





# DAORAIBARI ECO DEVELOPMENT COMMITTEE BANSBARI FOREST RANGE

MANAS NATIONAL PARK

MICRO-PLAN (2017-18 to 2026-27)

Prepared by

Daoraibari Eco Development Committee Assisted by

Assam Forest Department &
COMPELO (IIE and RGVN)

May 2017

Approved

Field Director Manas Tiger Project Barpeta Road, Assam.

# **List of Acronyms**

Acronym	Full Form			
APFBC	Assam Project on Forest and Biodiversity Conservation			
AFD	Agence France de Développement			
BPL	Below Poverty Line			
BTC	Bodoland Territorial Council			
COMPELO	Consortium for Micro Planning and Enhancing Livelihood Opportunities			
EPA	Entry Point Activities			
GIS	Geographical Information System			
На	Hectare			
IIE	Indian Institute of Entrepreneurship			
EDC	Eco Development Committee			
Kg	Kilogram			
Km	Kilometre			
Manas NP	Manas National Park			
Manas TP	Manas Tiger Project			
NGO	Non-Governmental Organization			
NTFP	Non Timber Forest Product			
PDS	Public Distribution System			
PRA	Participatory Rural Appraisal			
Rs.	Indian Rupees			
SHG	Self Help Group			
VCDC	Village Council Development Committee			

# DAORAIBARI ECO DEVELOPMENT COMMITTEE

# [Livelihood Development Plan]

# **Table of Contents**

Section No	Heading	Page No
1	Introduction	1
2	Village Socio-Economic Profile	2- 6
3	Livelihood Opportunity Analysis	7-9
4	Livelihood Development Plan	9- 10
	List of Appendices	11- 39

#### 1. Introduction

#### **About the Project**

The vision of the Assam Project on Forest and Biodiversity Conservation (APFBC) is 'to enable sustainable forest and biodiversity conservation and management in Assam through multi-scale integrative planning and involvement of forest dependent communities in target areas and giving fillip to their livelihood activities through sustainable use of forest and non-forest resources'. The project's objective has been stated as: 'In collaboration with the forest dependent communities, to restore forest eco-systems to enhance the forest dependent community's livelihoods and ensure conservation and sustainable use of biodiversity'.

The above project is being mainly funded by the *Agence France de Développement* (AFD) - i.e. the French Development Agency, with co-funding from the Government of Assam. The Assam Project on Forest and Biodiversity Conservation Society (APFBC Society) has the mandate for planning, implementation, monitoring, coordination and management of all the activities under the above mentioned project.

# Micro-Planning & Livelihood Development

In order to promote livelihood activities through market potential based value addition; the present project intends to take up activities like entrepreneurship promotion, product processing value addition and marketing under this project. This has become necessary on account of the pressures on existing forest resources due to the growth of population. There is a need to explore value addition to the existing forest and biodiversity products and services, based on the market potential. In addition, non-forest based livelihoods need to be explored and the capacities of the community members need to be built-up through skills development initiatives.

A consortium comprising of Indian Institute of Entrepreneurship (IIE) Guwahati, and *Rashtriya Gramin Vikas Nidhi* (RGVN) has been formed to implement (*inter-alia*) the micro-planning and livelihood development under the above project. The above consortium has been titled as 'Consortium for Micro Planning and Enhancing Livelihood Opportunities' - COMPELO in short.

As per project guidelines, this micro-plan includes 'various operations of village and forest development livelihood support of forest dependent members and keeping sustainable forest management as the broad objective'. It includes both forest development and livelihood development.

#### Micro-Plan for the Daoraibari EDC

This document gives the Micro-Plan for the DAORAIBARI EDC, which is located in the Baksa district of Assam. The EDC falls under the jurisdiction of the FDTP division of the BTC Circle. The profile of the community is given in the next section.

The present micro-plan has been prepared by members of the community, including both male and female members. This document has emerged as an outcome of a Participatory Rural Appraisal (PRA) process undertaken by the community and personnel of Indian Institute of Entrepreneurship (IIE) Guwahati in 10<sup>th</sup> of April 2017. The micro-plan has been compiled by IIE based on the project guidelines. The document has been discussed and finalized for adoption in May 2017.

2. Village So	ocio-Economic Profile		
Location	The Daoraibari Eco Development Committee (EDC) has been formed to cover the existing community dwelling in Daoraibari village. The area covered by the above EDC falls within the Ghoramara VCDC, Baksa district of Assam.		
	<b>Appendix-1</b> gives the Vill	lage Map.	
<b>Key Information</b>	The key information of the EDC is furnished below.		
	Table-A: Key Information	on of the EDC	
	Name of the EDC	Daoraibari	
	Habitation	Daoraibari	
	Name of Revenue Village	Goshaivita	
	Name of the Gram	Ghoramara	
	Panchayat / VCDC		
	Revenue Circle	Jalah	
	District	Baksa	
	Forest Division	Manas Wildlife	
	Forest Range	Bansbari	
	Forest Beat	Katajhar	
	Year Formed	2014	
	<b>Description of</b>	GPS Coordinates(Centre Point)	
	Boundary of EDC	N 26 <sup>0</sup> 40'45"	
		E 91°5′15″	
		North: Manas Nat	
		South: Pomara Riv	
		West: Manas Nat	
	g FDGD 1.0.1	East: Rupahi Rive	
		•	PRA Exercise in April, 2017 ord-I. (Given at Appendix)
Brief Details of the			***************************************
<b>Executive</b>	The brief details of Executive Committee & General Body of the EDC are contained in the table, which is given below.		
	Table-B: Brief Details of	Executive Commit	ttee & general Body
	Name of President		Mongal Singh Basumatary
	Name of Secretary		Tapan Bargayari
	Name of Treasurer		Sarjan Daimary
	No. of Members Committee	in Executive	Total- 12, Male-9, Female- 3
	Registration NumberMTP/EDC/08 Dated April, 2014		
	No. of Members in the	General Body	One member from each household (64 Nos. HH)

Households & Population Structure	Daoraibari village has 64 households. There is no female headed household in the village. Total population of the village is 310 of which 150 are males and the rest 160 are female members. All the population belongs to ST Community.
	Table-2 of Record-I (Appendix 6) may be referred for further details in the above regard.
	From this, it is inferred that:
	1. The average number of persons in a household is 5.
	2. The sex ratio is 1067 females per 1000 males in the village.
Education & Skills Development	Around 52% of the total population in the village is reported to be literate. Most of the community members have received school level education. On the other hand, relatively fewer households have higher education as well as graduate members in the village.
	Livelihood skills are usually acquired under various settings – formal & informal. In the EDC area, informal means for skills development is the traditional norm. People have traditional skills in the following areas:
	(a) Farming (b) Weaving
	(c) Livestock rearing
	(d) Horticulture
	Although government has been active in promoting formal skills development programmes in the country as well as in the state, the village has receipt very little of the benefits of such programmes that has been carried out in the habitation or in nearby areas.
Soil	The soil is deep alluvial Himalayan wash. This type of soil can support different kinds of crops, as the soil is reported to be fertile on the whole.
	The fast flowing Manas river on entering the plains from the steep hills loses its speed and as a result deposits enormous quantities of boulders, stones, sand, silt and other debris that are carried down by the water and this leads to the formation of alluvial terraces, comprising deep layers of rocks and sands deposits
Water	The Manas River flows through the west of the Park, where it splits into two separate rivers, the Beki and Bholkaduba, to join the River Brahmaputra some 64 km further south. These and five small rivers running through the Reserve carry enormous amounts of silt and rock from the foothills as a result of heavy rainfall, steep gradients and friable bedrock upstream. The two river namely Pomara river and Rupohi river flows in the south and east direction of the project boundary area.
Climate: Temperature & Rainfall	The maximum temperature during the summer is $26.3^{\circ}C \pm 4^{\circ}C$ . The minimum temperature during the winter is $15.6^{\circ}C \pm 2^{\circ}C$ .
Aumun	The climate of the EDC is moist tropical with an annual rainfall between 2800 mm to 3700 mm. About one-third of the rainfall usually occurs during the rainy season (May to September). The village has a high level of relative humidity (over 82 % $\pm$ 4 %) during the rainy season and has a low level in the winter (below 75 %).
Rainfall	mm. About one-third of the rainfall usually occurs during the rainy season (Ma September). The village has a high level of relative humidity (over 82 $\%$ $\pm$ 4 $\%$ ) during

