





RABHAPARA-CHRISTANPARA JOINT FOREST MANAGEMENT COMMITTEE (JFMC) BONDAPARA RANGE, KAMRUP WEST FOREST DIVISION

CENTRAL ASSAM FOREST CIRCLE

MICRO-PLAN

(2016-17 to 2025-26)

Prepared by Rabhapara-Christanpara Joint Forest Management Committee

assisted by Assam Forest Department

&

COMPELO

(IIE, RGVN and CML)

July 2016

Divisional Forest Officer Kamrup West Division Bamunigaon

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List of Acronyms

ACF Assistant Conservator of Forests

AfD Agence Française de Development

APFBC Assam Project on Forest & Biodiversity Conservation

APL Above Poverty Line

BPL Below Poverty Line

CCF Chief Conservator of Forests

CF Conservator of Forests

CML Centre for Microfinance and Livelihood

COMPELLO Consortium On Micro Planning And Enhancement Of Livelihood

Opportunities

DCF Deputy Conservator of Forests

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
Gol Government of India

GP Gaon Panchayat

Ha Hectare

HH Households

IIE Indian Institute of Entrepreneurship

JFMC Joint Forest Management Committee

MoEFCC Ministry of Environment, Forests & Climate Change

MT Metric Ton

NTFP Non Timber Forest Produce

OBC Other Backward Classes

SDP Skill Development Programme

ST Scheduled Tribes
SC Scheduled Caste

PHC Primary Health Center

PMU Project Monitoring Unit

PRA Participatory Rural Appraisal

RO Range Officer

RGVN Rashtrya Gramin Vikash Nidhi

SDG Sustainable Development Goals

SLF Sustainable Livelihood Framework

SWOT Strength Weakness Opportunity & Threat

WPC Working Plan Circle

RABHAPARA CHRISTIANPARA JOINT FOREST MANAGEMENT COMMITTEE Bondapara Range, Kamrup West Forest Division,

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

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1. Introduction

About the Project

The vision of the Assam Project on Forest and Biodiversity Conservation (APFBC) is 'to enable sustainable forest and biodiversity conservation and management in Assam through multi-scale integrative planning and involvement of forest dependent communities in target areas and giving fillip to their livelihood activities through sustainable use of forest and non-forest resources'. The project's objective has been stated as: 'In collaboration with the forest dependent communities, to restore forest 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 *Agence France de Développement* (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, *Rashtriya Gramin Vikas Nidhi* (RGVN) and Centre for Microfinance and Livelihood (CML) has been formed to implement (*inter-alia*) the microplanning 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 RABHAPARA CHRISTIANPARA JFMC

This document gives the Micro-Plan for the Rabhapara Christianpara JFMC, which is located in the Kamrup district of Assam. The JFMC falls under the jurisdiction of the Kamrup West Division the Central Assam Forest Circle. The profile of the community is given in the next section.

The present micro-plan has been prepared by members of the community, including both male and female members. This document has emerged as an outcome of a Participatory Rural Appraisal (PRA) process undertaken by the community and personnel of Indian Institute of Entrepreneurship (IIE) Guwahati in June 2016. The micro-plan has been compiled by IIE based on the project guidelines. The document has been discussed and finalized for adoption in July 2016.

2. Village Socio-Economic Profile

Location

The Rabhapara Christianpara Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in two villages namely; Rabhapara and Christianpara village located under Bondapara Range of Kamrup West Forest Division. **Appendix-1** Gives the Village Map.

Key Information

The key information of the JFMC is furnished below.

Table-A: Key Information of the JFMC

NY CALIFFORD	Dalla mana Chuistianmana		
Name of the JFMC	Rabhapara Christianpara		
Habitation	Rabhapara and Christianpara		
Name of Revenue Village	Gamerimura		
Name of the Gram	sukuniapara		
Panchayat / VCDC			
Revenue Circle	Boko		
District	Kamrup R		
Forest Division	Kamrup West		
Forest Range	Bondapara		
Forest Beat	Gamerimura		
Year Formed	2015-16.		
Description of Boundary of	As below		
JFMC	North: Gamerimuwa village		
	South: Singra river		
	West: Forest		
	East: Forest		

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	Gobordhan Rabha
Name of Member Secretary	Chawkreshwar Kalita
Name of Treasurer	
No. of Members in Executive	20
Committee	
No. of Members in the General	All the head of the HH
Body	

Source: JFMC Records

Households Population Structure

a) Rabhapara Village: - The village has 80 households. The number of female headed households is nil. The total population is 700, of which 390 are male and the 310 are female members. All the 65 HHs belong to the ST community.

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 8.8 (65 HHs).
- (2) The sex ratio is 795 females per 1000 males in the village.
- b) Christianpara Village: The Christianpara village has 130 households.

The number of female headed households is nil. The total population is 940, of which 390 are male and the 550 are female members. All the 130 HHs belong to the ST community.

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 7.2 (130 HHs).
- (2) The sex ratio is 1,410 females per 1000 males in the village.

Table C: Age and Sex distribution

Households (No.)	Population (No.)		Sex ratio	Avg. HH	
(140.)	Total	Male	Female	Tatio	size
210	1,640	780	860	1,103	7.8

Source: PRA

Development

Education & Skills Over 66.69% of the population of the JFMC area 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.

Table D: Education distribution

Households	Population (No.)			Total	Literacy
(No.)	Total	Age group	Excluding	Literates	Rate
			Age group		(in %)
210	1,640	127	1,513	1,009	66.69

Source: PRA

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 skills in the following areas:

- (a) Farming.
- (b) Livestock rearing.
- (c) Weaving

Table E: Work Force

Total	Cultivator	Livestock	Service	Wage- Labour
1,321	1,110	396	46	90

Source: PRA

Government has been active in promoting formal skills development programmes in the country as well as in the state. The village has not reported receipt of benefits of any such 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, hilly parts and forests areas.

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 Singra, which flows from the adjoining hills / mountains of Meghalaya into the project area before joining the River Brahmaputra to the north / south. This is a perennial river. There is another stream named Baganbari stream which provides water to the JFMC communities for their daily uses.

Climate: Temperature Rainfall

The maximum **temperature** during the summer is 40° C. The minimum **&** temperature during the winter is 8°-10° C.

The annual **rainfall** is about 300 mm. About two-thirds of the rainfall usually occurs during the rainy season (June-September). The village has high levels of **humidity** (over 95%) during the rainy months and low levels in the winter (Below 25%).

Forest & Biodiversity

a) Forest type:

The formation of forest falls under eastern hill sal forest khasi hills sal type 3c/c1 a(ii). This type occurs in the hilly areas of forest reserves of the Division and sal forms pure patches and groups along the ridges and spurs, the villages and the middle slope being occupied by the miscellaneous species and bamboos. Of late existence of bamboo is nil because of illegal collection.

b) Species composition: Other associates are Makrisal (schima wallichii), jia (lannea grandis), koroi (albizzia procra), amlokhi (emblica officinalis), dodhkhuri (halarrhena antidysentrica), bhatghilla (oroxylum indicum), parali (stereosparmum personatum) etc. found in scattered patches.

Additional details in this regard are given at the 'Forest Development Plan'.

Land Use Pattern

Appendix-2 gives the land-use pattern of the Christianpara and Rabhapara JFMC.

- 1. 130 hects. of patta land (35% are shallow and the rests are low lying areas)
- 2. 14 hect. areas of the shallow land are covered by complexes of 4 no. of school, churches and temples, playground and fields, served land for public

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:

- 10 households are large farmers
- 35 households are marginal farmers
- 165 households belong to small Farmer.

