



# ASSAM PROJECT ON FOREST & BIODIVERSITY CONSERVATION



#### Mirigaon Eco Development Committee (EDC) Mirigaon Range, Tinsukia Wild Life Division Tinsukia District, Assam

## Micro-Plan (2016-17 to 2025-26)

#### **Prepared by Mirigaon Eco Development Committee**

assisted by

#### **Assam Forest Department**

&

### COMPELO (IIE, RGVN and CML)

Divisional Forest Officer Tinsukia Wildlife Division Tinsukia

**July 2016** 

# 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 Dévelopement</i> (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, <i>Rashtriya Gramin Vikas Nidhi</i> (RGVN) and Centre for Microfinance and Livelihood (CML) has been formed to implement ( <i>inter</i> 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 Mirigaon EDC	This document gives the Micro-Plan for the Mirigaon EDC, which is located in the Tinsukia district of Assam. The Mirigaon EDC falls under the jurisdiction of the Mirigaon Forest Range under Tinsukia Wildlife Forest Division. 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 Centre for Microfinance and Livelihood (CML) Guwahati in June2016. The micro-plan has been compiled by CML based on the project guidelines. The document has been discussed and finalized for adoption in July 2016.

# 2. Village Socio-Economic profile

Location	The Mirigaon (EDC) was f	formed to cover t	wo villages namely-Mirigaon and	
	Tengabari village. It is situ	ated 6kms away fi	rom Mirigaon Forest Division.	
	Appendix 1 gives the Village	-		
Key Information	The key information of the EDC is furnished below.			
	Table – A : Key Information of the EDC			
	Name of the EDC		Mirigaon	
	District		Tinsukia	
	Forest Division		Tinsukia Wildlife	
	Forest Range		Mirigaon	
	Year of Formation		2015-16	
	Total Household		284 Nos.	
	Nos. of EDC Village		7 Nos.	
	Description of	• North :		
	boundary of EDC	• South :		
		• West		
		• East :		
	Range Office Name	Guijan	ng PRA Exercise in June 2016	
Brief Details of the Executive Committee &	The brief details of Exect contained in the table given	utive Committee of helow:	cord-I. (Given at Annexure) & General Body of the EDC are	
<b>General Body</b>	Table – B : Brief details of         Name of President	of Executive Com	Mr. Satan Sarkar	
	Name of Secretary		Mrs.Champa Das	
	No. of Members in Execu	utive Committee	12 Male-8 Female-4	
	No. of Members in the G	eneral Body	284	
	Source: EDC Records			
Households &	In Mirigan EDC, there is a	a total of 284 ho	useholds are residing in the two	
Population Structure	villages. The total population of the villages is 1356, of which 700 are male			
	and 656 are female members. The sex ratio of the EDC is 937 females per			
	thousand males. The avera	age family size of t	he villages is around 6 numbers.	
	The study found that, u	nder Mirigaon EI	DC, the residing community are	
	Bengali, Adivasi. The majo	r caste dominating	g the area is Scheduled Caste.	
	The average family size of		-	

[	
	The number of families which fall in the category of below the poverty line
	are- 177 households.
	<b>Table-2</b> of Record-I may be referred for further details in the above regard.
Education &	The literacy rate of the EDC villages is 63.60% and the literacy rate of Mirigaon is
Skill Development	the highest, being 67%. Highest class attended by the people from the area is
Development	from Class I-IV.
	Skill Development: In the Mirigaon EDC villages, the villagers are
	traditionally skilled in following areas:
	Fish Catching
	Agriculture
	Masonry
	Daily Wage Labour
	Drivers
Soil	The study has found different types of land in MirigaonEDC, The type of soil
	are-Entisol, Inceptisol Alfisols, Ultisols. These deposits contain alternating
	beds of pebbles, gravel or boulder with loose sand and clays. In certain parts,
	both the old and new alluvium are so combined that it is difficult to
	distinguish them.
	1. Inceptisol (Alluvial)41.4 percent
	2. Entisols
	3. Alflsols11.3 percent
	4. Ultisols5.6 percent
Water	Lohit flows from almost east to west through the area. It has many tributaries
	such as Digboi, Tingrai, Tipling, Telpani, Deherang and Sessa in the north
	bank and Tipam and Disam in the south bank. In the study area households is
	generally access their water from Pond, River and Tube-well. The tube well
	water has high iron content.
	From the field survey it has been found that handpump is available with
	almost all the families i.e. 166 families, and stream is also available in the
	area with around 30 families having access to stream water.
Climate:	Highest temperature is generally observed in the months of July/August
Temperature &	
Rainfall	the morning hour's ranges from 90-95% and 50-70% in the afternoon hours.
	The climate of the region is sub-tropical wet and is characterized by hot and
	humid summer and dry cool winter.

	The Guijan EDC is experiences 2300 to 3000 mm rainfall per year. Average annual rainfall of the area is 2819 mm. While normal rainfall (1901-1950) is 2796.4 mm. It is observed that on an average 64 to 68% of annual rainfall is received during the monsoon period (June-September) and 22-26% of annual rainfall during pre-monsoon period (March-May).
Forest & Bio- diversity	The Protected Area (DSNP) have been broadly classified as- Tropical Evergreen and Semi Evergreen forests. The Guijan EDC forest is enriched with tree species like- Lagerstroemia speciosa (Ajhar), Mansonia dipikae (Badam), Morns laevigata (Bola), Biscofia rnmnica (Uriam), Cordial dichotoma (Bual), Bombax ceiba (Simalu), Lagerstroemia parviflora (Sida), Delonix resia (Radhasura), Canarium benealensis & C resiniferum ( Dhuna, Dhup), Ficus hispida (Dimoru), Premna bengalensis (Gohra), Caeslpima pulcherima (Krishnasura),Tetrameles mdiflora (Bheleu), and Tactona srandis (Segun), Areca catechu (Arecanut) A wide variety of plants and animals is available in the adjacent protected Area Dibru Saikhowa National Park and varjan & Padumi wild Sanctuaries Guijan EDC villages, that can easily attract tourists, and thus there is a high possibility for the development of Eco-tourism in this area. In the rain forest, as wel as riverian forest there are a number of rare plants and animals. A large number of species of orchids, butterflies, birds and cats are the central attractive issues of the forest which cannot be found in any other rain forests.
Land Use Pattern	<ul> <li>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:</li> <li>Firewood plantation</li> <li>Forest degraded</li> <li>Paddy field</li> <li>Pond</li> <li>Road</li> <li>Settlement area</li> <li>Stream</li> <li>Tree Clad area</li> <li>Water body</li> </ul>
Land Holdings	<ul> <li>The type of households as per land-holding is given at Table-3 of Record-I.</li> <li>From the same, it is seen that:</li> <li>62.93% HH (73 HH) have farming lands</li> <li>Large farmer (&gt; 10 ha.) Nill</li> </ul>

	• Small Farmer (2 – 10 ha.) Nill
	• Marginal Farmer (<2 ha.) 25.88% (52 HH)
	• Landless 74 % (149 HH)
Livestock	The total number of livestock in the village is 1897. The main types of livestock possessed by the households include:
	• Cattle 219
	• Bull 200
	Buffaloes
	Poultry 1005     Disc 65
	<ul> <li>Pigs 65</li> <li>Goat 404</li> </ul>
	<b>Table-4</b> of Record-I may be referred to for the details in the above connection.
Village	In any community; the availability of basic infrastructure enables the
Infrastructure	development of sustainable livelihood options.
& Communication	The infrastructures which are available in the villages can be categorized into the following header
<b>Facilities</b>	the following heads:
	<b>Physical Infrastructure:</b> The households not have the basic amenities including electricity, mobile phones, cycles and motorbikes for communication purposes. The villages are not well being connected to the main road.
	<b>1. Education and Health facilities:</b> Education and health facilities include
	3 lower primary school, no middle school, no high school, 4 anganwadi
	centers, two sub center which is avaiblable with the families
	2. Govt. Offices: There are no Government offices which are present in the
	area
	<b>3. Financial Institutions:</b> There are no banks and post offices in the EDC.
	Table-5 of Record-I, which gives the present status of the village infrastructure.
Agricultural	Paddy is not grown by the people in the area as they have the problem of
Crops	flood which affects every year. There is siltation deposit in the soil. Commonly
	the community does not practice paddy cultivation as the produce is swept away
	by the recurring floods.
	The community at large go for the cultivation of rabi crops during the winter
	seasons. They start preparing the fields from September and sowing starts by the

	month of October for the crops like Chilli, Brinjal, Tomato, Potato, Cabbage and
	other green leafy vegetables.
Crop Production Profile	Table-7 of Record-I may be referred to for the production and yield details of the crops grown in the village.The production and yield details of the crops grown in the village are as follows. The crop cultivated by the families is basically rain fed.
Fodder Availability	The matter of fodder availability in the village is dealt with at <b>Table-8 of Record-I.</b> The above shows that the main sources of fodderin the village are:
	<ul> <li>Crop residue,</li> <li>Grazing in forest,</li> <li>Household vegetable wastes</li> <li>Green Fodder</li> </ul>
Markets	Table - 9 of Record-I shows the location of the different markets from the village. The main markets used by the community and its distance from the EDC villages are mentioned below:
	<ul> <li>The Grocery/ PDS shops: existing in the village</li> <li>The Weekly/ Bi-weekly Market Nearly 5km away</li> <li>Major Market: Tinsukia (nearly 12 km away)</li> </ul>
Water Resources	<ul> <li>The water resources are tabulated at Table-10 of Record-I. The main water resources with the water availability is as follows:</li> <li>Tube-well: 197 Nos. (Adequate)</li> <li>River: 1 No. (Adequate)- Rive</li> <li>The hand pumps which are available in the area provides water facility to the</li> </ul>
	households which can be used for drinking water purpose but it is very high on
	iron content. Only few families have water filters in their homes, others consume it directly from the hand pumps.
Energy Consumption	<b>Table-11</b> of Record-I shows the major sources of energy in the village.The same have been listed below.
	• <b>Firewood</b> : Households Depending:197 Nos. Source: Local forest area
	<ul> <li>Kerosene: Households Depending:5 Nos. Source: outside market.</li> <li>LPG: Households Depending: 4 Nos.</li> </ul>
Socio-economic	The villages are inhabited by people mostly belonging to the SC category. The
status	society overall is not marked by deep caste divisions. The observed position

