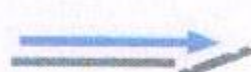


MICRO PLAN OF

**KUTHORI BAGHMARI ECO DEVELOPMENT
COMMITTEE**

June 2016

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Sri Kulen Chandra Das

On behalf of the Study Team

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CHAPTER I: INTRODUCTION

1. Defining Eco-development:

The term eco-development is used to describe an integrated, sustainable approach to environment and development. It is in the UN (1997) Glossary of Environmental Statistics as:

"..... development at regional and local levels, consistent with the potential of the area involved, with attention given to the adequate and rational use of natural resources, technological styles and organisational forms that respect the natural ecosystems and local social and cultural patterns".

Within the context of India's protected areas, eco-development as a strategy recognizes the traditional dependence of people on forest resources for domestic use as well as supplementing livelihoods and seeks to rationalise the demands of communities by facilitating alternative for resources and livelihoods. It is supposed that people would act rationally and utilize the resources sustainably so as to enhance the productivity of rural ecosystem. This entails promoting the adoption of alternative energy sources and resources for livelihoods, thereby reducing forest dependency. In essence eco development aims to strengthen nature conservation through participatory processes that empower local people to take responsibility for their socio-economic well being in ways that do not reduce the biodiversity capital maintained within the PAs.

Eco-development is a strategy for securing support from local communities and other stakeholders for protected areas management. Activities taken up under eco-development should provide a strong linkage between conservation and development; and they may include ecotourism and off-farm activities as well as providing specific alternatives to local biomass dependencies on protected areas.

Micro planning at the village level is the participatory process aimed at an inclusive identification and assessment of potential activities, including ecotourism, for promoting under the eco-development strategy. Such activities should strike a balance between conservation measures and income-generating initiatives. Often conservation measures can be realized in ways that also generate income and vice-versa. For example, villagers may be hired by the protected area management authority to augment fire control and anti-poaching patrols. The output of micro-planning is a plan, popularly called as 'Micro Plan', which explains in simple, plain language the physical, biological, socio-economic and cultural context of the village and its surrounds, together with the various activities proposed for addressing the threats to biodiversity and improving local livelihoods. The outcome of micro planning is likely to be most effective, if those members of a community most dependent of forest resources can be identified through an inclusive, transparent participatory process and prioritized for support in adopting alternative, income generating activities.

2. Micro-planning for purpose of eco-development:

Planning is an act of formulating a programme for a definite course of action. It is a blue print for a definite action within a time frame. Macro planning is a planning for mainstream development at macro level. Micro planning is a location specific planning or grass roots planning. Micro-level planning (MLP) means detailed planning at a lower level, usually at or below a district, which takes into account the variations in the community.

Micro-planning is a term used to describe the inclusive process of engaging stakeholders in planning at a local level, usually at the smallest unit of community organisation, namely the village. It provides an effective participatory mechanism for planning eco-development within the context of protected area management. A micro-plan is the product of this process.

2.1. Key principles of micro-planning to be followed:

- **Micro-planning is not a one-off exercise:** Proper assessment of felt needs can evolve only in full consultation with all the stakeholders and that too through a multi-stage process.
- **Micro-planning requires patience:** Since villagers have their own prioritization of time and little initial understanding of the tools used during micro-planning, it is necessary for the facilitator to be very patience throughout the process.
- **Micro-planning requires ingenuity:** Sensitive situation may arise that requires a great deal of ingenuity to address, usually best resolved by one-to-one mediation.
- **Micro planning is by nature specific to the local context and cannot be replicated:** Since each village differ others in terms of socio-economic and other parameters and hence is unique, therefore, cannot be replicated.
- **Micro planning is inclusive:** The strength of a micro plan is its inclusive, grass roots nature. It should represent the sum of the combined wisdom and aspirations of the entire village. Thus, the process of micro planning should reach out to each household to elicit relevant information.
- **Micro planning is never 'in your face':** It is essential that the facilitator is humble, respectful and mindful of the value of the time, privacy and life style of the villagers.

2.2. Micro-planning tools to be used:

- **Social mapping** – It is a group exercise which provides the physical, social and infrastructure information about the village as a whole. It is taken up in a participatory manner and gives a rudimentary sketch of the village as an entity, with each household marked on the map. The purpose of the map is to gain an insight into the existing resources of the village, as well to understand its social complexity.
- **Visioning exercise** – It is a group activity in which villagers share their dreams and aspirations for the future, then identify the main challenges and constraints to achieving their vision, and finally identify measures for removing the impediments in achieving their vision.
- **Household interviews** – This is one-to-one exercise in which the facilitator visits each household to gather basic household level information in an informal manner that is based on structured line of enquiry.

2.3. Steps for preparation of micro-plan:

There are two main steps in the process of preparation of EDC Micro-plans as mentioned below:

Step 1 –

- ✚ Orienting the facilitation team
- ✚ Developing a common vision among the protected area staff and the EDC members
- ✚ Build the Micro-plan facilitation team.

Step 2 –

- ✚ Ice breaking
- ✚ Reaching out to each village
- ✚ Socio-economic profiling of the village
- ✚ Visioning with the entire village
- ✚ Assessing forest dependency
- ✚ Writing Micro-plan

CHAPTER II: BACKGROUND OF THE KAZIRANGA TIGER RESERVE

KAZIRANGA NATIONAL PARK, legally notified as a National Park in the year 1974, is a name known worldwide for its success in the conservation history of one horned Indian Rhinoceros. It also provides a natural habitat for a number of rare, threatened and charismatic species. A symbol of dedication for the conservation of animals and their habitat, Kaziranga, with a National Park status represents the single largest protected area within the North-east Brahmaputra valley Biogeographical Province to provide long term viable conservation.

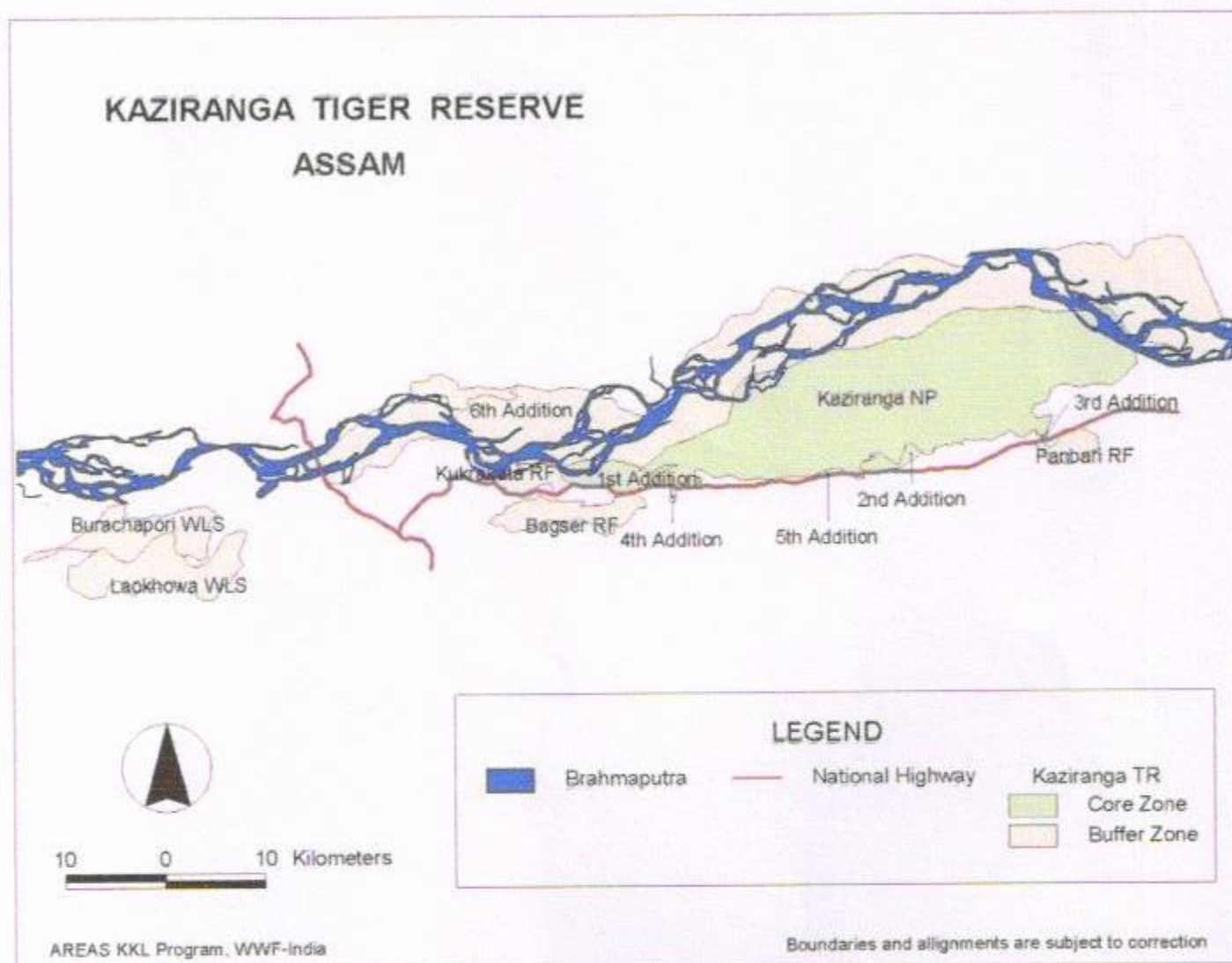
Kaziranga National Park lies between Latitudes 26034' N to 26046' N and Longitudes 930 08' E to 930 36' E. It is spread over the civil jurisdictions of Nagaon, Golaghat and Sonitpur districts in Assam with mighty Brahmaputra River on the north and verdant Karbi Anglong hills on the south.

Kaziranga National Park (KNP) is one of the most important protected areas in Assam. Spread over an area of 429.93 Sq.Km in the flood plains of Brahmaputra, it harbors the World's largest population of One horned Rhino with a population of more than 2003, Wild Buffalo (1431 Nos. in 2001) and the Swamp Deer (more than 800 Nos.) presently. Its conservation value was much recognized when it become one of the World Heritage Sites notified in India by UNESCO in the year 1985. The management history dates back to 1st June 1908 when it was first declared as a Reserve Forest. It was subsequently upgraded to a Game Sanctuary in 1916, a Wildlife Sanctuary in 1950 and finally a National Park in 1974.

Since then 6(six) areas have been proposed to be added to the existing National Park. Besides these the R.Fs. of Panbari (7.65 Sq.Km.) and Kukurakata R.F. (15.93 Sq.Km.) are also under the administration of Kaziranga National Park.

Some of the significant conservation values of Kaziranga National Park are enumerated below:

- The largest Undivided and Representative area of Brahmaputra Valley flood plain grassland and forest with associated large herbivores, avifauna and wet land values.



- The World's largest population of Indian one horned Rhinoceros (*Rhinoceros unicornis*) Wild Buffalo (*Bubalus bubalis*) Swamp Deer (*Cervus duvauceli ranjitsinghi*)
- High ecological density of Tigers (*Panthera tigris*)
- Significant population of Asiatic Elephant (*Elephas maximus*)
- The junction of the Australasia flyway and Indo-Asian flyway exhibits considerable diversity in avifaunal species.
- Provides an entire range of habitat from the floodplains to grassland to hill evergreen forest communities.
- Considerable Research, Education and Recreation values.