Livestock

The total number of livestock in the village is 2305 (approx.). The main types of livestock possessed by the households include:

Cows: 358 Goats: 134 Pigs: 453 Poultry: 1360

Table-4 of Record-I may be referred to for the details in the above connection.

Village Infrastructure & Communication

In any community; the availability of basic infrastructure enables the development of sustainable livelihood options. The present condition of infrastructure in the village is not satisfactory. This is borne out by **Table-5** of

Facilities

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:

- A major thrust of the micro plan is to understand the village level infrastructure of the surveyed JFMC. As we already have an idea of the two villages in the JFMC which are adjacent two each other, the main road with is connected to the village with National Highway is found pucca motorable while the roads within the villages are kutcha motorable.
- Electricity is available to all the household of the Rabhapara and Christianpara villages. However, there is a lack of LPG gas connections in the villagers of the JFMC villages. The Household still dependent on forest and use firewood for their cooking purposes. They used to go to the forest for collecting the firewood 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 Gamerimuwa, which is 2 KM away from the JFMC. The villagers have to cover a long distance for their health check-up.
- There are one LP, one ME and one high school present within the JFMC area. There is also an Anganwadi Centre present where Basic health care activities include contraceptive counselling and supply, nutrition education and supplementation, as well as pre-school activities are done.
- There is also one community hall available in the JFMC where various meetings are held. Major meeting are Gram panchayat meeting, village head meetings, forest department meetings and other political meetings.
- 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.
- There are some grazing field where villagers use for their cattle rearing. These fields are available for a maximum of six months. Seasonal grazing incorporates "grazing animals on a particular area allows the land that is not being grazed to rest and allow for new forage to grow.
- The villagers of the Rabhapara- Christianpara JFMC have to move Gamerimua, a distance covered with 3 KM. this is the weekly having different rows of sheds. Food grains such as rice, dal, wheat, etc. are sold in one row. Vegetables are sold in another row. Fish, meat and dried fish are sold in a different row. Domestic materials, utensils, bangles, cloths and stationeries are sold in different stalls.
- In the JFMC area several water resource present in the JFMC, however the drinking water facility is not adequate. There is a spring present where people availed day to day uses of water from that. On the other hand, for irrigation and livestock rearing and bathing people uses River/Nala.
- Energy is one of the most important ingredients required to alleviate poverty and realize socio-economic and human development, which is directly interconnected to the prominence of life in rural areas. There are various source of energy consumption such as Biomass, kerosene, electricity, LPG and candle. In the Rabhapara- Christianpara JFMC, all the household uses firewood for cooking. People collect Bamboo, branches,

firewood, rice husk, leaves & twigs for household energy use.

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, Gaya)

Rabi Crops: Mustard

Others: Mango, Jackfruit, Cabbage, Brinjal, Chilli, Cauliflower, Tomato,

Pumpkin, Gourd etc.

All the crops are rain fed.

Table-7 of Record-I may be referred to for the production and yield details of the crops grown in the village.

Table F: Seasonal cropping pattern

Agricultural crop	Sowing	Plucking	Harvesting		
Betel Nut	May - June	January-	July- December		
		February			
Orange	May- June	January -	July- December		
		February			
Ginger	April –	October –	June- September		
	May	December			
Turmeric	April –	October-	June- September		
	May	December			
Pineapple	July –	January- June	September-		
	August		December		
Banana	Throughout the year				
Rice	Throughout the year				

Source: PRA

Crop Production Profile

The maximum numbers of households are involved in growing crops like rice and vegetables.

The production and yield of these crops is given as follows:

(a) Paddy: Production 1370 Quintals

(b) Horticulture: Production 330 Quintals

(c) Fruits: Production 220 Quintals

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) Household wastage
- (d) 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: Gamerimuwa at 2 km away.
- (b) Weekly / Bi-weekly Market: Gamerimuwa at 2 km away.
- (c) Major Market: Boko at 20 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) Kutcha well
 (b) River
 (c) Water Availability: Perennial-/ Seasonal)
 (d) Water Availability: Perennial-/ Seasonal)
- (c) Stream (Water Availability: Perennial / Seasonal)

Energy Consumption

Table-11 of Record-I shows the major sources of energy in the village. The same have been listed below.

- (a) Fuel wood Households Depending 210 Nos. Source: forest
- (b) LPG- Households Depending 30 Nos. Source: Govt.

Socio-economic status

Social set-up: The village is inhabited by Rabha and Garo community and all the inhabitants are classified as Schedule Tribe Category. 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, Daily wages, Livestock rearing, Selling Vegetables etc. Most households earn Rs. 20,000 to Rs. 40,000 per year except service holder.

There is a migration in this JFMC area. Over 5 percent of the total population have migrated to other place for better livelihood.

Maps

Appendix-1 gives the following maps, based on PRA exercise:

- Village Map
- Village Social Map (with the names and particulars of members in PRA)
- Village Resource Map

3. Livelihood Opportunity Analysis

PRA Exercise

Team from IIE Guwahati carried out PRA exercise in Rabhapara village as follows:

Date: 27th May, 2016 Location: Community Hall of Rabhapara Village

Numbers Present: 95

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 & Outcomes of the PRA

Different tools were used and outcomes obtained. These include:

Social Mapping Wealth Ranking

Seasonality of Livelihoods

Venn Diagram Chapatti Diagram

Appendix-3 furnishes detailed information of the above.

Livelihood assessment of the JFMC:

Human capital

1.1 Skill profile:

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

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

1.2 Occupational profile:

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

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

1.3 Level of Education:

Sustainable livelihood is the capability of people to make their living comfortable and improve their quality of life without endangering the livelihood options of others and education plays an important role to achieve this. The provision of educational opportunities to all people must be facilitate to alleviate poverty and social empowerment.

In the project area, it is seen that there are good facility to attain higher education.

1.4 Source of Information:

Source of information always a factor for successful society. Perhaps the reason for backward in the forest area is the lack of access to information. People of the project area are fully aware of outer world information

1.5 Culture and tradition

The culture and tradition of a community shows a communities civilisation. The project area is highly cultured and their traditional way of living brought immense potentially of tourism in the area.

1.6 Gender Participation in day to day life In the project area, females are largely engaged in farm activities such as land preparation, sowing, weeding, inter culture and harvesting. Where males are involve in cooking, child care, livestock rearing etc. It is important to analyse gender participation to see how value addition can be provided based on their skills which they perform in day to day life.

2. Social Capital

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

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

It is also seen that the delivery of government schemes to the people is average.

3. Natural Capital

Refer to Forest & Bio-diversity part (page number 8)

4. Economic & Financial Capital

Refer to Village Infrastructure & Communication Facilities part

5. Physical Capital

Refer to Village Infrastructure & Communication Facilities part

Ranking

Ranking exercise has been done for the following:

- Entry Point Activities (EPA)
- Livelihoods & Skills Development

Appendix-3 elaborates the above. From the same, it is stated that:

Table: G Ranking of EPA

Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.
1,	Sanitation	Providing HHL (House Hold Latrine) - Low cost, septic and sanitary type.	Swach Bharart Mission/ PHED
2.	Electricity	Every Households should be Electrified of the JFMC area through solar light	

Divisional Forest Officer Kamrup West Division Bamunigaon

3.	Drinking	At least 40 ring wells should	APFBC/ PHED &
	Water	be provided in the JFMC	Govt. Schemes
		area(as the water contains high	
		amount of fluoride and arsenic	
)	

Source: PRA

- An arrangement of working capital worth Rs 2 Lacs should be arranged from the EPA fund for promoting Livelihood activities.
- A low cost community workshed cum JFMC office to be set up within the JFMC boundaries for setting up and commission of tool kits/equipments/machineries.

