







MURABASTI JOINT FOREST MANAGEMENT COMMITTEE (JFMC) LUMDING RANGE, NAGAON SOUTH DIVISION NORTHERN ASSAM CIRCLE

MICRO-PLAN (2016-17 to 2025-26)

Prepared by Murabasti Joint Forest Management Committee

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

July 2016

Divisional Forest Officer Nagaon South Division Hojai.

List of Acronyms

AfD	French Development Agency
APFBC	Assam Project on Forest & Biodiversity Conservation
APL	Above Poverty Line
BPL	Below Poverty Line
CML	Centre for Microfinance and Livelihood
COMPELLO	Consortium On Micro Planning And Enhancement Of Livelihood Opportunities
DFO	Divisional Forest Officer
EDC	Eco-Development Committee
EPA	Entry Point Activity
FCA	Forest (conservation) Act, 1981
FD	Forest Department
FRA	Forest Rights' Act
FV	Forest Village
FYP	Five Year Plan
GHG	Green House Gases
GOI	Government of India
GP	GaonPanchayat
На.	Hectare
IIE	Indian Institute of Entrepreneurship

MURABASTIJOINT FOREST MANAGEMENT COMMITTEE Nagaon South Forest Division, Lumding Forest Range

Micro-Plan for 10 Years [Livelihood Development Plan & Forest Development Plan]

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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 ecosystems to enhance the forest dependent community's livelihoods and ensure conservation and sustainable use of biodiversity'.

The above project is being mainly funded by the *Agence France de Développement* (AFD) - i.e. the French Development Agency, with 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 built-up through skills development initiatives.

A consortium comprising of Indian Institute of Entrepreneurship (IIE) Guwahati, *RashtriyaGraminVikasNidhi* (RGVN) and Centre for Microfinance and Livelihood (CML) has been formed to implement (*interalia*) 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 MurabastiJFMC

This document gives the Micro-Plan for the Murabasti JFMC, which is located in the Hojai district of Assam. The JFMC falls under the jurisdiction of the Nagaon South Forest Division of the Lumding ForestRange. 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 June 2016. The micro-plan has been compiled by IIE based on the project guidelines. The document has been discussed and

finalized for adoption in July 2016.

2. Village socio-economic profile

Location Key Information	The Murabasti Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in Murabasti, a village located on the fringe of the Lumding Reserve Forest. The area covered by the above JFMC falls within theLumdingDevelopment Block of Hojai District of Assam. Appendix-1 gives the Village Map. The key information of the JFMC is furnished below. Table-A: Key Information of the JFMC		
	Name of the JFMC	Murabsti	
	Habitation	Murabasti	
	Name of Revenue Village	Murabasti	
	Name of the Gram Panchayat / VCDC	Pub Lumding GP	
	Revenue Circle	Lanka	
	District	Hojai	
	Forest Division	Nagaon South	
	Forest Range	Lumding	
	Forest Beat	Borlongphur	
	Year Formed	2007-2008	
	Description of Boundary	As below	
	of JFMC	North:LumdingDiphu Road South:Lumding railway station West: National Highway 54 East:Christianbasti village	
Brief Details of the Executive Committee & General Body	Source: JFMC Records & Discussions during PRA Exercise in June 2016 Additional details are given at Table-1 of Record-I. (Given at Annexure) The brief details of Executive Committee & General Body of the JFMC are contained in the table, which is given below. Table-B: Brief Details of Executive Committee & general Body		
	Name of President	Biswanath Das	
	Name of Member Secretar	y Dilip Bora, ,Forester-I	
	Name of Treasurer	Ms. Sabita Das	
	No. of Members in Executi		
	Committee	Female:5	
	No. of Members in the Ger Body	neral 70	
	Source: JFMC Records		
Households & Population Structure	The village has 70 households, of which 70 households are BPL (Below Poverty Line) households. The number of female headed households is 0.		
	The total population is 405,	of which 226 are male and 179 are female	

	members. Out of the total population 56 belongs to SC and 349 belongs to the General Category.
	Table-2 of Record-I may be referred for further details in the above regard.
	From this, it is inferred that: (1) The average number of persons in a household is 5.8. (2) The sex ratio is 792 females per 1000 males in the village.
Education & Skills Development	Over 76% of the population is reported to be literate. Most of the community members 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 JFMC area, informal means for skills development is the traditional norm. People have traditional skills in the following areas: (a) Food Processing (b) Farming (c) Carpentry (d) Tailoring
	Government has been active in promoting formal skills development programmes in the country as well as in the state. However, no such programme has been carried out in the habitation or in nearby areas.
Soil	 The soil type of the project area includes: Alluvial soil in low lying (clayey soils) and plain areas (loamy soils). Red soils in hillocks and hilly parts
	Both types of soil can support different kinds of crops, as the soil is reported to be fertile on the whole.
Water	The area is drained by River Borlongphur, which flows from the adjoining hills of Karbi-Anglong into the project area.
Climate: Temperature & Rainfall	The maximum temperature during the summer is 45° C. The minimum temperature during the winter is 7° C.
	The annual rainfall is about 60-125 mm. About one-third of the rainfall usually occurs during the rainy season (June-September). The village has high levels of humidity (over 90%) during the rainy months and low levels in the winter (Below 30%).Lumding and adjoining areas Rain shadow Zone and is known to be an area with least rainfall.
Forest & Biodiversity	The local forests have been broadly classified as Reserve Forest. The main tree species are Arjun, Xilikha, Bhomora, Ahat. The forests can yield a range of NTFP like spices, leafy vegetables, ferns, medicinal plants, cane, thatch, fodder, etc.
	Additional details in this regard are given at the 'Forest Development Plan'.

	[C 12 11 W
Land Use Pattern	Cultivable Wasteland: 10.5%
	LumdingDiphu Road: 0.85 %
	Paddy Field: 21.38 % Firewood Plantation area: 25.34 %
	Pond: 8.08%
	River: 2.30 %
	Road: 1.76 %.
	Settlement Area:23.87%
	Tree clad area:6.37%
	Tree clad area.o.s / /o
Land Holdings	The type of households as per land-holding is given at Table-3 of Record-
	I. From the same, it is seen that:
	• 31 HH (55 %) are landless;
	• 25 HH (45 %) are marginal farmers (less than 2 Ha); and
	 None of the households belong to small farmers (2-10 Ha).
Livestock	The total number of livestock in the village is 387. The main types of
	livestock possessed by the households include:
	Cows:120
	Goats:140
	Pigs:Nil
	Poultry:127
	Table 7 of December when referred to for the details in the shows
	Table-7 of Record-I may be referred to for the details in the above connection.
	Connection.
Village	In any community; the availability of basic infrastructure enables the
Infrastructure &	development of sustainable livelihood options. The present condition of
Communication	infrastructure in the village is not satisfactory. This is borne out by Table-5
Facilities	of Record-I, which gives the present status of the village infrastructure.
	From the above table, the following have been noted with regard to village
	infrastructure:
	Physical Infrastructure: The habitation is deprived of basic physical
	infrastructure like paved roads, electricity, water supply, mobile network
	etc.
	Education & Health Facilities: There are minimal educational and health
	facilities. Public transport is not available, and the community members
	have to use bicycles to move around.
	Govt. Offices: The government offices (such as Police station Gram
	Govt. Offices : The government offices (such as Police station, Gram Panchayat office, Revenue office, Forest Range office etc.) are located at a
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Agricultural Crops	Panchayat office, Revenue office, Forest Range 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. Financial Inclusion: Facilities for financial inclusion like bank and post office are located at a considerable distance from the habitation. Hence, the community members do not have bank accounts or postal savings

