# CHAPTER 4

# LIVELIHOOD ASSESSMENT

## 4.1 INTRODUCTION:

In order to assess the livelihood status of sampled villages, a household survey was carried out. The survey questionnaire (ANNEXURE-I) was designed based upon the Sustainable Livelihood Framework (SLF). The survey was carried out in 1126 households (HH) from 20 sample villages from both the hill districts. Information on livelihood assessment was also sought through qualitative methods which involved various Participatory Rural Appraisal (PRA) exercises. Within each section, the findings and discussions from household survey are followed by those from PRA exercises.

## 4.2 HUMAN CAPITAL:

In this section, an attempt is made to understand the quality of human resources the sampled villages have access to. Livelihood strategies of a household depend upon age, family labour, education etc. Therefore, it is necessary to have an idea on a household's access to such resources.

### i) Community-Wise Break-up of Respondents:

The presence of various communities is observed among the 492 respondents from villages which are nearer to urban centres. Such diversity is more in case of the villages in Karbi Anglong District as compared to Dima Hasao District. However, in case of villages which are located far from urban centres, such diversity is not observed. In such villages, in both the districts, only the indigenous tribe of the districts constituted the total respondents from the particular district. This may be because of the fact that the options of taking up diverse livelihood activities are higher as compared to locations which are far from urban centres. Both the urban centres viz. Diphu in Karbi Anglong and Haflong in Dima Hasao are connected by the railways. All train services connecting Upper Assam with rest of the country passes through Diphu. This serves as a facilitating feature for diverse communities to migrate and settle near such urban centres. Although Haflong too is connected by railroads, the traffic remains very low. This is because of the fact that up-gradation to 'broad-gauge' railway track is not yet complete. This along with other features such as geographical-isolation and very low

population density makes Haflong a relatively 'lesser' commercial centre. This has led to a lower diversity of communities existing in the region.

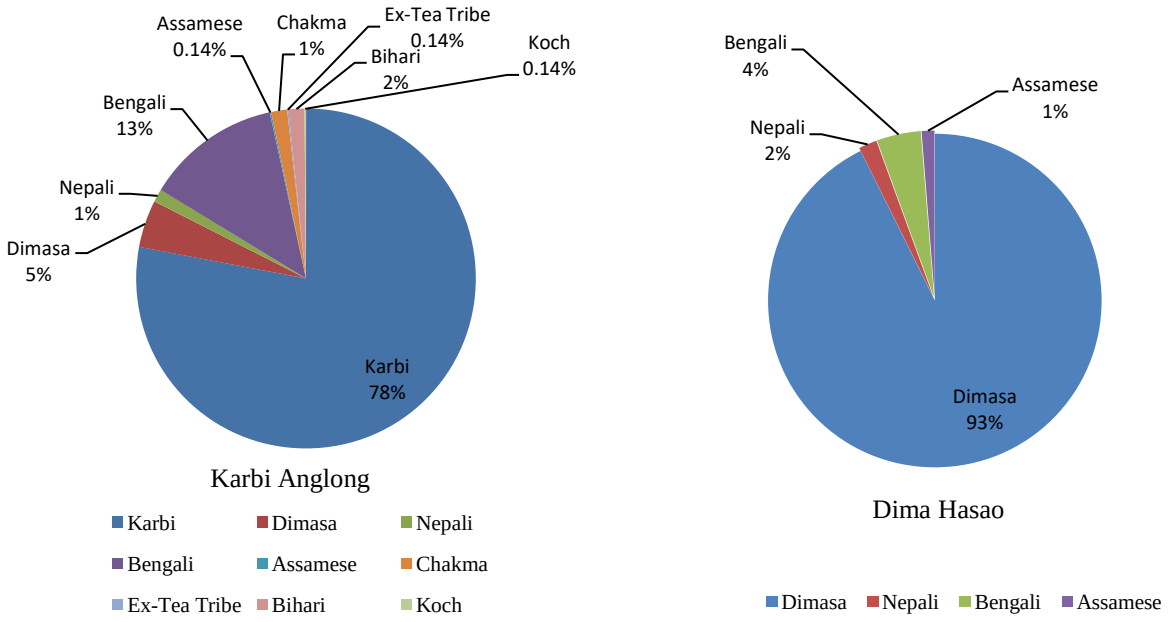


**Figure 4.1**
**Community-Wise Break-up of Respondents (District-wise)**
*Source: Field Survey*

In case of villages, situated far from urban centres it was observed that there was absolute occupation of one tribe in a single village. For example, in a Karbi village, all residents belonged to Karbi community only. Similar characteristic was observed in case of Dimasa villages.

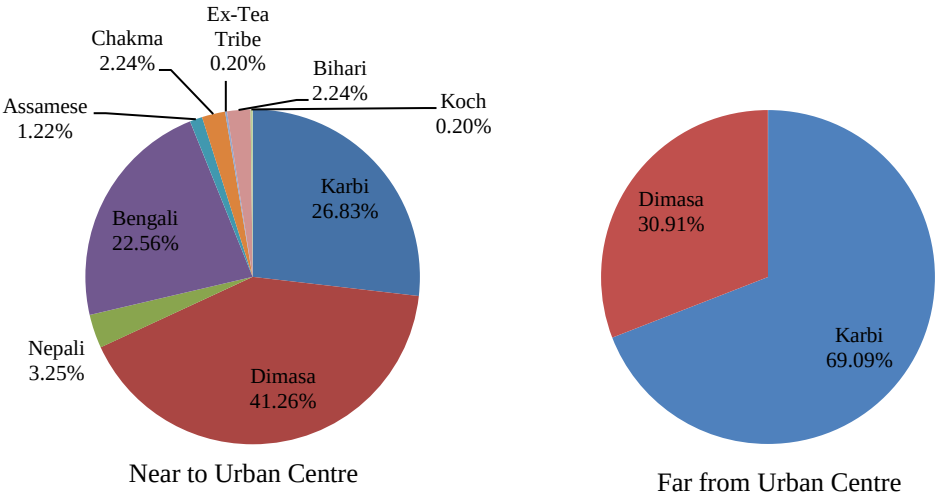


**Figure 4.2**
**Community-Wise Break-up of Respondents (Distance from Urban Centre)**
*Source: Field Survey*

### ii) Age of Household Head:

The average age of household heads in villages situated near Urban Centres in both the districts stands at 45 years, which is slightly lower than the figure for villages located far from Urban Centres for which the figure stands at 47 years. Although both the figures vary marginally, the difference is marginal and non-significant.

**Table 4.1**

**Average Age of Household Heads**

| Location of Village | Number of HH | Mean |
|---|---|---|
| Near Urban Centre | 492 | 44.88 |
| Far From Urban Centre | 634 | 46.66 |

***Source: Field Survey***

### iii)Type of Family:

In both cases, it was seen that majority of families surveyed were of 'nuclear' type. The presence of 'nuclear' families was significantly more in villages near urban centres (75%) than those far from urban centres (56%). This may be a direct outcome of differences in livelihood pattern of households with regards to location of villages. Higher involvement in labour intensive *jhum* cultivation in villages located far from urban centres compels families to stay together. Still majority of the families are 'nuclear' ones. So, it is also important to understand the variation in the size of families that exist with regards to location of villages.

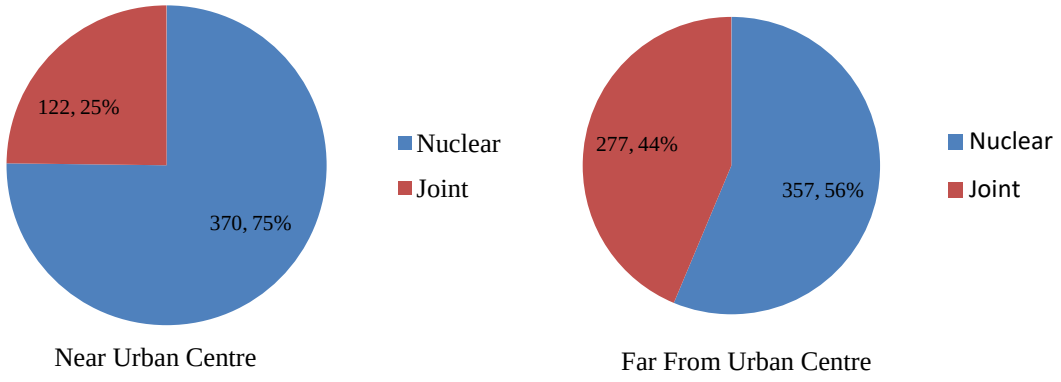


**Figure 4.3-Type of Family**

***Source: Field Survey***

**iv) Size of Family:**

The average sizes of family vary between villages near urban centres and those far from urban centres. The average family size in villages near urban centres stand at about 5 as against 6 in villages far from urban centres. On running independent sample t-test, we found that there is enough evidence to reject the belief that there is no significant variation in the average size of families with respect to their nearness from an urban centre.

We can infer that sizes of family in villages located far from urban centres were significantly high as compared to those in villages located near urban centres. The reason for such variation may be attributed to variation in livelihood pattern as discussed earlier. The presence of higher number of 'nuclear' families in both type of villages may also indicate that with gradual increase in the number of members i.e. size of 'joint' families, they tend to separate and live separately as 'nuclear' families. The significantly higher number of family members in villages located far from urban centres provides for increased requirement of labour for *jhum* cultivation even in the 'nuclear' type of families. Thus, the dependence on labour seems to dictate type and size of families in the study area.

**Table 4.2**
**Size of Family**

| Location of Village | Number of HH | Mean |
|---|---|---|
| Near Urban Centre | 492 | 4.77 |
| Far From Urban Centre | 634 | 5.66 |

***Source: Field Survey***

**Table 4.3**

**Independent sample t –test (Size of Family)**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | |
|---|---|---|---|---|---|---|
| | | F | Sig. | t | df | Sig. (2-tailed) *p* value |
| Size of Family | Equal variances assumed | 26.795 | 0.000 | -6.258 | 1124 | 0.000 |
| | Equal variances not assumed | | | -6.508 | 1119.12 | 0.000 |

***Source: Field Survey***

### v) Years of Education of HH Head:

The state of education in the surveyed villages was not satisfactory. The average years of schooling of household heads were about 3years in villages located near urban centres and about 2 years in those located far from urban centres.

**Table 4.4**
**Years of Education of HH Head**

| Location of Village | Number of HH | Mean |
|---|---|---|
| Near Urban Centre | 492 | 2.99 |
| Far From Urban Centre | 634 | 2.42 |

***Source: Field Survey***

On running independent sample t-test, we found that there is enough evidence to reject the belief that there is no significant variation in the average number of years of schooling with respect to their distance from an urban centre. Thus, it is observed that the education level of household heads in villages located near urban centres is slightly better than those far from urban centres. However, since the variation in educational level is statistically significant interventions for promoting nonfarm enterprises shall vary with respect to location of villages.