Livelihood Opportunities were identified as follows:

Livelihood opportunities

Keeping the view of the present livelihood of the villagers, an overall assessment of skill needs/ skill preference of JFMC have been analysed. The categorisation has been divided into farm sector and non-farm sector. The responses towards preference towards skill development training programmes have been presented in the following chart.

Table H: Livelihood Opportunities ranking

Type of training programme	Mark the pro			eferred option		
	1	2	3	4	5	
Agricultural and allied activities related	1		•	75	-	
Horticultural related	190	20	220	4	(m)	
Livestock related	-	2		- 6	3	
Handicraft related	940	(#Y	1961	4		
Handloom related	3	3	- 3	4	-	
Others (NTFP)	1	æ	;≘:	-	-	

Source: PRA

It is observed during the PRA that preference for agriculture and allied activities like bee keeping, sericulture related training programmes is highest. This is because of the available resource present in the JFMC area. The second and third preference is given to Horticulture and livestock rearing such as piggery. Handicraft sector like skill development on cane and bamboo products and handloom where tailoring and weaving activities are came less into focus.

Agriculture & Horticulture
NTFP
Livestock
Handloom and Handicraft
Additional discussion about the above has been given below.

Forest Development Opportunities

In Rabhapara-Christianpara JFMC, ranking has been done in order to understand how people are aware regarding opportunities lead to forest development. The following details provide the rank wise forest development opportunities in the project area. (Matrix ranking is given in Annexure)

1. Plantation of firewood, 2. Development of degraded forest 3. Forest protection Plantation on medicinal NTFP etc 4. Raising of nursery 5. Demarcation of land, 6. Plantation of bamboo 7. Plantation of tree, 8.

Natural regeneration 9. Fodder cultivation

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) Very negligible use of fertilizers and pesticides, insecticides.
- (b) Lack of irrigation facilities
- (c) Lack of agricultural infrastructure, modern tools and equipment's viz, power tillers, tractors etc.
- (d) Non usages of high yielding seeds etc.

The opportunities are:

- (a) Application of proper and controlled pesticides and insecticides.
- (b) Introduction of new and advance technology
- (c) Well-structured training programme.

The villagers are inherited with the skill of cultivation. All they need is improvisation of their skill level.

The suggested programmes are:

- Tractor operation training
- Agri.-skill development programme.
- Training on insecticides, pesticides, hybrid cultivation etc.

Livestock

Table-13 fúrnishes additional information about opportunities for livestock rearing.

The main constraints are:

- (a) Unable to buy fodder from market due to poor financial condition.
- (b) Trees fodder and crop residue are available only for 3-6 months. Green fodder is also not available for the whole year.
- (c) No veterinary care clinic
- (d) Lack of knowledge about the proper rearing of live stock

The opportunities are:

- (a) Higher income from livestock rearing.
- (b) Majority of the workforce is engaged in this activity.

The suggested Skill Development Programme is:

- (a) Goatery
- (b) Poultry
- (c) Cattle rearing

NTFP

The opportunities for NTFP are tabulated at **Table-14** under Record-2

The main constraints are:

- (a) Lack of proper utilisation of NTFP due to inadequate knowledge.
- (b) Lack of research on development of high yielding varieties, domestication etc.
- (c) No technical know-how

- (d) No processing units
- (e) Lack of trained personnel and equipment
- (f) Lack of facilities to fabricate equipment locally

The opportunities is:

- (a) Availability of fertile fallow land
- (b) A ready market for the finished products.

The suggested programme are:

- (a)Plantation of Food plants,
- (b) Medicinal Plant etc.

Specialized Skills

For skills development, the opportunities are tabulated at **Table-15** under Record2

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
- (c) Financial assistance from govt.

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.

Credit Facility

Table-16 under Record-2 discusses this aspect.

The main constraints with the reasons are:

- (a) Financial exclusion
- (b) Higher rate charged by the private money lender.

The opportunities are:

- (a) Setting up modern financial institution
- (b) Adequate awareness.
- (c) To provide credit facilities for modern equipment (tractors etc.)

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, Agri-skill development programme, Training on insecticides, pesticides, hybrid cultivation

- 2. Livestock: Cattle rearing, Goatery, Poultry, Piggery.
- 3.NWFP: Plantation of Food plants, Medicinal Plant etc
- **4. 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.
- 5. Credit facility: Setting up modern financial institution in the nearby areas

4. Livelihood Development Plan

Income Generating Activities

The main income generating activities as planned at the village are:

Farm Sector:

- 1.Food processing
- 2. Bee keeping
- 3. Horticulture
- 4. Medicinal plant and NTFP
- 5. Lac cultivation

Non-Farm sector:

- 1. Areca leaf plate making
- 2. Weaving
- 3. Electrician
- 4. Tailoring

SHG Activities

SHGs of the village can plan the following activities:

- 1. To create awareness.
- 2. To organise and form group
- 3. To involve the villagers in Livelihood Activities collectively.

Exposure Trips

The following exposure trips are planned:

1. Exposure visit to agriculture university

Summary Action Plan

of 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.

5. Forest Development Plan of Rabhapara Christianpara 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 Rabhapara Christianpara 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.

Status of the JFMC Forests

The micro-plan takes into consideration the following categories of the JFM Forests of the Rabhapara Christianpara 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.

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 Rabhapara-Christianpara JFMChave been summarized below.

Table-1: Conditions of the Forests of Rabhapara Christianpara 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: Bodapara Beat: Account Beat Compartment:	326	ä,	Good Area: 60 Degraded Area: 30 Ha	
(B) Other Planted Area				
Location: Type of Forest: VF / Other	12	9	÷	; =
TOTAL	326	THE VISION	Good Area: 60 Ha Degraded Area: 30 Ha	

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

It is seen that the Rabhapara-Christianpara JFMC has 326 Ha under its forests, of which 296 Ha is 'Good' (Crown density >40%) and the rest is 'Degraded'.

Forest Soil Type

The forests of Rabhapara-Christianpara JFMC are located in Red Soil. Some salient points of the forest soil type have been given in the following table.

