



# **RAMSARABAR JOINT FOREST MANAGEMENT COMMITTEE**

**Social Forestry Division, Kokrajhar**

**Khoraghat Forest Range**

## **MICRO-PLAN**

**(2016-17 to 2025-26)**

**Prepared by Ramsarobar JFMC**

**assisted by**

**Assam Forest Department**

**&**

**COMPELO**

**(IIE, RGVN and CML)**

**July 2016**

  
Divisional Forest Officer  
Field Implementation Unit  
S.F. Division, Kokrajhar

## List of Acronyms

Acronym	Full Form
<b>APFBC</b>	Assam Project on Forest and Biodiversity Conservation
<b>AFD</b>	<i>Agence France de Développement</i>
<b>BPL</b>	Below Poverty Line
<b>COMPELO</b>	Consortium for Micro Planning and Enhancing Livelihood Opportunities
<b>EPA</b>	Entry Point Activities
<b>GIS</b>	Geographical Information System
<b>Ha</b>	Hectare
<b>IIE</b>	Indian Institute of Entrepreneurship
<b>JFMC</b>	Joint Forest Management Committee
<b>Kg</b>	Kilogram
<b>Km</b>	Kilometre
<b>NGO</b>	Non Governmental Organization
<b>NTFP</b>	Non Timber Forest Product
<b>PDS</b>	Public Distribution System
<b>PRA</b>	Participatory Rural Appraisal
<b>Rs.</b>	Indian Rupees
<b>SHG</b>	Self Help Group
<b>VCDC</b>	Village Council Development Committee
<b>HH</b>	House Hold

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

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## 1. Introduction

<b>About the Project</b>	<p>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’.</p> <p>The above project is being mainly funded by the <i>Agence France de Développement</i> (AFD) - i.e. the French Development Agency, with co-funding from the Government of Assam. The Assam Project on Forest and Biodiversity Conservation Society (APFBC Society) has the mandate for planning, implementation, monitoring, coordination and management of all the activities under the above mentioned project.</p>
<b>Micro-Planning &amp; Livelihood Development</b>	<p>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.</p> <p>A consortium comprising of Indian Institute of Entrepreneurship (IIE) Guwahati, <i>Rashtriya Gramin Vikas Nidhi</i> (RGVN) and Centre for Microfinance and Livelihood (CML) has been formed to implement (<i>inter-alia</i>) 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.</p> <p>As per project guidelines, this micro-plan includes <b>‘various operations of village and forest development ... livelihood support of forest dependent members and keeping sustainable forest management as the broad objective’</b>. It includes <u>both</u> forest development and livelihood development.</p>
<b>Micro-Plan for the Ramsorobar JFMC</b>	<p>This document gives the Micro-Plan for the Ramsorobar JFMC, which is located in the Mahamaya RF under khoraghat rangebut formed and run under social forestry division of Kokrajhar district of Assam. The JFMC falls under the jurisdiction of the Kokrajhar Social Forest Division of the Bogoribari Revenue Circle. The profile of the community is given in the next section.</p> <p>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.</p>