Forest & Biodiversity	The main tree species are Sida, Ajar, Khokan, Gamari, Titasapa, etc found in Manas National Park. Lemon trees are grown in abundant in this EDC village. Some other species such as Jack Fruit, Bamboo, etc. are also grown in the village.			
Land Use Pattern	Appendix-2 gives the land-use pattern of the village. From the same, it is seen that the land-use in the village is as follows:  Paddy field: 58.16 %  Road: 2.47 %  Settlement area: 14.78 %  River: 9.17 %  Tree clad area: 15.43 %  Total area is 90.53 hector.			
Land Holdings	The type of households as per land-holding is given at Table-3 of Record-I. From the same, it is seen that:  • 18.8 % of households are landless (12 HH)  • 3.1% of the households belong to Large farmers (2 HH)  • 53.1 % of the households are marginal farmers (34 HH)  • 25 % of the households belong to small categories(16 HH)			
Livestock	The total number of livestock in the village is 739. The main types of livestock possessed by the households include:  Cows: 158 Goats: 67 Buffaloes: 18 Pig: 52 Poultry: 444 Table-4 of Record-I may be referred to for the details in the above connection.			
Village Infrastructure & Communication Facilities	In any community; the availability of basic infrastructure enables the development of sustainable livelihood options. The present condition of infrastructure in the village is not satisfactory. This is borne out by Table-5 of Record-I, (Appendix-6) which gives the present status of the village infrastructure.  From the above table, the following have been noted with regard to village infrastructure: Physical Infrastructure: The habitation is deprived of basic physical infrastructure like paved road, water supply, Public Distribution System, transportation, etc.  Education & Health Facilities: There is one primary school inside the village. Apart from the basic education facility the community people need to go outside the village for higher education. As per health facility is concern there is no Primary health centre and veterinary heath centre in the village.  Govt. Offices: The government offices (such as Police station, Gram Panchayat Revenue office, Forest Beat office etc.) are located at a considerable distance.			

I I	The details of the agricultural crops grown in the village is available at Table-6 of Record-I. (Appendix-6) The above shows that the following are the main crops grown in the village.  Kharif Crops: Sali, Ranjit, Aijung Rabi Crops: Potato, Chilli, Radish, spinach etc.  Others: Lemon, Betel-nuts, etc.  Most crops are rain-fed.			
I	Rabi Crops: Potato, Chilli, Radish, spinach etc.  Others: Lemon, Betel-nuts, etc.			
	Others: Lemon, Betel-nuts, etc.			
l I	Most grops are rain fed			
	wiost crops are rain-red.			
-	Table-7 of Record-I (Appendix- 6) may be referred to for the production and yield details of the crops grown in the village.			
7	The production and yield of these crops is given as follows:			
	(a) Paddy: Production 4291 Quintal Yield 11.26 Quintal /ha			
	(b) Vegetables: Production 160 Quintals Yield 3 q/ha			
(	(c) Betel Nut: Production 460 Quintals Yield 2.1 q/ha			
	The matter of fodder availability in the village is dealt with at Table-8 of Record-I. The table shows that the main sources of fodder in the village are as follows:			
	(a) Crop residue- Yes (1 to 3 months)			
(	(b) Gazing in forest- Yes (> 6 months)			
	(c) Household Wastage- Yes (>6 months)			
(	(d) Green fodder- Yes (1- 3 months)			
	Table-9 of Record-I shows the location of the different markets from the village. The mai markets used by the community are as follows:			
	(a) Grocery / PDS: Salbari at 5 km away			
	(b) Weekly / Bi-weekly Market: : Salbari at 5 km away			
(	(c) Major Market: : Rupohi at 2.5 km away			
	The water resources are tabulated at Table-10 of Record-I. The main water resources with the water availability is as follows:			
	(a) River (Water Availability: Perennial / Seasonal) (b) Ring Wells (Water Availability: Perennial / Seasonal) (c) Tube Wells (Water Availability: Perennial / Seasonal)			

Energy Consumption	Table-11 of Record-I shows the major sources of energy in the village.			
Consumption	The same have been listed below.			
	(a) Fuel wood: Households Depending: 64 Nos. Source: Homestead and forest area			
	(b) Kerosene: Households Depending: 61 Nos. Source: Open Market			
	(c) LPG: Households Depending 07 Nos. Source: Agency			
Socio-economic	Social set-up: The village is inhabited by Bodo community and they are from schedule tribe.			
status	They mainly observed two religions Hindu and Christian.			
	Economic Condition: The economic position is not satisfactory. The main livelihoods are			
	Farming, Daily wages, Horticulture, Livestock rearing etc. Most households earn Rs. 60,000			
	to Rs. 1, 60,000 per year.			
	There is some migration of the youth and others for livelihoods.			
	Additional details are available at the next section.			
Impact of wild life area	Positive impacts			
	Soil and water conservation			
	Economic benefits from tourism			
	Environmental improvement			
	Negative impacts			
	Human wild life conflict			
	Cattle/crop residue			
	Damage of property by wild animals			
Maps	Appendix-1 & 2 gives the following maps, based on PRA exercise:			
	Village Map			
	<ul> <li>Village Social Map (with the names and particulars of members in PRA)</li> </ul>			
	Village Resource Map			
	Venn Diagram			
	Chapatti Diagram			

