



RUPAHI RAJGARH JOINT FOREST MANAGEMENT COMMITTEE (JFMC)

North Lakhimpur Range, Lakhimpur Forest Division

NORTHERN ASSAM CIRCLE

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

Prepared by Rupahi Rajgarh Joint Forest Management Committee

assisted by Assam Forest Department

&

COMPELO

(IIE & RGVN)

June 2017

Approved Offices

List of Acronyms

AfD A	Agence Française de Development
APFBC A	Assam Project on Forest & Biodiversity Conservation
APL A	Above Poverty Line
BPL I	Below Poverty Line
CML (Centre for Microfinance and Livelihood
COMPELO	Consortium On Micro Planning And Enhancement Of Livelihood Opportunities
DFO I	Divisional Forest Officer
EDC H	Eco-Development Committee
EPA I	Entry Point Activity
FCA I	Forest (conservation) Act, 1981
FD I	Forest Department
FRA I	Forest Rights' Act
FV I	Forest Village
FYP I	Five Year Plan
GHG	Green House Gases
GoI	Government of India
GP (Gaon Panchayat
Ha.	Hectare
IIE I	Indian Institute of Entrepreneurship
JFMC J	Joint Forest Management Committee
NTFP	Non Timber Forest Produce
OBC (Other Backward Classes
PHC I	Primary Health Center
PMU I	Project Monitoring Unit
PRA I	Participatory Rural Appraisal
SC S	Scheduled Caste
SDG S	Sustainable Development Goals
ST S	Scheduled Tribes
WPC	Working Plan Circle

RUPAHI RAJGARH JOINT FOREST MANAGEMENT COMMITTEE Lakhimpur Forest Division, North Lakhimpur Forest Range

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

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A. Introduction

About the Project of COMPELO (Consulting for Micro Planning and Enhancing Livelihood Opportunities)

Assam Project on Forest and Bio-diversity Conservation co funded by French Development Agency Project and state Government of Assam envisages integration of sustainable forest management interventions with special emphasis on income generation and livelihood security of forest dependent communities. 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 Development (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 explore value addition to the existing forest and bio-diversity products and services, promote livelihood activities through market potential based value addition; the present project intends to take up activities like entrepreneurship promotion, product processing value addition and marketing under this project. This has become necessary on account of the pressures on existing forest resources due to the growth of population. There is a need to explore value addition to the existing forest and biodiversity products and services, based on the market potential. In addition, non-forest based livelihoods need to be explored and the capacities of the community members need to be built-up through skills development initiatives.

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

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

Micro-Plan for the Rupahi Rajgarh JFMC

This document gives the need analysis of the Village through Micro-Plan for the Rupahi Rajgarh JFMC, which is located in the Lakhimpur district of Assam. The JFMC falls under the Dullung Reserve Forest of the Lakhimpur Forest Division of the Northern Assam Forest Circle. The villagers belong to Assamese, Audibasi (Tea tribe) and of Nepali community and the religion of the villagers is Hindu. 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 March 2017. The micro-plan has been compiled by IIE based on the project guidelines. The document has been discussed and finalized for adoption in April 2017.

B. Village Socio-Economic Profile of Rupohi Rajgarh JFMC

Location of Rupohi Rajgarh JFMC

The Rupahi Rajgarh Joint Forest Management Committee (JFMC) has been formed in the year 2008 to cover the existing community .The Rupahi Rajgarh JFMC, is a village which is located on the fringe of the Dullung Reserve Forest under North Lakhimpur Sub Division. The JFMC area covered falls within the Boginadi Revenue Circle of Lakhimpur District of Assam.

Appendix-1(B) gives the Village Map.

Key Information in terms of Forest Range, Division, Year of Establishment etc

The key information of the JFMC is furnished below.

Table-A: Key Information of the JFMC

27 0.1 777.50	
Name of the JFMC	Rupahi Rajgarh
Habitation	Rupahi Rajgarh
Name of Revenue Village	Rupahi Rajgarh
Name of the Gram	Ukhomati
Panchayat / VCDC	
Revenue Circle	Boginadi Circle
District	Lakhimpur
Forest Division	Lakhimpur Division
Forest Range	North Lakhimpur
Forest Beat	Pathalipam
Year Formed	2008
Description of Boundary of	As below
JFMC	North: Auranachal Pradesh
	South: N.F. Railway Station
	West: Gagornadi
	East: Rajali

Source: JFMC Records & Discussions during PRA Exercise in March 2017 Additional details are given at **Table-1** of **Record-I** (**Given at Annexure 6**)

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	Mr. Rajen Bhorali
Name of Member Secretary	Mr. Atul Boruah
Name of Treasurer	Mr. Dilip Saikia
No. of Members in Executive	Male:9
Committee	Female:4
	Total:13

	N 6 M 1 41 -	06 (The mumber represents and adult	
	No. of Members in the General Body	86 (The number represents each adult member of the household of the JFMC)	
	Source: JFMC Records	inclined of the notisehold of the 31 Me)	
Households & Population Structure	The Rupohi Rajgarh JFMC consists of 86 households out of which the number of female headed households is nil. The total population of the village is 430, of which 258 are male and 172 are female members. The population includes 56 OBC and 374 people are from 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(86 HHs). (2) The sex ratios of 666 females per 1000 males in the village and female		
	percentage (i.e. 40 %) are in the village.	e very less than males' percentage (i.e. 60%)	
Education & Skills Development Profile of Rupohi Rajgarh JFMC	The percentage of literacy of Rupohi Rajgarh JFMC is 36.74% of the population and 63.25% is reported to be illiterate as depicted in Table-4 of Record-I). Most of the villagers have received school level education but on the other hand, relatively fewer villagers have received college level education.		
	informal. In the JFMC area, informal traditional norm. The villagers hav (a) Weaving (b) Cane & Bamboo (c) Tea Farmer (d) Carpentry (e) Shop(grocery, computer etc) Government has been active programmes in the country as wel	quired under various settings – formal & ormal means for skills development is the re traditional skills in the following areas: in promoting formal skills development I as in the state. The village has not reported programme has been carried out in the	
Soil Type of Rupohi Rajgarh JFMC	The soil type of the project area is sandy soil in plain areas .This type of soil can support different kinds of crops, as the soil is reported to be fertile on the whole.		
Water Resource Availability	The area is drained by river ghagor, which flows from the adjoining hills of Arunachal Pradesh into the project area and joining the river bhimpora to the south. This is a perennial river.		
Climate: Temperature & Rainfall	during the winter is 9 ° C. b) The mean temperature is 24 ° Cc) The annual rainfall is about 15: rainfall usually occurs during the rd) The humidity level of the villag	he summer is 33 ° C and low temperature and precipitation is 129.3 mm. 51.3 mm per year. About one-third of the	

Forest & Biodiversity	The local forests have been broadly classified as reserve forest. The main tree species and medicinal Plants are Gomari, Hillikha, Bhumura, Otenga, Nafaful, Thakara etc. Additional details in this regard are given at the 'Forest Development Plan': Table-3: Existing Composition of Flora in the Rupahi Rajgarh JFMC.
Land Use Pattern	Appendix-2 gives the land-use pattern of the village. From the same, it is seen that the land-use in the village is as follows:
	Paddy Field – 44.49% Degraded Forest-27.97% River-5.00% Road-2.60% Settlement Area-19.94%
Land Holdings	The type of households as per land-holding is given at Table-6 of Record-I . From the same, it is seen that: • 6.97 % of the households are landless (6 HH) • 40.69 % of the households are marginal farmers i.e. less than 2 Ha (35 HH) • 52.32 % of the households are small farmers i.e2-10 Ha (45 HH).
Livestock	The total number of livestock in the JFMC is 1502. The main types of livestock possessed by the households include: Cows: 400 Goats: 240 Poultry: 842 Buffaloes: 220 Bulls: NIL Pigs: NIL Duck: 20 Table-7 of Record-I may be referred to for the details in the above connection.
Village Infrastructure& Communication Facilities	The availability of basic infrastructure in any community enables the development of sustainable livelihood options. The present condition of infrastructure in the village is not satisfactory which is depicted in Table-8 of Record-I , which gives the detailed present status of the village infrastructure on the basis of Physical, Educational, Health, Govt. Offices and Financial Inclusion. From the above table, the following have been noted with regard to village infrastructure: Physical Infrastructure: The basic physical infrastructures such as paved roads, electricity, water supply, mobile network condition are very poor in this Village area. Education & Health Facilities: There are few educational institutions and the health facilities are present which is not sufficient for the Village People. Public transport and Market is not available under this JFMC area and the community members have to use bicycles to move around. Govt. Offices: The government offices (such as Police station i.e.5 km away, Revenue office i.e.7km away, Railway Station i.e. 3km away etc.) are located
	Revenue office i.e.7km away, Railway Station i.e. 3km away 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 (i.e.in Gogamukh, 12 km) and post office (i.e. Pathalipam, 7km away) are located at a considerable distance from the habitation. The 25 no. of community members have bank accounts in faraway places.		
Agricultural Crops such as Kharif, Rabi and others	The details of the agricultural crops grown in the JFMC is available at Table-9 of Record-I.		
	The above shows that the following are the main crops grown in the JFMC:		
	Kharif Crops (Monsoon crops): Paddy (Aijong, Pankaj, Bao, Joha, Bora) Rabi Crops (Winter Crops): Mustard (Brassica juncea L.), Potato (Solanum tuberosum), Tomato (Solanum lycopersicum,L) Others: Pineapple, Mango, Jackfruit, Cabbage, Betel Nut, Lemon, Cauliflower, Chilli, Brinjal, etc Most crops are rain-fed.		
Crop Production	Table-10 of Record-I may be referred to for the production and yield details of the crops grown in the JFMC.		
Profile in terms of Paddy, Vegetables, Fruits	The maximum numbers of households are involved in growing crops like Paddy, vegetables, Fruits and Tea.		
	The production and yield of these crops is given as follows:		
	(a) Paddy: Production 2600 qt Yield 44.30 qt /ha (b) Vegetables: Production 1200 qt Yield 37.47 qt/ha (c) Fruits: Production 300 qt Yield 27.22 qt/ha (d) Tea: Production 500 qt Yield 31.25 qt/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 JFMC are as follows:		
	(a) Crop residue(b) Grazing in forest(c) Household wastage(d) Green fodder and grasses		
Markets such as Grocery, Weekly/Bi-Weekly,	Table-12 of Record-I shows the location of the different markets from the JFMC. The main markets used by the community are as follows:		
Major Market	(a) Grocery / PDS: Within the village.(b) Weekly / Bi-weekly Market: Ananda Bazar at 2 km away.(c) Major Market: Gogamukh at 12 km away.		
Water Resources in terms of River,	The water resources are tabulated at Table-13 of Record-I. The main water resources with the water availability is as follows:		
Stream, Ring Well, Tube Well or others	(a) River (Water Availability: Perennial / Seasonal) (b) Ring wells (Water Availability: Perennial / Seasonal)		