	TO LL O. CD L.
	Table-9 of Record-I.
	The above shows that the following are the main crops grown in the village. Kharif Crops: Paddy(Aijong,Pankaj, Ranjit) Rabi Crops: Mustard Others: Mango, Jackfruit, Ladies Finger, Chilli, Drum stick, Cabbage, Cauliflower. Most crops are rain-fed.
Crop Production Profile	Table-10 of Record-I may be referred to for the production and yield details of the crops grown in the village.
	The maximum numbers of households are involved in growing crops like Paddy, Chilli, Ladies Finger, Brinjal, Cabbage, Cauliflower.
	The production and yield of these crops is given as follows:
	(a) Paddy: Production 1260 quintal Yield 61.61 quintal /ha (b) Vegetables: Production 600 quintal Yield 26.78quintal /ha (c) Mustard: Production 45 quintal Yield 11.25 quintal /ha
Fodder Availability	The matter of fodder availability in the village is dealt with at Table-11 of Record-I. The above shows that the main sources of fodder in the village are as follows:
	(a)Crop residue (b) Grazing in forest (c) Green fodder
Markets	Table-12 of Record-I shows the location of the different markets from the village. The main markets used by the community are as follows: (a) Grocery / PDS: Lumding Town at 4 km away (if in other village) (b) Weekly / Bi-weekly Market: : Lumding Town at 5 km away (c) Major Market: : Lumding Town at 5 km away
Water Resources	The water resources are tabulated at Table-13 of Record-I. The main water resources with the water availability is as follows: (a) Ring well(Water Availability: Perennial / Seasonal) (b) Tube well(Water Availability: Perennial / Seasonal) (c) River (Water Availability: Perennial / Seasonal)
Energy Consumption	Table-14 of Record-I shows the major sources of energy in the village. The same have been listed below. (a) Fuel wood- Households Depending: 70 Nos. Source: Forest (b) LPG -Households Depending: 21 Nos. Source: Government, Private (c) Kerosene Stove – Households Depending: 62 Nos. Source: Local market
Socio-economic status	Social set-up: The village is inhabited by general community. They do not have a caste system. The society is not marked by deep social divisions. The observed position of women is satisfactory.
	Economic Condition: The economic position is not satisfactory. The main livelihoods are farming, wage earning, and carpentry. The annual income

	of the villagers Ranges fromRs. 74,000 to 86,000 per year.
	There is no large-scale migration of the youth and others for livelihoods. Additional details are available at the next section.
Maps	 Appendix-1 gives the following maps, based on PRA exercise: Village Map Village Social Map (with the names and particulars of members in PRA) Village Resource Map Venn Diagram Chapatti Diagram

3. Livelihood Opportunity Analysis

Framework of livelihood Opportunity Analysis has been done with the help of the following criteria:

- Livelihood assets
- Livelihood context
- Priority ranking on potential livelihood

The livelihood situation of MurabastiJFMC has been analysed during the PRA exercise using sustainable livelihood framework of DFDI (Department of Funding for International Development). The existing livelihood situation of JFMC is outlined in terms of

- Natural Capital
- Physical Capital
- Social Capital
- Human Capital
- Financial Capital

4. Natural Capital

The major natural capital of Murabasti JFMC are Teak, Sal, Neem, Arjun and there is only one number of river namely Borlongphur.

Majority of the people are dependent on the forest for firewood, green fodder, timber etc. For farming purpose and for livestock rearing, the villagers use the river water.

(Refer table 10, 11, table 3 of FDP for further details)

5. Physical Capital

Majority of the households in the Murabasti JFMC are involved in farming activities and are marginal farmers with farming land of less than 2 ha. Detailed land holding pattern is described in the table 3/annexure 6.

The village has 49 numbers of semi-pucca houses and the remaining houses are puccaa and IAY funded. Among the various sources of energy consumption the main sources which are mostly being used by the villagers are kerosene, Electricity, LPG and candle, and are mainly dependent on

firewood and kerosene for cooking purpose. Although some of the households have LPG, but reliability is very less. (refer to table 10,11)

There is only one LP school present within the JFMC area and one Middle school located on the boundary of the JFMC. There are no other educational institutions present within the JFMC. (refer to table 5)

In case of water sources, 30 per cent HH have access to tube well, 45percentHH have access to both ring well.

6. Social Capital

The villagers are not fully involved in the JFMCs functioning due to lack of awareness on their roles, functions, and specific benefits they are going to receive.

Only two female SHGs are there in the village. However, the village has one temple where social meetings of the villages are held.

7. Human Capital

76 per cent of total population of the JFMC are educated and 24 per cent of them have crossed upper primary level school education. (refer to table 4)

8. Financial Capital

There is no government bank or lending institution available in the JFMC area or in the nearby areas. However, villagers lend from informal lending groups, relatives etc.

269 numbers of people have bank account in commercial banks, but they are not aware of the benefits of financial inclusion.

9. Livelihood Context

Livelihood activities of the Murabasti JFMC are identified on the basis of following criteria:

- Contribution of particular livelihood activity in the total income of the JFMC
- Percentage involvement of income group in a particular livelihood activities
- Priority ranking of the potential livelihood activities

10. Priority Ranking through PRA Exercise

	Team from IIE Guwahati carried out PRA exercise in Murabasti village as follows:		
PRA Exercise	Date: 8 th June, 2016 Location: Kali Mandir Numbers Present: 42		
	In Presence of: JFMC office bearers, Village Headman, community members, Forest Department personnel, etc.		

011 11 077	701	4		
Objective of PRA	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.			
	opuo	ons and the forest de	evelopment plan.	
Tools Used &	Diff	erent tools were use	d and outcomes obtained. T	hese include:
Outcomes of the	Different tools were used and outcomes obtained. These include:			
PRA	Soci	al Mapping		
		lth Ranking		
	Time	e Line review		
	Seas	onality of Livelihoo	ods	
	Ven	n Diagram		
		11		
	App	endix-3 furnishes d	letailed information of the al	bove.
Ranking	Ran	king exercise has be	en done for the following:	
			la Davialamma4	
		Livelihoods & Skil Entry Point Activit	<u>=</u>	
			iles (El II)	
	App	endix-3 elaborates	the above. From the same,	it is stated that:
	Ranl	king of Livelihoods	& Skills Development	
	4 -	15	•	
		ood Processing		
		ee Keeping		
		lotor driving shery		
	4.11	islici y		
	Ran	king of EPA		
		Village EPA as	Details	Probable source of
		ranked	(Appendix-3 has	funding/deptt.
			additional particulars)	
	1.	Drinking	Government supply	EPA APFBC/
		Water	water	NRDWP
	2.	Sanitation	Providing HHL (House	
			Hold Latrine) - Low	Mission/ PHE
			cost, septic and sanitary	
	3.	Road	type. Black Topping of road	PMGSY/PWD
	3.	Connectivity	From Lumding Town to	FWIGS 1/F WD
		Connectivity	the village (12 KM)	
	4.	Health Centre	Sub-Centre within the	NHM/ H & FW
			village	
	5	Community	Well-built Community	APFBC
		Hall	hall to help conducting	
			village level meetings	
	6.	School	High school	SSA
		•	t of working capital wort	
		_	he EPA fund for promoting	
			mmunity work shed cum J C boundaries for setting u	_
			ment/Machineries.	p and commissioning of
Livelihood	Live		es were identified as follows	:
	1	or opportunite		-

	The suggested programme is: Training programmes on food processing		
Credit Facility	Table-18 under Record-2 discusses this aspect.		
	The main constraints with the reasons are: (a) Rate of interest (b) Availability of loan (c) Mortgage difficulty The opportunities are: (a) Creating SHG's (b) Setting up Micro finance institutions		
	The suggested programme is: Education programme on SHG's		
Strategic Interventions	Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan:		
	 Agriculture & Horticulture: Tractor operation training, Agro-skill development programme, Training on insecticides, pesticides, hybrid cultivation Apiculture 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. Credit facility: Setting up micro finance institutions in the nearby areas. 		

11. Livelihood Development Plan

Income Generating	The main income generating activities as planned at the village are:
Activities	
	1.Food Processing
	2.Driving
	3.Tailoring
	Source: Table-32 of Record-4
SHG Activities	SHGs of the village can plan the following activities:
	- No SHG formed within the JFMC area
	Source: Table-33 of Record-4

Exposure Trips	The following exposure trips are planned:
	1.Nil 2.Nil
	Source: Table-34 of Record-4
Summary of Action Plan	As attached in next page.
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) RashtriyaKrishiVikasYojana (RKVY) - for agricultural and allied development (c) SwarnaJayanti Gram SwarojgarYojana (SJGSY)- for irrigation, including watershed development (d) National Rural Livelihood Mission (e) Skills Development schemes (f) Other schemes for rural development and livelihoods as found appropriate. The above convergence will yield synergies for the present plan, as well as help in sustaining the planned works in the post-project period.