3. Livelihood Opp	ortunity	Analysis		
PRA Exercise	Team from IIE Guwahati carried out PRA exercise in DAORAIBARI village as follows:			
	Date: 10 <sup>th</sup> April Location: Daoraibari L. P. School, Daoraibari			
	Numbers Present: 21			
	Numbers Present: 21			
		sence of: Villa	ge Headman, community mem	bers, Forest Department personnel,
	etc.			
Objective of PRA	data a	•	· ·	onditions and obtain other primary velihood options and the forest
Tools Used &	Differe	ent tools were us	sed and outcomes obtained. The	ese include:
Outcomes of the	Social	Mapping		
PRA		Ranking		
		ine review		
		ality of Liveliho	oods	
	Venn L	Diagram		
	Appen	dix-3 furnishes	detailed information of the abo	ve
Ranking	Rankin	g exercise has b	peen done for the following:	
	<ul><li>Livelihoods &amp; Skills Development</li><li>Entry Point Activities (EPA)</li></ul>			
	Ranking of EPA			
	Rank	Village EPA	Details	Probable source of
		as ranked	(Appendix-3 has additional particulars)	funding/ deptt.
	1.	Community Hall	Community meetings can be organized properly.	Panchayat & Rural Development.
	2.	Weaving	A center with training facilities which link to mass consumption	APFBC
	3.	Irrigation	For agriculture activities	Irrigation Dept., Govt. of Assam
	4.	Sanitation	Providing HHL (House Hold Latrine)-low cost, septic and sanitary type.	Swachh Bharat Mission/PHE
	5.	Education	Class room extension	APFBC

opportunities	Agriculture & Horticulture		
	Agriculture & Horticulture		
	Weaving		
A • 14 0	Additional discussion about the above has been given below.		
Agriculture & Horticulture	Table-12 Under Record-2 may be seen in this connection for opportunities in the areas of agriculture and horticulture.		
	The main constraints are:		
	<ul> <li>(a) Lack of barrier for wild animals.</li> <li>(b) Lack of irrigation facilities</li> <li>(c) Lack of agricultural infrastructure, modern tools and equipment's such as tractors, etc.</li> <li>(d) Non usage of high yielding variety of seeds etc.</li> </ul>		
	The opportunities are:		
	<ul> <li>(a) Application of HYV seeds</li> <li>(b) Provide irrigation facilities</li> <li>(c) Organic farming increases productivity</li> </ul>		
	The suggested programmes are:		
	<ul><li>(a) Organic farming training</li><li>(b) Development of solar lights</li></ul>		
Weaving	Table-13 Furnishes additional information about opportunities for Weaving.		
	The main constraints are:		
	<ul><li>(a) Unable to buy raw materials from market due to poor financial condition.</li><li>(b) Lack of modern scientific knowledge on machineries, tools.</li><li>(c) Middleman in selling the products.</li></ul>		
	The opportunities are:		
	(a) Higher income from upgraded weaving design.		
	<ul><li>(b) Market Exposure</li><li>(c) Increase in demand</li></ul>		
	The suggested programme is:		
	(a) Training on modern looms		
	(b) Design clinic schemes		
NTFP	All village is located adjacent to protected area, there is no scope for collecting NTFP		

Credit Facility	Table-16 under Record-2 discusses this aspect.			
	The main constraints are:			
	<ul><li>(a) Financial exclusion</li><li>(b) Higher rate charged by the private money lender.</li><li>The opportunities are:</li></ul>			
	a) Setting up modern financial institution The suggested progarmme is:			
	Awareness programme			
Strategic Interventions	1. Agriculture & Horticulture: Organic farming, Tractor operation training, Agriskill development programme, Training on HYV application, bio fencing			
	2. Weaving: Training Modern looms, Design clinic scheme.			
	3. NWFP: No scope			
	4. Specialized skills: Training on Modern Tools and Equipment			
	5. Credit facility: Setting up modern financial institution in the area			

4. Livelihood Dev	elopment Plan		
Livelihood	Framework of livelihood Opportunity Analysis has been done with the help of the		
opportunity Analysis	following criteria:		
	A) Livelihood assets		
	B) Livelihood context		
	C) Priority ranking on potential livelihood		
	The livelihood situation of Daoraibari EDC has been analyzed during the PRA exercise using sustainable livelihood framework of DFDI (Department of Funding for International Development). The existing livelihood situation of EDC is outlined in terms of –		
	Natural Capital		
	Physical Capital		
	Social Capital		
	Human Capital		
	Financial Capital		
Natural Capital	The present EDC is under the jurisdiction of Manas Reserve Forest and two streams flow in both the sides of the EDC.		
	For farming purpose and for livestock rearing, the villagers use the stream water. Villagers use the ring well and tube well for drinking water.		
	They collect leafy vegetables from the forest along with some seasonal fruits.		
	(Refer table 10, 11 of Appendix 6, table 3 of FDP for further details)		

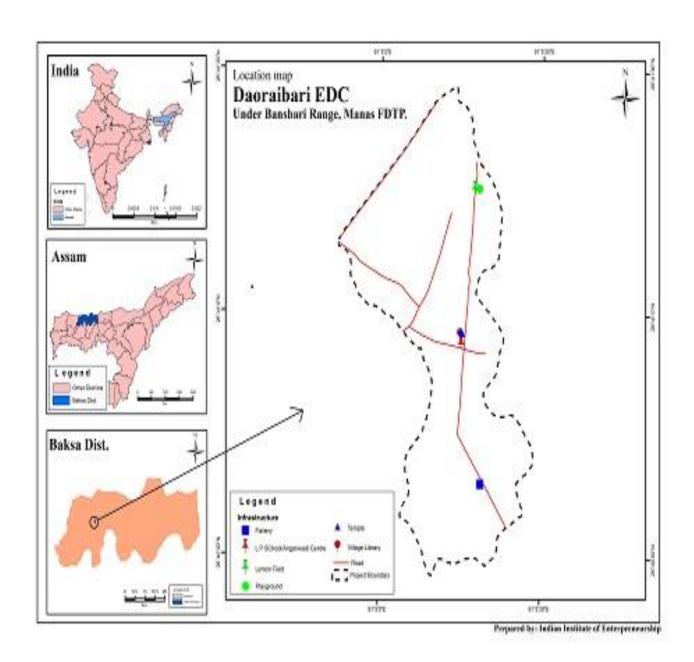
Physical Capital	Majority of the households in the DAORAIBARI EDC are involved in farming of Betelnuts and are categorized as marginal farmers.
	(Detailed land holding pattern is described in the table 3/annexure 6.)
	The village has 50 numbers of semi pucca houses and remaining houses are pucca houses. Among the various sources of energy consumption such as kerosene, electricity and LPG, villages depend on firewood and kerosene for household and other uses.  There are only one L. P. School and Anganwadi Centre available in the village. In case of water sources, there are 64 numbers of Tube well, 6 numbers of Ring well and two numbers of stream.
Social Capital	The villagers are not fully involved in the EDCs functioning due to lack of awareness on their roles, functions, and specific benefits they are going to receive.
	Three numbers of Self-help groups (SHGs), one number of Farmer's group and Youth Club are present in the village. The village has no community hall inside the EDC.
Human Capital	52 per cent of total population of the EDC are reported to be literate whereas 48 per cent are illiterate. Most of the people (about 30 per cent) have crossed the primary level education. Moreover 24 per cent have passed higher secondary education and only 6 per cent population is completed graduation.
Financial Capital	There is no government bank available in the EDC area. One bank is available at Salbari area which is 5 km away from the EDC. However, villagers lend from informal lending
	groups such as SHGs, relatives etc.
	48 per cent have bank account in commercial banks, but they are not aware of the benefits of financial inclusion. More over nearly 19 per cent population have health insurance.
Livelihood Context	Livelihood activities of the Daoraibari EDC are identifies on the basis of following criteria:
	<ul> <li>(a) Contribution of particular livelihood activity in the total income of the EDC</li> <li>(b) Percentage involvement of income group in a particular livelihood activities.</li> <li>(c) Priority ranking of the potential livelihood activities</li> </ul>
Contribution of	(a) Farming of paddy, Betel nuts farming
livelihood activity in the total income of the EDC	
	(d) Service
Involvement of income	(e) Small Business  As observed from the household survey and PRA activity that all the households are
group in a particular	involved in the above mentioned activities in some or other parts of the year.
livelihood activity	Primary livelihood: Farming of paddy, Daily wage labour
	Secondary livelihood: Betel nuts farming, livestock rearing, Small business.  Some service sector employee are also there.
Priority ranking of the	Priority ranking of Livelihoods & Skills Development
potential livelihood	1. Weaving
activities	2. Farming
	3. Livestock rearing
	4. Wage Labour

