatives				
4.1	Access to Communication Technology at home but don't access to Market and credit				
4.2	Access to cooperatives, Market and credit but don't access to Communication Technology at home				
5	Access to Communication Technology at home but don't access to local PHC				
5.1	Access to local PHC but don't access to Communication Technology at home				

9.2 How frequently you access to Internet Café/CIC/Arunoday Kendra

		Female	Male
1)	Once/twice/thrice a week		
2)	Once a month		
3)	Once in six month		
4)	Once in one year		
5)	Have not visited yet		

9.2.1 Mark the barriers (Multiple pick at a time) to access to Communication technology at home and at community as per preferences such as 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> ( For Women Residents)

- 1) Supposed difficulties
- 2) Technology phobia
- 3) Cost
- 4) Lack of time beyond household management
- 5) Child rearing
- 6) Lack of skills
- 7) Lack of knowledge/ information regarding benefits of ICT
- 8) Inappropriate opening timing, not consistent with household timing
- 9) Lack of requisite transport facilities
- 10) Lack of security

9.3 Tick the CIC services given below that you have accessed so far

- 1) Commodity/ Mandi Marketing Information/ Rural Market
- 2) Rural News Paper (Information of the Gaon)
- 3) Health Service Information
- 4) Customer complain

9.4 Mention the distance nearest Internet café/ CIC/Arunodoy Kendra

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9.5 Are you trained in any programme offered by CIC i.e. CAP (Computer awareness Program)/ CCCA (Certificate Course in Computer application )/ ACAP ( Advanced CAP)/ CCC ( Course on Computer Concepts ) of DOEACC/ Computer Literacy Program of IGNOU/ Internet

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9.6 Have you ever engaged in ICT sales service such as Computer ( Hardware and Software), Mobile Phone Sale, TOP-UP-recharges ? Yes \_\_\_ No \_\_\_

If yes, then mention the nature of service

\_\_\_\_\_

9.7 Do you possess Adhaar card/UID card? Yes \_\_\_ No \_\_\_

9.8 If given choice to receive information from information Centre , the nature of service you prefer most will be-

- 1) Voice services (want to listen to a person from opposite end)
- 2) Computational voice services

9.9 Share your experience on the distribution of Mobile Phone-Related Goods and Services Goods and/or services

- 1) Selling recharge voucher
- 2) Selling air time (making other call and SMS)
- 3) Charging phone batteries
- 4) Repairing mobile phones
- 5) Selling mobile phones

*10. Information on Interventionist approach : Intervention Programme of Gram Panchayat/ SHGs-NGOs/ State or Central Government*

10.1 Have you ever/ quite often taken participation in meeting of Village Society, Panchayat, Village Development Committee, with Business Partners or Clients ?

\_\_\_\_\_

10.2 Are you a beneficiary of income enhancement program of State/ Central Government?

\_\_\_\_\_

10.3 Are you a beneficiary of any social welfare program of State/ Central Government?

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10.4 Have you ever/ quite often participated in any skill development or capacity development program of an NGO ?

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10.5 Capability indicators that is experienced by women residents of families after involvement in NGOs/SHGs. Mark or tick (Yes= 1, No=2) of the following

- 1) Greater economic stability
- 2) Reduced cost of credit
- 3) Obtain entrepreneurial skills
- 4) Acquired an identity at home & in society
- 5) Improve group dynamics
- 6) Improve marketing skills
- 7) Improve Financial skills
- 8) Better business decision
- 9) Engaged in managerial work
- 10) Gained more access to schemes and scholarship
- 11) Gained more access to legal information

10.6 General socio-economic barriers that pose to be motivational constraints for women residents household

to participate in community Groups & enterprises i.e. SHG/CIC/ Internet café/ Arunoydra/Cooperative or

Credit society ( Mark tick on multiple conditions if applicable)

- 1) Poor living conditions
- 2) livelihood insecurity
- 3) Illiteracy, lack of proper employment
- 4) Gender inequality at home and elsewhere
- 5) Health problems
- 6) Scientifically less advanced
- 7) Constraints in accessing information

10.7 General constraints women face after participating in community Groups & enterprises i.e. SHGs/CIC/Internet café /Arunoydoy Kendra/ Cooperative or Credit society ( Mark tick on multiple conditions if applicable)

- 1) Marketing is considered to be tough
- 2) Hectic procedures in preparing minutes, reports, meetings, banking etc.
- 3) Community groups & enterprises became an additional burden to them besides household

10.8 Do you think NGO intervention is required for the promotion and development of self-employment of women?

Yes \_\_\_\_\_ No \_\_\_\_\_

Thank you

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## **Appendix II**

### **Surveyed Villages**

**Assam:** The geographical area of Assam is 78353 Square km (2.4% of the area of country). It is surrounded by the other six North East States viz. Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya. It also shares a boundary with Bhutan and Bangladesh in the North and East. There are 33 districts and 153 Sub-Districts/Blocks, 214 towns and 26395 villages in the State. As per census 2011, population is recorded 31205576 with 14.08% urban population. The population density of Assam is 397 persons per Sq Km.

**Locational Overview of Sonitpur District:** With 37 million people and an area of 945,000 square km, Sonitpur remains one of the most urbanized districts of Assam. There are villages in peripheral surrounding of the District dominated by the ethnic communities such as Bodos, Mishing, Nepali and Aadibasi Community. Most of the inhabitants, despite having their own local language, adore the Assamese language as their own and speak in Assamese. Assamese is the lingua franca of the region.

### **Summary of the Villages Surveyed**

#### **Namonigaon Village under Rangapara Development Block**

The Namoni gaon is one of the ancient villages adjacent to Rangapara Town. The village is surrounded by Hatibari Tea estate in the north, Depota River in the south, Namoni gaon Tea Estate in the east while Rangapara Town is in the west. Originally, the village was thinly populated with a few Assamese, Adibasi, Bodo, Punjabi, Nepali and Bengali people. The main livelihood of the people in the past was cultivation. During 1960s, people came from different places in search of work in tea estates, and slowly settled in some of the nearby agricultural lands of Rangapara Town. Also, after the extension of Rangapara-Tangla Railway line, people of different communities had infiltrated either for Railway Service or for contract and supply etc. and get settled in the Namonigaon Village. It would be worthwhile to mention that, today, almost 14 thousand people from various caste, creed, languages and religions live together with integrity who understand and speak Assamese language for the common purpose and interest. However,



Namonigaon village is now divided into two parts as Namonigaon -1 and Namonigaon-2. One part is now under Rangapara Town Committee, while other part of the village is a gram Panchayat under Rangapara Anchalic Panchayat Committee. With the constitution of Rangapara Block in 1992, the area has slowly started developing. Up to 1970s, there was only one LP school. With increasing numbers of population, Schools, Clubs, Religious Institution and Government Offices etc. are built across the village. Apart from Namonigaon M.E School, some private schools like Green Dale, The Diamond, Sankardeva Sishu Niketan have established three to five years back. Two Anganwadi Centres are located in the village. With the active support of Sri Nagen Basumatary, Durlabh Sarma, Nizamul Hazarika, Tafaid Ahmed, Ratul Sarma, one club was established in 1979 which is now known as Namonigaon Milan Sangha and Library. Since its inception, various cultural festivals such as Silpi Divas, Rabha Divas have been organized every year apart from Bihu Festivals. However, a committee for the Rangali Bihu Festival is formed every year and it has completed its Silver Jubilee year in 2013. In the village, there are temples of Mother Goddess (Aai Bhagawati Mandir), and of Lord Shiva, two temples of Goddess Kali, one in the village and another in nearby Daushi lake; one Buddhist Monestry, one Anjuman Madrassa, two cremation grounds one for the Muslims and the other for the Hindus. An Assamese 'Namghar' and a 'Mahila Samity' office for the women folk of Namonigaon says the participation of the local ladies in various cultural and other programmes.

With the growing population, agricultural lands for cultivation have been fallen into shortage in the village. Villagers are mainly dependent on business, self-employment, Govt. and Pvt. Services. The percentage of highly educated people is comparatively less. However, the new generation has come forward and has been working as doctors, engineers, lecturers, Govt. officials in different places outside the village. In terms of composition of household, the average family size comprises of 6 members.

Rangapara Town is almost 2 kilometer away from the village. There are three PCOs, one internet café inside the vicinity of Namonigaon Village, younger one in the household is found going to town to surf net. The Community Information Centre of Rangapara Bengali H.S School has been used not only the students of that school but also the students from Schools of Namonigaon and adjoining areas. CIC is converted to Internet Café now, access and use of which is open to all villagers at a nominal fee.

Post office, Bank Branches of UCO, SBI, Assam Co-operative Apex bank, UBI are located within the radius of 2 km apart from a Satellite Branch of LIC. The condition of PWD Road connected to Tezpur is not good. In spite of that, villagers commute by bus and minibus service for attending the district offices as per their necessities. The main two roads connecting the Rangapara town are pucca, and road development activities inside the village are carried by a few conscious social workers of the village. Social workers like Sri Nagen Basumatary Pankaj Nath, Dipak Baruah have made major contribution for some the developmental and community works in the village. It is observed that all families in the village use mobile phone barring one or two and almost all users are happy to use the phone in day to day life.

### **Niz Borchola Village under Borchola Development Block**

Niz Borchola is a thickly populated agriculture based village under Borchola Development Block. It is almost 15 km away from Dhekiajuli Town via Sirajuli with pucca road connected to Highway from Sirajuli Centre. Daily Buses commute from Dhekiajuli town with 4-5 frequency per day. Borchola H.S. School is situated near the right side of the main road just before reaching the Niz Borchola village.

There are almost 85 families in the village comprising mainly Koch, Bodo and Nepali community. Earlier, it was a dense forest with 12/13 families of Bodo and Nepali origin. These families of Bodo and Nepali have gone to the interior forest side now. 48% of total households belong to BPL Category. Inside the village, the roads are either gravel or semi pucca. The land is very fertile and productive. The families grow agricultural products such as khariff crops- paddy, oilseeds, pulses apart. Some of the families have started small tea plantation in the nearby open area of land. Some of the families have started poultries and fisheries nearer to their boundaries of the household premises. Three/four families have started small tea plantation apart from other cultivation. A section of the people is engaged in small business and trade while others are fully devoted to their cultivation. The overall condition of the village households is good. The average household income of the family is almost Rs.20,000/- per month. A small section of households are engaged in services like teachers, clerks etc. in Govt. and semi Govt. offices. Apart from the H.S Schools, there are two L.P Schools and three Anganwadi Centers. There is neither PCOs nor internet café. The Arunoday Centre is in

Doomdoo market place, 6 km away from the Borchola village where one PCO is also located.

Village households own tube well and well for drinking water. Water supply scheme has introduced a few roadside taps in the villages. No drainage system is found. However 62% of households use sanitary latrine. Electricity connectivity is there, but there is no facility of street lights in the village. The irrigation system through Deep Tube Well is installed around a few cultivation fields. However, all cultivators do not avail the same. Only 18 % people use LPG Cylinders for cooking. There are two co-operative societies, one credit society and three self-help groups in the village. No commercial and agricultural bank is found in the village.

### **Bhalukekhowa Village under Bihaguri Development Block**

Bhalukekhowa Gaon is an ancient village under No 2 Bihaguri Anchalik Panchayat in Bihaguri Block. It is 2 Km from the Highway point at Bihaguri towards southeast from the Highway. There are 434 families in thickly populated village and almost 90% of the people are dependent on cultivation. The average members per households are 5. Out of the total 434 households, 227 families belong to OBC. 180 households are recorded under BPL Category. There is no SC, ST families in the village. 27 numbers of households are headed by female in the village. Road, in the village up to a certain point is pucca and the remaining roads are gravel and kuchcha. There are two LP Schools, two Anganwadi Centres, and one small library in the village. Only one fair price shop is found in the village. The average income per family per month is around 25,000/-. However a good numbers of families who are living from hand to mouth working as daily labourer either in agricultural sector or in non-agricultural sector.

For high school and higher secondary education, the students come to Bihaguri H.S Schools and Bihaguri Girls High Schools which are adjacent to National Highway at Bihaguri. National Highway is 2.5 km away from the village. There is no PCOs, internet cafés at the interior of the village; villagers have to come out to Bihaguri Centre where these facilities are available. There is a Arunoday Centre, internet café and a co-operative society at the Centre of Bihaguri Higway. There is a Community Information Centre at Bihaguri Higher Secondary School has been inactive from last four years as the grants from the Govt. has been discontinued. Bihaguri College is situated almost 5 km away

from the village. The Bihaguri Block Office is situated at a distance of 4 km and the newly constructed Tezpur Medical College and Hospital at Bihaguri is located 4.5 km from south west of the Bhalukekhowa village. Almost 86 % of the households surveyed use two to three mobile phones. Though there is no government and private sector banks within the village, villagers come to Bihaguri Centre for banking transactions where there are 2 ATMs and one UCO Bank Branch, one branch of Assam Gramin Bikash Bank and one SBI branch etc. The Post Office is also in the Bihaguri Centre point near the Highway which is about 1 km away from the village. The PHC in the village is placed at the distance of 1 km from the heart of the village. A daily evening market is found at the Bihaguri Highway where the vegetable and other commodities are sold by local vendors. There is a central library called Chandranath Sarma memorial library in Bihaguri within 3.5 k.m range. Though there is rural water supply project of PHED in Bihaguri, it has reached only a part of the villagers at Bhalukekhowa. For drinking water, people are dependent on tube-well/hand pump and well. 80% of total households (both Male & female) are self-employed in agricultural sector, and 20% of total households are in non-agricultural sector. Almost 40% of total village households are employed as regular waged and salaried employee. Regarding the structure of the house, 40%, 15% and 45 % of households are respectively pucca, half pucca and kutcha. There is no forest area within the radius of 5 km No industry or factory is found in the village.

#### **Dhenudhara Village under Chaiduar Development Block**

Dhenudhara is an old village under Gohpur Town Committee under Pub Chaiduar Block established in 1817 with only 15 families as per an octogenarian habitant. The village is situated in the southeast of Gohpur town connected with Gohpur –Howajan Road with 3 / 4 connecting bye lanes. The village is 3.5 km from the Gohpur Town and is under the urban agglomeration of the town since last 2003. At present, the village is inhabited by 105 families. Almost all the families are dependent on cultivation. The main crops are Paddy, various pulses, and maize etc. The land is fertile and crops grow heavily without any chemical manure. However, organic manure is used by some of the families for khariff crops. The people are very hard working, simple and busy with cultivation and firming. A few village households are engaged in tea plantation in two/three bighas of land since last 6 years. Out of the total 105 families most belong to OBC communities. 19 families are high cast Brahmins while other 7 families belong to SC communities. There are no ST families. 11 families are

Hindu Bengalis who are slowly going to be merged with Assamese culture and societies. 12 % of the total village households are well-to-do rich. They earn from their occupation as doctors, advocates, lecturers of college, teachers. 12 % of the total numbers of families are engaged in business apart from cultivation. Total households headed by females are 6. As per Voter List, 400 male and 375 female are there in the village. Including minor children, total population of the village would be around 1089. Total Male and female employed in Agricultural sector are 85 and 50 respectively. Male and female self-employed in non-agricultural sector are 15 and 20 respectively. Male and female employed as regular wage/salaried employee 18 and 5 respectively. Total unemployed youth would be around 55.

The village households own personal tube well and well for drinking water. There are no credit societies in the village. One Co-operative society is found nearby Gopalpur village, 4 km away from the surveyed village. There are 4 self-help groups in the village. There is no adult education facility in the village. Only one fair price shop is available in the village. There, are three Anganwadi noon-meal Centre and one Pre-Primary, one L.P School, one High School within the radius of 2 km in the village. For Higher Secondary School and College education, student commutes to Gohpur Town. There is a PH sub-Centre in the village and the main PHC is in Gohpur town. There are no factories within the vicinity of 7 km radius of the village. Work of one new bridge is going on since 2011 on Satrang River which is within the vicinity of 5 km. There is no forestry in the village and nearby villages. There are Bank Branches in the town only and a post office. A public library is in the Gohpur town only. One single Community Information Centre is found Gohpur H.S School. People commute to the town for marketing of commodities and other belongings.

Electricity connection is there with only 5 street lights in the village. No renewable source of energy is there in the village. No Govt. controlled irrigation system is found in the village. However, two families are found to have boring pump for irrigation at tea plantation and other cultivation. The Rly Station is 2.5 km away from the village. The branches of SBI, Assam Co-operative Apex Bank and UCO Bank branches are located in Gohpur Town, distance of which is 2.5 km from the village.

### **Hydabari Village under Sakomota Development Block**

The original name of Hydabari Village was Haldhibari which is an almost 140 year old village which was thinly populated having farms and cultivable lands. The families are mostly poor and belong to BPL category living on cultivation and minor business. Majority of the village families are Bodo, Adivasi, Koch-Rajbangsi along with some families of Bihari origin. There are around 100 ST (Bodo), 70 Adivashi, 15 SC, 35 OBC families in the village along with 25 families of Bihari origin. 68% villagers are under BPL category, another 3% BPL category people have not registered for BPL Card. In the last 40 years, a good numbers of landless small businessman and labour class households of Biswanath Chariali Town have settled in the village purchasing the lands at nominal amount. The village head, Sri Mohan Kumar, who belong to Adivasi community, informed that as per his register, there are 287 families with total population of 1591 in the village. Almost 35 % people who are small businessman and of labour class have only the dwelling house in one to two kathas of lands having no other cultivable lands. There are two LP schools, one High School, one Private junior college in the village. The Primary Health Centre for the village is located in Japani Basti, 2 km away from the village interior. There is a market near by the Gram Panchayat office. The Library is run by the Hydabari Jubak Sangha. There is no Arunoday Centre, however, one internet café is found 3 km away in Kochgaon, Internet café can be accessed in Biswanath Chariali which is 5 km away from the village. The only Adult Education Centre since 1983 has been closed. The villagers are simple, co-operative and peaceful though they belong to different communities. Structures of the houses are kutcha and thatched. However, houses of Assam type pucca full wall are found by the main road. There are some families who are under BPL category but the BPL card is yet to be issued. The average income of the families per month is around Rs. 8000/- to 15,000/- only. Almost 70% people uses mobile phones. A few families in the village are found not possessing a single mobile phone. There is no Bank Branches in the village except one post office which serve the monetary purpose. 15 households have bank account in Biswanath Chariali Bank .The power supply is not regular for which people have to use kerosene lamps. A few households are found to sleep at around 7-30 to 8.00 pm in the evening. Villagers use tube well and well for drinking water. Almost 43 % of total households use sanitary latrine.

### **Jarani Village under Pub Chaiduar Development Block**

The Kokila –Jarani village under Dubia Gaon Panchayat is popularly known as Jarani Village in Pub Chaiduar Block. The village is almost 170 km from Tezpur University. The village is inhabited by poor people living on cultivation only. Almost 65% of the villagers are from Ahom community belong to OBC. There are altogether 122 families in the village with zero families belong SC, ST community. As per records, total male members in the village are found 457 against 468 (no) of females out of 925 total population. Number of female headed households are 21. There are 73 numbers of households under BPL Category. Another 12 to 15 families who are under BPL category, yet to be recorded in the list for lack of guidance and due to their own ignorance. The village is situated towards north of National Highway and it is almost 1.5 km away from the National Highway. The road in the village interior is mixed with half pucca and gravel. One pre-primary, one High School and one Anganwadi Centre are there in the village. No adult education institute is there in the village. The Village Panchayat Office is in one corner of the Village. There is no co-operative society in the village, but some people avail the facility from the co-operative society at Dubia (at a distance of 6 km ). There are four self-help groups in the village. There is one fair price shop in the village and the weekly market sits 3.5 km away from the village. Neither PCO nor internet café is available in the village. Villagers have to go either to Gohpur town which is almost 12 km distance or to Dubia for internet access. Villagers generally commute to Dubia on foot or by bye-cycle. The Dubia Railway Station is almost 6 km away from the village. The Mandi market is at a distance of 10 km at north of the village. There is neither Arunoday Kendra nor Kishan Call Centre in the village.

