





POTUPATHER JOINT FOREST MANAGEMENT COMMITTEE (JFMC)

LUMDING RANGE, NAGAON SOUTH DIVISION

NORTHERN ASSAM CIRCLE

MICRO-PLAN

(2016-17 to 2025-26)

Prepared by Potupather Joint Forest Management Committee

assisted by Assam Forest Department

> & COMPELO (IIE, RGVN and CML)

Approved.

Divisional Forest Officer Nagaon South Division

July 2016

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

POTUPATHERJOINT 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) Bee Keeping.	

1. Introduction

About the Project	The vision of the Assam Project on Forest and Biodiversity Conservation (APFBC) is 'to enable sustainable forest and biodiversity conservation and management in Assam through multi-scale integrative planning and involvement of forest dependent communities in target areas and giving fillip to their livelihood activities through sustainable use of forest and non-forest resources'. The project's objective has been stated as: 'In collaboration with the forest dependent communities, to restore forest eco-systems to enhance the forest dependent community's livelihoods and ensure conservation and sustainable use of biodiversity'. The above project is being mainly funded by the <i>Agence France de Développement</i> (AFD) - i.e. the French Development Agency, with 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>RashtriyaGraminVikasNidhi</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 PotupatherJFMC	This document gives the Micro-Plan for the Potupather 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.

Village Socio-Economic Profile

Location Key Information	The Potupather Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in Potupather, a village located on 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	Potupather	
	Habitation	Potupather	
	Name of Revenue Village	Potupather	
	Name of the Gram Panchayat / VCDC	Pub Lumding GP	
	Revenue Circle	Lanka	
	District	Hojai	
	District Hojan Forest Division Nagaon South		
	Forest Range	Lumding	
	Forest Range Luniding Forest Beat Borlongphur		
	Year Formed	2007-2008	
	Description of Boundary As below :		
	of JFMC	North:Lumding Reserve Forest South:ChristanBasti West:Murabasti East:Borlongphur River and Karbi- Anglong Border	
	Source: JFMC Records & Discussions during PRA Exercise in June 2016 Additional details are given at Table-1 of Record-I. (Given at Annexure)		
Brief Details of the Executive Committee & General Body	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	Hira Das	
	Name of Member Secretary	Dilip Bora, Forester - I	
	Name of Treasurer	Arabinda Das	
	No. of Members in	Male:7	
	Executive Committee	Female:3	
	No. of Members in the	70	
	General Body		
	Source: JFMC Records		
Households & Population Structure	The village has 70 households. The number of female headed households is 0.		
	members. All the village peop	of which 231 are male and 156 are female le are of Hindu religion and they belong to dule caste and comprised of Bengali and	

	BihariCommunity.
	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.(2) The sex ratio is 675 females per 1000 males in the village.
Education & Skills Development	Over 77 % 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-Anglonginto 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-thirds 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 & Bio- diversity	The local forests have been broadly classified as Reserve Forest. The main tree species areArjun, 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'.
Land Use Pattern	Cultivable Wasteland: 22.4% Borlongphur River: 0.47 % Paddy Field: 29.68 % Firewood Plantation area: 18.82 %

	Pond: 3.06%
	Road: 1.66 %.
	Settlement Area:20.31%
	Sugarcane Field:0.39%
	Wetland: 1.69%
	Medicinal Plantation: 1.48%
T ITTI	
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:
	• 37 nos. of the households are landless.
	• 21 nos. of the households are marginal farmers.
	• None of the households belong to small farmers.
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-4 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. 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
	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 accounts.
Agricultural Crops	The details of the agricultural crops grown in the village is available at Table-6 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, Sugarcane.			
	Most crops are rain-fed.			
Crop Production Profile	Table-7 of Record-I may be referred to for the production and yield detailsof the crops grown in the village.			
Tione				
	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 4465 quintal Yield 60.99 quintal /ha (b) Vegetables : Production 2436 quintal Yield 37.50quintal /ha (c) Mustard: Production 144 quintal Yield 9.38 quintal /ha (d) Sugarcane: Production 370 quintal Yield 370 quintal/ha 			
Fodder Availability	The matter of fodder availability in the village is dealt with at Table-8 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-9 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 at 14 km away			
	(b) Weekly / Bi-weekly Market: : Lumding at 14 km away(c) Major Market: : Lumding at 14 km away			
Water Resources	The water resources are tabulated at Table-10 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	Table-11 of Record-I shows the major sources of energy in the village. The			
Consumption	same have been listed below.(a) Fuel wood- Households Depending: 70 Nos. Source: Forest, Market			
	(b) LPG -Households Depending: 21 Nos. Source: Government, Private(c) Kerosene- Households Depending: 65 Nos. Source: Market			
Socio-economic	Social set-up: The village is inhabited by general community. They do not			
status	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. Most households earn Rs. 30,000 to Rs. 70,000 per year.			
	There is / 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 MapVillage Social Map (with the names and particulars of members in			
L	- mage social map (with the names and particulars of members in			

PRA) • Village Resource Map
• Venn Diagram
Chapatti Diagram

LIVELIHOOD OPPORTUNITY ANALYSIS

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

- a) Livelihood assets
- b) Livelihood context
- c) Priority ranking on potential livelihood

The livelihood situation of Potupather JFMC has been analyzed 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 –

