

# RAJABIL ECO DEVELOPMENT COMMITTEE MANAS TIGER PROJECT BANSBARI FOREST RANGE

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

Prepared by Rajabil Eco Development Committee

> Assisted by Assam Forest Department & COMPELO (IIE, RGVN and CML)

> > May 2017

Approver

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			
втс	Bodoland Territorial Council			
COMPELO	Consortium for Micro Planning and Enhancing Livelihood Opportunities			
ЕРА	Entry Point Activities			
GIS	Geographical Information System			
На	Hectare			
IIE	Indian Institute of Entrepreneurship			
EDC	Eco Development Committee			
Kg	Kilogram			
Km	Kilometer			
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			

# **RAJABIL ECO DEVELOPMENT COMMITTEE** FIELD DIRECTOR, MANAS TIGER PROJECT

Micro-Plan for 10 Years [Livelihood Development Plan]

# **Table of Contents**

1. Introduction	1
2. Village Socio-Economic Profile	
3. Livelihood Opportunity Analysis	
4. Livelihood Development Plan	10 - 11
List of Appendices	
Appendix-1	13 - 15
Appendix-2	16
Appendix-3	
Appendix-4: Photographs	
Appendix-5	
Appendix-6: (Record I and Record II)	

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 <i>Agence France de Développement</i> (AFD) - i.e. the French Development Agency, with cofunding 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 builtup through skills development initiatives.
	A consortium comprising of Indian Institute of Entrepreneurship (IIE) Guwahati, <i>Rashtriya Gramin Vikas Nidhi</i> (RGVN) and Centre for Microfinance and Livelihood (CML) has been formed to implement ( <i>interalia</i> ) 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 Rajabil EDC	This document gives the Micro-Plan for the Rajabil EDC, which is located in the Baksa district of Assam. The EDC falls under the jurisdiction of the Field Director, Manas Tiger Project and Bansbari Forest Range. 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 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 Socio-Economic Profile

Location	The Rajabil Eco Development	Committee has been formed to cover the exi	istin		
	The Rajabil Eco Development Committee has been formed to cover the existing community dwelling in Rajabil village. The area covered by the above EDC falls				
	within the Ghoramara VCDC, within the jurisdiction of Field Director, Manas Tiger				
	Project of Baksa district of Assam.				
	Appendix-1 gives the Village Map.				
Key Information	The key information of the EDC	C is furnished below.			
	Table-A: Key Information of the EDC				
	Name of the EDC	Rajabil			
	Habitation	Rajabil			
	Name of Revenue Village	Rajabil			
	Name of the Gram	Ghoramara			
	Panchayat / VCDC				
	Revenue Circle	Jalah			
	District	Baksa			
	Forest Division	Field Director, Manas Tiger Project			
	Forest Range	Bansbari			
	Forest Beat	New Camp			
	Year Formed	2014			
	Description of Boundary	GPS Coordinates(Centre Point)			
	of EDC	N 26.6733			
		E 91.0782			
		East: Rupohi, Pomora River			
		West: Manas National Park			
		North: Daoraibari village, Pomora River			
		South: Kamalabari village			
	Source: EDC Records & Discuss	ions during PRA Exercise in April 2017			
	Additional details are given at <b>Table-1</b> of Record-I. (Appendix-6)				
Brief Details of	The brief details of Executive C	Committee & General Body of the EDC are com	Itaine		
the	in the table, which is given belo	W.			
Executive					
Committee &		s of Executive Committee & general Body			
General Body	Name of President	Dhirendra Basumatary			
	Name of Member Secretary	Denkhu Narzary			
	Name of Treasurer	Hari Saran Daimari			
	<b>Registration Number</b>	-			
	No. of Members in	Male: 8			
	Executive Committee	Female: 2			
	No. of Members in the	One member from each household (120			
	General Body	HH)			
	Source: EDC Records	· ·			
	The village has 120 households	of which 67 % households are ADI family (	Abor		
Households &	The village has 120 households, of which 67 % households are APL family (Abo				
Households & Population	C C	•			
Households & Population Structure	C C	eholds are BPL family (Below Poverty Line)			

	The total population of the village is 643. Out of the total 120 household, 100 % people belong to the ST plain community.
	<b>Table-2.1 and 2.2</b> of Record-I (Appendix-6) may be referred for further details in the above regard.
	From this, it is inferred that:
	<ul><li>(1) The average number of persons in a household is 5.</li><li>(2) The sex ratio is 1034 females per 1000 males in the village.</li></ul>
Education & Skills Development	Over 80 % of the population is reported to be literate. Most of the members of the individual household have received school level education. On the other hand, relatively fewer households have college educated members.
	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) Dairy
	Government has been active in promoting formal skills development programmes in the country as well as in the state. The village has not reported receipt of benefits of any such programs has been carried out in the habitation or in nearby areas.
Soil	The soil type of the project area is sandy loam. This type of soil can support different kinds of crops, as the soil is reported to be fertile on the whole.
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 area is drained by the Pohumara stream which flows through the project area. This is a perennial stream.
Climate: Temperature &	The maximum temperature during the summer is $27^{\circ}C \pm 5^{\circ}C$ . The minimum temperature during the winter is $15^{\circ}C \pm 2^{\circ}C$ .
Rainfall	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 81 % $\pm$ 3 %) during the rainy season and has a low level in the winter (below 75 %).
Forest & Biodiversity	The main tree species are Ajar, Gamari, Titasapa, Sisu, etc, found in the project area. Betel nuts trees are grown in abundant in this EDC village. Some other species such as Bamboo, Mango, etc. are also grown in the village.