Though the village is well supplied with electricity, eight families are yet to have the electricity facility. The power supply is not regular throughout the entire day. One family is found to have renewable source of energy (Gobar gas project) which lit only two/three bulbs. Though there is mini water supply project of Public Health Engineering Department in the village, water does not flow through the taps in the roadside regularly for which, people are dependent on tube well and well for drinking water. Sanitary latrine is used by almost 42% of the families in the village. Out of the total 122 families, 20% families live in kutchha thatched house, 50% live in half pucca and rest 30 % houses are with pucca full Assam type construction. Only 6 well-to-do families live in the

village. There is no factory or industry found in the village or in adjoining area. Almost 68% of the total villagers use mobile phones.

### **Bora Chuburi ( Ratowa )Village under Baghmara Development Block**

Originally, there were only 20 families in the Ratowa village. During sixties, some people had settled down coming from Bihali and Baghmara and adjoining areas by clearing some forest and unregistered lands. At present, there are almost 100 families in the village. Earlier the lands were very fertile and production of agricultural was heavy. At present, not the entire but only some parts of the village are fertile. A part of Ratowa village called Bora Chuburi is surveyed where most of the families belong to lower middle class and poor. However, there are three four families who are well to do with an occupation in business sector and service sector. 55% of the houses are kutcha mud plastered, 28% are half-walled with pucca floors and remaining 17 % are full-walled Assam type (Pucca). 75% of the families belong to OBC community and 58% are under BPL category. There are around 53% male and 47% female population as per village head. The household or families headed by females are nine (9) in number. Most of the households are into agricultural works and few households are dependent on small trade and business in village.

One L.P School, two Anganwadi Centres are there in Bora Chuburi. The High school is almost 5 km away from the village. The main road from the Highway is pucca for almost 3 km and rest of the road is gravel and katcha. The village is connected with electricity though the power supply is not regular throughout the day. Well to do families are seen using generators and inverters. There is one Kishan Call Centre just at the entrance to the village near the Highway. There is no daily or weekly market sit in the village. For purchasing essential commodities, people come to the Centre point at Highway though two/three shops are there in the interior part of the village. There is no PCO or internet café found in the village. There are no co-operative societies in the village. Neither NGOs nor self-help groups are formed in the village. One sub Centre of the PHC is located in the village. However, villagers are not benefited much from the PHC sub Centre and they go to Baghmara PHC for medical consultation. Families in the village use tube well and well for drinking water though one part of the village is connected by water supply of PHED, Govt. of Assam. Although poor, most of the families use sanitary and semi sanitary latrines. 60% of total families use gas cylinder for



cooking and rest are dependent on kerosene and woods as fuel. There is no renewable source of energy in the village. There is no big forestry within the vicinity of the village. 62 % of the total surveyed households in the village use mobile phones. There is no Bank Branches in the village.

### **Dahkin Panibharal Village under Biswanath Development Block**

Dakhin Panibharal village (Panibharal Panchayat) under Biswanath Chariali Development Block is almost 6 km away from the Biswanath Chariali Town towards Biswanath Ghat. The road from the town is pucca pitched to Biswanath Ghat whereas the south west route of the village is stony. The road becomes muddy during rainy season. Most of the households belong to Assamese-Nepali community. The families are mostly from poor and lower middle class category dependent on cultivation. Some households started small tea gardens with fresh & new plantation apart from paddy cultivation. Almost all the families possess own Jersey cows, when per cow gives 15 to 30 liters of milk per day. There is a co-operative society of milk sellers in the village. A big forest lands under Kaziranga sanctuary is located in the south west part of the village, which is almost 6 km away from the heart of the village, and villagers see rhinos, deer and tigers sometimes as per they say. The distance of the village is equal from the Biswanath Chariali Town and from Biswanath Ghat (Bank of Brahmaputra). The Scenic beauty of the village is one of the main features. The Anchalic Panchayat Office comprising of 10 villages is situated at the Centre point near the main road in front of the Panibharal Natya Mandir (established in 1945). 900 families were enlisted as BPL families out of which 35 families are from Dakhin Panibharal Gaon. Some of these families are found to apply for Indira Aash Yojana. According to Sri G. Kafle, one octogenarian citizen of the village, the village is as ancient as 235 years having only 25/26 families initially. During that time, the village was covered with dense forestry and those families co-habited with wild animals and it was a regular feature to meet the herds of buffalos, elephants, deer and some rhinos and tigers. In the past, families were belong to peasantry owning 30 to 40 bighas\* of land per family. At present, there are 117 families in the Dakhin Panibharal village. There are 3 pre-primary schools, 2 L.P schools, one MV school and one High School in the village. Three Anganwadi Centers are there in the village. The Biswanath Chariali H.S. School is 3 km away from the village. A Firm Machinery Training Institute is there which is located at a distance of 2.5 km from the village. The Biswanath Chariali Agricultural College under Jorhat Agricultural University is situated almost 4.5 km away

from the village. A big campus of 'Maharshi Yogapith' is situated almost 2 km away from the village on the right side of the road towards, Biswanath Ghat. The entire village including Dakhin Panibharal is electrified. There are street lights in the main road. People are very peaceful, laborious and cooperative. There are 4/5 families having highly qualified persons who are working outside the country. Along the main road, a small market with some 7 shops including a fair price shop and a restaurant is sited near the Panibharal Anchalic Panchyat Office. There are two PCOs and a computer training Centre found. However, no internet café is located nearby areas of the village. 72 % of total households use sanitary and semi-sanitary latrines as per an Anwanbadi worker. Drainage system passes through the village. Families use tube wells for drinking water. LPG cylinders and woods are used by the families as a fuel for cooking purpose. Two families are found to use the benefit of Gobar gas plant as a renewable source of energy for their own. Almost all the families use mobile phone for their business and personal use. A good number of families are still using kerosene lamps when there is no electricity power supply. Average monthly income per family per month is around Rs.12000/-

A small Branch of SBI , some newly formed self-help groups and a Co-operative Credit society are found in the village.

### **Pathekkuri Village under Sootea Development Block**

Pathekkuri village is situated 2.5 km north of the National Highway road under Madhyam Naduar Panchyat under Sootea Block. The village is thickly populated. The Roads inside the village are pucca and gravel mixed. The families belong to lower middle class baring a few poor families. The families are dependent mainly on cultivation and very laborious. Almost in every alternate family there is a service holder either in Govt. service, semi govt. service or private service. Most of the houses are found to be either full-walled or half-walled pucca with a small garden in front of the house. At the heart of the village, there is a public library with

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\*Bigha us a traditional unit of land measurement used in India. It varies in size in different parts of India.It is usually less than an acre or 0.4 hectare. In Assam, one Bigha consist of 5 Katha. Bigha is 14400 ft2 (1337.8 m2).

Katha is another unit of land measurement use in India and Bangladesh.

computer facility. Government regularly grants books to the library. Library is congested and needs more rooms and racks for accommodating books. The students and younger generation are found to be interested to borrow books or sometimes study in the reading room in the library. Close to the library, a Namghar is seen where older generation and village women usually assemble regularly at different interval.

The villagers are very cultured, soft spoken and helpful to each other. In the Bihu festivals and other local festivals, all the villagers assemble in the open space in front of the library and Namghar where there is ample space. The village consists of 133 families. The ratio of male and female population is 51% and 49 % respectively. The females also help the males in the field during the plantation and harvesting season of the agricultural products. A good numbers of families in the village were found to participate in the Gandhiji's movement for freedom. One elderly citizen informed that he along with a few others personally met Binova Bhave and traveled with him for Bhudan Movement. There are one high School, one Pre- primary, one LP Scool, one Sankardeb Sishu Niketan and one Anganwadi Centre in the village. The average income per family is Rs.20, 000 per month. 46% of total families belong to BPL category whereas 54 % of total families are from APL category in the village. Villagers use to participate in the developmental activities of the village. Neither PCOs nor internet café is found in the village interior. However, one 'Sahaj' is located just at the entrance of the village beside the National Highway. There are no bank branches in the village. For banking transaction, villagers have to come to Sootea Market Centre at NH. The village is connected with electricity. Villagers use well and tube well for drinking water. Sanitary system in the village is improved one. Each family of the village possesses one or more than one mobile phone. Households are electrified and there are street lights in the village. No renewable source of energy is found for use. Drainage is constructed in some part of the village. Govt. controlled irrigation system is found in the village. Two self-help groups and one co-operative society are formed in the village. One handloom and textile Centre came up in the village 10 years ago. Sootea College is at a distance of 6 km from the village interior and the students use to commute by bye cycle and on foot. The Post office and PHC are 2 km and 3 km away from the village respectively. The Rly station is situated at a distance of 6 km from the village.

### **Jahajduba Village under Gabharu Development Block**

Jahajduba is a small village under Gabharu Block, road connected to the village is katcha. There are all together 87 families out of which 80 % are Muslims and are poor. 69% families are under BPL category though a good numbers of them are yet to be categorized as BPL. The land composition of the village is sandy. Villagers live on cultivation on paddy, jute, sugarcane, Potato, oil seeds and other khariff crops. They use chemical manure in the cultivation field. In some households, both male and female members are working as daily laborers, thela pullers or vegetable sellers. All the village households are religious and goes to Masjid for prayers. There is an L.P School. For High school education, students of the village commute on foot or by bye-cycle to Panch-mile High school. Though there are two/ three shops in the village, village households come to Panch-mile for marketing and other purchases. There is one Anganwadi Centre in the village. No bank Branches or post office in the village is found. There is no small or medium industry in the village. The average family income per month is around 7000/-. Only 8% of the total population has secondary education as per the records of Block office with 30 % having primary education and rest 62 % of households are without any formal education. But the interesting feature is that, almost each family is having mobile connectivity, even though some of the people are illiterate. The electricity connection is there but 40% of the families are without electricity connection and use kerosene lamps and candles. Most of the village household respondents said that they go to bed at around 7-30 pm in the evening and gets up early at 4.00am in the morning and get themselves busy with their day to day work. Villagers are simple and laborious.

### **Behali T.E Village under Behali Development Block**

Behali T.E is a small settlement of Adivasi people under Serelia Panchayat in Behali Block. The Behali T.E authority established the village with some 45 labor quarters for their stay. Subsequently, with the growth of population, some Adivasi people have built their residential houses for their families near the quarters in vacant land. Total numbers of families at present in this Tea Estate settlement are 120. In front of the village parallel to National Highway, a large play ground with a church and a community well is there. The street alongside the Quarter is pucca. Streets in Basti area is kutchha and gravel. Around 24% of total families are dependent on cultivation.

The village settlement is electrified. 20%, 30%, and 50% of total households surveyed are respectively pukka, semi-pukka and kutcha. There are two Anganwadi noon meal centers and one pre-primary, one primary, one high school inside the Adivasi settlement in Bihali. The Higher Secondary school is 4 km away from the village interior. There are two colleges - one Govt. college in Bargang and another private college at a distance of 2 km from the village interior. The police station and veterinary sub-Centre are 2 km away from the village. The Post office and PHC are at a distance of 1 km from the village. There is no Bank Branches in the village. For banking transaction people have to go ahead of another 5 km. There is one co-operative society store from where the people collect their ration and commodities. Another co-operative credit society is there for the Adivasi households. One fair price shop, about 7 other shops and a restaurant are found in the village. There is tea factory within the vicinity of 3 km. No PCOs or internet café is found in and around the village. For internet access and conventional telecommunication facility, villagers have to go another 4 /5 km. Villagers use tube well and well for drinking water purpose. 60 % of total households got sanitary latrine provision.

The Bedeti Railway station is 7 km away from the village. Bus connectivity is available as the village settlement is close to highway.

### **Tarajan Village under Dhekiajuli Development Block**

Tarajan village is situated in the north west of Sonitpur District. The Tarajan village is aggregation of two adjoining villages- Tarajan Pathar (Purani Tarajan) and New Tarajan. New Trajan is inhabited by Muslim community most of which came to settle after 1962. The surveyed village is Purani Tarajan under Panbari panchayat in the Dhekiajuli Development block. There is no pukka road connected to the village, only stony kucha narrow lane and 'aali' drawn in across the vast cultivable field are visible road connection. Three years ago, one primary school got established in the vicinity of the village. There is no higher secondary school, colleges and technical institution is far beyond to think. However, a high school has been set up few years ago on the way to Purani Tarajan village along the Panbari locality which is at a distance of 2 km from the village. Purani Tarajan village is inhabited by the Adivasi people and are very thinly populated. According to Mahendra Rajowar, there are only 36 families comprising the village. Two to four households in the village received electricity. However, there was no electricity until 2009. The average income of the village household is between

Rs.8000/- to Rs.10,000/- per family. However, almost all the families are poor and deprived and living in a deplorable condition. Most of the households possess a BPL card which is used to buy ration.

There is no health care facility, no PHC in the village. One post office is situated at a distance of 3 km from the village. Most of the villagers send and deposit money in the post office as there is no Bank Branches in and around the village.

Until July, 2012 few village households received WLL telephone (one disk, one panel and a handset) for a period of three years which is now found outdated and out of connection.

Village households use boring machine to irrigate their cultivation. The village head has mentioned that only two people (two households) in their villages own a boring machine. The village head is provided a mobile phone from Block Development Office which is out of order now. The family members of the village household told that they have sold the BDO offered mobile phone and has bought a new one.

Most of the village heads complain about the handset and the connection scheme. It is entirely limited to the circle of government and many times cell is not giving lasting service. For the villagers the major drinking water source is tube well, hand pump and well. Water in the well is found within 8/10 feet from the ground level. Cable and other media technology are far beyond to be existed in the village. There is no drainage system passed through the village. No co-operative society and self-help group is functioning in the village.

There is no credit society in the village. However, in Garmara, one kilometer away from the village, one Self Help Group leads saving account scheme which is used by most of the villagers of Tarajan for one time. There is no proper sanitation in the village. Percentage of households with latrine facility will be less than 40%. Panchayat head quarter is located one and half kilometer away from the village. There is one Anganwadi-noon meal Centre in the village within half kilometer radius.

Everyone in the village of or above 16 years of old is found to have a mobile phone. For charging the phone, members of the households (villagers) have to go to nearby village or to Dhekiajuli Town. There are no grocery shops within 3 km vicinity in the villages.

For buying essentials, the villagers have to move to Panibari Centre which is 5 kilometer away from the main village location.

## **Second phase of Survey: Villages outside Assam**

**Todhara Almora, Uttarakhand :** Todhara is a medium size village located in Dwarahat of Almora district, Uttarakhand with total number of 94 resident households. The Todhara village has population of 482 of which 235 are males while 247 are females as per Population Census 2011. Average Sex Ratio of Todhara village is 1051 which is higher than Uttarakhand state average of 963. Todhara village has higher literacy rate compared to other villages of Uttarakhand. Male Female ratio of Todhara village is 212:255 while the literacy rate is counted 82.11%.

Women of the village are literate. As per constitution of India and Panchyati Raj Act, Todhara village is administrated by Sarpanch (Head of Village) who is an elected representative of the village. Populations of Todhara belong to Schedule Caste category. Primary occupation of the population is wage earning. However, total numbers of workers are 262 and women are equally engaged in household economy as per men. There are less numbers of marginal workers.

**Simtoli, Almora, Uttarakhand :** Simtoli is a very small village located in Bhikiyasain of Almora district, Uttarakhand with total 8 families residing. The Simtoli village has population of 37 of which 16 are males while 21 are females as per Population Census 2011. In Simtoli village population of children with age 0-6 is 3 which make up 8.11 % of total population of village. Average Sex Ratio of Simtoli village is 1313 which is higher than Uttarakhand state average of 963. Simtoli village has lower literacy rate compared to Uttarakhand. In 2011, literacy rate of Simtoli village was 73.53 % compared to 78.82 % of Uttarakhand. In Simtoli Male literacy stands at 93.33 % while female literacy rate was 57.89 %. As per constitution of India and Panchyati Raaj Act, Simtoli village is administrated by Sarpanch (Head of Village) who is the elected representative of the village. There are 12 male workers and 14 female workers out of 26 workers.

**Rasingapuram, Theni District, Tamil Nadu:** Rasingapuram is a large village located in Bodinayakkanur Taluk of Theni District in Tamil Nadu with total 2758 families residing. It is located 19 km towards west from District headquarters, 8 km from Bodinayakkanur and 549 km from State capital Chennai. Tamil is the Local Language here. The Rasingapuram village has population of 9280 of which 4609 are males while 4671 are females as per Population Census 2011. In Rasingapuram village population of children with age 0-6 is 792 which make up 8.53 % of total population of village. Average Sex Ratio of Rasingapuram village is 1013 which is higher than Tamil Nadu state average of 996. Rasingapuram village has lower literacy rate compared to Tamil Nadu. In 2011, literacy rate of Rasingapuram village was 73.17 % compared to 80.09 % of Tamil Nadu. In Rasingapuram Male literacy stands at 84.33 % while female literacy rate was 62.32 %. As per constitution of India and Panchyati Raj Act, Rasingapuram village is administrated by Sarpanch (Head of Village) who is elected representative of village.

**Cheyar, Tiruvannamalai District, Tamil Nadu:** is a town in the Tiruvannamalai District in the Tamil Nadu state of South India. Cheyyar is located on the banks of Cheyyar River in the north eastern corner of Thiruvannamalai district of Tamil Nadu. It is also referred to as Thiruvetipuram in many government records. As of 2011, the town had a population of 37,802. The town is situated at 30 km from Kanchipuram, 90 km from Thiruvannamalai and 100 km from Chennai, 60 km from Vellore, 32 km from Arcot. The town was in the North Arcot District (part of Vellore district) until Tiruvannamalai district was formed. The chief occupations of the people are agriculture and handloom. According to 2011 census, Tiruvethipuram had a population of 37,802 with a sex-ratio of 1,014 females for every 1,000 males, much above the national average of 929. A total of 3,749 were under the age of six, constituting 1,940 males and 1,809 females. Scheduled Castes and Scheduled Tribes constitute 12.81% and 56% of the population respectively. The average literacy of the town was 76.59%, compared to the national average of 72.99%. The town had a total of 9162 households. There were a total of 14,580 workers, comprising 294 cultivators, 489 main agricultural labourers, 1,247 in house hold industries, 11,205 other workers, 1,345 marginal workers, 20 marginal cultivators, 109 marginal agricultural labourers, 206 marginal workers in household industries and 1,010 other marginal workers. Tiruvettipuram is known for its oldest and biggest government schools and college. Cheyyaru has become an alternative choice for



hi-tech Special Economic Zone for automotive components, a 300-acre electronics hardware park.

**Vettavalam, Tiruvanamalai District, Tamil Nadu:** is a panchayat town in Tiruvanamalai district of Tamil Nadu located in between Tiruvannamalai and Villupuram. As of 2011 India census, Vettavalam had a population of 15,506. Males constitute 49% of the population and females 51%. Vettavalam has an average literacy rate of 67%, higher than the national average of 59.5%: male literacy is 75%, and female literacy is 58%.