- a) Natural Capital
- b) Physical Capital
- c) Social Capital
- d) Human Capital
- e) Financial Capital

2. Natural Capital

In Potupather JFMC under Lumding Reserve Forest, major natural capital are Bamboo,Teak,Sal and various species of Bamboo and there is only one 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)

3. Physical Capital

Majority of the households in the Potupather 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 22 numbers of semi-pucca houses, 7 numbers of Pucca houses and the remaining houses are thatch. Among the various sources of energy consumption such as Biomass, kerosene, electricity and LPG, villagers depend on the firewood and kerosene for household and other uses. Although some of the household have LPG, but reliability is very less. (Refer to table 10, 11)

There is three LP schools, one High school, three anganwadi centres present within the JFMC area. No other education institution is present. (Refer to table 5)

In case of water sources, most of the HH have access to tube well, river and ring well.

4. 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.

There are no SHGS in the village. However, the village has one L.P school, one Anganwadi Centre and one community hall where social meetings of the villages are held.

5. Human Capital

77 per cent of total population of the JFMC are literate and 23 per cent are illiterate. (Refer to table 3.3)

6. 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.

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

7. Livelihood Context

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

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

8. Priority Ranking Through PRA Exercise

PRA Exercise	Team from IIE Guwahati carried out PRA exercise in Potupather village as follows:		
	Date: 18 th June, 2016 Location: Village Area Numbers Present: 22		
	In Presence of: JFMC office bearers, Village Headman, community members, Forest Department personnel, etc.		
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.		
Tools Used &	Different tools were used and outcomes obtained. These include:		
Outcomes of the			

PRA	Social Mapping Wealth Ranking Time Line review Seasonality of Livelihoods Venn Diagram				
	Appendix-3 furnishes detailed information of the above.				
Ranking	Ranl	king exercise has be	en done for the following:		
		 Livelihoods & Skills Development Entry Point Activities (EPA) 			
	Арр	endix-3 elaborates	the above. From the same, i	it is stated that:	
	Ranl	king of Livelihoods	& Skills Development		
	 Food Processing Bee Keeping Driving Fishery 				
	Ranl	king of EPA			
		Village EPA as rankedDetails (Appendix-3 has additional particulars)Probable source funding/deptt.			
	1.	Drinking Water	Government supply water	EPA APFBC/ NRDWP	
	2.	Sanitation	Providing HHL (House Hold Latrine) - Low cost,septic and sanitary type.	SwachBharart Mission/ PHE	
	3.	Road Connectivity	Black Topping of road From Lumding to the village (12 KM)	PMGSY/PWD	
	4.	Health Centre	Sub-Centre within the village	NHM/ H & FW	
	5	Community Hall	Well-built Community hall to help conducting village level meetings	APFBC	
	6. School High school SSA				
	 An arrangement of working capital worth Rs 2 Lacs should be arranged from the EPA fund for promoting Livelihood activities. A low cost community work shed cum JFMC office to be setup within the JFMC boundaries for setting up and commissioning of Tool kits/Equipment/Machineries. 				
Livelihood opportunities	Agri Live NTF Skill	lihood Opportunitie culture & Horticultu stock	s were identified as follows	:	

	Additional discussion about the above has been given below.
Agriculture & Horticulture	Table-12 under Record-2 may be seen in this connection for opportunities in the areas of agriculture and horticulture.
	The main constraints are: (a) Low production/collection (b) Storage & processing (c) Marketing
	The opportunities are:
	(a) Nearness to marketing hub(b) Availability of new technologies and farming practices(c) Rising demand for diversified agriculture product
	The suggested programme is: Agriculture developmental programme
Livestock	Table-13 furnishes additional information about opportunities for livestock rearing.
	The main constraints are: (a) Lack of monetary assistance (b) Insufficient knowledge (c) Remoteness of the producers from the supplier market
	The opportunities are:
	(a) Income generating activity(b) Good domestic market(c) Potential bee keepers
	The suggested programme is: Training on Bee Keeping
Specialized Skills	For skills development, the opportunities are tabulated at Table-15 under Record-2
	The main constraints are: (a) Raw material availability (b) Product quality (c) Credit facility
	The opportunities are:
	(a) Abundance of mangoes, chillies in the JFMC(b) Nearness to marketing hub(c) Use of modern scientific method to compete with the outside market
	The suggested programme is: Training programmes on food processing
Credit Facility	Table-16 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: 1. Agriculture & Horticulture: Tractor operation training, Agro-skill development programme ,Training on insecticides, pesticides, 		
	 hybrid cultivation 2. Apiculture: Training on Bee-keeping 3. Specialized Skills: Training on Modern Tools and Equipment, Providing modern technology to the villagers, Skill Up gradation & Training on New Product Development and Product Diversification, Setting up a raw material bank, providing a bulk buy arrangement of the finished product with institutional buyers. 		
	 4. Credit facility: Setting up micro finance institutions in the nearby areas. 		

9. Livelihood Development Plan

Income Generating	The main income generating activities as planned at the village are:
Activities	
	1.Food Processing
	2.Driving
	3.Tailoring
	5.1 unoning
	Sources Table 22 of Decord 4
	Source: Table-32 of Record-4
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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	As attached in next page.
Plan	
1 1411	

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.
	help in sustaining the plained works in the post project period.