Land Use Pattern	<b>Appendix-2</b> gives the land-use pattern of the village. From the same, it is seen that the land-use pattern in the village were:
	Crop Land: 55.10 % Irrigation canal: 1.88 % Road: 1.17 % Pond: 2.98 % River: 2.35 Cultivable wasteland: 1.84 %
Land Holdings	<ul> <li>The type of households as per land-holding is given at Table-3 of Record-I (Appendix-6).</li> <li>From the same, it is seen that:</li> <li>4 % of the households are small farmers (2 – 10 ha., 5 HH)</li> <li>92 % of the households are marginal farmers (&lt; 2 ha., 110 HH)</li> <li>4 % of the households are landless (5 HH)</li> </ul>
Livestock	The total number of livestock in the village is 3500 The main types of livestock possessed by the households include:
	Cows: 1100 Buffaloes: 200 Goats: 200 Pigs 1200 Hen: 800
Village Infrastructure & Communication Facilities	<ul> <li>Table-4 of Record-I (Appendix-6) may be referred to for the details in the above connection.</li> <li>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.</li> </ul>
	From the above table, the following have been noted with regard to village infrastructure:
	<b>Physical Infrastructure:</b> The habitation is deprived of basic physical infrastructure like paved roads, Public Distribution System, transportation, water supply, mobile network etc. Public transport is not available, and the community members have to use bicycles and motor cycles to move around.
	<b>Education &amp; Health Facilities:</b> There are minimal educational and health facilities present within the village. There is only one primary school and one anganwadi centre inside the village. Apart from the basic education facility the community people need to go outside the village for higher education.
	<b>Govt. Offices</b> : The government offices (such as Police station, Gram Panchayat office, Revenue office, Forest Beat office etc.) are located at a considerable distance, which gets amplified as the villagers do not have access to regular public transport from either the habitation or from nearby areas.
	<b>Financial Inclusion</b> : Facilities for financial inclusion like bank and post office are located at a considerable distance from the habitation.

Agricultural Crops	The details of the agricultural crops grown in the village is available at <b>Table-6</b> of Record-I (Appendix-6).	
	The above shows that the following are the main crops grown in the village. Kharif Crops: Ranjit, Aijong, Basmati. Rabi Crops: Mustard, Chillies, Potato, Cabbage Others: Betel-nuts	
	Most crops are rain-fed	
Crop Production Profile	<b>Table-7</b> of Record-I (Appendix-6) may be referred to for the production and yield details of the crops grown in the village.	
	The production and yield of these crops is given below:	
	<ul> <li>(a) Paddy : Production 1920 Quintal Yield 34-36 Quintal/ha</li> <li>(b) Mustard: Production 3 Quintal Yield 1.5 Quintal/ha</li> <li>(c) Vegetables: Production 10 Quintal Yield 3.5 Quintal/ha</li> <li>(d) Betel nuts: Production 106.67 Quintal Yield 10 Quintal/ha</li> </ul>	
Fodder Availability	The matter of fodder availability in the village is dealt with at <b>Table-8</b> of Record-I (Appendix-6). The table shows that the main sources of fodder in the village are as follows:	
	<ul> <li>(a) Crop residue – Yes (3 to 6 months)</li> <li>(b) Household wastage – Yes (&gt; 6 months)</li> <li>(c) Green fodder – Yes (&gt; 6 months)</li> <li>(d) Grazing in forest – Yes (1 to 3 months)</li> </ul>	
Markets	Table-9 of Record-I (Appendix-6) shows the location of the different market from the village. The main markets used by the community are as follows:(a) Grocery / PDS: Rupohi at 2 Km away(b) Weekly / Bi-weekly Market: Salbari at 5 km away(c) Major Market: Salbari at 5 km away	
Water Resources	The water resources are tabulated at <b>Table-10</b> of Record-I (Appendix-6). The	
	main water resources with the water availability is as follows:(a) Pond(Water Availability: Perennial / Seasonal)	
	(b) Stream (Water Availability: Perennial / Seasonal)	
	<ul> <li>(a) Ring Wells</li> <li>(b) Tube Wells</li> <li>(Water Availability: Perennial / Seasonal)</li> <li>(Water Availability: Perennial / Seasonal)</li> </ul>	
Energy Consumption	<ul> <li>Table-11 of Record-I (Appendix-6) shows the major sources of energy in th village. The same have been listed below.</li> <li>(a) Fuel wood: Households Depending: 120 Nos. Source: Local/Forest</li> <li>(b) Kerosene: Households Depending: 120 Nos. Source: PDS/Local market</li> <li>(c) LPG: Households Depending: 25 Nos. Source: Gas Agency</li> </ul>	
Socio-economic status	<b>Social set-up:</b> The village is inhabited by the Bodo community people only and they all belong to the ST plain category.	
	The society is not marked by any deep social divisions. The observed position of women is satisfactory.	

	<ul> <li>Economic Condition: The economic position is just in the marginal stage. The main livelihoods are Daily wages, Agriculture, Weaving etc. Most households earn Rs. 72,000 to Rs. 1,80,000 per year.</li> <li>There is no migration of the youth and others for livelihoods. Additional details are available at the next section.</li> </ul>
Maps	Appendix-1, 2 and 3 gives the following maps, based on PRA exercise:
	• Village Map
	Village Social Map
	Village Resource Map
	Venn Diagram
	Chapatti Diagram
Impact of wild life	Positive impacts
area	Soil and water conservation
	Environmental improvement
	Negative impacts
	Human wild life conflict
	Cattle/crop residue
	Damage of property by wild animals

3. Livelihood (	Opportunity	Analysis
-----------------	-------------	----------

Date: 8 <sup>th</sup> April Location: Rajabil Library Numbers Present: 40
<b>In Presence of</b> : EDC office bearers, Village Headman, community members, Forest Department personnel, etc.
The objective was to study the existing household conditions and obtain other primary data about the community for developing the livelihood options and the forest development plan.
Different tools were used and outcomes obtained. These include: Social Mapping Wealth Ranking Time Line review Seasonality of Livelihoods Venn Diagram Chapatti Diagram Appendix-3 furnishes detailed information of the above.

	<ul> <li>Livelihoods &amp; Skills Development</li> <li>Entry Point Activities (EPA)</li> </ul>				
		•	ues (LPA)		
	Ranking	g of EPA Village EPA	Details	Probable source of	
	Rank	as ranked	(Appendix-3 has		
	Rum	usrumeu	additional particulars)	runung, uepu	
	1.	Community	For organizing community	Panchayat and Rural	
		Hall	meetings	Development	
	2.	Weaving	A center with training	EPA/APFBC	
		centre	facilities which link to mass consumption		
	3.	Irrigation	For agricultural activities	Irrigation Dept., Govt. of Assam	
	4.	Drinking water	For drinking purposes	EPA/APFBC	
	5.	Sanitation	For health and hygienic sanitation	Swachh Bharat Abhijan	
Livelihood opportunities	Livelihood Opportunities were identified as follows:				
	Agriculture				
	Weaving				
	Skills Development Programmes				
	Dry Betel nut production				
	Addition	nal discussion a	bout the above has been given	below.	
Agriculture &	Table-12 Under Record-2 may be seen in this connection for opportunities in the				
Horticulture	areas of agriculture and horticulture.				
	The main constraints are:				
	(a) Lack of barrier for wild animals.				
	<ul><li>(a) Lack of barrier for white animals.</li><li>(b) Lack of irrigation facilities</li></ul>				
	<ul><li>(c) Lack of agricultural infrastructure, modern tools and equipment's</li><li>(d) New waves of high yielding goods ato</li></ul>				
	(d) Non usage of high yielding seeds etc.				
	The opportunities are:				
	(a) Application of HYV seeds				
	(b) Provide irrigation facilities				
	(c) Organic farming increases productivity				
	The sug	gested program	mes are:		