**Thimri:** A majority of the persons living in Thimiri have involved themselves in agriculture and associated industries Thimiri is a village in the state of Tamil Nadu; it lies in Arcot block/taluka/tehsel. The village is located in Vellore district with a total population of 14953, of which 7417 are men and the female population comprises of 7536.

**Deri Machha :** Deri Machha is a small Village/hamlet in Dadri Tehsil in the border area of Gautam Buddha Nagar District of Uttar Pradesh State, India. It comes under Upasi Panchayat. It is 449 km from away State capital, Lucknow. Postal head office is Dadri . Deri Machha is surrounded by Greater Noida Tehsil towards South, Bisrakh Tehsil towards west , Dhaulana Tehsil towards East , Ghaziabad Tehsil towards North . Dadri , Ballabhgarh , Greater Noida , Ghaziabad are the nearby Cities to Deri Machha. Hindi is the Local Language. Deri Machha mainly known of its Gurjar cast people. Its geographical situation on main G.T.Road places it in famous villages. On the name of honorable "Baba Machha" this village is known as "Deri Machha". In the name of the village Deri Machha, "Deri" represents the business of Baba Machha. Baba Machha was a big Milk renouncement through his Dairy business in his time period. There are 3 Schools in and around Deri Machha.

**Tilapata:** Tilapata is a small Village/hamlet in Bisrakh Tehsil in the border of the Gautam Buddha Nagar District of Uttar Pradesh State, India. It comes under Tilapata Panchayat. It belongs to Meerut Division. It is located 27 KM towards North from District headquarters Noida. 462 km from State capital Lucknow .Tilapta is surrounded by East Delhi Tehsil towards west, Dadri Tehsil towards East , Ghaziabad Tehsil towards

North , Greater Noida Tehsil towards South . Ballabgarh , Dadri , Ghaziabad , NOIDA are the nearby Cities to Tilapta. Hindi is the Local Language. There are 2 Colleges and 1 school near Tilapta.

## Appendix III

### Interview Framework

1. Who continue to be the head of the household with an ultimate decision?
  - a) Aged or elderly
  - b) Husband
  - c) Wife
  
2. As per you, who seem to be more vulnerable in your family?
  - a) Elderly members
  - b) Wife/housewife
  - c) Husband
  - d) Children
  - e) Others
  
3. What kinds of behaviors are allowed by the use of mobile phone among the younger and elder members of a family?
  - a) Replaced submissiveness
  - b) Deference of young to elderly
  - c) More assertiveness
  - d) Friendliness and love
  
4. Do you think that the use of mobile phone technology has transformed the traditional notion of parental authority?
  
5. Do you want your wife to possess mobile phone? (Question to the male head of the household)

## **Home-Work Balance**

6. How much does your family/spouse support you in your job?
7. Who does help you in your housework?
8. Does your family/husband/in-laws allow you to do job/ work outside home?  
  
Yes                      No
9. Do you feel excessively tired by managing household chores and working outside home?
10. Who does look after your child/children in your absence?
  - a) Husband
  - b) Grand parents
  - c) Crèche
  - d) Non-family members or friends, relatives
  - e) Household maid
11. How much stake do you have in your household decision?

## **Barriers to Accessing Information**

12. How much do you contribute to your household financially, emotionally, by doing child care and managing household chores?
13. What are the bottlenecks in expanding telecommunication infrastructure and networking in rural India?

14. Do you have a bank account?
15. Do you have experienced electronic payment?
16. What are the explicit information requirements for you?
17. What are the common barriers you face in accessing information?

### **Mobile phone and Capability Enhancement**

18. How does mobile phone support you (women paid workers) to manage both home and work?
19. How does the use of mobile phone enhance your participation in community groups and enterprises?

## **Appendix IV**

### **Focus Group Framework**

- (1) Does improved access to mobile phone technologies improve the livelihood opportunities of the villagers?
- (2) Does improved access to mobile phone technologies address the current socio-economic challenges of women?

## Appendix V

### Endnotes

[1] Wireless Application protocol (WAP) is a technical standard for accessing information over mobile wireless network. It leads mobile service providers the opportunity to offer interactive data services such as mobile email , mobile news, music downloads and so on.

USSD (Unstructured Supplementary Service Data) is a Global System for Mobile(GSM) communication technology that is used to send text between a mobile phone and an application program in the network. Applications may include prepaid roaming or mobile chatting

[2] Universal Mobile Telecommunication System is a third generation mobile cellular system for networks based on GSM standard. UMTS supports maximum data transfer rates of 42 Mbit/s with HSPA+ implementation in the network.

[3] NTT DoCoMo's i-mode is a mobile internet (as opposed to wireless internet) service in Japan. I-mode users have access to various services such as e-mail, sports results, weather forecast, games, financial services and ticket booking. .

[4] The Barefoot College: For more than 40 years, The Barefoot College has designed new ways to nurture and support a journey to empowerment, one village at a time, one woman at a time. It has demystified and de-centralised technology and put new tools in the hands of the rural poor with a singular objective of spreading self-sufficiency and sustainability. With a geographic focus on the Least Developed Countries, barefoot college train women worldwide as solar engineers, innovators and educators, who, then, return to their villages to bring light and learning to their community. The barefoot college operates in 1300 villages in 80 countries worldwide. The impact of direct training and services ripples out to impact about two million people giving communities access to clean water and safe reliable energy.

[5] CruiseControl.NET is an Automated Continuous Integration server, implemented using the .NET Framework.

[6] 2G and 3G are respectively second and the third generation of development of mobile telecommunication technology. Basically 2G and 3G are a set of standards used for mobile devices as conformed to the International Mobile Telecommunications-2000 (IMT-2000) specifications of the International Telecommunication Union. 3G finds application in wireless voice telephony, mobile Internet access, fixed wireless Internet access, video calls and mobile TV.

[7] RailTel Corporation a "Mini Ratna (Category-I)" PSU is one of the largest neutral telecom infrastructure providers in the country owning a Pan-India optic fiber network on exclusive Right of Way (ROW) along Railway track. The OFC network covers all important towns & cities of the country and several rural areas covering 70% of India's population. RailTel with strong nationwide presence is committed to bring cutting edge technology and offer innovative services to the Indian Telecom market. RailTel is in the forefront in providing nationwide Broadband Telecom & Multimedia Network in all parts of the country in addition to modernization of Train operations and administration network systems

[8] VAP is a four-year strategic plan was adopted in 1998 by World Telecommunication Development Conference (WTDC) attempted to bridge the digital divide. The main elements of VAP are access to new technologies, sector reform, rural development gender issues, universal service and access. Valetta Action Plan' (VAP)[5],

[9] LTE, an abbreviation for Long-Term Evolution, commonly marketed as 4G LTE, is a standard for wireless communication of high-speed data for mobile phones and data terminals. It increases the capacity and speed using a different radio interface together with core network improvements.

[10] The App Store offers more than one million apps by Apple and third parties and is ranked as the world's second largest mobile software distribution network.



[11] iPhone is a line of smartphones designed and marketed by Apple Inc. It runs Apple's iOS mobile operating system. The first generation iPhone was released on June 29, 2007. The inbuilt user interface coupled with multi-touch screen, virtual keyboard, iPhone has Wi-Fi and can connect many cellular networks, GPRS, EDGE, UMTS, 4G and LTE. An iPhone can shoot video, take photos, play music, send and receive email, browse the web, send texts, GPS navigation, record notes, do mathematical calculations, and receive visual voicemail.

[12] BlackBerry Limited, formerly known as Research in Motion Limited (RIM) is a Canadian telecommunication and wireless equipment company best known to the general public as the developer of BlackBerry brand of smartphones and tablets.

[13] WhatsApp Inc. was founded in 2009 by American Brian Acton and Ukrainian Jan Koum (also the CEO) is based in Santa Clara, California. The client software is available for Android, BlackBerry OS, BlackBerry 10, iOS, Symbian Series 40, Symbian Series 60, and Windows Phone.

[14] WeChat is a mobile text and voice messaging communication service developed by Tencent in China, first released in January 2011. WeChat claims to provide a social networking platform that emphasizes user privacy and fast response performance.

[15] LINE is a Japanese instant messaging application for smartphones and PCs launched in Japan in 2011, reached 100 million users within eighteen months and 200 million users only six months later.

[16] Viber provides free call, text, picture sharing with anyone and location sharing with viber users.

[17] Kakao provides an array of services such as Kakao Talk, Kakao Group, Kakao Story, and Kakao Place for Social Networking, Kakao Music for song podcast and download,

Kakao Home Provides Home Screen, Kako Album for Photo and Video, Kakao Page and Kakao Style for Lifestyle, ,Kakao Topic for News etc.

[18] QR code or Quick Response Code is the trademark for a two-dimensional barcode first designed for the automotive industry in Japan. A barcode is a machine-readable optical label that contains information about the item to which it is attached. A QR code uses four standardized encoding modes (numeric, alphanumeric, byte / binary, and kanji) to efficiently store data.

[19] Mobile payment, also referred to as mobile money where instead of paying with cash, cheque, or credit cards, a consumer can use a mobile phone to pay for a wide range of services and digital or hard goods.

[20] BRIC is an acronym for the group of countries -Brazil, Russia, India and China, all four of which are at a similar stage of newly advanced economic growth.

[21] Semi-closed mobile wallets is the weapon of financial inclusion and they do not require the user to have a bank account. One noticeable drawback is that a user can add cash but can't draw it out.

[22] I-mobile is ICICI bank's mobile banking applications that offers services such as transfer of funds, pay bills, book tickets.

[23] NGpay is the mall on mobile, the application has to be downloaded to book air, rail, bus, shop for favorite brand, recharge mobile and DTH set, for round the clock convenience.

[24] Tatawalkys is available only in Delhi & NCR market. It combines effortlessly the functionality of mobile and the stability of landline. It offers wireless desktop phone let users talk and SMS by enabling internet connection. It has opened the provision of making payments over phone with Mcheck.

[25] Mobile wallets are digital products that can be loaded with cash, usually through a mobile payment provider or telecom operator such as Airtel or Vodafone, and can be used to

purchase goods electronically. A mobile wallet makes everyday bill payments and other money transfers easy and secure by using a mobile phone. The mobile wallet module empowers financial institutions and banks to connect consumers in rural areas and increase their reach at a lower cost.

[26] Airtel Money is a convenient way to pay, send and recharge directly via mobile phone. There are over 7000 merchants who support transactions using airtel money. The user has to dial \*400# to register and load cash at your nearest airtel money outlet or online at [www.airtel.in/money](http://www.airtel.in/money). It helps to send money, pay electricity bill, shop online, recharge DTH, and recharge mobile, book movie ticket, book train ticket.

[27] State Bank of India has launched Mobicash Easy, a prepaid mobile wallet service that allows users to transfer funds and make bill payment among others. The service has been initially launched in Delhi and Mumbai.

[28] Oxigen is a wallet apps to provide the service such as recharge, money service, payment for telecom, banking etc. This app has to be downloaded by the user to get access the services. Oxicash is one stop shop that satisfies payment requirement.

[29] Zipcash is a digital currency allows to shop online and offline in a safe secure manner.

[30] MPOS has transformed iOS and Android smartphones into card accepting POS terminals at merchant outlets through a small card reader and mobile app on the handset. Numerous mPOS devices and services such as Swipeon, OxiShaan, MTS mPOS , PayPOS etc. are launched with collaboration with banks in the last 12 months. Point-of-sale (POS) is the place at which a buyer makes a payment to the trader in exchange for goods or services. In return, buyer will get a receipt for transaction from the trader. In various retail industries, POS uses customized hardware and software as per their requirements.

[31] mGurujee (India) – allows users access to content in areas of engineering, management, civil services and medicine; school syllabi of CBSE and ICSE boards as well as skill

development, vocabulary and general knowledge tutorials IGNOU (India) – Exam alerts, available in five regional sectors with a network of 30,000 – 50,000 students

[32] English Seekho (Tata DoCoMo) - allows users to take conversational English language lessons on their mobiles through an interactive voice response (IVR) application that guides the user through audio clips. It offers short lessons followed by interactive lessons which enable users to practice what they have learnt through the mobile's keys or through speech recognition.

[33] Air time credit strategy: is a 'safe, simple and fast way' for prepaid mobile customers to transfer credit through mobile phone to friends and family members. Credit is deducted from the sender's account and gifted directly to the recipients mobile phone account. Recharging takes place in real time, with both sender and receiver immediately notified of the transaction by SMS.

[34] Human capital: The productive capacity of human beings in the process of economic development supported by investments in education, health and other programmes.

[35] "During the Ninth Plan period the Dept. of Family Welfare has implemented the recommendations of the NDC Sub committee on population; the centrally defined methods specific targets for family planning were abolished; emphasis shifted to decentralised planning at district level, based on community needs assessment and implementation of programmes aimed at fulfillment of these needs. Efforts were made to improve quality and content of services through skill up gradation training for all personnel and building up a referral network. A massive pulse polio campaign was taken up to eliminate polio from the country. The Department of Family Welfare set up a Consultative Committee to suggest appropriate restructuring and revision of norms for infrastructure funded by the states and the Centre and has initiated implementation of the recommendations."

[36] The Government of Assam under the National Rural Health Mission has been laying increasing focus on the preventive aspect of diseases.

(a) Government of Assam Health & Family Welfare National Health Mission official website <https://nhm.assam.gov.in/portlets/sarathi-%e2%80%93104>

(b) National Health mission, Ministry Of Health And Welfare, Government of India retrieved from <http://nhm.gov.in/communitisation/asha/about-asha.html>

[37] The Sawayamsidha is an integrated Scheme for Women's empowerment, formally launched on 29th November, 2001, replacing the erstwhile India Mahila Yojana and subsuming the Mahila Sambridhi Yojana. Directorate of Social Welfare: Assam . See Official website <http://socialwelfareassam.com/Schemes.php?Page=saw>

[38] Kishori Shakti Yojana (KSY) seeks to empower adolescent girls, so as to enable them to take charge of their lives. It is viewed as a holistic initiative for the development of adolescent girls. Ministry of women and Child development, Government of India.

See Web site <http://wcd.nic.in/kishori-shakti-yojana>

[39] Aajeevika - National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in June 2011. See e.g. website <http://aajeevika.gov.in/>

[40] CAPART (The Council for Advancement of People's Action and Rural Technology) is a major promoter of rural development in India, assisting over 12000 voluntary organizations across the country in implementing a wide range of development initiatives. Council for Advancement of People's Action and Rural Technology (CAPART) was launched in 1986. It works as a nodal agency for catalyzing and coordinating the emerging partnership between voluntary organizations and the Government for sustainable development of rural areas. The scheme was formed at that time by merging CART and PADI which refer to Council for Advancement of Rural Technology and People's Action for Development India respectively. CAPART is an autonomous body registered under the Societies Registration Act 1860. It is chaired by the Union Minister for Rural Development.

[41] PRAHARI: Project Prahari, is a Kokrajhar police project in collaboration with the Assam State Commission for Women (ASCW) that aims to educate people about the menace of witch hunting, to curb it and to introduce community policing.

[42] AASHWAS: is an Assam Police Project for the welfare of the child victims of violence and terrorism in Assam

[43] Initially the dual-sector model as given by W.A Lewis was enumerated in his article entitled "Economic Development with Unlimited Supplies of Labor" written in 1954 by Sir Arthur Lewis, the model itself was named in Lewis's honor. First published in Manchester School in May 1954, the article and the subsequent model were instrumental in laying the foundation for the field of Developmental economics. The article itself has been characterized by some as the most influential contribution to the establishment of the discipline.

[44]G 20: is group of major economies of developing nations emerges at the 5th ministerial WTO conference, held in Mexico in August 2003. The original group of signatories went through changes and took different names as G 21, G 22 or G 23.

[45] Feminization of poverty : UNIFEM describes that in north south division of world, feminization of poverty is especially suffered by developing countries. It is a phenomenon that women represent disproportionate percentage of world's poor. Lack of access to income, deprivation of capabilities, lack of access to education , health care facilities , , no decent standard of living, continuing increase in single mother households made women susceptible to poverty. Low income is a consequence of the social biases women face.

[46] EPZs: The concept of Export processing Zones (EPZs) is conceived during 1970s aiming to promote export business in India. This cluster area enjoys special government entitlements regarding fiscal incentives, tax rebates and other exclusive benefits for the growth of export. This Zone boost economic development by encouraging FDI (Foreign

Direct Investment). EPZs encourages to generate economic activities, promote development of Indian industries, business enterprises, promote infrastructure and generate employment opportunities by giving importance to labor management and skill development.

[47]Trade Union Act of 1926, provides recognition and protection to labour union movement. There are 59000 trade unions registered with Government of India in 1997. There are 10 central federations of trade unions in 1995 with numerous local trade union affiliates. Central federation unions are INTUC, CITU, BMS, AITUS, HMS, TUCC, NLO, UTUC, AIUTUC, NFITU.

[48] Rajib Gandhi national crèche scheme for children of working mothers provides its services to the children of working mothers provides its services to the children of age group 0-6 years which includes supplementary nutrition, emergency medicines and contingencies. At present about 28000 crèches are functioning under the schemes benefitting around 7 lakh children.

[49] Bulk Voice Call Service although used by Indian Companies as a promotional or marketing tool, can be used as an important tool for development. Bulk voice call service allows one to send a pre-recorded message to a large group of people. One could create own voice message on important announcements, alerts or reminder notifications, social campaigning messages, promoting business or marketing campaigns, latest offers and updates on products and services and send across multiple customer database.

[50]Governments have recruited FTAs (Farm Tele Advisor) for Kisan Call Centre to deliver prompt queries. FTAs are graduates or above (i.e PG or Doctorate) in Agriculture or allied (Horticulture, Animal Husbandry, Fisheries, Poultry, Bee-keeping, Sericulture, Aquaculture, Agricultural Engineering, Agricultural Marketing, Bio-technology, Home Science etc. offered by Agricultural/Horticultural/Veterinary Universities) disciplines with excellent communication skills in respective local language respond to the farmers queries instantly.

Besides there are subject matter specialists of State Development Departments, ICAR and State Agricultural Universities who receive a transferred call on conferencing mode.