**Table 4.5**
**Independent sample t –test (Years of Education of HH Head)**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | |
|---|---|---|---|---|---|---|
| | | F | Sig. | t | df | Sig. (2-tailed) *p* value |
| Number of years of education | Equal variances assumed | 0.0364 | 0.8488 | 2.80791439 | 1124 | 0.005 |
| | Equal variances not assumed | | | 2.81821238 | 1069.561 | 0.005 |

***Source: Field Survey***

**PRA FINDINGS**:

There is a prominent disparity in the availability of education institutions with respect to distance from urban centres. In Dima Hasao district, Hojai , Hojai Khasiba, Choto Wapo and Delaisa have at least a Lower Primary (L.P) school within village premises. In some villages such as Choto Wapo and Delaisa, High Schools and Medium English Schools are also present. Moreover, presence of schools supported by Christian missionaries is also observed in villages like Hidim Teron. On the other hand, in villages like Kalaidisa, Mojowari, Surangdisa, Langsomepi, Umdap and Langteng in Dima Hasao and Karbi Anglong, located far from urban centres, students have to walk for 2 hours or travel 6-20Km to attend a High School. This adds as a dissuading factor for pursuing education beyond primary level. The situation is much harsh for a girl child. At an early age she is given the responsibility of tending to her younger siblings, while elder members of the family go to *jhum* fields. Once she attains teenage, she has to help in household chores such as fetching water and washing clothes and utensils and gradually has to participate as an agricultural labour. Participants disclosed that in many interior locations government appointed teachers do not regularly attend their respective schools. They in turn have 'sub-contract' arrangement with nominally educated local youths who in exchange of a monthly salary represent the government-appointed teachers.

**vi) Primary Occupation of Respondents:**

Majority of the respondents are primarily engaged in the agricultural sector which included agricultural and allied activities in their own plots and also as agricultural labours. About 30% of the respondents from villages situated far from urban centres were primarily engaged in agricultural and allied activities while in locations near urban centres the proportion is 23%. The proportion of agricultural labour is more in case of villages located far from urban centre because of the fact that as compared to their 'near-urban' counterparts they are believed to have better access to land resources. There is a significant difference in the number of respondents in the 'salaried' section. The number being 76(15.4%) in case of villages near urban centres against 3% in case of those located far from urban centres. In case of non-farm enterprises, there is higher level of engagement in case of respondents located in 'near urban' areas. Hence, it is easily understood that there is a prominent variation in the livelihood pattern of

households located in villages located near urban centres and those located far from urban centres. The intricacies of such variation in livelihoods have been discussed in later parts.

**Table 4.6**

**Primary Occupation of Respondents (Number of Households)**

| Location of Village | Primary Occupation of HH Head | | | | |
|---|---|---|---|---|---|
| | Agriculture and Allied | Salaried | Non-Farm Enterprises | Agricultural Labour | Total |
| Near Urban Centre | 114 | 76 | 76 | 226 | 492 |
| Far From Urban Centre | 190 | 19 | 64 | 361 | 634 |
| Total | 304 | 95 | 140 | 587 | 1126 |

***Source: Field Survey***

**PRA FINDINGS:**

In all villages, whether near or far from urban centres, primary occupation of majority of the households happen to be *jhum* cultivation. They have knowledge of traditional and indigenous practices engaged during such cultivation.

Almost all women are skilled in weaving traditional dresses in both the districts. However, use of loin looms is popular. Use of different colour combinations is more in case of Dimasa weavers as compared to Karbi ones. Karbi traditional dresses commonly use red, black and white patterns. Moreover, in both the districts, the weavers make only traditional dresses with indigenous designs. In addition to it, women are also experts in livestock rearing such as piggery, poultry, and cattle. They are also skilled in brewing rice beer. For example, Borpu village, about 200 years back was a rich kingdom name *Borpu Riso*. Its king was from the *Rongphar* clan and was rich from goat rearing and production of lac and opium. This village was particularly famous for the production of alcoholic beverage. Some of the village women act as 'Village Dais' (Mid-wives).

Male members are involved in making handicraft products such as baskets etc. for self use and sale. In Dima Hasao, men are skilled with bamboo and cane work and build various items such as *Maikho*, a basket for storing paddy and *Kailum*, a basket for storing clothes. In Karbi Anglong also, men build various bamboo items such as baskets

(*hoton*), trays (*beleng*). Another item, particularly observed in villages like Langteng, Langsomepi, Umdap is bamboo mat which serve as an important source of livelihoods.

**Figure 4.4**
**A commonly observed scene of women in villages engaged in weaving in both Karbi Anglong and Dima Hasao.**

*Source: Field Survey*

**Figure 4.5**
**Young and the old- all contributing to the household income by making bamboo products, Langsomepi Village, Karbi Anglong**

*Source: Field Survey*

Knowledge regarding wild food varieties and medicinal plants is relatively more in case of villages located far from urban centres. Thus, it is seen that apart from their knowledge of traditional agricultural practices, inhabitants of the hill districts have a strong repository of skilled and informed human resources in the form of weavers, handicraft artisans, brewers and those well acquainted with wild food varieties and medicinal plants.

### vii) Health Status of Household members

The respondents were asked about their health status by enquiring incidence of serious and non-serious illnesses. These were classified based on absence from their daily engagements, such that if the absence is for one week or more, illness is to be considered as serious and if it for less than a week, illness is to be considered as non-serious. Survey revealed that incidence of non-serious illness is relatively high (62.6%) in case of respondents located near urban centres. Out of these, majority of respondents declared that they were sick only once or twice during the past one year. In case of respondents from villages located far from urban centres, majority (67.7%) of them declared that they were never sick with non-serious illness during the past one year. Only 20.2% of the respondents from villages located far from urban centres declared that they were sick only once or twice in the past one year.

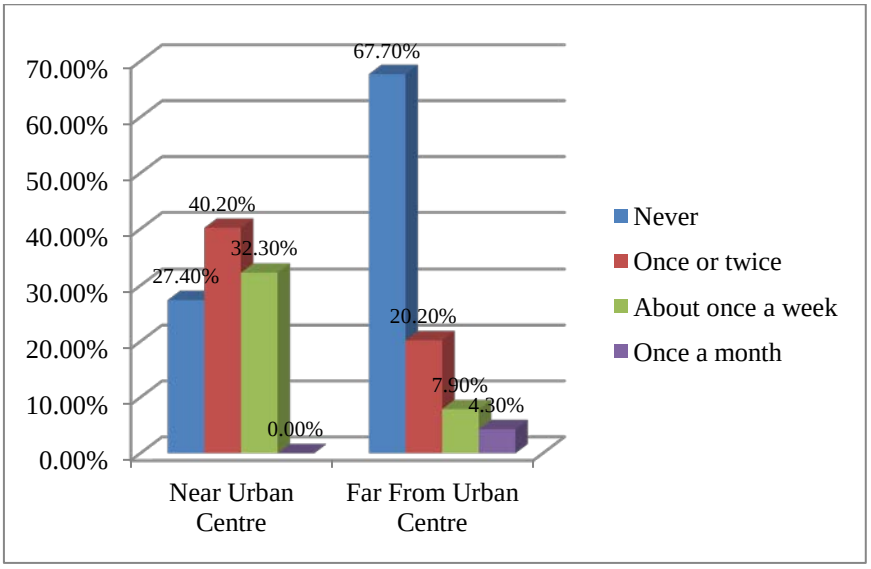


**Figure 4.6**
**Occurrence of non serious illness**

*Source: Field Survey*

However, in case of serious illnesses, the situation is reverse. The frequency of incidence of serious illness during the previous one year was more in case of villages situated far from urban centres. This might be because of the fact that health services in far off locations are not readily available. Residents from these villages tend to ignore diseases in their early stages, and only when the situation worsens they go for medical treatment.

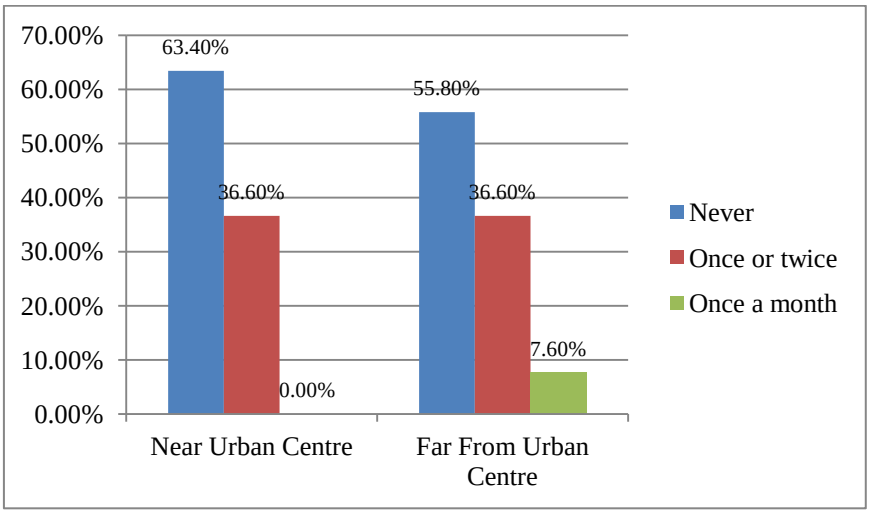


**Figure 4.7**
**Occurrence of Serious Illness**

*Source: Field Survey*

**PRA FINDINGS:**

The general view on 'health' of villagers, irrespective of distance from urban locations is considered to be good. However, in case of villages located near urban centres, majority of villagers perceive a person to be 'healthy' if he is free from illnesses. But in case of villages located far from urban centres, a person's ability to carry out his livelihood activities is considered the sole criterion of is health status.

In villages located far from urban centres, during summer, villagers experience highest incidence of diseases, most commonly malaria, jaundice and dysentary. All these commonly occurring diseases are water borne and contagious ones and their frequent occurance reflect an unhygienic environment in villages located far from urban centres. Incidence of epidemics such as cholera is reported to have occurred long time back, irrespective of distance from urban centres. These led to breaking up of villages and migration. However, such epidemics have not occurred in the immediate past in all

the studied villages. The availability of Primary Health Services differed with distance from urban centres.

**viii) Primary Source of Drinking Water:**

In order to get information on the hygiene aspects of the lifestyle, respondents were enquired upon their source of drinking water, water purification practices, defecation practices and garbage disposal practices. While the situation in villages near urban centres seemed to be better bestowed with 34.6% getting piped water supply and majority of the rest having 'well" as the source of water, the primary source of drinking water for those villages located far from urban centres still remains rivers and streams(47.5%).

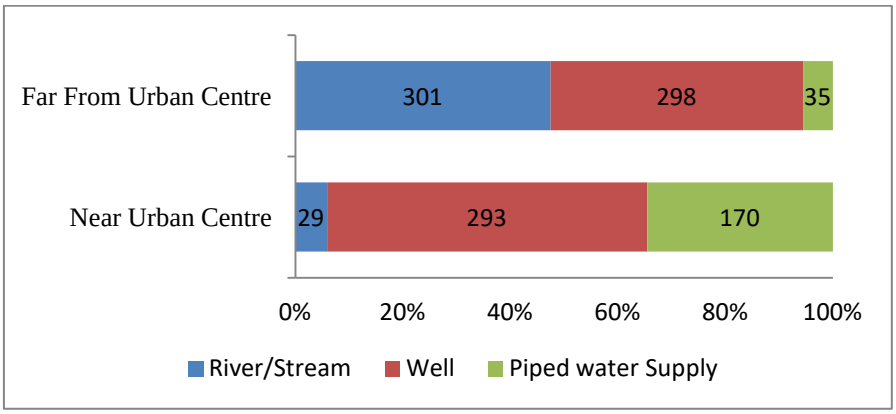


**Figure 4.8**
**Primary source of drinking water**

*Source: Field Survey*

Since, it was observed that a considerable number of households from villages located far from urban centres and a few households from 'near urban centre- villages' depended upon water sourced from rivers and streams, it is pertinent to know which members of the family generally fetches water for the family and how much time is consumed per day in such activity. In hill areas such pre-occupations are important for designing livelihood solutions for the population. It was seen that adult female members of the households (83.4%) are generally involved in fetching of water. Sometimes, non-adult female members (14.4%) of the family also do such work. Adult male members (2.2%) very rarely participate in such activity.