## 2. Village Socio-Economic Profile

<b>Location</b>	<p>The Ramsorobar Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in Ramsorobar, a village located on the Kokrajhar Social Forest. It is located in the Mahamaya RF under khoraghat range but formed and run under social forestry division of Kokrajhar district of Assam. The JFMC falls under the jurisdiction of the Kokrajhar Social Forest Division of the Bogoribari Revenue Circle. The area covered by the above JFMC falls within the Kazigaon Revenue Sub-Division of Kokrajhar District of Assam.</p> <p><b>Appendix-1</b> gives the Village Map.</p>																						
<b>Key Information</b>	<p>The key information of the JFMC is furnished below.</p> <p style="text-align: center;"><b>Table-A: Key Information of the JFMC</b></p> <table border="1"> <tr> <td><b>Name of the JFMC</b></td><td>Ramsorobar – SFK/JFMC/25</td></tr> <tr> <td><b>Habitation</b></td><td>Ramsorobar</td></tr> <tr> <td><b>Name of Revenue Village</b></td><td></td></tr> <tr> <td><b>Name of the Gram Panchayat / VCDC</b></td><td>Devitola</td></tr> <tr> <td><b>Revenue Circle</b></td><td>Bogoribari</td></tr> <tr> <td><b>District</b></td><td>Kokrajhar</td></tr> <tr> <td><b>Forest Division</b></td><td>Territorial division is Parbatjhora division Formed under Kokrajhar SF division.</td></tr> <tr> <td><b>Forest Range</b></td><td>Khoraghat</td></tr> <tr> <td><b>Forest Beat</b></td><td>Suparighat</td></tr> <tr> <td><b>Year Formed</b></td><td>2009</td></tr> <tr> <td><b>Description of Boundary of JFMC</b></td><td>As below North: Bamuni Pahar Village South: NH-31 West: Jayprakash PWD road, DFO office East: Hatibandha-NH31 connecting road</td></tr> </table> <p><b>Source:</b> JFMC Records &amp; Discussions during PRA Exercise in June 2016</p> <p>Additional details are given at <b>Table-1</b> of Record-I. (Given at Annexure)</p>	<b>Name of the JFMC</b>	Ramsorobar – SFK/JFMC/25	<b>Habitation</b>	Ramsorobar	<b>Name of Revenue Village</b>		<b>Name of the Gram Panchayat / VCDC</b>	Devitola	<b>Revenue Circle</b>	Bogoribari	<b>District</b>	Kokrajhar	<b>Forest Division</b>	Territorial division is Parbatjhora division Formed under Kokrajhar SF division.	<b>Forest Range</b>	Khoraghat	<b>Forest Beat</b>	Suparighat	<b>Year Formed</b>	2009	<b>Description of Boundary of JFMC</b>	As below North: Bamuni Pahar Village South: NH-31 West: Jayprakash PWD road, DFO office East: Hatibandha-NH31 connecting road
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<b>Brief Details of the Executive Committee &amp; General Body</b>	<p>The brief details of Executive Committee &amp; General Body of the JFMC are contained in the table, which is given below.</p> <p style="text-align: center;"><b>Table-B: Brief Details of Executive Committee &amp; general Body</b></p> <table border="1"> <tr> <td><b>Name of President</b></td><td>Triben Sangma</td></tr> <tr> <td><b>Name of Secretary</b></td><td>Ranjit Sur</td></tr> <tr> <td><b>Name of Treasurer</b></td><td></td></tr> <tr> <td><b>No. of Members in Executive Committee</b></td><td>Male:7 Female:4</td></tr> <tr> <td><b>No. of Members in the General Body</b></td><td>Male: Female:</td></tr> </table> <p><b>Source:</b> JFMC Records</p>	<b>Name of President</b>	Triben Sangma	<b>Name of Secretary</b>	Ranjit Sur	<b>Name of Treasurer</b>		<b>No. of Members in Executive Committee</b>	Male:7 Female:4	<b>No. of Members in the General Body</b>	Male: Female:												
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<b>Households &amp; Population Structure</b>	<p>The village has 80 households, of which all households are BPL (Below Poverty Line) households.</p> <p>The total population is 366, of which 206 are male and 160 are female</p>																						

	<p>members. Out of 80 HH all HH to the ST-Plain., ethnically belonging to Garo community.</p> <p><b>Table-2</b> of Record-I may be referred for further details in the above regard.</p> <p>From this, it is inferred that:</p> <ol style="list-style-type: none"> <li>(1) The average number of persons in a household is 4.56.</li> <li>(2) The sex ratio is 776.69 females per 1000 males in the village.</li> </ol>
<b>Education &amp; Skills Development</b>	<p>Over 64.56% of the population is reported to be literate. Most of the community members have received school level education. On the other hand, relatively fewer households have college educated members.</p> <p>Livelihood skills are usually acquired under various settings – formal &amp; informal. In the JFMC area, informal means for skills development is the traditional norm. People have traditional skills in the following areas:</p> <ol style="list-style-type: none"> <li>(a) handloom</li> <li>(b) sericulture</li> <li>(c) livestock rearing</li> <li>(d) farming</li> </ol> <p>Government has been active in promoting formal skills development programmes in the country as well as in the state. However, no such programme has been carried out in the habitation or in nearby areas.</p>
<b>Soil</b>	<p>The soil type of the project area includes:</p> <ul style="list-style-type: none"> <li>• Alluvial soil in low lying (clayey soils) and plain areas (loamy soils).</li> <li>• Red soils in hillocks and up lands.</li> </ul> <p>Both types of soil can support different kinds of crops, as the soil is reported to be fertile on the whole.</p>
<b>Water</b>	<p>The area is drained by the Stream Ramsroobar, which flows from the adjoining. This is a seasonal stream .</p> <p>The Brahmaputra Valley is also marked by the presence of wetland, locally called as ‘beels’, which are rich in fish and other aquatic resources.</p>
<b>Climate: Temperature &amp; Rainfall</b>	<p>The maximum <b>temperature</b> during the summer is 38 ° C. The minimum temperature during the winter is 8°-9 ° C., average is 23 ° C.</p> <p>The annual <b>rainfall</b> is about 3000 mm. About two-thirds of the rainfall usually occurs during the rainy season (June-September). The village has high levels of <b>humidity</b> (over 90%) during the rainy months and low levels in the winter (Below 30%).</p>
<b>Forest &amp; Bio-diversity</b>	<p>The local forests have been broadly classified as Estern Alluvial Forest . The main tree species are Sishoo, Ajar, Khayar, Koros etc. The forests can yield a range of NTFP like leafy vegetables, ferns, medicinal plants, bamboo, thatch etc.</p> <p>Additional details in this regard are given at the ‘Forest Development Plan’.</p>
<b>Land Use Pattern</b>	<p><b>Appendix-2</b> gives the land-use pattern of the village. From the same, it is seen that the land-use in the village is as follows:</p> <p>Cultivable wasteland : 27.6%</p>