Forest Development Plan of Potupather 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 Potupather 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 Potupather 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 PotupatherJFMC have been summarized below.

Identification	Area of JFMC Forest (Ha)	Distance from Village (Km)	Condition of Forest [Good - Forest with crown density of 40% of more Else 'Degraded']	Frequency of Use by Community [2-3 m / 3-6 m / 6- 9 m / Over 9 m]
(A) Assigned Forest				
RF/PF Name:Lumding	50 Ha	1km	Good Area: 50Ha	3-6m
Beat:Borlongphur			Degraded Area: Nil	
Compartment:				
(B) Other Planted Area				

 Table-1: Conditions of the Forests of PotupatherJFMC

Location:	-	-	-	-
Type of Forest:				
VF / Other				
TOTAL	50 Ha		Good Area: 50 Ha	
			Degraded Area: Nil	

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

It is seen that the Potupather JFMC has 50 Ha under its forests, of which 50 Ha is 'Good' and none is 'Degraded'.

1.2. Forest Soil Type

The forests of PotupatherJFMC are located in sand dune 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 in Other Planted Areas
Fertility Level	2.3 to2.94% organic. The available N, P205 and K20 content of the Soil is comparatively less.	-
Soil Erosion Status	-	-
Presence of:		
(a) Silt	15%	-
(b) Mud-flat	20%	-
(c) Newly accreted land	Low	-
(d) Sand dune	65%	-

Table-2: Forest Soil Type in Potupather JFMC

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

For the PotupatherJFMC; 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 Potupather 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 PotupatherJFMC

Parameter	Local Name(s)	Botanical Name(s)
Major Forest Species	Arjun,	Terminalia arjuna,
	Hilikha,	Terminaliachebula,
	Ahat	Ficusreligiosa
Associates	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 PotupatherJFMC.

2.1. Past Protection Measures of the JFMC

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

- (a) Number of households involved: 70 HH
- (b) Number of people involved: 65
- (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
PotupatherJFMC

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Approx. Qty Requirement			

Firewood	High	350 kg/yr	-	Forest
Timber for House	Medium	2 nos/ yr	-	Forest
Small timber for Implements	-	-	-	-
Pole / Bamboo	Low	2 nos/ yr	-	Forest
Fodder from Forest	Low	1.5kg/month	-	Forest
NTFP	-	-	-	-
Other	Nil	-	-	

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

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

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks	
Firewood	24500	-	
Timber for House	2 nos.	-	
Small Timber for Implements	-	-	
Pole / Bamboo	2 nos.	-	
Fodder from Forest	1260	-	
NTFP	-	-	
Other	-	-	

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 PotupatherJFMC.

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

Name	of	Forest	Collection for Marketing			Location of
Produce			Season / No of Average Qty.			Collection
			Months Households Collected			

		Collecting	(Kg)	
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.

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	-	-	-

 Table-5 (B): Collection & Marketing of Forest Produce - Additional Information

 [Potupather JFMC]

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 Potupather JFMC have been summarized below - based on the information in the previous sub-sections.

Table (Tatal Degrifterments of Ferrest Duadwas by	Villa gour of the Detune then IEMC
Table-6: Total Requirements of Forest Produce by	v magers of the rotupather Jr MC

Name of Forest Produce	Community Requirement (Kg per annum) From Table-4(B)	Surplus Marketed (Kg) From Table- 5(B)	Total Requirements (Kg)
Firewood	24500	-	24500
Timber for House	2 nos.	-	2 nos.
Small timber for Implements	-	-	-
Bamboo	2 nos.	_	2 nos.
Pole		-	
Fodder from Forest	1260	-	1260
NTFP	-	-	-
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 Potupather JFMC have been summarized below.

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

Table-7: Protection Problems of the Potupather JFMC

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 Potupather 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 PotupatherJFMC 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 Forest Area	Quantification of the Measures [Length, Area, Size etc.]	Timing	Priority [High / Medium / Low]
Engagement of watcher	Reserve forest	1 no	Morning- Evening	High
Fire Protection	Reserve forest	2m plantation boundary	Dry season	High
Informers award	-	_	-	-
Fencing/social fencing	-	-	-	-
Cattle proof trenches	-	-	-	-
Rotational grazing	-	-	-	-
Stall feeding	-	-	-	-

Table-8: Protection Plan of thePotupatherJFMC

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 Potupather 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 Potupather JFMC are given hereunder.

Table-9: Types of Operations Proposed in the Potupather 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	
Watershed Treatment	Yes	Yes	2017	200 metres
Water Reservoirs	Yes	Yes	2017	200 metres
Grass &Silvi-pasture	No	-	-	-
Bamboo Plantation	No	-	-	-
Seed Sowing	No	-	-	-
Root & Shoot Cutting & Plantation	No	-	-	-
Cut Back & Coppice Treatment	No	-	-	-
Physical Fencing(Live hedge fencing)	Yes	Yes	2017	JFMC Boundary
Social Fencing	-	-	-	-
Other Activities	-	-	-	-

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 Potupather 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 thePotupatherJFMC

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
Assisted Natural Regeneration (with plantation in gap)	-	_	-	-
Block Plantation	-	-	-	-
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	-	-	-	-
Enrichment Plantation	-	-	-	-
Direct Plantation	25 Ha	-	Fuelwood	
Other	-	-	-	-
TOTAL AREA (in Ha)	25 Ha	-	-	-