Livestock	<b>Table-13</b> Furnishes additional information about opportunities for Livestock.
	The main constraints are:
	(a) Unable to buy fodder from market due to poor financial condition.
	(b) Threat from wild animals which destroys most of the livestock.
	(c) Lack of knowledge about the proper rearing of livestock.
	(d) No veterinary care clinic
	The opportunities are:
	(a) Higher income from livestock rearing.
	(b) Increase the life span of cattle
	(c) Higher income from milk and milk products
	The suggested programme is:
	(a) Piggery
	(b) Poultry
NTFP	All village is located adjacent to protected area, there is no scope for collecting NTFP
Specialized Skills	For skills development, the opportunities are tabulated at <b>Table-14</b> under Record 2
	The main constraints are:
	(a) Lack of product diversification
	(b) Lack of research on product quality
	(c) Non availability of raw material
	(d) Use of traditional machineries
	The opportunities are:
	(a) Exploring new markets
	(b) Developing demand based products as per the needs
	The suggested programme are:
	(a) Training on Modern Tools and Equipment
	<ul><li>(b) Skill Up-gradation &amp; Training on New Product Development and Product Diversification</li></ul>
	(c) Setting up a cold storage facility
	(d) Providing a bulk buy arrangement of the finished product with institutiona buyers.

<b>Credit Facility</b>	Table-15 under Record-2 discusses this aspect.
	The main constraints are:
	(a) Financial exclusion
	(b) Higher rate charged by the private money lender.
	The opportunities are:
	(a) Setting up modern financial institution
	(b) Adequate awareness.
	(c) Credit at low rate of interest
	The suggested programme is:
	(a) Setting up modern financial institution in the nearby areas.
Eco- tourism	The main constraints are
	(a) Infrastructure
	(b) Marketing
	(c) Lack of trained guide
	The opportunities are
	(a) Location near Manas NP
	(b) Increase in eco-tourism
Strategic Interventions	1. Agriculture & Horticulture: Organic farming, Tractor operation training, Agri- skill development programme, Training on HYV application, bio fencing
	2. Livestock: Piggery, Poultry
	3. Specialized Skills: Training on Modern Tools and Equipment, Providing modern technology to the villagers, Skill Up gradation & Training on New Product Development and Product Diversification, Setting up a raw material bank, providing a bulk buy arrangement of the finished product with institutional buyers.
	4. Credit facility: Setting up modern financial institution in the nearby areas.

# 4. Livelihood Development Plan

Livelihood	Framework of livelihood Opportunity Analysis has been done with the help of the
opportunity	following criteria:
Analysis	A) Livelihood assets
	B) Livelihood context
	C) Priority ranking on potential livelihood
	The livelihood situation of Rajabil 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 – <ul> <li>Natural Capital</li> </ul>
	Physical Capital
	Social Capital
	Human Capital
	Financial Capital
Notural Carital	The present EDC is under the jurisdiction of Field Director Manag Timer Desired
Natural Capital	The present EDC is under the jurisdiction of Field Director, Manas Tiger Project and the major river flows near the EDC is Beki River with two adjoining streams. However, of the two streams, one stream is flowing within the area of EDC.
	For farming purpose and for livestock rearing, the villagers use the stream water. Whereas, the villagers use ring well and tube well for drinking purposes.
	They collect leafy vegetables and some seasonal fruits from the adjacent area of the forest.
	(Refer Table 10 of Appendix-6)
Physical Capital	Majority of the households in the Rajabil EDC are involved in rice cultivation, farming of vegetables and betel-nuts and are mostly categorized as marginal farmers. (Detailed land holding pattern is described in the table 3/annexure 6.) The village has 95 numbers of semi-pucca houses and 25 numbers of pucca houses. Among the various sources of energy consumption such as Biomass, kerosene, electricity, LPG and candle, villagers depend on the electricity, firewood and kerosene for household and other uses. (refer to Table 11 of Appendix-6.)
	There is only one LP school present within the EDC area along with 1 number
	of Anganbadi center. No other education institutions are present. (refer to Table
	5 of Appendix-6)
	In case of water sources, there are one community pond, 20 ring wells, 120
	tube wells and one stream in the EDC area.
Social Capital	The villagers are partially involved in the EDCs functioning due to lack of awareness on their roles, functions, and specific benefits they are going to receive. There are 20 numbers of unregistered SHG (Female – 15 nos. and Male – 5 nos.) groups in the EDC.
	The village has no youth club and no community hall inside the EDC.
Human Capital	About 65 percent of the total population of the EDC are reported to be literate and rest 35 percent are illiterate.
	Most of the people (about 49.61 percent) have crossed the upper primary level education. However, people are less interested to continue their education post HSLC. Post Graduate people is only four numbers (3 male and 1 female) and
	Graduate people is 20 numbers.
	(refer to Table 3.2/Appendix-3)