[51] De Soto Hernando Why does informal economy Matter? A lecture, translated by Tim Ennis



## Abbreviation

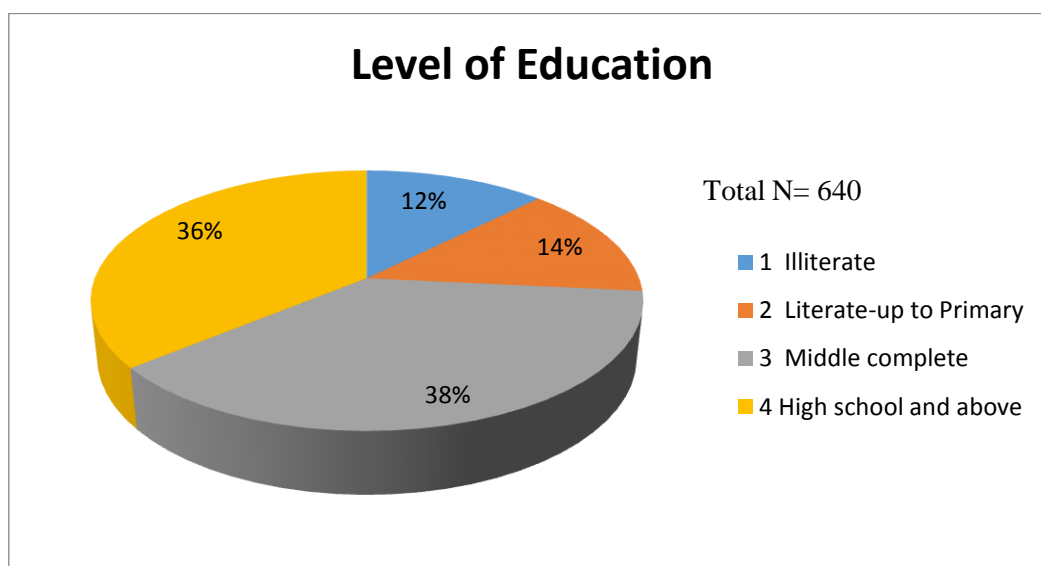
BBNL	Bharat Broadband Network Limited BOO: Boot, Operate & Own
BTS	Base Trans-Receiver Station
CAPART	The council for advancement of people's action and rural technology
CRBT	caller ring back tones
CST Act	Central Sales Tax
DONER	Department for Development of the North Eastern Region
DeitY	Department of Electronics and Information Technology
DHQ	District head quarter
DSPTs	Digital Satellite Phone Terminals
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
GBT	Ground Based Tower
GDP	Gross Domestic Product
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications
IVR system	Integrated Voice Response system
LTE technology	Long Term Evolution Technology
LSAs	Licensed Service Areas
LSA	License service area
LDCs	Least Developed Countries
MVAS	Mobile Value Added Service
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
NER	North East Region
NSDG	National Service Delivery Gateways
NOFN	National Optical Fiber Network
OFC	Optical Fiber Cable
POTS	plain old telephone service
POP	Points of Presence
PGCIL	Power Grid Corporation of India limited

QoS	Quality of Services
RTT	Roof Top Towers
ROW	Right of Way
RTI act	Right to Information Act
SDCs	State Data Centers
SDH	Synchronous Digital Hierarchy
SDHQ	State District Head Quarter
SMS	Short Messaging Service
SSDGs	State Service Delivery Gateways
SWANs	State Wide Area Networks
TSPs	Telecom Service Providers
UIDAI	Unique Identification Authority of India
UA	Universal Access
UID card	Unique Identity Data Card
UMTS	Universal Mobile Telecommunications System
UPA Government	United Progressive Alliance Government
USOF	Universal Service obligation fund
USSD	Unstructured Supplementary Service Data
USAID	United States Agency for International Development
VPTs	Village public telephone
WAP	Wireless Application Protocol

**Table 1**

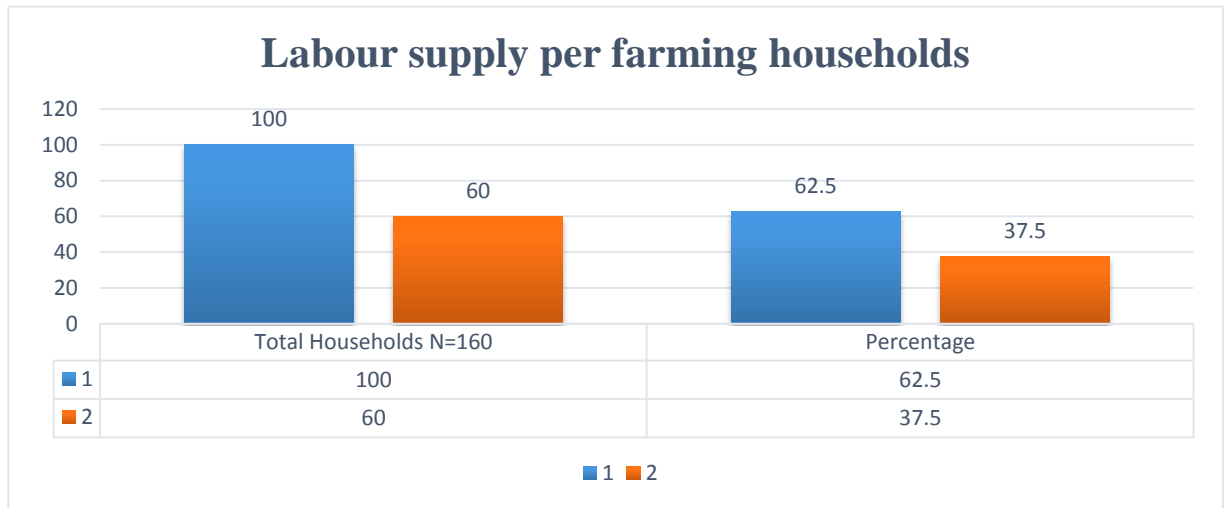
SL. No	Basic amenities available in Villages (Range of services within 1 to 5 km distance)	Surveyed Villages N= 14
1	Electrified /Not Electrified	12
2	Cooperative society	11
3	Commercial bank/agricultural bank	10
4	Self-help group	12
5	Credit society	11
6	Police Station	13
7	Medicine Shop-PHC	12
9	Mandi-Market	12
10	Primary School-Secondary School	12
11	Higher Secondary School	12
12	Post-office-PCO	14

**Figure 1.2**



<b>Table 1.2 Source:</b> Questionnaire Survey with 640 respondents		
SL No	Level of Education	Total No=640
1	Illiterate	80
2	Literate-up to Primary	90
3	Middle complete	240
4	High school and above	230

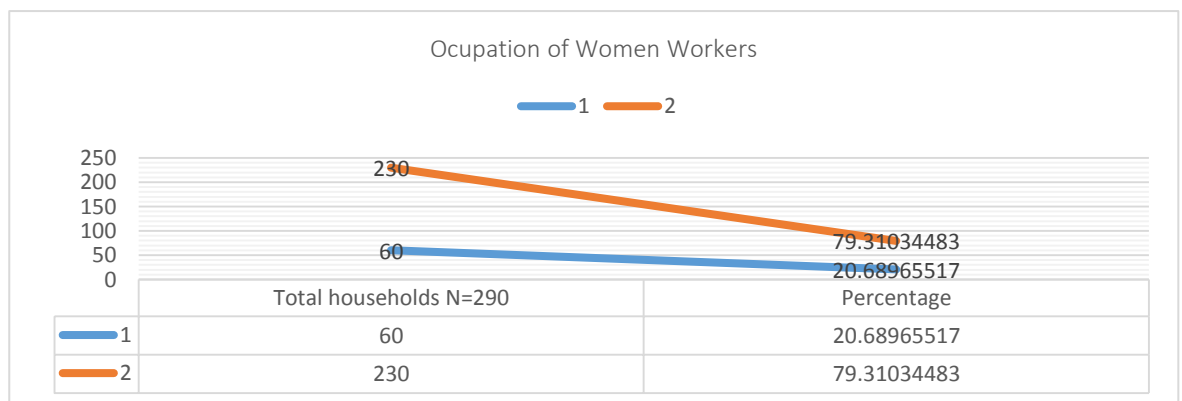
**Figure 2.1**



**Table 2.1 Source: Questionnaire Survey with 160 respondents**

Sl. No	Labour supply per farming households	Total Households N=160	Percentage
1	Number. of men farm workers	100	62.5
2	Number of women farm workers	60	37.5

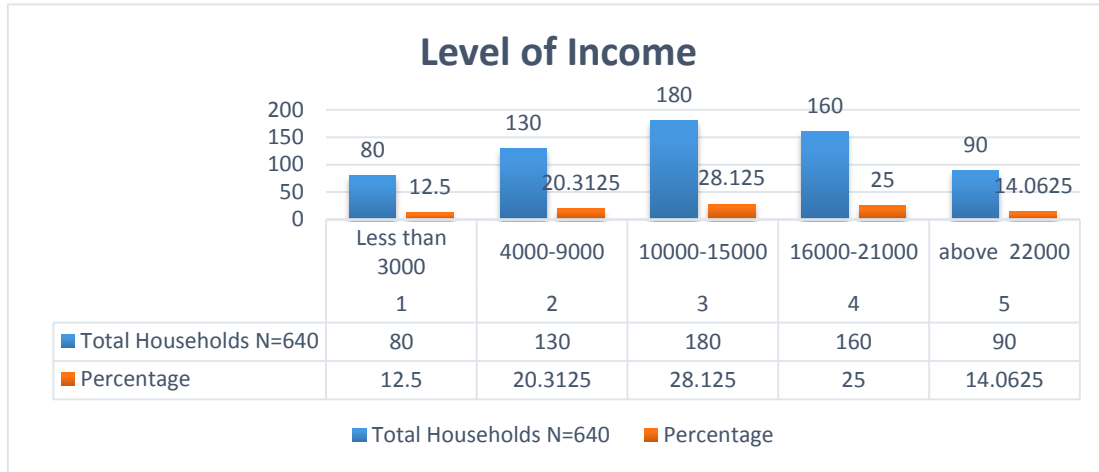
**Figure 2.2**



**Table 2.2 Women Workers Source: Questionnaire Survey with 290 respondents**

Sl. No	Occupation	Total households N=290	Percentage
1	Formal	60	20.68966
2	Informal	230	79.31034

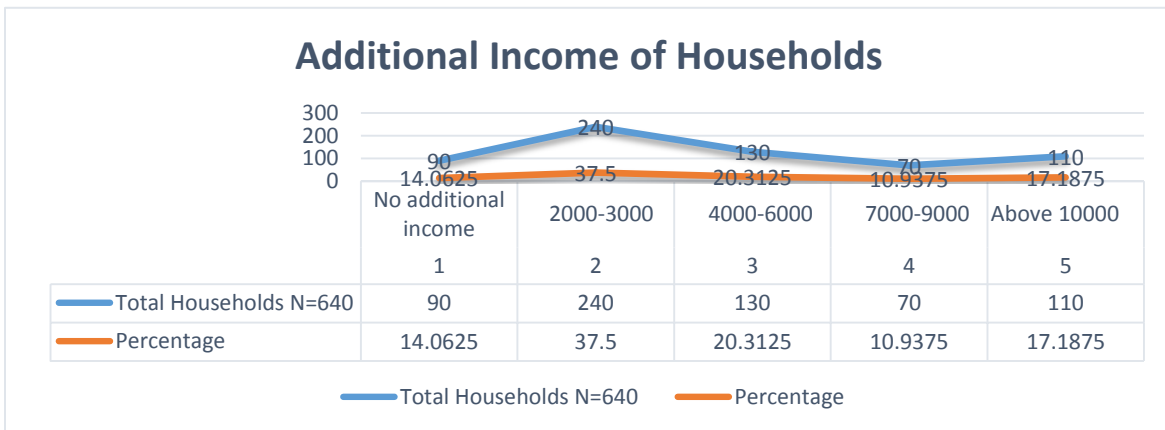
**Figure 2.3**



**Table 2.3 Source: Questionnaire Survey with 640 respondents**

Sl. No.	Level of income	Total Households N=640	Percentage
1	Less than 3000	80	12.5
2	4000-9000	130	20.3125
3	10000-15000	180	28.125
4	16000-21000	160	25
5	above 22000	90	14.0625

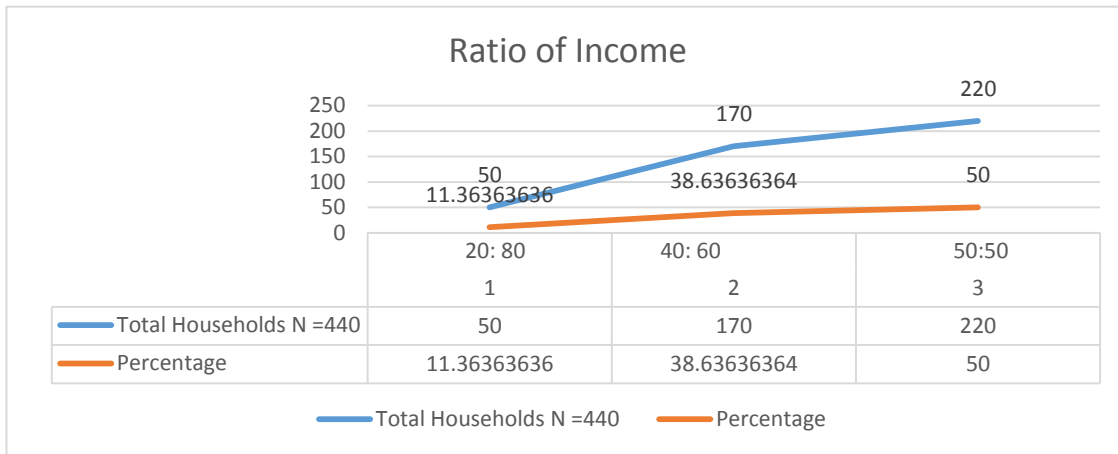
**Figure 2.4**



**Table 2.4 Source: Questionnaire Survey with 640 respondents**

SL No	Additional Income	Total Households N=640	Percentage
1	No additional income	90	14.0625
2	2000-3000	240	37.5
3	4000-6000	130	20.3125
4	7000-9000	70	10.9375
5	Above 10000	110	17.1875

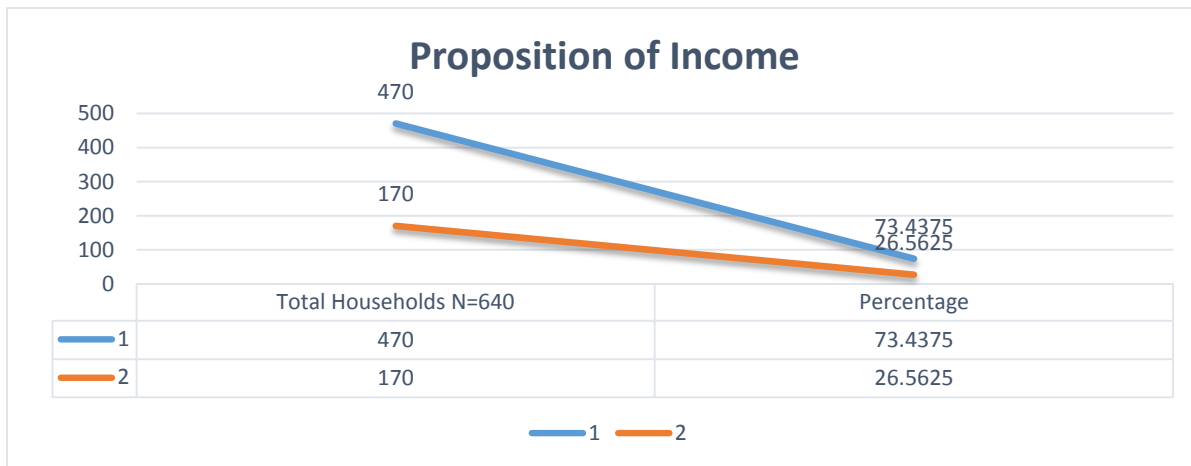
**Figure 2.5**



**Table 2.5 Source: Questionnaire Survey with 440 respondents**

SI No	Ratio of Income	Total Households N =440	Percentage
1	20: 80	50	11.36364
2	40: 60	170	38.63636
3	50:50	220	50

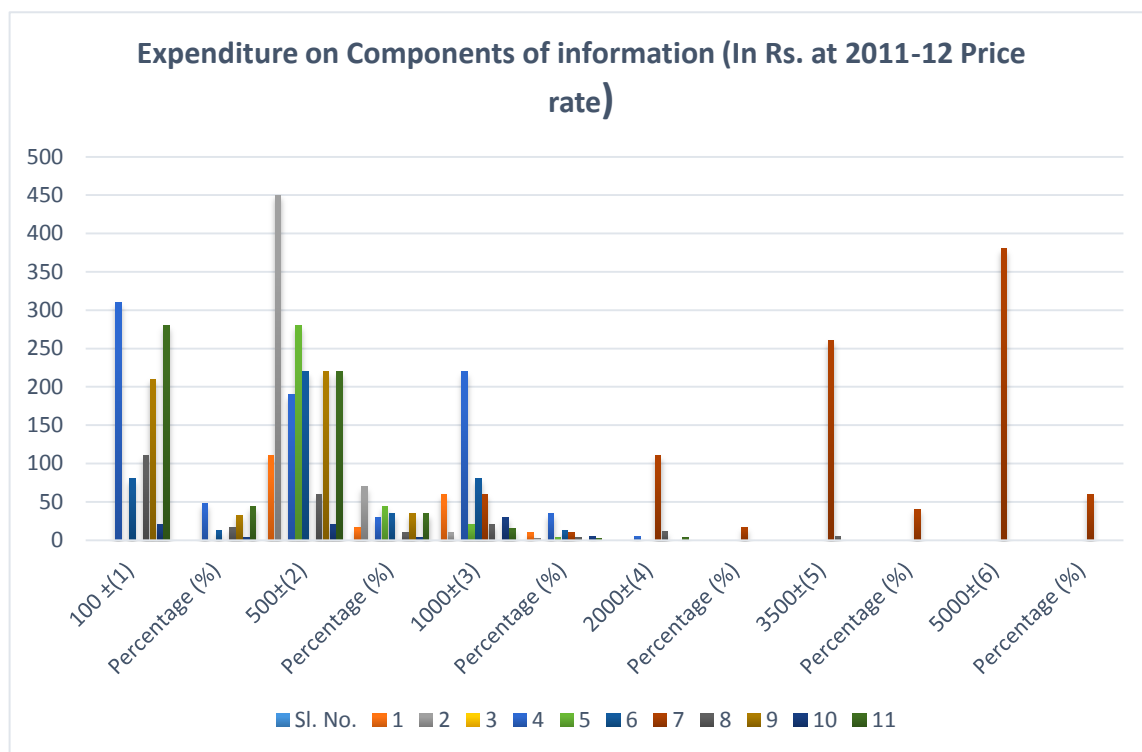
**Figure 2.6**



**Table 2.6 Source: Questionnaire Survey with 640 respondents**

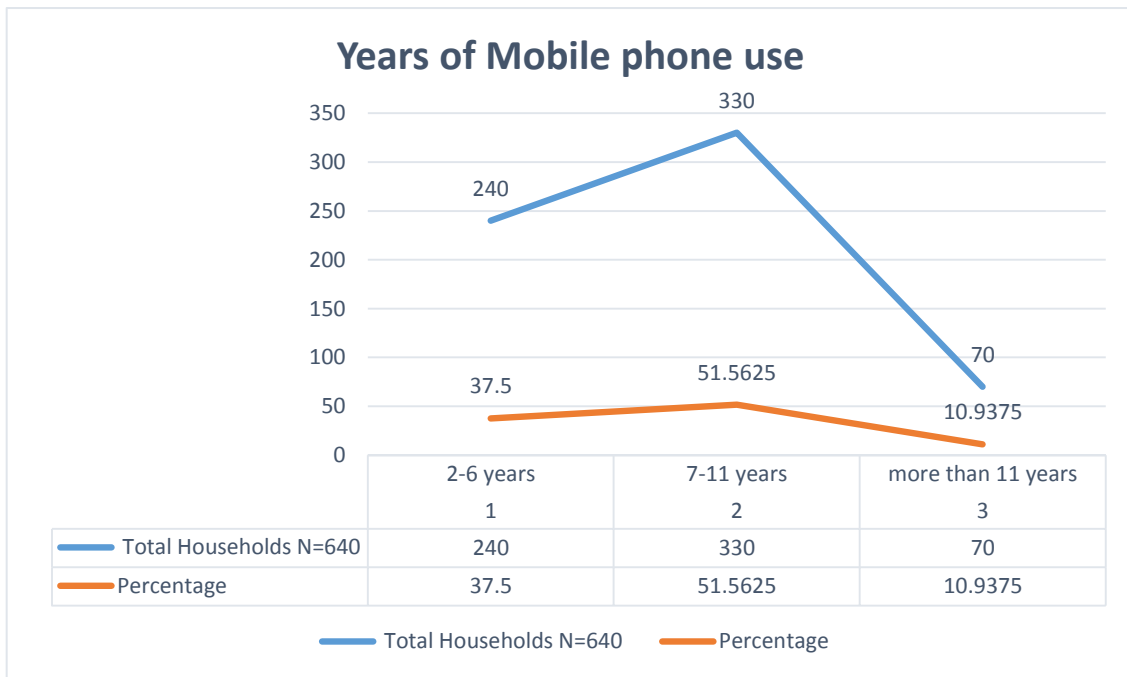
SI No	Proposition of Income	Total Households N=640	Percentage
1	Cash	470	73.4375
2	Other	170	26.5625