	1			
	to the lower middle class category. The other caste dominating the area is			
	OBC.			
	<b>Economic Conditions-</b> The overall economic condition of the people of the			
	area has not been found very satisfactory. They don't have a stable incom			
	pattern. Agriculture though done but it is very limited, practiced by roughly			
	4% of the population. Frequent floods cause rampant damage to their crops			
	and livestock every year.			
	The per annum income of the families is in the range of Rs 75,000 to Rs 1, 20,000. Seasonal migration is also prevalent in the area. People mostly engage in fish catching. There are small water bodies which are around the area and those are home to a variety of fishes.			
Maps	Appendix-1 gives the following maps, based on PRA exercise:			
	<ul> <li>Village Map</li> <li>Village Social Map (with the names and particulars of members in PRA)</li> <li>Village Resource Map</li> <li>Wealth Ranking</li> </ul>			

# 3. Livelihood Opportunity Analysis

	Г <u> </u>			
PRA Exercise	Team fr follows:		ti carried out PRA exercise	in Mirigaon village as
	ionows:			
	• ]	<b>Date</b> : 09-06-2016		
		Location: Commo		
	• ]	Numbers Present	: 41	
			e bearers, Village Headman,	community members,
		Department personn		
Objective of PRA	The spe	cific objectives of	the exercise are to:	
ГКА		a) To understand the livelihood options existing within the region, it prevalence and challenges.		
	mec	hanism. Examine	e credit needs of the po the options, challenges, nterested in delivering finance	and opportunities for
	c) Identify existing livelihood support mechanisms and explore viable options of providing livelihood support services for increasing income and employment opportunities of the people.			
Tools Used &	In this st	tudy, different tool	s were used. These includes	
Outcomes of				
the PRA	<ul> <li>Social Mapping</li> <li>Resource Mapping,</li> <li>Wealth Banking</li> </ul>			
	<ul><li>Wealth Ranking,</li><li>Seasonality of Livelihoods and</li></ul>			
	<ul> <li>Seasonanty of Elvenhoods and</li> <li>Venn diagram</li> </ul>			
	Appendix furnishes the details on above			
Ranking	Ranking	g exercise has been	done for the following:	
		Livelihoods & Ski	1	
	● .	Entry Point Activi		
	Append	ix-3 elaborates the	above. From the same, it is	stated that:
	Ranking	g of Livelihoods &	Skills Development	
	Rankin	g of EPA		
	Rank	Village EPA	Details	Probable source of
		as ranked	(Appendix-3 has additional particulars)	funding/ Department
	1	Road & Bridge	Concurred	PWD/PMGSY
	2.	Raising	Concurred	ENDE
		Platform		
	3.	Boat	Machine house boat	

	4.	Community	Two Story Build	ding				
		Hall						
	5	LPG						
	6	Electricity	Solar Light					
		_1		I				
Livelihood opportunities	Livelih		s were identified as					
	•	Promotion of ral Life skill training	bi crop cultivation f	or the comr	nunity	,		
	•	Skill based train	-					
	Table ]	I: Livelihood Op	portunities Rankir	ng				
		Type of trainin	g programme	Mark t	he pro	eferre	d opt	ion
		JT	or o	1	2	3	4	5
	• Ta	ailoring & Embro	idery	1	-	-	-	-
		an & bamboo	• •	-	-	_	4	-
	• Fo	ood Processing		-	2	-	-	_
	• V	Vermi compose			-	-	4	_
	• Li	Livestock			-	-	4	-
	• 0	thers (NTFP)		1	-	-	-	-
Agriculture & Horticulture		<b>12</b> under Recordas of agriculture a	-2 may be seen in t nd horticulture.	this connect	ion fo	r oppo	ortuni	ties
	<b>The m</b> a) b) c) d)	Lack of irrigation Lack of agricultu power tillers, trav Non usages of hi	for the wild animal. n facilities ıral infrastructure, n	nodern tools			ient's	viz,
	The ma a) b) c) d) The op a) b) c)	Lack of fencing : Lack of irrigation Lack of agricultu power tillers, trac Non usages of hi <b>oportunities are:</b> Application of pr Introduction of n Well-structured the skill of cult level.	for the wild animal. n facilities ural infrastructure, n ctors etc. gh yielding seeds er roper and controlled wand advance tec training programma ivation. All they n	nodern tools tc. d pesticides a chnology e. The villa	and e and ins gers a	quipm sectici re inf	ides. neritec	ł wi
	The ma a) b) c) d) The op a) b) c)	Lack of fencing : Lack of irrigation Lack of agricultu power tillers, trad Non usages of hi <b>portunities are:</b> Application of pu Introduction of n Well-structured the skill of cult level.	for the wild animal. n facilities tral infrastructure, n ctors etc. gh yielding seeds et roper and controlled two and advance tec training programme ivation. All they n	nodern tools tc. d pesticides a chnology e. The villa	and e and ins gers a	quipm sectici re inf	ides. neritec	ł wi
	The ma a) b) c) d) The op a) b) c)	Lack of fencing : Lack of irrigation Lack of agricultu power tillers, trad Non usages of hi <b>portunities are:</b> Application of pr Introduction of n Well-structured the skill of cult level. <b>ggested program</b> Tractor operation	for the wild animal. n facilities ural infrastructure, n ctors etc. gh yielding seeds e roper and controllec ew and advance tec training programme ivation. All they n <b>mmes are:</b> on training	nodern tools tc. d pesticides a chnology e. The villa leed is impr	and e and ins gers a	quipm sectici re inf	ides. neritec	ł wi
	The ma a) b) c) d) The op a) b) c)	Lack of fencing : Lack of irrigation Lack of agricultu power tillers, trac Non usages of hi <b>oportunities are:</b> Application of pr Introduction of n Well-structured the skill of cult level. <b>ggested program</b> Tractor operati Agri-skill deve	for the wild animal. n facilities tral infrastructure, n ctors etc. gh yielding seeds et roper and controlled two and advance tec training programme ivation. All they n	nodern tools tc. d pesticides a chnology e. The villa leed is impr	and e and ins gers a ovisat	quipm sectici re inh ion o	ides. heritec f their	ł wi

	Table-13 furnishes additional information about opportunities for livestock
	rearing.
	The main constraints are:
	a. Unable to buy fodder from market due to poor financial condition.
	b. Treat from the wild animal which destroy the Livestock.
	c. No veterinary care clinic.
	d. Lack of knowledge about the proper rearing of live stock
	The opportunities are:
	a. Higher income from Vegetable
	The suggested programme is:a.Piggery
NWFP	The opportunities for NWFP are tabulated at Table-14 under Record-2
	The main constraints are:
	a. Less technical know how of cultivating NTFP medicinal plant.
	b. Less knowledge of market Linkage.
	The opportunities is:
	a. Availability of fertile fallow land
	The suggested programme are: a. Plantation of Food plants,
	b. Medicinal Plant etc.
Specialized Skills	For skills development, the opportunities are tabulated at Table-15 under Record-2
	The main constraints are:
	Lack of product diversification
	• Lack of research on product quality
	Lack of TQM techniques.
	The opportunities are:
	Providing good communication facility
	• Training of the skill holder
	<ul> <li>Financial assistance from govt./NGOS/others Agency.</li> </ul>
	The suggested programme are:
	Training on Modern Tools and Equipment
	<ul> <li>Providing modern technology to the villagers</li> </ul>
	<ul> <li>Skill Up gradation &amp; Training on New Product Development and</li> </ul>
	Product Diversification
	<ul> <li>Setting up a raw material bank</li> </ul>
	<ul> <li>Providing a bulk buy arrangement of the finished product with institutional buyers.</li> </ul>

Credit Facility	Table-16 under Record-2 discusses this aspect.
1 uchity	The main constraints with the reasons are:
	• Financial exclusion
	• Higher rate charged by the private money lender.
	The opportunities are:
	Providing opportunity for modern financial institution
	• Adequate awareness for various scheme of govt. such as mudra banks.
	The suggested programme is:
	• Setting up modern financial institution in the nearby areas.
Strategic Interventions	Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan:
	• Agriculture & Horticulture: Tractor operation training, Agri-skill development programme ,Training on insecticides, pesticides, hybrid cultivation
	• Livestock: Piggery, Poultry.
	• <b>NWFP:</b> Plantation of Food plants, Medicinal Plant, arerunut Plantation, Floriculture etc.
	• <b>Specialized Skills:</b> 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.
	• <b>Credit facility:</b> Inclusion with modern financial institution in the nearby areas.
Livelihood	Framework of livelihood Opportunity Analysis has been done with the help of the following criteria:
<b>Opportunity</b>	the following chiefta.
Analysis	Livelihood assets
	<ul> <li>Livelihood context</li> </ul>
	<ul><li>Priority ranking on potential livelihood</li></ul>
	The livelihood situation of Mirigaon EDC has been analysed 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 –
	1 Natural Capital
	1. Natural Capital
	<ol> <li>Physical Capital</li> <li>Social Capital</li> </ol>
	4. Human Capital
	5. Financial Capital

#### 1. Natural Capital :

The Major natural Capital of Mirigaon EDC is ,Dibru saikhua National park and dibru river is flowing through out for farming purpose and for the livelihood rearing the villegers use river water as well as underground water.