	Paddy : 24.32% Private Plantation : 40% Road : .82 % Settlement : 6.46% Stream : .42%
<b>Land Holdings</b>	The type of households as per land-holding is given at <b>Table-3</b> of Record-I. From the same, it is seen that: <ul style="list-style-type: none"> <li>• 12.5 % of the households are landless;</li> <li>• 80 % of the households are marginal farmers (less than 2 Ha); and</li> <li>• 7.5% of the households are small farmers (2-10 Ha).</li> </ul>
<b>Livestock</b>	The total number of livestock in the village is 841. The main types of livestock possessed by the households include:  Cows: 244 Goats: 37 Pigs: 196 Poultry: 230  <b>Table-4</b> of Record-I may be referred to for the details in the above connection.
<b>Village Infrastructure &amp; Communication Facilities</b>	<p>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 <b>Table-5</b> of Record-I, which gives the present status of the village infrastructure.</p> <p>From the above table, the following have been noted with regard to village infrastructure:</p> <p><b>Physical Infrastructure:</b> The habitation is deprived of basic physical infrastructure like paved roads, electricity, water supply, mobile network etc.</p> <p><b>Education &amp; Health Facilities:</b> There are minimal educational and health facilities. Public transport is not available, and the community members have to use bicycles to move around.</p> <p><b>Govt. Offices:</b> The government offices (such as Police station, Gram Panchayat office, Revenue office, Forest Beat office etc.) are located at a considerable distance, NH31 is around 1 km away from the village..</p> <p><b>Financial Inclusion:</b> Facilities for financial inclusion like bank and post office are located at a considerable distance from the habitation. Hence, the community members do not have bank accounts or postal savings accounts.</p>
<b>Agricultural Crops</b>	The details of the agricultural crops grown in the village is available at <b>Table-6</b> of Record-I.  The above shows that the following are the main crops grown in the village. <b>Kharif Crops:</b> Sali Paddy, Yum <b>Rabi Crops:</b> Mustard <b>Others:</b> Rubber , jack fruit, pomelo, Mango etc.  Most crops are rain-fed, except for the paddy cultivation has a provision of irrigation through Ramsarobar stream for 6 month.
<b>Crop Production Profile</b>	<b>Table-7</b> of Record-I may be referred to for the production and yield details of the crops grown in the village. The production and yield of these crops is given as follows:

	(a) Paddy : Production 334 kg Yield 15.8 kg /ha (b) Oil seed : Production 3 kg Yield 2 kg/ha (c) Spice : Production .75 kg Yield .5 kg/ha
<b>Fodder Availability</b>	The matter of fodder availability in the village is dealt with at <b>Table-8</b> 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
<b>Markets</b>	<b>Table-9</b> 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: Alomganch at 3 km away (if in other village) (b) Weekly / Bi-weekly Market: : Alomganch at 2 km away (c) Major Market: Alomganch at 2 km away
<b>Water Resources</b>	The water resources are tabulated at <b>Table-10</b> of Record-I. The main water resources with the water availability is as follows: (a tube well (Water Availability: Perennial / <del>Seasonal</del> ) (b) Well (Water Availability: Perennial/ <del>Seasonal</del> ) (c) stream (Water Availability: <del>Perennial</del> -/ Seasonal))
<b>Energy Consumption</b>	<b>Table-11</b> of Record-I shows the major sources of energy in the village. The same have been listed below. (a) FUEL WOOD- HHs Depending 80 Nos. Source: forest (b) KEROSENE-HHs Depending: 50 Nos. Source: Open Market and PDS (c)LPG – 35 HH Source: Authorised Agency (d) electricity: 76 HH
<b>Socio-economic status</b>	<b>Social set-up:</b> The village is inhabited by tribal community. They do not have a caste system. The society is not marked by deep social divisions. The observed position of women is satisfactory. <b>Economic Condition:</b> The economic position is / is not satisfactory. The main livelihoods are Farming, Sericulture, Livestock rearing etc. Most households earn Rs. 60000 to Rs. 75000 per year. There is large-scale migration of the youth and others for livelihoods. Additional details are available at the next section.
<b>Maps</b>	<b>Appendix-1</b> gives the following maps, based on PRA exercise: <ul style="list-style-type: none"> <li>• Village Map</li> <li>• Village Social Map (with the names and particulars of members in PRA)</li> <li>• Village Resource Map</li> </ul>



### 3. Livelihood Opportunity Analysis

<b>PRA Exercise</b>	<p>Team from IIE Guwahati carried out PRA exercise in Ramsarobar village as follows:</p> <p><b>Date:</b> 13<sup>th</sup> June <b>Location:</b> House of Mr. Triben Sangma  <b>Numbers Present: 30</b></p> <p><b>In Presence of:</b> JFMC office bearers, Village Headman, community members, Forest Department personnel, etc.</p>																						
<b>Objective of PRA</b>	<p>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.</p>																						
<b>Tools Used &amp; Outcomes of the PRA</b>	<p>Different tools were used and outcomes obtained. These include:</p> <p>Social Mapping  Wealth Ranking  Time Line review  Seasonality of Livelihoods  Venn Diagram</p> <p><b>Appendix-3</b> furnishes detailed information of the above.</p>																						
<b>Ranking</b>	<p>Ranking exercise has been done for the following:</p> <ul style="list-style-type: none"> <li>• <b>Livelihoods &amp; Skills Development</b></li> <li>• <b>Entry Point Activities (EPA)</b></li> </ul> <p><b>Appendix-3</b> elaborates the above. From the same, it is stated that:</p> <p>Ranking of Livelihoods &amp; Skills Development</p> <ol style="list-style-type: none"> <li>1. Weaving</li> <li>2. Livestock rearing</li> <li>3. Diving</li> <li>4. endy- silk Rearing</li> <li>5. Electrician</li> <li>6. Cane and Bamboo</li> </ol> <p>Ranking of EPA</p> <table border="1"> <thead> <tr> <th>Rank</th><th>Village EPA as ranked</th><th>Details (Appendix-3 has additional particulars)</th><th>Probable source of funding/deptt.</th></tr> </thead> <tbody> <tr> <td>2.</td><td>Road Connectivity</td><td>Black Topping of road From Patgaon to the village (~7 KM)</td><td>PMGSY/PWD</td></tr> <tr> <td>2.</td><td>Community hall</td><td>25*30 square feet</td><td>Forest dept/social welfare dpt</td></tr> <tr> <td>3.</td><td>water harvesting dam</td><td>2.5 bigha of land</td><td>Water resource dept</td></tr> <tr> <td>4.</td><td>Stay arrangement for guard in the forest</td><td>At least 2 room for the guard in the foest area</td><td>EPA APFBC</td></tr> </tbody> </table>			Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.	2.	Road Connectivity	Black Topping of road From Patgaon to the village (~7 KM)	PMGSY/PWD	2.	Community hall	25*30 square feet	Forest dept/social welfare dpt	3.	water harvesting dam	2.5 bigha of land	Water resource dept	4.	Stay arrangement for guard in the forest	At least 2 room for the guard in the foest area	EPA APFBC
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	5.	Tube well	At least 4 community water tube well	APFBC EPA
	<ul style="list-style-type: none"> <li>An arrangement of working capital worth Two Lacs should be arranged from the EPA fund for promoting livelihood activities.</li> <li>A low cost community work shed cum JFMC office to be set up within the JFMC boundaries for installation and commissioning of Toolkits/ Equipments/Machineries.</li> <li>A low cost livestock rearing shed have to be arranged from the EPA fund for promoting a common community livelihood activity.</li> </ul>			
<b>Livelihood opportunities</b>	<p>Livelihood Opportunities were identified as follows:</p> <p>Agriculture &amp; Horticulture Livestock NTFP Skills Development Credit Facility</p> <p>Additional discussion about the above has been given below.</p>			
<b>Agriculture &amp; Horticulture</b>	<p><b>Table-12</b> under Record-2 may be seen in this connection for opportunities in the areas of agriculture and horticulture.</p> <p>The main constraints are:</p> <p>(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.</p> <p>The opportunities are:</p> <p>(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.</p> <p>The suggested programmes are:</p> <ul style="list-style-type: none"> <li>Agri-skill development programme.</li> <li>Training on insecticides, pesticides, hybrid cultivation etc.</li> </ul>			
<b>Livestock</b>	<p><b>Table-13</b> furnishes additional information about opportunities for livestock rearing.</p> <p>The main constraints are:</p> <p>(a) Unable to buy fodder from market due to poor financial condition. (b) Tree 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</p>			