Forest Development Plan of Murabasti JFMC

This Forest Development Plan has been prepared after a detailed PRA exercise at the village level as a part of the Micro-Plan of Murabasti JFMC. 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 JFMC; 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 JFM Forests of the Murabasti JFMC:

- (a) Forest areas assigned to the JFMC by the Forest Department; and
- (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 JFMC forests is briefly discussed below.

1.1. Forests & Their Conditions

The details of the status of forest areas assigned to the JFMC 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 Murabasti JFMC have been summarized below.

Table-1: Conditions of the Forests of Murabasti JFMC

Identification	Area of	Distance	Condition of Forest	Frequency of
	JFMC	from	[Good - Forest with	Use by
	Forest	Village	crown density of 40%	Community
	(Ha)	(Km)	of more	[2-3 m/3-6 m/
			Else 'Degraded']	6-9 m / Over 9
				m]
(A) Assigned Forest				
RF / PF	110 Ha	1km	Good Area: 110 Ha	3-6m
Name:Lumding			Degraded Area: Nil	
Beat:Borlongphur				
Compartment:				
(B) Other Planted Area				
Location:	-	-	-	-
Type of Forest:				
VF / Other				
TOTAL	110На		Good Area: 110 Ha	
			Degraded Area: Nil	

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

It is seen that the Murabasti JFMC has 110 Ha under its forests, of which 110 Ha is 'Good' and none is 'Degraded'.

1.2. Forest Soil Type

The forests of Murabasti JFMC are located in sand dune type of soil. Some salient points of the forest soil type have been given in the following table.

Table-2: Forest Soil Type in Murabasti JFMC

Parameter	Status in Assigned Forests	Status in Other Planted
		Areas
Fertility Level	2.3 to 2.94% organic. The available N, P205 and K20 content of the Soil is comparatively less.	-
Soil Erosion Status	-	-

Parameter	Status in Assigned Forests	Status in Other Planted Areas
Presence of:		
(a) Silt	15%	-
(b) Mud-flat	20%	-
(c) Newly accreted land	Low	-
(d) Sand dune	65%	-

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

For the Murabasti JFMC; the salient points of the forest soil type are summarized below:

- a) Entisol (32.3%)
- b) Inceptisol (49.3%)
- c) Alfisols (12.3%)
- d) Ultisols (6.1%)

Existing Composition of Flora

In the forests of the Murabasti JFMC, the existing composition of the flora has been given as follows. It may be noted that the local forests are classified as Reserved Forests.

Table-3: Existing Composition of Flora in the Murabasti JFMC

Parameter	Local Name(s)	Botanical Name(s)
Major Forest Species	Teak	Tectonagrandis Linn
	Sal	Shorearobusta
Associates	Arjun,	Terminalia arjuna,
	Hilikha,	Terminaliachebula,
	Ahat	Ficusreligiosa
	Bhomora,	Terminaliabelerica,
Shrubs	BiriPata,	NicotianaTabacum,
	Broom	Genisteae
Medicinal Plants	Neem,	Azadirachtaindica,
	Bhomora,	Terminaliabelerica,
	Hilikha,	Terminaliachebula,Terminalia arjuna,
	Arjun,	Phyllanthusemblica
	Amla	
Produces		
Others, if any Herbs	Doron	LeucasCephalites

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 Murabasti JFMC.

2.1. Past Protection Measures of the JFMC

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

(a) Number of households involved: 100 HH

(b) Number of people involved: 200

(c) Summary of the measures: Patrolling within the JFMC area

(d) Any formal mechanism: NA

[Source: Proforma-3, 'JFMC Status - viii + ix' / Discussions with Forest Department personnel & JFMC 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.

Table-4 (A): Domestic Requirement of Forest Produce per Household of the Murabasti JFMC

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	High	540kg/yr		Forest
Timber for House	Low	2 nos/ yr		Forest
Small timber for Implements	Nil	Nil		
Pole / Bamboo	Low	2 nos/ yr		Forest
Fodder from Forest	Low	1.5kg/month		Forest
NTFP	Low	1 kg/month		Forest
Other	Nil			

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

There are 70 households in the Murabasti JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the Murabasti village for forest produce for own use is as follows:

Table-4 (B): Total Domestic Requirement of Forest Produce - All Households of the Murabasti JFMC

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	37800 kg	-
Timber for House	2 nos.	-
Small Timber for Implements	-	-
Pole / Bamboo	2 nos.	-
Fodder from Forest	1260 kg	-
NTFP	120 kg	-
Other	Nil	-

Source: Table - 4(A) at above & Total Household Number from Community records

(*) = Approx. Qty. of Average Household Requirement (from Table-4 (A) x _____ Households

2.3. Collection & Marketing of Forest Produce by Villagers

It is observed that there is no sale and marketing of forest produce by the locals from the Murabasti JFMC.

Table-5 (A): Collection & Marketing of Forest Produce by Villagers of the Murabasti JFMC

Name of Forest	Colle	Location of		
Produce	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	Collection
Firewood	-	-	-	-
Timber for House	-	-	-	-
Small timber for Implements	-	-	-	-
Bamboo	-	-	-	-
Pole	-	-	-	-
Fodder from Forest	-	-	-	-
NTFP	-	-	-	-

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 [Murabasti JFMC]

Name of Forest Produce	Surplus Marketed (Kg)	How marketed	Average Income per HH from sale of Forest Produce
Firewood	-	-	-
Timber for House	-	-	-
Small timber for Implements	-	-	-
Bamboo	-	-	-
Pole	-	-	-
Fodder from Forest	-	_	-
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 Murabasti JFMC have been summarized below - based on the information in the previous sub-sections.

Table-6: Total Requirements of Forest Produce by Villagers of the Murabasti JFMC

Name of Forest Produce	Community Requirement (Kg per annum) From Table-4(B)	Surplus Marketed (Kg) From Table- 5(B)	Total Requirements (Kg)
Firewood	37800 kg	-	37800 kg
Timber for House	2 nos.	-	2 nos.
Small timber for Implements	-	-	-
Bamboo	2 nos.	-	2 nos.
Pole	2 nos.	-	2 nos.

Name of Forest Produce	Community Requirement (Kg per annum) From Table-4(B)	Surplus Marketed (Kg) From Table- 5(B)	Total Requirements (Kg)
Fodder from Forest	1260 kg	-	1260 kg
NTFP	120kg	-	120kg
Other	-	-	-

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

3. Forest Protection Issues

3.1. Protection Problems

The protection issues of the forests of Murabasti JFMC have been summarized below.

Table-7: Protection Problems of the Murabasti JFMC

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	No	No
Accidental Fires	Yes	Yes
Encroachment of Forest Lands	No	No
Others	No	No

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 JFMC are:

- (a) Grazing by local and other animals
- (b) Accidental forest fires

4. Components of the Forest Development Plan

The following sub-sections discuss the main components of the Forest Development Plan of Murabasti JFMC; 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 Murabasti JFMC from the issues discussed earlier at Sub-section 3.1

Table-8: Protection Plan of the Murabasti JFMC

Protection Work	Location in	Quantification	Timing	Priority
[to be filled from	Forest	of the		[High /
Table 3.7 of	Area	Measures		Medium /
Proforma-3 as		[Length, Area,		Low]
applicable]		Size etc.]		
Engagement of	Reserve	1 no	Through	High
watcher	forest		out the day	C
Fire Protection	Reserve	2m plantation	-	High
	forest	boundary		
Informers award	-	-	-	-
Fencing/social	-	-	-	-
fencing				
Cattle proof	-	-	-	-
trenches				
Rotational grazing	-	-	-	-
Stall feeding	-	-	-	-

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 Murabasti JFMC (with high / medium priority) are as follows:

- (a)Engagement of watcher
- (b) Fire Protection

4.2 Types of Operations Proposed

The types of operations proposed for the treatment of degraded areas of the JFMC Forest of Murabasti JFMC are given hereunder.