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

4.4. Forest Improvement – Action Plan

Action Plan for Block Plantation of Saal Mixed with Associates

Name of Plantation	: Block Plantation of Saal 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
	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less	-
2016-17	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	-
2019 10*	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	
	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ;	-
2020-21*	GPS marking of the area	
	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	-
2023-24	year	
2024-25*	7th Weeding	-
2025-26*	8th Weeding	-
	Total Budgetary Requirement	_

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

Action Plan for Block Plantation of Mixed Harwood Plantation - Teak with Associates, Firewood and Bamboo

Name of Plantation	: Block Plantation of Mixed Harwood Plantation - Teak with Associates, Firewood and Bamboo
	The wood and Danioso
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	-		
2018-19	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	-		
2010 20*	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	-		
	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

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

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	-
2018-19*	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	
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 &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	-

4.5. Nursery Development Plan

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

(a) JFMC Peoples' Nursery (incl. Departmental Nursery) The details are given below.

JFMC Nurseries

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

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
	-		-	-
	-	2016-17	-	
	-		-	
	-		-	-
	-	2017-18	-	
_	-		-	
	-		-	-
	-	2018-19	-	
	-		-	
	-		-	-
	-	2019-20	-	
	-		-	

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

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

4.6. Maintenance Plan - 10 Years

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

(A) Timber Species Saal, Teak, Associates

Year(s)	Treatment
2016-17 to 2025-26	-
2016-17 to 2025-26	-

Table-12 (A): Maintenance Plan of Plantation in the PotupatherJFMC

Source: Discussions with Forest Department personnel & Community member

(B) Bamboo

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

Year(s)	Treatment
2016-17 to 2025-26	-

Source: Discussions with Forest Department personnel & Community members

(C) Fuel wood Plantation

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

Year(s)	Treatment
2016-17 to 2025-26	-

Source: Discussions with Forest Department personnel & Community members

(D) NTFP / Medicinal Plantation

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

Year(s)	Treatment
2016-17 to 2025-26	-

Source: Discussions with Forest Department personnel & Community members

5. Expected Benefits

This sub-section furnishes the benefits expected from the forests protected by members of the Potupather 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 Potupather 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 PotupatherJFMC

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

5.2. Sharing Mechanisms

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

Method	Items
To be shared equally	NTFP
To be freely collected by the members	Firewood,
Other Methods	Processing of NTFPs

Table-15: Sharing Mechanism for Potupather JFMC

Source: Proforma-3, Table-3.15 / 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 Forcest Officer, Lunding Range, Lunding Sub: Unavailibility of area for creation of plantation under Potupathon JFMC area. Sin, I have the honour to inform you that no area is available for creation of plantation under Potupather JFMC. Since, the vacant 25 Hac. have already been couved by fuelwood plantation under APFBC scheme dwing 2015-16. This is for favour of your kind information & necessary action. your's faithfully. 1. APRAGATORY President A. W. M. C. Potupathan Launding on asded Silip Burn For (Member Secretary) Member & Secretary 1, P. M. C. Potupathar 28-59, Lumdino Lumding Confirmed. onm Ahman. AFS.) SFO. MS. Divn. Hojai.

5.3. Miscellaneous Operations Plan

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

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

Table-13): Miscellaneous Operations in the PotupatherJFMC

Operation	Required (Yes / No)	Responsibility	Month / Year	Area (Ha)
Promotion of fuel saving devices	Yes	VSS	All year	
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 Potupather JFMC, the planned marketing operations are:

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

List of Appendices

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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 the road.

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

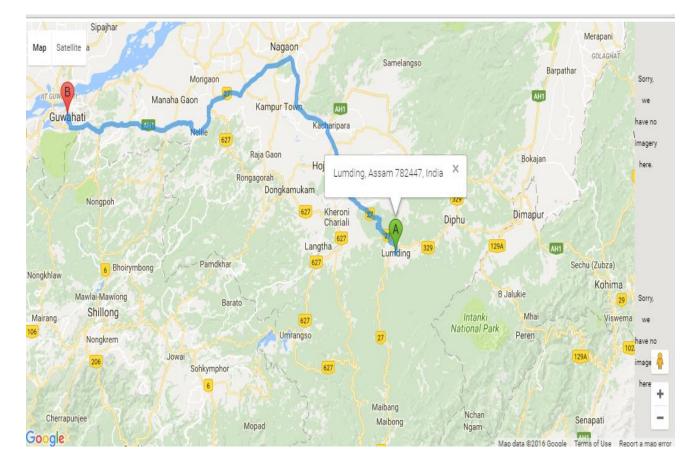
Bus timings from Lumding to Guwahati is around **2.5 hours** when your bus maintains an average speed of sixty kilometer per hour over the course of your journey. The estimated travel time from Lumding to Guwahati by bus may vary or it will take more time than the above mentioned time due to the road 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.