**Figure 2.7**



Sl. No.	Expenditure on Components of information (In Rs. At 2011-12 Prices)	100 ±(1)	Percentage (%)	500±(2)	Percentage (%)	1000±(3)	Percentage (%)	2000±(4)	Percentage (%)	3500±(5)	Percentage (%)	5000±(6)	Percentage (%)
1	Books and Journals	0	0	110	17.1875	60	9.375	0	0	0	0	0	0
2	Newspapers & Periodicals	0	0	450	70.3125	10	1.5625	0	0	0	0	0	0
3	Library Charges	0	0	0	0	0	0	0	0	0	0	0	0
4	Education	310	48.4375	190	29.6875	220	34.375	5	0	0	0	0	0
5	Tuition Fees	0	0	280	43.75	20	3.125	0	0	0	0	0	0
6	Transport	80	12.5	220	34.375	80	12.5	0	0	0	0	0	0
7	Food & Clothing	0	0	0	0	60	9.375	110	17.1875	260	40.625	380	59.375
8	Health	110	17.1875	60	9.375	21	3.28125	11	0	5	0	0	0
9	TV	210	32.8125	220	34.375	0	0	0	0	0	0	0	0
10	Internet	20	3.125	20	3.125	30	4.6875	0	0	0	0	0	0
11	Mobile phone	280	43.75	220	34.375	15	2.34375	0	0	0	0	0	0

**Figure 5.7**

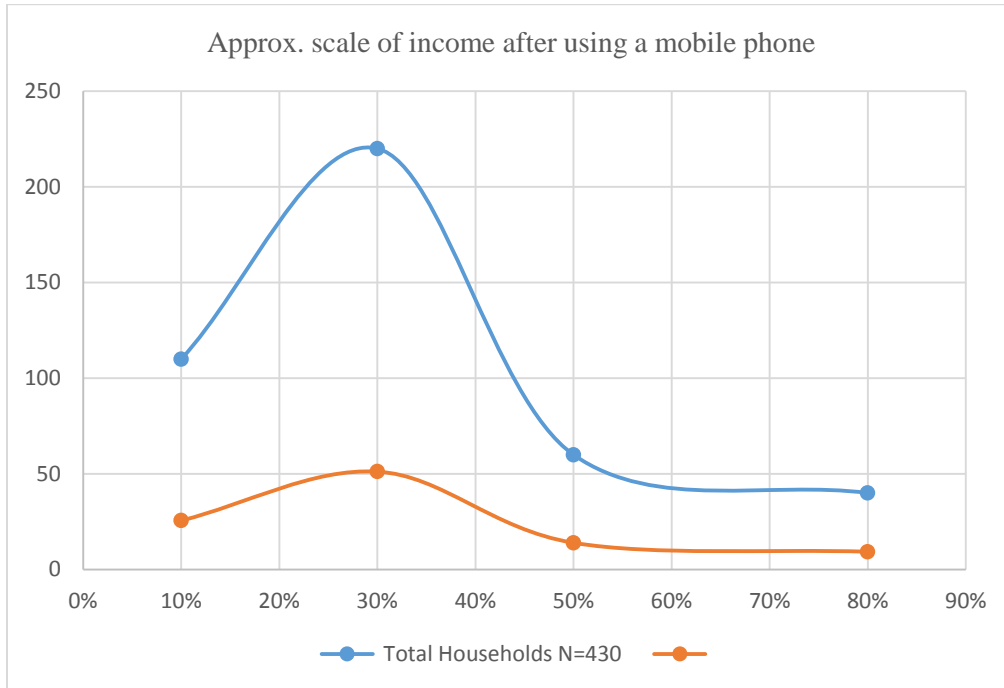


**Table 5.7 Source:** Questionnaire Survey with 640 respondents

Si No	Number of years of use of mobile phone	Total Households N=640	Percentage
1	2-6 years	240	37.5
2	7-11 years	330	51.5625
3	more than 11 years	70	10.9375



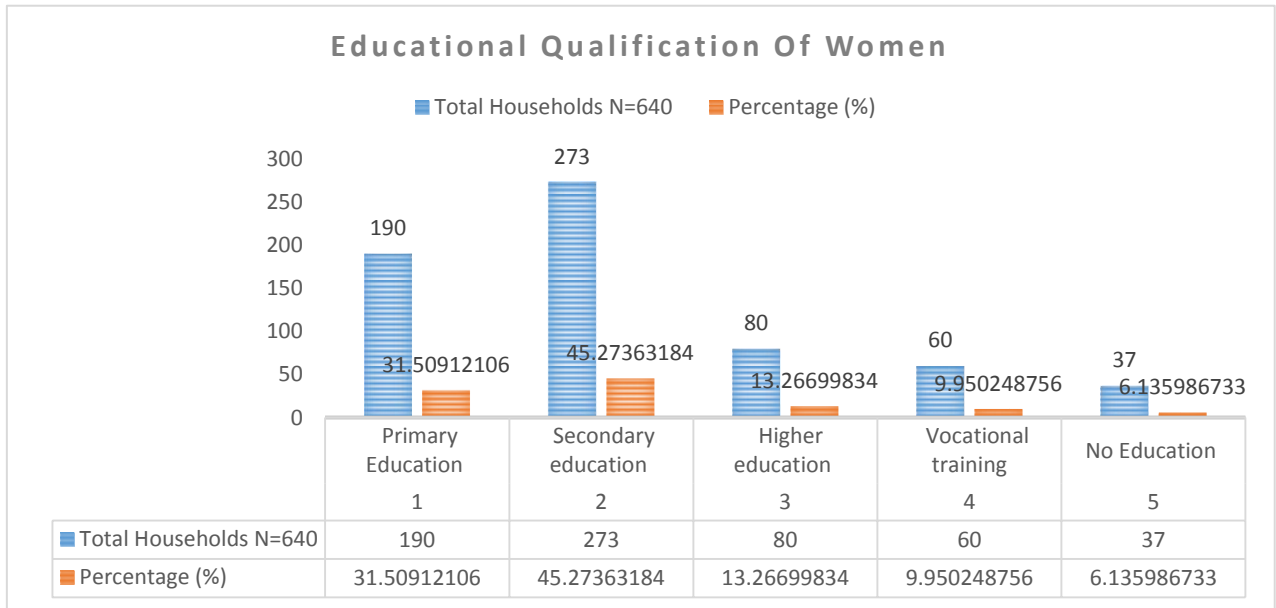
**Figure 5.11**



**Table 5.11 Source:** Questionnaire Survey with 430 respondents

SL No	Approx. scale of income after using a mobile phone	Total Households N=430	Percentage
1	10%	110	25.5814
2	30%	220	51.16279
3	50%	60	13.95349
4	80%	40	9.302326

**Figure 6.1**

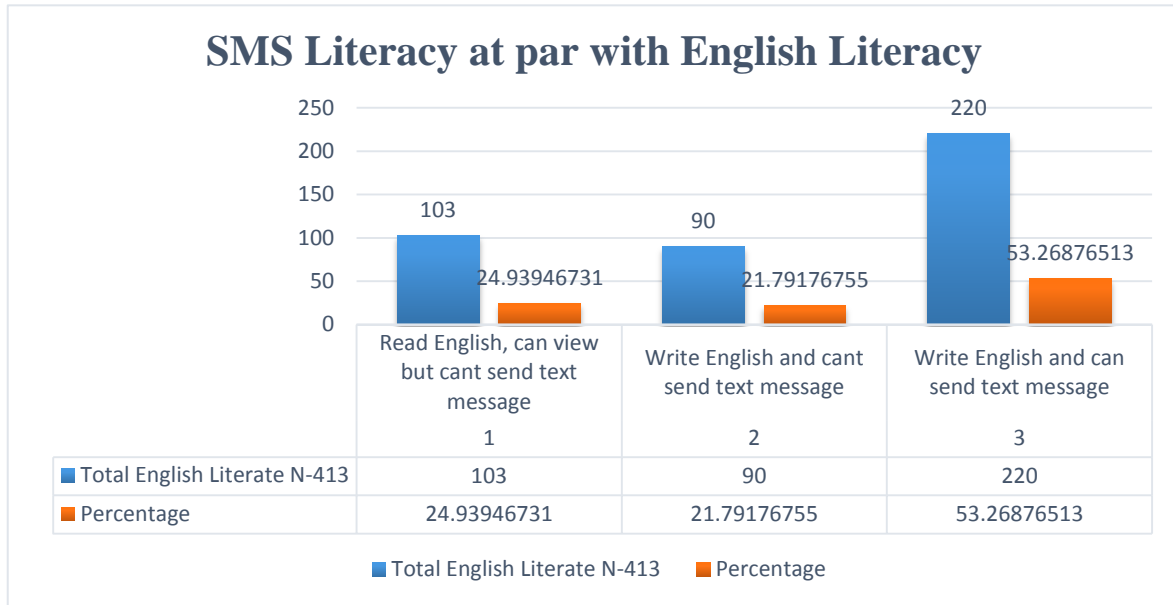


**Table 6.1 Source:** Questionnaire Survey with 640 respondents

Si No	Educational qualification of women member of households	Total Households N=640	Percentage
1	Primary Education	190	31.50912
2	Secondary education	273	45.27363
3	Higher education	80	13.267
4	Vocational training	60	9.950249
5	No education	37	6.135987



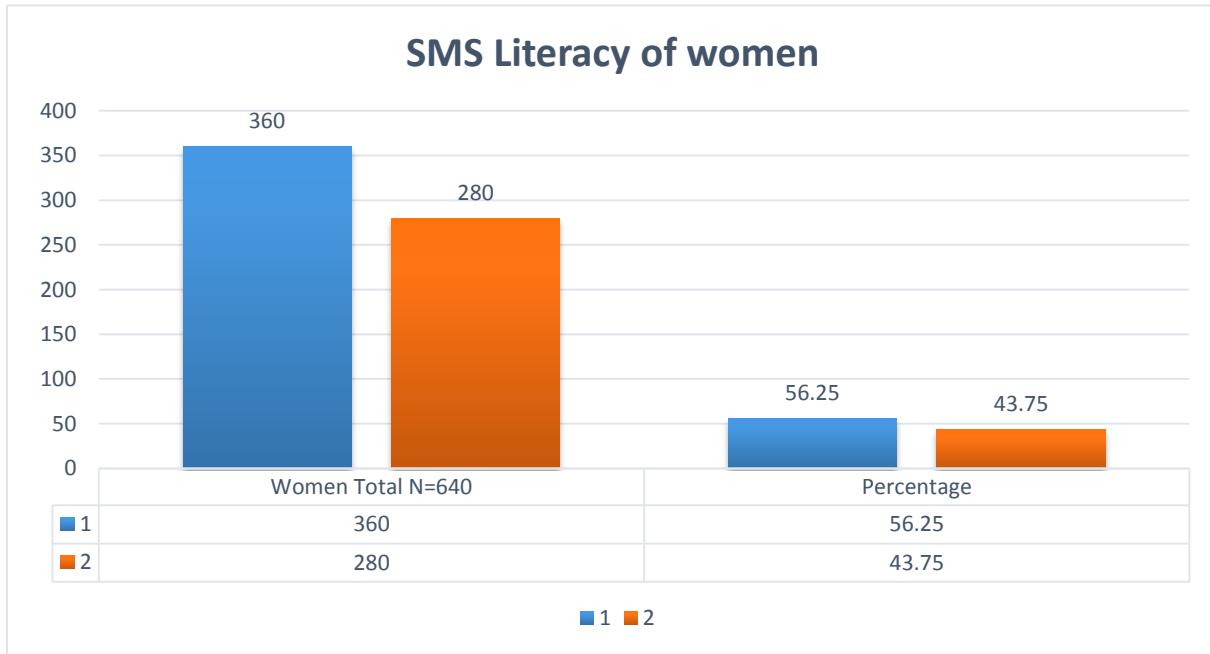
**Figure 6.2**



**Table 6.2 Source :** Questionnaire Survey with 413 respondents

SI No	SMS Literacy at par with English Literacy	Total English Literate N-413	Percentage
1	Read English, can view but can't send text message	103	24.93947
2	Write English and can't send text message	90	21.79177
3	Write English and can send text message	220	53.26877

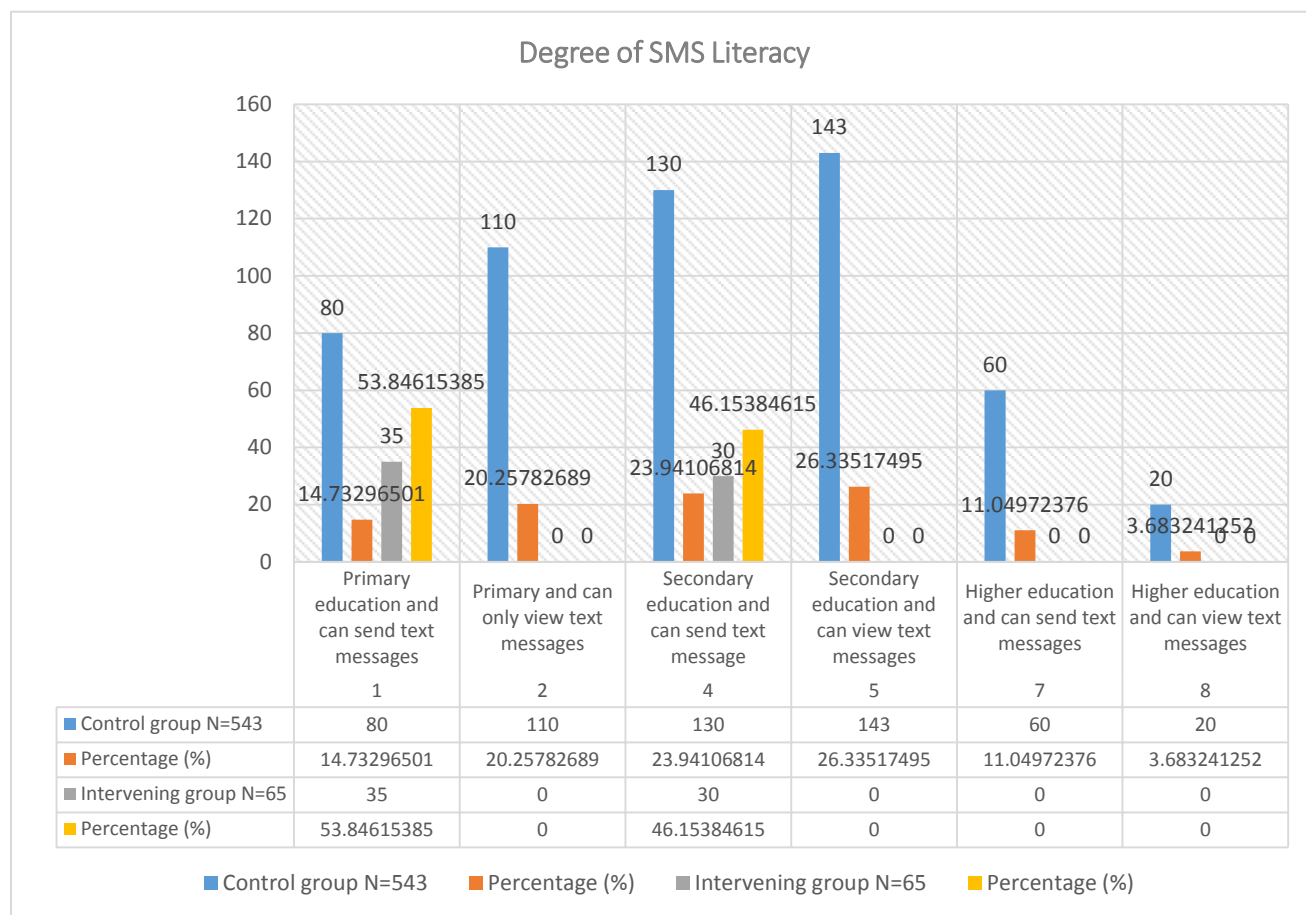
**Figure 6.3**



**Table 6.3 Source:** Questionnaire Survey with 640 respondents

SI No	SMS literacy	Women Total N=640	Percentage
1	View text message but can't send	360	56.25
2	View and can send text message	280	43.75

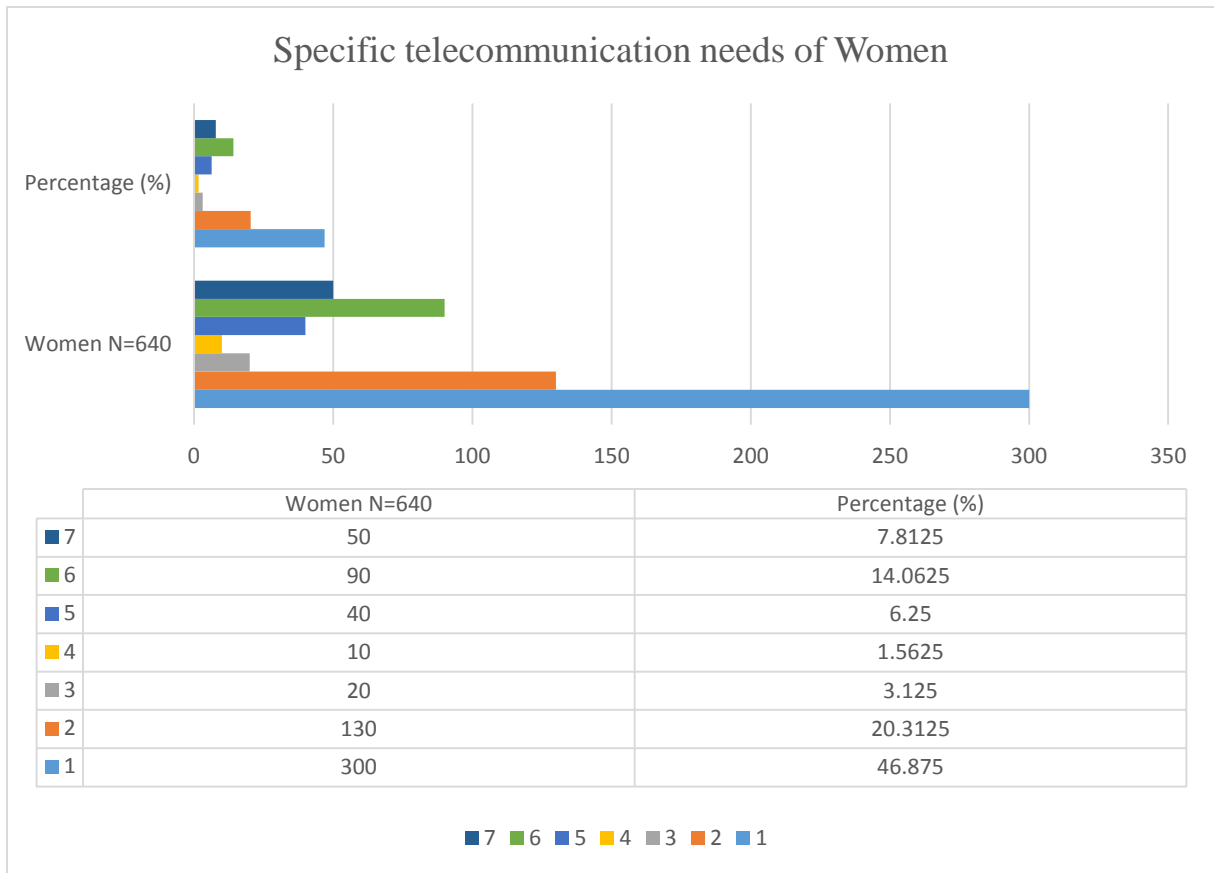
**Figure 6.4**



**Table 6.4 Source:** Questionnaire Survey with 608 respondents

Sl No.	Degree of SMS literacy	Control group N=543	Percentage (%)	Intervening group N=65	Percentage (%)
1	Primary education and can send text messages	80	14.73296501	35	53.84615385
2	Primary and can only view text messages	110	20.25782689	0	0
4	Secondary education and can send text message	130	23.94106814	30	46.15384615
5	Secondary education and can view text messages	143	26.33517495	0	0
7	Higher education and can send text messages	60	11.04972376	0	0
8	Higher education and can view text messages	20	3.683241252	0	0