Some of the major constraints that have been identified are: Poaching and other illegal activities, domestic livestock grazing, Insect/ Pathological problem, Floods and erosion, invasion by weeds, Siltation of water-bodies and problems related to infrastructure and communication needs of the park. Heavy traffic on the NH-37, growing tourist pressure and the man-animal conflict are some of the problems of lesser magnitude now, with greater implications for the future.

CHAPTER III: STEPS FOLLOWED TOWARDS MICRO-PLANNING

EDC MICRO-PLANNING PROCESS IN KTR

Orienting the facilitation team: This is the very first step of the EDC Micro-planning process in KTR, where the management staff along with the field staff (the member secretaries of the EDCs) of the KTR met with the EDC executive committee members and NGOs members in order to develop the Micro-plan for the existing EDCs.

Developing a common vision among the protected area staff and the EDC members: This is a desirable step for the protected areas which don't have management plans. Since the KTR has an existing management plan, therefore, this step was avoided. Nevertheless, the vision of the KTR was discussed during the orientation workshop among the participants. While different values of the KTR and its identified threats were discussed in the workshop. Opinions were invited from all the stakeholders to mitigate the threats.

Build the Micro-plan facilitation team: The Micro-plan process needs to be facilitated by a team trained in participatory processes and skilled in facilitation techniques. Members of the team should be available to see the entire process through to ensure consistency in approach and, for purposes of building trust, continuity. In the case of KTR, a number of experienced Forest Officers along with organisations like WWF-India, Laokhowa Buhrachapori Wildlife Conservation Society (LBCS), were part of the whole process from the very beginning.

Ice breaking and reaching out to the people: Entry into a village or household should always be undertaken in a spirit of humility, respect and patience in small groups and preferably including a lady. In case of KTR, after the initial discussion with the EDC members a general meeting was convened at the concerned EDC and the villages. All the villagers congregated where the facilitation team talked about the importance of EDC and its importance in realizing the goals of conservation. The importance of socio-economic profiling was discussed in detail in the meeting and was decided to do the socio-economic profiling of the village on a later date.

Socio-economic profiling: Members of the facilitation team split into small groups to visit each household in the village and elicit information on predefined parameters. Such visit also provide an opportunity to engage directly with the entire village at an individual level and therefore, gain a deeper insight into the livelihood concerns and issues of household members, while also accessing the information that can help to consolidate the village social map and validate the assessment of

the forest dependency and wellness ranking. In case of the KTR, as per the date fixed in the ice breaking meeting for socio-economic profiling a team was formed with the WWF members and volunteers from the EDC. An exhaustive questionnaire was prepared for the purpose and the team was given the requisite training how to approach the villagers and collect the required information for the purpose of Micro-planning. The team then entered into the village for socio-economic data collection.

Visioning with the villagers: In this phase of the work each and every person of the village was engaged. After compiling the data collected through the questionnaire, the findings were placed before the villagers for their information. The findings put light on household information, land holdings, sources of livelihood, livelihood skills, level of forest dependency, man-animal conflict, sources of energy, health issues and the like. Problem areas were almost defined, nevertheless, the villagers were asked if they wanted to add or omit some of them. Then suggestions were asked from the villagers for solving such problems. Alternative livelihood options were also discussed on the basis of the available village resources.

Assessing forest dependency and wellness: This is one of the most important steps in the process of preparing the Micro-plan for an EDC. The ultimate objective of the EDC and its micro-plan is to reduce the dependency of the fringe people on the forest by providing them gainful livelihood alternatives inside the village. The villagers were asked, in the light of the findings of the socio-economic survey, to identify the forest dependent households or individuals on their own. The ultimate objective is to be able to target the most forest dependent and poorest households in the village for assistance. The criteria for defining forest dependent and wellness are as follows:

| Categories | Criteria |
|--------------------------|--|
| Forest dependency | |
| High | Graze livestock, collect NTFPs, collect firewood and thatching materials for own use |
| Medium | Graze livestock, collect firewood and thatching materials for own use |
| Low | Collect firewood and thatching materials for own use |
| Wellness | |
| Very poor | Landless; no regular source of income; widow; separated women; orphaned children. |
| Poor | Marginal land holder; day-to-day (hand-to-mouth) living. |

| | |
|-------------------|---|
| Manageable | Less land; barely enough for the year with no savings. |
| Well off | Enough land; well established; government service/ pensioners; running a good business; surplus food and money during the year. |

Writing Micro-plan: The facilitation team worked closely with the EDC executive throughout the preparation of the micro-plan. The team wrote the plan and the draft plan was shared with the villagers for their approval. Though it was written in English it was discussed in vernacular medium for greater understanding of all the people of the village.

CHAPTER IV: DATA SOURCE AND METHODOLOGICAL APPROACH

Methods of data collection: For preparation of the Micro Plan both the Primary and secondary sources of data were consulted and extracted from the villages.

Primary Data Collection: The Micro Plan was prepared on the basis of primary data. To extract primary data various PRA (Participatory Rural Appraisal) techniques were used. Following are the brief discussion of the techniques of PRA that were used in the study and the criteria for selection of the sample for each technique.

For extraction of the information the Micro Plan preparation team adopted different PRA methods like direct observation, followed by time line, PRA mapping, SI (structured interview) and FGD. Prior information was given and the villagers were asked to assemble in a certain common place where they can be interviewed.

Team composition: PRA is basically a team work. The team comprises insiders and outsiders. The members from the outside interact with the insiders and jointly learn and achieve the desired outcome. For the present work the outside members were the KTR officials, WWF and LBCS members.

- 1. Direct Observation:** An understanding of the life and livelihoods of people as well as the resources of different kinds that support and sustain the livelihoods demands a direct observation of the livelihood opportunities and resources. The outsiders cannot have a better, deeper and more comprehensive analysis of the resources by just sitting and interacting with a group of people in a village. The need to leisurely walk in and around the village, walk through the fields, spend a great deal of time in directly observing the resources of various types, interact with the people on the basis of observation and learn gradually.
- 2. Time Line Analysis:** It should be noted that every village has a past and every past is full of events, incidences, happenings, experiments, etc. The past carries a great deal of experience along it and they need to be carefully studied. The best prophet of the future is past and therefore, there is a need to study the past. Time line is an important PRA tool which enables us to peep into the past.

A time line is a key events, changes and landmarks in the past, presented in a chronological order. It is a way of charting trends, showing how past events led to the present situation and illustrating recurring themes.

- 3. PRA mapping:** Rural people are the natives of the area and have a clear perception of the area where they have been living for long. They possess the ability to represent their surroundings very accurately and diagrammatically irrespective of their literary status. People can easily transfer the picture in their mind into maps. Maps are very effective and immediate source of communication.

Mapping refers to maps made or drawn by the members of the community on paper or on the ground. It also entails building three dimensional models on the ground. It is a process by which information is presented in a spatial form.

4. **Structured Questionnaire:** Interviewing is one of the major methods of data collection. It is defined as a two-way systematic conversation between an investigator and an informant, initiated for obtaining information relevant to a specific study.

SI is a focused interview. The interviewer under this type attempts to focus the discussion on the actual effects of a given experience. For the present study a number of questions were designed carefully to extract the socio economic condition of the villagers. Each and every household was interviewed and the questionnaire was filled up by the interviewer who was trained up in this regard prior to the household survey.

5. **Focus Group Discussion:** It's basically a group interviews. There are a great many uses for focus group discussion in combination with other methods or even as an independent method of qualitative data collection.

Focus group discussion is basically a group interview. A moderator guides the interview while a small group discusses the topics that the interviewer raises. What the participants in the group say during their discussions is the essential data in focus group. In action research focus group discussion has almost become the sole method of data collection.

Sample selection: Since the objective of the study was to collect socio economic data of the village and also to know about various livelihood opportunities in the village, only young adult male and female and old age people were taken as sample. Children were not allowed to participate.

Secondary Data Collection: Secondary information was collected from the following sources:

1. Management plan of KTR,
2. Books and journals: Different reports, books and journals were consulted to get the knowledge to write the Micro Plan,

CHAPTER V: BACKGROUND OF THE EDC

PRELUDE TO THE KUTHORI BAGHMARI EDC:

The Kuthori Baghmari Eco Development Committee was established in the year 2002 with a few senior members of the village. The EDC was not working properly for last several years. Presently Mr Jayanta Rajkhowa is the president of the EDC and Mr Madhurjya Saikia, Forester I, is the member secretary of the EDC.

One member of each household of the village is a general member. The executive committee is formed with 11 members who are selected or elected at the general meeting by the general members.

TIME LINE AND HISTORY OF THE VILLAGES:

Kuthori Baghmari village –

Kuthori Baghmari is a historic village situated at both the sides of the NH – 37. The Ahom King established his camp (Koth) and hence later on the village was known as Kuthori. Late Chandra Phukan, the mouzadar, was the key person for various developmental works of the village in the first half of the twentieth century. He was the person to establish a school and also did some street lighting from the electricity generated from the Bhalukjuri stream. He had a big agricultural farm and the laborers were brought from different parts of Nagaon. The village, which is also second home of Legendary (Late) Dr Bhupen Hazarika, is presently inhabited by the people belonging to tea tribes, Bengali and Bihari. In the seventies there were about 50 households, migrating from the neighboring areas like Juria, Polashoni of Nagaon, which increased to 402 households in 2015. Family fragmentation and migration from other parts of the state results into increased population in the village.

Kuthori Baghmari is a village constituting by 402 households of different communities like tea tribe, Bengali, Bihari, Hindu, Muslim, etc. It is a very old settlement in the area where all the people have been living in peace and tranquility for years.