# **List of Appendices**

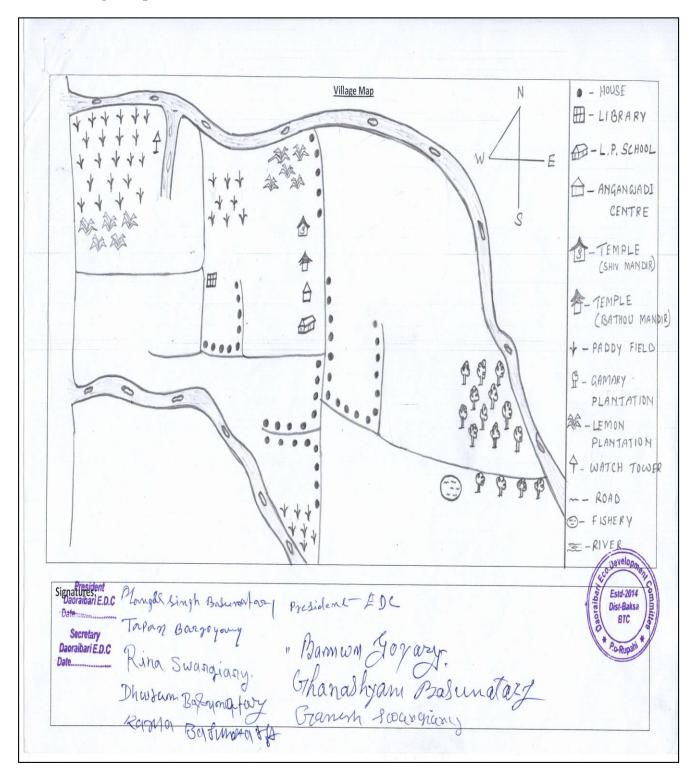
Appendix No	Heading	Page No
1	Maps	12- 14
	Location Map	12
	Village Map	13
	Village Resources Map	14
2	Land Use Map of Village (GIS)	15
3	PRA Exercise	16- 26
	Social Mapping	17- 19
	Wealth Ranking	19- 20
	Time Line review	20
	Seasonality of Livelihoods	21- 22
	Venn Diagram	23
	Chapatti Diagram	24
	Priority Rankings-EPA and Potential Livelihoods	25- 26
4	Photographs	27- 28
5	List of EDC Executive Members	29
	EDC Registration Certificate	30
	List of Training Participants	31
6	<b>Filled Up Tables</b> (Proforma-1 to Proforma-4) Table Nos. 1-16	32-39

# Appendix 1

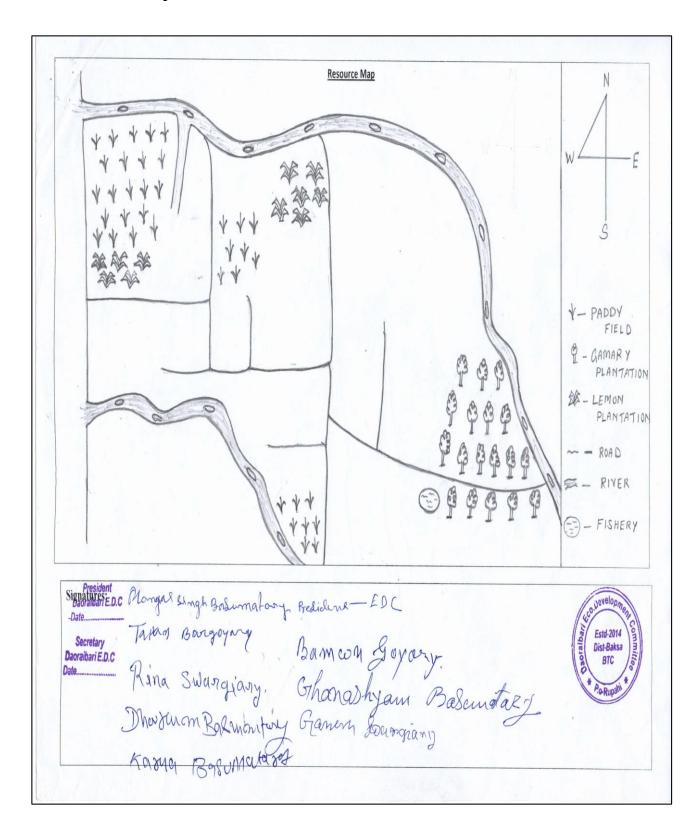
## 1. Location Map:



#### 2. Village Map

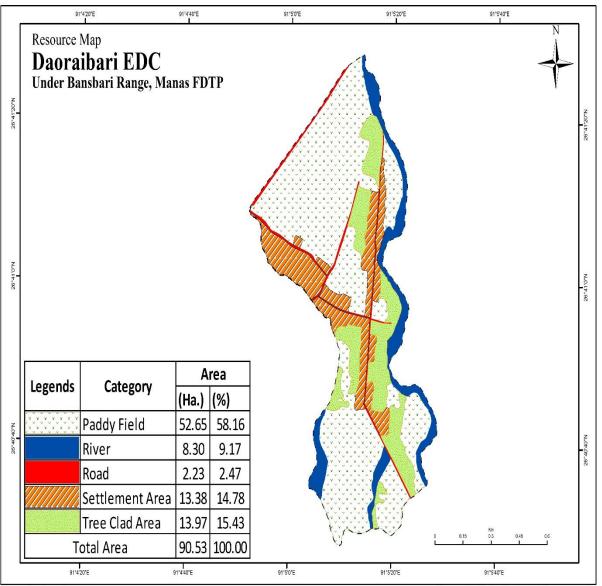


#### 3. Resource Map:



# Appendix 2

# Land Use Map of GIS



Source: Google earth Imagery

Prepared by: Indian Institute of Enterpreneurship

# Appendix 3

## PRA ACTIVITY

# Location and Timing of Participatory Rural Appraisal:

Numbers of participants :	21
Time:	10.30 am, 10 <sup>th</sup> April 2017
Venue:	Daoraibari L. P. School (Daoraibari Village)

Table -3.1Brief about the villages under Daoraibari EDC

Sl. No.	Name of the Village	No. of households	opulation				
1101			Total	Male	Female		
1	Daoraibari	64	310	150	160		
	Total	64	310	150	160		

Source: Field Survey

Table – 3.2 Education profile Daoraibari EDC

Illiterate	Primary	Middle	High	Higher	Graduate	Total
		School	School	Secondary		
150	50	30	31	39	10	310

Table – 3.3 Income category of Daoraibari EDC

Income Category(in Rs)Yearly	No. of Households
60000- 80000	12
80000-100000	28
100000- 120000	10
120000- 140000	9
140000- 160000	3
>160000	2

Different PRA tools used under the exercise of PRA technique are:

- a) Social Mapping
- b) Wealth Ranking
- c) Time Line Review
- d) Seasonality Analysis
- e) Chapatti diagram