#### 2. <u>Physical Capital :</u>

Majority of the household in Mirigaon are involved in farming sector Detailed land holding pattern is described in the table 3/annexure 6 There is no pucca or semi pacca house in the village .

#### 3. Social Capital :

Social capital has been used to explain the improved performance of diverse groups, the growth of entrepreneurial firms, superior managerial performance, enhanced supply chain relations, the value derived from strategic alliances, and the evolution of communities.

In the project area, only limited number of SHG groups are available. In this case, there is a need to strengthen the SHGs and build up village communities and cooperative societies for better performance of the livelihood opportunities in the area.

It is also seen that the delivery of government schemes to the people is very less. Social schemes are yet to be received in the area.

#### 4. <u>Human Capital :</u>

In the project area, as far as human capital is concern, the people are traditionally skills in the farming sector. Almost all the household are reported to be farmer in nature and do subsistence agriculture for selfsufficiency. The farmers focus on growing enough food to feed themselves and their families. The output is mostly for local requirements with little or no surplus for trade.

Although it is also seen from the survey that there is an immense potentiality of sericulture, weaving and cane and bamboo industry in the area.

In the project area, it is seen that majority of the households having land holding from 5-19 Bigha. It is found that the relationship between land holding and livelihood strategies that larger landholding did not imply higher income after a particular class or stage. Having higher land holdings did not suggest a greater dependence on land in terms of higher agricultural income (in cash or food) from their lands.

This suggest need for building skills like cane and bamboo, tailoring and other non-farm based activities so as to enable household to diversify their basket of livelihood option.

Sustainable livelihood is the capability of people to make their living

	comfortable and improve their quality of life without endangering the livelihood options of others and education plays an important role to achieve this. The provision of educational opportunities to all people must be facilitate to alleviate poverty and social empowerment.
	In the project area, it is seen that there is no facility to attain higher education. There is a need to provide both formal and informal education in the area to equip vulnerable with entrepreneurial and related functional literacy skills.
	Source of information always a factor for successful society. Perhaps the reason for backward in the forest area is the lack of access to information. There is no such medium (only radio) available in the project area. There is also negligence of forest offices to provide information to the people. Source of information became an important factor so that people may became up to date to compete with modern society with a better livelihood opportunities gathered from various source.
	The culture and tradition of a community shows a communities civilisation. The project area is highly cultured and their traditional way of living brought immense potentially of tourism in the area.
	In the project area, males are largely engaged in farm activities such as land preparation, sowing, weeding, inter culture and harvesting. Where females are involve in cooking, child care, livestock rearing etc. It is important to analyse gender participation to see how value addition can be provided based on their skills which they perform in day to day life.
	Migration is one of the important factor in analysing human capital. Out-migration or in-migration is take place due to available opportunities for better livelihood. In the project area there is no such out-migration or in-migration seen in the PRA. This is due to the less high educated persons available in the area. As education plays an important role in the migration factor. Higher education level increases the migration because people willing to go outside for better livelihood option. The family size also limited in this certain case migration from other place to another is seen negligible in the project area.
5.	<u>Financial Capital :</u>
	Economic & Financial Capital indicates the capital base (cash, credit/debt, savings, and other economic assets, including basic infrastructure, production equipment and technologies) which are essential for the pursuit of any livelihood strategies.
	In the project area, it is seen that only limited number of people (2 percent of the total households) having their bank accounts. Other facilities like having health insurance, crop insurance, bank loans, availing micro finance is nil.
	In this case there is a need to improve the Economic & Financial

	Capital in the area by providing bank accounts, health insurance, crop insurance, bank loans, availing micro finance in order to improve the livelihood scenario of the area.
Livelihood	Livelihood activities of the Mirigaon EDC are identifies on the basis of following
Context	criteria:
	• Contribution of particular livelihood activity in the total income of the EDC
	• Percentage involvement of income group in a particular livelihood activities
	• Priority ranking of the potential livelihood activities

# 4. Livelihood Development Plan (LDP)

Income	The main income generating activities as planned at the village are:									
Generating Activities	Farm Sector :									
Activities	<ul> <li>poultry and Gottarey</li> </ul>									
	<ul> <li>Fish Catching</li> </ul>									
	• Robi crop (Vegetable)									
	Non-Farm sector:									
	Eco Tourism									
	• Tailoring &Embroidery.									
	Cane and bamboo									
SHG	• Vermi compose SHGs of the village can plan the following activities:									
Activities	Shos of the vinage can plan the following activities.									
	1. To create awareness.									
	2. To organise and form group									
	3. To involve the villagers in Livelihood Activities collectively.									
Exposure	The following exposure trips are planned:									
Trips										
-										
C of	As attached in next nece									
Summary of Action Plan	As attached in next page.									
Action 1 Ian										
Convergence	The planned initiatives may be converged with the following schemes of the									
	Government of India:									
	a) National Rural Employment Guarantee Scheme - for rural									
	employment									
	b) Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied									
	development									
	c) Rashtriya Krishi Sinchay Yojana (RKSY) - for irrigation, including									
	watershed development									
	d) National Rural Livelihoods Mission									
	e) Skills Development schemes									
	f) Other schemes for rural development and livelihoods as found appropriate.									
	g) Introducing Ujjala Programme for replacement of use firewood.									
	The above convergence will yield synergies for the present plan, as well as help in sustaining the planned works in the post-project period.									

# 5.Action Plan (A) of Mirigaon EDC (Entry Point Activity)

SL.NO	ltem	Unit	Unit Cost	Total	Remarks
1	Construction of Eco	5	5L	25 L	Maintainance by the
	cottage for home stay				EDC for revenue
	with in the EDC				generation
2	Construction of machine	3	10L	30L	For using tourism
	boat				purpose in DSNP
					And use to rescue
					the community
					during flood.
3	Installation of solar Light	300	0.15L	39L	Street light cum
					domestic uses of
					EDC
4	Construction of two story	1	25L	25L	Used as training cum
	community hall cum				production center in
	training & production				the ground floor &1 <sup>st</sup>
	center.				floor used as a
					community Hall
5	Improvement of village	10 km	2.5L	25L	Sand graveling of
	internal road.				existing road.
6	Procurement of Function				To be used by the
	Utensil for the villegers.				EDC member for
	1)Chair	100	0.04	0.40	their personal family
	2)Plastic Table	30	0.10	0.30	function &
	3)Cooking Utencil	L.S	0.50	0.50	community function
	4) Tarpoline	5	0.05	0.25	on rental for income
					generation.
7	Procurement of sports				Inspiring the youth
	materials for youth				in sports & Culture
	including yoga & wiliness				
	san . 1.Foot ball	F	0.01	0.05	
		5 4	0.01	0.05	
	2.Volley Ball 3. cricket set.		0.005	0.02	
		1 1	0.15 0.30	0.15	
	4 Carpet. 6. Gersey set.	1 2	0.30	0.30	
	o. Gersey set.	2	0.10	0.10	
8	Procurement of Tractor	1	7L	7L	Used for farming
					Activity in rental for
					income generation

# Action Plane (B) of Mirigaon EDC (Skill Development)

SL.	Year	Activity	Unit	Unit Cost	Method	Total	Remarks
No						Amount	
1	1 <sup>st</sup>	Participatory Micro	1	100000.00	PRA, Baseline	100000.00	
	Year	Plane			Survey		
2		Awareness Building	2	20000.00	Awareness	40000.00	
					Programme		
3		Training on Tailoring & embroidery	30		40 days	200000.00	
4		Training on cane & bamboo	30		40 days	200000.00	
5		Supply of modern tools.	60	150000.00		300000.00	
		Total				840000.00	

SL.	Year	Activity	Unit	Unit Cost	Method	Total	Remarks
No						Amount	
1	2 <sup>nd</sup>	Awareness	2	50000.00	4 days awareness	100000.00	
	year	generation camp on			camp on		
		formation of			formation of		
		collective unit			collective unit		
		(e.g.SHGs,Societies			through		
		,NGO,Producers,			cooperative		
		Company .			expert.		
2		Training on Micro	2	50000.00	3days	100000.00	
		Enterprise			Entrepreneurship		
					Orientation		
					Pregame.		
3		Hand Holding	2	50000.00	Hand holding	100000.00	
		guidance support and			support from		
		linkage promotion			CML expert		
		programme for self			through out the		
		employment and			year.		
		placement.					
4		Value chain	2	50000.00	10 days training	100000.00	
		improvement			on diversification		
5		Improved production	2	130000.00		260000.00	
		and processing					
		Capacity					
		Total				660000.00	