Table-9: Types of Operations Proposed in the Murabasti JFMC

Treatment	Required (Yes/ No)	Responsibility of JFMC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
Restoration of Degraded Forests	No	No	-	-
Protection to Cut Stumps of Trees	Yes	Yes	2017	

Treatment	Required (Yes/ No)	Responsibility of JFMC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
Watershed Treatment	Yes	Yes	2017	200 metres
Water Reservoirs	Yes	Yes	2017	200 metres
Grass &Silvi-pasture	No	No	-	-
Bamboo Plantation	No	No	-	-
Seed Sowing	No	No	-	-
Root & Shoot Cutting & Plantation	No	No	-	-
Cut Back & Coppice Treatment	No	No	-	-
Physical Fencing(Live hedge fencing)	Yes	JFMC	2017	JFMC Boundary
Social Fencing	No	No	-	-
Other Activities	No	No	-	-

 $\bf Source:$ 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 Murabasti JFMC:

(a) Protection to Cut Stumps of Trees

- (c) Watershed Treatment
- (d) Water Reservoirs
- (e) Live hedge fencing

4.3 Forest Improvement Plan - Advance Works & Creation

The pertinent details in the above connection have been tabulated as follows.

Table-10: Forest Improvement Planned in the Murabasti JFMC

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
Assisted Natural Regeneration	-	-	-	-

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
(with plantation in gap)				
Block Plantation	-	-	-	-
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	-	-	-	-
Enrichment Plantation	-	-	-	-
Direct Plantation	110 Ha (25 Ha under APFBC and 85 Ha under NARMIL)		Fuelwood, Bogipoma, Velu, Xiharu, Ahoi, Jamuk, Bhomora, Xilikha,	-
Other	-	-	-	-
TOTAL AREA (in Ha)	110 Ha		Fuelwood, Bogipoma, Velu, Xiharu, Ahoi, Jamuk, Bhomora, Xilikha,	-

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

5. Action Plan for Block Plantation of Non Saal Mixed with Associates

Name of Plantation : Block Plantation of NonSaal Mixed with Associates

Plantation Period : 2016-17 to 2025-26 (10 Years)

Plantation Area : Spacing : No. of Plants to be Raised : Number Blocks : Species : Rates : -

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	
2017-18*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	-
2010 104	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	-
2018-19*	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2019-20*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	-
2019-20*	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2020-21*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	-
2020-21	3rd Weeding	-
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2024-25*	7th Weeding	-
2025-26*	8th Weeding	-
<u> </u>	Total Budgetary Requirement	-

^{*} Silvicutural thinning to be undertaken on intervals of five years post plantation

6. <u>Action Plan for Block Plantation of Mixed Harwood Plantation - Teak with Associates, Firewood and Bamboo</u>

Name of Plantation : Block Plantation of Mixed Harwood Plantation - Teak with Associates,

Firewood and Bamboo

Plantation Period : 2016-17 to 2025-26 (10 Years)

Plantation Area : Spacing : No. of Plants to be Raised : Number Blocks : Species : -

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	-
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	-
2018-19*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	-

	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2010 201	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	-
2019-20*	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2020-21*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	-
2020-21**	3rd Weeding	-
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2024-25*	7th Weeding	-
2025-26*	8th Weeding	-
	Total Budgetray Requirement	-

^{*} Silvicutural thinning to be undertaken on intervals of five years post plantation

 $\textbf{Source} \colon \textbf{Proforma-3, Table-3.10} \, / \, \textbf{Discussions with Forest Department personnel \& Community members}$

7. Action Plan for Block Plantation of Non Timber Forest Produce

Name of Plantation : NTFP PLANTATION

Plantation Period : 2016-17 to 2025-26 (10 Years)

Plantation Area : Spacing : No. of Plants to be Raised : Number Blocks : Species : -

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 50 ha, Demarcation of land during the month of December-January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha, 3 wired barb fencing 2800 RM @ Rs56.36/RM	-
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	-
2019 10*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	-
2018-19*	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2019-20*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	-

	2nd Weeding; Replacement of dead/struggling saplings raised in the previous	-
	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	-
2020-21*	3rd Weeding &Prunning	-
2021-22*	4th Weeding &Prunning Replacement of dead/struggling saplings raised in the previous year	-
2022-13*	5th Weeding & Prunning; Replacement of dead/struggling saplings raised in the previous year	-
2023-24*	6th Weeding&Prunning	-
2024-25*	7th Weeding	-
2025-26*	8th Weeding	-
	Total Budgetary Requirement	-

7.2 Nursery Development Plan

The Nursery Development Plan for the Murabasti JFMC depends on the following types of Nurseries:

- (a) JFMC 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 Murabasti JFMC. This includes the Departmental Nursery involved in JFMC works.

Table-11 (A): JFMC Nurseries of the Murabasti JFMC

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
-	-	-	-	-

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 Murabasti JFMC.

Table-11 (B): Other Nurseries near the Murabasti JFMC

Name of Nursery	Species	Year of Development	Number of Seedlings	Remarks
-	-	-	-	-

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

7.3 Maintenance Plan - 10 Years

The maintenance plan for plantations raised in the Murabasti JFMC is given below. This covers a period of ten years.

(A) Timber Species – Sal, Teak

Table-12 (A): Maintenance Plan of Teak Plantation in the Murabasti JFMC

Year(s)	Treatment
1 st Year	-
2 nd Year	-
3 rd Year	-
4 th Year	-
5 th Year	-
6 th Year	-
7 th Year	-
8 th Year	-
9 th Year	-
10 th Year	-

Source: Discussions with Forest Department personnel & Community members

(B) Bamboo

Table-12 (B): Maintenance Plan of Bamboo Plantation in the Murabasti JFMC

Year(s)	Treatment
1 st Year	-
2 nd Year	-
3 rd Year	-
4 th Year	-
5 th Year	-
6 th Year	-
7 th Year	-
8 th Year	-
9 th Year	-
10 th Year	-

Source: Discussions with Forest Department personnel & Community members

(C) Fuel wood Plantation

Table-12 (C): Maintenance Plan of Fuel Wood Plantation in the Murabasti JFMC

Year(s)	Treatment
1 st Year	-
2 nd Year	-
3 rd Year	-
4 th Year	-
5 th Year	-
6 th Year	-
7 th Year	-
8th Year	-
9th Year	-
10 th Year	-

Source: Discussions with Forest Department personnel & Community members

(D) NTFP / Medicinal Plantation

Table-12 (D): Maintenance Plan of NTFP / Medicinal Plantation in the Murabasti JFMC

Year(s)	Treatment	
1 st Year	-	
2 nd Year	-	
3 rd Year	-	
4 th Year	-	
5 th Year	-	
6 th Year	-	
7 th Year	-	
8 th Year	-	
9 th Year	-	
10 th Year	-	

Source: Discussions with Forest Department personnel & Community members

NB::As Confirmed by DFO there is no available area for Plantation(Copy enclosed below)

To The Range Forst Offices, Lumding Range, Lumding Sub: - Onavailability of whea for creation of Plantation under 'Murabarti" IFMC week. Sis. I have the Lonous to Enform you that no area is available for creation of planfation "Hukabalfi" JFMC. Since, The vacant 25 Hactuse have abready been covered by Juelwood planfation under APF130 before desiring 2015-16. This is for favour of your Rind information & necessary action. · yours faithfully, T. Ay 1300 1905/411-(President) forwarded Laurabasti J.F. M.C. Forest Range Officer unding Range, Lumding Member Secrefory)

Silly Boro Fri

Member/Secretary

Murabosti J. F. M. G.

Lumding ann (s. Rahman, ARS,) & Fo. Ms. Division

7.4 Miscellaneous Operations Plan

The miscellaneous operations planned in the Murabasti JFMC are given below.

Table-13): Miscellaneous Operations in the Murabasti JFMC

Operation	Required (Yes / No)	Responsibility	Month / Year	Area (Ha)
Medical/Health camp	Yes	VSS	Rainy season	JFMC area
Centre for non formal education	Yes	VSS	All year	JFMC area
Promotion of fuel saving devices	Yes	VSS	All year	JFMC area
Cattle improvement/health programmes	Yes	VSS	Monthly	JFMC area

Source: Proforma-3, Table-3.13 / Discussions with Forest Department personnel & Community members

Marketing Operations

For produce from the Murabasti JFMC, the planned marketing operations are:

- (a) Marketing directly to private purchasers
- (b) Marketing individually
- (c) Marketing Collectively

8. Expected Benefits

This sub-section furnishes the benefits expected from the forests protected by members of the Murabasti JFMC, as well as the sharing mechanism for the usufruct benefits.