#### 3.1 Social Mapping:

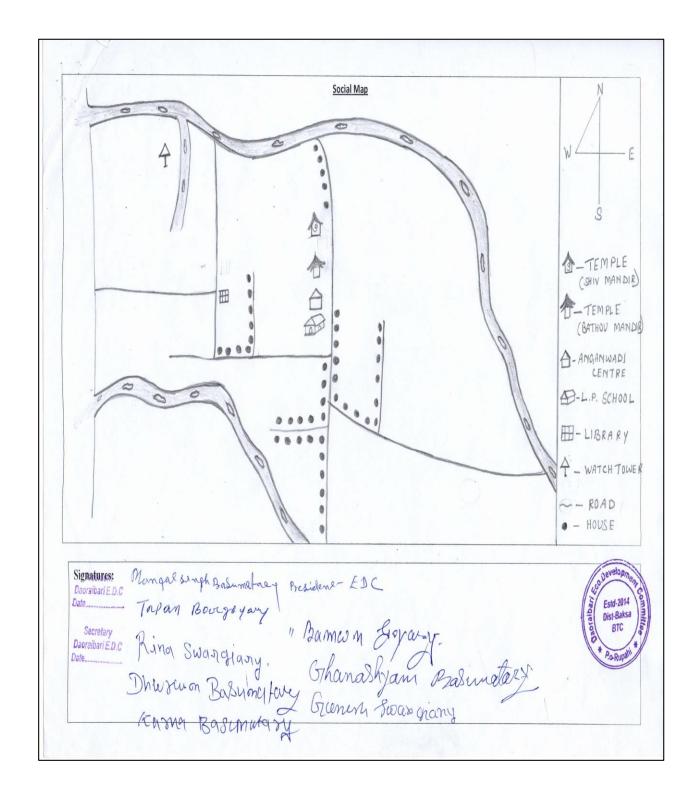
Social mapping is used to visualize the socio-economic aspects of the Daoraibari EDC where the housing patterns of the households, the numbers of schools, social infrastructure, and religious beliefs among households. Due to time constraint and bad weather we have to skip the transect walk. The villagers were enthusiastic about the mapping process and they actively participated in the process.

At first, the people of villagers were asked to draw the main roads of the village and then asked them to locate their houses and locate the important social places and government offices with help of the PRA team members. Two of them voluntarily came out to draw and they were assisted by other villagers and the team members. All the villagers spotted their households in the map.

Table 3.2: Information about the villages

<b>Social Information</b>	Village	Daoraibari
	Total population	310 nos.
	Male	150 nos.
	Female	160 nos.
	Total households	64 nos.
	Numbers of Pucca Houses	14 nos.
	No of thatch house/Kutcha House	-
	No's of semi pucca house	50 nos.
Land Marks	Bridges	Nil
	Stream	2 nos.
	River	Nil
	PHE	Nil
	Community hall	Nil
	Community Hand pump	Nil
	Well	6 nos.
	Embankment	Nil
	Check Dam	Nil
	Play Ground cum Grazing filed	1 nos.

#### Social Map of Daoraibari EDC



#### **Findings of Social Map:**

The participants of social mapping have identified all the 64 households out of which 50 households were semi pucca house and rest 14 households were pucca. There are fifteen household who are below poverty line and all the households have their own MGNERGA job card. Apart from the individual households, important places like LP school, Anganwadi centre, Temples, playground, stream and bridges were mapped out. All the people belongs to the village is Bodo community which are of schedule tribe caste.

Main sources of drinking water for the villagers are tube wells and it is available in all the households. Moreover some families have Ring wells too. The Provision for Education facility is not satisfactory. There is only one primary L. P. School but there are no ME and High school within the village.

#### **Learnings:**

All the villagers used firewood as primary source for their cooking purposes, but few of the households have LPG connection. The villagers are not completely dependent on the forest resources for their daily livelihood activities. Though electricity is available inside the villages but its presence is negligible due to continuous power failure for more than 4-5 hours per day. The villagers of the Daoraibari EDC have to move Salbari which is at a distance of 5 km for their weekly marketing activity. Agricultural and livestock are partly damaged by the wild animals that come from the national park as there were no social fencing constructed throughout the area.

The main institutions such as ME school, High school, Primary Health Centre, Bank along with Post Office is located at Salbari which is at a distance of 5 km away from the village.

The villagers of the EDC are fully dependent on crop residue, household wastages, grasses, and green fodder.

#### 3.2 Wealth Ranking:

Wealth ranking, or well-being ranking, involves community members identifying and analyzing the different wealth groups in a community. It enables evaluators to learn about the socioeconomic stratification of project beneficiaries and local people's definitions and indicators of wealth/wellbeing. Wealth ranking was done with the help of the following criteria:

- a) Land holding
- b) Occupation

The analysis revealed that about 18.75 percent people were poor, 78.13 per cent were middle class family and the rest 3.13 percent were rich people. Poor people were mainly engaged in daily wage labour and sometimes they take lease (adhilua) others agricultural land.

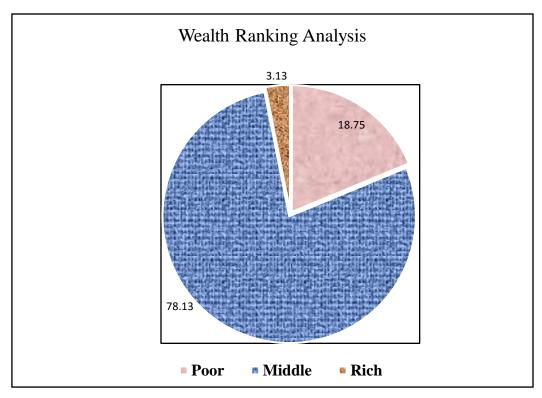


Figure 3.1: Wealth Ranking

## 3.3 Timeline Review

In order to know the past important cum historical events over time, the team has conducted the timeline analysis. The team members discussed about the local events to the village head, elderly persons and also to some young people to have an idea about how they dealt with those situations and what was the impact of those events on their lives as well as on the development of the village. Our time line illustrates the following events.

Year	Event	Type
1961	Primary School established	Construction
1980	Severe Flood in the village.	Destructive
1989	Elephant killed the people	Destructive
2012	Youth migrated to other places in search of livelihood activity	Livelihood

#### 3.4 Seasonal Mapping of livelihood activities:



Figure 3.2: Seasonal Map of Daoraibari EDC

Seasonal calendars drawn by the local people are very useful means of generating information about seasonal trends within the community and identifying periods of particular stress and vulnerability.

Best undertaken in the context of a group discussion (to help verify the information obtained), seasonal calendars are often drawn on the ground with the relative trends depicted using stones or seeds, as in a preference-ranking matrix.

In other instances, simple line graphs can be drawn to show seasonal increases or decreases. A whole series of seasonal variables can be included in one calendar to give an overview of the situation throughout the year. These variables can include: rainfall, crop sequences, labour demand, availability of paid employment, out-migration, incidence of human diseases, expenditure levels, and so on. Important periods, such as festivals, can also be shown.