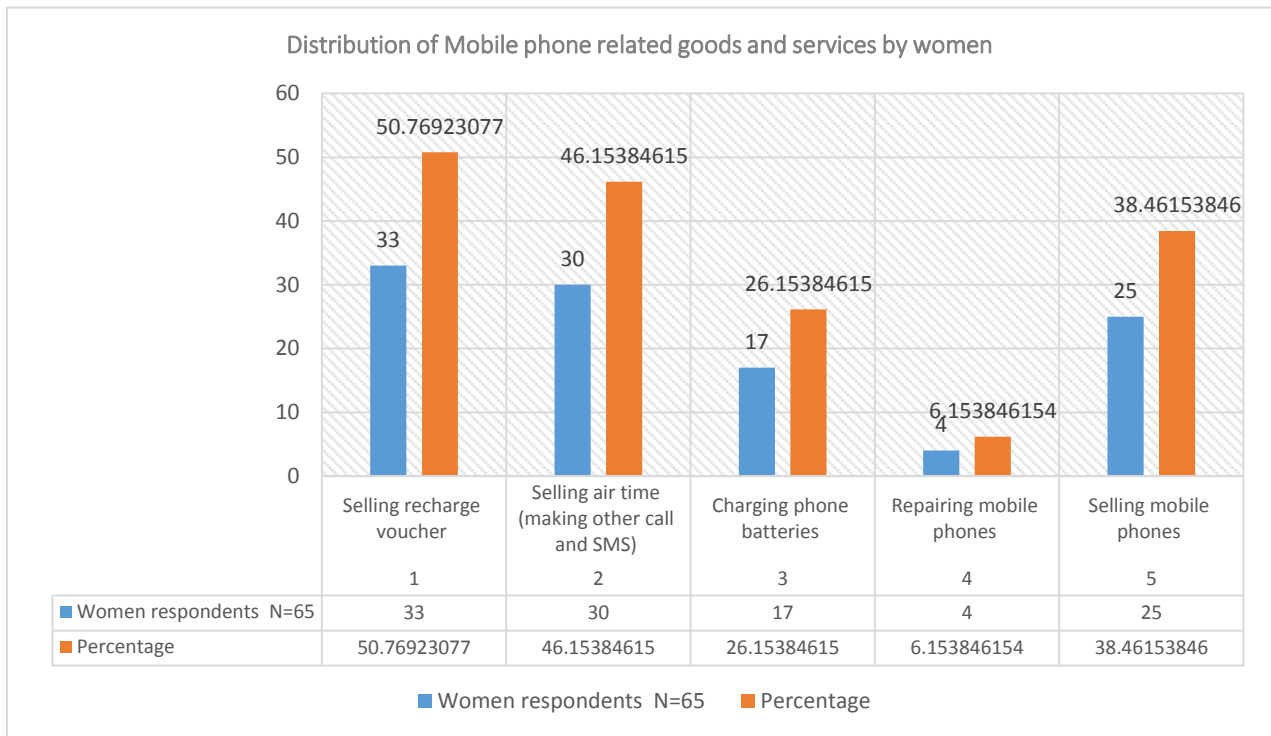
**Figure 6.6**



**Table 6.6 Source: Questionnaire survey with 640 respondents**

Sl No	Specific telecommunication needs of women	Women N=640	Percentage (%)
1	Best priced handset/subsidized	300	46.875
2	Connectivity offer	130	20.3125
3	VAS offer	20	3.125
4	Free Sim	10	1.5625
5	Lower call rate for SHG members	40	6.25
6	Full talktime on all recharge	90	14.0625
7	Free SMS	50	7.8125

**Figure 6.8**



**Table 6.8 Source:** Questionnaire Survey with 56 respondents

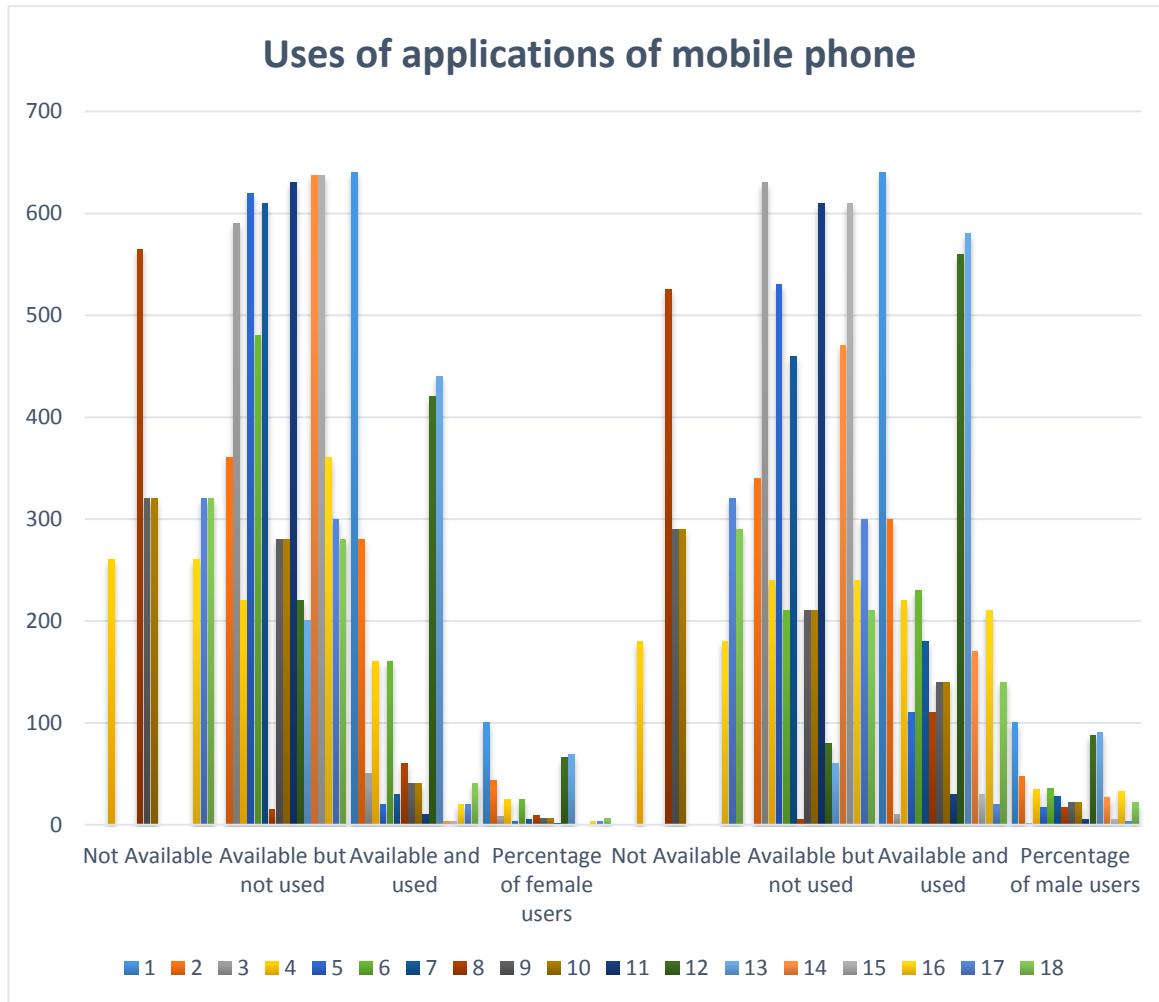
Sl. No.	Mobile Phone-Related Goods and Services Goods and/or services	Women respondents N=65	Percentage (%)
1	Selling recharge voucher	33	50.76923077
2	Selling air time (making other call and SMS)	30	46.15384615
3	Charging phone batteries	17	26.15384615
4	Repairing mobile phones	4	6.153846154
5	Selling mobile phones	25	38.46153846



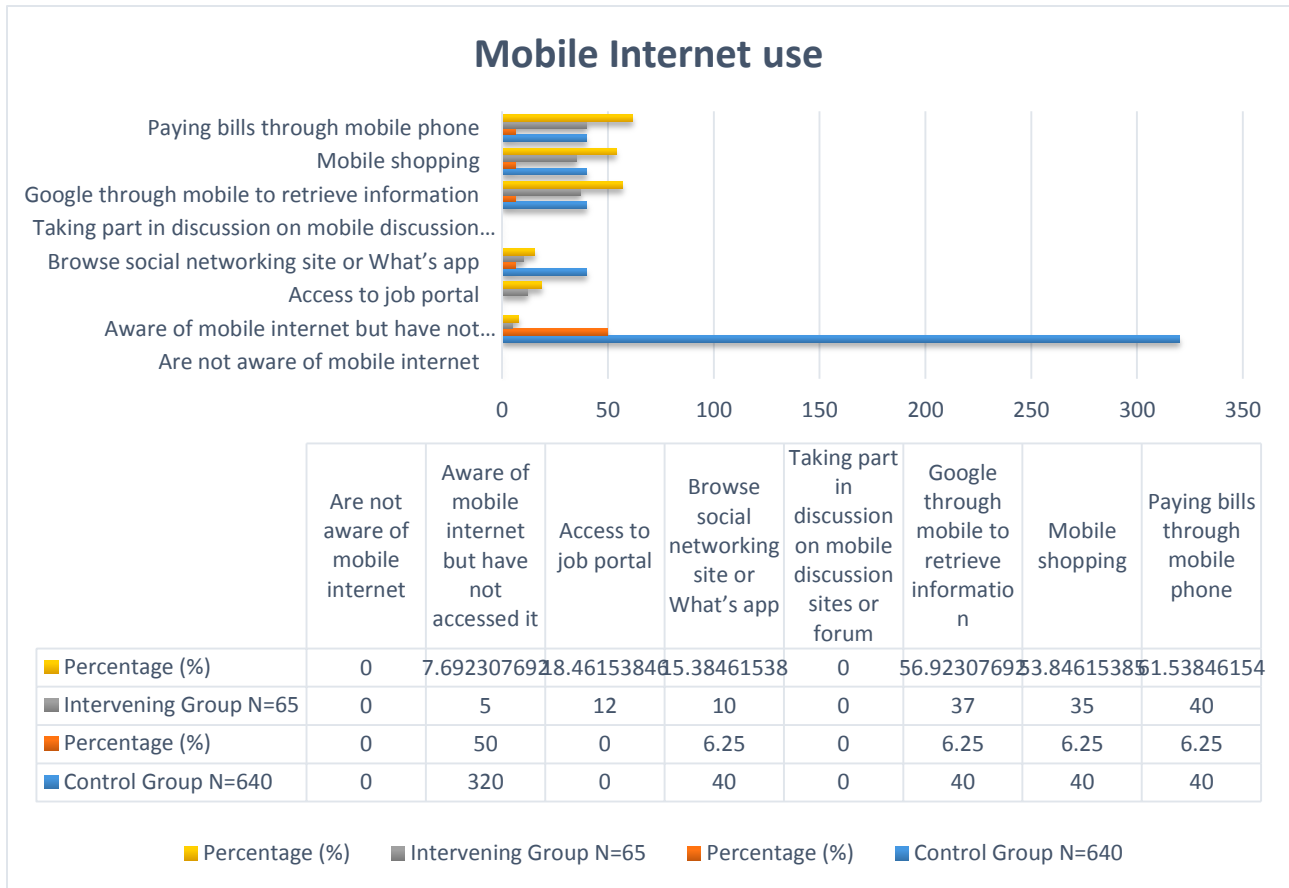
**Table 7.1**

Sl. No.	Uses of Applications of Mobile Phone	Female				Male			
		Not Available	Available but not used	Available and used	Percentage of female users	Not Available	Available but not used	Available and used	Percentage of male users
1	Calling purpose	0	0	640	100	0	0	640	100
2	Use of SMS	0	360	280	43.75	0	340	300	46.875
3	Use of beeping services	0	590	50	7.8125	0	630	10	1.5625
4	Use of camera	260	220	160	25	180	240	220	34.375
5	Use of recorder	0	620	20	3.125	0	530	110	17.1875
6	Use of calculator	0	480	160	25	0	210	230	35.9375
7	Use of headphone to listen to music	0	610	30	4.6875	0	460	180	28.125
8	Use of touch screen	595	15	30	4.6875	525	5	110	17.1875
9	Use of Internet or google	320	280	40	6.25	290	210	140	21.875
10	Use for communication-social media, what's app or hike	320	280	40	6.25	290	210	140	21.875
11	Use of Bluetooth	0	630	10	1.5625	0	610	30	4.6875
12	Use of calendar	0	220	420	65.625	0	80	560	87.5
13	Use of clock	0	200	440	68.75	0	60	580	90.625
14	Game	0	637	3	0.46875	0	470	170	26.5625
15	GPS	0	637	3	0.46875	0	610	30	4.6875
16	Video	260	360	20	3.125	180	240	210	32.8125
17	Book Reading	320	300	20	3.125	320	300	20	3.125
18	Use of Online Shopping	320	280	40	6.25	290	210	140	21.875