5.1 Expected Benefits Related to Wood & Grass

The above has been tabulated below for the Murabasti JFMC. The benefits are expected from the forests protected by its members under this Forest Development Plan.

Table-14: Expected Benefits from Forests Protected by Members of Murabasti JFMC

Item	Month	Year (Indicative)	Quantity
Firewood	-	-	-
Timber for House	-	-	-
Small timber for Implements	-	-	-
Bamboo	-	-	-

Pole	-	-	-
Fodder from Forest Trees & Grass	-	-	-
NTFP	-	-	-
Wages	-	-	-
Other	-	-	-

Source: Proforma-3, Table-3.14 / Discussions with Forest Department personnel & Community members

8.2 Sharing Mechanisms

The sharing mechanism for the benefits is indicated below for members of the Murabasti JFMC.

Table-15: Sharing Mechanism for Murabasti JFMC

Method	Items
To be shared equally	-
To be freely collected by the members	Medicinal Plants, Fodder, Broom Stick
Other Methods	-

According to Forest Officials of Lumding Range the sharing mechanism process has not been started officially and the people who work in the plantation collect the residual remains only.

Source: Proforma-3, Table-3.15 / Discussions with Forest Department personnel & Community members

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Appendix 1

HOW TO REACH:

Lumding to Guwahati distance, location, road map and direction

Lumding is located in **India** at the longitude of 93.17 and latitude of 25.75. Guwahati is located in **India** at the longitude of 91.75 and latitude of 26.19.

Distance between Lumding and Guwahati

The total straight line distance between Lumding and Guwahati is **150 KM** (kilometers) and 188.93 meters. The miles based distance from Lumding to Guwahati is **93.3**miles. This is a straight line distance and so most of the time the actual travel distance between Lumding and Guwahati may be higher or vary due to curvature of

Lumding to Guwahati travel time

Lumding is located around 150 KM away from Guwahati so if you travel at the consistent speed of 50 KM per hour you can reach Guwahati in 3 hours. Your Guwahati travel time may vary due to your bus speed, train speed or depending upon the vehicle you use.

Lumding to Guwahati Bus

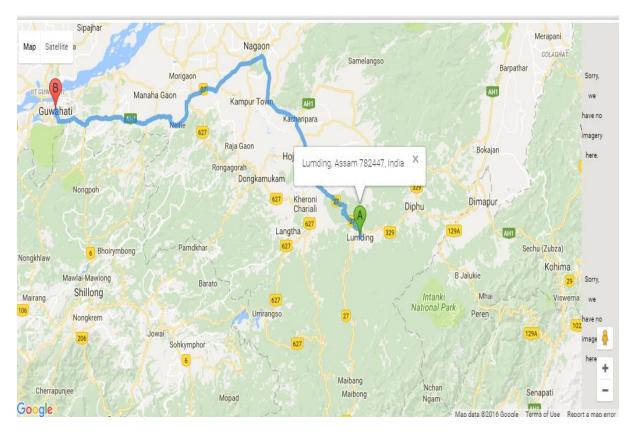
Bus timings from Lumding to Guwahati is around **2.5 hours** when your bus maintains an average speed of sixty kilometer per hour over the course of your journey. The estimated travel time from Lumding to Guwahati by bus may vary or it will take more time than the above mentioned time due to the road condition and different travel route. Travel time has been calculated based on crow fly distance so there may not be any road or bus connectivity also.

Bus fare from Lumding to Guwahati

May be around Rs.120.

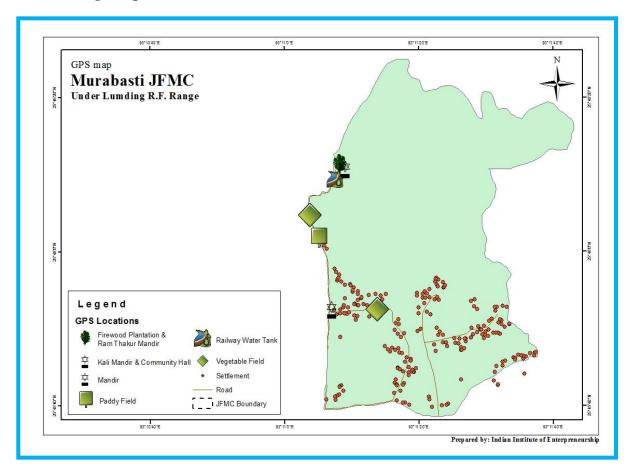
Lumding to Guwahati road map

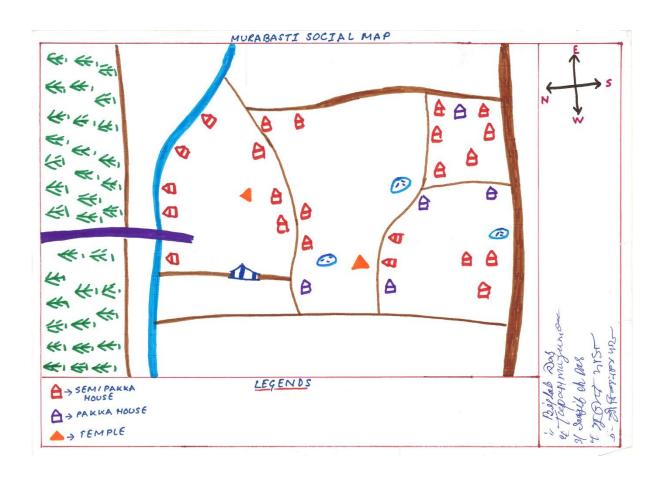
Lumding is located nearly **east** side to Guwahati. The given east direction from Lumding is only approximate. The given google map shows the direction in which the blue color line indicates road connectivity to Guwahati. In the travel map towards Guwahati you may find enroute hotels, tourist spots, picnic spots, petrol pumps and various religious places. The given google map is not comfortable to view all the places as per your expectation then to view street maps, local places see our detailed map here.



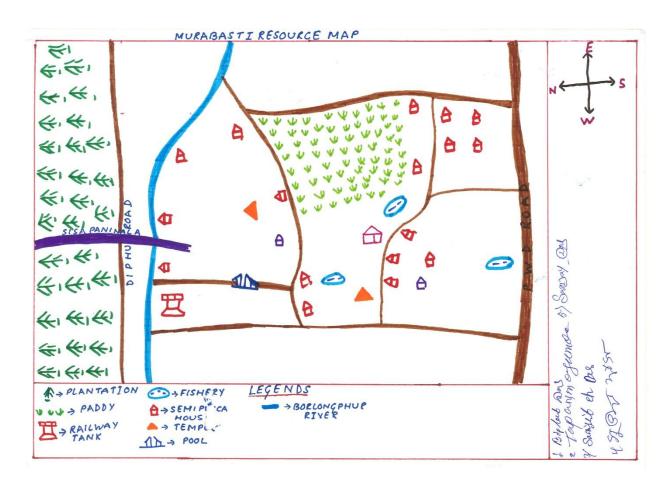
Appendix 2

1) Village Map



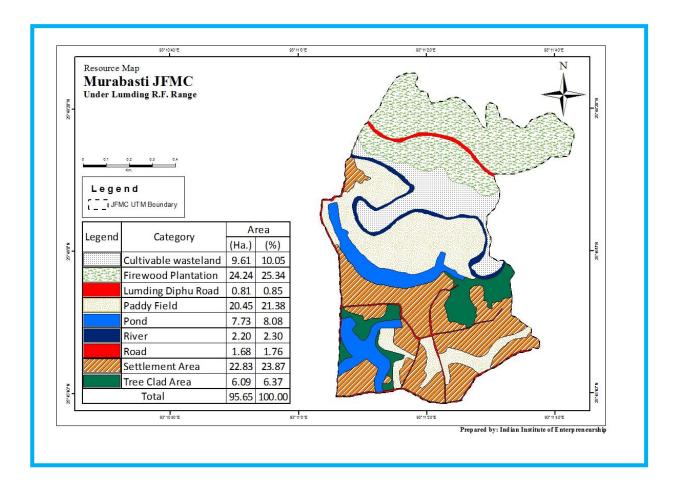


3. Resource Map



Appendix 3

Land Use Map of GIS



Appendix 4

PRA Activity

Location and timing of PRA activity

Numbers of participants:	42
Time:	10.30 am, 8 th June 2016
Venue:	Kali Mandir

Table – 3.1Brief about the villages under Murabasti JFMC

Sl. No.	Name of the Village	No. of households	Population (nos.)		
			Total	Male	Female
1	Murabasti	70	405	226	179
	Total	70	405	226	179

Source: Field Survey

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

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

3.1 Social Mapping:

Social mapping is used to visualise the socio-economic aspects of the Murabasti JFMC 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 it was easy to gather people for the PRA process in the community hall. And due to time constraint we have to skip the transect walk. The villagers were enthusiastic about the mapping process and they actively participated in the process.