	<p>The opportunities are:</p> <p>(a) Higher income from livestock rearing. (b) High demand market is available like Gauripur, dhuburi Bongaigaon etc.</p> <p>The suggested programme is:</p> <p>(a)Piggery                      (c) Dairy (b)Poultry</p>
<b>NTFP</b>	<p>The opportunities for NWFP are tabulated at <b>Table-14</b> under Record-2</p> <p>The main constraints are:</p> <p>(a) Less availability of NWFP (b) No technical know-how (c) No processing units</p> <p>The opportunities is:</p> <p>(a) Availability of fertile fallow land</p> <p>The suggested programme are:</p> <p>(a)Plantation of Food plants, (b)Medicinal Plant etc.</p>
<b>Specialized Skills</b>	<p>For skills development, the opportunities are tabulated at <b>Table-15</b> under Record-2</p> <p>The main constraints are:</p> <p>(a) Lack of product diversification (b) Lack of research on product quality</p> <p>The opportunities are:</p> <p>(a) Providing good communication facility (b) Training of the skill holder (c) Financial assistance from govt.</p> <p>The suggested programme are:</p> <ul style="list-style-type: none"> <li>• Training on Modern Tools and Equipment</li> <li>• Providing modern technology to the villagers</li> <li>• Skill Up gradation &amp; Training on New Product Development and Product Diversification</li> <li>• Setting up a raw material bank</li> <li>• Providing a bulk buy arrangement of the finished product with institutional buyers.</li> </ul>
<b>Credit Facility</b>	<p><b>Table-16</b> under Record-2 discusses this aspect.</p> <p>The main constraints with the reasons are:</p> <p>(a) Financial exclusion</p> <p>The opportunities are:</p> <p>(a)setting up modern financial institution (b)Adequate awareness.</p>

	<p>The suggested programme is:</p> <p>(a) Setting up modern financial institution in the nearby areas.</p>
<b>Strategic Interventions</b>	<p>Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan:</p> <ol style="list-style-type: none"> <li>1 <b>Agriculture &amp; Horticulture:</b> Tractor operation training, Agri-skill development programme ,Training on insecticides, pesticides, hybrid cultivation</li> <li>2.<b>Livestock:</b> Piggery, Poultry, Dairy</li> <li>3.<b>NWFP :</b> Plantation of Food plants, Medicinal Plant etc</li> <li>4. <b>Specialized Skills:</b> Training on Modern Tools and Equipment, Providing modern technology to the villagers, Skill Up gradation &amp; 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.</li> <li>5. <b>Credit facility:</b> Setting up modern financial institution in the nearby areas</li> </ol>