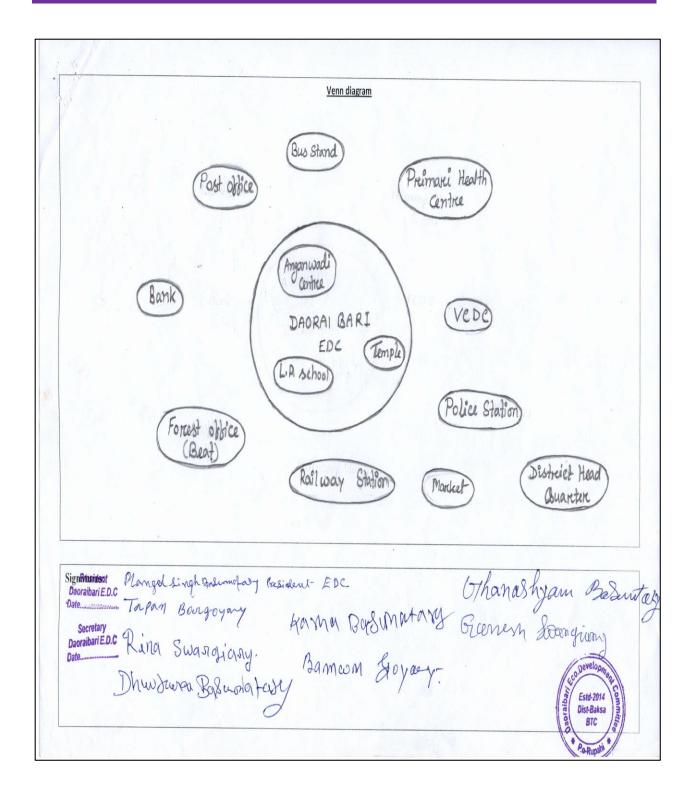
Seasonal mapping mainly covers the seasonal variation of crops. In seasonal mapping, we considered agricultural crops and the timing of three activities viz. showing, cropping and harvesting criteria and collected the details throughout the year.

From the seasonal mapping, it has been noticed that the main crops grown in the village are Sali rice, Betelnut, Lemon, etc. The FGD conducted revealed that other major livelihood options available in the EDC are Livestock rearing (Piggery, poultry), weaving, daily wage laborers, mason, tailoring, carpentry which are not seasonal in nature but is showed in the seasonal mapping.

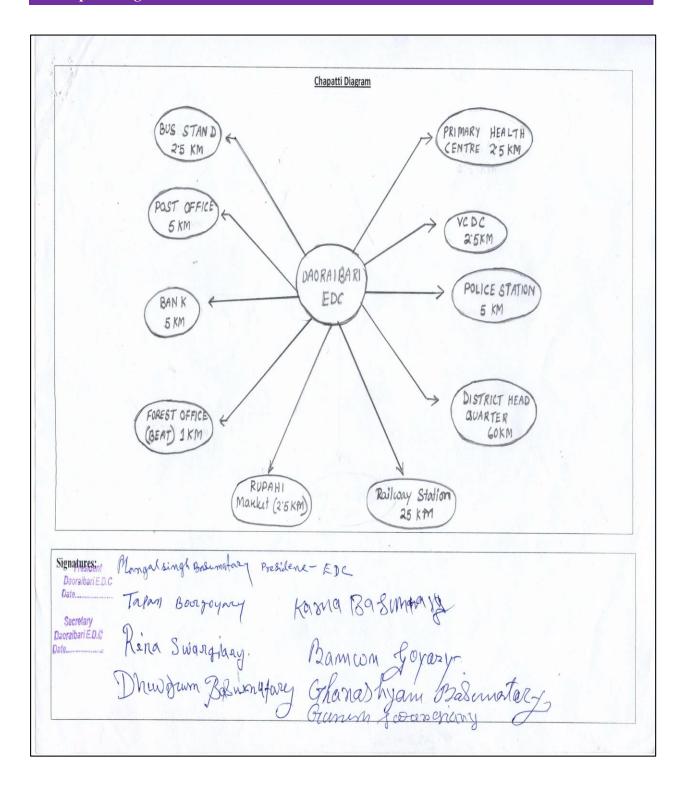
Table 3.4 Seasonal cropping pattern

Categories	Types	Time of Activity							
Farming		Sowing/Planting	Harvesting	Plucking					
	Sali	May-June	Oct - Nov	-					
	Vegetables	Nov-Dec	Feb-Mar	-					
	Betel-Nut	Jul - Aug	-	Feb-May					
	Lemon	Throughout the year							
	Weaving								
	Livestock								
	Rearing								
	Daily Wage								
Non-Farming	Earning		Throughout the year						
·· • • • • • • • • • • • • • • • • • •	Masonry								
	Carpentry								

#### 3.5 Venn Diagram



#### 3.6 Chapatti Diagram



# **Priority Ranking- EPA:**

									-24						
		Roa d	Drinkin g water	Electricit y	Hospita I	veterinar y	Communit y hall	irrigatio n	sanitatio n	Educatio n	Marke t shed	Handloo m	Marks scorin	Positio n	
		Α	В	С	D	E	F	G	Н	1	J	K	ь		
oad	Α	4	A	A	D	E	F	Gı	Н	ī	A	K	3	7 M.	
rinking vater	В		4		D	E.	F	6	Н	Ī	J	К	0	914	
lectricity	С			<	D	E	F.	G	Н	Γ	J	K	0	gn.	
ospital	D				×	D	F	G.	H	E	D	k.	5	54	
eterinary	Ε					, t	F	Gr.	. Н.	1	E	k.	4	Ch.	
ommunit hall	F						7 *	F	F	F	F	F	10	151	
rigation	G						7	K	6	G	61	k.	8	3-9.	
anitation	Н								K	Н	1-1	K:	7	4 m.	
ducation	1									K	I	K.	5	5 M.	
larked ned	J							4			К	K	2	gh.	
andloom	K											K	9	2 0	
7. R DI	in	al Blor	Swar Swar n Bac	eoficing	Georetaryoje Liegoloogo	eg Ĝ	- EDC	Date	ED.C					Development C	
K	B	ma	Bai	GOY O	J.		natar						Saoraibari		mmitte

# **Priority Ranking- Potential Livelihood activities in the EDC:**

				Š								
					Priori	ty Ranking o	of Liveliho	od Activities	**			
ivelihood Activi	ties	Missing Mil	Jen To	Livetide	art das	Companished	(ciliso)	production of the second	- Antigrain	Log briegy	Marks	Rank
		A	В	С	D	Е	F	G '	Н	I		
grientine	A	X	A	A.	A	A	A	A	A	A	8	184
Leavig.	B C		X	B	ß	E	B	-B.	В	B	6	2rd
age Corbon	D			X	4	C.	C	9	C	C	5	3 Kd
penlary	Е				X	E	F	D	D	۵	3	5th
iloning	F			- 1		X	X	G <sub>E</sub>	F	I	4	4th
nticulture	G							X	G	I	3	5th
d prouss	H								×	I	3	isth
or photos	1	K.							,	X		0.11
nt Lockage	lsin	ngh B nzi	-next or 1	Presi	deni-	- EDC	The second property of			O DI sono e a d	1	Estd-2014 Dist-Baksa BTC  # Populi #
EDC Knga P.D. Trean Ring Dhusta Kama	Bu	argoyo largia	my "	Ba. GHA	mw ana	y Soy Shyan	ary. 1 Ba	Suma	tar-	Conen	Swangian	
Kama	R	sa grando	149 SH		· · · ·				1			

# Appendix 4 PHOTOGRAPHS



Awareness in Daoraibari EDC



Village Map in PRA activity

Some Snaps while interacting with the Village people during Awareness and PRA activity