At first, the people of villagers were asked to draw the main roads of the village and then asked them to locate their houses and locate the important social places and government offices with help of the PRA team members. Two of them voluntarily came out to draw and they were assisted by other villagers and the team members. All the villagers spotted their households in the map. After the mapping process the team members collected the information about the pattern of their households namely pucca, semi pucca, IAY and thatch house.

Table4.1: Information about the villages

	Village	Murabasti
	Total Population	405
	Male	226
Social information	Female	179
	Total households	70
	Numbers of semi pucca Houses	49
	Numbers of pucca Houses	6
	Numbers of IAY Houses	15
	Bridges	1
	Stream	1
Landmarks	River	1
	Temple	10
	Puffed rice(Muri) Mill	1
	Beaten Rice(Cheera) Mill	1
	Fishery Pond	3

- ➤ The participants of social mapping have identified 70 households out of which 49 households have semi pucca houses and 6 have pucca houses. Out of the 49 Semi pucca houses, 15 houses are funded by Indira Awash Yojana (IAY) which shows very limited coverage of government policy in the village. This signifies that the IAY scheme of Government has not achieved considerable coverage of poor people residing in rural area yet.
- Other than the class based division of the households, important places like community hall, schools, and playground, stream, well, embankment, check dam, hand pump and bridges are mapped.
- Main sources of water for the villagers are the limited number of tube wells and the railway supply water line which is used by villagers for their day to day use.
- Provision of Education facility is not satisfactory in the villages as there is no high school level education facility within the JFMC which results is maximum number of school drop outs. There is only one Anganwadi centre in the entire village
- ➤ Majority of the population belongs to the Bengali community and are of General category and Schedule Caste.

Learnings:

- > The Households are still dependent on forest and use firewood for their cooking purpose which is still a concern for the forest department for degradation of the forest.
- > The primary health center along with post office is located in Lumding Town, which is 5 Km away from the JFMC. The villagers have to cover a long distance for their health check-up.
- The availability of fodder for domestic animals depends on the resource available in the forest area and the capacity of the household who can rear the livestock's. The people of the JFMC are fully dependent on crop residue, trees fodder, grasses, and green fodder. Field residues are materials left in an agricultural field after the crop has been harvested. These residues include stalks and stubble (stems), leaves, and seed pods.
- The villagers of the Murabasti JFMC have to move Lumding town, a distance covered within 4 km, for their weekly marketing activity.

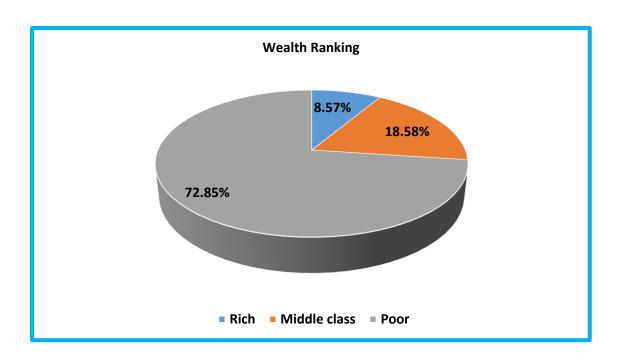
4.3 Wealth Ranking:

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

Wealth ranking was done with the help of the following criteria

- Occupation
- Land holding
- Types of living houses

As such about 72.85% people are poor, about 18.58% belong to middle class and about 8.57 % are categorised to be rich. Poor people are mainly irregular wage earners, farmers, shopkeepers, doing farming on (adilua) others land. Rich people have more than 10 bighas of land,RCC and semi RCC house, service, adequate no of cattle, TV and CD, Motor Cycle, And Rice Mill, Irrigation Facilities and earning more than 100 quintals of rice are listed as rich people.



4.4 Time Line Review:

Table 4.2: Timeline review

Year		Event	Type						
Pre independence	1945	DacoityinRajKumar's house(a reputed	Robbery						
		person in the village)							
	1961	Land agreement conflict between two renowned businessman, SarathCh Das and	Land Agreement						
		Manoj Sarkar							
		An Elephant severely devastated the village	Elephant						
	1963	people lives causing severedamage of their	Depredation(enclosed						
Post -Independence		houses and plantations.	copy in Annexure-5)						
	1972	A person named MilonCh Das got the first	First Employed						
		job as a L.P school teacher from the village.							
	1985	First Fish Breeding was done.	constructive						
	1990	The First Road was constructed.	Construction of first road						
	1990	The First Road was constructed.	Construction of Thist Toad						
	2000	The first Ring Well was facilitated by Govt.	Construction of Ring						
20 th century		which was inaugurated by MP RajenGohain.	Well.						
	2010	The first Beaten rice (cheera) and puffed rice	Industrial establishment.						
		(muri) mill was built up.							

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

Learnings:

- > The village name Murabasti was derived from the fact that there were people belonging to the *mura* community in the village hence the name Murabasti came into being.
- > The man-elephant conflict is one of the major problem in the village and no preventive measures had taken place so far.
- ➤ The Beatenrice (Cheera) and Puffed Rice (Muri) Mill was a mini industrial initiative taken by the villagers which resulted in an income generating process for most of the households.

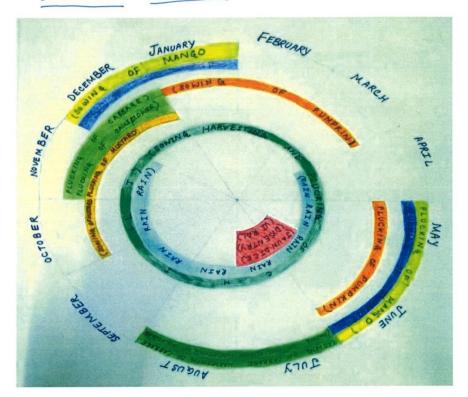
4.5 Seasonal Mapping of livelihood activities:

Seasonal calendars drawn by the local people are very useful means of generating information about seasonal trends within the community and identifying periods of particular stress and vulnerability. Best undertaken in the context of a group discussion (to help verify the information obtained), seasonal calendars are often drawn on the ground with the relative trends depicted using stones or seeds, as in a preference-ranking matrix. In other instances, simple line graphs can be drawn to show seasonal increases or decreases. A whole series of seasonal variables can be included in one calendar to give an overview of the situation throughout the year. These variables can include: rainfall, crop sequences, labour demand, availability of paid employment, out-migration, incidence of human diseases, expenditure levels, and so on. Important periods, such as festivals, can also be shown.

Seasonal mapping mainly covers the seasonal variation of crops. In seasonal mapping, we considered agricultural crops and the timing of three activities viz. showing, cropping and harvesting criteria and collected the details throughout the year. From the seasonal mapping, it has been noticed that the main crops grown in the village are Aijong, Pankaj, Ranjit rice, chilli, cabbage, cauliflower, mangoetc. The FGD conducted revealed that other major livelihood options available in the JFMC are Food processing, bee keeping, shop-keeping, daily wage labourers, mason, tailoring, carpentry which are not seasonal in nature but is showed in the seasonal mapping.