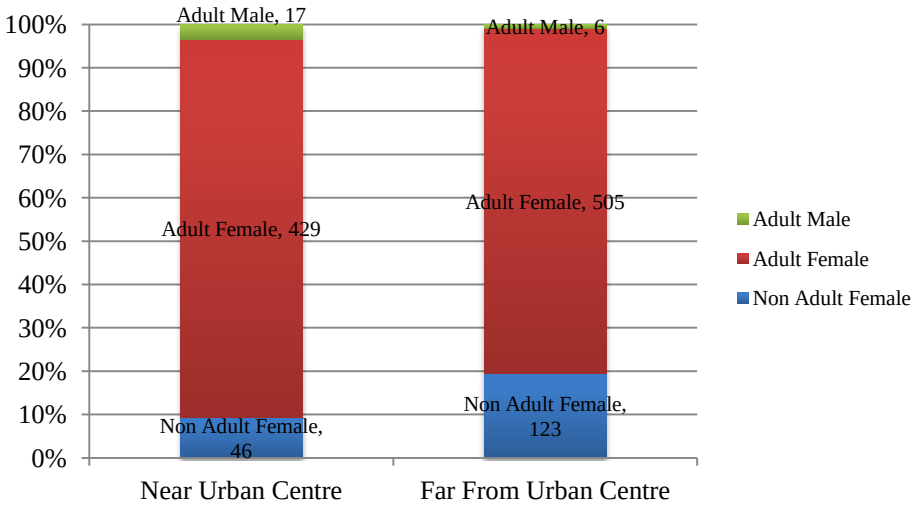


**Figure 4.9**
**Category of household members involved in fetching of water**

*Source: Field Survey*

The average time per trip, taken to fetch water (approximately 20 litres per trip) is much higher in case of villages located far from urban centres (36 minutes) as compared to villages located near urban centres (9 minutes). Hence, we can say that households living near urban centres are more privileged than the others as they have to spend less time in fetching water.

**Table 4.7**
**Average time required to fetch water**

| Location of Village | Mean (minutes) |
|---|---|
| Near Urban Centre | 9 |
| Far From Urban Centre | 36 |
| Total | 24 |

*Source: Field Survey*

### ix) Treatment of drinking water:

Awareness regarding water purification is very poor in the overall region, as apparent from the fact that only 1.6% of those residing in villages near urban centres use boiling as a purification process.

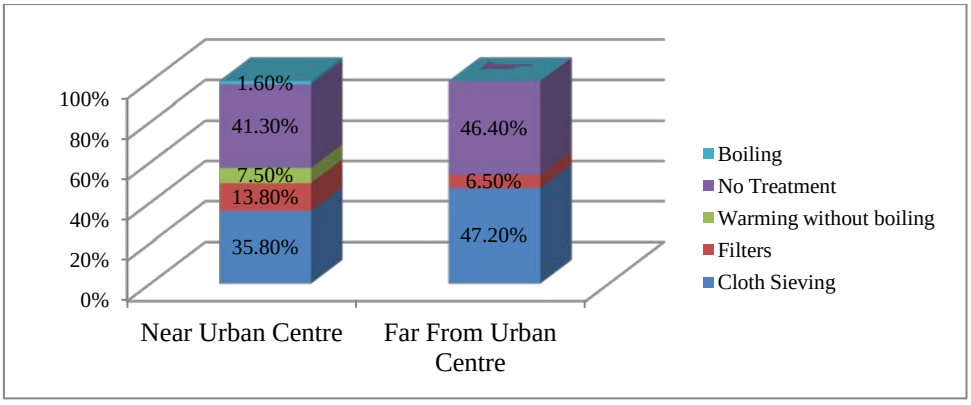


**Figure 4.10**
**Treatment of drinking water**

*Source: Field Survey*

Only 13.8% of respondents from villages near urban centres used some filtration apparatus as a treatment measure of drinking water. The numbers are still lower in case of respondents from villages situated far from urban centres (6.5%). Majority of the rest 42.2% of the overall respondents use cloth sieving as the process for purification of water. In general across all type of villages, 44.1% do not undertake any kind of treatment mechanism of drinking water. This poses a serious threat to the hygiene situation and makes majority of the population vulnerable to water-borne diseases. Such incidence of diseases has a direct impact on the livelihoods of the hill districts, majorly involved in labour based livelihoods.

**x) Practices regarding defecation:**

As regards hygiene standards maintained by the respondents with respect to defecation, 24.3% respondents stated open defecation without any designated area to be the normal practice. Majority of the rest (75.6%) had been using 'Latrines' located in the household premises. However, there was a significant variation in responses from villages from near urban centres and those located far from urban centres. Open defecation was reported by 43.2% of respondents from villages located far from urban centres. In these villages, 56.8% respondents stated using latrines for defecation. However, during PRA exercises it was revealed that these latrines were mostly *'Kutcha'* latrines with varying improvisations with available resources. Practice of open defecation by a considerable section of the households makes them vulnerable to contagious diseases. This too has a direct bearing on their earnings by disrupting their regular livelihood activities.

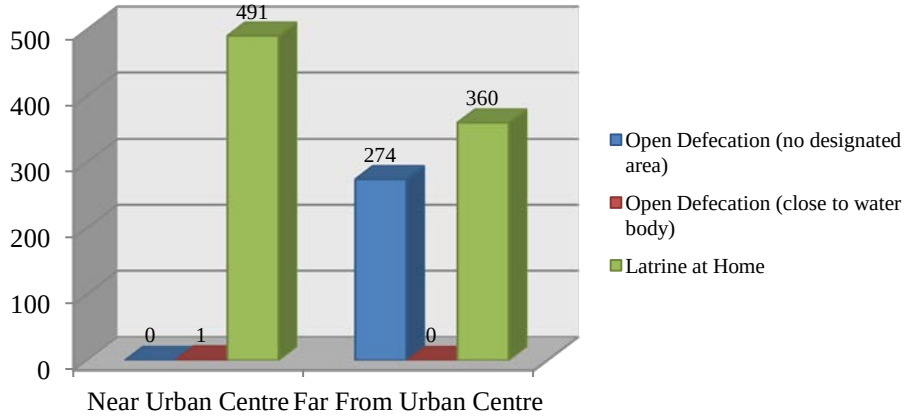


**Figure 4.11**
**Practices regarding defecation**

*Source: Field Survey*

### xi) Practice regarding Garbage Disposal:

In order to further assess the hygiene practices of respondents, they were asked regarding their garbage disposal practice. In all, 82.8% of respondents stated that they disposed off their garbage in their backyards. However, on looking into the categorised responses we find that in case of villages near urban centres, respondents reported mostly garbage disposal at their backyards (87.6%), followed by disposal at some 'designated space within inhabited area' (10.4%). In case of villages located far from urban centres, 79% reported 'backyard disposal', followed by 'front-yard disposal' (16.4%) and disposal at 'undesignated space within the inhabited area' (3.2%).

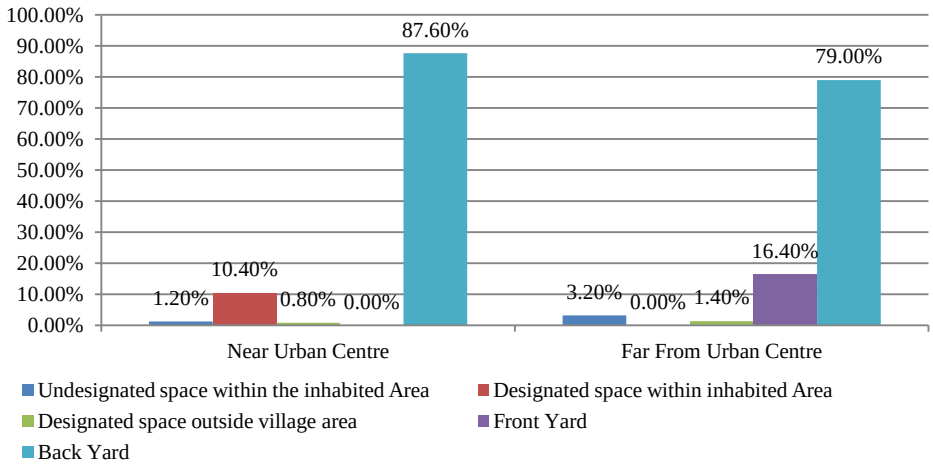


**Figure 4.12**
**Practices regarding garbage disposal**

*Source: Field Survey*

### xii) Number of meals per day:

In order to assess the food security position of the respondents they were asked regarding the number of meals they could afford to have per day. It was observed that people from villages near urban centres were in a relatively better position as compared to their counterparts from villages located far from urban centres. However, majority of respondents, in both cases, stated they could afford to have two meals per day. In case of villages located near urban centres, a significant fraction (16.3%) could afford to have three meals in a day, which was almost absent (1.3%) in case of the other group. Only 0.2% respondents from villages located near urban centres stated could afford just one meal in a day, while the number is 2.4% in case of those located far from urban centres.

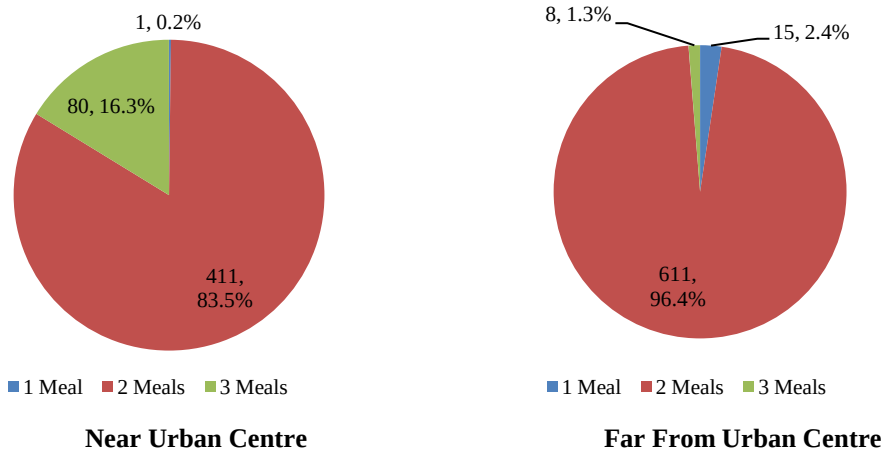


**Figure 4.13**
**Number of meals per day**
*Source: Field Survey*

**PRA FINDINGS:**

In most of the villages, villagers reported having rice production, that sustained the family for a period of six to nine months. So, major scarcity of fund and food prevails in the month of June, July and August as the previous year produce of the village become exhausted. During this period, household members have to depend upon alternative livelihood sources of livelihoods such as waged labour, selling of livestocks, selling firewoods and rice beer, to name a few.

Villages located near urban centres have better access to services of Public Health Engineering Department (PHE), reflected from the presence of water reservoirs and distribution systems in villages like Choto Wapo, Delaisa, Hojai and Moti Phonglo.

Similarly, under Integrated Watershed Management Program (IWMP), ringwells are provided in Het Tisso village. PHE's role is also seen with the presence of sanitation facilities in villages like Hidim Teron.