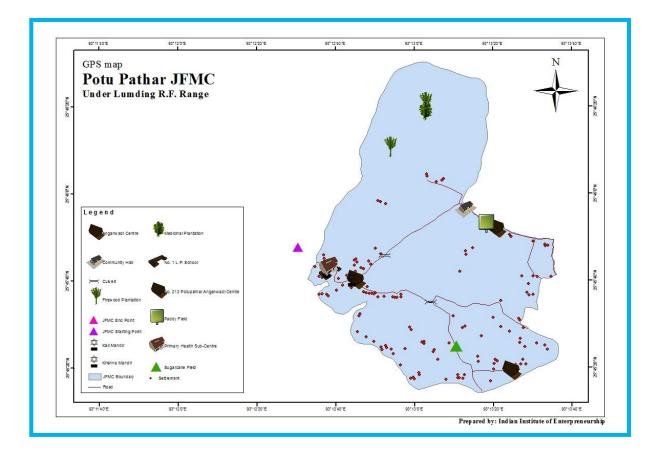
Lumding to Guwahati road map

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.

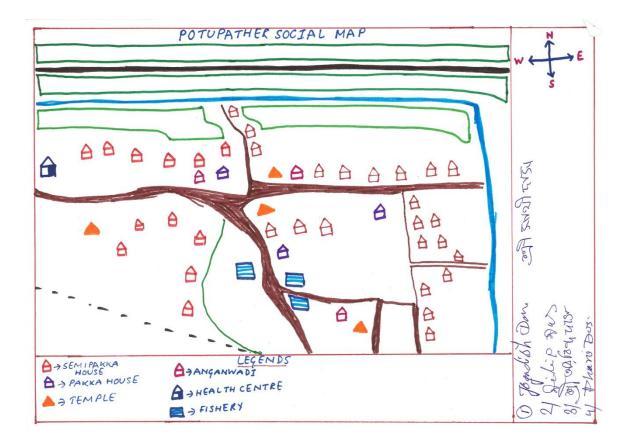


Appendix 2

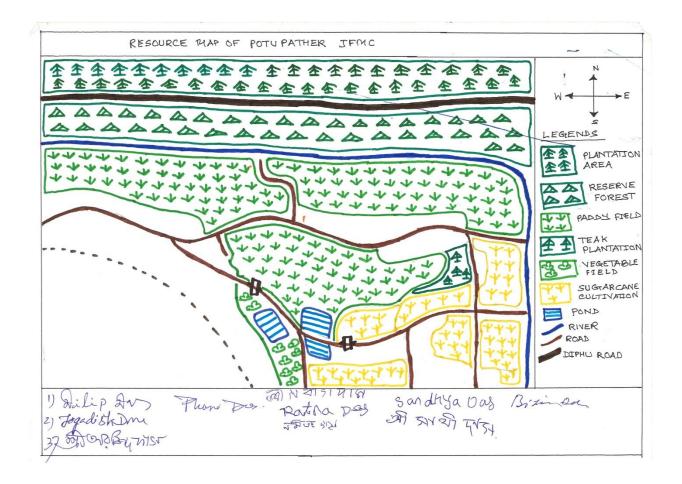
1) Village Map of Potupather JFMC



2) SOCIAL MAP OF POTUPATHERJFMC

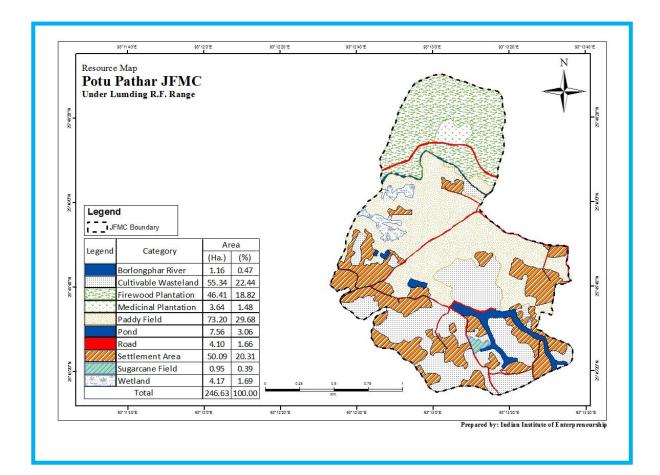


3. **RESOURCE MAP OF POTUPATHER JFMC**



Appendix 3

Land Use Map of GIS



Appendix 4

PRA Activity

Location and timing of PRA activity

Numbers of participants :	22
Time :	10.30 am, 18 th June 2016
Venue :	Village

Table – 3.1Brief about the villages under Potupather JFMC

Sl. No.	Name of the Village	No. of households	Population			
			Total	Male	Female	
1	Potupather	70	387	231	156	
	Total	70	387	231	156	

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 Potupather 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 pukka, semi pukka, IAY and thatch house.

Table4.1: Information about the villages

	Village	Potupather
	Total Population	387
	Male	231
Social information	Female	156
	Total households	70
	Numbers of semi pakka Houses	22
	Numbers of Pakka Houses	7
	Numbers of Thatch Houses	41
	Primary School	1
	Culvert	4
Landmarks	River	1
	Temple	3
	Fishery Pond	3
	Primary Health Centre	1

- The participants of social mapping have identified 70 households out of which 22 households have semi pakka houses, 41 HHs have thatch houses and 7have pakka houses. 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 culvert, stream, Ringwell, hand pump and River are mapped.
- Main sources of water for the villagers are the limited number of tube wells and the Ring Well which is used by villagers for their day to day use.
- Provision of Education facility is not satisfactory in the villages as there is oneL.P school within the JFMC which results is maximum number of school drop outs. There is two Anganawadi centres in the entire village
- > Majority of the population belongs to the Bengali and Bihari community and are of General caste.