Energy Consumption	Table-14 of Record-I shows the major sources of energy in the JFMC. The same have been listed below.
	 (a) Fuel Wood - Households Depending: 86 Nos. Source: Forest, Market (b) LPG - Households Depending: 4 Nos. Source: Govt (c) Kerosene - Households Depending: 45 Nos. Source: Open Market and PDS.
Socio-economic status	Social set-up: The village is inhabited by Audibasi (Tea tribe) and Nepali community. They have a caste system. The society is not marked by deep social divisions. The observed position of women is satisfactory.
	Economic Condition: The economic status of the village people is not satisfactory. The main livelihoods are Farming, tea waging, agriculture, daily wage earning, vegetable vendoring etc. The Annual income of the villagers ranges from Rs. 21,000 to 30,000 per year.
	There is no large-scale migration of the youth and others for any livelihood activity. Additional details are available at the next section.
Maps	 Appendix-1(B) gives the following maps, based on PRA exercise: Village Map (with the names and particulars of members in PRA) Village Social Map (with the names and particulars of members in PRA) Village Resource Map (with the names and particulars of members in PRA).

C. 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 Rupahi Rajgarh JFMC 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

1. Natural Capital

The major natural capital of Rupahi Rajgarh JFMC are Gomari, Bhelkar, Poma, Hillikha, Bhomora, Nefafo, Bamboo and there is only one river namely ghagor. (Refer **Table-3 of FDP**)

Majority of the people are dependent on the forest for firewood, green fodder, timber etc. The villagers use the river water for farming purpose and for livestock rearing. (Refer **Table-4(A)** and **Table-4(B)** of **FDP** for further details).

2. Physical Capital

Majority of the households in the Rupahi Rajgarh 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-6(annexure 6)**.

The JFMC has 25 numbers of semi-pucca houses, 5 numbers of pucca houses and the remaining 56 houses are katcha (**Table 3.1, annexure 3**). Among the various sources of energy consumption such as Biomass, kerosene, electricity, LPG and candle, 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 14, annexure 6**) There is one LP school present within the JFMC area. And two Middle schools are very nearby just on the boundary of the JFMC. No other education institution is present. (Refer to **Table 3.1, annexure 3**)

In case of water sources, 15 per cent HH have access to river, 35 percent HH have access to both ring well and river. (Refer **Table-13**, **annexure 6**)

3. 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 SHGS in the village. However, the village consists of Namghar, Anganwadi Center ,Bishnu mandir and tea garden where social meetings of the villages are held. (Refer to **Table 3.1, annexure 3**)

4. Human Capital

36.74% per cent of total population of the JFMC are literate and 63.25 % are illiterate. The remaining 4.18 per cent of them has crossed degree level education. (Refer to **Table 4**, **annexure 6**)

5. 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.

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

6. Livelihood Context

Livelihood activities of the Rupahi Rajgarh JFMC are identifies 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

7. Priority Ranking through PRA Exercise

PRA Exercise	Team from IIE Guwahati carried out PRA exercise in Rupahi Rajgarh JFMC as follows:				
	Date: 17 th March, 2017 Location: Anganwadi Centre, Rupahi Rajgarh Numbers Present: 27				
	In Prese Forest D	nce of: JFMC Presepartment personne	sident, JFMC Member secretar el, JFMC office bearers, Villag	ry, community members, ge Headman etc.	
Objective of PRA	The objective was to study the existing household conditions and obtain of primary data about the community for developing the livelihood options and forest development plan.				
Tools Used &	Differen	t tools were used ar	nd outcomes obtained. These in	nclude:	
Outcomes of the	Social M	lannina			
PRA	Wealth I				
		ne review			
		ity of Livelihoods			
	Venn Di				
		Diagram			
	Appendix-3 furnishes detailed information of the above.				
	Ranking	exercise has been	done for the following:		
	Livelihoods & Skills Development				
	Entry Point Activities (EPA)				
	Appendix-3 elaborates the above. From the same, it is stated that:				
	Ranking of Livelihoods & Skills Development				
	1.Tea Waging				
Ranking	2.Handloom				
	3. Bee-Keeping				
	4.Carpentry				
	5. Cane and Bamboo				
	6.Livestock				
	Ranking of EPA				
	Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.	
	1.	Community Hall cum Training Centre	Community hall with infrastructure facility and sanitation facility nearby.	EPA APFBC/ NRDWP	
	2.	Drinking Water	At least 4-5 ring well	EPA APFBC/ NRDWP	

	3.	Sanitation	Providing HHL (House Hold Latrine) - Low cost, septic and sanitary type.	Swach Bharart Mission/ PHED	
	4.	Waiting Shed	It is required Under the JFMC area.	EPA APFBC/ NRDWP	
	5.	Road Connectivity	Road connectivity required (2km)	PMGSY/PWD	
	6.	Tent house	A tent house along with Chairs and Utensils	APFBC	
	7.	Community Piggery Farm	A community Farm should be setup for Pig rearing and Breeding	APFBC	
	8.	School/Public Infrastructure and others	A Library with Computer should be setup within the JFMC. and Providing furnitures, School bags for kids	APFBC	
	>	from the EPA fund A low Communi	of working capital worth Rs 2 L d for promoting Livelihood activity work shed cum JFMC office es for setting up and corractions.	ties. to be setup within the	
Livelihood opportunities	Agricul Tea wa Livesto Weavir Skills I Credit	Livelihood Opportunities of Rupohi Rajgarh JFMC were identified as follows: Agriculture & Horticulture Tea waging Livestock Weaving Skills Development Credit Facility Additional discussion about the above has been given below in Appendix-3 (Table 3.8: Priority Ranking of Livelihood Activities)			
	Table- areas of	15 under Record-I f agriculture and ho iin constraints are:	I may be seen in this connection rticulture.	for opportunities in the	
Agriculture & Horticulture	(b) Ani	(a) Inadequate rainfall and irrigation facilities(b) Animal Depredation(c) Prevalence of Pests and inefficient use of insecticides.			
	(d) Lac	(d) Lack of modern tools, equipment and machineries.			
	(a) Nea (b) Ava	rness to any marke ailability of new tec	ting hub. hnologies and farming practices ersified agricultural products.		
	• Tr	ggested programme ractor operation trai gro-skill developme	ning	, etc	

	Table-16 under Record-II furnishes additional information about opportunities for livestock rearing.
	The main constraints are:
Livestock	(a)Unable to buy beekeeping equipment from market due to poor financial
	condition.
	(b)Insufficient knowledge on marketing and technical skills
	(c) Lack of knowledge on the increasing demand for tea products.
	(d) No veterinary care clinic
	The opportunities are:
	(a) Income concreting activity
	(a) Income generating activity (b) Good domestic market
	(c) Majority of the workforce is engaged in this activity.
	(c) Majority of the workforce is engaged in this activity.
	The suggested programme are:
	(a) Training on Agarbatti making
	(b) Training on Weaving
	(c) Training on Tailoring
	(v) 11mming on 1mnormg
	The opportunities for NWFP are tabulated at Table-17 under Record-II
	The main constraints are:
	(a) Less availability of NWFP
	(b) No technical know-how
	(c) No processing units
	(d) Lack of trained personnel and facilities.
NWFP	The opportunities are:
	(a) Availability of fertile fallow land
	(b) Increasing demand for herbal products
	(1) I I I I I I I I I I I I I I I I I I I
	The suggested programme are:
	(a) Plantation of Food plants
	(a)Plantation of Food plants, (b)Medicinal Plant etc.
	(b) Medicinal Flant etc.
	For skills development, the opportunities are tabulated at Table-18 under Record-
	II.
	The main constraints are:
	(a) Lack of product diversification
	(b) Lack of research on product quality
	(c) Lack of TQM techniques.
	The opportunities are:
	(a) Providing good communication facility
	(b) Training of the skill holder
Specialized Skills	(c) Financial assistance from govt.
	(1)

	The suggested programme are:
	 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.
	Table-19 under Record-II discusses this aspect.
Credit Facility	The main constraints with the reasons are: (a) Financial exclusion (b) Higher rate charged by the private money lender. The opportunities are:
, and the second	 (a) Setting up modern financial institution (b) Adequate awareness. (c) To provide credit facilities for modern equipment. The suggested programme is: (a) Setting up modern financial institution in the nearby areas.
Strategic Interventions	Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan: 1. Agriculture & Horticulture: Tractor operation training, Agro-skill development programme ,Training on insecticides, pesticides, hybrid cultivation 2. Livestock: Poultry and Cattle rearing. 3. NWFP: Plantation of different variety of food plants, Medicinal Plant etc 4. Specialized Skills: Training on Modern Tools and Equipment, Setting up a raw material bank, Providing a bulk buy arrangement of the finished product with
	institutional buyers. 5. Credit facility: Setting up micro finance institute in the nearby areas.