**Figure 4.14**
**Water Supply arrangement provided by PHE at Hojai Khasiba Village, Dima Hasao**

*Source: Field Survey*

Presence of Anganwadi centres in villages such as Hidim Teron and Mongoldhar Chakma village, located near urban centres, ensure better access to health and nutrition services by women, children and other vulnerable sections of the population.

**Figure 4.15**
**Adapting to available resources: Seen in the picture is a innovative method of storing water, sourced from a stream located at a higher altitude, in a 'Hume-pipe'(meant for use in pipe-culverts during road construction) and distribution to households in a village called Silaguri in Karbi Anglong.**

*Source: Field Survey*

However, there is a huge gap in the service delivery of health department and PHE in villages located far from urban centres. For example in villages like Borpu, villagers have to travel about 20 Kms to Baithalangso or 8 Kms to Hamren to avail health services. Villagers, still have to fetch water from a stream for their regular household uses. Situation is similar in case of most villages located far from urban centres.

## 4.3 NATURAL CAPITAL:

In hill areas, a major determinant of livelihoods happens to be the 'natural resources' endowment a particular region enjoys. Natural resources include all types of land and water based resources which provide scope for supporting livelihoods. During quantitative survey, land holding of respective households was assessed

The average land holding by households in villages located far from urban centres is much more (1.89 Ha) than those located near urban centres (1.46 Ha). However, there is much variation in the average land holding in between both the districts. The average land holding per household in villages near urban centre in Karbi Anglong stands at 0.84 Ha, whereas the corresponding figure for Dima Hasao stands at 2.38 Ha. And in case of villages located far from urban centres, the average land holding in Karbi Anglong is 1.43 Ha and that for Dima Hasao is 2.92 Ha.

**Table 4.8**
**Average Land Holding**

| Name of the District | Location of Village | Average Land Holding (Ha) | No. of Respondent |
|---|---|---|---|
| Karbi Anglong | Near Urban Centre | .84 | 293 |
| | Far From Urban Centre | 1.43 | 438 |
| | Total | 1.19 | 731 |
| Dima Hasao | Near Urban Centre | 2.38 | 199 |
| | Far From Urban Centre | 2.92 | 196 |
| | Total | 2.65 | 395 |
| Total | Near Urban Centre | 1.46 | 492 |
| | Far From Urban Centre | 1.89 | 634 |
| | Total | 1.70 | 1126 |

*Source: Field Survey*

**PRA FINDINGS**:

**i. Land and produce:**

It is seen that villages, more particularly in Dima Hasao, which are far from urban centres have large areas within their occupancy. For example, villagers from Kalaidisa village reported that the total area covered by the village is about 300 Ha. However, legally recognized individual ownership was very minimal. The allotment of a plot of land to a household for jhum cultivation is at the discretion of the village headman. The village headman considers size of the family, potential labour input of the family and other factors and decides upon the size of plot to be allotted to the family. He also decides which plots, under the authority of the villages are to be cultivated for jhumming and which are to be left for regeneration. However, most of these lands are 'community owned', which has no legality which implies that households do not have ownership title over land they cultivate or reside, even though they have been occupying these lands for generations altogether. However, there is now a growing consciousness among the people to convert such unclassified land to *myadi* land and possess *pattas* against the same. In villages like Het Tisso, Mohong Diza, Hidim Teron and Kangther Basti, all located near urban centres, all land were classified and owners had proper *pattas* against land possession. In rest of the villages, it is observed that a few affluent households have land ownership documents or *pattas*. The incentive for such a trend is adoption of some permanent plantations such as rubber and tea by the rich and affluent class of the population the districts.

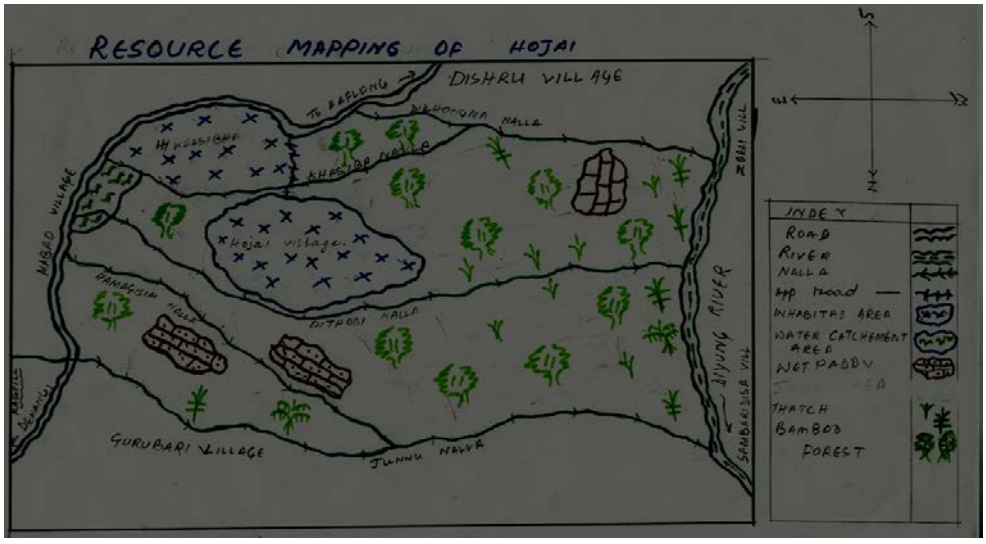


**Figure 4.16**
**Sample Resource Map (Hojai Village) drawn through PRA exercise**

*Source: Field Survey*

The overall available land may be classified into reserved forests, human settlement areas, wetland and the remaining unclassified area are for *jhuming*. Access to wetlands, used exclusively for paddy cultivation, is enjoyed by a few rich and powerful households of the village. The average span of jhum cycle in both the districts is about 4 to 5 years. In the jhum they do mixed cropping consisting of paddy, maize, sesame, ginger, vegetables etc. but from the past few years they started cultivation of broom grass and bamboo in the jhum plot as cash crop. Participants reported that the jhum-fallow cycle has got reduced drastically over the years due to increased population and increased demand for supply of products.

**ii. Water & aquatic resources:**

Small streams and rivulets are the primary sources of water for villagers in the hill districts. According to villagers, small ponds, streams and rivers have varieties of fish varieties such as Mahseers (*Nuhong), Nujung* other indigenous fish varieties and snail varieties, eels, frogs which serve as food to the locales. The villagers use unique fishing ways such as poisoning by using local herbs, which temporarily paralyses the fish, in hill streams and rivers. The villagers mainly depend upon rain, which normally occur during the month of June, July and August.

**iii. Forest products, wildlife:**

Bamboo and valuable timber tree such as Teak, Gamhar, Simul, Sissoo etc. are found in the forest. Housing materials are mostly sourced from the forests. Wild vegetables, firewood, and others NTFPs (Non-Timber Forest Products) such as cinnamon, honey, frankincense resins, edible mushrooms, medicinal plants etc. are collected from the forest. Sacred groves, cemeteries and funeral sites are places where forests are conserved in traditional manner.

Participants reported that wild animals such as deer, monkey, caveats, porcupines etc.; wild fowl and birds are found in the forest. Village elders reported that earlier leopards, tigers, bears were frequently seen in the forests, but now their presence in the forests has gone down considerably.

Domestic animals like buffalo, goat and cow are dependent mainly on natural grazing fodder. Grazing land for animals has no specified area. Animals are looked after by owners and non jhum areas are used as grazing land.

## 4.4 FINANCIAL CAPITAL

### i) Proportion of BPL households :

The majority of the surveyed households were Below Poverty Line (BPL) category households in both villages near urban centres (73%), as well as those far from urban centres (91%). However, the frequency of BPL families is significantly high in case of villages located far from urban centres.

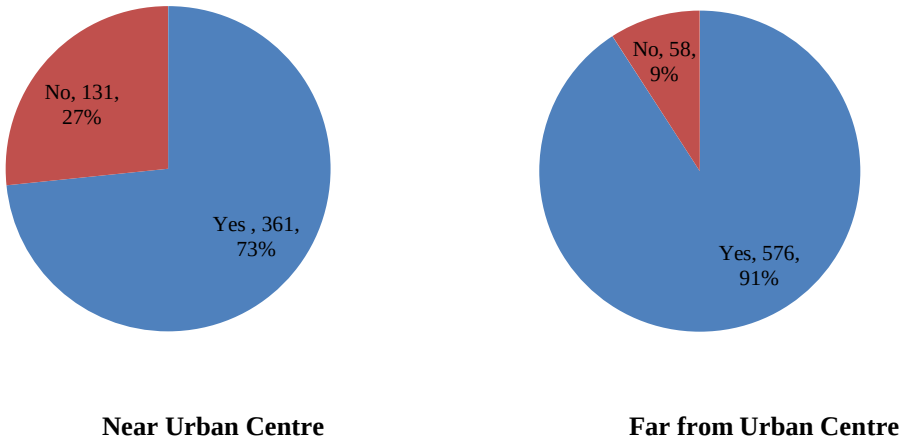


**Figure 4.17**
**Proportion of BPL Households**

*Source: Field Survey*

### ii) Ownership of Bank Account:

In order to assess the success of financial inclusion initiatives of various institutions to bring excluded groups within formal financial services, respondents were asked whether or not they owned a bank account.

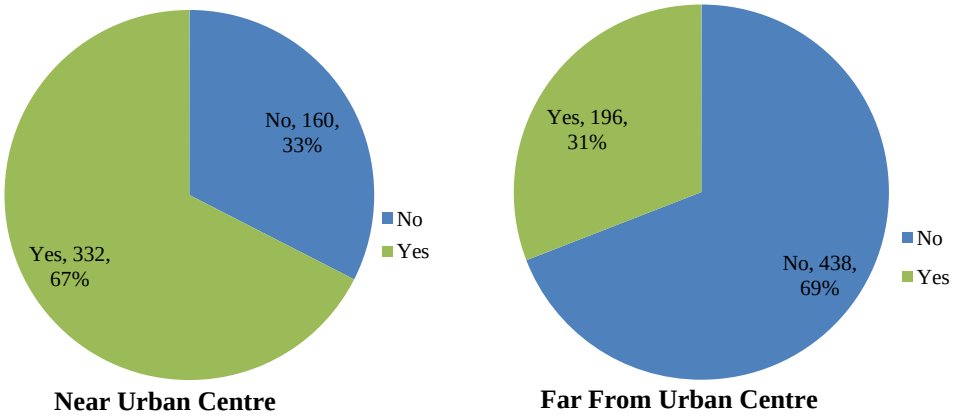


**Figure 4.18**
**Ownership of Bank Account**

*Source: Field Survey*

In villages near urban centres, majority (67%) of respondents had a bank account. However, the scenario was reverse in case of villages located far from urban centres in the fact that only 31% had bank accounts.

### iii) Whether No-Frill Account?

Respondents having bank accounts were further questioned whether their accounts were no-frill accounts. In villages located near urban centres, only 16% stated their accounts to be 'no-frill' accounts. But in case of villages located far from urban centres almost all (94%) reported their accounts to be 'no-frill' accounts.