SL.	Year	Activity	Unit	Unit Cost	Method	Total	Remarks
No						Amount	
1	3 <sup>rd</sup>	Linkage with the	2	80000.00	Creating	160000.00	
	year	institutional buyer and			platform for		
		govt. organization			buyer and		
		through out the year.			sellers		
					.interaction 2		
					days.		
2		Setting up the Ban	2	100000.00	Linkage	200000.00	

	Bazar through out the			through Van		
	year.			Bazar		
3	Exhibition	1	120000.00	Participation	120000.00	
	Participation			one exhibition		
	_			through forest		
				department.		
4	Access to other	2	120000.00	Exposer Visit	240000.00	
	geographical Market.			_		
5	Publicity through E-	2	60000.00	2days training	120000.00	
	Portal brochure			and awareness		
	catalog etc			progamme		
				taken by		
				marketing		
				expert.		
	Total				840000.00	

SL.	Year	Activity	Unit	Unit Cost	Method	Total	Remarks
No						Amount	
1	4 th	Training on Food	30		40 days	200000.00	
	year	processing					
2		Training on vermin	30		40 days	200000.00	
		compose					
3		Supply of modern	60	150000.00		3000000.00	
		tools.					
4		Exhibition	1	120000.00	Participation	120000.00	
		Participation			one exhibition		
					through forest		
					department.		
5		Access to other	2	120000.00	Exposer Visit	240000.00	
		geographical Market.					
		Total				1060000.00	

SL.	Year	Activity	Unit	Unit Cost	Method	Total	Remarks
No						Amount	
1	5 <sup>th</sup>	Value chain	2	50000.00	10 days	100000.00	
	year	improvement			training on		
					diversification		
2		Improved production	2	130000.00		260000.00	
		and processing					
		Capacity					
3		Exhibition	1	120000.00	Participation	120000.00	
		Participation			one exhibition		
					through forest		
					department.		
4		Access to other	2	120000.00	Exposer Visit	240000.00	
		geographical Market.					
5		Training on livestock	30	200000.00		200000.00	
		(Piggery)					
`					Total	920000.00	

# Abstract of Action Plan for 5 year

SL. NO	Year	Activity	Unit	Amount
1	1 <sup>st</sup> year	Participatory Micro Plane	1	
	,	Awareness Building	2	
		Training on Skill Development	30	840000.00
		Training on Skill Development	30	
		Supply of modern tools.	60	
2	2 <sup>nd</sup> year	Awareness generation camp on formation of collective unit (e.g.SHGs,Societies ,NGO,Producers, Company .	2	
		Training on Micro Enterprise	2	-
		Hand Holding guidance support and linkage promotion programme for self employment and placement.	2	
		Value chain improvement	2	660000.00
		Improved production and processing Capacity	2	
3	3 <sup>rd</sup> year	Linkage with the institutional buyer and govt.	2	
		organization through out the year.		
		Setting up the Ban Bazar. through out the year.	2	
		Exhibition Participation	1	
		Access to other geographical Market.	2	840000.00
		Publicity through E-Portal brochure catalog etc	2	
4	4 <sup>th</sup> year	Training on Skill Development	30	
		Training on Skill Development	30	
		Supply of modern tools.	60	1060000.00
		Exhibation Participation	1	_
		Access to other geographical Market.	2	
5	5 <sup>th</sup> year	Valu chain improvement	2	4
		Improved production and processing Capacity	2	╡
		Exhibition Participation	1	
		Access to other geographical Market.	2	920000.00
		Total		Rs.432000.00

#### 6. Forest Development Plan (FDP)

This Forest Development Plan has been prepared after a detailed PRA exercise at the village level as a part of the Micro-Plan of Mirigaon EDC. The objective of this plan is to provide for the sustenance of the conservation and bio-diversity values, environmental functions and productive potential of the forests assigned to the EDC; while meeting the consumption and livelihood needs of the community in a sustainable manner.

#### 1. Status of the JFMC Forests

The micro-plan takes into consideration the following categories of the EDC Forests of the Guijan EDC:

- (a) Forest areas assigned to the EDC by the Forest Department .
- (b) Areas planted / to be planted on community lands and other lands outside the notified forest area.

The status of both the above categories of EDC forests is briefly discussed below.

#### **1.1.** Forests & Their Conditions

The details of the status of forest areas assigned to the EDC have been furnished at Table-3.1 under Proforma-3 ('Forest Development Plan'), which has been attached as Annexure to this micro-plan. After considering other areas planted (or to be planted), the conditions of the forests of the Mirigaon EDC have been summarized below.

Identification	Alloted to EDC in Buffer zone of DSNP(Ha)	Distance from Village (Km)	Condition of Forest [Good - Forest with crown density of 40% of more Else 'Degraded']	Type of plantation	Utilization
(A) Assigned Forest					
Dibru Saikhowa National Park, Buffer Zone (Guijan Wildlife Range)	500 Ha	0 - 1.5Km	Riverian - newly formed soil and Char Area	Fooder to the Wild animal/Sand done stabilization etc.	
(B) Other Planted Area					
			Good Area: - Nil		
			Degraded Area: Nil		
TOTAL					

#### Table-1: Conditions of the Forests In Protected Area Mirigaon EDC

**Source**: Proforma-3, Table 3.1 / Discussions with Forest Department personnel & Community members

It is seen that the Mirigaon EDC has 500 Ha under its forests, of which 160 Ha is **'Good'** and 50 Ha is **'Degraded'**.

#### **1.2.** Forest Soil Type

The forests of Mirigaon EDC are located in loamy type(s) of soil. Some salient points of the forest soil type have been given in the following table.

Parameter	Status in Assigned Forests	Status Areas	in	Other	Planted
Fertility Level	2.3 to 2.94% organic. The available N, P205 and K20 content of the Soil is comparatively less.			-	
Soil Erosion Status	-			-	
Presence of:					
(a) Silt	24%			-	
(b) Mud-flat	31%			-	
(c) Newly accreted land	15%			-	
(d) Sand dune	45%			-	

Table-2: Forest Soil Type in Mirigaon EDC

**Source**: Proforma-3, 'B. Forest Soil Type' / Discussions with Forest Department personnel & Community members.

For the Mirigaon EDC; the salient points of the forest soil type are summarized below:

- 1. Entisol (30.3%)
- 2. Inceptisol (51.3%)
- 3. Alfisols (11.3%)
- 4. Ultisols (7.1%)

#### **1.3.** Existing Composition of Flora

In the forests of the Mirigaon EDC, the existing composition of the flora has been given as follows. It may be noted that the local forests are classified as deciduous moist Forests.

Table-3: Existing Composition of Flora in the Protected Area Mirigaon EDC

Parameter	Local Name(s)	Biological Name(s)
Major Forest Species	Hollock	
Associates	Gamari	Gmelina Arborea
Shrubs	Dhekia	Ferns
	Bhot jalakia	Capsicum chinense
Medicinal Plants	Arjun,	Terminalia arjuna
	Hilikha	Terminalia Chebula
	Neem	Azadirachta indica
	Amlakhi	Phyllanthus emblica
Produces		
	Jori bet	Calamus erectus
	Jati bet	Calamus tenuis

	Raidang bet	Calamus rotang
	Chuli bet	Calamus
		flagellum
	Lejai bet	Calamus floribundus
Others, if any	Kako Bah	D. hamiltonii
	Pahari Jati Bah	Oxytenthera parvifolia
	Dulu Bah	Schizostachyum dulloa
	Amlakhi	Emblica officinalis
	Halakh	Terminalia myriocarpa
	Hollong	Dipterocarpus
		macrocarpus
	Arjun	Terminalia arjuna
	Agar	Aquillaria agallocha

**Source**: Proforma-3, 'C. Composition of Existing Fauna & Flora' / Discussions with Forest Department personnel & Community members.

#### 2. Other Inputs for the Forest Development Plan

The following sub-sections discuss the other inputs for the Forest Development Plan of the Mirigaon EDC.

#### 2.1. Past Protection Measures of the EDC

The measures taken by the Mirigaon EDC for forest protection in the past have been discussed as follows.

- (a) Number of households involved:478
- (b) Number of people involved: 478 (1 Person Per House hold)
- (c) Summary of the measures: Not available
- (d) Any formal mechanism: Not available

[Source: Proforma-3, 'EDC Status - viii + ix' / Discussions with Forest Department personnel & EDC members]

#### 2.2. Domestic Requirements of Forest Produce

The dependency of the local community on forest produce for household requirements is available in the table given at below.