**Figure 7.1**



**Figure 7.2**

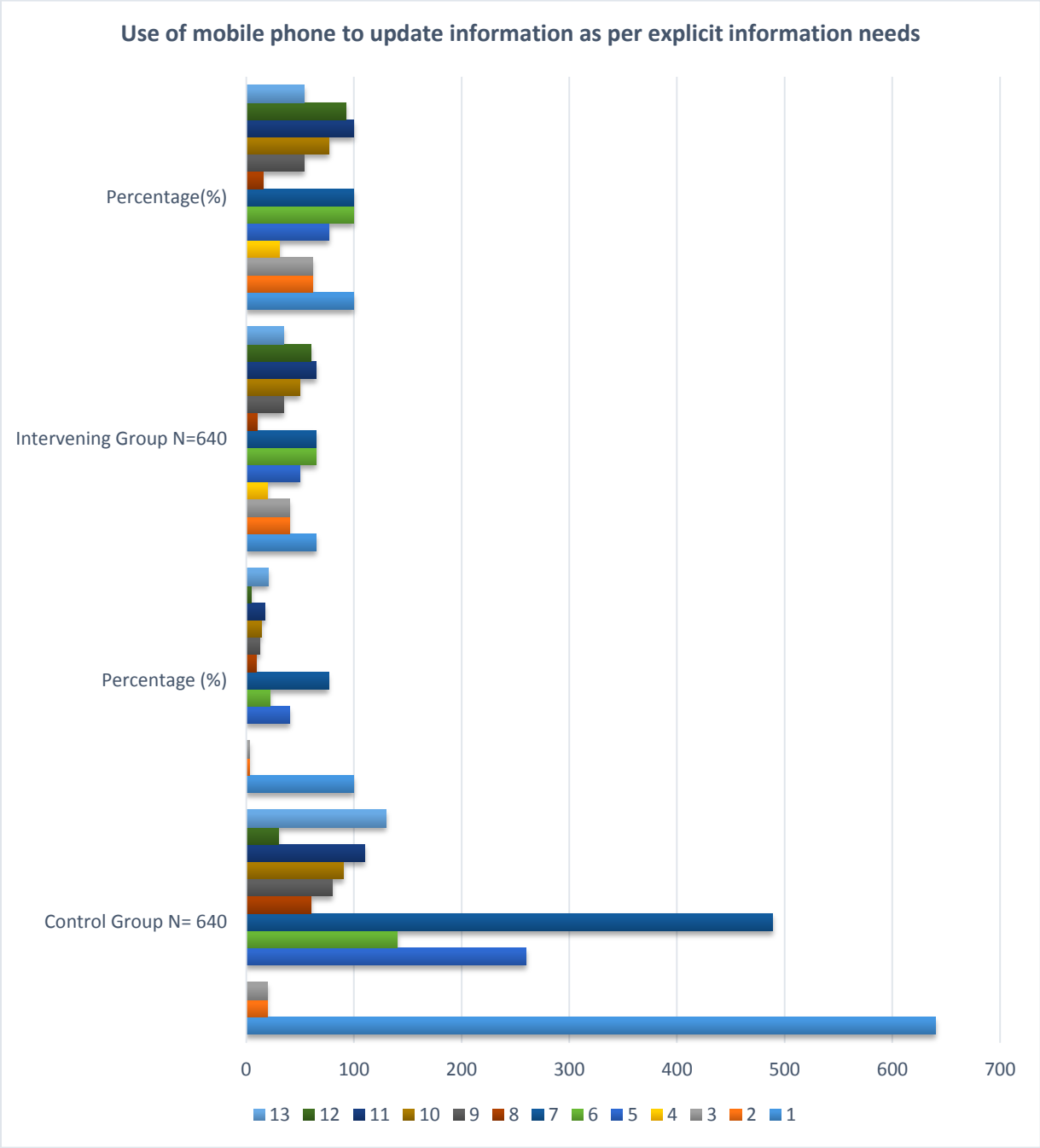


**Table 7.2 Source:** Questionnaire Survey with 705 respondents

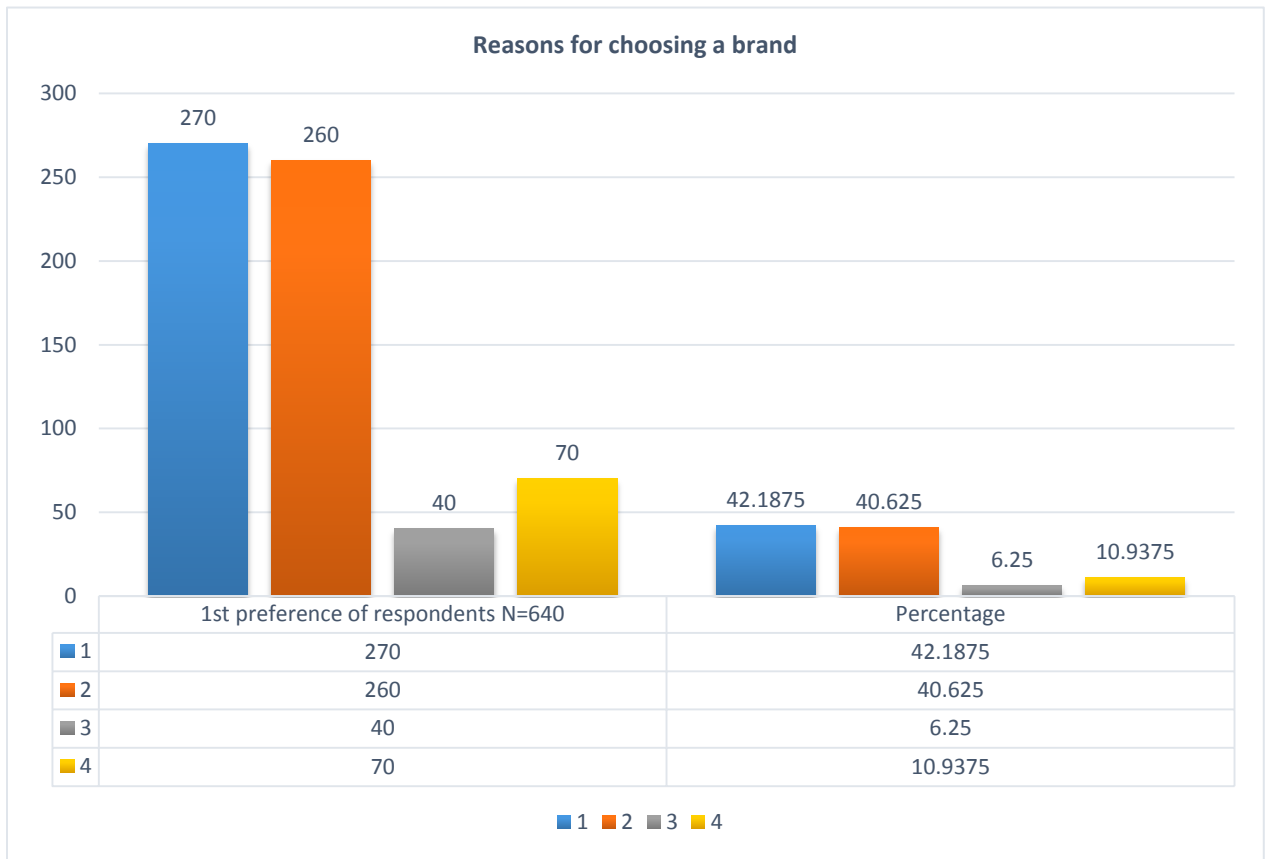
SL No	Mobile Internet use	Control Group N=640	Percentage (%)	Intervening group N=65	Percentage (%)
1	Are not aware of mobile internet	0	0	0	0
2	Aware of mobile internet but have not accessed it	320	50	5	7.692307692
3	Access to job portal	0	0	12	18.46153846
4	Browse social networking site or What's app	40	6.25	10	15.38461538
5	Taking part in discussion on mobile discussion sites or forum	0	0	0	0
6	Google through mobile to retrieve information	40	6.25	37	56.92307692
7	Mobile shopping	40	6.25	35	53.84615385
8	Paying bills through mobile phone	40	6.25	40	61.53846154

**Table 7.3 Source:** Questionnaire Survey with 1280 respondents

Sl. No	Use of mobile phone to update information as per explicit information needs	Control Group N= 640	Percentage (%)	Intervening Group N=640	Percentage (%)
1	Talk only use	640	100	65	100
2	Market information such as use of market light app	20	3.125	40	61.53846154
3	Mobile Krishi	20	3.125	40	61.53846154
4	Weather information	-		20	30.76923077
5	Mobile Health or use for Health information	260	40.625	50	76.92307692
6	Talking to clients ( business purpose)	140	21.875	65	100
7	Use of mobile phone as a substitute to transportation	489	76.40625	65	100
8	Retrieve information about disasters	60	9.375	10	15.38461538
9	Checking Examination Results	80	12.5	35	53.84615385
10	Searching employment opportunities	90	14.0625	50	76.92307692
11	Mobile phone to reach new contacts and opportunities.	110	17.1875	65	100
12	M-banking or money transfer	30	4.6875	60	92.30769231
13	Use mobile phone to communicate with children's school teachers	130	20.3125	35	53.84615385



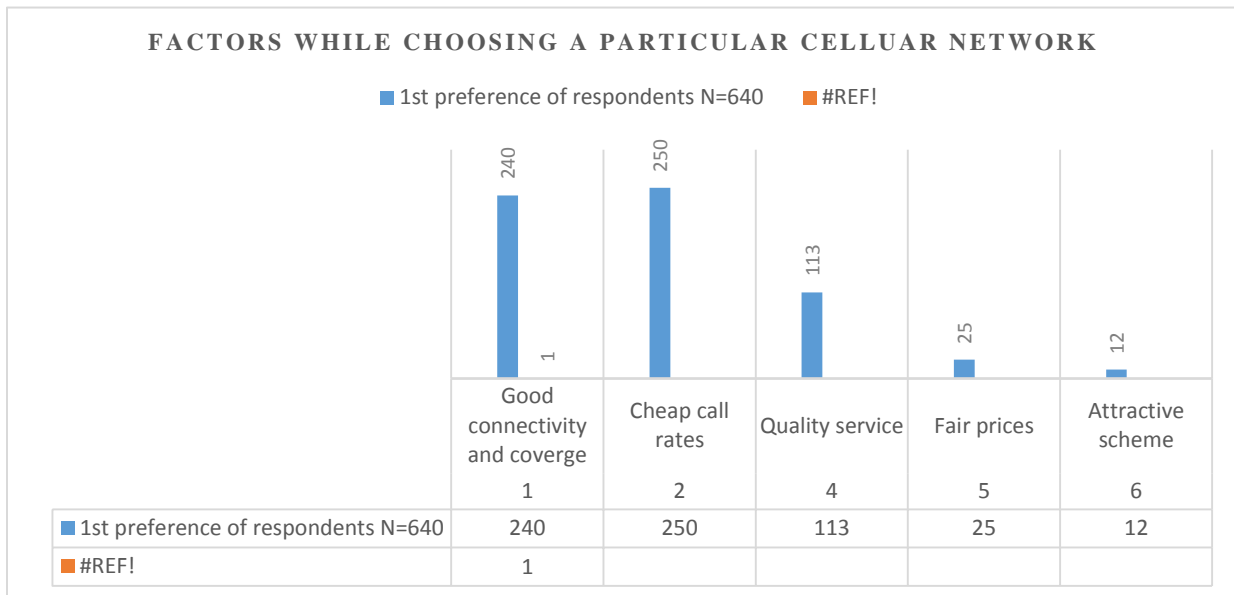
**Figure 7.5**



**Table 7.5 Source:** Questionnaire Survey with 640 respondents

Sl. No.	Reason for choosing the brand	1st preference of respondents N=640	Percentage
1	Low price	270	42.1875
2	Easy to use	260	40.625
3	Light weight/compact size	40	6.25
4	Enhance technological features	70	10.9375

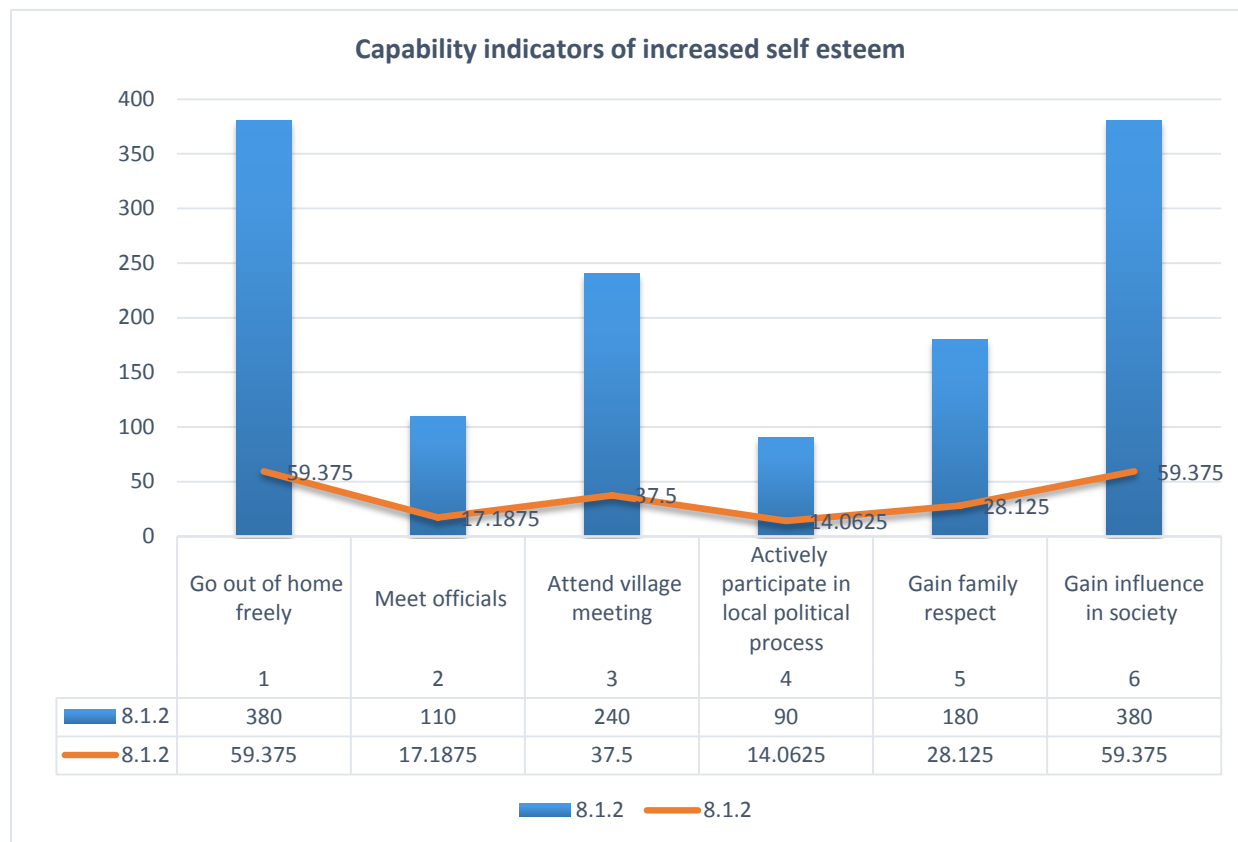
**Figure 7.6**



**Table 7.6 Source:** Questionnaire Survey with 640 respondents

Sl. No.	Factors while choosing a particular cellular network	1st preference of respondents N=640	Percentage
1	Good connectivity and coverage	240	37.5
2	Cheap call rates	250	39.0625
4	Quality service	113	17.65625
5	Fair prices	25	3.90625
6	Attractive scheme	12	1.875

**Figure 8.1.2**



**Table 8.1.2**

Sl No	Capability indicators of increased self esteem	Number of Women Respondents N= 640	Percentage (%)
1	Go out of home freely	380	59.375
2	Meet officials	110	17.1875
3	Attend village meeting	240	37.5
4	Actively participate in local political process	90	14.0625
5	Gain family respect	180	28.125
6	Gain influence in society	380	59.375



<b>Table 8.2.1 Source: Questionnaire Survey with 640 respondents</b>			
SI No	Capability indicators of accountability	Number of Women Respondents N= 640	Percentage (%)
1	Listen to each other more	580	90.625
2	Discuss issues together	260	40.625
3	Sense of reciprocity enhanced	330	51.5625
4	Help to oversee family responsibility	590	92.1875

Figure 8.2.1

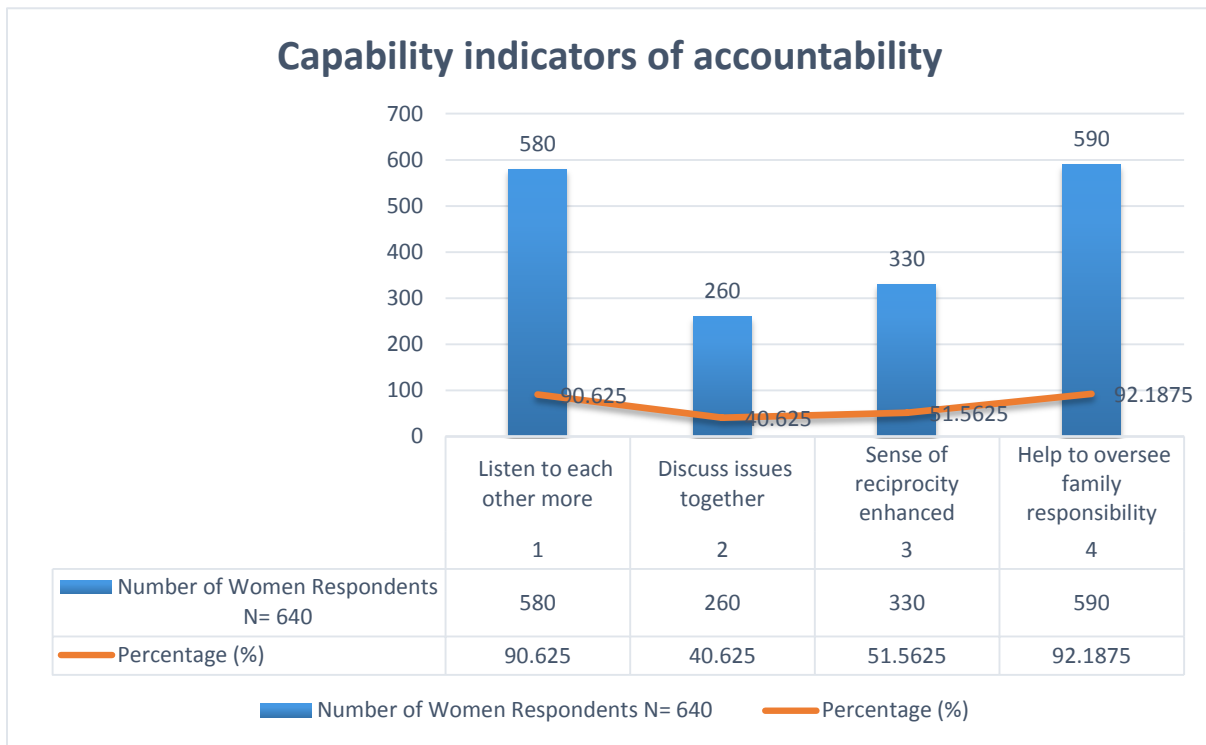
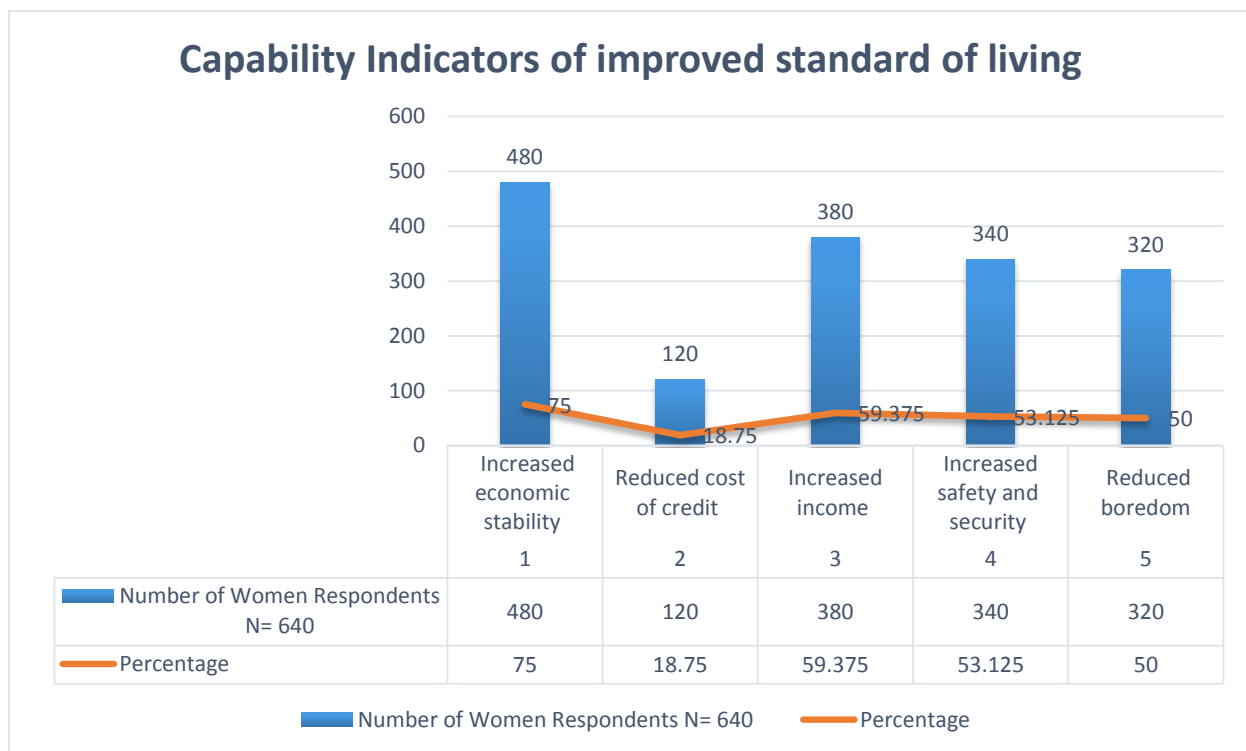


Table 8.3.1 **Source:** Questionnaire Survey with 160 respondents

SL No	Capability indicator of improved standard of living	Number of Women Respondents N= 640	Percentage (%)
1	Increased economic stability	480	75
2	Reduced cost of credit	120	18.75
3	Increased income	380	59.375
4	Increased safety and security	340	53.125
5	Reduced boredom	320	50