Name of the village: Kuthori Baghmari

Name of the Development Block: Hatbor

Police Station: Jakhalabandha

Post office: Kuthori

District: Nagaon

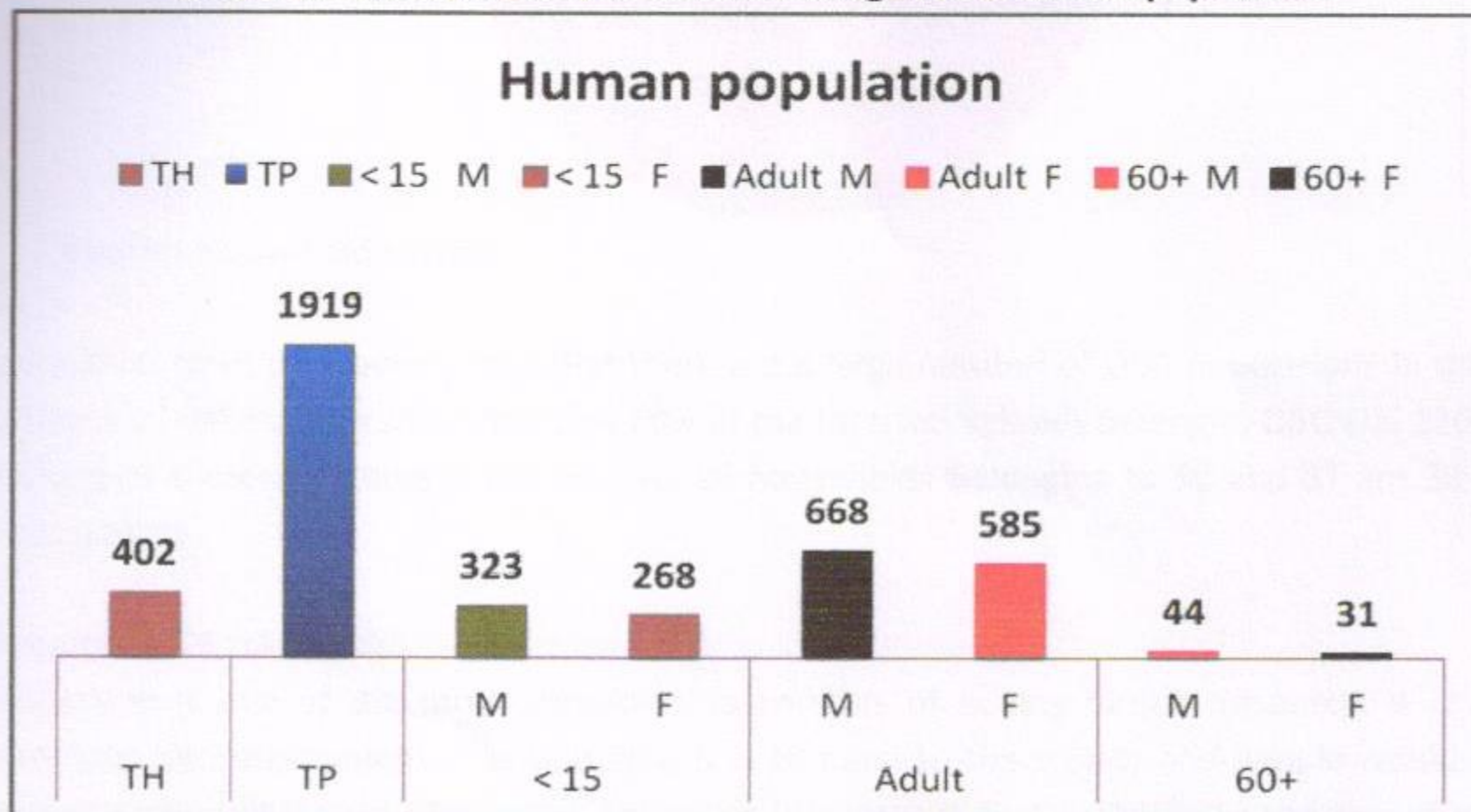
Village boundary: North: Kaziranga National Park, South: Karbi Anglong and Jagadamba Tea Estate; East: Najan Village and West: Deopani river.

| | | | | | | | | |
|-----|-----|------|-----|-----|-----|-----|----|----|
| All | 402 | 1919 | 323 | 268 | 668 | 585 | 44 | 31 |
|-----|-----|------|-----|-----|-----|-----|----|----|

Source: Household survey

Human population: Kuthori Baghmari is a big village accommodating 402 households with a population of 1919 nos out of which 884 are female as against 1035 male. There are 1253 workable people in the EDC 46% of which are female. The female male ratio in the village is 854 as against 1000 male which is not at all encouraging. The female male ratio in the village for workable population is 875. In the age group below 15, this ratio is 829 which are very encouraging. The overall literacy rate in the village is 51%. There are rooms for improving the education scenario in the village. The family size can be said to be very moderate in the village as 4.76 per family.

Graphical representation of different categories of human population

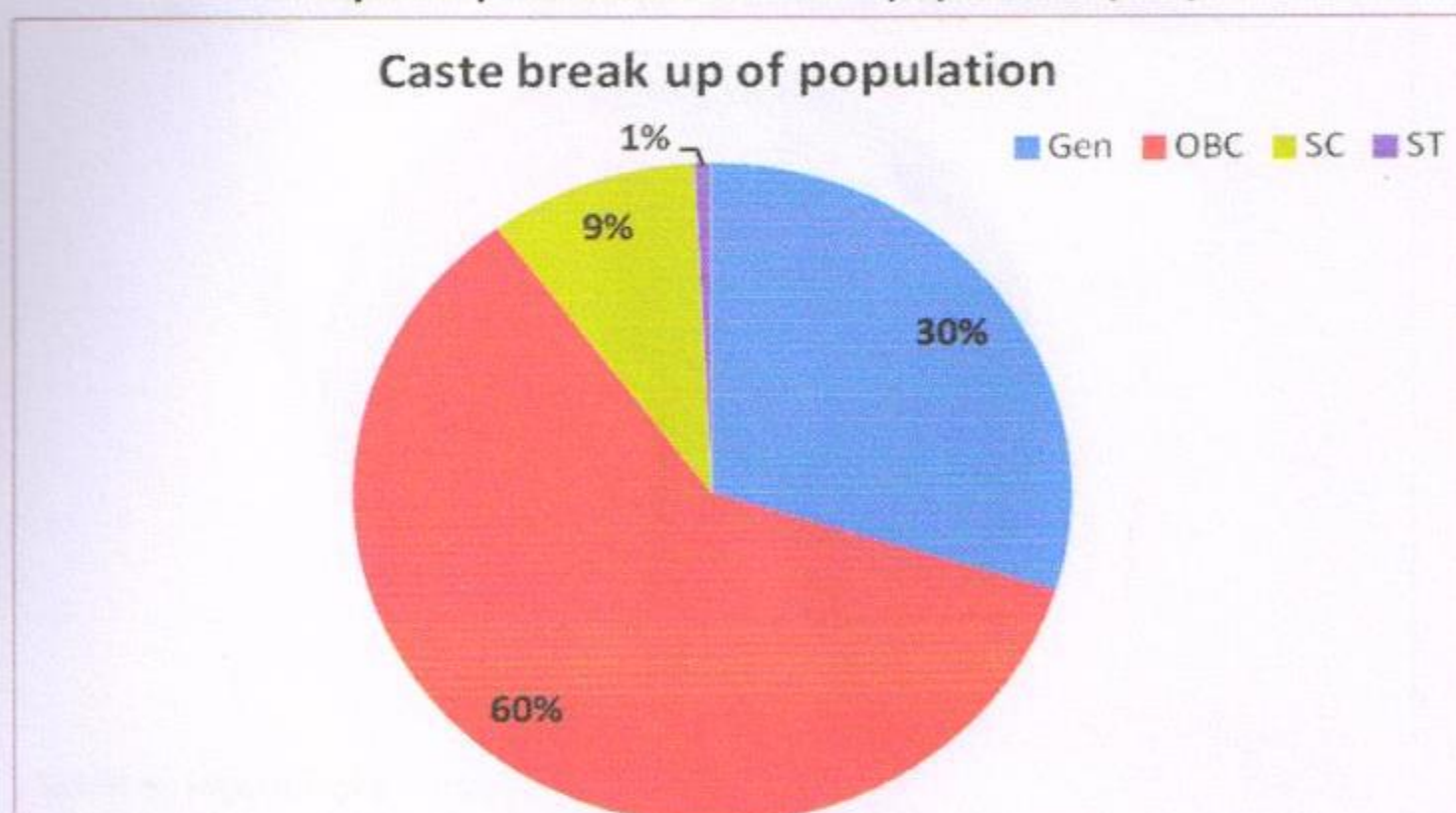


Source: Household survey.

The above diagram represents the total households of the village along with the total population and different categories of population. Kuthori Baghmari is inhabited by both the Hindu and Muslim people. About 15% of the total households are Muslim that comprises 62 households and the rest belong to Hindu religion.

2.2. Caste population: The following table represents the caste population according to their age group in the village:

Graphical presentation of caste population (in%)



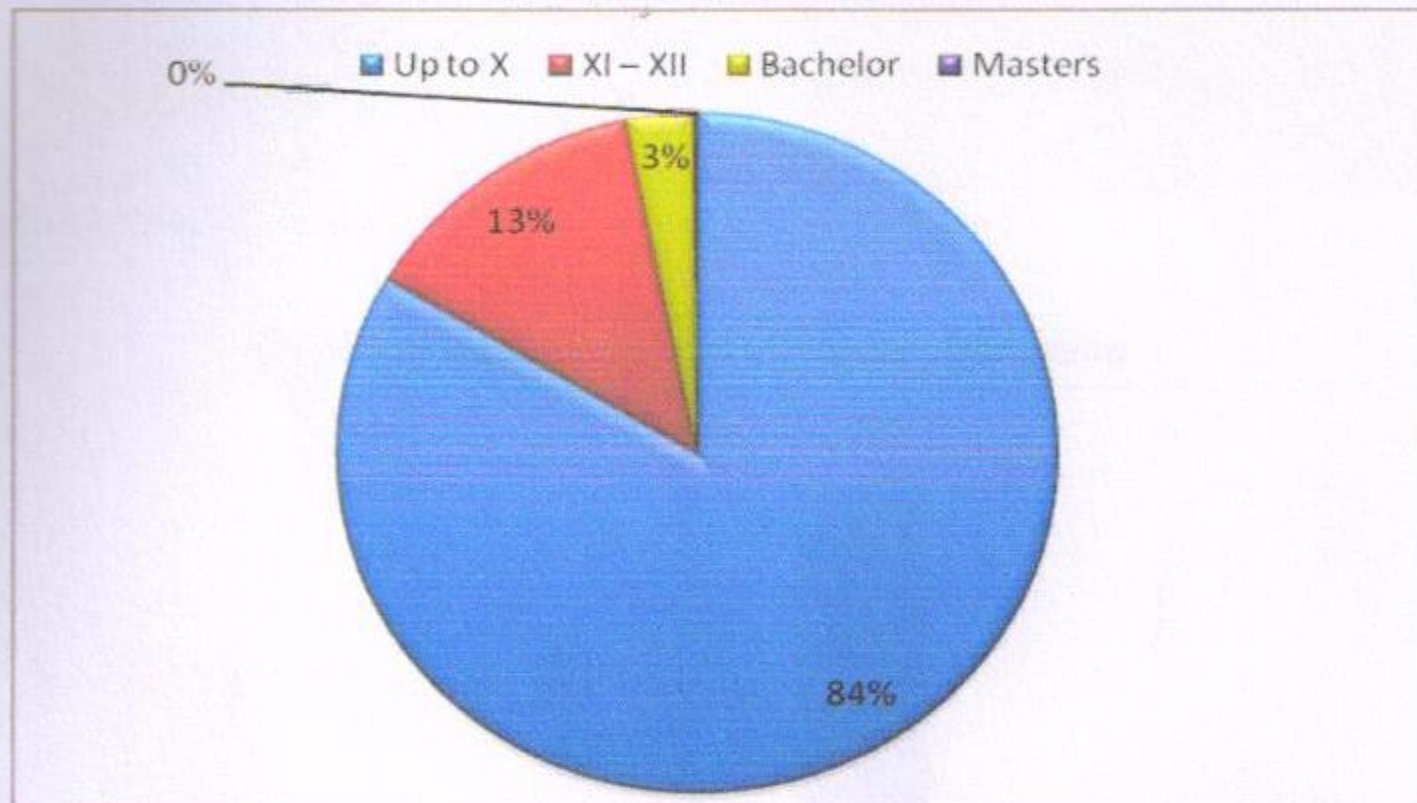
Source: Household survey.

As is clear from the above graph that there are a large number of OBC populations in the EDC. 242 out of 402 households comprising 60% of the total households belong to OBC and 120 (30%) belong to General category. The number of households belonging to SC and ST are 38 and 3 respectively.

2.3. Educational Background:

Education is one of the most important parameters of quality human resource. It is a prerequisite for development of any society. It is an asset to the society and people would like to see all their children well educated. Education increases their employability and thus raises the income of the households which contributes to the welfare of the said society. In a society, particularly in a modern society, where so much depend on the written medium, being illiterate is like being imprisoned, and school education opens a door through which people can escape incarceration. Having said this it can be said that the overall educational achievement is not at all encouraging in our country as a whole. The situations in the rural and interior places are rather tricky. The literacy rate in the Kuthori Baghmari EDC as a whole is 60.4%. The following table followed by the graphs shows the educational status in the Kuthori Baghmari EDC:

Educated people in absolute numbers



Source: Household survey.