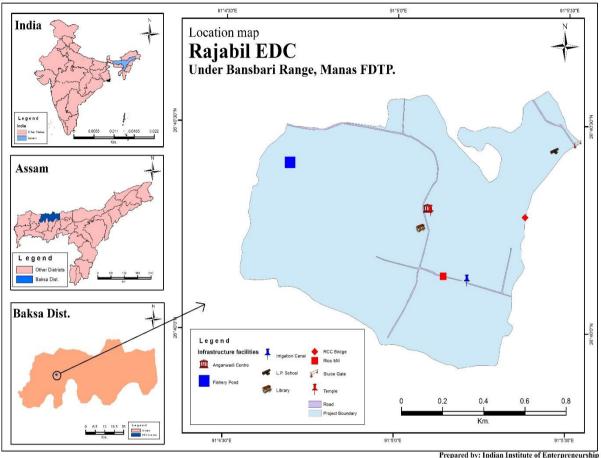
Financial Capital	There is no government bank or lending institution available in the EDC area but is present at Salbari at a distance of 5 km away. The villagers used to lend from Bank and relatives etc.
	On an average two members of all the households have bank account in the commercial banks, but they are not aware of the benefits of financial inclusion
Livelihood Context	<ul><li>Livelihood activities of the Rajabil EDC are identifies on the basis of following criteria:</li><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>
Income Generating Activities	<ul> <li>The main income generating activities as planned at the village are</li> <li>(a) Betel nuts farming and farming of paddy</li> <li>(b) Vegetables</li> <li>(c) Mustard</li> </ul>
SHG Activities	<ul> <li>SHGs of the village can plan the following activities:</li> <li>1. To create awareness.</li> <li>2. To organize and form group</li> <li>3. To involve the villagers in Livelihood Activities collectively</li> </ul>
Exposure Trips	The following exposure trips are planned: 1. Weaver Service Centre
Convergence	<ul> <li>The planned initiatives may be converged with the following schemes of the Government of India:</li> <li>(a) National Rural Employment Guarantee Scheme - for rural employment</li> <li>(b) Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied development</li> <li>(c) Rashtriya Krishi Sinchay Yojana (RKSY) - for irrigation, including watershed development</li> <li>(d) National Rural Livelihoods Mission</li> <li>(e) Skills Development schemes</li> <li>(f) Other schemes for rural development and livelihoods as found appropriate.</li> </ul>

# List of Appendices

Appendix No	Heading	Page No
1	Maps	13 - 15
_	Location Map	13
_	Village Map	14
_	Resources Map	15
2	Land Use Map of Village (GIS)	16
3	PRA Exercise	
-	Social Mapping	18 – 19
	Wealth Ranking	19
	Time Line review	20
_	Seasonality of Livelihoods	20
_	Venn Diagram	21
_	Chapatti Diagram	22
	Priority Rankings-EPA and Potential Livelihoods	23 - 24
4	Photographs	25 - 26
5	List of EDC Executive Members	27
	EDC Registration Certificate	28
	List of Training Participants	29
6	<b>Filled Up Tables</b> (Proforma-1 to Proforma-4) Table Nos. 1-15	30 - 36

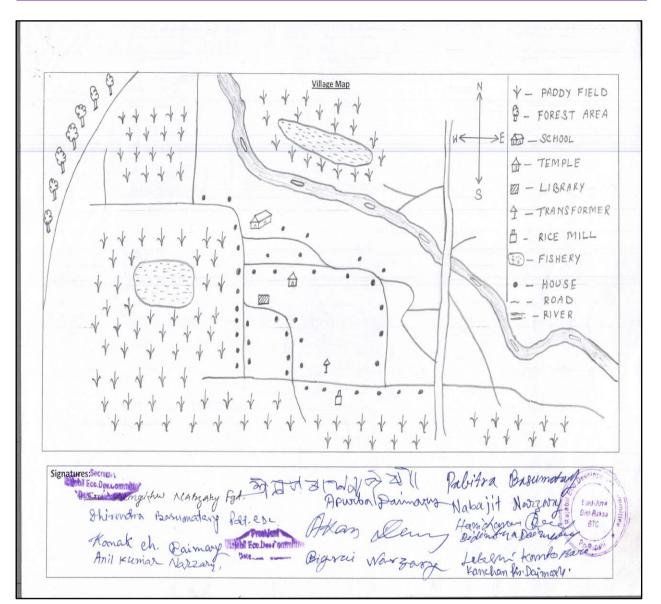
# Appendix-1

# 1. Location Map

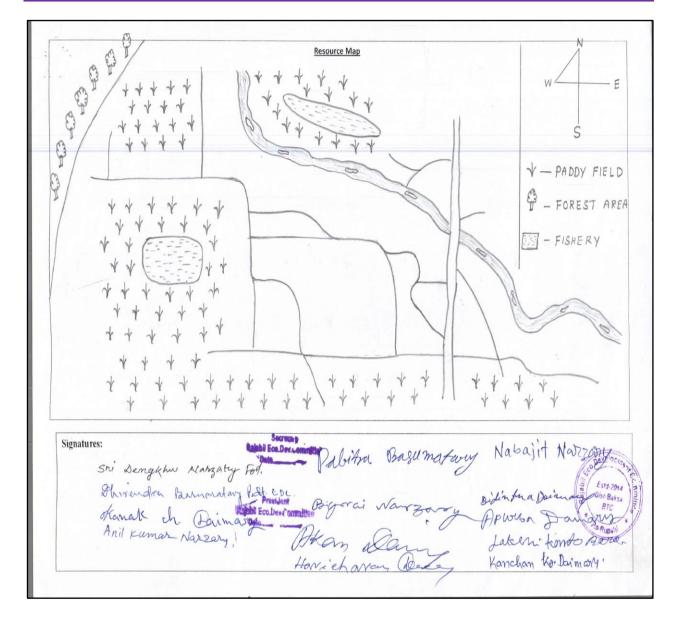


Prepared by: Indian Institute of Enterpreneurship

### 2. Village Map

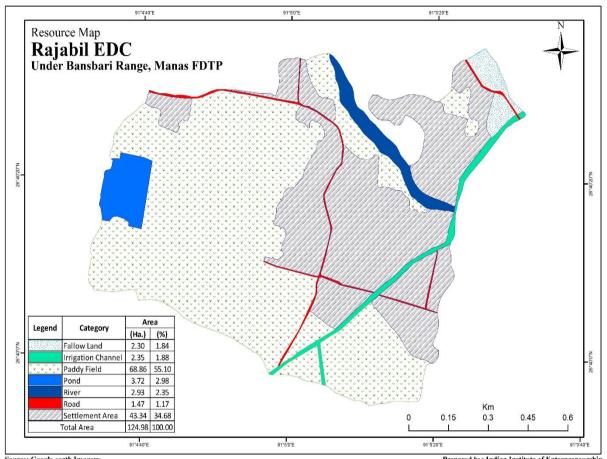


### **3. Resource Map**



# 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:			
Name of the EDCRajabil			
Numbers of participants	40		
Time	10.05 a.m., 8 <sup>th</sup> April, 2017		
Venue     Rajabil Library			

### Table – 3.1: Brief about the villages under Rajabil EDC

Name of the Village	No. of households	Population		
		Total	Male	Female
Rajabil	120	643	316	327
Total	120	643	316	327

Source: Field Survey

### Table – 3.2: Education profile Rajabil EDC Page 1

Illiterate	Primary	Middle School	High School	Higher Secondary	Graduate and above	Total
225	138	94	87	75	24	643

### Table – 3.3: Income category of Rajabil EDC

Income Category (in Rs.)Yearly	No. of Households
72000 - 90000	20
90000 - 110000	55
110000 - 130000	25
130000 - 150000	15
> 150000	5

Different PRA tools have been used under the exercise of PRA technique.