Learnings:

- The Households are still dependent on forest and use firewood for their cooking purposes 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, which is 7KM 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 two villages 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 Potupather JFMC have to move Lumding, a distance covered with 7km, for their weekly marketing activity.

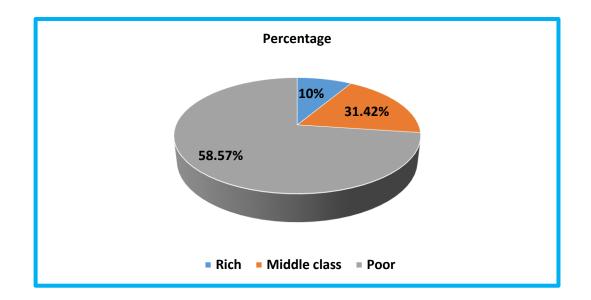
4.3 Wealth Ranking:

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 58.57% people are poor, about 31.42% belong to middle class and about 10% are categorised to be rich. Poor people are mainly irregular wage earners, farmers, shopkeepers, doing farming on (adhilua) 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:

Year	Event	Туре
Pre independence	The village was named after a	Recognition
	GaonBuranamed Potu.	

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. But there was no such remarkable events as described by the villagers only the naming of the village after the GaonBura.

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 POTUPATHER

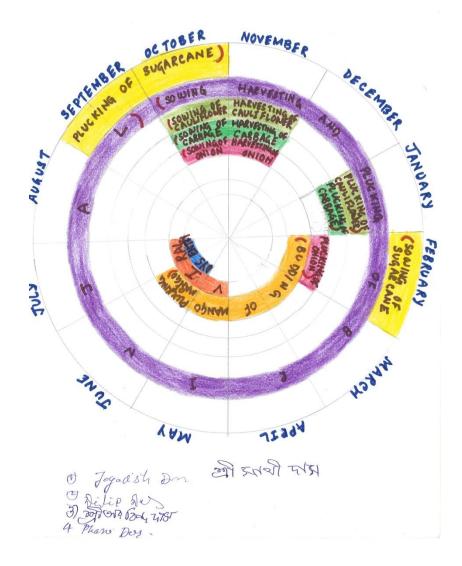
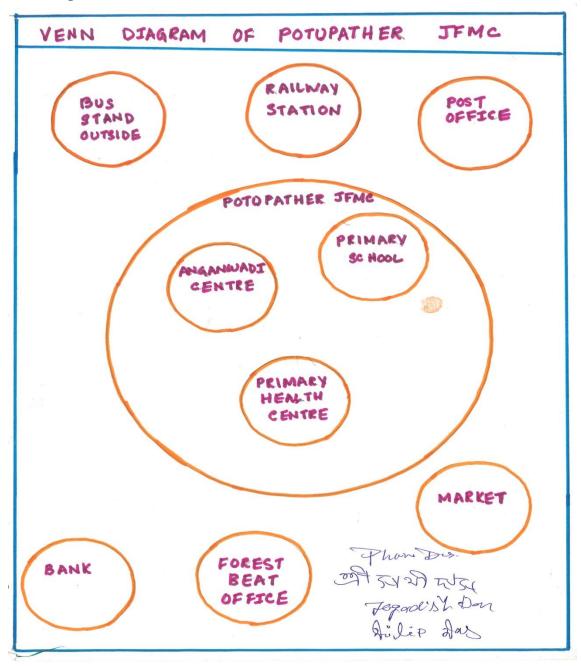


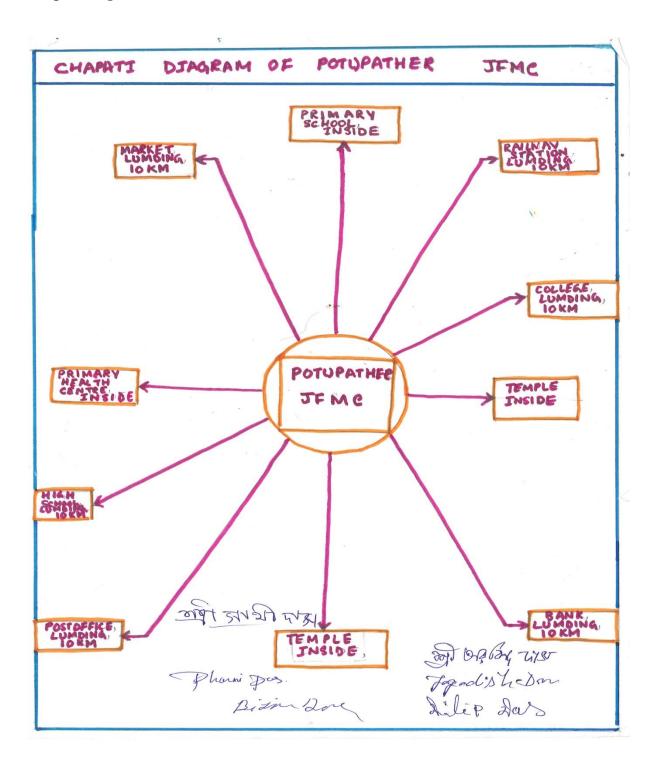
Table 3.4 Seasonal cropping pattern

Categories		Time o	of Activity	
		Sowing	Harvesting	Plucking
	Cabbage	July	August	Nov-Dec
	Cauliflower	July	August	Nov-Dec
	Chilli		Throughout the year	r
	Pumpkin	Jan-Mar		May-June
	Mustard	October		Nov-Dec
	Mango	March-April		May-June
Farming	Jackfruit	April-May	May-June	
	Weaving		1	
	Livestock			
	Rearing			
	Daily Wage			
	Earning		Throughout the year	r
	Shop-keeper			
	Masonary	1		
	Electrician	1		
Non-Farming	Tailoring	1		