D. Livelihood Development Plan

institutional buyers.

5. Credit facility: Organizing the community into forming SHG/JLG and link them with Financial service provider. Setting up modern financial institution in the nearby areas

10. Livelihood Development Plan

Income	The main income generating activities as planned at the village are:
Generating	Farm Sector :
Activities	1. Tea wage Earning.
	2.Farming
	3.Horticulture
	Non-Farm sector:
	1. Weaving
	2. Electrician
	3. Carpentry
	4. Tailoring
SHG Activities	SHGs of the village can plan the following activities:
	To create awareness.
	2. To organise and form group
	3. To involve the villagers in Livelihood Activities collectively.
Exposure Trips	Two Exposure tips to Successful JFMC, within Assam and other States.
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) Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied development (c) Rashtriya Krishi Sinchay Yojana (RKSY) - for irrigation, including watershed development (d) National Rural Livelihoods Mission (e) Skills Development schemes (f) Other schemes for rural development and livelihoods as found appropriate.
	The above convergence will yield synergies for the present plan, as well as help in sustaining the planned works in the post-project period.

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E. Forest Development Plan of Rupohi Rajgarh 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 Rupahi Rajgarh 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 Rupahi Rajgarh 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 Rupahi Rajgarh JFMC have been summarized below.

Table-1: Conditions of the Forests of Rupahi Rajgarh JFMC

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: Dullung Reserve Forest Beat: Pathalipam Compartment:	140На	1.5 km	Good Area: 90 Ha Degraded Area: 50 Ha	12m
(B) Other Planted Area				
Location: Type of Forest:				
TOTAL	145 Ha		Good Area: 70 Ha Degraded Area:50Ha	

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

It is seen that the Rupahi Rajgarh JFMC has a total of 145 Ha under its forests including plantation area, while the assigned forest is 90 Ha of which 99 Ha is 'Good' and 50Ha is 'Degraded'.

1.2. Forest Soil Type

The forests of Rupahi Rajgarh JFMC are located in alluvial type of soil. Some salient points of the forest soil type have been given in the following table.

Table-2: Forest Soil Type in JFMC

Parameter	Status in Assigned Forests	Status in Other Planted Areas
Fertility Level	70% Fertile	-
Soil Erosion Status	10%	_
Presence of:	1070	-
(a) Silt	Low	-
(b) Mud-flat	25%	-
(c) Newly accreted land	5%	-
(d) Sand dune	65%	-

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

For the Rupahi Rajgarh 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%)

1.3. Existing Composition of Flora

In the forests of the Rupahi Rajgarh 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 Rupahi Rajgarh JFMC

Parameter	Local Name(s)	Botanical Name(s)
Major Forest Species	Ajhar	Lagerstroemia speciosa
	Gomari	Gmelina arborea
	Bhelkor Trewai nudiflora	
	Poma Cedrela toona	
	Dhuna	Canarium resiniferum

Associates	Sia-nahar	Kayea assamica
	Samkathal	Artocarpus chama
	Jutuli	Altingia excels
	Lejai bet	Calamus floribundus
Shrubs	Jomlakhuti	Costus speciosus
	Nayantara	Catharanthus rose us
	Phulkata	Styrax serrulatum
	Sah goss (Tea plant)	Camellia chinensis
	Sorat goss	Laportea crenulata
	Pasotia	Vitex negundo
Medicinal Plants	Hilikha	Terminalia chebua
	Bhomora	Terminalia chebua
	Thekera	Garcina sp
	Nephaphu	Clerodendrum colebrookianum
	Bhatghila	Oroxylum indicum
Produces	Bamboo	Bambusa dendrocalmus
	Outenga	Dillenia indica
	Khomal Iota	Dregea volubilis
Others, if any	Dimoru	Ficus hispida
	Jamuk	Syzygium cumini
	Rudrasksha	Elaeocarpus shpaericus
	Bandardima	Dysoxylum binectarferum

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

2. Other Inputs for the Forest Development Plan

The following sub-sections discuss the other inputs for the Forest Development Plan of the Rupahi Rajgarh JFMC.

2.1. Past Protection Measures of the JFMC

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

(a) Number of households involved: NIL

(b) Number of people involved: NIL

- (c) Summary of the measures: Patrolling by forest officials
- (d) Any formal mechanism: Not available

[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 Rupahi Rajgarh JFMC

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	High (100%)	20 stm3	From the Forest Area	Forest Area
Timber for House	Moderate (50%)	4 m3	Purchasing	Dept., Saw Mill, Depot
Small timber for agriculture Implements	High (80%)	0.025 m ₃	From the Forest Area	Forest Area
Pole / Bamboo	Low (20 %)	300rmtr	From the Forest Area	Forest Area
Fodder from Forest	High (100%)	5 Quintal	From the Forest Area	Forest Area
NTFP	Low (5%)	100 Rmtr	From the Forest Area	Forest Area

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

There are 320 households in the Rupahi Rajgarh JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the Rupahi Rajgarh village for forest produce for own use is as follows:

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	80-120/yr	Throughout the year
Timber for House	5-6 nos/yr	Throughout the year
Small Timber for Implements	7-8 nos/yr	Throughout the year
Pole / Bamboo	1-2 nos/yr	

Fodder from Forest	80-120/yr	Throughout the year
NTFP	1-3kg per yr	Throughout the year

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

2.3. Collection & Marketing of Forest Produce by Villagers

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

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

Name of Forest	Collection for Marketing			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	1	-	-	-
Other	-	-	-	-

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

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

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

-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
	- - - -	

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 Rupahi Rajgarh 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 Rupahi Rajgarh 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	-	-	-
Timber for House	-	-	-
Small timber for Implements	-	-	-
Bamboo	-	-	
Pole	-	-	-
Fodder from Forest	-	-	-
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 Rupahi Rajgarh JFMC have been summarized below.

Table-7: Protection Problems of the Rupahi Rajgarh 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	Yes	Yes
Smuggling of Timber	Yes	Yes
Accidental Fires	Yes	Yes
Encroachment of Forest Lands	NIL	NIL
Incident of snake bites/life threat/risk while protecting forest	Life treat	Yes
Theft of Medicinal Plants	No	No
Other (specify)	Due to low infrastructure protection problem arises in this Forest Area.	

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 Local Animals
- (b) Accidental Fires
- (c) Smuggling of Timber

3.2. Reasons for Degradation of the Forest

In the Rupahi Rajgarh JFMC, the reasons for degradation of forest are as follows:

- (a) Deforestation (Due to constant used of fuel wood)
- (b) Accidental fire
- (c) Grazing of animals
- (d) No Scientific plan

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

4. Components of the Forest Development Plan

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

Table-8: Protection Plan of the Rupahi Rajgarh JFMC

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	Yes	Along the Demarcation of the Plantation Area	7am-5pm	Medium
Solar Fencing	Within the Forest	Along the Demarcation of the Plantation Area	Grazing Seasons	High
Fire Protection	Boundary	-	Autumn-Winter	High

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

- (a) Solar Fencing
- (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 Rupahi Rajgarh JFMC are given hereunder.

Table-9: Types of Operations Proposed in the Rupahi Rajgarh 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	Yes	Yes	Should be initiated by Govt. only	20Н
Protection to Cut Stumps of Trees	Yes	do	do	100H
Watershed Treatment	No	No	No	No
Water Reservoirs	No	No	No	No
Grass & Silvi Pastoral activities	No	No	No	No
Bamboo Plantation	No	No	No	No
Seed Sowing	Yes	Yes	Should be initiated by Govt. only	100H
Root & Shoot Cutting &Plantation	No	No	No	No
Cut Back & Coppice Treatment	No	No	No	No
Stone wall Fencing	Yes	Yes	Should be initiated by Govt. only	100H
Social Fencing	No	No	No	No
Other Activities	Awareness Training	Yes	Should be initiated by Govt. only	

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 Rupahi Rajgarh JFMC:

- (a) Root & Shoot Cutting & Plantation
- (b) Restoration of Degraded Forests
- (c) Seed Sowing
- (d) Stone wall Fencing
- (e) Awareness Training

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 Rupahi Rajgarh JFMC

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	10 Ha	Yes (Block plantation)	Ajhar, Jia, Poma, Bhelkar, Simul etc	2m*2m
Sowing of Medicinal Plants	-	-	-	-
Enrichment Plantation	-	-	-	-
Direct Plantation	20 Ha under APFBC	Yes (Block plantation)	Neem, Amla, Jamu etc	2m*2m
Other	-	-	-	-

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 Non Saal Mixed with Associates

Name of Plantation : Block Plantation

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

Plantation Area : 20 Ha

Spacing : 3 x 3 m-1100plants per ha
No. of Plants to be Raised : 22,000(5500 approx.anually)

Number Blocks : 4Numbers(5ha each)

Species : Non Saal; Associates Arjun, Seleng, Poma, Borpat, Udal, Hollock, Khokon,

Jutuli, Amari, Bola etc.