The overall literacy rate in the EDC is 50% which seems not that encouraging. But, the irony is that a large portion of enrolled children leave school in between due to various reasons. Most of such children are now being engaged in daily wage earning activities and some of them are remaining unemployed. A total of 84% of the total population is in the range of class Nursery to Ten. The following table shows the educated people in absolute numbers.

| Class | Numbers |
|----------|---------|
| Up to X | 818 |
| XI - XII | 130 |
| Bachelor | 30 |
| Masters | 1 |

Source: Household survey.

3. Livestock:

Livestock are domesticated animals raised in an agricultural setting to produce commodities such as food, fiber and labor. Livestock are generally raised for profit. Raising animals is a component of modern agriculture. It has been practiced in many cultures since the transition to farming from hunter-gatherer lifestyles.

3.1. Details of livestock population: There are altogether 3918 different domesticated animals in the village. The following table and the bar diagram give a detail picture of the numbers of different animals in the village. Out of 402 households of the village 295 households own some or the other kind of animals. There are 107 households who don't possess any kind of livestock population.

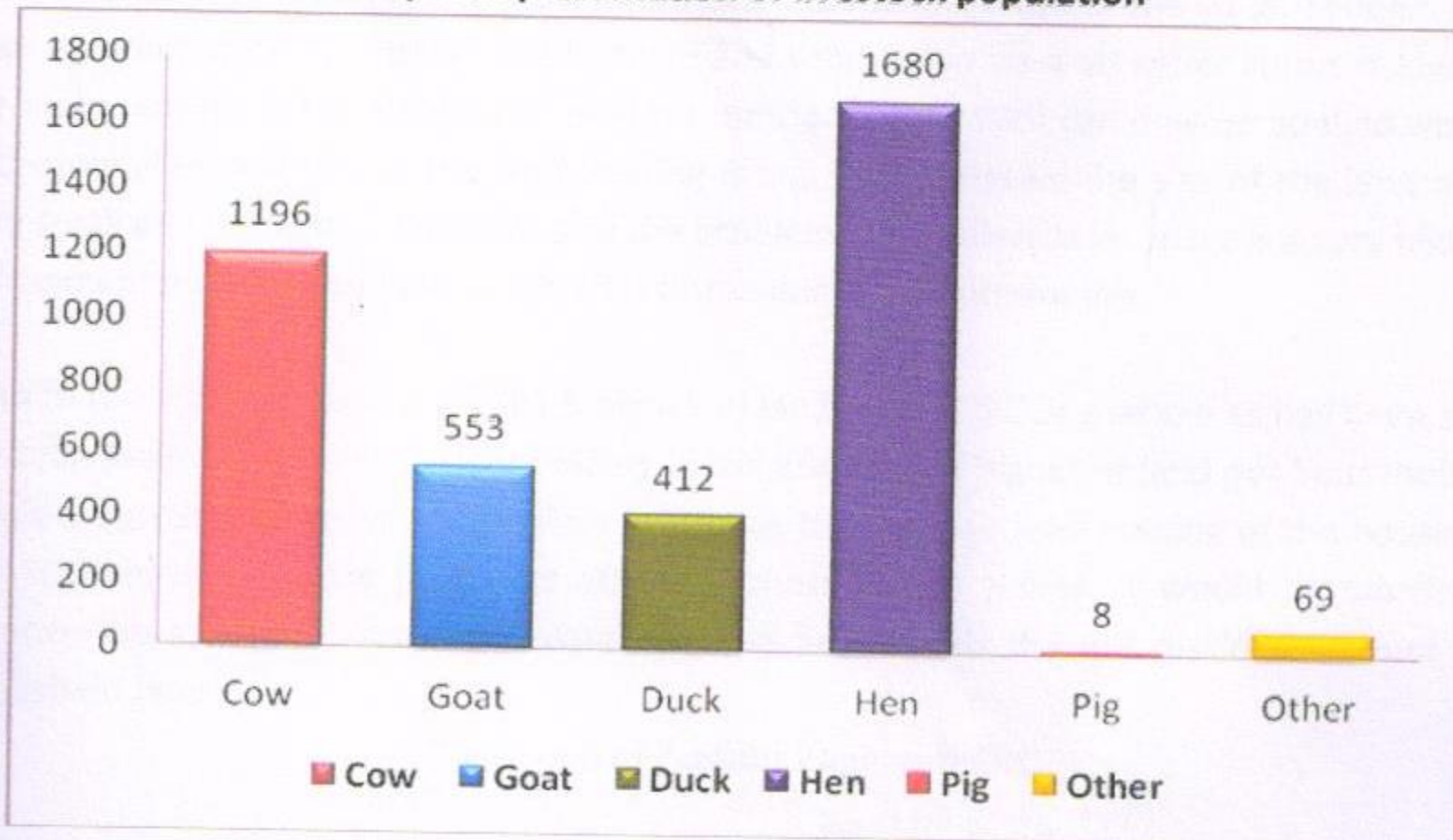
Livestock population of Kuthori Baghmari EDC

| Types of livestock | Total numbers | Stall fed | Household nos having livestock |
|--------------------|---------------|-----------|--|
| Cow | 1196 | 0 | 107 households don't have livestock population |
| Goat | 553 | 0 | |

| | | |
|-------|------|---|
| Duck | 412 | 0 |
| Hen | 1680 | 0 |
| Pig | 8 | 0 |
| Other | 69 | 0 |

Source: Household survey.

Graphical presentation of livestock population



These large cattle population graze mainly on the chaporis near the Baghmari village. A few of them also enter the KTR sporadically. The cows are of not high milking variety and therefore people can be motivated to get away with those and get some improved and high milking variety so as to receive greater income out of such livestock populations.

3.2. Fodder availability: Fodder cannot be collected from the KNP. Though they are amidst the KNP the hills of Karbi Anglong the cattle are not allowed to graze inside the KNP nevertheless the cattle sporadically enter it. Earlier the cattle used to graze on a grazing land of about 350 bighas but the entire land has been encroached for agriculture squeezing and creating a big problem for the grazing ground. Therefore the cattle graze in the village agricultural fields as well as the roadside of the NH hampering the smooth movement of the vehicles of the NH.

Fodder availability round the year at Kuthori Baghmari

| Types | Approx. months |
|--------------------|----------------|
| Crop residues | 5/6 |
| Trees | 0 |
| Grasses | 3/4 |
| Green fodder | 0 |
| Grazing in village | 6 |
| Grazing in the PA | 0 |

Source: FGD, PRA.

The sources of the cattle food are varied as has been presented in the above table. Grazing inside the KNP is restricted. The crop residue can cater to the needs of the fodder requirement

for about five six months. People also collect palatable grasses of different variety like Dol, Erali, etc. from the agricultural fields. The livestock feed are also purchased from the market. During flood cattle feed are purchased and crop residues become the main source.

4. **Land and land holding:** Assam is predominantly an agrarian state. About 70 – 80 percent of the people depend on agriculture. The main crops produced are rice, maize, sugarcane, oil seeds, etc. Tea and jute are two of the most important commercial crops of the state. Though, the state is an agrarian state its relative productivity and production vis-à-vis other states is low. One of the main reasons is the absence of modern methodology which can only be applied where land is consolidated and size of the land holding is big. But, in Assam the size of the land holding is very small and marginal. There are also the problems of landlessness. There is a very high degree of fragmentation of land holding which is untenable and unproductive.

- 4.1. **Land in the village:** There are 1361.5 bighas of land in the EDC as a whole as has been shown in the table below. The average landholding in the EDC is 3.43 bighas of land per household. But, it would be grossly incorrect to calculate and value the average land holding of the households of the EDC since there are problems of landlessness in the village. It would be worthwhile to mention here that for reasons unknown some households did not disclose amount of their household land.

Total land of Kuthori Baghmari EDC

| | | Land (in Bighas) |
|---|-------------------|------------------|
| 1 | Total land | 1381.5 |
| 2 | Community land | 20 |
| 3 | agricultural land | 1361.5 |

Source: Household survey and FGD, PRA.

As has been represented by the villagers there are only about 20 bighas of community land which has been utilized for establishing various community organisations like the schools, temple, etc.

- 4.2. **Irrigated land:** Agricultural activity is done once in a year till seven/eight years back. For last seven/eight years most of the villagers are doing double cropping primarily the Sali and Bodo crop. People are now concentrating more on the Bodo crop due to its higher productivity and less susceptibility to weather. Sali paddy is absolutely weather dependent but Bodo paddy is done by providing irrigation water. Bodo paddy is done on approximately 1000 bighas of land where farmers provide irrigation water by installing STW and DTW. There are two DTWs and a number of STWs in the village. There was one irrigation project named Singijuri Irrigation project though lying defunct now. If the water from the spring flowing through the Bagser reserve on the south can be tapped irrigation round the year could be ensured and the problem of drinking water would be solved to a large extent.

- 4.3. **Current land use:**

Land under different use

| | | Amount of land (in Bighas) |
|---|----------------------------|----------------------------|
| 1 | Agriculture single cropped | 361.5 |

| | | |
|---|----------------------------|------|
| 2 | Agriculture double cropped | 1000 |
| 3 | Agriculture fallow/no crop | 0 |
| 4 | Fruit plantation | 0 |
| 5 | Jhum | 0 |
| 6 | Small tea gardens | 0 |

Source: FGD, PRA.

People used to grow only Sali (winter) paddy in their land till a few years back. But, the production and productivity of Sali paddy is relatively low. Erratic weather and application of age old technology in agriculture is the prime reasons of low productivity of Sali paddy. Due to tiny land holding and poor economic condition of the farmers make the application of modern agricultural technique a costly affair. The villagers produce different items absolutely for domestic consumption purpose and commercialization has yet to be popularized.

4.4. Agricultural land holding: Land holding pattern in the state is not encouraging. More than 85% farmers are small and marginal against national average of 81%. Average land holding is 1.11 hectare and average land holding of small and marginal farmers are 0.63 hectares. The land holding pattern in Kuthori Baghmari EDC has been shown in the following table.

Land holding category

| | Kuthori Baghmari | |
|--------------------------|------------------|------------------|
| | TH | Land (in bighas) |
| Large (> 4 hectares) | 1 | 40 |
| Medium (2 - 4 hectares) | 8 | 172 |
| Small (1 - < 2 hectares) | 39 | 409 |
| Marginal (< 1 hectares) | 303 | 740 |
| No agricultural Land | 51 | 0 |

Source: Household survey.

The land holding scenario of the EDC reflects a very dismal picture as has been shown in the above table. There is only one farmer belonging to the first (large) category. Only eight households belong to the second category (land holding in between 2 – 4 hectares). A huge number of people (about 75% of the total households) of the EDC are having very low land holding belonging to marginal land holders. Also a substantial number of households don't possess any agricultural land. The land man ratio is a little above 3 bighas per household in the EDC. Overall the land holding scenario in the village is in a sorry state of affair.