Table-2: Forest Soil Type in Rabhapara Christianpara JFMC

Status in Assigned Forests	Status in Other Planted Areas
High	High
No Soil Erosion	No Soil Erosion
Nil	Nil
	High No Soil Erosion Nil Nil Nil

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

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

- (a) The Red Soil id Fertile in Nature
- (b) No Soil Erosion in the recent past
- (c) No Presence Silt, Mud-flat, newly accreted land or Sand dune

Existing Composition of Flora

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

Table-3: Existing Composition of Flora in the Rabhapara Christianpara JFMC

Parameter	Local Name(s)	Botanical Name(s)
Major Forest Species	Teak(Segun)	Tectona Grandis
	Saal	Shorea Robusta
Associates	Ghora Neem	Melia azedarach
	Koroi	Albizia Procera
	Ajar	LagrsIroomia Specia
	Bhelkor	Trewia nudiflora
Shrubs	Dhekia	Ferns
	Jharmoni Ban	Atropa belladonna
Medicinal Plants	Amla	Phyllanthus emblica
	Hilikha	Terminalia chebula
	Bohera	Terminalia bellirica
	Bhomora	Terminalia belerica
Produces	2	-
Others, if any	Bamboo	Bambusoideae

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

Other Inputs for the Forest Development Plan

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

Past Protection Measures of the JFMC

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

(a) Number of households involved: 210

(b) Number of people involved: 210

- (c) Summary of the measures: Plantation of Major and Associates Species, Non Grazing of Cattle in Plantation Area, Protection against illegal deforestation
- (d) Any formal mechanism: Nil

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

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 Rabhapara Christianpara JFMC

Name of Forest Produce	Average Household Requirement		How met at	Source
	Frequency of Requirement	Approx. Qty	Present	
Firewood	Regularly	6-7 kg daily	Cutting Branches	Plantation Area
Timber for House	-		(m)	1001
Small timber for Implements	/ .	177	(#)) ž
Pole / Bamboo	Frequently	2-3 Monthly	643	
Fodder from Forest	Not Available		7. 2 .1	-
NTFP	Not Available		590	75
Other	*			

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

There are 75 households in the Rabhapara Christianpara JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the Rabhapara Christianpara village for forest produce for own use is as follows:

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	More than 120000 annully	Usage of Firewood Branches
Timber for House	30-40 large tree trunks	Usage of Saal, Teak for timber

Small Timber for Implements	50 small trunks, big branches	Usage of Saal, Teak for making ploughs,
Pole / Bamboo	1000 bamboo	Fencing, Sale
Fodder from Forest	Not Available in large scale	te.
NTFP	Not Available in large scale	(#)
Other	Not Available	

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

(*) = Approx. Qty. of Average Household Requirement (from Table-4 (A) x 74 Households

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 Rabhapara-Christianpara JFMC is given in the following table.

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

Name of Forest Produce	Col	lection for Market	ting	Location of Collection
	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	
Firewood	Autumn/winter	210	100-150 kg annually	Hiforest normal forest area.
Timber for House	Autumn/winter	*	: * ;	3.51
Small timber for Implements	Autumn/winter	*	(*)	Œ
Bamboo	Throughout the Year	210	10-15 pieces annually	Plantation
Pole	3#6	æ	:(+6)	-
Fodder from Forest		:2:) ±	ĕ
NTFP		@	-	2
Other	- /A	(())	-	#

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 [Rabhapara Christianpara JFMC]

Name of Forest Produce	Surplus Marketed	How marketed	Average Income per HH from sale of Forest Produce
Firewood	100-150 kg per household	Sold in the Local Market	500-800
Timber for House	Not marketed	Not marketed	Not marketed
Small timber for Implements	Not marketed	Not marketed	Not marketed
Pole	Not Available	Not marketed	Not marketed
Fodder from Forest	Not marketed	Not marketed	Not marketed

NTFP	Not Available	Not Available	Not Available
Other	Not Available	Not Available	Not Available

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

Total Requirements of Forest Produce - Domestic Use & Marketing

The total requirements of forest produce by the community members of the Rabhapara-Christianpara 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 Rabhapara Christianpara 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	130000	10000	130000
Timber for House	- B	2	*
Small timber for Implements	.53	· ·	ě
Bamboo	1000 pieces	150 pieces	1150 pieces
Pole	-	<u>\$</u>	-
Fodder from Forest	₹	*	
NTFP	•	-	in the second
Other	-	ă .	-

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

Forest Protection Issues

Protection Problems

The protection issues of the forests of Rabhapara-Christianpara JFMC have been summarized below.

Table-7: Protection Problems of the Rabhapara Christianpara JFMC

Relevant (Yes / No)	Significant (Yes / No)	
Yes	Yes	
No	No	
Yes	Yes	
No	No	
	Yes Yes Yes Yes No Yes	

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

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

(b) Illegal Deforestation

Reasons for Degradation of the Forest

In the Rabhapara Christianpara JFMC, the reasons for degradation of forest are as follows:

(a) Illegal Deforestation

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

Components of the Forest Development Plan

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

Protection Plan

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

Table-8: Protection Plan of the Rabhapara Christianpara 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]
Various plantation area under different side.	Boundary	Along the Demarcation of the Plantation Area	For all weather	High
Fire Protection	Within the Forest	3	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 Rabhapara-Christianpara JFMC(with high / medium priority) are as follows:

- (a) Social Fencing
- (b) Fire Protection

Types of Operations Proposed

The types of operations proposed for the treatment of degraded areas of the JFMC Forest of Rabhapara-Christianpara JFM Care given hereunder.

Table-9: Types of Operations Proposed in the Rabhapara Christianpara 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	No	No
Protection to Cut Stumps of Trees	No	No	No	No
Watershed Treatment	No	No	No	No

Treatment	Required (Yes/ No)	Responsibility of JFMC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
Water Reservoirs	No	No	No	No
Grass & Silvi-pasture	No	No	No	No
Bamboo Plantation	No	No	No	No
Seed Sowing	Yes	Yes	June-July	
Root & Shoot Cutting & Plantation	Yes	Yes	June-July	
Cut Back & Coppice Treatment	No	No	No	No
Physical Fencing	Yes	Yes	November- February	NTFP 50 ha
Social Fencing	Yes	Yes	June-July	100 ha
Other Activities	No	No	No	No

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 Rabhapara Christianpara JFMC:

- (a) Seed Sowing
- (b) Root & Shoot Cutting & Plantation
- (c) Physical Fencing
- (d) Social Fencing

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 Rabhapara Christianpara JFMC

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
Assisted Natural Regeneration (with plantation in gap)			Saal, Teak, Gamari,	4m x 4m
Block Plantation	200	High	Saal, Teak, Gamari, Sissoo, Ghoraneem, Khayer	2m x 2m
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	50	High	NTFPs	2m x 2m
Enrichment Plantation		20		
Direct Plantation	(a)	340	*	ā
Other	393	3.63	÷	*
TOTAL AREA (in Ha)	250	:#°		2

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

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

: 100 ha

Spacing

2m X 2 m-2500plants per ha

No. of Plants to be

110000 (44000 approx. annually)

Raised

Number Blocks

4 Numbers(25 ha each)

Species

Sal; Associates-Gamari, Sissoo, Titasopa, etc.

Rates

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

Financial Year	Activities	Amount
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 100 ha, Demarcation of land during the month of December-January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha	100000
2017-18*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	497000
2018-19*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	497000
	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	6160
2019-20*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	59640
2nd Weeding; Replacement of dead/struggling saplings raised in the previous year		7392
2020-21*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	59640
	3rd Weeding	14784
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	26611
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	35481
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	26611
2024-25*	7th Weeding	26611
2025-26*	8th Weeding	26611
	Total Budgetary Requirement	398942

^{*} 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

Plantation Period

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

Plantation Area

: 100 ha

Spacing

: 2m X 2 m-2500 plants per ha

No. of Plants to be

: 2,50,000 (62,500) approx. annually)

Raised

Number Blocks

: 4 Numbers(25 ha each)

Species

: Teak; Associates-Ajar, Khoroi, Khayer, Sissoo, Jia, Arjun, Ghora

Neem, Bamboo(Jaati, Kako, Bholoka, Bijili), etc

	Action Plan for Creation of Plantation	
Financial Year	Activities	Amount
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 100 ha, Demarcation of land during the month of December-January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha	100000
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	262500

0040 40+	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	262500
2018-19*	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	
0040 00*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	315000
2019-20*	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year	32340
2020-21*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area	315000
2020-21	3rd Weeding	64680
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	266112
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	155232
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	116424
2024-25*	7th Weeding	116424
2025-26*	8th Weeding	116424
	Total Budgetray Requirement	2149586