Rates : As Approved by APFBCS (to be increased by 20% every two years)

Financial Year	Activities	Amount (Rs.)
	A. Advance Works:	
2016-17	 Site clearance including survey (GPS) of 1st plot of 5Ha @15 DLs/Ha @Rs.280/DL 	21,000/-
	2. Raising of Site Nursery, 9 Dls/Ha @ Rs.280/Ha	12,600/-
	3. Providing fencing in vulnerable point @ Rs. 2000/ha	40,000/

	B. Creation & Maintenance :	
201= 1=:	Creation of 5Ha Plantation (1st Plot)during the period of April-June	1,17600/-
2017-18*	followed by 1st year maintenance viz 4 weedings and carrying out advance	
	works in 2 nd plot of 5 Ha area for next year creation, 420 DLs @Rs.280/DL	1 17 (00)
	Creation of 5 ha Plantation (2 nd Plot) during the period of April-June	1,17,600/-
	followed by 1st year maintenance viz 4 weedings and carrying out advance	
2018-19*	works in 3 rd plot of 5 ha area for next year creation, 420 DLs @Rs.280/DL 2 nd year maintenance of 1 st plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the previous year, (2017-	42,000/-
	18)	
	Creation of 5 Ha Plantation (3 rd Plot) during the period of April-June	1,17,600/-
	followed by 1st year maintenance viz 4 weedings and carrying out advance	1,17,0007
	works in 4 th plot of 5 Ha area for next year creation, 420 DLs	
	@Rs.280/DL	
2019-20*	3 rd year maintenance of 1 st plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2017-18 & fire	•
	watching	
	2 nd year maintenance of 2 nd plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2018-19	
	Creation of 5 Ha Plantation (4 th Plot) during the period of April-June	84,000/-
	followed by 1st year maintenance viz 4 weedings, 300 DLs @Rs.280/DL	
	4 th year maintenance of 1 st plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2017-18 & fire	
2020-21*	watching	12.000/
	3rd year maintenance of 2 nd plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2018-19 & fire	
	watching 2 nd year maintenance of 3 rd plot of 5 ha viz 4 Weedings including	42.000/
	2 nd year maintenance of 3 rd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2019-20	42,000/-
	4 th year maintenance of 2 nd plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2018-19 & fire	42,000/-
	watching	
2021 221	3rd year maintenance of 3 rd plot of 5 ha viz 4 Weedings including	42,000/-
2021-22*	replacement of dead/struggling saplings raised in the year, 2019-20 & fire	,
	watching	
	2 nd year maintenance of 4 th plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2020-21	
	4 th year maintenance of 3 rd plot of 5 ha viz 4 Weedings including	42,000/-
	replacement of dead/struggling saplings raised in the year, 2019-20 & fire	
	watching	
2022-23*	3rd year maintenance of 4th plot of 5 ha viz 4 Weedings including	42,000/-
2022 23	replacement of dead/struggling saplings raised in the year, 2020-21 & fire	
	watching	1.4.000/
	Silvicutural thinning of 5 ha.(1st plot) plantation created in 2017-18, 10	14,000/-
	Dls./ <u>ha.@Rs.280/</u> DL.	12 000 /
	4th year maintenance of 4th plot of 5 ha viz 4 Weedings including	42,000/-
2023-24*	replacement of dead/struggling saplings raised in the year, 2019-20 & fire	
2023-24**	watching Silvicutural thinning of 5 ha.(2 nd plot) plantation created in 2018-19, 10	14.000/
	Dls./ ha.@Rs.280/ DL.	14,000/-
	Silvicutural thinning of 5 ha.(3rd plot) plantation created in 2019-20, 10	14,000/-
2024.5*		
2024-5*		11,000/
2024-5*	Dls./ <u>ha.@Rs.280/-</u> per DL. Silvicutural thinning of 5 ha.(4 th plot) plantation created in 2020-21, 10	14,000/-

Total Budgetray Requirement

Action Plan for Block Plantation of Mixed Harwood Plantation - Associates, Firewood

Name of Plantation : Block Plantation of Non Saal Mixed with Associates, Firewood and Bamboo

Plantation Period : 2016-17 to 205-26 (10 Years)

Plantation Area : 20 ha

Spacing : 2m X 2 m-500 plants per ha No. of Plants to be Raised : 50,000 (12,500 approx. annually)

Number Blocks : 4Numbers(5 ha each)

Species : Non Saal; Associates- Cham, Gomari, Titasopa, Poma, Hollock, etc.Fuel

wood - Ghora neem, Moj, Dhuna, Siris, Bola etc.

Action Plan for Creation of Plantation			
Financial Year	Activities		
	A. Advance Works:		
2016-17	1.Site clearance including survey (GPS) of 1st plot of 5Ha @15 DLs/Ha @Rs.280/DL	21,000/-	
	2.Raising of Site Nursery, 9 Dls/Ha @ Rs.280/Ha	12,600/-	
	3. Providing fencing in vulnerable point @ Rs. 2000/ha	40,000/-	
	B. Creation & Maintenance :		
2017-18*	Creation of 5Ha Plantation (1st Plot)during the period of April-June followed by 1st year maintenance viz 4 weedings and carrying out advance	1,17600/-	
	works in 2 nd plot of 5 Ha area for next year creation, 420 DLs @Rs.280/DL Creation of 5 ha Plantation (2 nd Plot) during the period of April-June followed by 1st year maintenance viz 4 weedings and carrying out advance works in 3 rd plot of 5 ha area for next year creation, 420 DLs @Rs.280/DL	1,17,600/-	
2018-19*	2 nd year maintenance of 1 st plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the previous year, (2017-18)	42,000/-	
	Creation of 5 Ha Plantation (3 rd Plot) during the period of April-June followed by 1st year maintenance viz 4 weedings and carrying out advance works in 4 th plot of 5 Ha area for next year creation, 420 DLs @Rs.280/DL	1,17,600/-	
2019-20*	3 rd year maintenance of 1 st plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2017-18 & fire watching	42,000/-	
	2 nd year maintenance of 2 nd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2018-19	42,000/-	
	Creation of 5 Ha Plantation (4 th Plot) during the period of April-June followed by 1st year maintenance viz 4 weedings, 300 DLs @Rs.280/DL	84,000/-	
2020-21*	4 th year maintenance of 1 st plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2017-18 & fire watching	42,000/-	
	3rd year maintenance of 2 nd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2018-19 & fire watching	42,000/-	

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

	2 nd year maintenance of 3 rd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2019-20	42,000/-		
	4 th year maintenance of 2 nd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2018-19 & fire watching	42,000/-		
2021-22*	3rd year maintenance of 3 rd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2019-20 & fire watching	42,000/-		
	2 nd year maintenance of 4 th plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2020-21	42,000/-		
	4 th year maintenance of 3 rd plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2019-20 & fire watching	42,000/-		
2022-23*	3rd year maintenance of 4 th plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2020-21 & fire watching	42,000/-		
	Silvicutural thinning of 5 ha.(1st plot) plantation created in 2017-18, 10 Dls./ ha.@Rs.280/ DL.	14,000/-		
2023-24*	4 th year maintenance of 4 th plot of 5 ha viz 4 Weedings including replacement of dead/struggling saplings raised in the year, 2019-20 & fire watching	42,000/-		
	Silvicutural thinning of 5 ha.(2 nd plot) plantation created in 2018-19, 10 Dls./ ha.@Rs.280/ DL.	14,000/-		
2024-5*	Silvicutural thinning of 5 ha.(3rd plot) plantation created in 2019-20, 10 Dls./ ha.@Rs.280/- per DL.			
205-26*	Silvicutural thinning of 5 ha.(4 th plot) plantation created in 2020-21, 10 Dls./ ha.@Rs.280/ DL.	14,000/-		
	Total Budgetray Requirement	10,70,400/-		

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

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

Action Plan for Block Plantation of Non Timber Forest Produce

Name of Plantation : NTFP PLANTATION
Plantation Period : 2016-17 to 205-26 (5Years)

Plantation Area : 10ha

Spacing : 2m X 2 m-500 plants per ha

No. of Plants to be Raised : 25,000

Number Blocks : 1 Number(10 ha)

Species : Amlokhi, Hilikha, Bhomora, Bohera, Mango, Guava, Neem, Arjun, Ashok,

Nara singha, Bhatghila, Jolphai etc.

Wage Rate- Rs.280/DL

Action Plan for Creation of Plantation				
Financial Year	Activities	Amount (Rs.)		

	A. Advance Works:			
	1.Site clearance including survey (GPS) of 1st plot of 5Ha @15 DLs/Ha @Rs.280/DL	28,000/-		
2016-17	2.Raising of Site Nursery, 9 Dls/Ha @ Rs.280/Ha	25,200/-		
	3.Providing fencing in vulnerable point @ Rs.2000/Ha	20,000/-		
	B. Creation & Maintenance :			
2017-18*	Creation of 10Ha Plantation during the period of April-June; followed by 1st year maintenance viz 4 weedings 60Dls/ha.@ Rs.280/DL.	1,68,000/-		
2010 10*	2 nd year maintenance viz 4 weedings, replacement of dead/struggling saplings 30Dls/ha.@Rs.280/DL.			
2018-19*	3 rd Year maintenance viz 4 weedlings , replacement of dead /struggling saplings-20Dls/ha.@Rs.280/DL	56,000/-		
2020-21*	4 th year maintenance viz 2 Weedings including replacement of dead/struggling saplings pruning etc15 Dls /ha. @ Rs.280/Dl			
	Total Budgetray Requirement	4,23,200-		

4.5. Nursery Development Plan

The Nursery Development Plan for the Rupohi Rajgarh 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 Rupohi Rajgarh JFMC. This includes the Departmental Nursery involved in JFMC works.