## 4. Livelihood Development Plan

<b>Livelihood opportunity Analysis</b>	<p>Framework of livelihood Opportunity Analysis has been done with the help of the following criteria:</p> <ul style="list-style-type: none"> <li>A) Livelihood assets</li> <li>B) Livelihood context</li> <li>C) Priority ranking on potential livelihood</li> </ul> <p>The livelihood situation of Ramsarobar JFMC has been analyzed during the PRA exercise using sustainable livelihood framework of DFDI (Department of Funding for International Development). The existing livelihood situation of JFMC is outlined in terms of –</p> <ul style="list-style-type: none"> <li>• Natural Capital</li> <li>• Physical Capital</li> <li>• Social Capital</li> <li>• Human Capital</li> <li>• Financial Capital</li> </ul>
<b>Natural capital</b>	<p>The major natural capital of Ramsarobar JFMC is Mahamaya reserve forest and the major stream namely Ramsarobar.</p> <p>Majority of the people are dependent on the forest for firewood, green fodder, timber etc. For farming purpose and for livestock rearing, the villagers use the river water.</p> <p>(Refer table 10, 11, table 3 of FDP for further details)</p>
<b>Physical Capital</b>	<p>Majority of the households in the Ramsarobar JFMC/EDC are involved in farming activities and are marginal farmers with farming land of less than 2 ha. Detailed land holding pattern is described in the table 3/annexure 6.</p> <p>The village has 37 pucca house , 38 houses are thatch. 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. (refer to table 10,11)</p> <p>There is only LP school present within the JFMC area. And one Middle school is at outside of the boundary of the JFMC. No other education institution is present. (refer to table 5)</p> <p>In case of water sources, there are 1 stream and 1 community well in the JFMC.</p>
<b>Social Capital</b>	<p>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.</p> <p>The village has no youth club and no community hall inside the JFMC .</p>
<b>Human Capital</b>	<p>64.56 per cent of total population of the JFMC are educated. (refer to additional table i, ii.)</p>
<b>Financial capital</b>	<p>There is no government bank or lending institution available in the JFMC area or in the nearby areas. However, villagers lend from informal lending</p>

	<p>groups, relatives etc.</p> <p>All of the people have bank account in commercial banks, but they are not aware of the benefits of financial inclusion.</p>
<b>Livelihood Context</b>	<p>Livelihood activities of the Ramsarobar JFMC are identifies on the basis of following criteria:</p> <ol style="list-style-type: none"> <li>Contribution of particular livelihood activity in the total income of the JFMC.</li> <li>Percentage involvement of income group in a particular livelihood activities.</li> <li>Priority ranking of the potential livelihood activities</li> </ol>
<b>Income Generating Activities</b>	<p>The main income generating activities as planned at the village are:</p> <p><b>Farm Sector :</b></p> <ol style="list-style-type: none"> <li>poultry and piggery</li> <li>Fishery</li> <li>Dairy</li> <li>Horticulture</li> </ol> <p><b>Non-Farm sector:</b></p> <ol style="list-style-type: none"> <li>Handloom/ Weaving</li> <li>Driving</li> <li>Electrician</li> <li>Sericulture</li> </ol> <p><b>Source:</b> Table-32 of Record-4</p>
<b>SHG Activities</b>	<p>SHGs of the village can plan the following activities:</p> <ol style="list-style-type: none"> <li>To create awareness on the benefits of JFMC.</li> <li>To organise and form group</li> <li>To involve the villagers in Livelihood Activities collectively.</li> </ol> <p><b>Source:</b> Table-33 of Record-4</p>
<b>Exposure Trips</b>	<p>The following exposure trips are planned:</p> <p>The exposure trip may be organised by concerned district officers to improve the knowledge and skills of the villagers.</p> <p><b>Source:</b> Table-34 of Record-4</p>
<b>Summary of Action Plan</b>	<p>As attached in next page.</p>
<b>Convergence</b>	<p>The planned initiatives may be converged with the following schemes of the Government of India:</p> <ol style="list-style-type: none"> <li>National Rural Employment Guarantee Scheme - for rural employment</li> <li>Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied development</li> <li>Rashtriya Krishi Sinchay Yojana (RKSJ) - for irrigation, including watershed development</li> <li>National Rural Livelihoods Mission</li> </ol>

	<p>(e) Skills Development schemes</p> <p>(f) Other schemes for rural development and livelihoods as found appropriate.</p> <p>(g) DRDA/ MGNREGA.</p> <p>The above convergence will yield synergies for the present plan, as well as help in sustaining the planned works in the post-project period.</p>
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## 5. Forest Development Plan

This Forest Development Plan has been prepared after a detailed PRA exercise at the village level as a part of the Micro-Plan of Ramsarobar 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 Ramsarobar 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 Ramsarobar JFMC have been summarized below.