^{*} 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

: 50 ha

Spacing

: 2m X 2 m-2500 plants per ha

No. of Plants to be

: 1,25,000 (31,250) approx. annually)

Raised

Number Blocks

34 Numbers(25 ha each)

Species

Amla, Hilikha, Bhomora, Bohera, Mango, Guava, Neem, Arjun, etc

Financial Year	ACTIVITIES	
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	210000
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	147500
2018-19*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	147500
	1st Weeding; Replacement of dead/struggling saplings raised in the previous year	9625
2019-20*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	177000
2nd Weeding; Replacement of dead/struggling saplings raised in the previous year		11550
2020-21*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June ; GPS marking of the area	177000
	3rd Weeding & Prunning	23100
2021-22*	4th Weeding & Prunning; Replacement of dead/struggling saplings raised in the previous year	41580
2022-13*	5th Weeding & Prunning; Replacement of dead/struggling saplings raised in the previous year	55440
2023-24*	6th Weeding & Prunning	41580
2024-25*	7th Weeding	27720
2025-26*	8th Weeding	13860
	Total Budgetary Requirement	1083455

Nursery Development Plan

The Nursery Development Plan for the Rabhapara-Christianpara JFMCdepends 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 Rabhapara Christianpara JFMC. This includes the Departmental Nursery involved in JFMC works.

Table-11 (A): JFMC Nurseries of the Rabhapara Christianpara JFMC

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks	
	Major- Saal, Teak		37000	Provide sapling for	
	Associates- Gamari, Sissoo, Titasopa, Ghoraneem, Khayer, etc	2016-17	37000	plantation to be under taken in the 2017-18	
	NTFP		50000		
	Major- Saal, Teak		37000	Provide sapling for	
Within the	Associates- Gamari, Sissoo, Titasopa, Ghoraneem, Khayer, etc	2017-18	37000	plantation to be under taken in the 2018-19	
Vilage	NTFP		45000		
_	Major- Saal, Teak		37000		
	Associates- Gamari, Sissoo, Titasopa, Ghoraneem, Khayer, etc	2018-19	37000	Provide sapling for plantation to be under taken in the 2019-20	
	NTFP		40000		
	Major- Saal, Teak		37000		
	Associates- Gamari, Sissoo, Titasopa, Ghoraneem, Khayer, etc	2019-20	37000	Provide sapling for plantation to be under taken in the 2020-21	
	NTFP		40000		

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

Maintenance Plan - 10 Years

The maintenance plan for plantations raised in the Rabhapara-Christianpara JFMCis given below. This covers a period of ten years.

(A) Timber Species Saal, Teak, Associates

Table-12 (A): Maintenance Plan of Plantation in the Rabhapara Christianpara JFMC

Year(s)	Treatment
2016-17 to 2025-26	As provided in Action Plan for Block Plantation of Saal Mixed with Associates
2016-17 to 2025-26	As provided in Action Plan for Block Mixed Harwood Plantation - Teak with Associates, Firewood and Bamboo

Source: Discussions with Forest Department personnel & Community members

(B) Bamboo

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

Year(s)	Treatment
2016-17 to 2025-26	As provided in Action Plan for Block Mixed Harwood Plantation - Teak with Associates, Firewood and Bamboo

Source: Discussions with Forest Department personnel & Community members

(C) Fuel wood Plantation

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

Year(s)	Treatment
2016-17 to 2025-26	As provided in Action Plan for Block Mixed Harwood Plantation - Teak with Associates, Firewood and Bamboo

Source: Discussions with Forest Department personnel & Community members

(D) NTFP / Medicinal Plantation

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

Year(s)	Treatment
2016-17 to 2025-26	Action Plan for Block Plantation of Non Timber Forest Produce

Source: Discussions with Forest Department personnel & Community members

Miscellaneous Operations Plan

The miscellaneous operations planned in the Rabhapara-Christianpara JFMCare given below.

Table-13): Miscellaneous Operations in the ______ JFM0

Operation	Required (Yes / No)	Responsibility	Month / Year	Area (Ha)
No such planned	2	æ	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	•

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

Expected Benefits

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

Expected Benefits Related to Wood & Grass

The above has been tabulated below for the Rabhapara Christianpara 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 Rabhapara Christianpara JFMC

Item	Month	Year (Indicative)	Quantity
Firewood	Throughout the year	2021-20	2 quintals annually /household

Timber for House	Throughout the year	2025-26	2-3 trunks per household annually
Small timber for Implements	Throughout the year	2025-26	6-7 trunks per household annually
Bamboo		2017-18 onwards	100 pices
Pole	825		
Fodder from Forest Trees & Grass			
NTFP	June-July	2021-22 onwards	1 MT
Wages	Planation and Weeding Season	2016-17 onwards	*:
Other	()#d	#	

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

Sharing Mechanisms

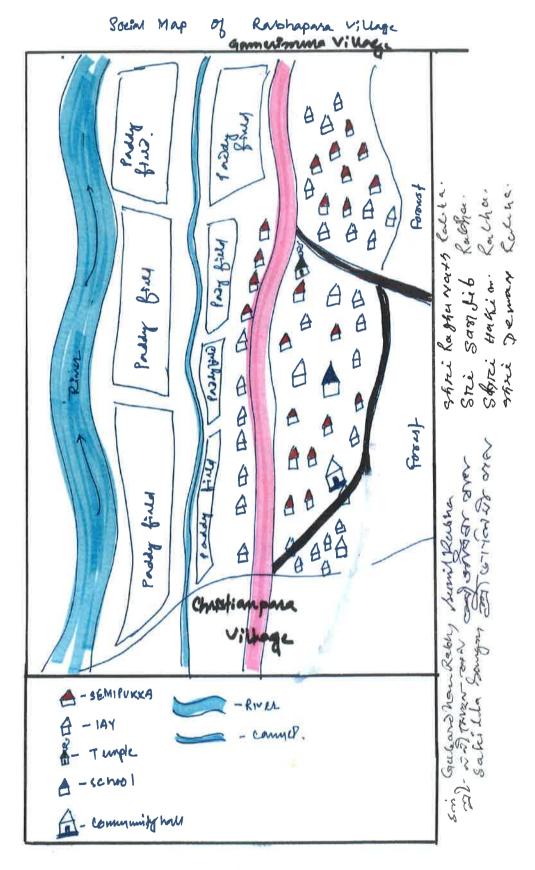
The sharing mechanism for the benefits is indicated below for members of the Rabhapara Christianpara JFMC.