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

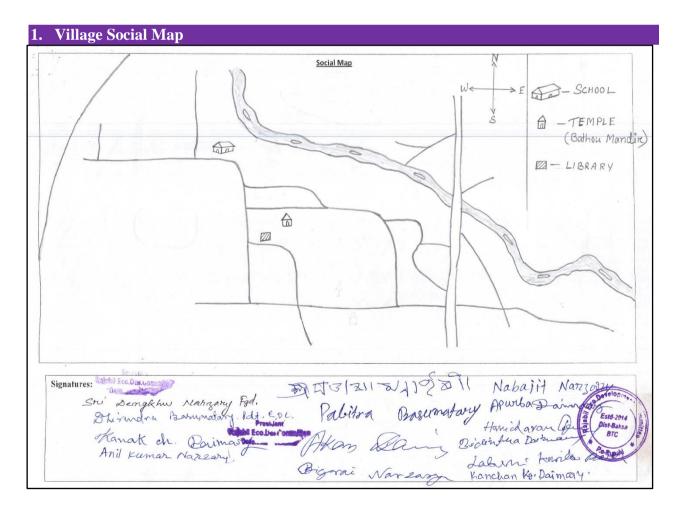
### **3.1. Social Mapping:**

Social mapping is used to visualize the socio-economic aspects of the Rajabil village where the housing patterns of the households, the numbers of schools, social infrastructure, and religious beliefs among households. Awareness camp about the project was carried out beforehand. So people came collectively to participate in the PRA process. Simultaneously, transect walk has been done by one of the team member along with some villagers. The villagers are enthusiasms about the mapping process and they actively participated in the process.

Social Information	Total households	120
	Numbers of Kaccha Houses	Nil
	Numbers of Semi-Pucca Houses	95
	Numbers of Pucca Houses	25
Landmarks	Stream	1
	Temple	1
	School (L.P)	1
	Anganwadi Centre	1
	Library	1
	Rice Mill	1
	Transformer	1

#### Table 3.1: Information about the village

Source: PRA Exercise



### **Findings of Social map:**

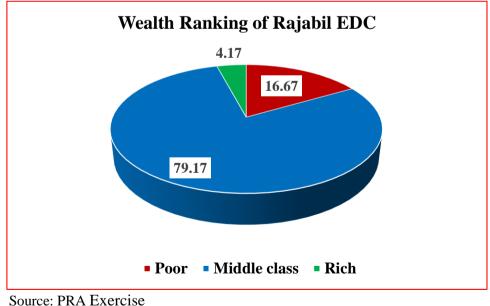
- The participants of social mapping have identified 120 households out of which 25 numbers are pacca house and 95 numbers are semi-pacca houses.
- Other than construction based division of the households, important places like temple, one primary school, one anganbadi centre, one library are mapped.
- Water facility is not adequate in the village. There are one streams present where people availed water for agricultural activities and livestock rearing. On the other hand, for drinking and household activities, every household have their own tube well, but their requirement is not fulfilled. They also used public for their daily requirements.
- Provision of Education facility up to school level is not satisfactory in the village. There is only one LP school present within the EDC area.

### **3.2. Wealth Ranking:**

Wealth ranking was done with the help of the following information about the households

- a) Occupation/livelihood
- b) Land holding
- c) Ownership of assets

From the analysis it was observed that about 18.18 percent people are poor, 86.36 percent belongs to the middle class category and rest 4.55 percent are categorized to be rich. Poor people are mainly daily wage earners and mostly mortgage land for the paddy cultivation. Rich people cultivate paddy, vegetables for their own consumption as well as to sell in the market with good amount of land. Some of the people under rich category are also government and company employees. They also have televisions sets, two wheelers, radio, etc. People in the middle class category are wage earners, cultivators and small business owner.



### Source: PRA Exercise

Figure 3.1: Wealth ranking showing percentage (%) of households in each category

# 3.3. Time Line Review:

Table 3.2: Limeline review			
Year	Event	Туре	
1947	LP School was established	Construction	
1980	Bathou Temple was build	Construction	
1984	High flood	Environmental	
1990	Destruction from wild animals	Environmental	

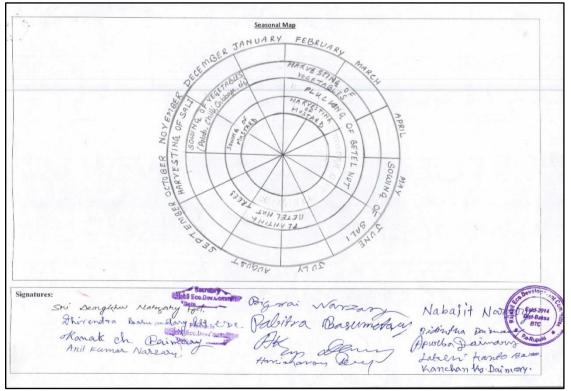
From the Finding and field survey, it was observed that the historical events of Rajabil EDC can be categorized as constructive (2 nos.) and environmental (2 nos.)