Table-11 (A): JFMC Nurseries of the Rupohi Rajgarh JFMC

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
	Non Saal; Arjun, Seleng,Poma, Borpat,Udal,Hollock, Khokon, Jutuli, Amari, Bola etc Mixed Hardwood		5500	
RF	:Cham, Gomari, Bola,Dhuna, Titasopa, Poma, Hollock, etc.Fuel wood – Kadam Ghora neem, Moj, Siris, etc.	2016-17	12,500	Provide sapling for plantation to be under taken in the 2017-18
	NTFP: Amlokhi, Hilikha, Bhomora, Bohera, Mango, Guava, Neem, Arjun, Ashok, Nara singha, Bhatghila, Jolphai etc.		25,000	

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
	Non Saal; Arjun, Seleng,Poma, Borpat,Udal,Hollock, Khokon, Jutuli, Amari, Bola etc		5500	
	Mixed Hardwood :Cham, Gomari, Bola,Dhuna, Titasopa, Poma, Hollock, etc.Fuel wood – Kadam Ghora	2017-18	12,500	Provide sapling for plantation to be under taken in the 2018-19
	neem, Moj, Siris, etc.			
	NTFP: Amlokhi, Hilikha, Bhomora, Bohera, Mango, Guava, Neem, Arjun, Ashok, Nara singha, Bhatghila, Jolphai etc.		25,000	
	Non Saal; Arjun, Seleng,Poma, Borpat,Udal,Hollock, Khokon, Jutuli, Amari, Bola etc		5500	
	Mixed Hardwood :Cham, Gomari, Bola,Dhuna, Titasopa, Poma, Hollock, etc.Fuel wood – Kadam Ghora neem, Moj, Siris, etc.	2018-19	12,500	Provide sapling for plantation to be under taken in the 2019-20
	NTFP: Amlokhi, Hilikha, Bhomora, Bohera, Mango, Guava, Neem, Arjun, Ashok, Nara singha, Bhatghila, Jolphai etc.		25,000	

N.B. 35% extra will be raised each year in each category for vacancy fill up.

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 Rupohi Rajgarh JFMC is given below. This covers a period of ten years.

(A) Timber Species - Non Saal, Associates

Table-12 (A): Maintenance Plan of Plantation in the Rupohi Rajgarh JFMC

Year(s)	Treatment
2016-17 to 205-26	As provided in Action Plan for Block Plantation of Timber, Non Saal Mixed with Associates
2016-17 to 205-26	As provided in Action Plan for Block Mixed Harwood Plantation - Firewood

Source: Discussions with Forest Department personnel & Community members.

(B) Fuel wood Plantation

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

Year(s)	Treatment	
2016-17 to 205-26	As provided in Action Plan for Block Mixed Harwood Plantation – Firewood	

Source: Discussions with Forest Department personnel & Community members

(C) NTFP / Medicinal Plantation

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

Year(s)	Treatment	
2016-17 to 205-26	Action Plan for Block Plantation of Non Timber Forest Produce	

Source: Discussions with Forest Department personnel & Community members

4.7. Miscellaneous Operations Plan

The miscellaneous operations planned in the Rupohi Rajgarh JFMC are given below.

Table-13): Miscellaneous Operations in the Rupohi Rajgarh JFMC

Operation	Required (Yes / No)	Responsibility	Month / Year	Area (Ha)
No such planned	-	-	-	-

Source: Proforma-3, Table-3.13 / 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 Rupohi Rajgarh 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 Rupohi Rajgarh 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 Rupohi Rajgarh JFMC

Item	Month	Year (Indicative)	Quantity
Firewood	Throughout the year	2026-27 onwards	8000 Kg. (Approx)
Timber for House	Throughout the year	2040 Onwards	2000 Kg. (Approx)
Small timber for Implements	-	-	-
Pole	-	-	-
Fodder from Forest Trees & Grass	Throughout the year	2026-27 onwards	40000 Kg. (Approx)
NTFP	Throughout the year	2035 onwards	1000 Kg. (Approx)
Wages	Throughout the year	2016-17 onwards	5000 DLs (Approx)
Other	-	-	-

 $\textbf{Source} \colon \textbf{Proforma-3, Table-3.14} \ / \ \textbf{Discussions with Forest Department personnel \& Community members}$

5.2. Sharing Mechanisms

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

Table-15: Sharing Mechanism for Rupohi Rajgarh JFMC

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

 $\textbf{Source} \colon \textbf{Proforma-3, Table-3.15} \ / \ \textbf{Discussions with Forest Department personnel \& Community members}$

List of Appendices

Appendix 1(A)

HOW TO REACH:

Guwahati to North Lakimpur distance, location, road map and direction

Guwahati is located in India at the longitude of 91.75 and latitude of 26.19. North Lakimpur is located in India at the longitude of 94.11 and latitude of 27.24

Distance between Guwahati and North Lakimpur

The total straight line distance between Guwahati and North Lakimpur is 450 KM (kilometers) and 640.39 meters. The miles based distance from Guwahati to North Lakimpur is 162.6 miles. This is a straight line distance and so most of the time the actual travel distance between Guwahati and North Lakimpur may be higher or vary due to curvature of the road.

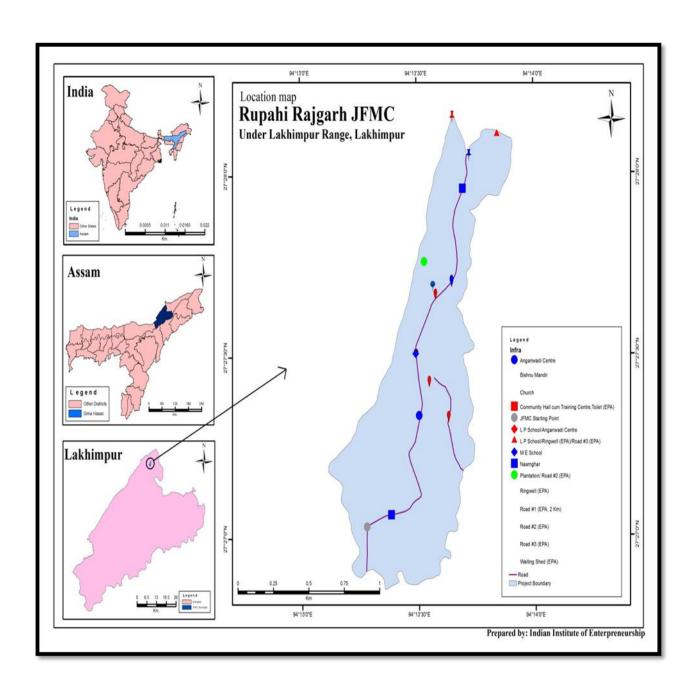
Guwahati To North Lakimpur road map

Guwahati is located nearly west side to North Lakimpur. The given west direction from Guwahati is only approximate. The given google map shows the direction in which the blue color line indicates road connectivity to North Lakimpur. In the travel map towards North Lakimpur 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.

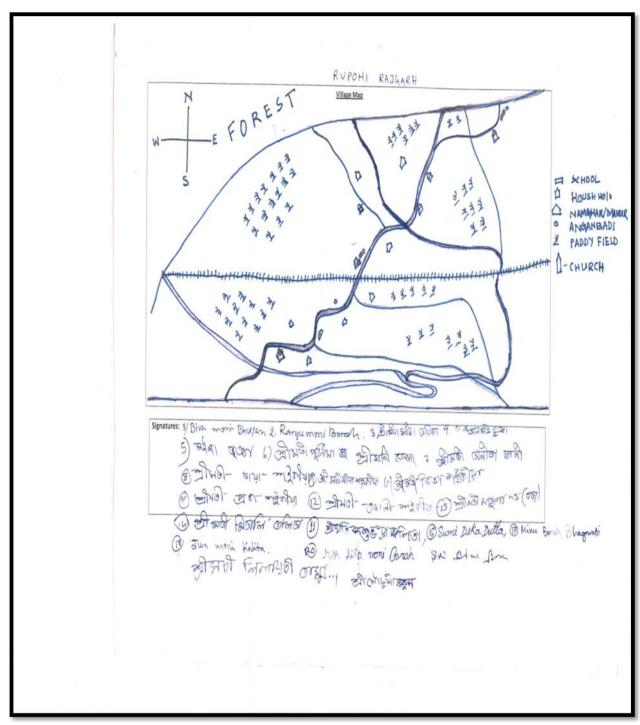


Appendix 1(B)