Table-15: Sharing Mechanism for Rabhapara Christianpara JFMC

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

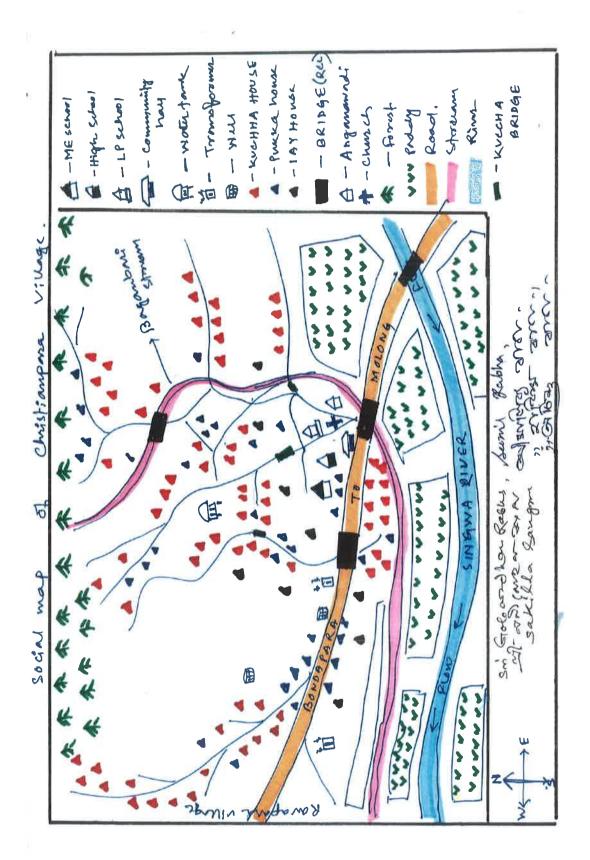
Source: Proforma-3, Table-3.15 / Discussions with Forest Department personnel & Community members

Divisional Forest Officer Kamrup West Division Bamunigaon

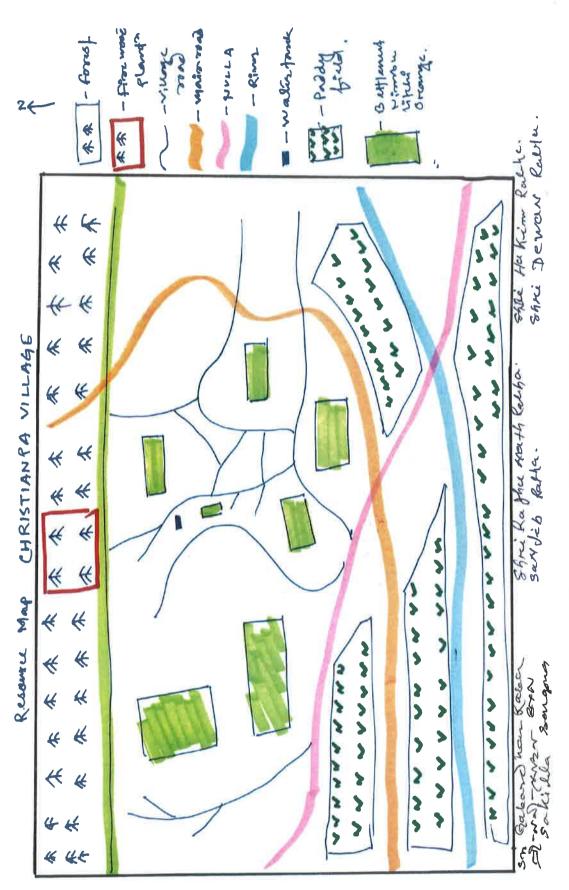


Social Map of Rabhapara Village

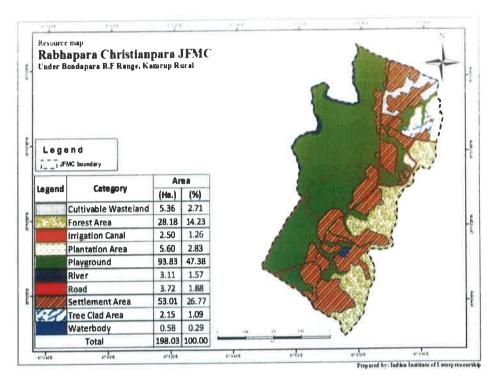
Resource map of Rabhapara Village



Social Map of Christian para JFMC



Resource map of Christianpara Village



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Sumil Raba

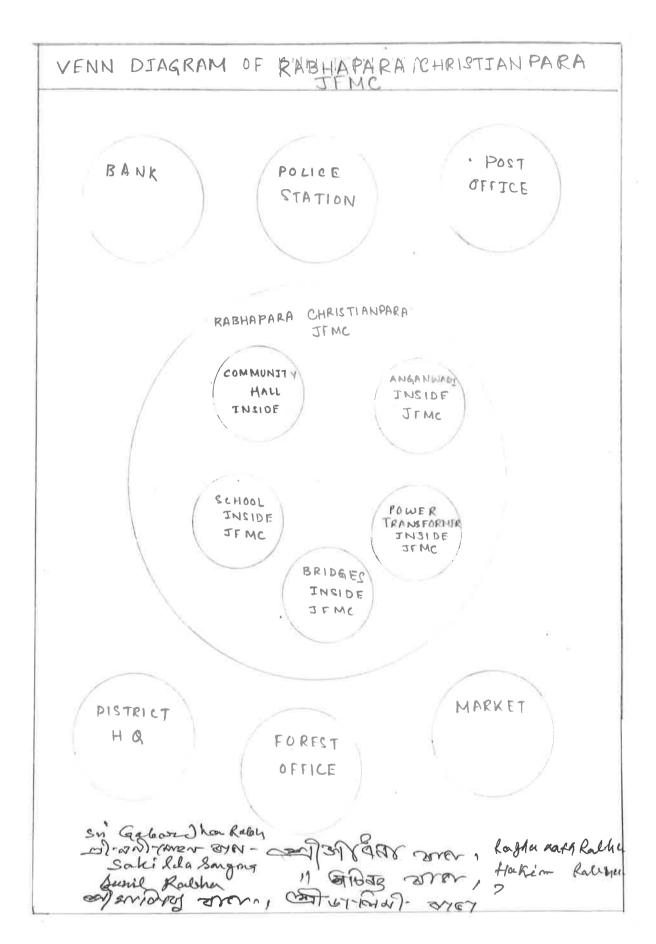
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Ven Diagram representation of Rabhapara Christianpara JFMC

Rabborge Wasthempore JFMC

on teak regeneration of the teak regen	A A G G G G G G G G G G G G G G G G G G	Plantad Prantad Natural Plantad Raisin Plantad On teak regenerati on of gof on firewoo Nurse on the firewood Nurs	Plantation Plantation Natural Plantation Plantation Plantation on teask regeneration on of gof cultivation on teask regeneration on of gof cultivation on the plantation of th	Plantati Plantati Natural Plantati Raisin Fodder Demarcati On teak regenerati in on of firewoo Nurse on firewoo Nurse on boundary on the bamboo of the bamboo on the bamboo on the boundary of the bamboo on the boundary on the boundary on the boundary on the boundary of the boundary on the boundary of the boundary on the boundary on the boundary of t	Plantati Plantati Natural Plantati Raisin Fodder Demarcati Mau on teak regenerati on of gof cultivati on of d cultivation on of d cultivati on of d cultivation on of d cult	t Forest b protecti	Forest al, N etc)	A B	Dev of A c A degraded c A Forest	Forest B <	tation C distribution	etc) Plantation D	Plantation E teak	Natural F regenerati	On Plantation G firaumond	Raising of H	Fodder 1	cultivation Demarcati J	on of
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Livelihood ranking of Rabhapara Christianpara JFMC

Rednapore - Chiastian face IFMC

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EPA ranking of Rabhapara Chriatianpara JFMC



Annexure (Record I)

Table 1: Basic data of the JFMC

Name of the JFMC	Date of establishment	No. of members in executive	Name of the president	Name of the Member secretary	Money in VDF	Contribution per family /per person	Social fencing used Yes / No	Remarks on special attainment	Grading %of success by RFO
Rabhapara- Christanpara	2015	20	Gobordhan Rabha	Chawkreshwar Kalita	Nil	Nil	No	del de	

Table -2: Demographic status of the project JFMC

Households		ST		Sex ratio	Avg. HH
(No.)	Total	Male	Female	(per 1000 male)	size
210	1640	780	860	1103	7.8

Source: - Field survey report.