5. Village resources and resource gap analysis: The state of affairs of the infrastructure facilities have been presented in the table below:

Resources of Kuthori Baghmari EDC

| Type of resources | Availability | Distance (in km) | Status | Shortfall |
|---------------------|--------------|------------------|---------------------------|-----------|
| LP School | Yes, three. | 0 | Inside the village | 0 |
| ME | Yes, two. | 0 | Inside the village | 0 |
| High School | No | 0 | | 1 |
| HSS school/ college | Yes, one | 0 | | 1 |
| PHC | Yes, one. | 0 | Not properly functioning. | Needs |

| | | | | |
|---------------------------|-----|--------|---|-----------------------|
| | | | No Doctor. | improvement |
| Hospital | No | 30 kms | Jakholabandha | 1 |
| Veterinary hospital | Yes | 0 | Not properly functioning. So need to go to Hatbor about 33 kms. | Needs improvement |
| GP office | Yes | 0 km | Inside the village | 0 |
| Police station | No | 30 | Jakholabandha | Needs an outpost |
| Forest office | No | 3 | Bagori Range Office | 0 |
| Post office | Yes | 0 | Inside the village | 0 |
| Bus facility (Roads) | Yes | 0 | Roadside, NH 37 | 0 |
| Weekly market (Wednesday) | Yes | 0 | Kuthori. Monday & Thursday. | 0 |
| Tank/ pond | Yes | 0 | Inside the village | Individual |
| Drinking water | Yes | 0 | | Most of them have TW. |

Source: Household survey and FGD, PRA.

Infrastructure facilities are satisfactory. Most of the services are available in the village. One PHC and a veterinary centre are there in the village but needs improvement. For basic health services people need to go to Jakhalabandha which is about 30 kms away from the village.

6. **Market facility:** Market scenario is also satisfactory in the village as can be seen from the table below:

Market availability

| Nature of facility (purchase/sale) | Nos | Distance |
|-------------------------------------|-----|----------|
| Grocery shop | 12 | 0 |
| PDS | 1 | 0 |
| Weekly market (Haat) | 1 | 0 |

Source: Household survey and FGD, PRA.

There is one retail centre of Public Distribution Shop and more than twelve grocery shops at the village. These shops fulfill the demand for basic requirements of the villagers. The important items can be purchased from these shops easily inside the village.

7. **Institutions:** Institutions are agents of change in both rural and urban set up. The following are some of the institutions the village has and have been working for the betterment of the villagers.

Village institutions of Kuthori Baghmari

| Institutions | Numbers | No of member households |
|-----------------|---------|-------------------------|
| EDC | 1 | All |
| SHG | 17 | |
| VDP | 1 | All |
| Mandir (Temple) | | |
| Mosque | | |

Source: FGD, PRA.

There is the Kuthori Baghmari EDC where all households have their representative. Another institution where all the villagers are members is the VDP. There are seventeen female SHGs in the village and all the SHGs are doing the money lending business. The names of the SHGs along with other details are shown as below:

Available village institutions

| Sl no | Name of the SHGs | President | Secretary | Registration no |
|-------|-----------------------------|----------------------------|--------------------------|-----------------|
| 1 | Baghmari Rengoni SHG | Sri Nildyuti Bhattacharjya | Sri Ruma Saikia | 617/9 |
| 2 | Nabajyoti SHG Baghmari | Sri Momi Baruah | Sri Dipti Choudhuri Jain | 619/9 |
| 3 | Baghmari Mohila Lakhimi SHG | Sri Lakshimai Nath | Sri Momi Rajkhowa | 702/9 |
| 4 | Naba Milon Mohila SHG | Sri Moni Bora | Sri Jasaswi Rajkhowa | 1981/20 |
| 5 | Hatidandi Mohila SHG | Sri Lili Bora | Sri Dipa Bora | 366/07 |
| 6 | Lokhimi SHG | Sri Bina Bora | Sri Juri Bora | |
| 7 | Bishnu Priya SHG | Sri Dipa Bhumij | Sri Sheela Ghatowar | |
| 8 | Baghmari Progotishil SHG | Sri Munu Nath | Sri Lokhimi Laskar | 365 |
| 9 | Baghmari Udayon Mohila SHG | Sri Doli Rajkhowa | Sri Jyoti Devi | 2042/20 |
| 10 | Kuthori Satbhani Mohila SHG | Sri Mamoni Das | Sri Junu Das | 364 |
| 11 | Trinayan SHG | Sri Kalpana Das | Sri Dipti Das | 680/9 |
| 12 | Jyotirupa SHG | Sri Hiron Das | Sri Dipika Bhuyan | 1486/18 |
| 13 | Bhagyshree SHG | Sri Gita Ghatowar | Sri Sabitri Rai | 2020/20 |
| 14 | Lakhimi SHG | Sri Niru Bora | Sri Archana Mahanta | 359/7 |
| 15 | Rangdhali SHG | Sri Jina Saikia | Sri Nitumoni Handique | 616/9 |
| 16 | Progoti SHG | Sri Deheswari Bora | Sri Niru Saikia | 2375 |
| 17 | Jonaki Mohila SHG | Sri Minoti Bora | Sri Jonti Das | 752/10 |

Source: FGD, PRA.

All the SHGs are doing only micro finance activities. But, these SHGs can be motivated to embark upon different income generating activities. In fact, the members of the female SHGs expressed their willingness to take up such activities during the PRA activities.

8. **Sources of water:** The state of drinking water is a bit satisfactory in the village in comparison to the neighboring villages. The drinking water scenario of the EDC has been represented through the table below:

Water infrastructure at Kuthori Baghmari EDC

| Sources | Number | B | D | I | L | Status (seasonal/perennial) |
|-----------|--------|-----|-----|----|-----|-----------------------------|
| Pond | 220 | Yes | No | No | Yes | Perennial |
| Tube well | 374 | Yes | Yes | No | Yes | Perennial |
| Ring Well | 13 | Yes | Yes | No | Yes | Seasonal |
| PHE | 1 | | | | | Not operative |
| Stream | 1 | Yes | No | No | Yes | Perennial |

| | | | | | | |
|-------|---|-----|----|----|-----|-----------|
| River | 1 | Yes | No | No | Yes | Perennial |
|-------|---|-----|----|----|-----|-----------|

*Bathing, Drinking, Irrigation, Livestock

Source: Household survey and FGD, PRA.

The state of water infrastructure in the Kuthori Baghmari EDC (village) is satisfactory. There are about 374 tube wells in the villages as a whole. People who don't own a tube well can collect it from the nearest tube well. There are 13 Ring Wells in the village to cater to the needs of drinking water. Though PHE connection is there it is rendering inoperative. About 15 households collect water from the spring flowing from the nearby hill (Bagser reserve). It is noteworthy that if the water from the spring can be collected it could be a good source of water for all purposes for the villagers. Pond water is used for bathing and washing purposes. Deopani River flowing towards the west of the village can be tapped for irrigation and other purposes.

9. **Energy requirements:** There are diverse sources of energy in the village, namely, fire wood, LPG, electricity, kerosene, etc. required for cooking, lighting, heating, etc. The overall energy scenario of the village has been presented in the table below.

Types of energy used by the villagers

| Type of fuel | Applicable | No of HHs | No of months of major dependency | Sources |
|--------------|------------|-----------|----------------------------------|---------|
| Fire wood | Yes | 298 | Dec & Jan | |
| Crop residue | No | 0 | | |
| LPG | Yes | 104 | Dec & Jan | |
| Electricity | No | 280 | Jun – Aug & Dec & Jan | |
| Bio-gas | Yes | 0 | | |
| Kerosene | Yes | 172 | Summer | |

Source: Household survey and FGD, PRA.

Fire wood is the primary energy used for cooking by the people of Kuthori Baghmari EDC. Though there are LPG connections in some households yet all of them need to depend on firewood for cooking during when the LPG is short in supply. The demand for both the sources of energy plights during the month of December and January since during these months they are also used for some other purposes like house heating, water boiling, etc. A good number of households have electricity connections in the village demand of which reaches its peak during June to August and again during December and January since it is used for both houses cooling and heating. But, since there is frequent power cut in the state as a whole and this village is also not an exception the demand for Kerosene is always high. The Kerosene is basically procured from the fair price shops at a price Rs. 17/- (subject to change). Only the BPL households are entitled to receive kerosene and each household are allotted 5 liters per month which quite often falls short of the demand. Only problem with the supply of kerosene is that the APL families of the villages don't receive kerosene. It is also difficult to procure kerosene by paying higher prices.

It is remarkable to note here that all the 402 households depend on Kerosene since frequent power cut is a common phenomenon. Though quite a large number of households rely on LPG,

most of such households also require fire wood for stopgap maintenance when scarcity of LPG arises, which is quite common a circumstance. It is noteworthy that only about 10% of the households having LPG never use firewood for cooking.

10. **Forest protection issues:** As has been depicted on the table below that there is no such issue which shows an intimate relation of the people and the forest. But during household survey it was divulged that there are a miniscule amount of NTFP collection which is, indeed, not from the KNP but from the Karbi Anglong side of the village.

| Issues | Presence | Status (Significant/ insignificant on the basis of volume and frequency) |
|-------------------------|----------|--|
| Collection of timbers | No | |
| Collection of fuel wood | No | |
| Collection of NTFPs | No | |
| Hunting | No | |
| Grazing | No | |
| Encroachment | No | |
| Others | No | |

Source: Household survey and FGD, PRA.

11. **Household dependency on forest and forest products:**

People of the Kuthori Baghmari village don't depend at all on the KTR and their level of dependency is thus nil.

| Level of dependency | Dimension |
|---------------------|-----------|
| High | Nil |
| Medium | Nil |
| Low | Nil |

Source: Household survey and FGD, PRA.

12. **Current income generation activities:**

The income generating activities have been categorized broadly into five as has been shown in the table below.

Current income generating activities (in household numbers)

| Sl no | Livelihood category | No of HHs | % of total households |
|-------|---------------------|-----------|-----------------------|
| 1 | Daily wage laborer | 314 | 78 |
| 2 | Farmer | 168 | 41 |
| 3 | Service | 0 | 0 |
| 4 | Business | 59 | 15 |
| 5 | Other | 19 | 04 |

Source: Household survey.

It is to be noted here that members of one family may be engaged into different employment activities and same person may be engaged in different activities at different point of time in the

same year. The primary livelihood activity of the villagers is daily wage earning activity. Second important livelihood activity of the people of the Kuthori Baghmari EDC is farming. As has been already mentioned that both summer and winter paddy is grown in the village apart from different vegetables for domestic consumption purpose. Petty business is also one of the important activity people depend on for their livelihood. Driver, carpenter, mason, etc. are some of the other employment opportunities where the people of the EDC are engaged in.