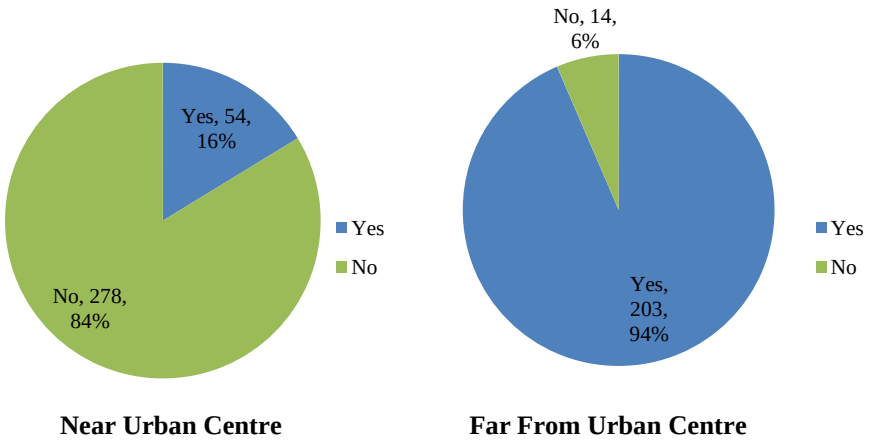


**Figure 4.19**
**Proportion of 'No-frill' Accounts**

*Source: Field Survey*

### iv) Vintage of Bank Account:

In both type of villages majority of account holders are relatively new users of bank accounts.

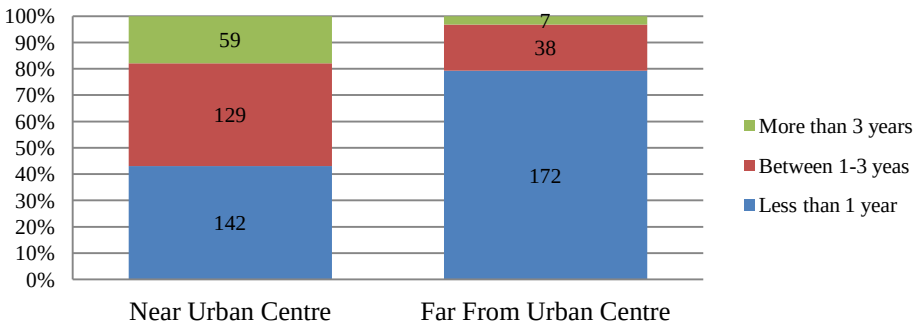


**Figure 4.20**
**Vintage of Bank Account**

*Source: Field Survey*

Even in villages located near urban centres, less than 20% of account holders reported using their accounts for more than 3 years. Those using their accounts for less than 1 year happen to be majority in both types of villages. In villages located far from urban centres less than 25% of account holders were using their accounts for more than a year.

**v) Account Balance of Respondents:**

Among the account holder from villages located near urban centres, only about 11% of respondents stated to have account balance of more than Rs 10,000/-. The corresponding figure for villages located far from urban centres is less than 4%.

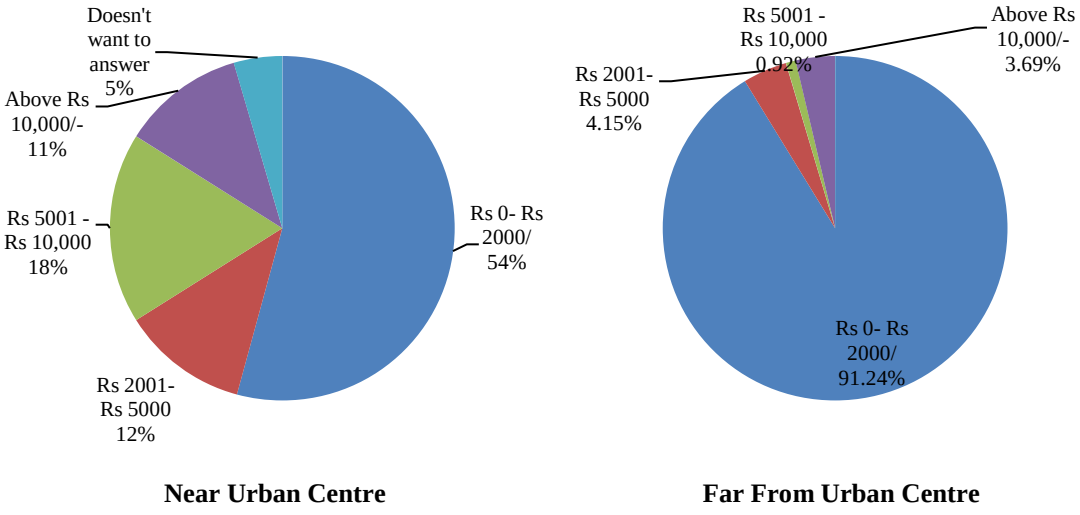


**Figure 4.21**
**Account Balance of Account Holders**

*Source: Field Survey*

The majority of account holders in both types of villages had deposits less than Rs2000.00. While 54% of account holders in villages near urban centres fall in this category, the figure for the same category in villages far from urban centres stands at 91.24%. The figures in the other 'amount-ranges' shows a relatively healthier financial position in terms of bank deposits in case of account holders from villages near urban centres.

**vi) Utility of Bank Account:**

In villages located far from urban centres, account-holders stated that their bank accounts were mainly used for transfer of government subsidies and payments under programmes like Mahatma Gandhi National Rural Employment Guarantee Scheme (75%). 23% stated that they used the bank accounts primarily for savings and 2% stated they used their accounts for remittance purpose. In case of account-holders from villages located near urban centres, most stated that they used their bank accounts for savings (60%) purpose, followed by government transfers (35%) and credit (5%) purposes. It is therefore observed that numerical figures on financial inclusion in terms of ownership of bank accounts seem to be deceptive as a considerable number of them in both type of villages were opened only for the purpose of transferring government subsidies and payments under various government schemes.

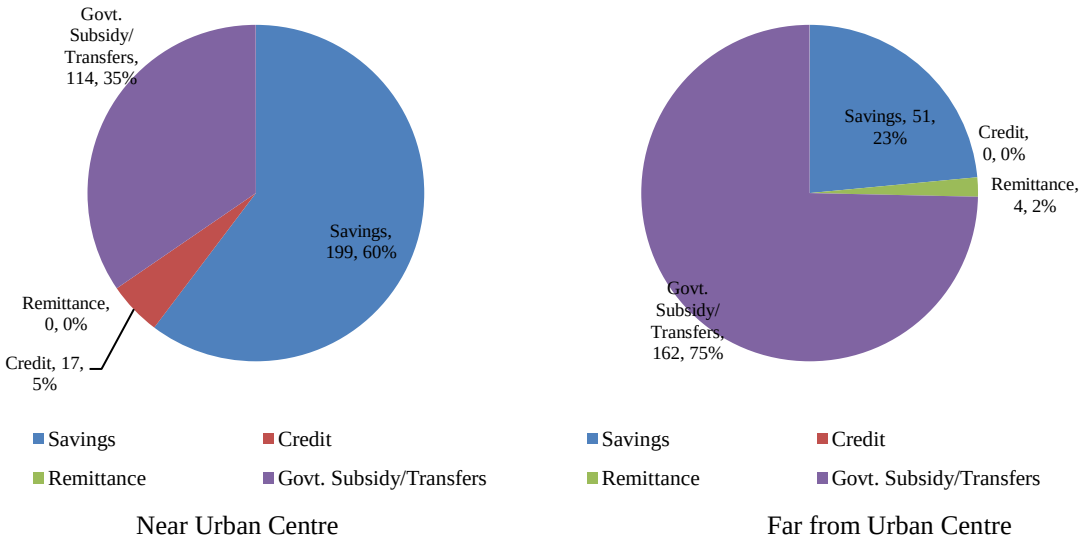


**Figure 4.22**
**Utility of bank accounts**

*Source: Field Survey*

**vii) Convenient source of credit**:

On enquired about the convenient sources of credit, majority of respondents stated that their friends and relatives happen to be the most convenient source of credit. In villages located far from urban centres they play a much urgent role (62%) as compared

to villages located near urban centres. Moneylenders happen to be the second best alternative both in case of villages located far from urban centres (23%) as well those near urban centres (19%). The third option in both types of villages is Self Help Groups (SHGs). However, SHGs' efficiency as source of credit varies across location, as 18% of respondents from villages located near urban centre stated them to be the convenient source of credit as against only 3% from those far from urban centres. In these villages, respondents revealed that only credit for petty expenses are met through relatives/friends or SHGs. For any expense that required expenditure of more than Rs 5000.00, they had to rely on money lenders. The prevailing rate of interest for such loans ranges from 10%-20% per month. Only 2% respondents from villages located near urban centres stated 'banks' to be convenient source of credit while the number is nil for villages located far from urban centres.

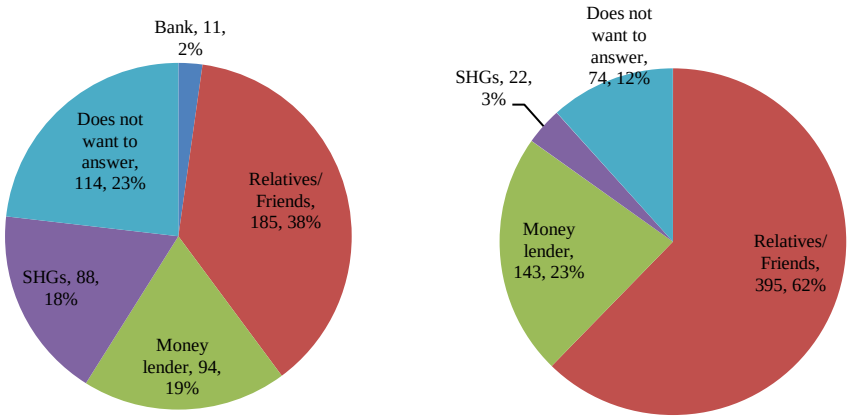


**Figure 4.23**
**Convenient Source of Credit**

*Source: Field Survey*

Thus, we find that available banking services are very sparse for the largely BPL respondents, particularly in villages located far from urban centres. Even among bank account holders most of the accounts were no-frill accounts, opened for receiving government subsidies or other payments. Even account holders in both type of villages maintained very low account balances. It was revealed that, in spite of high lending rates, the moneylenders were considered as prominent and convenient sources of credit, ahead of banks or SHGs. Formal financial institutions have failed to deliver to the needs of the hill people in Assam.

### viii) Membership of SHGs

SHGs have been one of the key institutions promoted by various government and non-government programmes in India. They have played an important role especially in financial and social empowerment of India. In order to assess the presence of SHGs in the region, respondents were asked whether anyone in their households were members of Self Help Groups (SHGs). Responses revealed that 75.4% of households in villages located near urban centres had members of SHGs in their family. The figure for villages located far from urban centres was still higher and stood at 76.7%.