Table3 Village wise farmer category on the basis of land holding

Large farmer >10 ha.	small farmer 2-10 ha.	Marginal farmer (household) <2ha.	Land less (household)	total
10	165	35	*	210

Table 4: Cattle Population of the JFMC

Cows	Buffaloes	Goat	Poultry	Pig	Total
358	-	134	1360	453	2305

Table 5 Infrastructure of the JFMC

Sl no	Infrastructure	Location	Distance from village
1	Electricity	30% of the HH	Poor
2	Gas connection	3% of the HH	Poor
3	Transport	Pucca Road	1 km
4	PHE	Gamarimuwa	2km
5	LP school	Inside	

6	High school	Inside	7km
7	Post office	Sukunia	7km
8	Bank	Boko	22 km
9	Anganawadi centre	Inside	
10	VCDC	Sukunia	7km
11	Revenue Office	Boko	22 km
12	Police station	Boko	22 km
13	Forest Office	Bondapara	8 km
14	Bus facility	Bondapara	7km
15	Railway Station	Boko	22 km
16	District head quarter	Chayygaon	37 km

Table 6 Agriculture Crops

	Rain Fed	
	Name of the crop	Area (in ha.)
Kharif	Sali rice , orange, ginger, turmeric	60
Rabi	Mustard , Pineapple	10
Others	Vegetable, Fruits	12

Table 7 Crop production profile

Type of crop	Total Production (approx) in QT
Paddy	1370
Oil seeds	2
Horticulture	330
Fruits	220

Table 8 fodder availability of the JFMC

types	1-3 month	3-6 month	>6 month
Crop residue			✓
Trees fodder		✓	
Grasses		✓	
Green Fodder		✓	
Grazing in Forest		✓	

Table 9 Location of market from the village

For Purchase	Location	Distance from village if in other village (in km)
Grocery shop	Gamerimuwa	2 Km
Weekly Market	Gamerimuwa	2 Km
Major Market	Boko	22 Km
Forest Corporation Sale Depot.	Kukurmara	40 Km
Tendu Patta PHAD	366	***
Fish Market	Sukunia	7 Km
Medicinal Plant collection Centre	###	
Forest Corporation Medicinal plant Collection Centre		

Table 10: showing the water resource facility available in the village

Water source	number	number Availability of water	
Stream Kutcha well	1	Seasonal	Irrigation, livestock rearing
Kutcha well	180	Perennial	Domestic use
River	1	Seasonal	All type of use
Community ring well	2	Perennial	Domestic use

Table11 showing the Energy Consumption of the JFMC

Type of Fuel	Number of household	Number of months	Sources (local, village, forest,	Major/ Secondary
	depending	dependent	other sources)	
Fuel wood	210	12	Forest	Major
Kerosene stove	NA	-	=	÷
Gobar/Bio gas	NA	12	17	Ħ
LPG	30		(#	Secondary
Electric Healer	NA		%	2

RECORD: II LIVELIHOOD OPPORTUNITY ANALYSIS

Table 12: showing the agricultural and horticultural status

Constraints	Reason	Opportunities	Programme
Low Production	 Traditional way of cultivation. Only one crop undertaken annually (Sali) 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. 	 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. Usage of high yielding seed programme. 	 Tractor operation training Agri-skill development programme. Training on insecticides, pesticides, hybrid cultivation
Storage and Production	 Lack of common storing place Lack of cold storage facility due to non- availability of electricity 	 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. 	PackagingTransportation and distribution.
Marketing	 Lack of transporting facilities for carrying products Less contact with the direct market; much dependency upon middle man No knowledge on marketing know-how, dependence on traditional system of selling. 	 Smooth transportation facility will help the farmers to carry their products to the nearby markets. Generate highest market price by removing middle men. More knowledge about the current market situation as well as the current value of their products. They can sell their products outside of the state, as the JFMC is located in Assam West Bengal border and Bhutan border is also not far from it. 	Buyers sellers meet

Table 13 Livestock

Constraints	Reasons	Opportunities	Programme
Constraints Reasons Op Less grazing land Not Applicable Unable to buy fodder from market due to poor financial condition Trees fodder n crop residue are available only for 3-6 months. Green fodder is also not available for the whole year. No veterinary care clinic Lack of knowledge about the proper rearing of live stock Less availability of fodder No scientific knowledge on cattle rearing to increase the milk production.			
Availability of	 Unable to buy fodder from market due to poor financial condition Trees fodder n crop residue are available only for 3-6 months. Green fodder is also not available for the 	livestock rearing.	
•	Lack of knowledge about the proper rearing of live	 Increases the life span of cattle. It will also help to aware the villagers and will encourage them for livestock rearing. 	Linkage with
	No scientific knowledge on cattle rearing to increase	production can enhance the skill of milk production.	veterinary department for better opportunities in livestock sector.
Milk market		A huge demanded market for milk is available as Kokrajhar district head quarter and West Bengal state is too far from the JFMC.	

Table 14 NWFP

Constraints	Reasons	Opportunities	Programme
Less collection	Less availability of NWFP	Availability of fertile fallow land	Plantation of Food plans, Medicinal
Value addition	 No processing units Non availability of required resources No technical know-how 	Availability of fertile fallow land	Plant etc. Improve in processing of NTFP

Table 15: Specialised skills: Handloom

Constraints	Reasons	Opportunities	Programme
Raw material availability	 Non-Availability of Raw Materials within reachable location (market 7km away) No Storage 	Common place for setting a raw material storage	Setting up a raw material bank
Product quality	 Shortage of High Quality Materials Use of Traditional machineries 	Developing Quality Products for new market exploration.	 Training on Modern Tools and Equipment. Providing modern technology to the villagers
Marketing potential	 No standardised market No pricing policy No linkage with the institutional buyers No Product Diversification or New Product Development. 	Exploring new markets with diversified products	Providing a bulk buy arrangement of the finished product with institutional buyers.
Non-Availability of Raw Materials within reachable location (market 7km away)	Term Loans, Working Capital		
	or New Product Development. Lack of concept for product	Demand Based Products, as per the needs of the modern day	& Training on New Product Development and Product

Table 16 Credit facility

Constraints	Reason	Opportunities	Programme
Indebtness	Nil	• Setting up modern financial institution in the nearby areas.	Linkage with financial institution for better credit facility with
Rate of interest	 Higher lending rates charged by the private money lender 	Subsidised credit arrangement	financial inclusion.
Availability of loan	Fear of risk takingNo knowledge of documentation	• Start-ups entrepreneurial venture	
Mortgage difficulty	 Unavailability of proper documentation of mortgaged property. 	Proper awareness about documentation in the area	