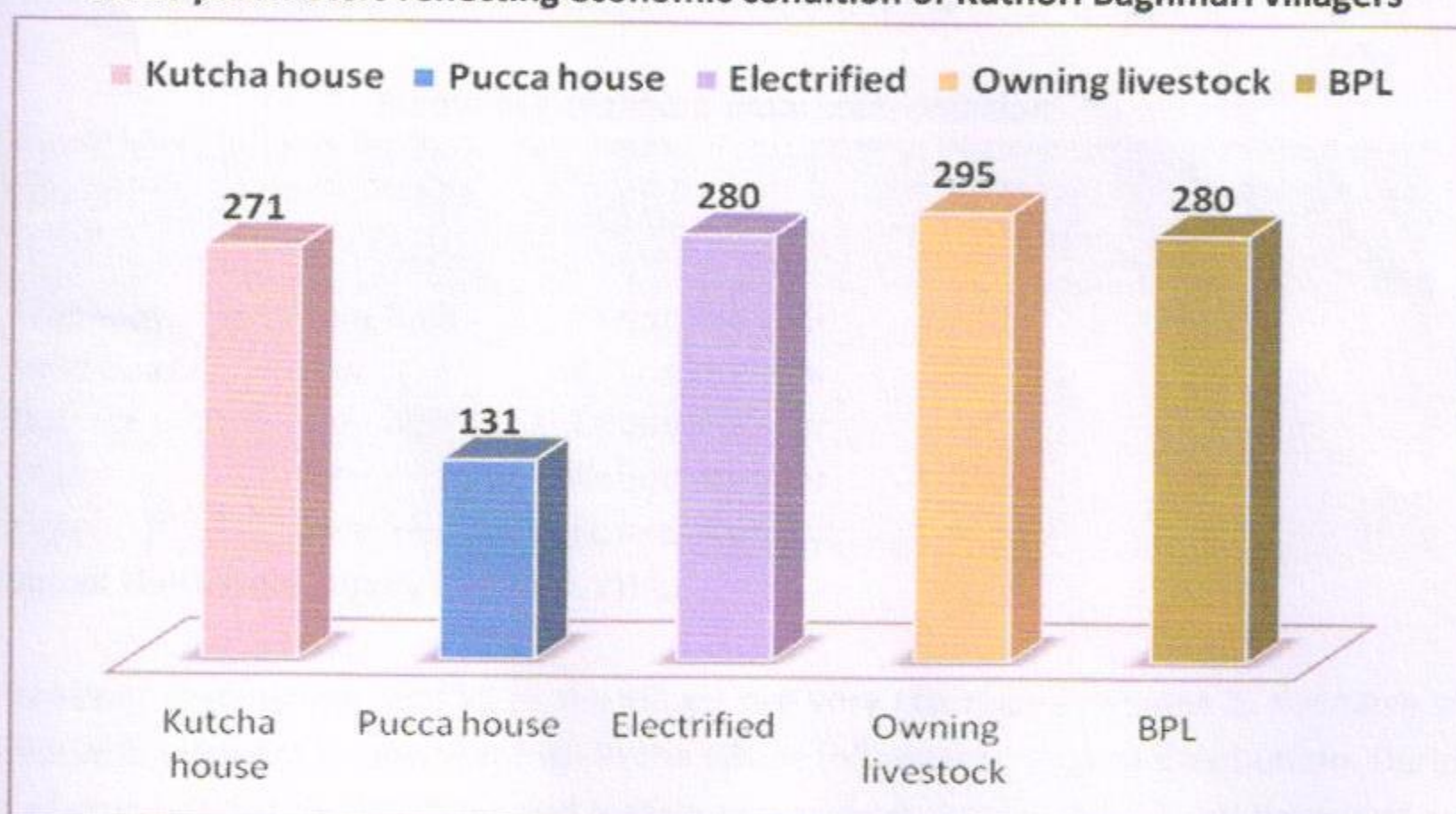
13. **Economic status:** It is really difficult to measure the economic status of the people of a village. Similar is the case for Kuthori Baghmari village also. Nevertheless, the following table tries to show some of the conditions of the people of the Kuthori Baghmari EDC.

| Category of house | Nature of house | No of households |
|-------------------|--------------------------------|------------------|
| Kutcha house | Thatched roof, mud floor, etc. | 271 |
| Pucca house | RCC/ tin roof, cement floor | 131 |
| Electrified | | 280 |
| Owning livestock | | 295 |
| BPL | | 280 |

Source: Household survey.

It is apparent from the above table that the economic condition of the people of Kuthori Baghmari EDC is relatively better. Most of the people have kutcha houses. Some of the pucca houses have been constructed under the IAY scheme. Similarly the electricity has also been connected through the Rajib Gandhi Rural Electrification Mission for the BPL households. As has already been mentioned there are 295 households possessing some or other kind of livestock. If the villagers can be motivated to rear the livestock on commercial basis this could generate handsome amount of income to the owners and this will obviously help eradicating the existing poverty in the village.

Some parameters reflecting economic condition of Kuthori Baghmari villagers



14. Wellness status:

Wellness is a difficult word to define. Traditionally wellness has meant the opposite of illness and the absence of disease and disability. Wellness is now a word used to describe living the best possible life you can regardless of whether you have a disease or disability. There is no single set standard for wellness and wellness is a difficult thing to quantify. Wellness here means the economic wellness of the people.

| Wellness status | Number of households |
|-----------------|----------------------|
| Well off | 50 |
| Manageable | 78 |
| Poor | 230 |
| Very poor | 44 |

Source: FGD, PRA.

It is really a difficult task to attribute a wellness status upon the household since wellness of the people depends upon various parameters. Agricultural land, which is one of the most important assets of the rural people, employment opportunity, house structure, availability of mode of energy, education, health, family size are some of the important parameters of wellness. Considering all these aspects and in consultation with the villagers in the FGD the wellness status for the Kuthori Baghmari village has been attributed as above.

15. Human – animal conflict in Kuthori Baghmari EDC:**15.1. Crop raiding by wild animals:**

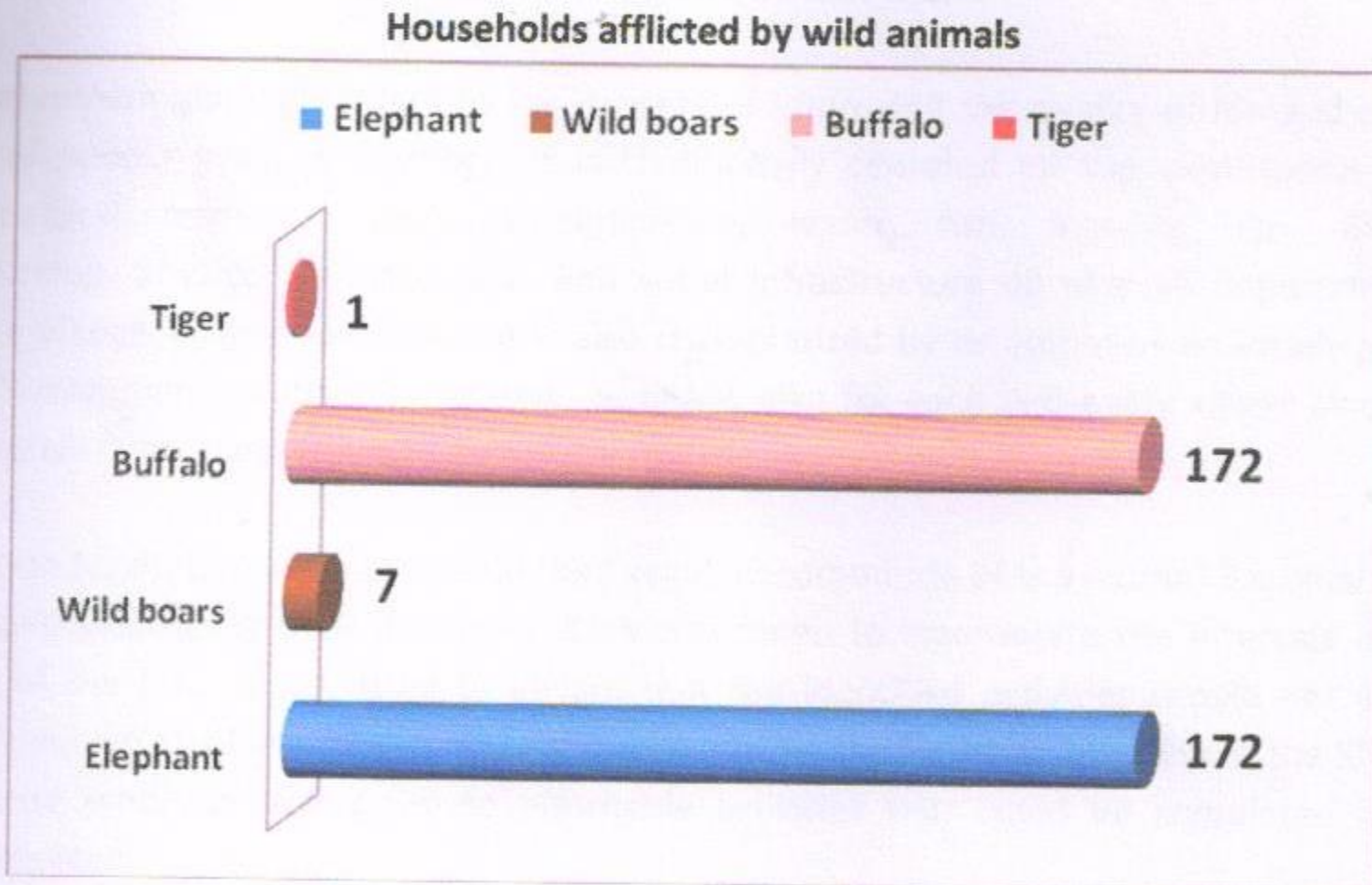
Man animal conflict is very prominent in the village as has been discussed above. Though, there are no casualties in terms of man or animal, but animals like elephant and buffalo raid the crop and cropland frequently causing trouble for the people in terms of loss of crops and other assets. The cumulative damage in terms of money would be very high.

Frequency of man-animal confrontation

| Names of animals | Frequency of conflict | Seasons | Nos killed/ injured by villagers | No of HHs afflicted |
|------------------|-----------------------|----------------|----------------------------------|---------------------|
| Elephant | Very high | Round the year | NIL | 172 |
| Wild boars | Low | Round the year | NIL | 7 |
| Buffalo | Very high | Round the year | NIL | 172 |
| Rhino | Nil | Round the year | NIL | 0 |
| Tiger | Very low | Round the year | NIL | 1 |

Source: Household survey and FGD, PRA.

The cases of man-animal conflict in the village are very common as shown in the table above. Conflict with elephant is relatively high in the village followed by crop raid by Buffalo. During the time of crop harvest the elephant and buffalo comes down to the agricultural fields and eats up and damages the crop. Despite cases of confrontation the affected households are not being compensated by the department. The following bar diagram shows the households afflicted by different animals of the KTR during last three years.



Almost all the affected households have been raided by both the elephant and the buffalo. Crop damage is huge due to such incidences and therefore it can be termed as a serious problem from the perspective of the villagers. For mitigation of such conflict, villagers opine that construction of electric fencing along their agricultural land will ease the situation.

15.2. Household (HHs) impacted by crop raiding animals:

| Crop damage during last 3 years | No of HHs |
|---------------------------------|-----------|
| High (> 70% crop damage) | |
| Medium (50 - 70 %) | |
| Low (< 50%) | 172 |

Source: FGD, PRA.

The man-animal conflict has reached a serious position in Kuthori Baghmari. Though the animals don't enter into the village and damage any household property but raiding the crops and croplands are quite common. This problem needs immediate departmental intervention. No compensation on the part of the department has so far been paid to any person in the village. Therefore, payment of adequate compensation for the damaged property and other assets is to be given priority.

CHAPTER VI: VILLAGE DEVELOPMENT

Village development generally refers to the process of improving the quality of life and economic well-being of people living in a village. It is traditionally centered on the exploitation of land-intensive natural resources such as agriculture, water, fish, forestry, etc. Education, entrepreneurship, physical infrastructure, and social infrastructure all play an important role in developing a village. Village development is also characterized by its emphasis on locally produced economic development strategies. We need separate plan for each and every village since one is highly distinctive from another.

The Micro-plan facilitation team consulted the Executive committee of the Kuthori Baghmari EDC for identifying and prioritizing their problems. Care was taken to incorporate the interests of all the households of the EDC. It was tried to ensure that the identified activities should not adversely impact the biodiversity of the forest rather should conserve the forest and wildlife of the KNP. Since fund is limited emphasis was given to affordable activities that could be completed from the available resources.

Priority setting: There are many problems to be solved in a village. But each and every problem cannot be given an equal credence due to paucity of funds and therefore needs to be prioritized. The most urgent needs are to be solved first and so on. It is the villagers who know best about their problems and which need to be resolved first. The following list of activities and priority ranking was done in consultation with the EDC executive and general members of the EDC in a PRA exercise held at the school premises.