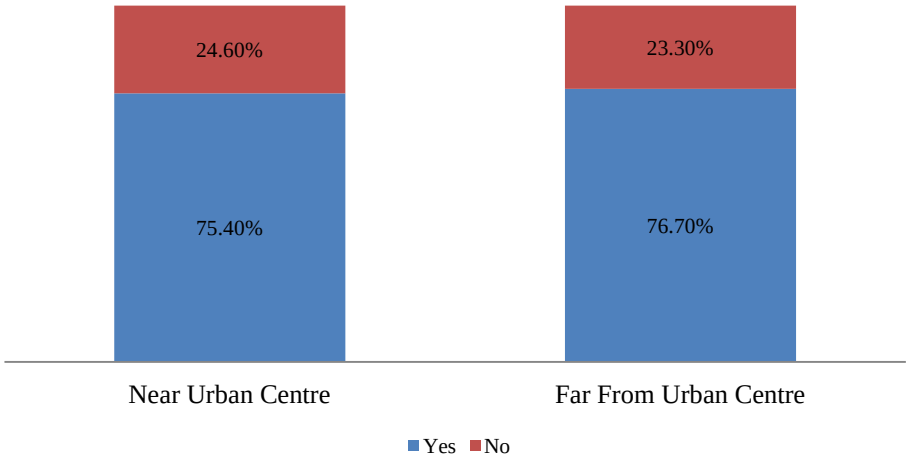


**Figure 4.24**
**Membership of Household members in SHGs**

*Source: Field Survey*

### ix) Corpus of SHG

Respondents stating that they had members of SHGs in their households were asked to estimate corpus amount of their respective SHGs. A massive difference was observed in case of corpus in both types of villages. In case of villages located near urban centres, the average corpus amount was Rs17322/- and that in case of villages located far from urban centres stood at Rs3856/- . Both these amounts are very less and therefore provide scope for further delving. Higher corpus in village located near urban centres may be a direct outcome of higher cash income as compared to villages located far from urban centres. The amount of corpus of a SHG directly dictates the nature and characteristics of various activities that may be adopted by its members. Here, SHG members in villages located near urban centres have more option of taking up income

generating activities that too in a larger scale as compared to SHG members in villages located far from urban centres.

**Table.4.9**
**Average Corpus of SHGs**

| Location of Village | Average Corpus (Rs) |
|---|---|
| Near Urban Centre | 17321.78 |
| Far From Urban Centre | 3855.51 |

*Source: Field Survey*

### ix) Access of loan from SHGs

It was observed that in spite of high membership figures across households from different types of villages, the average corpus amount in these groups were very low. A further query was put to the respondents as to whether their households have taken loan from these groups in the last 12 months. Responses reveal that in case of villages located near urban centres only 32% of the households have taken loans from SHGs in the last 12 months. In villages located far from urban centres 9% of respondents had availed loan from SHGs in the last 12 months. This reflects the fact that even if majority of the households, especially in villages located far from urban centres, are members of SHGs, most of them have failed to avail loan from their groups. This implies that the groups are ill managed and the members have not been properly guided on running of SHGs.

**Table 4.10**
**Availed loan from SHG in last 12 months**

| Taken Loan | **Location of Village** | |
|---|---|---|
| | Near Urban Centre | Far From Urban Centre |
| Yes | 31.9% | 9.1% |
| No | 43.5% | 67.2% |

*Source: Field Survey*

### x) Amount of loan taken from SHGs

Respondents who stated that they had availed loan from SHG in the last 12 months were further asked regarding the amount of loan they had taken during the period. In villages located near urban centres, the average loan amount is slightly over Rs3500/- , while it is slightly more than Rs 500/- in village located far from urban

centre. Hence, there is a significant difference in average loan amount between the two groups. The low average loan size in villages located far from reflects lesser demand and low absorption capacity of credit in these areas. There is scope for increasing both these factors by promoting traditional and other skills which can lead to production of marketable products.

**Table 4.11**
**Average amount of loan taken**

| Location of Village | Average Loan Amount (Rs) |
|---|---|
| Near Urban Centre | 3651 |
| Far From Urban Centre | 522 |

*Source: Field Survey*

### xi) Purpose of loan:

In case of villages located near urban centres, loans were taken for a variety of purposes. Out of these, 'investing in Income Generating Activities (IGAs) happens to be the most common purpose of loan sourced from SHGs. However, loans for meeting expenditures during rituals / family weddings (21%) and purchase of household assets (22%) are other important reasons for which members have taken loan from SHGs. Medical emergencies, children's education; buying livestock, home improvement and land development are other purposes for which loans were taken from SHGs in the past 12 months.

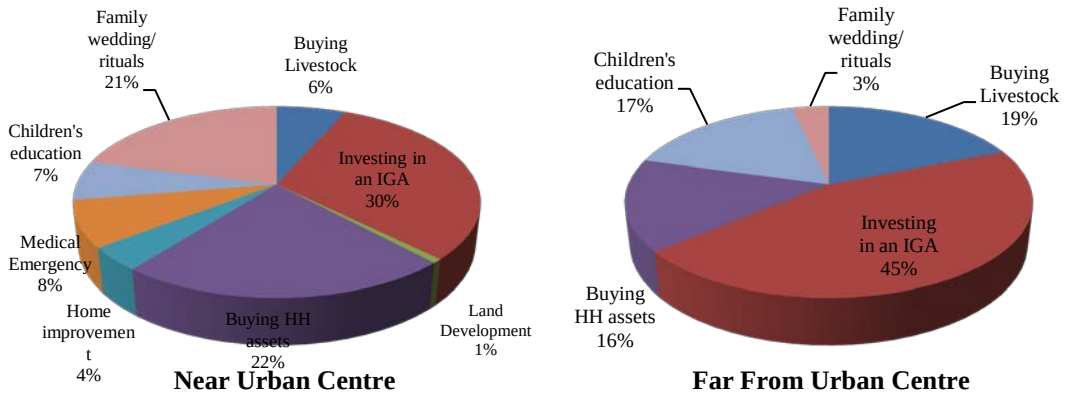


**Figure 4.25**
**Purpose of loan**

*Source: Field Survey*

In case of villages located far from urban centres, loans were taken primarily for the purpose of financing IGAs (45%). Other important purposes include buying of livestock (19%), children's education (17%), and buying household assets (16%). In contrast to villages located near urban centres, loans for the purpose of family weddings and rituals were considerably less (3%).

**xiii) Sources of Income:**

It is observed that any household is dependent on a number of sources of income. In order to check if there is any significant variation in various income sources across villages located far and near urban centres, respondents were asked about their households' income sources in the last twelve months. From Independent Samples t-Test, we arrive at the conclusion that average income from livestock, agriculture, wages and natural resources vary significantly across the two location groups.

The total average annual income of households near urban centres was Rs 70457.54/- (Rupees Seventy Thousand Four Hundred and Fifty Seven and Fifty Four Paisa Only). When we analyse the contribution of various sources to the total income, we find that non-farm enterprises contribute the highest (31.32%), followed by salary (25.41%) and wages (24.71%). However, in case of villages located far from urban centres, wages (38.88%), followed by agriculture (19.39% and non-farm enterprises (18.28%) happen to be the three prominent contributors to the households' cash income. Taken together, in the hill districts, wages (31.63%) happen to be the most important sources of household income, followed by non-farm enterprises (24.95%) and salary (15.4%).

Although non-farm enterprises play an important role in contributing to the household's income, its contribution varies across location of the villages. In villages located far from urban centres, the average annual income from non-farm enterprises stood at Rs 9553.63/- whereas the average annual income in case of villages located near urban centres stood at Rs 22067.48/-.

It is also remarkable that cash income from natural resources was relatively very high in case of village located far from urban centres and the average annual income from such sources stood at Rs 2886.91 /- whereas in case of villages located near urban centres, the annual figure stood at Rs. 458.33/-. This imply that households residing far from urban centres still dependent upon natural resources to complement the households' income. An independent sample t-test was conducted to test whether the difference in mean annual income from various income categories differed with respect

to location. It was found that mean income in all categories differed significantly with respect to locations.

**Table 4.12**
**Independent t Test Results comparing mean income from various sources**

| | Location of Village | N | Mean (Rs) | Std. Deviation (Rs) | T test p value |
|---|---|---|---|---|---|
| Livestock | Near Urban Centre | 492 | 1310.98 | 2847.09 | .000 |
| | Far From Urban Centre | 634 | 6295.58 | 6599.80 | |
| Agriculture | Near Urban Centre | 492 | 7441.06 | 10329.33 | .000 |
| | Far From Urban Centre | 634 | 10100.00 | 10291.75 | |
| Wages | Near Urban Centre | 492 | 17400.00 | 13429.27 | .000 |
| | Far From Urban Centre | 634 | 20300.00 | 9219.51 | |
| Salary | Near Urban Centre | 492 | 17900.00 | 39799.37 | .000 |
| | Far From Urban Centre | 634 | 2574.13 | 15073.86 | |
| Remittances | Near Urban Centre | 492 | 918.70 | 4062.83 | 023 |
| | Far From Urban Centre | 634 | 460.57 | 2673.23 | |
| Non-Farm Enterprises | Near Urban Centre | 492 | 22100.00 | 29184.13 | .000 |
| | Far From Urban Centre | 634 | 9553.63 | 7833.85 | |
| Natural Resources | Near Urban Centre | 492 | 458.33 | 1345.88 | .000 |
| | Far From Urban Centre | 634 | 2886.91 | 2581.57 | |
| Pension | Near Urban Centre | 492 | 2951.22 | 12482.07 | .000 |
| | Far From Urban Centre | 634 | 37.85 | 953.16 | |

*Source: Field Survey*

This means that households have to adopt different livelihood strategies with respect to their distance from urban centres. This might be because of varying resource allocations with respect to location. It is therefore important to study the dynamics categorically so as to have a better understanding. Further, on investigating the degree of relationship between cash income from various sources and total cash income, it was found that in case of villages located both near and far from urban centres, there is a moderately positive relationship (Pearson's Correlation= 0.677 and 0.659) between cash income from salary and total cash income. It is observed that in villages located far from urban centres, income from natural resources is significantly higher than that in villages near urban centres. Also, income from livestock, agriculture, wages are higher in case of villages located far from urban centres.

Thus, it is observed that the sources of income from various sources varied significantly with respect to nearness to an urban centre. Nonfarm enterprises

contributed significantly in case of villages located near urban centres, whereas in case of villages located far from urban centres, agriculture and waged based income were the significant contributors to the household income. One important information drawn was the fact that household depended on natural resources as a source of income, which was significantly high in case of villages located far from urban centres. Unless done with some restrain, such activities can lead to environmental degradation. Thus, promotion of alternative livelihood option in those villages can help weaning households away from uncontrolled exploitation of natural resources. Seasonal variations in livelihood activities are observed. The average value of inflow commodities to the village is higher than that of value of outflow ones and this gap is fulfilled by often by illegal livelihood practices such as hunting, timber felling etc..

**Figure 4.26**
**A typical retail shop in Langsomepi Village**

*Source: Field Survey*

**PRA FINDINGS:**

Due to large geographical area and thin population density, banking services have not been able to reach out to all villages and households. Accounts were mostly used for availing government schemes such as IAY, MGNREGA, and ‘old-age pensions’. SHGs promoted by government agencies also to some extent have served the purpose of

'savings' and 'credit' for many households, as banks are inaccessible for regular transactions. This is because of a number of reasons as stated by the participants. The important among them was that the cost of transactions was very high because of distance to banks and cost of transport is quite high. Other reasons, as stated by participants, are 'low illiteracy' and 'low income'. Only during weekly haats, villagers tend to go to banks, which are generally located near such market centres.

**i. Savings:**

Traditional practice of saving cash using household resources such as bamboo poles, tin-boxes, under-matresses are still common. But this is not with fixed schedule and terms. Some households have formed SHGs and are initialising the regular 'savings'.

**ii. Credit/debt:**

Taking credit is a very common practices by the villagers from the moneylenders, better off families, relatives, neighbours and friends etc. but formal credit systems for the individuals is rare and the interest are charged in a very high rate which was exploiting the poor section of the community. As stated by the participants, banks have failed to deliver as a 'credit' source because of a number of reasons such as physical inaccessibility due to remoteness of villages, collaterals required are not available and loan requirements are in small amounts, normally only during times of sickness and family rituals. As long as SHGs are concerned, it has been able to serve the purpose of 'savings' and 'credit' only in the groups formed by relatively affluent households of the villages. One common problem of SHGs was that since most households were dependent upon agriculture, income was not regular and so regular 'savings' and 'repayment' was difficult.