Seasonal Map

SEASONAL MAPPING OF MURABASTI

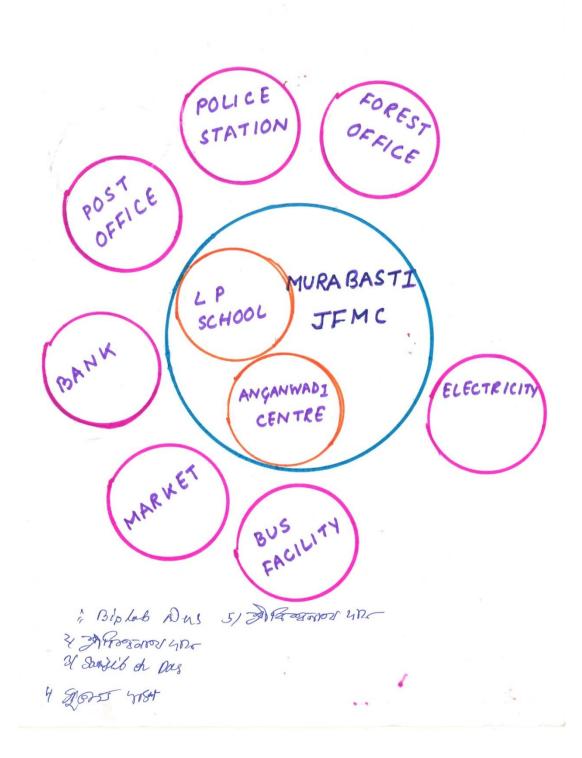


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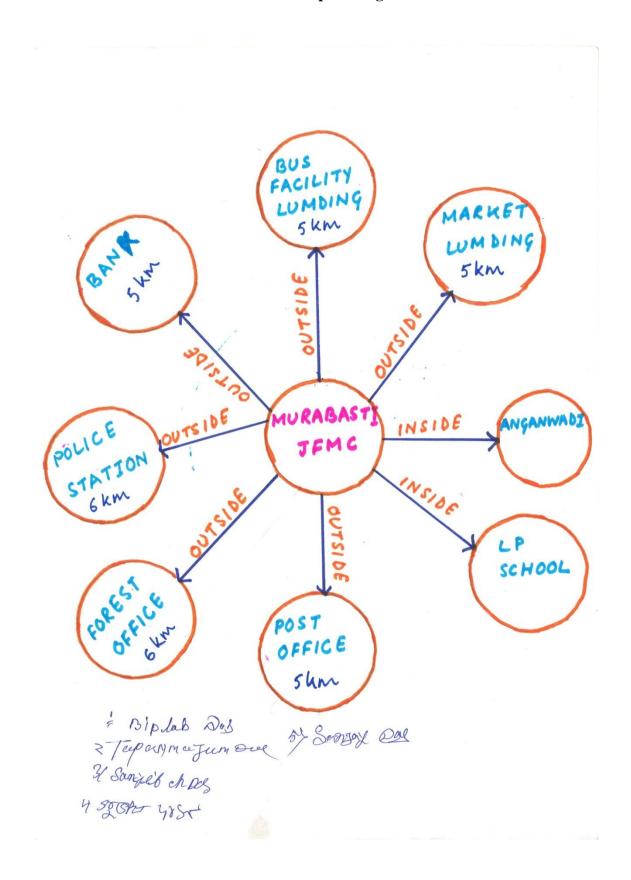
Table 3.4 Seasonal cropping pattern

Categories		Time of Activity						
Ħ		Sowing	Harvesting	Plucking				
arn	Cabbage	July	August	Nov-Dec				
Farming	Cauliflower	July	August	Nov-Dec				
	Chilli		Throughout the year	•				
	Pumpkin	Jan-Mar		May-June				
	Mustard	October		Nov-Dec				
	Mango	March-April		May-June				
	Jackfruit	April-May		May-June				
Z	Weaving							
Non-Farming	Livestock							
Far	Rearing							
Ë.	Daily Wage							
ng	Earning		Throughout the yea	r				
	Shop-keeper							
	Masonary							
	Electrician							
	Tailoring							

Venn Diagram



Chapatti diagram



Priority Ranking – EPA

	Drink ing Water (A)	Sanitat ion (B)	Road (C)	Health Centre	Communi ty Hall (E)	School (F)	Mark Scoring	Positio n
Drinkin g Water (A)	X	В	C	A	A	A	3+	2
Sanitati on (B)	X	X	С	В	В	В	3	3
Road (C)	X	X	X	С	С	С	5	1
Health Centre (D)	X	X	X	X	С	D	1+	4
Commu nity Hall (E)	X	X	X	X	X	Е	1	5
School (F)	X	X	X	X	X	X	0	6

Priority Ranking – Livelihood

	Food	Bee	Driving	Tailo	Carpe	Electr	Mark	Position
	Processing (A)	Keepin g (B)	(C)	ring (D)	ntry (E)	icia (F)	scoring	
Food Processing (A)	X	A	A	A	A	A	5	1
Bee Keeping (B)	X	X	В	В	В	В	4	2
Driving (C)	X	X	X	С	С	С	3	3
Tailoring (D)	X	X	X	X	D	D	2	2
Carpentry (E)	X	X	X	X	X	E	1	1
Electricia n (F)	X	X	X	X	X	X	0	5

Priority Ranking of Murabasti

Priority Ranking - EPA

	Drink ing Water	Sanitat ion	Road	Health Centre	Communi ty Hall	School	Mark Scoring	Positio n
	(A)	(B)	(C)	(D)	(E)	(F)		
Drinkin g Water (A)	X	В	С	A	A	A	3+	2
Sanitati on (B)	X	X	С	В	В	В	3	3
Road (C)	X	X	X	С	С	С	5	1
Health Centre (D)	X	X	X	X	С	D	1+	4
Commu nity Hall (E)	X	X	Х .	X	X	Е	1	5
School (F)	X	X	X	X	Х	X	0	6

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Priority Ranking of Murabasti

Priority Ranking - Livelihood

	Food Processing (A)	Bee Keepin g (B)	Driving (C)	Tailo ring (D)	Carpe ntry (E)	Electr icia (F)	Mark scoring	Position
Food Processing (A)	X	A	A	A	A	A	5	1
Bee Keeping (B)	Х	Х	В	В	В	В	4	2
Driving (C)	Х	X	X	С	С	С	3	3
Tailoring (D)	X	X	X	X	D	D	2	2
Carpentry (E)	X	Х	Х	Х	Х	Е	1	1
Electricia n (F)	Х	X	X	X	X	X	0	5

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Annexure 5

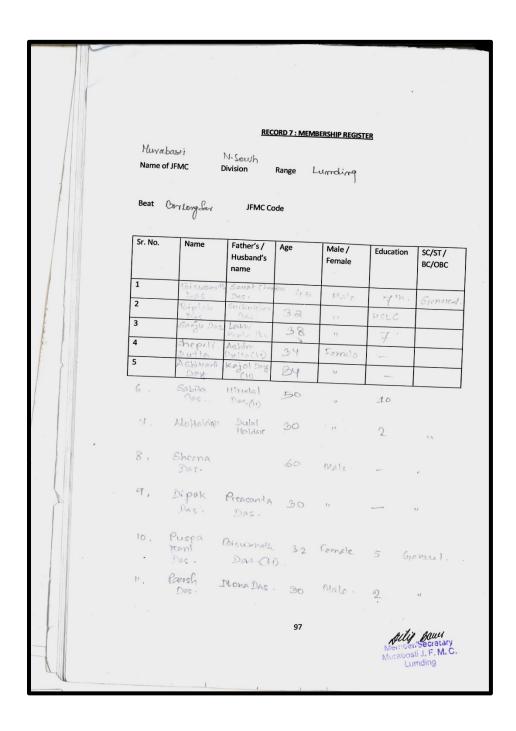
Photographs



During the PRA activity



LIST OF JFMC MEMBERS



	C10 . 10 .
Man-animal	l conflict list

Division	Nagaon	South	Divisio	n Hora	zi.
	Lumding				
JFMC	Murabost	i JFA	nc .		

SI No	Name of the	e villager	Male/ Female	Age	Village	Reason
1.	Ranjut	Dogsa	M	40	Myzabest	The pesson was
	0,	1 0	,	10	I My Decision)	trampled to death by
						a wild elephant near
						Diphy-Lymdine Road.
						The wild elephant had
-						stoayed out from the
-			-			nearbei Lumding RP
						on the origina of 05-02-16
						0
					10	
	4					
						2

SPORTONION DENVILLE BANGE TOT

Signature

President PRESIDENT

Morabasti J.F M.