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	Frequent	60-75 kg	Illegally collection from wild life Protected Area .	Near by the Protected Area
Timber for House	Once in a year	2nos.		Forest
Small timber for Implements	-	-		-
Pole / Bamboo	Once in a month	2-3 bamboo / per month		Home grown
Fodder from Forest	Frequent	5-6 kg per day		Forest
NTFP	Frequent	2-3 kg per day		Forest
Other	-	-		-

Table-4 (A): Domestic Requirement of Forest Produce per Household of the Mirigaon EDC

**Source**: Proforma-3, Table-3.2 / Discussions with Forest Department personnel & Community members

There are 116 Nos.households in the Mirigaon EDC. From the above table and this number of households, it is inferred that the total annual requirements of the EDC village for forest products for own use is as follows:

Table-4 (B): Total Domestic	Requirement	of Forest	<b>Produce</b> -	· All Househo	olds of the
Mirigaon EDC					

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	120700	Throughout the year
Timber for House	496 nos.	Dec - Jan
Small Timber for Implements	-	-
Pole / Bamboo	730 bamboo	Dec - Jan
Fodder from Forest	140800	Throughout the year
NTFP	204000	Throughout the year
Other		

**Source**: Table - 4(A) at above & Total Household Number from Community records (\*) = Approx. Qty. of Average Household Requirement (from Table-4 (A) x 65 Households

#### 2.3. Collection & Marketing of Forest Produce by Villagers

Apart from use in the households, the community dependency on forest produces also includes the collection of such items for sale in local markets. The collection and marketing of forest produce by villagers of Mirigaon EDC is given in the following table.

# Table-5 (A): Collection & Marketing of Forest Produce by Villagers of the Mirigaon EDC

Name of Forest	Collection for Marketing			Location of
Produce	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	Collection
Firewood	Throughout the year	183	4320	Forest
Timber for House	Dec - Jan	183	4 nos.	Forest
Small timber for Implements	-	-	-	-
Bamboo	Dec - Jan	183	16 nos.	Forest
Pole	-			
Fodder from Forest	Throughout the year	183	8 kg per day	Forest
NTFP	Throughout the year	183	9-11 kg per day	Forest
Other	-	-	-	-

**Source**: Proforma-3, Table-3.3 / Discussions with Forest Department personnel & Community members

In the above connection, the following table gives additional pertinent information.

Table-5 (B): Collection	&	Marketing	of	Forest	Produce -	- Additional	Information [
Mirigaon EDC]							

Name of Forest Produce	Surplus Marketed (Kg)	How marketed	Average Income per HH from sale of Forest Produce
Firewood	117000 kg/year	Local Market	1800-2100/month
Timber for House	-	-	-
Small timber for Implements	-	-	-
Bamboo	22-40 pc/ month	Local Market	800-1250/month
Pole	-	-	-

Fodder from Forest	1200 kg /year	Local Market	900-1400/month
NTFP	-	-	-
Other	-	-	-

Source: Proforma-3, Table-3.4 / Discussions with Forest Department personnel & Community members

#### 2.4. **Total Requirements of Forest Produce - Domestic Use & Marketing**

The total requirements of forest produce by the community members of the Mirigaon EDC have been summarized below - based on the information in the previous sub-sections.

Refer to: Tables 4 (B) & 5 (B) of this Section, given at the previous pages

#### 3. **Protected Area Protection Issues**

#### 3.1. **Protection Problems**

The protection issues of the forests of Mirigaon EDC have been summarized below.

• Table-7: Protection Problems of the Mirigaon EDC	
--	--

Type of Problem	Relevant (Yes / No)	Significant (Yes / No)
Grazing - Local Animals	Yes	Yes
Grazing - Animals from Other Area	Yes	Yes
Illicit Felling of Timber	No	No
Smuggling of Timber	Yes	Yes
Encroachment of Protected Area Lands	Yes	Mainly of Missing Tribel Forest Village enlarge their occupying Area.
Incident of Snake bites/life threats/risks while protecting forest	Yes	Yes
Theft of Medicinal Plants	Yes	Yes

Source: Proforma-3, Table-3.5 / Discussions with Forest Department personnel & Community members

Thus, it is seen that the significant forest protection issues facing the above EDC are: (a)Grazing - Local Animals

(b) Grazing - Animals from Other Area

#### 3.2. **Reasons for Degradation of the Protected Area**

Reasons for degradation of forest are as follows:

(a) Non improvement of management Plan due to dearth available of fund.

(b) Traditional Cultivation of Tribal People

(c) Extremist problem in the Protected Area.

[Source: Proforma-3, Table-3.6 / Discussions with Forest Department personnel & Community members]

#### 4. Components of the Protected Area Development Plan

The following sub-sections discuss the main components of the Protected Area Development Plan of Mirigaon EDC; viz. the plans for Protection, Forest Improvement (Treatment), Nursery Development, Maintenance and Miscellaneous Operations.

#### 4.1. Protection Plan

The Protection Plan given at below, discusses the measures for the protection of the forests of Mirigaon EdC from the issues discussed earlier at Sub-section 3.1

Protection Work [to be filled from Table 3.7 of Proforma-3 as applicable]	Location in Protected Area	QuantificationoftheMeasures[Length, Area,Size etc.]	Timing	Priority [High / Medium / Low]
1. Engagement of Watcher	PA	3 km	брт-бат	High
2. Informers award	РА	3km	Anytime	High
3. Fire Protection	РА	3km	Anytime	High

#### **Table-8: Protection Plan of the Mirigaon EDC**

**Source**: Proforma-3, Table-3.7 / Discussions with Forest Department personnel & Community members

Thus, it is seen that the significant protection measures planned to be undertaken in the Mirigaon EDC (with high / medium priority) are as follows:

(a) Fencing

(b) Fire protection

#### 4.2. Types of Operations Proposed

The types of operations proposed for the treatment of degraded areas of the Protected Area of Mirigaon EDC are given hereunder.

Table-9: Types of	f Operations	<b>Proposed</b> in	the Mirigaon EDC
-------------------	--------------	--------------------	------------------

Treatment	Required (Yes/ No)	Responsibility of EDC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
Restoration of Degraded Protected Area	Yes	Yes	June - July	200 Ha
Watershed Treatment	Yes	Yes	All the Year	20Ha

Treatment	Required (Yes/ No)	Responsibility of EDC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
Water Reservoirs	Yes	Yes	All the Year	20 Ha
Grass and Silvi Pastoral activities	Yes	Yes	All the Year	100 Ha
Bamboo culture and earth piling	Yes	Yes	All the Year	Home grown
Seed Sowing	Yes	Yes	All the Year	50 ha
Root & Shoot Cutting & Plantation	Yes	Yes	All the Year	-
Cut Back & Coppice Treatment	Yes	Yes	All the Year	-
Stone wall fencing/live Hedge fencing	Yes	Yes	All the Year	200 Ha
Social Fencing	Yes	Yes	All the Year	200 На
Other Activities(Protection of Elephants)	Yes	Yes	All the Year	R.F

**Source**: Proforma-3, Table-3.9 / Discussions with Forest Department personnel & Community members

Thus, it is seen that the following are the treatment operations which have been proposed in the forest area of the Mirigaon EDC:

(a) Seed Sowing(b) Root & Shoot Cutting & Plantation etc.

#### 4.3. Forest Improvement Plan - Advance Works & Creation

The pertinent details in the above connection have been tabulated

1. Medicinal plantation at their own land.

2. Plantation in the buffer zone area mostly newly raised char in the river for fast care and sand done stabilization to protect soil erosion

**Source**: Proforma-3, Table-3.8 / Discussions with Forest Department personnel & Community members

#### 4.4. Forest Improvement - Annual Targets

5. Table-10 (A) and (B): Annual Targets of Forest Improvement in Mirigaon EDC (Year-1 to Year-5) and (Year-6 to Year-10)

The annual targets in the above connection are given below for a ten year period.

Name of Plantation	: Block Plantation of Saal Mixed with Associates
Plantation Period	: 2016-17 to 2025-26 (10 Years)
Plantation Area	: 100 ha
Spacing	: 3m X 3 m-1100 plants per ha
No. of Plants to be Raised	: 110000 (11000 approx. annually)
Number Blocks	: 10 Numbers(10 ha each)
Species	: Saal ; Associates- Gamari, Sissoo, Titasopa, etc.
Rates	: As Approved by APFBCS(to be increased by 20% every two years)

	Action Plan for Creation of Plantation	
Financial Year	Activities	Amount
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 100 ha, Demarcation of land during the month of December- January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha	100000
2017-18*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June;</b> GPS marking of the area	497000
2019 10*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June;</b> GPS marking of the area	497000
2018-19*	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	61600
2019-20*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June;</b> GPS marking of the area	596400
2019-20*	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year	73920
2020-21*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June;</b> GPS marking of the area	596400
	3rd Weeding	147840
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	266112
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	354816
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	266112
2024-25*	7th Weeding	266112
2025-26*	8th Weeding	266112
	Total Budgetary Requirement	3989424

\* Silvicutural thinning to be undertaken on intervals of five years post plantation

Source: Proforma-3, Table-3.10 / Discussions with Forest Department personnel & Community members

Name of Plantation	: Block Plantation of Teak Mixed with Associates, Firewood and Bamboo
Plantation Period	: 2016-17 to 2025-26 (10 Years)
Plantation Area	: 100 ha
Spacing	: 2m X 2 m-2500 plants per ha

No. of Plants to be Raised : 110000 (11000 approx. annually)

Number Blocks	: 10 Numbers(10 ha each)
Species	: Teak; Associates- Ajar, Khoroi, Khayer, Sissoo, Jia, Arjun, Ghora Neem, Bamboo (Jaati, Kako, Bholoka, Bijili), etc

	Action Plan for Creation of Plantation	
Financial Year	Activities	Amount (in Rs.)
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 100 ha, Demarcation of land during the month of December- January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha	100000
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area	262500
2018-19*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	262500
2018-19	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	26950
2019-20*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	315000
	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year	32340
2020-21*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	315000
	3rd Weeding	64680
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	266112
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	155232
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	116424
2024-25*	7th Weeding	116424
2025-26*	8th Weeding	116424
	Total Budgetary Requirement	2149586

\* Silvicutural thinning to be undertaken on intervals of five years post plantation

#### 5.1. Nursery Development Plan

The Nursery Development Plan for the Mirigaon EDC depends on the following types of Nurseries:

- (a) EDC Nurseries (incl. Departmental Nursery)
- (b) Other Nurseries SHG & Private.