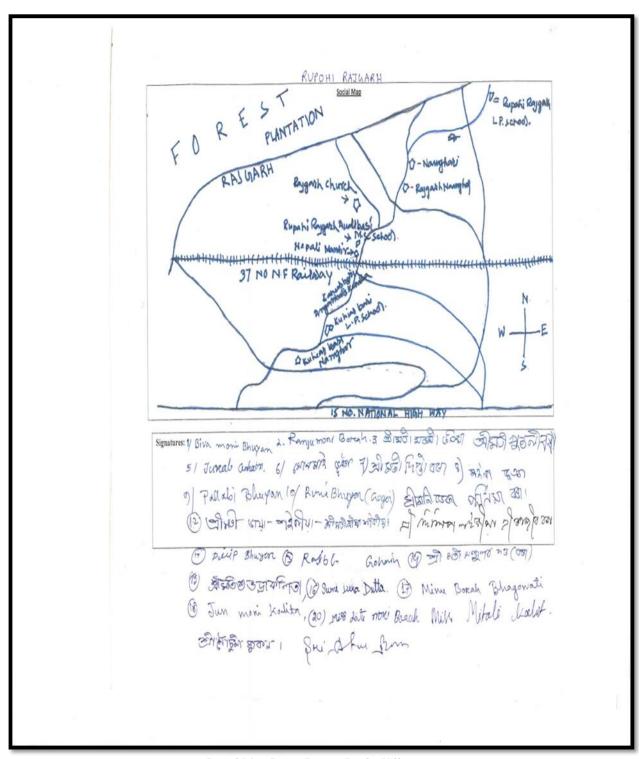
a) GIS Location map



b) Village map:

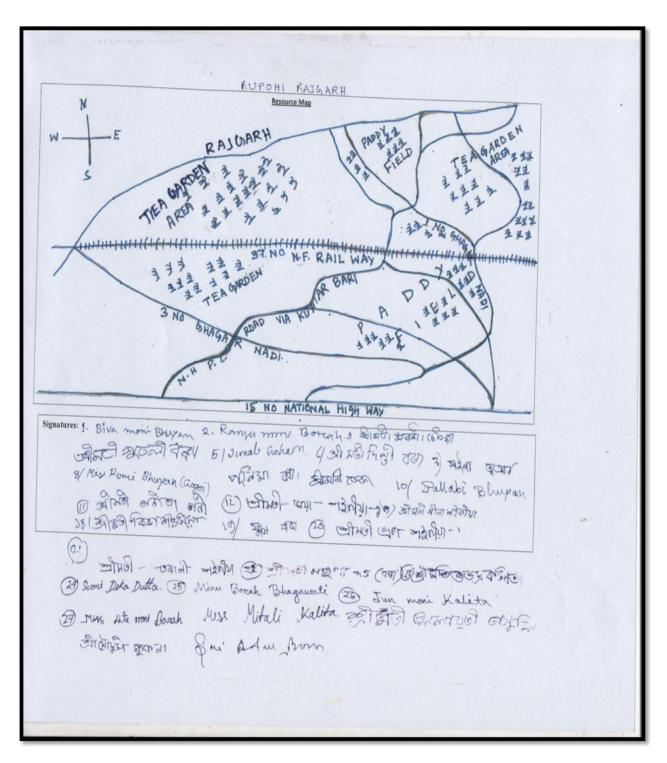


Village Map Being Drawn By the Villagers



Social Map Being Drawn By the Villagers

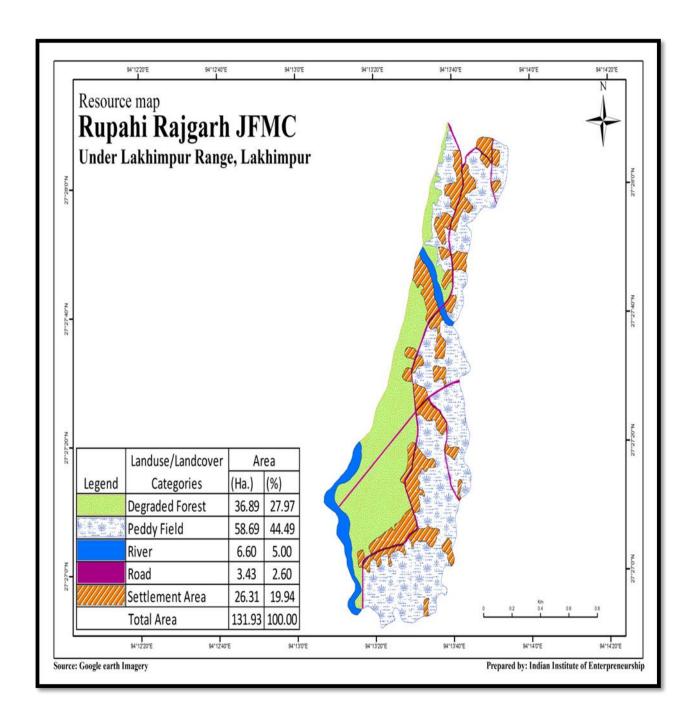
d) Resource Map:



Resource Map Being Drawn By the Villagers

Appendix 2

Land Use map of GIS



Appendix 3

PRA ACTIVITY

Location and Timing of Participatory Rural Appraisal:

Numbers of participants:	27 (JFMC members including Forest Officials)
Time:	10 a.m., 17 th March 2017
Venue:	Anganwadi Centre, Rupahi RajgarhJFMC

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 help the villagers and facilitators to develop in-depth understanding of socio-economic status of the area through preparation of maps and discussion on different social and economic aspects. Considerable efforts were made to present the information on the available community infrastructure, social structure, institutions, occupations etc. through a social map. Awareness camp about the project was carried out beforehand. So it was easy to gather people for the PRA process in the school. The enthusiasm level of the villagers was appreciating and they actively participated in the mapping process.

At first, the people of villages 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 the 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 pakka, semi pakka, IAY and thatch house.

Table 3.1: Information about the villages

	Village →	Rupahi Rajgarh JFMC
	Total population	430
	Male	258
	Female	172
Social information	Total households	86
	No. of Pakka houses	5
	No. of semi pakka house	25

	No. of kuccha houses	56
	Bridges	Yes
	Stream	Nil
	River	Yes (1 No.)
	PHC (Public Health	Chauldhowa
	Center)	
Landmarks	Community hall	No
	Tea Garden	Yes
	Ring Well	Yes
	Embankment	Nil
	Check Dam	Nil
	Anganwadi	Yes (2 No.)
	LP School	Yes (1 No.)
	ME School	Yes (2 No.)
	Namghar	Yes (5 No.)

Source: Discussed with JFMC members and Forest Officials.

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 household's namely pukka, semi pukka and thatch or kuccha house.

Findings of social map:

- ➤ The participants of social mapping have identified 86 households out of which 25 households have semi pakka houses and 5 have pakka houses and the remaining 56 households are kuccha or thatch houses. This shows that the person of the village is still deprived of the basic household schemes from the Government.
- Other than the class based division of the households, important places like LP and ME schools, ring well, river, tea garden and bridges are mapped.
- A main source of water for the villagers is ghagor which is used by villagers for their day to day use. The water is available throughout the year.
- 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.
- Majority of the population belongs to the OBC community and are of General 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 public health center along with police station is located in chauldhowa, which is 5 KM away from the JFMC. The villagers have to cover a long distance for their health centre facility.

- 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 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 Rupahi Rajgarh JFMC have to move to gogamukh, a distance covered with 12 km, for their weekly marketing activity.

3.2 Wealth Ranking:

Wealth ranking, or well-being ranking, involves community members identifying and analysing 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:

- a) Land holding
- b) Occupation

As such about 54.65 per cent people are poor, about 31.39 per cent belong to middle class and about 13.95 per cent are categorised to be rich. Poor people are mainly irregular wage earners, sometimes they lease (adhi lua) others land. They also have good amount of agricultural land.

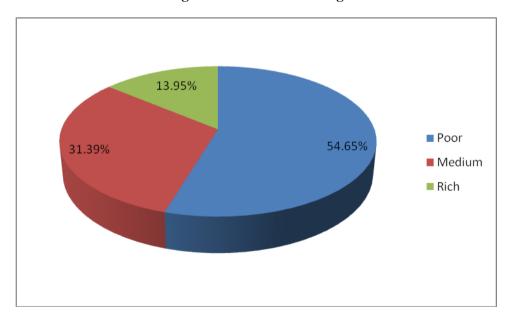


Figure 3.2: Wealth Ranking

Source: Field Survey Report

3.3 Timeline Review

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

Table 3.3: Timeline review

Timeline Category	Year	Event	Type
Pre-Independence	Nil	Nil	Nil
Post -Independence	1985	There was a animal depredation where a	Destructive
		elephant attacked a village person.	
	1985	A Boy named Rajen Hazarika was emerged as	Formative
		a first H.S.L.C candidate	
20 th Century	2001	There was a serious conflict with a group of	Destructive
		tribal people.	
	2008	Rupahi Rajgarh JFMC was formed	Constructive
	2012	Nanda Bahadur Tamang got the first job as a	Formative
		TET teacher	

Source: Field Survey Report

Learning:

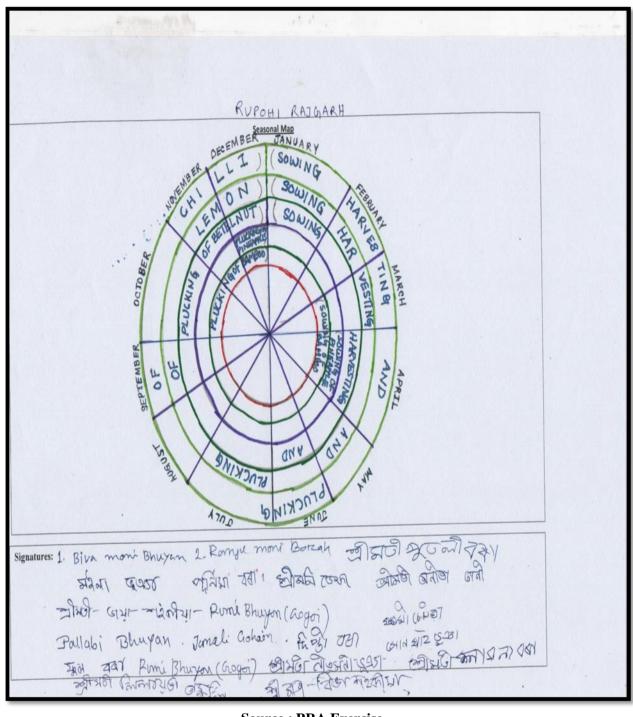
• It has been observed and learnt from our research and information from the village people that there are some kinds of Formative, destructive and constructive events in the village which is being learnt during the PRA exercise.