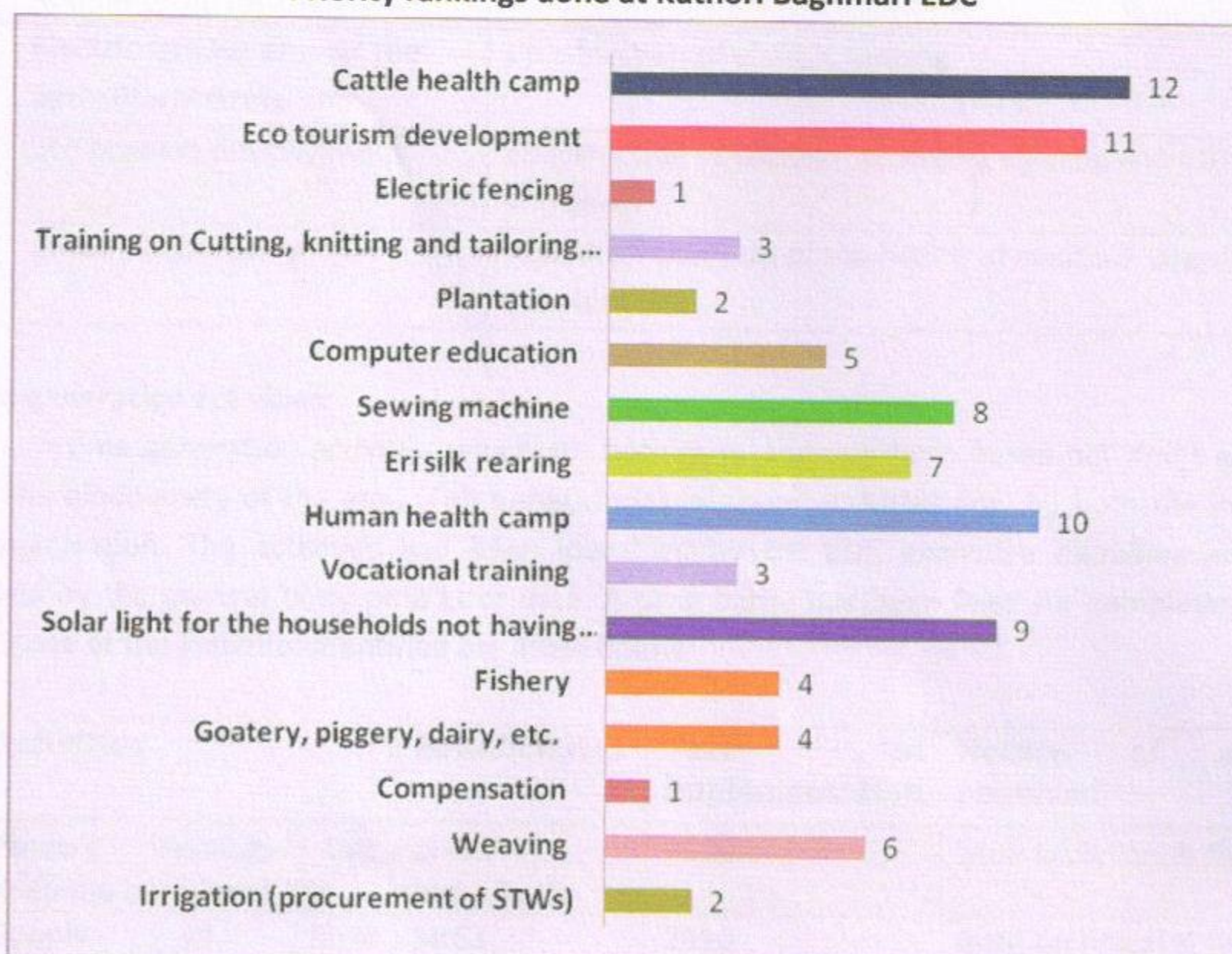
The priority list of the Kuthori Baghmari Eco Development Committee is as below:

| Sl no | Name of activity | Priority ranking |
|-------|--|------------------|
| 1 | Irrigation (procurement of STWs) | 2 |
| 2 | Weaving | 6 |
| 3 | Compensation for crop damage by wild animals | 1 |
| 4 | Goatery, piggery, dairy, etc. | 4 |
| 5 | Fishery | 4 |
| 6 | Solar light for the households not having electricity connection | 9 |
| 7 | Vocational training for the unemployed youths | 3 |
| 8 | Human health camp | 10 |
| 9 | Eri silk rearing | 7 |
| 10 | Sewing machine | 8 |
| 11 | Computer education for youth with a training centre | 5 |
| 12 | Plantation | 2 |
| 13 | Training on Cutting, knitting and tailoring for the women | 3 |
| 14 | Electric fencing around the agricultural fields | 1 |
| 15 | Eco tourism development | 11 |
| 16 | Cattle health camp | 12 |

Unemployment is a big problem in the village. Therefore, employment generation through different means is one of their topmost priorities. In this regard the people of the EDC expressed their eagerness to take up skill development programme. Skill development training like tailoring, beauty

parlour, mobile repairing, handloom, car repairing, motor vehicle repairing, etc. can be taken up immediately for the people. The villagers are also in favour of rearing jursey cow in lieu of the low milking indigenous breed of cows. People are also enthusiastic to develop ecotourism project around the village, since the village is near the Bagori range – another place of tourists' attraction, which will earn a good amount of revenue to the EDC during the tourist season.

Priority rankings done at Kuthori Baghmari EDC



Detail of the activities to be undertaken by Kuthori Baghmari EDC: Apart from the PRAs there was a series of very close meeting of the facilitation team with the people of the village at different point of time. The following specifications of their demand came out in the discussion:

| Sl no | Item | Detail activities |
|-------|---|--|
| 1 | Irrigation | Procurement of STWs |
| 2 | Weaving | Training on weaving and market linkage |
| 3 | Compensation for crop damage by wild animals | Financial compensation to the afflicted households |
| 4 | Goatery, piggery, dairy, etc. | Procuring calves of goat, high milking cows and pigs |
| 5 | Fishery | Providing financial and technical knowhow |
| 6 | Solar light | For the households not having electricity connection |
| 7 | Vocational training for the unemployed youths | Training on tailoring, weaving, beauty parlour, mobile repairing, handloom, car repairing, motor vehicle repairing, driving, catering, tourist guide, hospitality management, etc. |
| 8 | Human health camp | Periodical health check up camp |

| | | |
|----|---|--|
| 9 | Eri silk rearing | Providing financial and technical knowhow |
| 10 | Sewing machine | Procuring sewing machine to those willing to do |
| 11 | Computer education for youth with a training centre | Training and establishment of a computer centre |
| 12 | Plantation | On the roadside as well as on the campus of schools |
| 13 | Training on Cutting, knitting and tailoring for the women | Capacity building for such activities |
| 14 | Electric fencing around the agricultural fields | Construction of electric fencing |
| 15 | Eco tourism development | Construction of cottage, providing training and other knowhow |
| 16 | Cattle health camp | Periodical check up of the health of livestock population of the villagers |

Income generation activities:

Income generation activities which are both farm and non-farm based but don't adversely affect the biodiversity of the area. The beneficiaries of these activities may be both the individual and organisation. The activities had been identified by the EDC executive members and were approved by the general body on a later date. A time frame has been fixed for completion of the work. Some of the activities identified are listed below:

| Sl no | Activities | Beneficiaries | Year of implementation | Nature of support required |
|-------|--|-------------------|------------------------|----------------------------|
| 1 | Poultry farming; bee keeping, handloom, etc. | SHGs/ individuals | 2016 | Both technical & financial |
| 2 | Supply of farm equipments | SHGs /Individuals | 2016 | Both technical & financial |
| 3 | Supply of stitching machine, looms, etc. | SHGs/ individuals | 2016 | Both technical & financial |
| 4 | Driving, computer education, mobile repairing, electrician, etc. | Individuals | 2016 | Both technical & financial |

Since the people have no specific expertise therefore they prefer to get engaged in the primary sector. Poultry, bee keeping, etc. weaving, stitching, etc. have been selected by the villagers as major income generating activities. Capacity building for taking up such activities shall be the first stage as was opined by the villagers during the PRA exercise. The rationale for selecting these activities are two: the first is the market for such products and the second is the expertise the women in weaving. Apart from that a large number of educated unemployed youths will have the opportunity to work and earn a handsome amount of money. The beneficiaries would be both the individuals and the SHGs. What requires at the very initial stage is some kind of technical assistance to the entrepreneurs and a handsome amount of seed money.

Moreover, people also of the opinion that if proper irrigation can be provided summer paddy can be promoted in the villages since the productivity of this crop is very high. It will result into less reliance

on daily wage activities as a prime source of livelihood and people will have enough time to concentrate on household welfare activities. STW and some kind of technical support can also be provided. There are sizeable numbers of youths who want to take up activities like driving, computer education, motor vehicle repairing, electrician, etc. for which some kind of skill development training can be organised.

CAPACITY BUILDING:

Awareness creation for environment conservation:

| Type of programme | Year | Frequency | Targeted nos of participants |
|----------------------------------|------|---------------------------------------|---|
| Awareness | 2016 | Quarterly | School children and the EDC members |
| Trainings on specific activities | 2016 | Once in a year with proper monitoring | Educated unemployed and other interested youths |

Awareness regarding various issues of nature and nature conservation is of utmost importance in the village. Since, the EDC is located in the fringe of the Kaziranga Tiger Reserve therefore there is a need of generating awareness regarding forest and its ecosystem conservation. The school children could, thus, be groomed for future stewards for conservation in and around the Kaziranga Tiger Reserve. Also, most of the people don't understand the objective and aims of many conservation programme taken up by the Forest department. Timely dissemination of information in the awareness meeting would help the department mitigating the misunderstanding of the people.

Apart from this vocational training on specific activities would build the capacity of the people and thus help them earn handsome income in future. Selected youths of the village need to be trained up and financial assistance is to be provided for taking up their own venture. The EDC will have the onus of monitoring their performances.

Capacity building/ skill development potential IGA

| Target groups | Activities | Year of training | No of participants | Place of training/ training institutions |
|--------------------------------|---|------------------|--------------------|--|
| SHG and interested individuals | Farming activities | 2016 | 50 | Village premise |
| Drop out youths | Computer and other Mechanical training (carpentry, driving, etc.) | 2016 | 50 | Village premise |

Since, the farming would be done in a scientific manner, there is a need of capacity building for the people who would be involved in such kind of activities. The experts of the concerned field could be invited to the villages and the youths could be motivated for doing it in a scientific manner so as to get maximum benefit out of a tiny investment. The interested individuals and SHGs need to apply for taking up such kind of training activities and are to be selected at the general meeting of the EDC.

COMMUNITY BASED ECOTOURISM:

Promotion of ecotourism as an income generation activity in the village may be promoted. One should not confuse in using the term 'ecotourism' in a very liberal manner. It is not just about

green destination but is much more about green behavior in reaching and exploring such destinations. The International Ecotourism Society defines ecotourism as:

Responsible travel to natural areas that conserve the environment and improve the welfare of the local people.

The IUCN defines it as:

Environmentally responsible travel to natural areas, in order to enjoy and appreciate nature that promote conservation, have a low visitor impact and provide for beneficially active socio-economic involvement of local people.

Community based ecotourism is a growing phenomenon in developing world. The community has substantial control and involvement in the ecotourism initiatives and majority of benefits accrue directly to the community.