3.4. Sea	sonal Mar	pping of	livelihood	activities:

 Table 3.3: Seasonal Pattern of Livelihood Activities

Categories	Time of Activity			
Farming		Sowing/Planting	Harvesting	Plucking
	Paddy	May-June	Oct-Nov	-
	Betel-Nut	July-September	-	Feb-May
	Vegetables	Nov-Dec	Jan-Mar	-
	Mustard	Nov-Dec	Feb-Mar	-
Non-	Weaving		L	
Farming	Daily Wage Earning	Throughout the year		
	Shop-keeper			
	Masonry			

Source: PRA Exercise



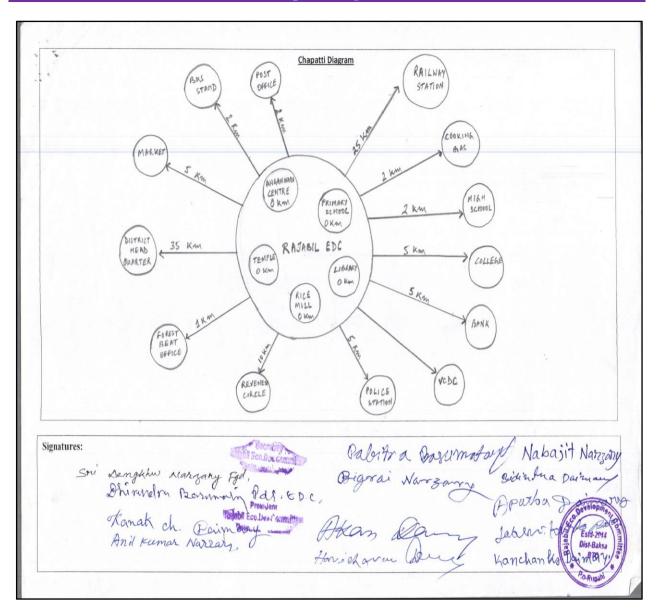
Source: PRA Exercise

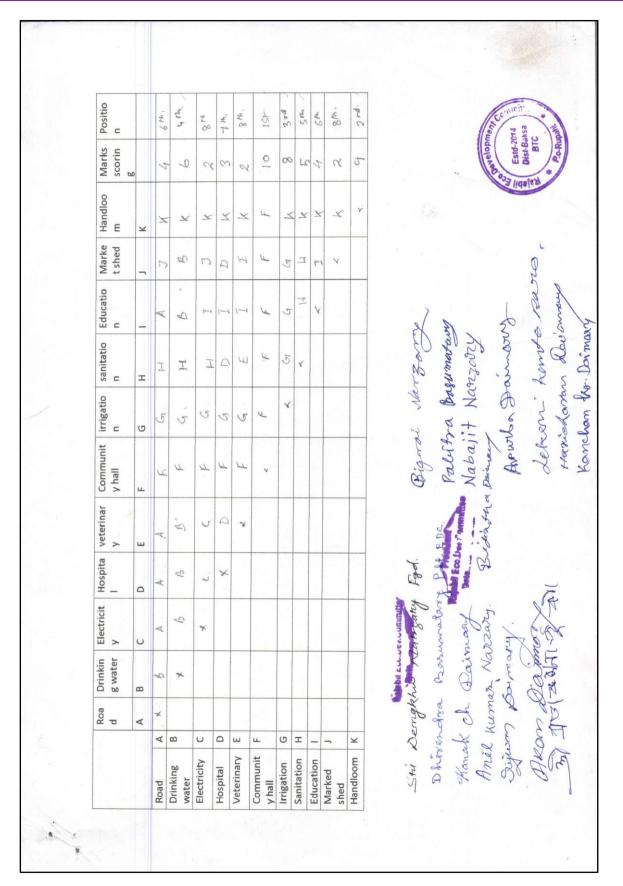
Figure 3.2: Seasonal and livelihood map

### Venn Diagram



### Chapatti Diagram





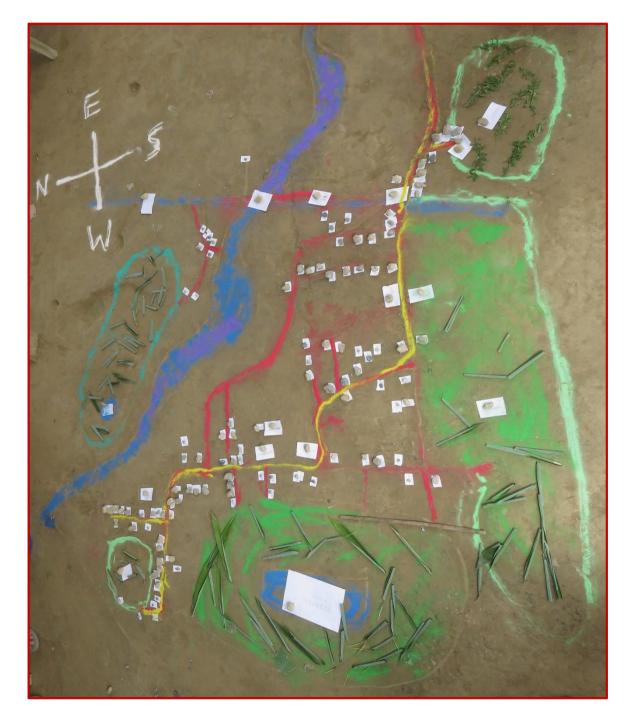
### **Priority Ranking- EPA**

	Г				-			7				
		m	h	ede	1	hog	fris	mp	hre	Jo-		
Livelihood Activities	çy	much	wingold	lives t	wage Lebou	regen	الم مذ له	10.4×074	warety	food	Marks	Rank
		A	В	C	D	Е	ц	- IJ	Н	I		
Agricultule .	A	K	A	×	A	E	A	B	М	(a)	4	Sul S
waing	B		X	3	0	8	C	e	C	0	4	24
ivestell	C			X	J	~	A	5	Z	1	1	5 gr
Jul 1	D				X	5	F	A	4	9	4	3 hol
	Ш					8	W	-6	100	H	5	2 m
	F						¥	4	Z	L	5	2 mg
Same	Ð							8	5	2	5	3 101
-	Н								8	Н	2	7 24
Lud	I									8	4	3 rd

# Priority Ranking- Potential Livelihood activities in the EDC

# **Appendix-4: Photographs**

# During the PRA exercise







# Appendix-5

# List of EDC Executive Members

# Name of EDC: Rajabil EDC

Sl.	Name	Male/ Female	Age	Category	Designation
No.					
1	Dhirendra Basumatary	М	52	ST	President
2	Denkhw Narzary	М	28	ST	Secretary
3	Hari Saran Daimary	М	42	ST	Treasurer
4	Durga Kherkatary	М	33	ST	Member
5	Anil Nrzary	М	30	ST	Member
6	Akon Daimary	М	29	ST	Member
7	Konak Daimari	М	25	ST	Member
8	Monil Daimary	М	24	ST	Member
9	Pronita Rani Basumatary	F	20	ST	Member
10	Mainao Basumatary	F	20	ST	Member

# This is to certify that "RAJABIL ECO-DEVELOPMENT COMMITTEE" under Bansbari Range of Manas Tiger Project, Barpeta Road which was Registered with the Office of the Field Director, Manas Tiger Project, Barpeta Field Director, Manas Tiger Project Field Director Reanas Tiger Project Barpeta Road, Assam. Barpeta Road, Assam. (H.K. Sharma, IFS) OFFICE OF THE FIELD DIRECTOR, MANAS TIGER PROJECT Registration No. MTP/EDC/06, dated 10th April' 2016 BODOLAND TERRITORIAL COUNCIL Barpeta Road- 781315, Assam. Road, Assam on 10th April' 2016 has been renewed upto 10th April 2017. . Signed under my hand & seal. Place: Barpeta Road. Date: ..10/04/2016...