3.4 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 Pineapple, tomato, Potato, chilli, cabbage, cauliflower, mango etc. The FGD conducted revealed that other major livelihood options available in the JFMC are Livestock rearing (Piggery, poultry), weaving, daily wage labourers, masonry, tailoring, carpentry which are not seasonal in nature.

Figure 3.4(A): Seasonal Map of Rupahi Rajgarh JFMC



Source: PRA Exercise

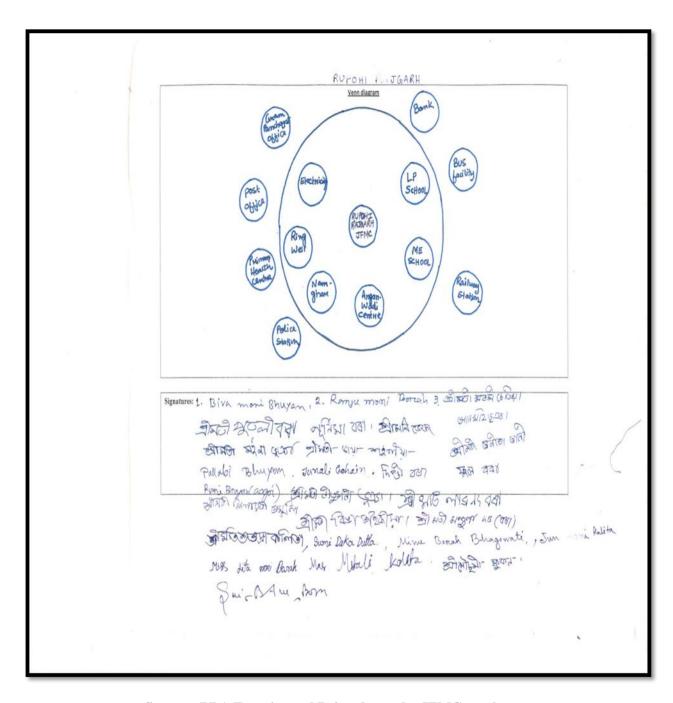
Table 3.4(B) Seasonal cropping pattern

Agricultural Crop	Time of Activity						
_		Sowing	Harvesting	Plucking			
	Bamboo	Marc	June-July				
Farming	Pineapple	Apri	l-May	June-July			
	Lemon	Througho	May-June				
	Chilli	Througho	May-June				
	Betel Nut	Jan -	July- Oct				
	Banana						
	Weaving						
	Livestock						
	Rearing						
	Daily Wage	r	Fl 41				
	Earning	-	Throughout the yea	ar			
	Shop-keeper						
Non-Farming	Electrician						
110H I HIMME	Tailoring						

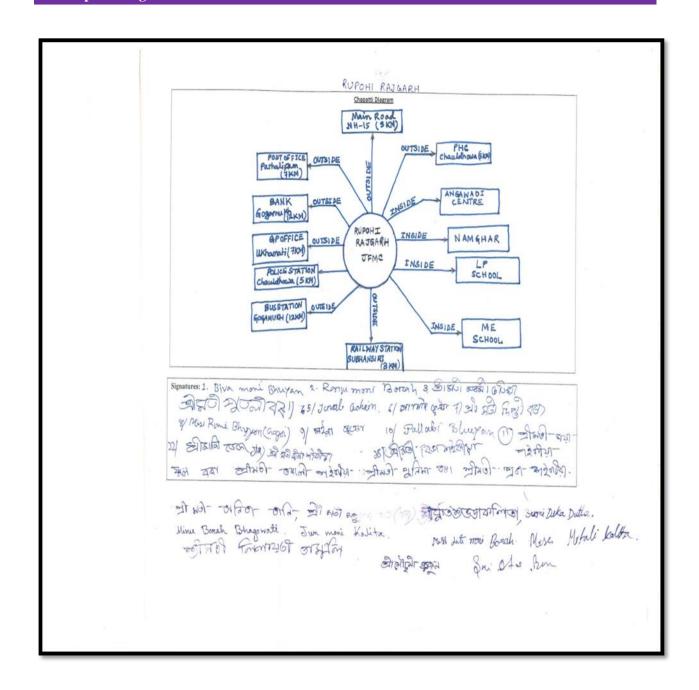
Source: PRA Exercise

Learnings:

• Water availability is less during the period October to March, so agricultural productivity becomes less in this period.



Source: PRA Exercise and Being drawn by JFMCmembers



Source: PRA Exercise and Being drawn by JFMCmembers

3.7 Priority Ranking- EPA

	RUPOHI RAJGAR刊 Priority Ranking of Entry Point Activity														
	Entry Point Activities		Community Hall	Dubling	Sawhelin	Stud of	Coursefish	House	Pingor.	Talings had				Marks	Rank
			A	В	С	D	E	F	G	Н	1	1	К		
	Community HALL	A	×	Α	Α	Α	Α	Α	A	A				7	1
	Durnhing water	В		X	В	В	B	B	B	В	1			6	2
	Sanitation	C			×	C	C	C	6	C				5	3
	Waiting shed	D				×	D	D	D	D				4	4
	Road Connectivity	Е					X	E	E	£				3	5
	Tent House	F						X	F	f.				2	6
	Community Piggary	G							×	G				1	7
	School I Public	Н								X				0	8
	10	1													
		J													
		K													
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Source : PRA Exercise

3.8 Priority Ranking-Livelihood

						Priori	tv Ranking o	of Liveliho	od Activitie	<u>:5</u>					
	Livelihood Activ	rities	Wagning	Hovollinem	Core &	Rupmadaes	Bundan					Marks	Rank		
			Α	В	С	D	Ε	F	G	Н	1				
	Tea waging	A	Х	A	Α	Α	А					4			
	Hardloom	В		X	В	B	8	-				3	2		
	Cane & Bamboo	С	•		Х	C	c					2	3		
	Carpentry	D				×	D					1	4		
	Bu Kaping	E	_		+-		X			-		0	5		
		G			+					+	-	-			
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Source : PRA Exercise

ANNEXURE 4

PHOTOGRAPHS -1



During Awareness

PHOTOGRAPHS -2



PRA Activity

PHOTOGRAPHS -3



Data Collection and drawing of maps being drawn by the villagers

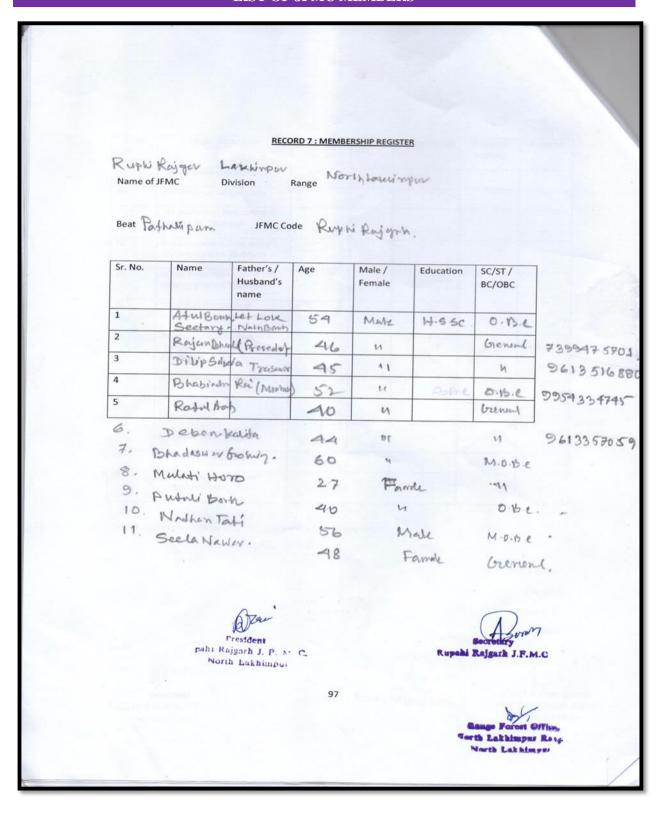
PHOTOGRAPHS -3



Group photo with the Villagers

Annexure 5

LIST OF JFMC MEMBERS



Annexure 6 (Record I)

Table 1: Basic data of the JFMC:

Name of JFMC/Vill age	Date of Esta blish ment	No. Of Membe rs In Executi ve Comtt.	Name of Presid ent	Name of Membe r Secreta ry	Mon ey in villa ge Dev. Fun d (VD	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
Rupahi	2008	13	Rajen	Atul	F No	-	Yes	-	80%
	JFMC/Vill age	JFMC/Vill of Esta blish ment Rupahi 2008	JFMC/Vill age Esta blish ment Executi ve Comtt. Rupahi 2008 13	JFMC/Vill age Esta rs blish In ment Executi ve Comtt. Rupahi 2008 13 Rajen	JFMC/Vill age Esta blish ment Executi ve Comtt. Rupahi 2008 13 Rajen Atul	JFMC/Vill ageof Esta blish mentMembe rs blish ve Comtt.of Presid entof Membe r Secreta ryent yilla Secreta ryVe Comtt.Ty Comtt.Dev. Fun d (VD FRupahi200813RajenAtulNo	JFMC/Vill ageof Esta blish mentMembe rs blish ve Comtt.of Presid entof Membe r 	JFMC/Vill ageof Esta blish mentMembe rs blish ve Comtt.of Presid entof Membe r Secreta ryey in villa ryution per yilla per per Fun (VD For per yes/ NoRupahi200813RajenAtulNo-Yes	JFMC/Vill ageof Esta blish mentMembe rs blish ve Comtt.of Presid entof Membe r Secreta ryey in villa ryution per yilla per per per person family per per person Nos on special attainme ntsRupahi200813RajenAtulNo-Yes-

Source: - Field survey report.