Venn Diagram



Chapatti diagram



Priority Ranking – EPA and Livelihood

	Drinkin g Water (A)	Sanitatio n (B)	Roa d (C)	Healt h Centr e (D)	Communit y Hall (E)	Schoo l (F)	Mark Scorin g	Positio n
Drinking Water (A)	X	В	С	A	A	A	3	3
Sanitation (B)	А	Х	С	В	В	В	4	2
Road (C)	A	В	X	С	С	С	5	1
Health Centre (D)	A	В	С	X	С	D	1++	4
Communit y Hall (E)	A	В	С	D	X	Е	1	6
School (F)	A	В	С	D	F	Х	1+	5

Priority Ranking – Livelihood

	Food	Bee	Driving	Tailo	Carpe	Electr	Mark	Position
	Processing	Keepin	(C)	ring	ntry	icity	scoring	
	(A)	g	(C)	(D)	(E)	(F)		
		(B)						
Food	Х	А	А	А	А	А	5	1
Processing								
(A)								
Bee	Α	Х	В	В	В	В	4	2
Keeping								
(B)								
Driving	А	В	Х	С	С	C	3	3
(C)								
Tailoring	А	В	D	Х	D	D	3	4
(D)								
Carpentry	А	В	С	D	Х	E	1	6
(E)								
Electricia	А	В	С	D	F	Х	1	5
n								
(F)								

EPA Activities	Duinking Water (A)	Roan Con	nechivity		Chuicily	Scl (L	1001	Sawitation (E)		μ	auks	Rank
Duinking Waten (A)	×		A		A	A		ŀ	4	ł	4	1
Rood Connectivity (B)			×	-	B	ß)		-		3	2
Electricity (c)					×	Ĩ)		E		2	4
School (P))	×		E		1	5
Samilation (E)									X		2 ⁺	3
ivelihood	Activity	0		4					,			
Livelihood Activities	Agnicult and Houticus (A)	име Томе	Livesta (B)	ock	Food Process (C)	ing	Bee Keej (D	ping	Cane and Bambo (E)	00	Manks	Rand
Agnicenture and Howficenture (A)	×		A		A		P		A		4	1
Livestock (B)	X		×		в	3		B B			3	2
Food Publicsing (C)	Х		Х		X	$\boldsymbol{\lambda}$		С			2	3
Bee keeping (P)	X		×		>	<		\times	E		7	01
Cane and Bamboo (E)	Х		X		>	<		×	×		2+	4
Jahue : Jeg Jahi A Flor	hip &	Jac 757 St	~ ~	6	थो इ	2)	51	21				

Annexure 4

Photographs



During the PRA activity



Annexure 5

LIST OF JFMC MEMBERS

		RECO	RD 7 : MEMBI	ERSHIP REGIST	ER	
Name of J		suth	Range Lon	rding		
Sr. No.	Name	Father's / Husband's name	Age	Male / Female	Education	SC/ST / BC/OBC
1	Hirza Das.	Elecandra Kumer Der.	50	M	8	SC
2	ARALINDA		50	n.	8	SC
3	Paro. Agilat ya	Li Hemon-	50	M	-	SC
4	Darol Blion Daro	1. Binon	35	M	フ	se
5	Bijoy Das.	Das. Lo Nanendra	35	M	9	sic
67	Arrati Dep	KumanDas. Ananta Da		1	-	SC
7)		h Analinda		F	8	SC
80	Namila D	PS. Adatya Das.	30	F	8	SC.
9)	Dilip Born	DAS.	30	PA		SC.
(0)		L. Homend	M 55	D/	8	SC.
			*			
					Nellep	Bosta Fil
					Member	& Secretary C. Potupathan Lumding
			97			

Annexure 6 (Record I)

TABLE-1: BASIC DATA OF VILLAGE/JFMC

Name of the Forest Division :Nagaon South

<u>Name of the Forest Range</u>:Lumding

Sl. No	Name of JFMC/Vil lage	Date of Esta blish ment	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 person	Socia l fenci ng used Yes/ No	Remark s on special attainme nts	Gradi ng % of Succe ss of JFMC by RFO
1	Potupather	2007	10	Hira Das	Dilip Bora,	-	-	-	-	80%
		2008			Foreste r-I					

TABLE-2: VILLAGE WISE POPULATION DATA

Name of	No. of	SC		ST OBC			BC	BC		Total-
Village	House hold	Male	Female	Male	Female	Male	Femal e	Mal e	Female	all category
Potupather	70	63	52	-	-	-	-	168	104	387

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	-	78	23	17	-	-	-	78
Total	6	141	71	59	16	-	-	90

TABLE-4: VILLAGE WISE INCOME DISTRIBUTION

No of HHs
-
-
-
-
-
28
42

TABLE-5: VILLAGE WISE FARMERS CATEGORY ON THE

BASIS OF LAND HOLDING

Sl. No	Name of Village	Тур	Total			
		Large Farmer	Small Farmer 2 – 10 ha.	Marginal Farmer	Land Less	
		> 10ha.		<2 ha.		