## **Registration Certificate of Rajabil EDC**

# List of Training Participants

SLNO	Name of ca	ndidate	Marme os	Grusdian	Ramuako
1	Smit Reviewani	Bui	Machen	Boly how	-1
Q.	3mf. Rwisumwi 5mt. Mainao			Basymatory	
3.	Smt. Neema	Naryary Daimas J	And	Nargary	
4,		· · · ·	Akan	Daimary	
5.	2mt, Alaka 2mt, Kabita	Naryovy Daimary	Khibong	Margary	
6.	Smit. Rekha	Daimany	Montu Rabi	Dalmary	
7.	ami. Lolita	Basumatary	Rabi	Daimary j Basumatany	
8.	Smit, Kneishna	Daimary	Rupen Hariabas	Basimatary	
9.	Smt Songita	Boro		an Daimarsy.	
10.	Smit. Mamoni	Passumatazy	Chulen	Boro	
tle	Smt. Rita	Margary	Mepal	Basiconatory	
12,	Smt, Malati	Paasumatory	Babul	Naryang Balumitan	
13,	Smt. Mabwthi	Narzany		s Basumitary Narijary	
14.	Smt. Riju	Daimary	Anil		
15.	Smit. Thempali	Daimary		Daimary	
16.	smt. Jonaki	Daimary		Daimary	
17.	Smt. Kakila	Basumatary	A 40	adduonatary	
and an international statement	Smt. Sombarie	Daimerry		Daimary	
19,	Smit. Anjali	Kher hatary			
20	3mt. Menoka	Marzary	Buyan Kh		
21	Smit. Paírola	Kherkatang	Rampsh t Durga KI		and a second
and the state of the second	Smit. Aroti	Narzany	Durga Ki Soden N	laman	
	smt. Monjita	Narjany	Kamuk N	larnery	
24	Smt. Rani	Daimary	utchab.	Saimazer	
and the second	Smit, Nita	Basumatary	Bijoy 1		
and the set of the second side o	Smt. Anima	12000	Bhaben		
	Smt. Namski	and the second	Dukhisan		
28				· · · · ·	

Skirendra Basumatary

Rajahil Eco.Les Portinities

Series

# Appendix-6 (Record I)

### Table 1: Basic data of the EDC

Table 1: Basic data of the EDC

Sl	Name of the EDC	Date of	No. of members in	Name of the	Name of the	Name of	Contribution per	Social fencing	Remarks on	Grading %of
No.		establishment	Executive Committee	President	Secretary	Treasurer	family /per person	Used Yes/No	special attainment	success by RFO
1	Rajabil	2014	20	Dhirendra Basumatary	Denkhw Narzary	Hari Saran Daimary	-	No	-	-

### Table 2: Village wise population data

Sl. No.	Name of Village	Households (No.)	Pop	oulation (N	[0.)	Sex ratio	Avg. HH
			Total	Male	Female		size
1	Rajabil	120	643	316	327	1035	5

 Table 2.2: Religion and Category wise distribution of households.

No. of the households	Community	Caste/Category	Religion
120	Bodo	Schedule Tribe (Plain)	Hinduism

 Table 3: Village wise farmer category on the basis of land holding

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

Sl. No.	Name of the village	Type of fa	rmer (Househo	old) according to la	and holding	
110.		Large farmer >10 ha	Small farmer 2-10 ha.	Marginal farmer <2ha.	Land less (household)	Total
1	Rajabil	-	5	110	5	120

# Table 4: Cattle Population

### Table 4: Cattle Population of the EDC

Sl. No.	Name of the village	Village wis	se no of cattle'	s or type of	animal			
1.00		Cows	Buffaloes	Goat	Hen	Bulls	Pig	Total
1	Rajabil	1100	200	200	800	-	1200	3500

# Table 5: EDC Infrastructure:

### Table 5: EDC infrastructure

Infrastructure	Location	Distance from Village (in km)
Main Road	Rupohi (outside village)	2 km
Electricity	Rupohi (outside village)	2 km
Cooking Gas	Salbari (outside village)	5 km
Public Transport	Rupohi (outside village)	2 km
Primary Health Centre	Salbari (outside village)	5 km
School	Lower Primary School	Within the village
	High School (outside village) - Rupohi	2 km
HS School	Salbari (outside village)	5 km
College	Salbari (outside village)	5 km
Post Office	Rupohi (outside village)	2 km
Bank	Salbari (outside village)	5 km
Drinking Water	Tube well per household	Within the village
	Well – 20 nos.	
Anganwadi Centre	1 number	Within the village
VCDC	Ghoramara (outside village)	2 km
Police Office	Salbari (outside village)	5 km
Railway Station	Surupeta (outside village)	25 km
Revenue Office	Jalah (outside village)	10 km
Forest Beat Office	New Camp	1 km
District Head Quarter	Mushalpur (outside village)	35 km

### Table 6: Agricultural crops

Table 6: Agriculture Cro	ps
--------------------------	----

Rain 1	Fed	Irrigat	ion
Name of the crop	Area (in ha.)	Name of the crop	Area (in ha)
Paddy	53.33	NA	NA
Vegetable	3.0	NA	NA
Mustard	2.0	NA	NA
Betel nuts	10.67	NA	NA
	Name of the cropPaddyVegetableMustard	Paddy53.33Vegetable3.0Mustard2.0	Name of the cropArea (in ha.)Name of the cropPaddy53.33NAVegetable3.0NAMustard2.0NA