**iii. Wages:**

All the households are involved in agricultural labour in order to earn their livelihood as they have food scarcity for an average of three to five months. Mostly these wages are paid in cash. Participants also mentioned that often, because of cash crunch, households within a villages helped each other by contributing as labour in each other's agricultural plots. Such barter of labour among households is seen mostly during harveting and sowing seasons.

## 4.5 PHYSICAL CAPITAL

### i) Housing Conditions:

In both households near urban centres and those located far from urban centres houses were mostly mud or clay floored. Only 38% households had concrete flooring in villages located near urban centres. The number was still lesser in case of households located in villages far from urban centres.

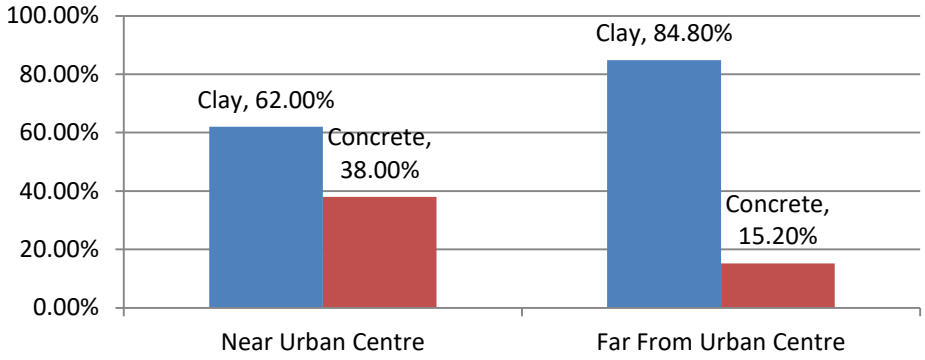


**Figure 4.27**
**Type of Floor**

*Source: Field Survey*

As regards the type of walls present in the dwelling houses of respondents, majority of houses in villages near urban centres (88%) and in villages far from urban centres (96%) had walls made with bamboo. Houses having brick walls, although very less in number, were more in villages located near urban centres (10%) as compared to those far from urban centres (4%). Other materials that were used for making walls of houses include C.G.I Sheets (2%) in villages located near urban centres and Plastic/Polythene sheets (0.3%) in village located far from urban centres.

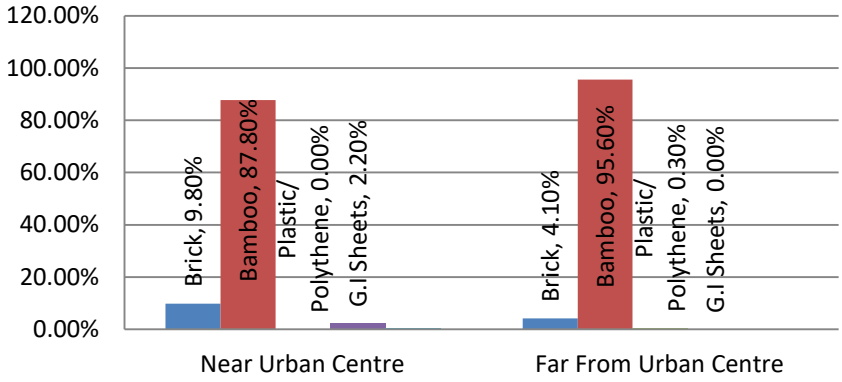


**Figure 4.28**
**Type of wall**

*Source: Field Survey*

In case of roofing materials used in dwelling houses, it was found that in case of villages located near urban centres C.G.I sheets were the most common (80.3%) materials. The rest of the households in these villages had thatch roofing (19.7%). In case of villages located far from urban centres, the commonly used material happen to be 'Thatch' (51.1%), followed by C.G.I Sheet (48.6%) and sporadic instance of 'plastic/polythene sheets' (0.3%).

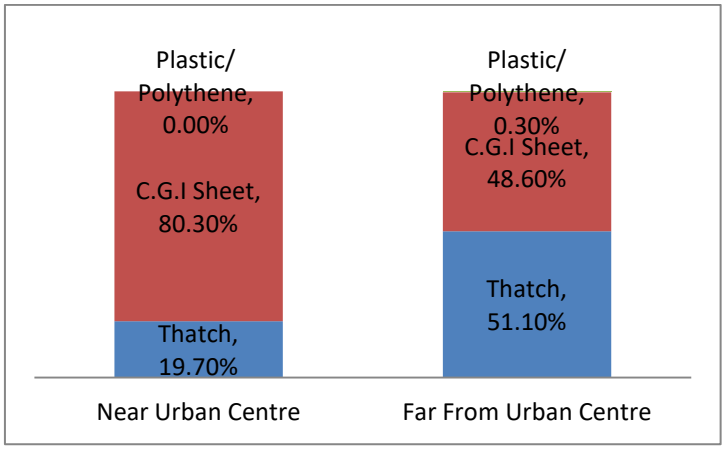


**Figure 4.29**
**Type of Roof**

*Source: Field Survey*

**ii) Households' Primary Cooking Fuel:**

Firewood happens to be the primary cooking fuel in villages located far (98.7%) and near (83.1%) urban centres. Use of LPG as a primary cooking fuel is seen in 16.9% of households in villages located near urban centres and 1.3% of households in villages located far from urban centres. Trading of firewood, thus, qualify as an important source of livelihood, particularly in villages located far from urban centres.

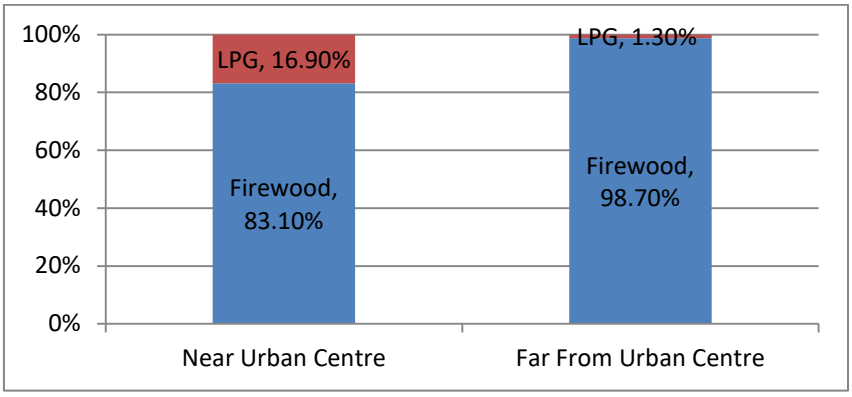


**Figure 4.30**
**Primary Cooking Fuel**

*Source: Field Survey*

### iii) Households' Primary Lighting Arrangement:

There is a vast difference in the pattern of use of primary lighting arrangement across villages. In villages near urban centres, electricity (94.3%) is the major source of lighting. Only in a few households Kerosene/gas lanterns (3.9%) and solar lights (1.8%) serve as lighting fuel. However, the situation is just reverse in case of villages located far from urban centres. 'Kerosene/gas lanterns' serve as the major source of lighting, followed by 'electricity' (27.6%) and 'solar lights' (17%).

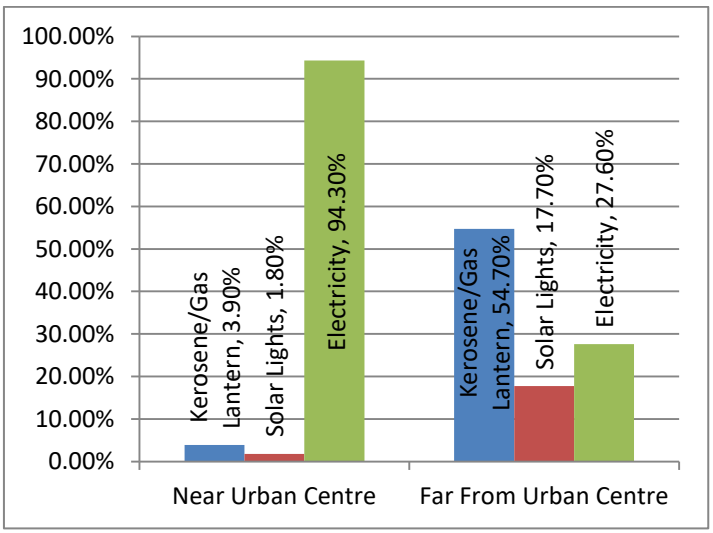


**Figure 4.31**
**Households' primary lighting arrangement**

*Source: Field Survey*

## PRA FINDINGS:

### i. Communication and Transportation:

Participants reported that such facilities were always politically influenced. For example, a village like Het Tisso which is only 6 kilometer away from Diphu Town was connected with a *Kutch* (gravel) road whereas an interior village like Umdap was connected with a black topped *pucca* road. However, if we consider the overall scenario, the villages located near urban centres were relatively in a better situation as compared to those located far from urban centres. In a number of villages like, Langsomepi, Langteng, Tirkim in Karbi Anglong and Kalaidisa, Surangdisa, Railing Hadi in Dima Hasao, participants reported that road communication gets disrupted

during the rainy season and there is no other options left for the villagers but to walk for their needs such as education, medical facilities etc. This poses as a major obstruction for villagers in availing government schemes, banking services and market facilities. Ownership of personal vehicles is very rare in the villages. Only a few families could afford to buy motorcycles and no households having cars was reported. Only in some villages located in the plain regions such as Mongoldhar Chakma, Het Tisso and Mohong Diza, a few households possessed bicycles for communication.

**ii. Secure shelter & buildings:**

As observed, most households across both the districts dwelled in houses constructed with bamboo walls, mud floor and tin roofed houses. A few rich households had cemented flooring. In Hidim Teron, participants stated that about 30 households have received IAY houses.

In villages located near urban centres such as Het Tisso, Hidim Teron and Mongoldhar Chakma, community halls, schools, Anganwadi centres are the commonly observed buildings. In villages located far from urban centres, such buildings are a rarity. In both the districts, a common observation was the presence of a large number of buildings, constructed by the government, left unused in a dilapidated condition.

**iii. Water supply & sanitation:**

In both the districts, villages near urban centres have better drinking water facilities provided by the government. For example, in villages like Het Tisso, water supply facility and toilets was provided under IWMP scheme. Likewise, in Hidim Teron, PHE department had provided low cost toilets. In case of Dima Hasao, except Hojai Khasiba, all villages near urban centres have received support from the P.H E department in the form of water reservoirs and supply pipelines. A few villages located far from urban centres such as Kalaidisa, Mojowari, P. Kungkruwari have received ringwells and water reservoirs under various schemes. However, in case of Karbi Anglong, in villages located far from urban centres, participants depended upon only on natural sources such as streams and rivers for water supply.

**Figure 4.32**
**A typical Karbi dwelling house mostly seen in villages located far from urban centres**

*Source: Field Survey*

### iv. Energy:

In case of villages located near urban centres, both in Karbi Anglong and Dima Hasao, villages near urban centres have electricity supply. However, it was observed that majority of the households had availed electricity illegally by using unscrupulous means. The quality of supply was poor, as expressed by villagers, due to frequent load shedding and low maintenance. In Dima Hasao, villages located far from urban centres, such as Mojowari and P. Kungkruwari, under RGGVY only electric posts were installed and the village is yet to be electrified. Similarly, in Karbi Anglong, among villages located far from urban centres, Lanteng, Langsomepi, and Umdap had once electricity supply. But due to poor maintenance, power theft by 'hooking', these stopped and now only electric posts exist. Villagers, therefore, mostly depend upon solar lights and kerosene lamps for their daily use. For cooking purpose, firewood was used by almost all households in the studied villages.