Divisional Forest Officer Kamrup West Division Bamunigaon

Trade:	Areca Leaf							
	plate Making							
Location:	Rabhpara Christanpara							
Start Date	06-07-2016							
End Date	17-9-2016							
Master			2000 3.4.4.27E3.7.C	D 4 DIT 4 D 4	TD 4	attrom.	A BUD A FR	
Trainer	Arup Pathak	ARECA LEAF PLA	TE MAKING	,		7		
Sl.No	Name of Participants	Guardian Name	Address	Qualific ation	A ge	Gen der	Cate gory	Contac t No
1	GABARDHAN RABHA	LATE. CHUSARAM RABHA	JAYPUR	HSLC	60	M	ST	789677 4043
2	LAKSHASHRI	LATE.UKIL		CLASS		M	am.	881201
2	RABHA	RABHA	JAYPUR	5	39		ST	4419
				MATRI				
2	MOUSUMI	SUBAL RABHA		C		M	ST	986442
2 3 4 5 6 7 8	RABHA	SUBAL KABIIA		APPER		141	31	9207
2 3 4 5 6 7			DAGAON	ED	35			
4	DALIMI	GABARDHAN		CLASS		F	ST	789666
	RABHA	RABHA	JAYPUR	8 CT + CC	50	T2		5217
5	MANJU	HARANATH	JAYPUR	CLASS	33	F	ST	813599 2332
	RABHA MAMANI	RABHA NAWAKUMAR	JATPUR	CLASS	33	F		995468
6	RABHA	RABHA	DAGAON	5	23	1	ST	2826
_	RAMILA		Ditorion	CLASS	25	F		876195
7	RABHA	AMBHI RABHA	JAYPUR	5	32		ST	6357
0	SONGITA	RAGHUNATH		CLASS		F	CT	913271
8	RABHA	RABHA	JAYPUR	9	35		ST	5840
				MATRI				
Q	JAHIRA	SAMBU		C		F	ST	NP
,	MARAK	SANGMA		APPER		_	.51	1 11
			JAYPUR	ED	31			
	DENIET			MATRI				700(11
10	BENITH	UMES MARAK		C APPER		M	ST	708611 4337
	SANGMA		JAYPUR	ED	60	2		4337
	HAKIM	LATE,BATAN CH	JALFUR	CLASS	00	M		967803
11	RABHA	RABHA	JAYPUR	5	36	171	ST	6219
10	SUBAL	LT PRASANNA		CLASS		M	C.T.	908538
12	RABHA	RABHA	DAGAON	9	36		ST	1779
13	RAGHUNATH	LT SUBARU				M	ST	NP
1.3	RABHA	RABHA	JAYPUR	HSLC	43		1 51	
14	ARCHANA	LT DEBEN	CHUKUNI			F	ST	995711
1-7	RABHA	RABHA	A PARA	HSLC	30		51	0589
15	DWIPEN	BACHAN) ID	40	M	ST	NP
	RABHA	RABHA		NP	48			

Trade:	Bee Keeping							
	RABHAPARA							
Locatio	CHRISTIANPAR							
n:	A							
Start								
Date	06-07-2016	BEEI	KEEPING RABHAPA	RA CHR	ISTIA	NPAR A	A.	
End								
Date	17-09-16							
Master								
Trainer	Arun Mitra							
Sl.No	Name of Participants	Guardian Name	Address	Qualifi cation	Ag e	Gen der	Ca te go ry	Con tact No
	SAKILLA	HEWLSON	RABHAPARA	CLAS				
1	SANGMA	MARAK	CHRISTIANPARA	S VIII	48	F	ST	NO
	JAHIRA R	SAMBHU	RABHAPARA					
2	MARAK	CHANGMA	CHRISTIANPARA	X	45	F	ST	NO
		HARANATH	RABHAPARA	CLAS				
3	MANJU RABHA	RABHA	CHRISTIANPARA	SIX	33	F	ST	NO
		SURESH CH	RABHAPARA	BA				
4	LOKAPRIYA DAS	DAS	CHRISTIANPARA	PASS	41	M	ST	NO
		ROHEN	RABHAPARA					
5	ELERIN G MOMIN	MARAK	CHRISTIANPARA	VIII	40	F	ST	NO
			RABHAPARA					
6	DALIMI RABHA	BOIDYA DAS	CHRISTIANPARA	VIII	49	F	ST	NO
-	LAKSHASHRI	20137712713	RABHAPARA					
7	RABHA	UKIL RABHA	CHRISTIANPARA	N	39	F	ST	NO
	TO LOS AS	BEBLIN G	RABHAPARA					
8	ORBUN R MARAK	MOMIN	CHRISTIANPARA	V	43	F	ST	NO
	Old Divid In India	BINITACHAN	RABHAPARA					
9	RUPALIN MARAK	CHANGMA	CHRISTIANPARA	VIII	43	F	ST	NO
	SADHANA	SRI RAM	RABHAPARA					
10	RABHA	RABHA	CHRISTIANPARA	N	28	F	ST	NO
	JIMITHA	BENKY	RABHAPARA					
11	SANGMA	MAMIN	CHRISTIANPARA	IX	33	F	ST	NO
		KATABEL	RABHAPARA					
12	MIRICH MARAK	MARAK	CHRISTIANPARA	VIII	31	F	ST	NO
	AMURLIASH	DINISON	RABHAPARA					
13	SANGMA	MARAK	CHRISTIANPARA	IX	30	F	ST	NO
	MANOBALA	SAIPUL	RABHAPARA					
14	SANGMA	MARAK	CHRISTIANPARA	IX	33	F	ST	NO
	MITROSH	MITHISON	RABHAPARA					
15	SANGMA	MARAK	CHRISTIANPARA	X	45	F	ST	NO
	MAINORO	BINITACHAN	RABHAPARA					
16	MARAK	CHANGMA	CHRISTIANPARA	N	30	F	ST	NO
	BARMISTE	NAYAMODIN	RABHAPARA					
17	MARAK	SANGMA	CHRISTIANPARA	N	36	F	ST	NO
	GOBARDHAN	CHUCHARA	RABHAPARA					
18	RABHA	M RABHA	CHRISTIANPARA	X	59	M	ST	NO
- 10	SONGAGITA	RAGHUNATH	RABHAPARA					
19	RABHA	RABHA	CHRISTIANPARA	VII	35	F	ST	NO
20	LATAMANGGESH	PARMMA	RABHAPARA	VI	39	F	ST	NO
				1			1	-

	RABHA	RABHA	CHRISTIANPARA					
		BENITSON	RABHAPARA					
21	ELSIRA MARAK	SANGMA	CHRISTIANPARA	X	30	F	ST	NC
	ELLAMONY K	GRIPIN	RABHAPARA					
22	MARAK	SANGMA	CHRISTIANPARA	N	33	F	ST	NO
	SANDAW	HAMIRTHON	RABHAPARA					
23	SANGMA	MARAK	CHRISTIANPARA	VI	70	M	ST	NC
		STIMSON R	RABHAPARA					
24	BETSI J SANGMA	MARAK	CHRISTIANPARA	HSLC	28	F	ST	NC
	RAGHUNATH	SUBARU	RABHAPARA					
25	RABHA	RABHA	CHRISTIANPARA	IX	43	M	ST	NC
	MUNAMY K	MARCONY R	RABHAPARA					
26	MARAK	MARAK	CHRISTIANPARA	IX	35	F	ST	NO
		AMBHI	RABHAPARA					
27	RAMILA RABHA	RABHA	CHRISTIANPARA	V	32	F	ST	NO
		GOBARDHAN	RABHAPARA					
28	JUGAL RABHA	RABHA	CHRISTIANPARA	IX	26	M	ST	NC
	KIRTI KAMAL	UDDHAB	RABHAPARA					
29	DAS	DAS	CHRISTIANPARA	HSLC	18	M	ST	NC
		LABAN	RABHAPARA					
30	SUNIL RABHA	RABHA	CHRISTIANPARA	IX	35	M	ST	NC
		BACHAN	RABHAPARA					
31	DWIPEN RABHA	RABHA	CHRISTIANPARA	VII	46	M	ST	NC