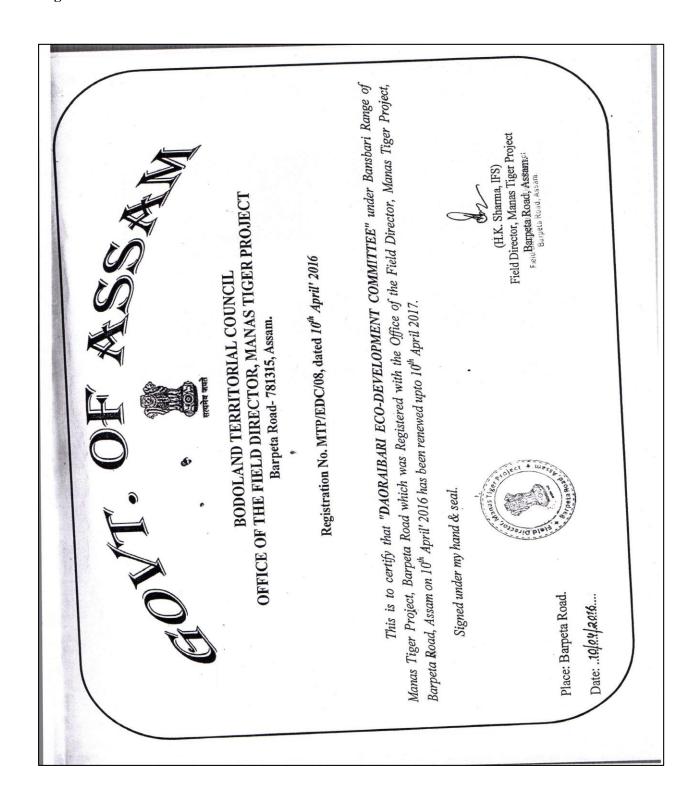


# Appendix 5

# LIST OF EDC EXECUTIVE MEMBERS

	Designation	Sex	Age
ngal Singh Basumatary	President	M	48
suma Kherkatary	Vice President	M	23
an Bargayari	Secretary	M	29
hen Goyary	Member Secretary	M	30
nesh Swargiary	Member	M	53
aaisyam Gayary	Member	M	30
en Goyary	Member	M	35
gion Daimary	Member	M	28
jib Basumatary	Member	M	27
ari Basumatary	Member	F	24
nika Swargiary	Member	F	22
nani Basumtary	Member	F	24
	jib Basumatary ari Basumatary nika Swargiary	jib Basumatary Member ari Basumatary Member nika Swargiary Member	jib Basumatary Member M ari Basumatary Member F nika Swargiary Member F

#### **Registration Certificate of Daoraibari EDC:**



# **List of Training Participants:**

	List of Particip	ants			srd-2014
SI. No.	Name of Participant	Sex	Age	Qualification	BIC )
1	Sri Himani Basumatary	female	35	C1083- E *	Rapahi *
2	". Janali Bosumafary	do	26	&	Rapan
3	"Abala Basematary	do	26	- 7111	
4	" fax & si Basumatorry	do	29	·- ×	
6	" Rimala Masermorany	do	25	3	
6	Kanika Daimary	do	29	~11	
7	Dina Bamaria	do	32	× -	
8	Janoki Drimdry	de	35	. 1	
7	Charati Daimary	do	25	will	
10	Bibari Basematan	do	32	100	
11	Maina Yayary	do	36	nice	
12	Marju Gayary	do	38	DAY.	
13	Pulsai Gayary	do	35	N. Til	
14		de	28		
16	Rita Daimary	do	38	Nill	
17	Rasina Ferratary	do	26	12	
19	Sa ampa Kerkatary	do	28	×	
20	Sushile Basumatary	do	32	3011	
DI	Sushila Basuragtory	do	28	(2	
22	Nilian a Basermatary	do	25	Will	
23	Jaymati Basumatary	do	22	6.111	
24	Renu Gayary	do	28	+2	
25	Runju Basumataay	do	26	7111	
26	Sabita Gayary	do	37	4	
27	Larque Ram Chiary	do	28	Will	
28	Rahiri Balumatary	de	35	prin	
29	Pamila Balumatary	do	38	Nill	
30	Peter of Basemotary	do	30	nin	
31	Sabitai Daimary	do	35	reill	
31	Latita Bakumataly	do	36	~****	
33	Biner Gayary	do	28	Coll	
34	Miner Ramchiary	do	38	Nill	
36	Parchari Marzary	do	38	Ilin	
36	Pramita Ps asumatary	do	38	rill	
37	Maori Balierratas,	do	32	4111	
39	Sarmila Babumutary	de	22	prict	
60	Jexi Basumatary	do	38	Nill	
40	201111111111111111111111111111111111111		30	1	
					TAPPAN Date HE
-	Bresident Daoraibari E.D.C				The County

# Appendix 6 (Record I)

## Table 1: Basic Data of the Village:

Table 1: Basic data of the EDC

Name of the EDC	Date of Establishment of the EDC	No. of Members in Executive Committee	Name of President	Name of Secretary	Money in village Dev. Fund	Contribution per family or per person	Social fencing used Yes/ No	Remarks on special attainments	Grading % of success of EDC by RFO
Daoraibari	2014	17	Mongal SingH Basumatary	Tapan Basumatary	-	-	Yes	-	-

## Table 2: Village wise population data:

Table -2: Demographic status of the project villages

Sl No.	Name of village	House holds		ST		OBC		SC		Sex ratio (per 1000	Avg. HH Size
110.	vinage	(No.)	Total	Male	Female	Male	Female	Male	Female	Male)	(Approx.)
1	Daoraibari	64	310	150	160	-	-	-	-	967	1000
	Total	64	310	150	160	-	-	-	-		

Source: Field survey report.

#### Table 3: Village wise farmer category on the basis of landholding:

Table3 Village wise farmer category on the basis of land holding

Sl	Name of the village	T	Type of famer according to land holding						
no		Large farmer >10 ha.	Small farmer 2-10 ha.	Marginal farmer (household) <2ha.	Land less (household)	Total			
1	Daoraibari	2	16	34	12	64			
	Total	2	16	34	12	64			

# Table 4: Livestock Population:

Table 4: Cattle Population of the EDC

Sl. No.	Name of the village	Village wise no of cattle's or type of animal							
110.	Vinage	Cows	Buffaloes	Goat	Duck	Hen	Pig	Total	
1	Daoraibari	158	18	67	-	444	52	739	
	Total	158	18	67	-	444	52	739	

## **Table 5: Village wise Infrastructure:**

Table 5 Showing village wise infrastructure

Sl no	Infrastructure	Location	Distance from village
1	Bus Stand	Salbari	5 km
2	Primary Health Centre	Salbari	5 km
3	Primary School	Daoraibari	Inside Village
4	Middle School	Rupohi	3 km
5	Post office	Rupohi	3 km
6	High school	Rupohi	3 km
7	Bank	Salbari	5 km
8	Anganwadi centre	Daoraibari	Inside Village
9	Police Outpost	Salbari	5 km
10	Forest Range Office	Katajhar	1 km
11	Railway Station	Sarupeta	20 km
12	College	Salbari	5 km
13	Police Outpost	Salbari	5 km
14	Weekly Market	Salbari	5 km
15	VCDC	Ghoramara	8 km