Eco-tourists typically look for experiences that provide a sense of closeness to the natural features and local communities that attracted them to visit the destination. Any destination, therefore, must protect its resources while facilitating a sense of integration with the local community. An important ingredient of any tourism destination is accommodation, which is often a decisive factor in the choice of destination. Eco tourists prefer a clean, well managed small hotel located in a quite natural area that is built of wood and bamboo. They prefer to eat local food and sleep in a room decorated with local handicrafts and furnishing. Also, most international tourists are very environmentally conscious and want to stay in a place that does not negatively affect the environment.

In this connection the existing resources of the village could be utilized. People are very much willing to develop a tourist project in and around the village so that it can generate some employment opportunities to the locals and thus bring handsome amount of income to them. A proper planning is needed for going ahead to achieve the desired goal.



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CHAPTER VII: PROJECT ACTIVITIES, BUDGET AND ANNUAL PLANNING

The micro-plan will prescribe various developmental activities and provide approximate estimate of funds and period for implementation. The activities listed here are on the basis of PRA meeting and household survey and prioritized in the EDC meeting as has been mentioned above. The fund requirement would be met by the KTR welfare fund and other sources that can be tapped by the park authority or the EDC itself. The activities include man-animal conflict mitigation, village development, capacity building, etc.

This is basically a long term plan for the EDC. The activities would be taken up on the basis of the prioritization done in the PRA meeting. The plan would be keep on reviewing every year and demands that have been fulfilled would be omitted and new demands would be included accordingly. This is shown as below:

| Activities | Year | | Duration of work | |
|--|-------|------------|--|----------------|
| | Unit | Cost (Rs.) | Starting (month) | End (month) |
| Man-animal conflict mitigation | | | | |
| Compensation for crop raid and other damages | Rs. | 5,00,000 | November 2015 | April, 2016 |
| Solar street lights | No 10 | | November 2015 | April, 2016 |
| Village development | | | | |
| EPA | | | | |
| Earth filling of KNP High and ME School | | 50,000 | November 2015 | December, 2015 |
| Construction of a stage at the Natya Mandir cum EDC office | 1 no | 3,00,000 | November 2015 | December, 2015 |
| Maintenance of the Barowari Durga Puja Mandop | 1 no | 1,00,000 | November 2015 | December, 2015 |
| Improvement of the Bogorijuri Harimandir | | 1,00,000 | November 2015 | April, 2016 |
| Culverts | 3 nos | 60,000 | November 2015 | December, 2015 |
| Public toilet at Kohora Chariali | 1 no | 1,00,000 | October 2015 | November, 2015 |
| Plantation | | | | |
| Locally available fruit trees at the roadside like Lemon, Litchi, Mango, Kordoi, Amlokhi, Amora etc. | Piece | 50,000 | March, 2016 | May, 2016 |
| Valuable tree at household premise like Agar, etc. | Piece | 50,000 | March, 2016 | May, 2016 |
| Common interest activity | | | | |
| Road (to contact PMGSY) | | | | |
| Improvement of playground and construction of an Indoor stadium | | | To contact the Ministry of Sports and Youth Affairs. | |

| Livelihood improvement | | | | |
|---------------------------------|--------|----------|--------------|-------------|
| Human health camp | 4 Nos | 2,00,000 | August, 2015 | Feb, 2016 |
| Animal health camp | 4 Nos | 80,000 | August, 2015 | Dec, 2015 |
| IGA | | | | |
| STW (subsidized by Agri deptt.) | 10 Nos | 1,25,000 | Oct, 2015 | Dec, 2015 |
| Dairy, piggery, etc. | Nos | 4,00,000 | Oct, 2015 | Dec, 2016 |
| Stitching machine and handloom | 50 Nos | 3,00,000 | Oct, 2015 | Dec, 2015 |
| Awareness education | 2 nos | 50,000 | August, 2015 | March, 2016 |
| Training in specific activity | | | | |
| Motor driving | 1 no | 8,00,000 | Oct, 2015 | Feb, 2016 |
| Carpentry | 1 no | | | |
| Welding | 1 no | | | |
| Electrical repairing | 1 no | | | |
| Automobile mechanic | 1 no | | | |
| Water pump repairing | 1 no | | | |
| Mobile repairing | 1 no | | | |
| Computer training | 1 no | | | |
| Stitching | 1 no | | | |
| Handloom | 1 no | | | |
| Sports | 1 no | | | |
| Organic manure production | 1 no | | | |
| Exposure visit | 1 no | 1,00,000 | Oct, 2015 | Feb, 2016 |
| Tractor | 2 nos | 9,00,000 | | |

MONITORING AND EVALUATION:

Monitoring and evaluation is part of the Micro Plan. If not properly monitored there is every possibility that the Micro Plan might not be implemented to achieve its desired goals of overall village development. Therefore, there should be some agencies that will look after the works to be implemented and point out the lacunae at accurate time so as to rectify for the greater benefit of the villages. Review of implementation of the Micro Plan may be carried out in the following manner:

| Sl no | Reviewing agencies | Minimum frequency |
|-------|--------------------|-------------------|
| 1 | EDC executive | Every month |
| 2 | KTR, WWF, LBCS | Quarterly |
| 3 | EDC general body | Half yearly |

The executive committee of Kuthori Baghmari EDC will be in charge of implementation of all kinds of schemes that have been outlined in the Micro Plan. Therefore, all the executive members have been proposed to sit and review the progress of the work monthly. The KTR, WWF and LBCS will meet quarterly and sit together with the executive members of the EDC and review whether the work is

progressing towards desired direction. Finally, it is the EDC general members who will review and approve the work.

The reviewing agencies mentioned in Col.2 of the above table will also ensure necessary corrective steps as brought out by the review.

ROLE OF THE LINE AGENCIES AND SUGGESTIONS:

It has been realized that all the problems / issues cannot be addressed and solved by the forest department or the KTR authority. It is not always possible and also desirable on the part of the department or the KTR authority to bring panacea for all sorts of constraints of village development. It would be a gross mistake if somebody expects so. Therefore, it would be proper for the park authority to negotiate with other line agencies like the department of Agriculture, Panchayat and Rural Development, Assam State Electricity Board, Public Health department, Veterinary department, PWD, etc. for overall socio-economic development of the Kuthori Baghmari EDC. A proper coordination, indeed, would ensure desired development of villages and thereby guarantee nature conservation to a large extent. The roles that could be played by the line agencies in the overall socio-economic development of the Kuthori Baghmari (village) EDC have been summarized below:

THE DEPARTMENT OF AGRICULTURE: The agriculture sector employs 52.9% of the total workforce and 46% of the total geographical area, making it a vital element for the inclusive and sustainable growth of Indian economy. Almost 41.8% of rural populations live in abject poverty and these poverty ridden people primarily depend on agriculture for their livelihood. For most of the farmers a noble thought of applying the modern and scientific technology in agriculture is a great luxury though there are no dearths of agricultural schemes. Kuthori Baghmari village is no exception. The small and marginal farmers don't even realize that a small dose of the green revolution package will improve their lifestyle to a great extent. Therefore, an endeavor should be made on the part of the park authority to invite the officials concerned in order to give them some kind of technical and other assistance so as to increase the productivity of the land and thereby improving the village economy.

THE DEPARTMENT OF VETERINARY: Since the farmers are small and marginal having a small holding, application of modern technology is a distant dream for them. They do agriculture in a very traditional way by bullocks and other equipments. It is worth noting here that the bullocks during the farming season suffer from many diseases and people cannot attend to any doctor owing to no veterinary hospital nearby. It leads serious hardship and huge loss on the part of the villagers and therefore, there is an utmost need of attending the cattle and vaccinate it. Therefore, vaccinating the livestock of the Kuthori Baghmari villages should be one of the topmost priorities. This will help both the poor farmers on the one hand and the wild lives of the KTR and other adjacent forests on the other.

THE DEPARTMENT OF P&RD: The department of Panchayat and Rural Development can be requested to deliver all kinds of facilities meant for the poor villagers in the fringe area of the KTR.

THE ASEB: There is a noble scheme of rural electrification named Rajib Gandhi Rural Electrification Programme under which the BPL households of the village are given free electricity connection. The modalities of the scheme are that the concerned development block will prepare the list of the BPL families and handed over to the ASEB department and the department on their part would give the necessary connection. Therefore, the KTR authority may discuss with the concerned officials of both the development blocks and the ASEB for delivering the services in the Kuthori Baghmari EDC.

THE DEPARTMENT OF PWD: It has been mentioned above that the villagers are not connected with all weathered roads and therefore suffer a lot especially during monsoon. It has been realized at the same time that it would not be possible for the KTR authority, owing to paucity of funds, to build an all weathered road, which involves huge cost, for the villagers. Therefore, the department of PWD can be brought into the scenario at this juncture. It is the PWD department who is looking into the construction of the PMGSY (Prime Minister's Gram Sadak Yojna). Our suggestion is that the KTR authority should sit and discuss with the PWD for their intervention in this regard.

CHAPTER IX: CONCLUSION AND SUGGESTIONS:

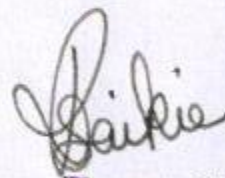
By the mid 1970s, wildlife conservation in India had become conflict ridden in many places. Conflicts and clashes between PA managers and local communities were on the rise. Also, in many PAs, it was proving to be a struggle for the park managers to safeguard their charge to the levels prescribed by law. In a few places, resource managers began to come up with innovative, ameliorative measures that began to yield results, which went beyond mere protection. Consequently, the mid 70s through to the 80s and 90s of the last century saw the emergence of new thoughts and practices in the realm of forest and wildlife management in the country. Driven primarily by the realisation that the needs and aspirations of forest dependent communities had to go hand in hand with the demands of nature conservation, practices like the Joint Forest Management were adopted. This, in turn, led to innovative experiments by a few resource managers in different parts of the country. In the case of the management of protected areas (PA), a government of India document (1983) titled 'Eliciting public support for wildlife conservation' sowed the seed of a philosophy and practice which finally came to be called 'eco-development'. This had clearly arisen out of a felt need.

A prior baseline survey profiling demographic and socio-economic features of the fringe villages where the EDC is to be established is a *pre-requisite*. The aim of such a venture is economic upliftment of the underprivileged as well as better conservation of biodiversity.

Robust micro planning in full participation with all community sections, specially the SNGs (special need groups), has emerged as another critical ingredient of all round success. The nature of micro planning process necessitates devotion of substantial time and expert facilitation. Hastening of the micro planning process can rob it of its real value and usefulness. Appropriate capacity building of the different players e.g. PA staff, NGOs and members of EDC/EC is a *sin qua non* of success. Similarly, skill enhancement of SHGs in IGAs is essential.

Kuthori Baghmari EDC has been constituted by Kuthori Baghmari village and is situated in between the KTR on the North and the hills of the Karbi Anglong on the south. The village is inhabited by a mixed population and living together for years in peace and tranquility. Agriculture is monsoon dependent and the age old methods of farming have been followed till date culminating into low productivity and production. It has been realized that there are many important issues to be addressed immediately. Livelihood is a major issue to be resolved, of course though they have different priorities altogether. There are a number of youths who want to take up different activities like driving, computer training, mobile repairing, electrician, motor mechanic, etc. For all round development of the Kuthori Baghmari EDC the KTR authority may have a talk with all the concerned line agencies and request them to implement the government schemes for all kinds of socio-economic development of the villages.

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