1	Potupather	-	-	21	37	58

TABLE-6: CATTLE POPULATION

Sl.No	Name of Village	Village Wise No. of cattles or Type of animals							Fotal	
	, muge	Cows	Buffalo es	Goats	Sheep	Bulls/ Oxeing	Came ls	He n/ Co ck	Other s	
1	Potupather	120	-	140	-	-	-	127	-	387

TABLE-7: VILLAGE WISE INFRASTRUCTURE

S.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	Lumding	7 Km	Poor
3	Gas connection	Inside	0km	Poor
4	Transport	Lumding	7 km	Good
5	Primary Health Centre	Lumding	7Km	Poor
6	School (LP)	Inside	0km	Good
7	Post Office	Lumding	7Km	Good
8	Bank	SBI, UBI,ICICI,AGVB,CBI,(Lumding)	7Km	Good
9	Phone			
10	AnganwadiCetre	Inside	0km	Good
11	Gram Panchayat	Inside	0km	Good

Office		
Office		

12	Revenue Office	Lanka	41 km	Good
13	Police Office	Lumding	14 Km	Good
14	Forest Office (Beat)	Borlongphur	7 Km	Good
15	Post Office	Lumding	14 Km	Poor
16	Bus facility	Lumding	Under Village area	Poor
17	Railway Station	Lumding	2.50Km	Good
18	Drinking Water	Ring well (15Nos)	Under Village area	Average
19	JFMC assets community hall petromax loudspeaker utensils etc.	Inside	0km	Poor
20	District Head Quarter	Hojai	54.6Km	Good

TABLE-8: AGRICULTURAL CROP

	Rain f	ed	Irrig	gation
	Name of Crop	Area in ha.	Name of Crop	Area in ha.
Kharif	Paddy(Aijong,Pankaj)	73.20 Ha	-	-
Rabi	Mustard	15.36 Ha	-	-
Others	Horticulture (Ladies Finger, Chilli, Brinjal, etc)	64.96 Ha	-	-
	Sugarcane	0.95 Ha	-	-

Сгор	Total production (approx)	Number of households growing	Average production(quintal per/ha)
Paddy	4465Quintal	58	60.99
Mustard	144 Quintal	32	9.38
Vegetables	2436 Quintal	58	37.50
Sugarcane	370 Quintal	10	370 (As per Land Use Map of GIS Sugarcane cultivation area is 0.95 Ha)

TABLE-9: CROP PRODUCTION PROFILE OF THE VILLAGE

TABLE-10: FODDER AVAILABILITY

`	1-3 months	3 – 6 months	> 6 months
Crop residue	Х	\checkmark	Х
Trees fodder	Х	\checkmark	Х
Grasses	\checkmark	~	\checkmark
Green fodder	\checkmark	✓	✓
Grazing in forest	Х	\checkmark	Х

TABLE-11: LOCATION OF MARKET FROM THE VILLAGE

For purchase	Location	Distance from village if in other village kilometer
Grocery Shop/PDS center	Lumding	7 Km
Weekly Market	Lumding	7Km
Major Market	Lumding	7Km
Other Specify	-	-

Water Source	Number	Water Availability (Adequacy, seasonality)	Uses (drinking, irrigation, livestock bathing)
Water Harvesting Structure	-	-	-
Check dam	-	-	-
Tube well	10	Adequacy	Drinking, bathing
River/Nala	1	Seasonality	Bathing
Spring	-	-	-
Canal	-	-	-
Water Reservoir	-	-	-
Other, plsspecify, Ring well	15(Individual),1(Go vt.) Source)	Adequacy	Drinking

TABLE-12: WATER RESOURCES FACILITIES

TABLE 13: ENERGY CONSUMPTION

Type of fuel	Number of household	Number of months	Source (local village forest,	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 Healer	-	-	-	-
Solar	-	-	-	-

RECORD 2 - LIVELIHOOD OPPORTUNITY ANALYSIS

TABLE- 14: 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 carrying products	Rising demand for diversified agriculture product	Awareness programme on marketing know how
	carrying products		

TABLE- 15: Bee Keeping

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

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.		

TABLE- 18: CREDIT FACILITY

Annexure 5

Man Animal Conflict List

Man-animal conflict list Division Nagaon South Division Hojei Range Lumding Pange JFMC Potupathar IFMC

SI No	Name of the villager	Male/ Female	Age	Village	Reason
1	Prabhat Dae	m	45	Potupathas	The man mal
	1 acaster and			101- Januar	trampled to death
					by a wild elephant
					which had entered
					night 82 05-02-2016
					0 0
					1
	the second s	-			
		-			
				C	
	A .	lin nor	-	11	and an
173		ip Baza	n/	An	y
Signa	ature Sign	ature		Signat	ure Signature
	the second se	r & Secret	ary	-/ 8.4 7	ure Signature (S: Rahmen, s Divisional Forest Office
Presi	dentMer	nber societ	acy	Range	orrest Officer, ange, Lumding
8. 0	Potupair	Lumding		Range Fo	ange Lumding
Au	nding			Lumaing Ra	ange, cumung