# Table 7: Crop production profile

### Table 7: Crop production profile

Type of crop	Total Production (approx.) in quintals	No of household growing	Average production (quintal/ ha.) approx.	Area under crop (ha.) approx.
Paddy	1920	115	34-36	53 .33
Vegetables	10	70	3.5	3.0
Mustard	3	50	1.5	2
Betel-nuts	106.67	80	10	10.67

## Table 8: Fodder Availability

### Table 8: Fodder availability of the EDC

Types	1-3 month	3-6 month	>6 month
Crop residue		✓	
Household wastage			$\checkmark$
Green Fodder			$\checkmark$
Grazing in Forest	$\checkmark$		

# Table 9: Location of market from the village

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

For Purchase	Location	Distance from village if in other village (in km)
Grocery shop	Rupohi	2 km
Weekly Market	Salbari	5 km

Major Market	Salbari	5 km
Forest Corporation Sale Depot.	NA	-
Tendu Patta PHAD	NA	-
Fish Market	Salbari	5 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

0	5 5	0	
Water source	Number	Availability of water	Uses
Stream	1	Perennial	Irrigation, livestock rearing
Ring well	20	Perennial	Domestic use
Tube well	120	Perennial	Domestic use

# Table 11: Energy consumption

Type of Fuel	Number of household depending	Number of months dependent	Sources (local, village, forest, other sources)	Major/ Secondary
Fuel wood	120	12	Local/Forest	Major
Kerosene	120	12	PDS/Market	Secondary
Gobar/Bio gas	NA	-	-	-
LPG	25	4-6	Market	Secondary
Electric Healer	NA	-	-	-

### **RECORD: II LIVELIHOOD OPPORTUNITY ANALYSIS**

# Table 12: Agriculture and Horticulture

Table 12:	Showing the	agricultural	and hortici	ultural status
1 4010 12.	Showing inc	agricanarai	unu nornei	illin al siains

Constraints	Reason	Opportunities	Programme
Low Production	<ul> <li>Lack of fencing.</li> <li>Only one crop undertaken annually (Sali)</li> <li>Lack of irrigation facilities.</li> <li>Lack of agricultural infrastructure, modern tools and equipment's viz., power tillers, tractors etc.</li> <li>Non usages of high yielding seeds.</li> </ul>	<ul> <li>Introduction of new and advance technology.</li> <li>Well-structured training programme. Usage of high yielding seed programme.</li> <li>Organic farming helps in increase productivity</li> </ul>	<ul> <li>Introduction of Bio-Fencing process.</li> <li>Tractor operation training</li> <li>Agri-skill development programme.</li> <li>Loan facility to purchase modern equipment</li> </ul>
Storage and Production	<ul> <li>Lack of common storing place</li> <li>Lack of cold storage facility due to non-availability of electricity.</li> </ul>	• Helpful in preserving unsold products for a longer period of time.	<ul> <li>Packaging</li> <li>Transportation and distribution.</li> <li>Buyers sellers meet</li> </ul>
Marketing	<ul> <li>No knowledge on marketing know-how, dependence on traditional system of selling.</li> <li>Weak marketing linkages</li> <li>More output is producing than demand in the local market.</li> </ul>	<ul> <li>More knowledge about the current market situation as well as the current value of their products.</li> <li>They can sell their products outside of the village area.</li> </ul>	<ul> <li>Open up the new markets outside the district</li> <li>Providing a bulk buy arrangement of the finished product with institutional buyers.</li> </ul>

# Table 13: Livestock

### Table 13: Livestock

Constraints	Reasons	Opportunities	Programme
Less grazing land	• NA	-	-
Availability of fodder	• NA	-	-

Veterinary care facility	<ul> <li>Improper functioning of veterinary care clinic</li> <li>Lack of knowledge about the proper rearing of live stock</li> </ul>	<ul> <li>Disease control</li> <li>It will also help to aware the villagers and will encourage them for livestock rearing.</li> </ul>	-
Production of milk	<ul> <li>Less availability of fodder</li> <li>No scientific knowledge on cattle rearing to increase the milk production.</li> </ul>	• Training on the milk production can enhance the skill of milk production.	-
Milk market	<ul> <li>No market facility</li> <li>Unaware of the demand of different milk made products.</li> </ul>	• High income from milk and milk product	-

# Table 14: Specialized skill

## Table 14: Specialised skills (Weaving)

Constraints	Reasons	Opportunities	Programme
Raw material availability	• Non-Availability of Raw Materials within reachable location (market 7km away) No Storage	• Common place for setting a raw material storage	• Setting up a raw material bank
Product quality	<ul> <li>Shortage of High Quality Materials</li> <li>Use of Traditional machineries</li> </ul>	<ul> <li>Developing Quality Products for new market exploration.</li> <li>Use of Jacard tool</li> </ul>	<ul> <li>Training on Modern Tools and Equipment.</li> <li>Providing modern technology to the villagers</li> </ul>
Marketing potential	<ul> <li>No standardized market</li> <li>No pricing policy</li> <li>No linkage with the institutional buyers</li> <li>No Product Diversification or New Product Development.</li> </ul>	• Exploring new markets with diversified products	• Providing a bulk buy arrangement of the finished product with institutional buyers.
Credit facilities	• No linkage with the banks or post office saving banks. Unaware of the development schemes of banks and government	<ul> <li>Financial assistance by the Govt.</li> <li>Providing easy access to credit.</li> </ul>	<ul> <li>Microfinance,</li> <li>Term Loans,</li> <li>Working Capital</li> <li>Arrangement</li> </ul>
Product Diversification	<ul> <li>No Product Diversification /New Product Development.</li> <li>Lack of concept for product diversification.</li> </ul>	<ul> <li>Developing Demand Based</li> <li>Products, as per the needs of the modern day market.</li> </ul>	<ul> <li>Skill Up gradation &amp; Training on New Product</li> <li>Development and Product Diversification</li> </ul>

# Table 15: Credit facility

### Table 15: Credit facility

Constraints	Reason	Opportunities	Programme
Indebtness	• Nil	• Setting up modern financial institution in the nearby areas.	-
Rate of interest	• Higher lending rates charged by the private money lender	<ul> <li>Subsidized credit arrangement</li> </ul>	-
Availability of loan	<ul> <li>Fear of risk taking</li> <li>No knowledge of documentation</li> </ul>	• Start-ups entrepreneurial venture	-
Mortgage difficulty	<ul> <li>Unavailability of proper documentation of mortgaged property.</li> </ul>	• Proper awareness about documentation in the area	-