### v. Telecommunications:

There is no telecom connectivity in the villages located far from urban centres. Such condition prevails in Langsomepi, Langteng, and Umdap villages of Karbi Anglong. Traditionally, in Karbi community, they have a messenger known as

"Pherangke" for delivering of message and to communicate in the village or outside. They also avail the services of passengers and the staff of public buses as the means of delivering messages in times of needs.

**vi. Tools and techology:**

**a) Tools and equipment for production:**

No modern tools and technology is employed for improving productivity of agriculture. For other items such as handloom and handicrafts, traditional looms and handtools are used.

**b) Seed, fertiliser, pesticides:**

Farmers practice recycling of seeds which involves saving of seeds and re-using them for cultivation in the next season is a tradition. Majority agricultural produces are organic, by nature, as there was no use of chemical fertilisers and pesticides. Lack of support services for using tools and techonology, such as tractors or powertillers etc. and inclination of the population towards *jhum* cultivation stand as a hindrance for such adoption.

**c) Traditional technology:**

Indigenous knowledge is applied by the farming communities. In the Karbi community, a unique egg-laying device (made of bamboo) is used for poultry.

From the above discussion, it is seen that villages located near urban centres have better infrastructural facilities such as roads, electricity, water supply and telecommunications. However, detailed discussion with villagers revealed highly corruptive practices and political favours by the authorities. This shows a weak social democracy arising out of multiple interrelated factors such as low education, low awareness, high poverty etc. As for technological advances, it is seen that the hill districts have remained out of the ambit of any serious effort for upgrading their *jhum* based agricultural tools and technology.

## 4.6 SOCIAL CAPITAL:

**i. Village Administration:**

The village administration is run by the traditional headman, called the *Kangbura* in Karbi villages and *Kunang* in Dimasa villages. He has considerable authority in the

village affairs. In a Dimasa village, a *Kunang* is assisted by an assistant headman called *Dilo.* The village headman, assisted by village elders settles disputes and quarrels, trial cases of thefts, incests, elopments etc. And the judgements delivered are binding on the concerned parties. He is the custodian of the village and major decisions related to land resources, culture and religious matters are taken by him. Such traditional village councils, called the *'Me'* are also found in Karbi villages.

**ii. Bachelors' Dormitory:**

Both the tribes have traditions of bachelors' dormitory for unmarried young boys, called the *Nodrang* in Dimasa and *Farla or Jirkedam* in Karbi. Village elders participating in the PRA exercises expressed that present day preoccupation of the youth in education and employment have made the bachelors dormitory insignificant and are barely seen in present times. Likewise, elders in Karbi villages stated that traditionally the *Farla or Jirkedam* had a perfect institutional set-up comprising of ten office bearers and performed social services for the villages. A similar institution called the *Kerung Amei* was reported by the participants in Karbi Anglong. The Kerung Amei, or grain bank, is an economic institution which caters to the needs of the poor families especially during the lean months of the year.

**iii. Neighbourhoods and kinship:**

In both the districts, participants from villages located far from urban centres, expressed that their neighbours plays a more vital role than the relatives or friends in times of needs and dificulties. Mutual support in crisis of food and health care is generally practiced. In time of any emergency cases the neighbour is the first to lend their support morally or financially. However, it must be mentioned that in villages located far from urban centres, it is seen that normally , a few households belonging to a single tribe forms a village. Therefore, it may be said that there is a strong social affiliation within members of the same tribe. At the same time, participants could easily be provoked to express feelings of mistrusts about people belonging to other tribes. For example, Karbi people expressed fear to have 'betel leaves' in a Tiwa home, because they believe Tiwas have magical powers to harm them.

Although, within their tribes, they are very close and supportive to each other when it comes to problems and difficulties, but in some occassions, people are influenced by

political affiliations and favouratism. Participants stated that this infuence is very strong and families affiliated to the ruling party in the Autonomous Council normally gets all government aids.

**iv. Family structure:**

In both the districts, the dominant tribes, namely the Karbis and Dimasas follow the patriarchal system of family structure. Clan system is present in both the tribes. While in case of Karbis, there are five clans, in case of Dimasas, there are forty male clans and forty two female clans. In Dimasa tribe, there is prohibition of marriage between boys and girls from the same clan or from his/her father's or mother's clan. However, in case of Karbis such prohibition is limited to father's clan only and unlike Dimasas, Karbis prefer cross-cousin marriage. It was also learnt that there was a strong social capital among members of the dominant tribes i.e. Dimasa in Dima Hasao and Karbi in Karbi Anglong. So, a 'joint' family did not conclusively mean only descendents from same family tree. Sometimes, distant relatives too stayed together as a family. This was more common in villages situated far from urban centres because of the fact that in most cases, their primary occupation happened to be *Jhum* cultivation, which required relatively more labour. Another prominent phenomenon that is particularly observed within Karbi tribe is their mutual support to educate the newer generations. Relatively 'better off' families often provide shelter and finance to educate children of poorer relatives.

**v. Formal and informal groups:**

The villages form informal bodies such as peers groups, interest group etc. for a short and temporary period, at the most for a year or on completion of the aimed activities. Villages near or far from urban centres are having various organisations such as religious, political, cultural and youth organisations which are fairly active.

**vi. Collective representation:**

The participants thought it is liberal in terms of women empowerment, but in true sense the male folk dominate in decision making and planning in all the major and important matters of the village and of the family.The women participate in the social gatherings but they are mere workers or spectators. The male folk take the lead role and decision and women are neither consulted nor their consent is taken. Management and

maintenance of the forest areas are usually done by the men. Women, youth or children, serve as labour for drawing and fetching of water from the streams for domestic purposes and during any festive occasion. Leadership roles are taken over by the male in the village and the women feel that they are inferior and participating at par with malefolk is similar to comitting a crime.

**4.7 INFERENCES FROM SEASONAL CALENDAR**:

Seasons have an effect on the livelihood scenario. Certain months in a year bring in more work, more income and more food. On the other hand, there are months of the opposite nature. Therefore, it is necessary to take into account the seasonal variations in the activities and problems of the people. Seasonal Calendar is a diagram drawn by people with locally available materials to provide a trend in the main activities, problems and opportunities throughout the annual cycle. In this study, it was attempted to appraise the livelihood sources and major activities which the village community are engaged in during the year.

It was found that, since major occupation of the sampled villages remain agriculture, the seasonal calendar reflect similar picture in both far and near urban centres. As per the information provided by the community, the villages start getting rain from the month of March and ends in October every year but the heavy rainfall is observed during the month of May to July. Activities related to *jhum* cultivation such as site selection and clearing of jungle start from the second fortnight of January and end in harvest during November. Clearing of site, which includes slashing and burning of trees and shrubs is over by end of March. During April and May, land preparation by tilling is done. By the month of June, sowing is complete. Till harvest, regular weeding is done. But the production of paddy from *jhum* cultivation is very low and on an average a village is food secured for only about six months and the rest of the remaining months people earn their livelihood through labour, selling of livestock, fruits and vegetables from the homestead, wild vegetables, selling of fire wood, rice beer, etc. Livestock rearing is a continuous activity which is practiced for religious offerings as well as an alternate source of income during times of hardship.They repair or build their houses during December and January when there is no rain and can afford to spare labour becaues they have sufficient stock of paddy, and are less engaged in other livelihood activities. Villagers also disclosed that during site clearing activity, due to

engagement of almost all household members in the process, sometimes attendance of children in schools is also hampered.

**4.8 CONCLUSION:**

This chapter, thus, has made an attempt to have a detailed understanding of the livelihood situation of the people residing in the hill districts of Assam. It is evident that there are prominent demographic variations as well as likeness in the villages located near urban centres and those located far from urban centres. Significant variations in educational level, family type and their sizes have a direct impact on their livelihood patterns. This might be a result of changes in respondents' primary occupational practices, wherein we have seen that engagement in labour intensive shifting cultivation based agricultural livelihoods are more in villages located far from urban centres.

Sparse educational infrastructures, especially in villages located far from urban centres, marred with corruptive practices have led to pathetic education quality throughout the hill districts. Hence, most men and women, although primarily engaged in agriculture, are dependent on traditional skill and knowledge for supplementary livelihoods. These skills in handicraft and handloom are limited to produce traditionally used household items and attires.

Unhygienic defecation and water purification methods make the respondents vulnerable to various diseases and have a direct impact on their livelihoods. Further, in absence of water supply services, women members have to fetch water for the families, which takes away a considerable amount of time that otherwise, could have been used for productive income generation activities.

Land ownership pattern is generally characterised by 'community owned' land, mostly in villages located far from urban centres. Hence, such land cannot be mortgaged for financing alternative livelihoods through banks. As regards environmental aspect, respondents have declared decrease in '*jhum*-fallow' cycle, flora and fauna and also disclosed about indigenous fishing techniques practised in the region and availability of forest produces which substitute or supplement their livelihoods. Thus, in one front, there is an urgent necessity to contain *jhum* cultivation for addressing 'sustainability' issues. Again, rich flora and fauna, coupled with unique indigenous way of living of the hill people provide scope for exploration and promotion in the 'tourism' front as an alternative 'natural resource-based livelihood' avenue.

As apparent, formal banking services have failed to deliver in the hill districts. Similarly, SHGs initiated during SGSY have failed to sustain their activities and are

gradually dying. Therefore, in spite of high lending rates, the moneylenders were considered as prominent and convenient sources of credit, ahead of banks or SHGs. Limited access to finance, therefore, seem to be strong dissuading factor for adoption of nonfarm enterprises. Financial services, which are a key determining factor in developing non-farm enterprises, need to be revamped in the hill districts.

Nonfarm enterprises contributed significantly to household income in case of villages located near urban centres, which signifies that there is a better and supportive environment for viability of nonfarm enterprises in such villages. Households' dependence on natural resources as a source of income, which was significantly high in case of villages located far from urban centres, is a serious concern and hence needs to be addressed through promotion of alternative livelihood options. Seasonal variations in livelihood activities are observed. The average value of inflow commodities to the village is higher than that of value of outflow ones and this gap is fulfilled by often by illegal livelihood practices such as hunting, timber felling etc. Thus, providing support for livelihood development from nonfam enterprises can reduce dependency on natural resources and lead to ecological protection.

The situation of physical resources, such as roads, electricity services, alternative fuels etc,, directly dictates the feasibility of interventions in the nonfarm enterprises. These facts determine the scale, degree of mechanisation of processes for setting up value-addition units, say in the food processing sector. Variation in electricity supply in villages with respect to nearness or farness from urban centres calls for distinct interventions in the nonfarm sector. Prevalence of traditional looms and hand-tools need to addressed after consideration of existent infrastructural facilities.

Traditional social institutions are running through a phase of gradual disregard and disintegration. Male dominance in the society as well in the household is easily observable. Among other corruptive practices, one disturbing aspect which was disclosed from the interactions with respondents was the presence of political favouritism during selection of development programme beneficiaries. There is potential for reorganising the traditional institutions for better dissemination of livelihood programmes for better acceptance, democratic implementation, in the field level. Also, it is important that women centric livelihood initiatives are taken to address issues of women drudgery and neglect.

Thus, from this chapter, we have an understanding of the livelihood situation, in villages located near and far from urban centres. This fulfils the first sub-objective of the study which was to undertake livelihood assessment of the hill districts.