Table 2: Village Wise Population data of the JFMC:

Table -2: Demographic status of the project villages

Sl. No	Name of Village	No. of Househol ds	OBC	!	Gener	ral	Total- all category
			Male	Female	Male	Female	
1.	Rupahi Rajgarh	86	31	25	227	147	430
	Total	86	31	25	227	147	430

Source: - Field survey report.

Table 3: Age profile of the JFMC

Age Class	<5 years	5-18 years	18-45 years	45-60 years	>60 years	Total
Male	21	79	117	31	10	258
Female	15	48	82	20	7	172
Total	36	127	199	51	17	430

Table 4: Education profile of the JFMC

Name of Village	Illiterate	Up-to IV	V-VII	VIII-X	X-XII	Graduate	Total
Rupahi	272	46	39	25	30	18	430
Rajgarh							
TOTAL	272	46	39	25	30	18	430

Table 5: Income Distribution of the JFMC

Income Category(in Rs) Yearly	No of HHs
>5000 Rs	-
5,0000-10,000	22
11,000-20,000	25
21,000-30,000	27
31,000-40,000	12
41,000-50,000	
<50,000	-

Table 6: JFMC farmer category on the basis of land holding:

Sl.No	Name of Village	Type of Farmers according to land holding				Total
	v muge	Large Farmer > 10ha.	Small Farmer 2-10 ha	Marginal farmer (household) <2ha.	Land less (house hold)	
1	Rupahi Rajgarh		6	35	45	86
	Total		6	35	45	86

Table 7: Cattle Population of the JFMC

Sl. No	Name of Village	Village wise no			no of cattle				
NO	vmage	Cows	Buffaloes	Goats	Bull	Poultry	Pig	Duck	Total
1	Rupahi Rajgarh	400		240		842		20	1502
	Total	400		240		842		20	1502

Table 8:Infrastructure of the JFMC

Sl. No.	Infrastructure Location Distance from village, if in another location (in Kilometers)		Condition and status of present use	
1	Main Road	NH-15	3km	Good
2	Electricity	Inside	Under Village area	Average
3	Gas connection	Gogamukh	12 km	Average
4	Transport	Gogamukh	12 km	Average
5	Primary Health Centre	Chauldhowa	5 km	Poor
6	School (LP)	Inside	Under Village area	Average
8	Bank	Gogamukh	12 km	Average
9	Anganwadi Centre	Inside	Under Village area	Average
10	Gram Panchayat Office	Ukhamati	7 km	Average
11	Revenue Office	Nil	-	-
12	Police station	Chauldhowa	5 km	Average
13	Forest Office (Beat)	Inside	Under Village area	Average
14	Post Office	Pathalipam	7 km	Good
15	Bus facility	Gogamukh	12 km	Poor
16	Railway Station	Subhansiri	3 km	Good

17	Drinking Water	Ring well	Under Village area	Average
18	Namghar	Yes	Under Village area	Average
19	District Head	Lakhimpur	20 km	-
	Quarter			
	I			

Source: - Field survey report.

Table 9: Agricultural crops of the JFMC

	Rain f	ed	Irrigation		
	Name of Crop	Area in ha.	Name of Crop	Area in ha.	
Kharif	Paddy (Sali, Aijong, Pankaj, joha, Bao)	58.89	-	-	
Rabi	Mustard,Potato,Tomato	30.02	-	-	
Others	Fruits	11.02	-	-	

Table 10: Crop production profile of the JFMC

Стор	Total production (approx) in quintals	Number of households growing	Average production(qui ntal per/hac) approx	Area under crop(hac) approx
Paddy	2600 q	48	44.30	58.89
Vegetables	1200 q	24	37.47	32.02
Tea	500 q	14	31.25	16
Fruits	300 q	9	27.22	11.02

Table 11: Fodder Availability (animal) of the JFMC

`	1 – 3 months	3 – 6 months	> 6 months
Crop residue	√	-	-
Trees fodder	-	√	√
Grasses	√	√	√
Green fodder		✓	-

Grazing in forest	-	-	✓

Table 12: Location of market from the JFMC

For purchase	Location	Distance from village if in other village kilometer
Grocery Shop/PDS center	Under village area (Inside)	0KM
Weekly Market	Ananda Tinali	2 km
Major Market	Ananda Bazar	2 km
Forest corporation sale depo.	-	
Tendu Patta PHAD	-	
Fish Market	Ananda Bazar	2 km
Medicinal Plant Collection Center	-	-
Forest Corporation Medicinal	-	-
Plant Collection Center	-	-
Other Specify	-	-

Source: - Field survey report.

Table 13: Water Resources Facility available in the JFMC

Water Source	Number	Water Availability (Adequacy, seasonality)	Uses (drinking, irrigation, livestock bathing)
Water Harvesting Structure	0	-	-
Check dam	0	-	-
Tube well	0	-	-
River/Nala	1	Adequate	Drinking, Bathing, Irrigation, livestock rearing
Ring well	20	Adequate	Drinking, Bathing, Irrigation, livestock rearing
Canal	0	-	-

Water Reservoir	0	-	-

Table 14: Energy consumption of the JFMC:

Type of fuel	Number of household depending	Number of months dependent	Source (local village, forest, other source)	Major/Secondary
Fuel wood	86	12 month	Forest, Village area	Major
Kerosene stove	45	12 month	Market	Major
Gobar /Bio Gas	0	-	-	-
LPG	4	6 month	Govt.	Secondary

Source: - Field survey report.

RECORD II

LIVELIHOOD OPPORTUNITY ANALYSIS

Table- 15: Agriculture and Horticulture

Constr aints	Reasons	Opportunities	Programme
Low produc tion/co llection	 Traditional way of cultivation. Only one crop undertaken annually (Paddy) Very negligible use of fertilizers and pesticides, insecticides. Lack of irrigation facilities. Lack of agricultural infrastructure, modern tools and equipment's viz, power tillers, tractors etc. Non usages of high yielding seeds. 	 Nearness to any marketing hub. Application of proper and controlled pesticides and insecticides. Introduction of new and advance technology. Well-structured training programme. The villagers are inherited with the skill of cultivation. But an improvisation of skills is the need of the hour. 	 Tractor operation training. Agro-skill development programme. Training on insecticides, pesticides, hybrid cultivation
Storag e & process ing	 Lack of common storing place Lack of cold storage facility due to non-availability of electricity. 	 Availability of new technologies and farming practices. Helpful in preserving unsold products for a longer period of time. They can store their product and sell it when there is a higher demand. 	 Training programme. Packaging Transportation and distribution

TABLE- 16: Livestock

Constraints	Reasons	Opportunities	Programme
Less grazing land	Not applicable	• Income generating activity	
Availability of fodder	 Trees fodder and crop residue are available only for 3-6 months. Green fodder is also not available for the whole year. Because of poor financial condition, unable to buy from market. 	Good domestic market for the fodder if they have access facility and can make an alternative livelihood opportunity.	
Lack of skilled manpower	Insufficient knowledge on technical skills and marketing skills.	Training on the skills development can enhance and increase their productivity.	
Market	 Proper linkage with the market Unaware of the market demand of different products. 	Good market demand for both National and International market.	
Veterinary care facility	 No veterinary care clinic Lack of knowledge about the proper rearing of live stock 	 Disease control Increases the life span of cattle. It will also help to aware the villagers and will encourage them for livestock rearing. 	

Problems related to	Poor nutrition	Cattle	
other Livestock		improvemer	nt
		/health	
		programme	S
1			

TABLE- 17: NWFP

Constraints	Reasons	Opportunities	Programme
Less Collection	Less availability of NWFP	Increasing demand in the market	• Training programme on benefits of NWFP
Unsustainable extraction	NA		
Low Rates	NA		
Value addition	 No processing units Non availability of required resources No technical know-how 		

TABLE- 18: Specialized skills

Constraints	Reasons	Opportunities	Programme
Raw material availability	 Lack of monetary assistance No storage facility Lack of effective use of raw materials 	 Diversified market products. Provide central storage facility. 	 Training on Skill development. Provide awareness and information programme for modern infrastructure and machine.
Product quality	 Lack of training Use of Traditional machineries Lack of knowledge for packaging of product. 	Developing new and innovative products with the help of modern technology.	 Training on Modern Tools and Equipment. Providing modern technology to the villagers.

Marketing potential	 Lack of domestic market knowledge. No linkage with the institutional buyers. Lack of proper 	Innovative ideas and new product development for better marketing channels.	Providing a bulk buy arrangement of the finished product with institutional buyers.
Credit facility	Lack of Micro Finance Institutions like SHG'S	Providing credit and short term money loan facility or financial assistance from some government organisation.	Microfinance, Term Loans, Working Capital Arrangement
Innovative and diversified Product	 Lack of new ideas and selling strategy. Lack of awareness about new trends of market. 	New product development as per needs of the market.	Training on diversified Products.

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

Christonal Forest Officer