The details are given below.

#### JFMC Nurseries

The following table gives the details of the nurseries of the Mirigaon EDC. This includes the Departmental Nursery involved in EDC works.

#### Table-11 (A): EDC Nurseries of the Mirigaon EDC

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
MIRIGAON EDC	Varieties	2016		Proposed

**Source**: Proforma-3, Table-3.11 / Discussions with Forest Department personnel & Community members

#### **Other Nurseries**

The following table gives the details of other nurseries near the Mirigaon EDC.

#### Table-11 (B): Other Nurseries near the Mirigaon EDC

Name of Nursery	Species		Remarks
Mirigaon EDC	Varieties	2016	Proposed

**Source**: Proforma-3, Table-3.12 / Discussions with Forest Department personnel & Community members

#### **Declaration Certificate**

Certify that the Micro Plan of Mirigaon EDC has cover our hole desire as per our Expectation .we are expecting the problem of our village will be removed shortly by conserving the forest and precise wild animal spices .

(President) Signature of the Mirigaon EDC (Secerataey) Signature of the Mirigaon EDC

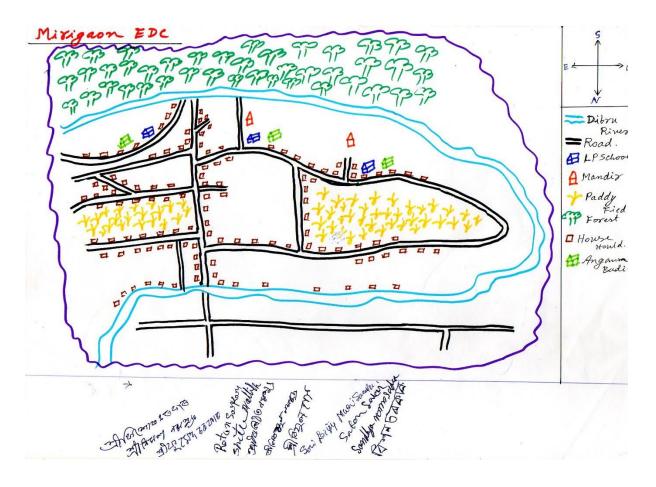
Counter signature of DFO Tinsukia Wild life Division

## List of Appendices

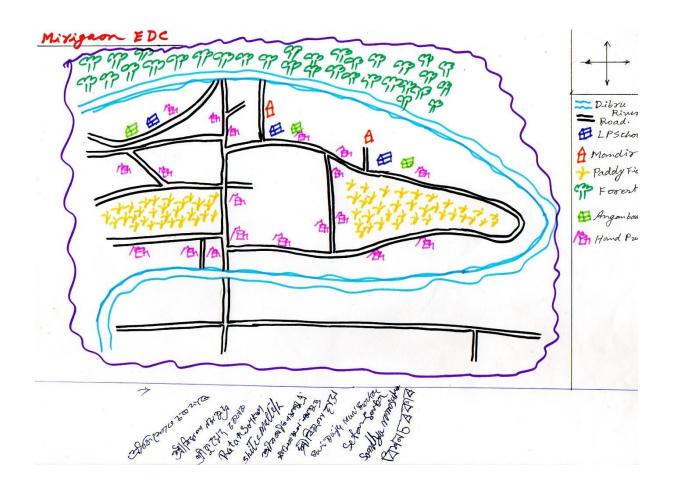
Annexure No.	Heading		
1	Maps: • Resource Map • Social Map • GIS Map		
2	PRA Exercise         • Focussed Group Discussion         • Seasonality Analysis         • Social Mapping         • Wealth Ranking         • Venn Diagram         • Chapatti Diagram         • Priority Ranking and EPA		
3	Photographs		
4	List of EDC Members		
5	Filled Up tables- Proforma 1 to 4 (Table 1-37)		

#### Annexure- 1

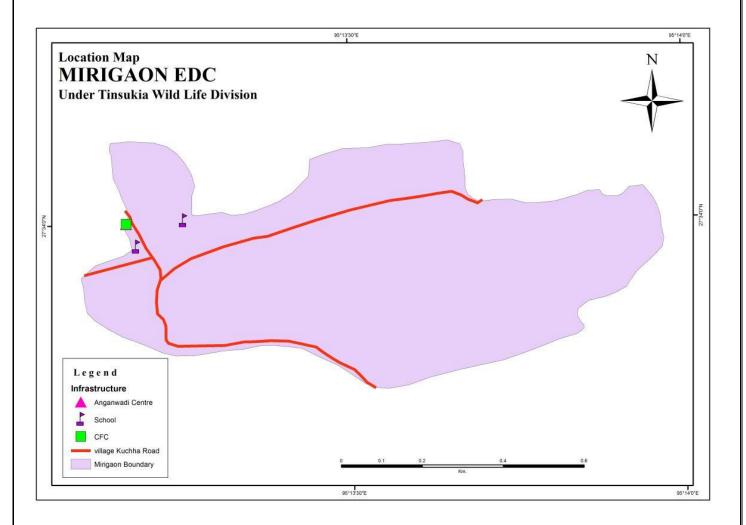
#### 1. Social Map



## 2. Resource Map



# **3.GIS Map**



#### Annexure-2 : PRA Exercise

Location and Timing of PRA

Numbers of participants :	25
Time :	11:20 a.m.
Venue :	Mirigaon Village
Date of Conducting PRA:	12 <sup>th</sup> June, 2016

#### Table – 2.1 Brief about the villages under Mirigaon EDC

Sl. No.	Name of the Village	No. of households	Population			
			Total	Male	Female	
1	Mirigaon	101	500	268	232	
2	Tengaguri	100	515	274	241	
	Total	201	1015	542	473	

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

- a) Focussed Group Discussions
- b) Seasonality Analysis
- c) Social Mapping
- d) Wealth Ranking
- e) Venn Diagram
- f) Chappati Diagram
- g) Ranking Exercise

#### **1.1 Focussed Group Discussion:**

The entire FGD were centered on the elements of rural economy namely- primary livelihood options of the EDC, rabi crop cultivation, fish catching and selling, followed by petty business, and wage labours etc. and also considering the important determinant of the presence of forests area all around. These factors have been blended well before extracting the information out from the respondents. The villages are affected by flood every year and the families therefore refrain from the activities like paddy cultivation.

#### **Findings from FGD**

• The existing livelihood options available in the EDC villages are rabi crop cultivation, fish catching and selling, petty business, and wage labours

• Some of the emerging livelihood options are growing of small scale tea gardens

• Agriculture is not practiced in the area and only a few percentage of the pople are engaged in cultivation of rain fed paddy. Households engage themselves in the cultivation of Rabi crops mostly.

• Every year the villages are affected by rampant flood. Due to flood related problems the community hesitates taking up agriculture and livelihood related activities

• There are no support services which are present in the area in context of agriculture

• There are no support services provided by the Government authorities in ensuring proper rearing of livestock. Some of the traded where the villagers are skilled at are weaving, masonry, painting, electrician, etc.

• There are no specific skills which are available with the families. Few of the families have received training from Industrial Training Institutes, Tinsukia on various trades like beutician, IT, AC and Refrigerator and diesel mechanics

• Some of the Government schemes through which some of the villagers have been benefitted are MGNREGA, IAY, provision of tube-well etc. However, these benefits have covered only 20-30% of the villagers.

• The children from the area have to travel to other neighbouring areas like Dulijan for appearing in the board examinations. The women are mostly engaged in the household tasks and the activities like taking care of the livestocks.

#### **1.2 Seasonality Analysis**

Seasonality analysis was done to generate information about and identifying periods of particular stress and vulnerability. In the context of a group discussion with respondents during the PRA, parameters such as expenditure, income, credit and savings were probed in sync with the factors such as employment trend, health conditions, education etc. associated with its increase or decrease in one's households.

#### Expenditure& Income

Children's education is also a component where most of the households spend during the start of the year. It is especially during the months of January to March when the new academic session of schools begin and apart from admission fees, the people also spend on buying new uniforms, textbooks and stationaries. The community also spends during April as it marks the onset of festival of Bihu. Again, for those engaged in paddy cultivation spends significantly during sowing season starting May till July along with harvest season starting in the months of October till December.

When it comes to income, it is seen that fishing catching, tourism are the popular livelihood activities which are prevalent in the area. During the months of October, January and Februrary the activities which are at peak are tourism and fish catching.