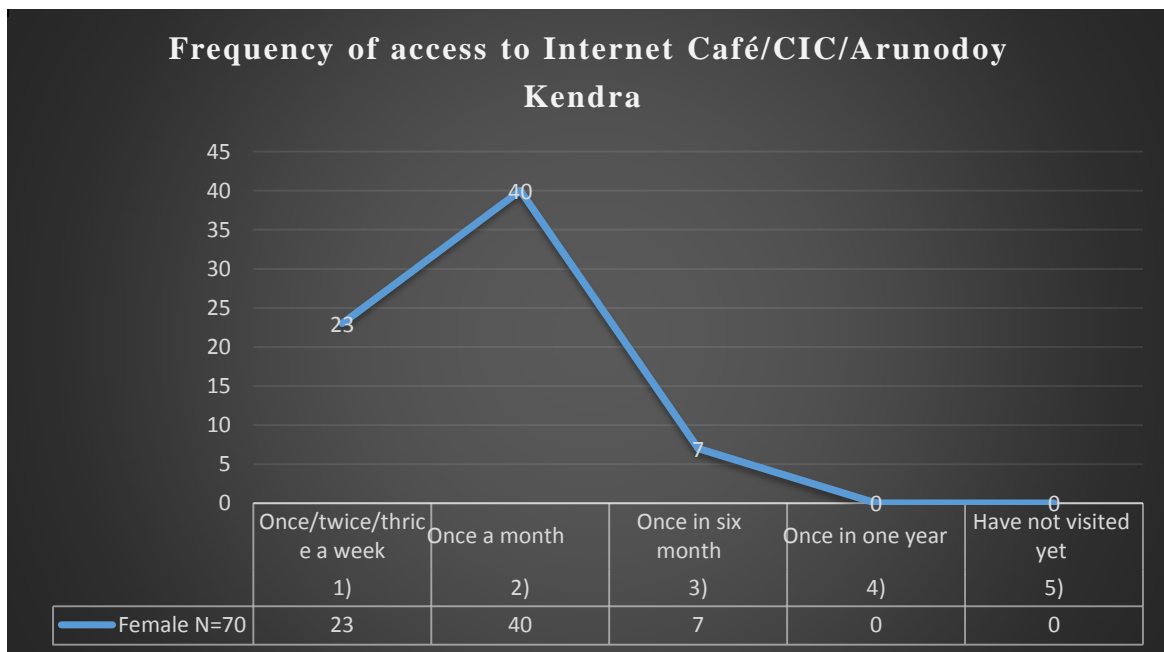
Figure 8.3.1



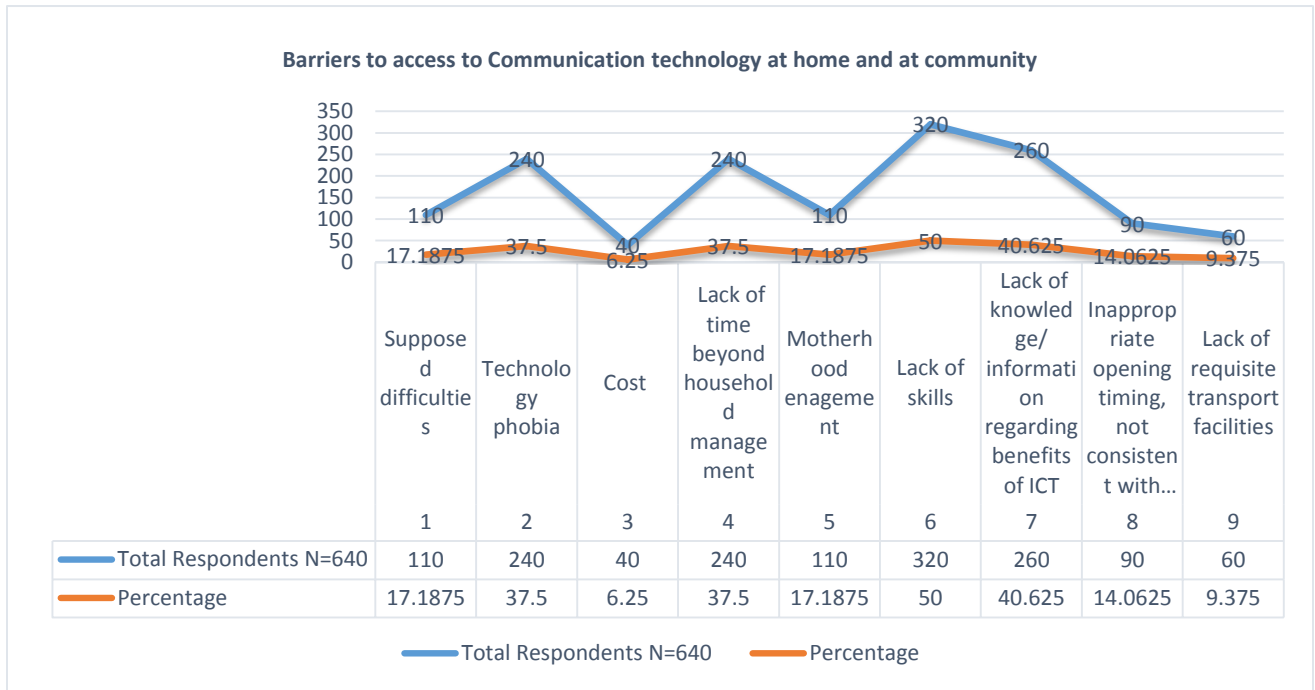
**Table 9.2**

SL No	Frequency of access to Internet Café/CIC/Arunoday Kendra	Female N=70
1)	Once/twice/thrice a week	23
2)	Once a month	40
3)	Once in six month	7
4)	Once in one year	0
5)	Have not visited yet	0

**Figure 9.2**



**Figure 9.2 1**



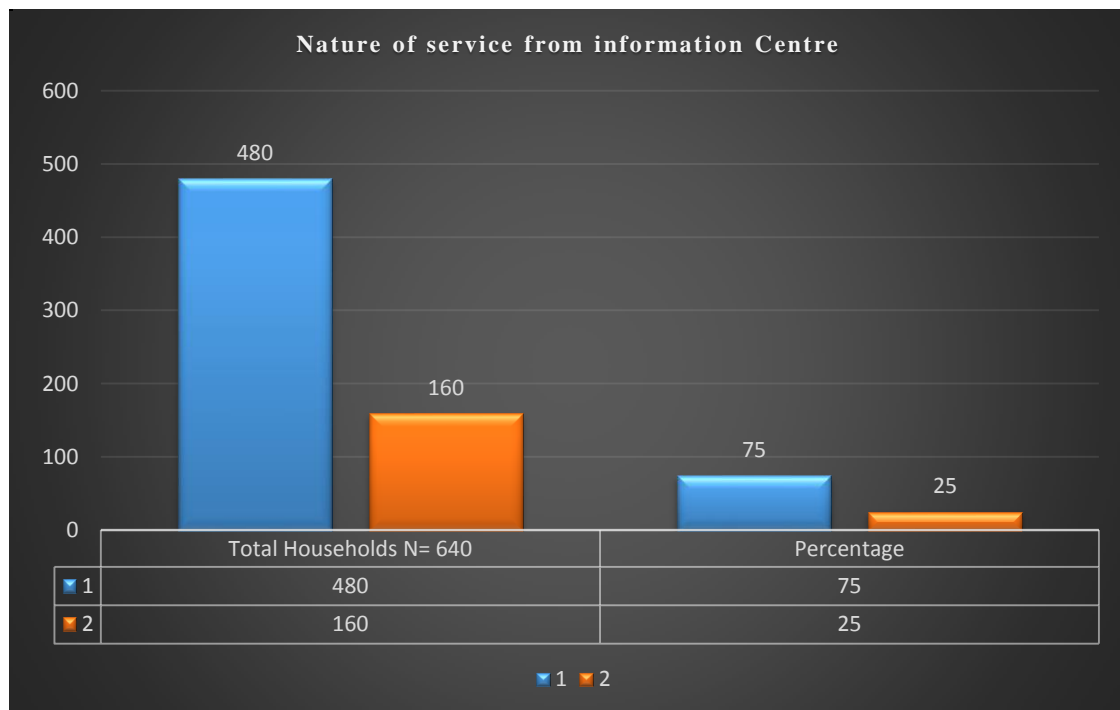
**Table 9.2.1 Source:** Questionnaire Survey with 640 respondents

SI No	Barriers to access to Communication technology at home and at community	Total Respondents N=640	Percentage
1	Supposed difficulties	110	17.1875
2	Technology phobia	240	37.5
3	Cost	40	6.25
4	Lack of time beyond household management	240	37.5
5	Motherhood engagement	110	17.1875
6	Lack of skills	320	50
7	Lack of knowledge/ information regarding benefits of ICT	260	40.625
8	Inappropriate opening timing, not consistent with household timing	90	14.0625
9	Lack of requisite transport facilities	60	9.375

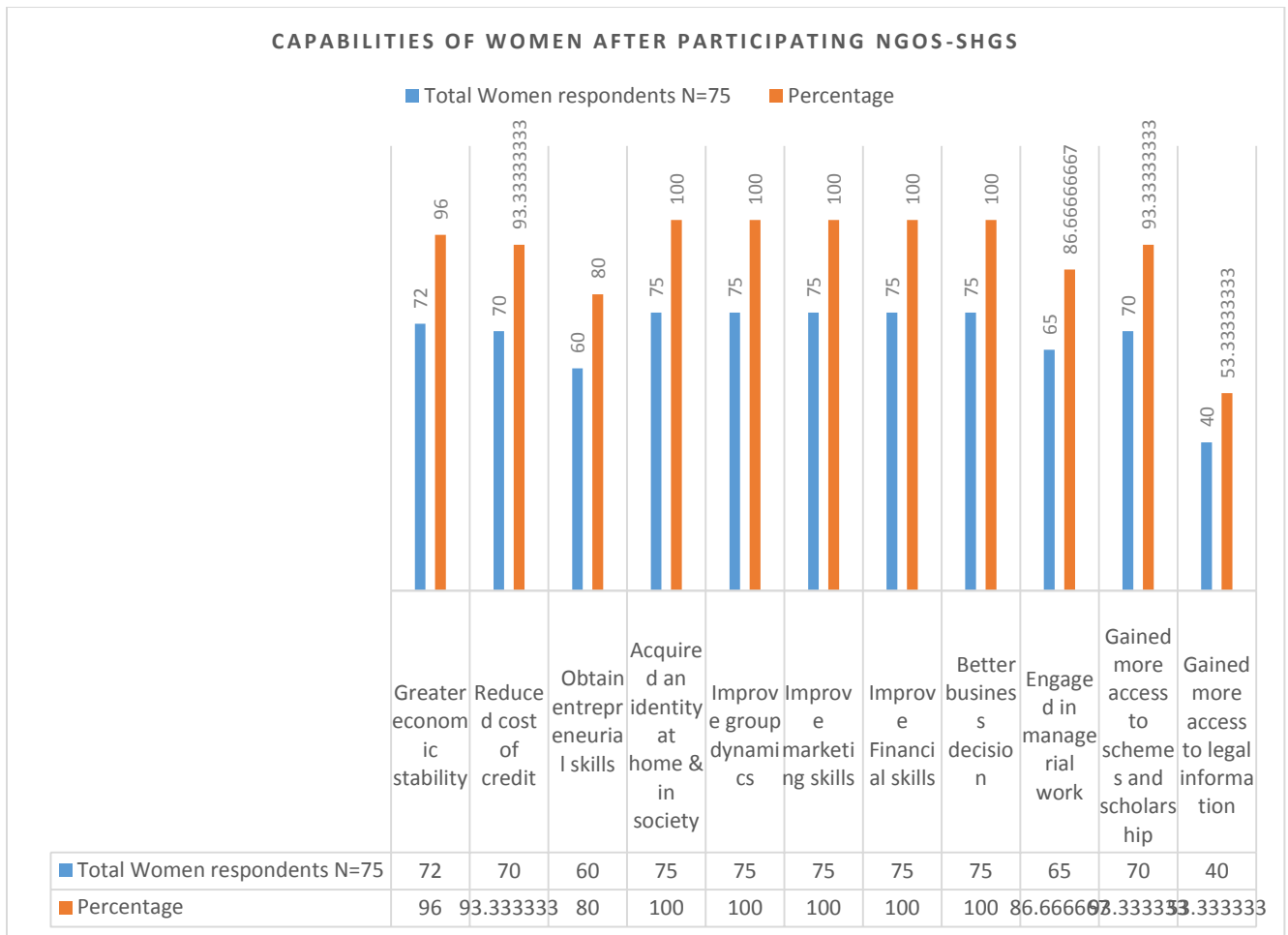
**Table 9.8**

SL No	Nature of service from information Centre	Total Households N= 640	Percentage
1	Voice services (want to listen to a person from opposite end)	480	75
2	Computational voice services	160	25

**Figure 9.8**



**Figure 10.5**

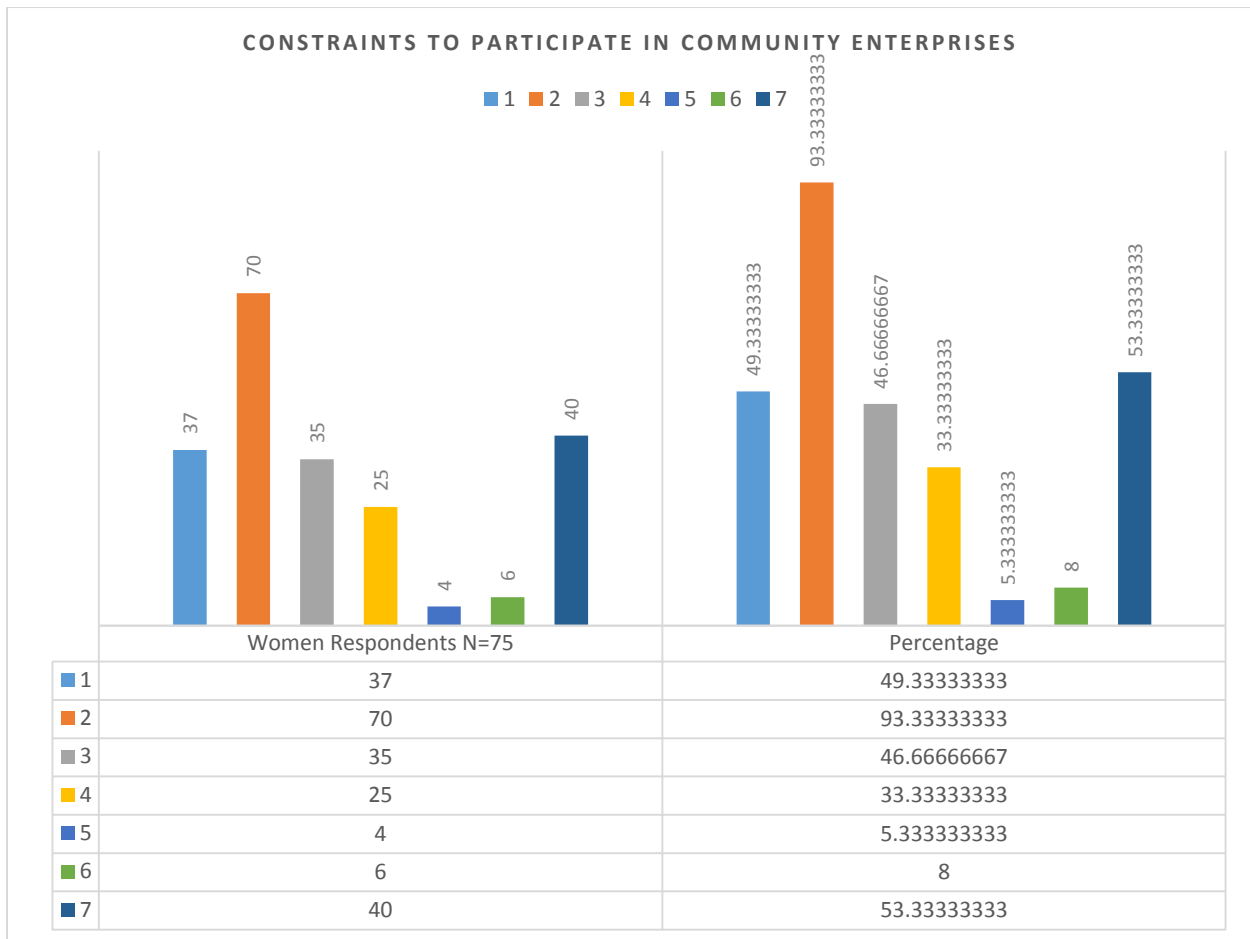


**Table 10.5 Source:** Questionnaire Survey with 75 respondents

Sl No	Capabilities of women after participating NGOs-SHGs	Total Women respondents N=75	Percentage
1	Greater economic stability	72	96
2	Reduced cost of credit	70	93.33333
3	Obtain entrepreneurial skills	60	80
4	Acquired an identity at home & in society	75	100
5	Improve group dynamics	75	100
6	Improve marketing skills	75	100
7	Improve Financial skills	75	100
8	Better business decision	75	100
9	Engaged in managerial work	65	86.66667
10	Gained more access to schemes and scholarship	70	93.33333
11	Gained more access to legal information	40	53.33333



**Figure 10.6**

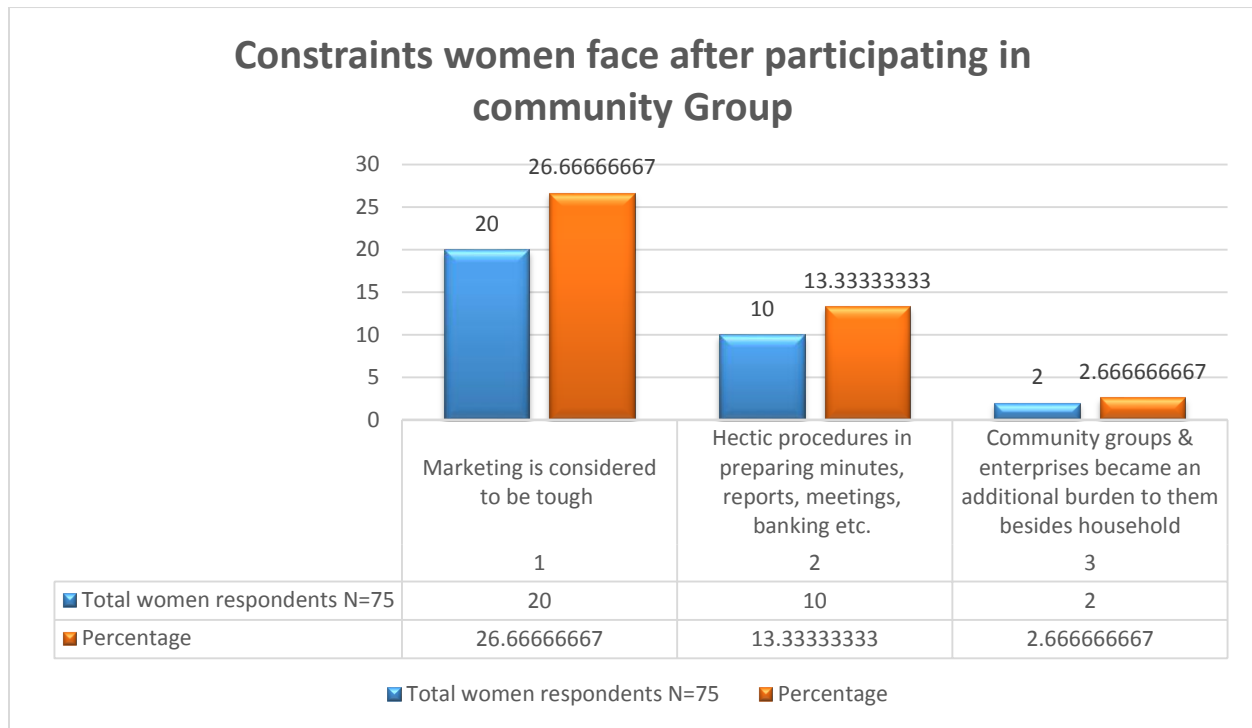


**Table 10.6 Source:** Questionnaire Survey with 75 respondents

SL No	Constraints to participate in community enterprises	Women Respondents N=75	Percentage
1	Poor living conditions	37	49.33333
2	livelihood insecurity	70	93.33333
3	Illiteracy, lack of proper employment	35	46.66667
4	Gender inequality at home and elsewhere	25	33.33333
5	Health problems	4	5.33333
6	Scientifically less advanced	6	8
7	Constraints in accessing information	40	53.33333



**Figure 10.7**



**Table 10.7 Source:** Questionnaire Survey with 75 respondents

Sl No	Constraints women face after participating in community Group	Total women respondents N=75	Percentage
1	Marketing is considered to be tough	20	26.66667
2	Hectic procedures in preparing minutes, reports, meetings, banking etc.	10	13.33333
3	Community groups & enterprises became an additional burden to them besides household	2	2.66667