Signature

Member Secretary Member Secretary Murabosti J. F. M. C. Lumding

Signature

(M. DAHAL) Range officer, Range Polest Officer, Lumding Range, Lumding

Signature

Divisional Forest Officer

S. Rathman, AFS)

RECORD – I: VILLAGE SOCIO-ECONOMIC PROFILE

TABLE-1: BASIC DATA OF VILLAGE/JFMC

Name of the Forest Division

Name of the Forest Range

Nagaon South Lumding

Sl. No	Name of JFMC/V illage	Date of Estab lishm ent	No. of Member s In Executi ve Comtt.	Name of Preside nt	Name of Memb er Secret ary	Mon ey in villa ge Dev. Fun d (VD F	Contrib ution per family or per per	Socia l fenci ng used Yes/ No	Remark s on special attainme nts	Gradi ng % of Succe ss of JFMC by RFO
1	Murabast i	2007- 2008	11	Biswan ath Das	Dilip Bora, Foreste r-I	-	-	-	-	80%

TABLE-2: VILLAGE WISE POPULATION DATA

Name of	No. of		SC	,	ST	(DBC	G	eneral	Total-
Village	House hold	Male	Female	Male	Femal e	Male	Femal e	Male	Female	all category
Murabasti	70	32	24	-	-	-	-	194	155	405

TABLE-3: VILLAGE WISE AGE PROFILE

Age Class	<5 years	5-18 years	18-45 years	45-60 years	>60 years
Male	16	55	82	68	5
Female	12	53	65	43	6
Total	28	108	147	111	11

TABLE-4: VILLAGE WISE EDUCATION PROFILE

Age Class	KG/Nursery	Up to IV	V-VII	VIII-X	X-XII	Graduate	Masters	Illiterate
<25 years	6	63	48	42	16	-	-	12
>25 years	0	78	23	17	0	-	-	78
Total	6	141	71	59	16	-	1	90

TABLE-5: VILLAGE WISE INCOME DISTRIBUTION

Income Category(in Rs) Yearly	No of HHs			
>5000 Rs	-			
5,0000-10,000	-			
11,000-20,000	10			
21,000-30,000	32			
31,000-40,000	28			
41,000-50,000	-			
<50,000	-			

TABLE-6: VILLAGE WISE FARMERS CATEGORY ON THE BASIS OF LAND HOLDING

Sl. No	Name of Village	Тур	Total					
110	mage	Large Farmer > 10ha.	Small Farmer 2 – 10 ha.	Farmer Less				
1	Murabasti	-	-	25	31	56		

TABLE-7: CATTLE POPULATION

Sl.No	Name of Village	Village – wise No. of cattles or Type of animals								Γotal
	, mage	Cows	Cows Buffalo es Sheep Bulls/ Came He Other S Oxeing Co ck						Other s	
1	Murabasti	80	1	140	ı	1	-	127	-	347

TABLE-8: VILLAGE WISE INFRASTRUCTURE

Sl.No	Infrastructure	Location	Distance from village, if in another location (in Kilometers)	Condition and status of present use
1	Main Road	Inside	0km	Good
2	Electricity	Inside	0km	Good
3	Gas connection	Inside	0km	Good
4	Transport	Outside	7KM	Good
5	Primary Health Centre	Outside	7KM	Poor

6	School (LP)	Inside	0km	Good
7	Post Office	Outside	1KM	Good
8	Bank	SBI, UBI,ICICI,AG VB(Lumding)	2KM	Good
9	Phone	-	-	-
10	Anganwadi Centre	Inside	0km	Good
11	Gram Panchayat Office	Inside	0km	Good

TABLE-9: AGRICULTURAL CROP

	Rain f	îed .	Irrigation		
	Name of Crop	Area in ha.	Name of Crop	Area in ha.	
Kharif	Paddy(Aijong,Pankaj)	20.45 Ha	-	-	
Rabi	Mustard	4 Ha	-	-	
Others	Horticulture (Ladies Finger, Chilli, Drum stick etc)	22 Ha	-	-	

TABLE-10: CROP PRODUCTION PROFILE OF THE VILLAGE

Сгор	Total production (approx)	Number of households growing	Average production(quintal per/ha)
Paddy	1260 Quintal	56	61.61
Mustard	45 Quintal	25	11.25
Vegetables	600 Quintal	56	26.78

TABLE-11: FODDER AVAILABILITY

`	1 – 3 months	3 – 6 months	> 6 months
Crop residue	X	✓	X
Trees fodder	X	✓	X
Grasses	✓	✓	✓
Green fodder	✓	✓	✓
Grazing in forest	X	√	X

TABLE-12: LOCATION OF MARKET FROM THE VILLAGE

For purchase	Location	Distance from village if in other village kilometer
Grocery Shop/PDS center	Inside	0km
Weekly Market	Outside	2KM
Major Market	Outside	2KM
Forest corporation sale depo.	-	-
TenduPatta PHAD	-	-
Fish Market	Outside	2KM
Medicinal Plant Collection Center	-	-
Forest Corporation Medicinal	-	-
Plant Collection Center	-	-
Other Specify	-	-

TABLE-13: WATER RESOURCES FACILITIES

Water Source	Number	Water Availability (Adequacy, seasonality)	Uses (drinking, irrigation, livestock
Water Harvesting Structure	-	-	-
Check dam	-	-	-
Tube well	10	Adequacy	Drinking,
River/Nala	1	Seasonality	Bathing
Spring	-	-	-
Canal	-	-	-
Water Reservoir	-	-	-
Other, pl specify, Ring well	4 (Individual),1(Govt) Source)	Adequacy	drinking

TABLE 14: ENERGY CONSUMPTION

Type of fuel	Number of household depending	Number of months dependent	Source (local village forest, other source)	Major/Secondary
Fuel wood	70HHs	12 month	Forest	Major
Kerosene stove	50HHs	12 month	Market	Secondary
Gobar/Bio Gas	-	-	-	-
Cow dung cake	-	-	-	-
LPG	21HHs	12 month	Govt	Secondary
Electric Heater	-	-	-	-
Solar	-	-	-	-

RECORD 2 - LIVELIHOOD OPPORTUNITY ANALYSIS

TABLE- 15: AGRICULTURE AND HORTICULTURE

Constraints	Reasons	Opportunities	Programme
Low production/co llection	Traditional way of cultivation. Lack of agricultural infrastructure, modern tools and equipment's viz, power tillers, tractors etc.	Nearness to marketing hub i.e. Guwahati	Agro-skill development programme. Training on insecticides, pesticides, hybrid cultivation
Storage & processing	Lack of common storing place Lack of cold storage facility due to non-availability of electricity	Availability of new technologies and farming practices	Training programme
Marketing	Lack of cold storage facility due to non-availability of electricity Lack of transporting facilities for	Rising demand for diversified agriculture product	Awareness programme on marketing know how
	carrying products		

TABLE- 16: LIVESTOCK

Constraints	Reasons	Opportunities	Programme
Lack of monetary assistance	No SHG's within the JFMC	Income generating activity	Training programmes
Insufficient knowledge	Lack of appropriately skilled trainers	Good domestic market	Awareness programmes on the demand of honey in the domestic market
Production of honey	No scientific knowledge on bee keeping to produce quality honey	Identification of the potential bee keepers	
Honey Market	Remoteness of the producers from		

the supplier market	
Unaware of the market demand of different honey made products.	

TABLE- 17: SPECIALIZED SKILLS (Food Processing)

Constraints	Reasons	Opportunities	Programme
Raw material availability	Ineffective use of the available raw materials	Abundance of mangoes, chillies in the JFMC	Training programmes on food processing
Product quality	Lack of scientific knowledge	Use of modern scientific method to compete with the outside market	Training on Modern Tools and Equipment.
Marketing potential	Lack of marketing knowledge	Nearness to marketing hub	EDP's within the JFMC
Credit facility	No SHG's within the JFMC	Low interest facility by SHG's	Education programme on SHG's

TABLE- 18: CREDIT FACILITY

Constraints	Reasons	Opportunities	Programme
Rate of interest	Higher lending rates charged by the public and private money lender	Creating SHG's	Education programme on SHG's
Availability of loan	Fear of risk taking No SHG's formed in the JFMC	Setting up Micro finance institutions	Education programme on the benefits of micro finance
Mortgage difficulty	Unavailability of proper documentation of mortgaged property.		