#### Savings and Credit

It was mostly found that amount of savings increases with the increase in income and most of the dwellers resort to institutional savings with likes of Post Office and bank savings. It is to be noted that the rate of interest for credit varies between group inter-loaning and outside members.

Сгор	Sowing	Harvesting
Paddy	May-July	October- December
Rabi Crops	October-November	January-March

#### Seasonality of Engagement\_ Non-Farm Activities

Engagement	Period of Engagement
Daily Wage Labour	April-August
Masonry	September-March
Petty business	Throughout the year
Fish Catching	October-January

#### 1.3 Social Mapping:

The social mapping activity was carried out to visualise the socio-economic aspects of the household under EDC villages. The mapping identified the housing patterns of the households, availability of schools, social infrastructure, religions and beliefs of the communities etc. Prior to social mapping an awareness camp was organised within the villages with an objective to gather villagers for PRA. The villagers were actively participated in the PRA activity. Initially, 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

 Table-2.2: Information about the villages

Social	Village	Mirigaon	Tengaguri
information	Total Population	500	515
	Male	268	274
	Female	232	241
	Total households	101	100
	Numbers of semi Pucca Houses	Nil	Nil

	Numbers of Pucca Houses	Nil	Nil
	Numbers of IAY Houses	Nil	Nil
Landmarks	Bridges	Nil	Nil
	Stream	Nil	Nil
	River	Yes	Yes
	PHE	Nil	Nil
	Power Transformer	Nil	Nil
	Community hall	Nil	Nil
	Primary School	Yes	Yes
	Anganabadi school	Yes	Yes
	ME, High School & College	Nil	Nil

- Under social mapping study a total of 201 households have been identified. All house hold in the village is mud house.
- > The communities mainly existing in the area are Bengali, and few Assamese families.
- About 201 population are concentrating in the two EDC villages. Of which Tengaguri village is having a total population of 515 followed by Mirigaon having 500 a total population
- Other than the class based division of the households, important places like community hall, schools and playground, access to water, and location of transformers, river, stream, and bridges were mapped.
- Main sources of water for the villagers are the tube-well and wells which is used by villagers for their day to day use.
- Provision of Education facility up to Medium level is satisfactory in the village as there are one primary, and one middle school in each village in along with Anganwadi centres.

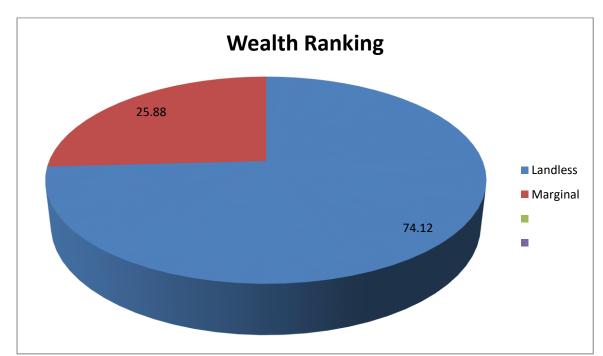
Maximum people are belonging to the Hindu community. They are under the category of OBC and SC.

#### Wealth Ranking

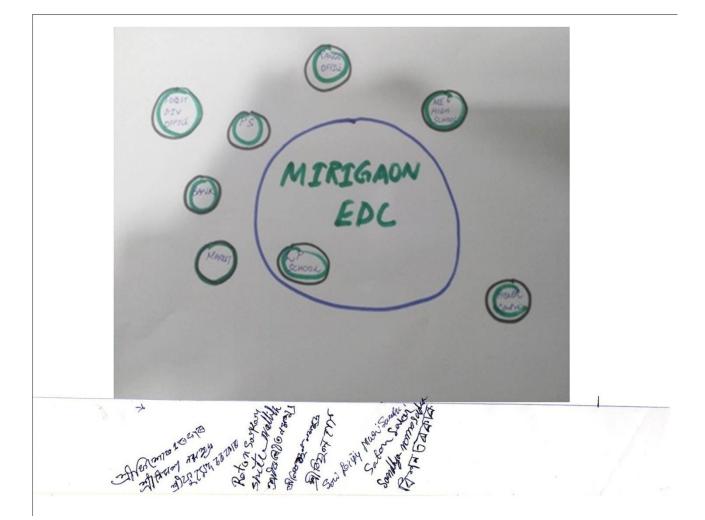
Wealth ranking, or well-being ranking, involves community members identifying well-being. Wealth ranking was done with the help of the following information about the households

- a) Occupation/livelihood
- b) Land holding
- c) Types of living house
- d) Ownership of assets

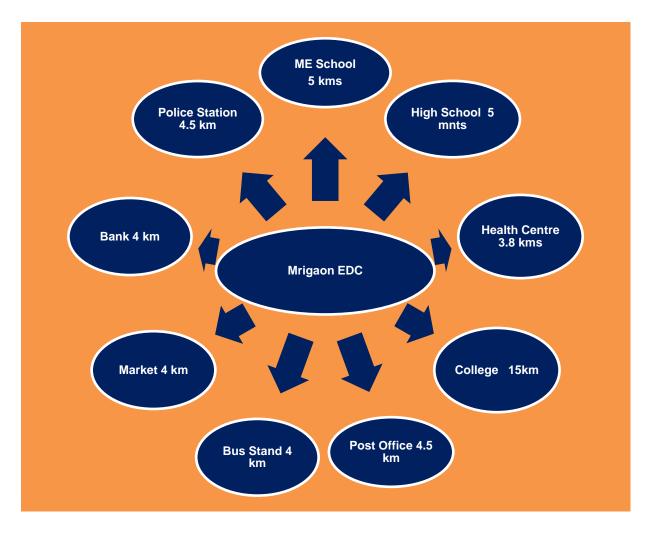
As such it is found that about 74.12 % per cent people are poor, about 25.88 % per cent are belonging to middle class and about 0 % per cent are categorized to be rich. Poor people are mainly irregular wage earners and mostly mortgage land for the paddy cultivation. Rich people are mainly involving in tea cultivators and paddy cultivators with good amount of agricultural land. They also have televisions sets, two wheelers, and four wheeler etc. Middle class people are doing cultivation of Tea, horticulture products as well as of paddy with own agriculture and analysing the different wealth groups in a community. It enables evaluators to learn about the socio-economic stratification of project beneficiaries and local people's definitions and indicators of wealth/land along with mortgaged lands.



## Venn Diagram



Chapatti Diagram



## **Priority Ranking- EPA**

## Priority Matrix of Mirigaon EDC for Entry Point Activity



Baby Paint Activity	Solar USH	Road. (b)	Tralon 6	Machin Boat	Community Hal	(f) se (f)	LPG. (G)	
Solar Lisht	A	A	A	A	A	A	A	ы.
Road. (b)	X	ß	ß	B	B	В	B	220,
Tractor (C)	X	×	C	C	C	C	6	1300 ·
MACION BOAL	×	×	×	D	D	D	D.	His
Community Hall	У	X	X	×	E	e	E	sis
Bridge. (F)	Y	4	X	×	×	P	F.	bin
LPG. (6)	t	X	X	X	¥	X	6.	Jeh

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## Priority Ranking- Livelihood Activity

### Priority Matrix of Mirigaon EDC for Potential Livelihood Activity

#### July and Enc

Livilihood. Activity.	Tailoning &. Endoraday	Can be Baurbo	Prod Premis	verani Le urpere	Live Stock		Marsh.	Parition
(ailoring & (A) Emboridary (A)	A	A	A	A	A		5	br
lan & bambo	+	B	B	Ь	Ь		4	220
food Brocessing	X	X	4	C	C		B	350.
verni compose.	¥	X	X	D	D		2	415
Live Stock. (E)	X	×	X	X	Ð	/	)	sis
A Contraction of the second se	end the series	Sr. F. W. May ENTROPERCE	All Francisco as		Contraction of the state			

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# Annexure-3 : Photographs









### Annexure - 4 List of Executive EDC

- 1. Satan Sarker (Pre)
- 2. Sandhiya Namusudra (Vice Pre)
- 3. Champa Dey (Secy.)
- 4. Sukesh Das (Member)
- 5. Biseswar Das
- 6. Bipul Das
- 7. Ranu Sarker
- 8. Jamuna Molik
- 9. Daiboki Sarker
- 10. Sunita Sarker
- 11. Bison Sarker
- 12. Khelon Sarker

### Annexure-5 (Record: I)

### Table- 1: Basic data of the village:

Sl. No	Name of the EDC	Date of Estd.	Nos. of members in Executive Committee	Name of President	Name of the Secretary
1	Mirigaon	2015-16	12	Satan Sarker	Champa Dey

### Table- 2: Village wise Population data

Sl.No	Name of the	Total House	Total Popula	ation	
	village	Hold	Total	Male	Female
1	Mirigaon	101	500	268	232
2	Tengaguri	100	515	274	241
	Total	201	1015	542	473

# Table- 2 .1 :Village wise population data

Name of the villageNos		SC		ST		OBC		Gener	al	Total of all
the village	house hold	Male	Female	Male	Female	Male	Female	Male	Female	Category
Mirigaon	101	265	231	3	1					500
Tengaguri	100	250	223			24	18			515
Total	201	250	454	3	1	24	18			1015