## Table 6: Agricultural crops

**Table 6 Agriculture Crops** 

Particulars	Ra	in Fed	Irrigation		
	Name of the crop	Area (in bigha.)	Name of the crop	Area (in hc)	
Kharif	Sali, Ranjit Aijung	, 374 Bigha	NA	NA	
Rabi	Potato, Chilli Radish, Spinacl etc	,	NA	NA	
Others	Betel nuts	16 Bigha	NA	NA	

# Table 7: Crop production profile of Daoraibari EDC

Table 7 Crop production profile of Daoraibari EDC

Type of crop Total		No of household	Average production	Area under
	Production	growing	(quintal/ hc)	crop
	(approx.) in		approx.	(hc) approx.
	quintals			
Paddy	4291 Quintal	52	11.29 q/ha	49.9
Vegetable	160 Quintal	10	9 q/ha	5.9
<b>Betel Nuts</b>	460 Quintal	64	2.1 q/ha	2.1

## **Table 8: Fodder Availability (animal)**

Table 8 Fodder availability of the EDC

types	1-3 month	3-6 month	>6 month
Crop residue	Yes		
Trees fodder		Yes	
Grasses			Yes
Green Fodder	Yes		
Grazing in Forest			Yes

## Table 9: Location of market from the village

Table 9: Location of market from the village from the village

For Purchase	Location	Distance from village if in other village (in km)
Grocery shop	Salbari	5 km
Weekly Market	Salbari	5 km
Major Market	Rupohi	3 km
Forest Corporation Sale Depot.	NA	-
Tendu Patta PHAD	NA	-
Fish Market	Rupohi	3 km
Medicinal Plant collection Centre	NA	-
Forest Corporation  Medicinal plant Collection Centre	NA	-

## **Table 10: Water Resources Facility:**

Table 10: Showing the water resource facility available in the village

Water source	Number	Availability of water	Uses
Stream	2	Seasonal	Irrigation, livestock rearing
Tube well	62	Perennial	Drinking, Domestic uses
Ring Well	6	Perennial	Drinking, Domestic uses

#### **Table 11: Energy consumption:**

Table 11: Showing the Energy Consumption of the EDC

Type of Fuel	Number of household depending	Number of months dependent	Sources (local, village, forest, other sources)	Major/ Secondary
Fuel wood	64	Whole year	Homestead/ forest	Major
Kerosene stove	61	Whole year	Market	Secondary
Gobar/Bio gas	NA	-	-	-
LPG	7	-	Local LPG Agency	Secondary
Electric Healer	NA	-	-	-

## RECORD: II

# LIVELIHOOD OPPORTUNITY ANALYSIS

# Table 12: Agriculture and Horticulture:

Table 12: Showing the agricultural and horticultural status

Constraints	Reason	Opportunities	Programmes
Low Production	1. Destruction of crops by the wild Animals.  2. Traditional ways of cultivation and non-usages of high yielding seeds.  3. Lack of irrigation facilities and very negligible use of fertilizers and pesticides, insecticides.  4. Lack of agricultural infrastructure, modern tools and equipment's viz, power tillers, tractors, etc.	<ul> <li>Introduction of new and advanced technology.</li> <li>Application of proper and controlled pesticides and insecticides.</li> <li>Well-structured training programme. The villagers are inherited with the skill of cultivation.</li> <li>Uses of high yielding seed programme.</li> </ul>	<ul> <li>Agro skill development programme.</li> <li>Training on insecticides, pesticides, hybrid cultivation.</li> <li>Tractor operating training.</li> <li>Organic farming</li> <li>Use of Vermicompost.</li> </ul>
Storage and Production	<ul><li>1.Lack of storing place.</li><li>2. Lack of cold storage facilities due to non-availability of electricity.</li></ul>	<ul> <li>Helpful in preserving unsold products for a longer periods of time.</li> <li>They can store their product and sell it when there is a higher demand.</li> </ul>	<ul><li>Packaging</li><li>Transportation and distribution.</li></ul>
Marketing	1. Due to lack of marketing knowledge, they have to solely depend on traditional system of selling  2. Less contact with the direct market; much dependency upon middle man.  3. Lack of transporting facilities for carrying products.	<ul> <li>More knowledge about the current market situation as well as the current value of their products.</li> <li>Generate highest market price by removing middle men.</li> <li>Smooth transportation facility will help the farmers</li> </ul>	• Buyers sellers meet • Convergence of schemes.

	to carry their products	
	to the nearby markets.	
	• Will help to sell their	
	products outside of	
	the state, as the EDC	
	is located in Assam	
	West Bengal border	
	and Bhutan border is	
	also not far from it.	

# Table 13: Livestock

## Table 13: Livestock

Constraints	Reasons	Opportunities	Programme
Less gazing	Not Applicable	-	-
land			
Availability of	Not Applicable	-	-
Fodder			
Veterinary care	No Veterinary care	Training on minimum	-
facility	facility available	veterinary care facility	
Production of	No scientific knowledge	Training on milk	-
milk and dairy	on cattle rearing to	production	
products	increase milk production		
Milk market	No proper market facility	Suitable market for	-
with market		selling	

# Table 14: NWFP

## Table 14: NWFP

Constraints	Reasons	Opportunities	Programme
Less collection	Not Applicable	Not Applicable	Not Applicable
Unsustainable extraction	Not Applicable	Not Applicable	Not Applicable
Low rates	Not Applicable	Not Applicable	Not Applicable
Value addition	Not Applicable	Not Applicable	Not Applicable

# Table 15: Specialised skill

Table 15: Specialized skills: Weaving

Constraints	Reasons	Opportunities	Programme
Raw material availability	1. Non-Availability of Raw Materials within reachable location (market 25 km away)	• Common place for setting a raw material storage	Setting up a raw material bank
Product quality	Lack of using modern equipment like jakart machine.	<ul> <li>As the weavers are equipped with traditional skill and introduction of new technology will help increasing both production and income.</li> <li>Developing Quality Products for new market exploration.</li> </ul>	<ul> <li>Training on Modern Tools and Equipment.</li> <li>Providing modern technology to the villagers</li> </ul>
Marketing potential	<ol> <li>No standardized market</li> <li>No pricing policy No linkage with the institutional buyers No Product</li> </ol>	• Exploring new markets with diversified products	• Providing a bulk buy arrangement of the finished product with institutional buyers.
Credit facilities	1. Avail credit facility through SHGs. Unaware of the development schemes of banks and government	<ul> <li>Make financial institutions in touch with the community people for building trust among the members to avail credit facility.</li> <li>Financial assistance by the Govt.</li> <li>Providing easy access to credit.</li> </ul>	<ul> <li>Linkage with customer service point by linking community people through financial institution.</li> <li>Microfinance, Term Loans, Working Capital Arrangement.</li> </ul>
Product Diversification	<ol> <li>No Product</li> <li>Diversification or New Product Development. Lack of concept for product diversification.</li> </ol>	Developing Demand Based Products, as per the needs of the modern day market.	• Skill Up gradation & Training on New Product Development and Product Diversification.

# Table 16: Credit facility

Table 16: Credit facility

Constraints	Reason	Opportunities	Programme
Ineptness	Nil	• Setting up modern financial institution in the nearby areas.	-
Rate of interest	1. Higher lending rates charged by the private money lender	• Subsidized credit arrangement	-
Availability of loan	1. Fear of risk taking lack of knowledge of documentation	Start-ups entrepreneurial venture	-
Mortgage difficulty	1. Unavailability of proper documentation of mortgaged property.	Proper awareness about documentation in the area	-