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

Sl.	Name of Village	Type of fa	Type of farmers according to land holding				
No.		Large Farmers >10 Hact.	Small Farmers 2 to 10 Hact.	Marginal Farmers < 2 Hact.	Landless		
1	Mirigaon			26	75	101	
2	Tengaguri			26	74	100	
	Total			52	149	201	

# Table- 4: Cattle Population:

	Village wise numbers of Cattle or type of animal							
EDC	Cows	Buffaloes	Goats	Cocks/Hen	Bulls/Oxe	Camels	Pigs	Total
				S	n			
Mirigaon	219		404	1005	200		69	

## Table- 5: Village wise Infrastructure:

Head	Particulars	Additional Information
Institution Name	Mirigaon EDC	Pre- Satan Sarker Secy- Champa Dey
Year of Formation	2016	
Division	Tinsukia	
Range Office	Mirigaon	
Number         of         Executive           Committee members	12	Male-8, Female-4
Names of cluster/villages under EDC	2 village	Mirigaon Tangaguri
Total no. of Households	201	
Residing Communities	Bengali, , Sonowal	
	Kachari,	
Nearest LP School	2	LP School
Anganwadi Kendra	2	Most of the Anganwadi are located adjacent to LP School
Church/Temple/Namghar	2	2 Temples,
Nearest ME School	1	2 km from EDC
Nearest High School	1	5 km from EDC
Nearest College	1	15 km from EDC
Nearest Hospital	sub-center	It is located 1 Km from the EDC
Nearest Police Station	Sabua	15 km from EDC
Nearest Post Office	Mulukgaon PO	5 kms from EDC
Nearest Market	Dinjan Market	Weekly market
Approach Road	2	Dinjan Road Sabua

### Table- 6: Agricultural crops

	Rain Fed	Rain Fed		
	Name of the crop	Area (in ha.)	Name of the crop	Area (in hac)
Kharif	Sali rice,			
Rabi	Mustard, leafy vegetables	Household use	NA	

# Table -7: Crop production profile

Type of crop	Total Production (approx) in quintals	No of household growing	Average production (quintal/ hac) approx	Area under crop (hac) approx
Paddy				
Tea				
Vegetable				

## Table- 8: Fodder Availability

Types	1-3 months	3-6 months	>6 months
Crop Residue	$\checkmark$		
Trees Fodder			$\checkmark$
Grasses	N		
Green Fodder		$\checkmark$	
Grazing in Forest			

# Table -9: Location of market from the village

For Purchase	Location	Distance from village if in other village (in km)
Grocery shop	Mirigaon	
Weekly Market	Mirigaon	
Major Market	Tinsukia	

Forest Corporation Sale Depo		
Tendu Patta PHAD		
Fish Market	Mirigaon Ghat	1 km
Medicinal Plant collection Centre		
Forest Corporation Medicinal plant Collection Center		

# Table -10: Water Resources Facility:

Water Source	Number	Water Availability	Uses
Water Harvesting	NA		
Structure			
Hand pump	130	Perennial	Drinking
River	1		
Well	4	a 1	Washing and Kitchen
		Seasonal	Gardening

# 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				
Kerosene stove				
Gobar/Bio gas				
LPG				
Electric Healer				

## Additional Tables:

## Table- 12: Income Distribution

### Income distribution of the households

Categories		No. of households in each category
BPL	below 25000	149
APL	25000-50000	52
	above 50000	Nill

# Table- 13: Education Status

Level of Education	Name of Villages	Name of Villages		
	Mirigaon	Tengapara		
Illiterate	165	188	353	
I-IV	126	111	237	
V-VII	88	78	166	
VIII-X	74	79	153	
XI-XII	44	55	99	
Graduate	3	4	7	
Post Graduate	0	0	0	
Total	500	515	1015	

## **RECORD: II**

## LIVELIHOOD OPPORTUNITY ANALYSIS

## Table-12: Agriculture and Horticulture:

### Table-12: Agriculture and Horticulture

Constraints	Reason	Opportunities	Programme
Low Production/ Collection	<ul> <li>Degraded fertility level of the paddy land due to tea Cultivation</li> <li>Negligible knowledge for organic farming</li> <li>No use of HYV seeds</li> <li>Lack of irrigation facilities</li> <li>Negligible use of modern machineries like tractor, power tiller etc.</li> <li>Not driven by the market demand</li> </ul>	<ul> <li>Use of irrigation facilities, modern machineries which directly lead to increase production</li> <li>Application of HYV (high yielding variety) seeds</li> </ul>	<ul> <li>Training on organic farming</li> <li>Provide training on the application of modern seeds, machineries etc.</li> <li>Provide credit facilities to buy modern machineries.</li> </ul>
Storage and Processing	<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	
Marketing	<ul> <li>Lack of transporting facilities for carrying products</li> <li>Less contact with the direct market; much dependency upon middle man</li> <li>No knowledge on marketing know-how, dependence on traditional system of selling.</li> </ul>	<ul> <li>Smooth transportation facility will help the farmers to carry their products to the nearby markets.</li> <li>Generate highest market price by removing middle men.</li> <li>More knowledge about the current market situation as well as the current value of their products.</li> </ul>	• Buyer seller meet

# Table -13: Livestock

Constraints	Reasons	Opportunities	Programme
Less grazing land	Not Applicable		
Availability of fodder	<ul> <li>Unable to buy fodder from market due to poor financial condition</li> <li>Trees fodder n crop residue are available only for 3-6 months. Green fodder is also not available for the whole year.</li> </ul>	<ul> <li>Faster growth of cattle</li> <li>Higher income from livestock rearing</li> </ul>	
Veterinary care facility	<ul> <li>No veterinary care clinic</li> <li>Lack of knowledge about the proper rearing of live stock</li> </ul>	<ul> <li>Disease control</li> <li>Increases the life span of cattle</li> <li>encourage livestock rearing for earning purpose</li> </ul>	
Production of milk	<ul> <li>Less availability of fodder</li> <li>No scientific knowledge about the cattle rearing for increasing milk production</li> </ul>	<ul> <li>High demand for milk products</li> <li>Availability of supplements to cattle like "Milk Booster, Milk Plus" etc. can increase the production of milk in the area.</li> </ul>	
Milk market	<ul> <li>Less contact with the direct market for milk</li> <li>Unaware of the market demand of different milk made products.</li> </ul>	• A huge demanded market for milk is available as Kokrajhar district head quarter and West Bengal state is too far from the JFMC.	

## Table- 14: NWFP

Constraints	Reasons	Opportunities	Programme
Less collection	Less availability of     NWFP	• Availability of fertile fallow land	Plantation of Food     plans, Medicinal Plant     etc.
Unsustainable extraction	• NA	• Availability of fertile fallow land	
Low rates	• NA		
Value addition	<ul> <li>No processing units</li> <li>Non availability of required resources</li> <li>No technical know-how</li> </ul>		

# Table-15: Specialized Skills

Constraints	Reasons	Opportunities	Programme
Raw material availability	<ul> <li>Non-Availability of Raw Materials within reachable location</li> <li>No Storage</li> </ul>	<ul> <li>Common place for setting a raw material storage</li> <li>Strengthen the commercialisation</li> </ul>	material bank
Product quality	<ul> <li>Lack of research on product quality</li> <li>Shortage of high quality materials</li> <li>Depend on traditional machineries. No use of modern machinery and equipment</li> <li>Lack of TQM techniques.</li> <li>Lack of innovation in product development</li> </ul>	<ul> <li>Increase productivity</li> <li>Optimal use of manpower</li> <li>Use of modern machinery and equipment</li> <li>Improvement of quality and designs by comparing their products with those of others' artisans in the fairs/seminars/ expos</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 proper market for hand made products</li> <li>No pricing policy</li> <li>No direct contact with the</li> </ul>	<ul> <li>Better price for the products</li> <li>Expansion of market</li> </ul>	<ul> <li>Establish link between buyers and sellers</li> <li>Marketing provision</li> </ul>

	institutional buyers		•	for participation in national and international seminars/expos Intervention in the form of engagement of market consultant Introduction of product catalogues
Credit facilities	<ul> <li>No linkage with the banks or post office saving banks</li> </ul>		•	Microfinance, Term
lacinties	<ul> <li>Unaware of the development</li> </ul>			Loans, Working Capital Arrangement
	schemes of banks and			Cupitui Filituigement
	government			
Product	No Product	<ul> <li>Developing</li> </ul>	•	Skill Up gradation &
Diversification	Diversification or New	Demand Based		Training on New
	Product Development.	Products, as per the		Product Development
	• Lack of concept for	needs of the		and Product
	product diversification.	modern day market.		Diversification

# Table-16: 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	Subsidised credit     arrangement	
Availability of loan	<ul> <li>Fear of risk taking</li> <li>No knowledge of documentation</li> </ul>	• Start-ups entrepreneurial venture	<ul> <li>Microfinance, Term Loans, Working Capital Arrangement</li> </ul>
Mortgage difficulty	• Unavailability of proper documentation of mortgaged property.	• Proper awareness about documentation in the area	

### **Conflict Resolution**

If in case any circumstance arise a conflict in between the member-secretary and the president of the EDC the executive committee member will try to resolve the problem in a one sitting. If not than Recall the meeting for the second sitting in the present of superior authority to settle the dispute. If than Also not resolve than try to settle the dispute by sitting with the whole general body including the higher Authority .if not than try to solve the dispute by inviting the higher authority of District Administration .