**Table-1: Conditions of the Forests of Ramsarobar 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]
<b>(A) Assigned Forest</b>				
RF / PF Name: Mahamaya RF Beat: Suparighat Compartment:	30 Ha	1 km	Good Area: -	Once in week
<b>(B) Other Planted Area</b>				
Location: Type of Forest: VF / Other Medicinal plantation	50 Ha		Good Area:-50	
<b>TOTAL</b>	80 ha		Good Area: 50 Degraded Area: 30 Ha	

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

It is seen that the Ramsarobar JFMC has 194 Ha under its forests, of which 134 Ha is 'Good' and the rest is 'Degraded'.



## 1.2. Forest Soil Type

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

**Table-2: Forest Soil Type in JFMC JFMC**

Parameter	Status in Assigned Forests	Status in Other Planted Areas
Fertility Level	high	Nil
Soil Erosion Status	low	Nil
Presence of:		Nil
(a) Silt	Nil	Nil
(b) Mud-flat	Nil	Nil
(c) Newly accreted land	Low	Nil
(d) Sand dune	nil	Nil

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

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

- (a) Loam soil
- (b) Fertile

## 1.3. Existing Composition of Flora

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

**Table-3: Existing Composition of Flora in the Ramsarobar JFMC**

Parameter	Local Name(s)	Biological Name(s)
Major Forest Species	Sal	Shorea Robuska
	Sisu	Dalbergia sissoo
	Arjun	Terminalia arjuna
	Bhelkor	Trewia nudiflora
	Ghora neem	Melia azedarach
Shrubs	Dhekia	Ferns
	Jharmoni bann	Eupatorium Odoratum
Medicinal Plants	Arjun,	Terminalia arjuna
	Hilikha	Terminalia Chebula
	Neem	Azadirachta indica
	Amla	Phyllanthus emblica
Produces		
Others, if any	Bamboo	

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

## 2. Other Inputs for the Forest Development Plan

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

### 2.1. Past Protection Measures of the JFMC

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

- (a) Number of households involved: 80
- (b) Number of people involved: all the villagers
- (c) Summary of the measures: Not available
- (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 Ramsarobar JFMC**

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	Once in a week	4-5 qntl/ year		Branch cutting of tree
Timber for House				
Small timber for Implements	Nil			
Pole / Bamboo	2/3 bamboo per month			Bamboo plantation
Fodder from Forest	-			
NTFP	-			
Other	-			

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

There are 46 households in the Ramsarobar JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the Ramsarobar village for forest produce for own use is as follows:

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	40000	Throughout the year
Timber for House		
Small Timber for Implements	-	
Pole / Bamboo	2880 bamboo	Per month
Fodder from Forest	-	
NTFP	-	
Other _____		

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

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

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

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 Ramsarobar JFMC is given in the following table.

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

Name of Forest Produce	Collection for Marketing			Location of Collection
	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	
Firewood	Dec- Jan	10	200-300 kg per month	Mahamaya RF
Timber for House				
Small timber for Implements	-			
Bamboo				
Pole	-			
Fodder from Forest	-			
NTFP	-			
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**  
[Ramsarobar JFMC]

Name of Forest Produce	Surplus Marketed (Kg)	How marketed	Average Income per HH from sale of Forest Produce
Firewood	6000kg	Alamganj market	2500-3000/month
Timber for House	-	-	
Small timber for Implements	-	-	
Bamboo			
Pole	-	-	
Fodder from Forest	-	-	
NTFP	-	-	
Other			

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

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

The total requirements of forest produce by the community members of the Ramsarobar 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 Ramsarobar 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	40000 kg	6000	46000
Timber for House			
Small timber for Implements	-		
Bamboo	2880 pcs	-	2880 pcs
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 Ramsarobar JFMC have been summarized below.

**Table-7: Protection Problems of the Ramsarobar 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	Nil	
Smuggling of Timber	Nil	
Accidental Fires	Nil	
Encroachment of Forest Lands	Nil	
Others	Nil	

**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) Grazing – Animals from Other Area

#### 3.2. Reasons for Degradation of the Forest

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

- (a) Cutting of trees
- (b) Grazing of cattle

**[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 **Ramsarobar 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 **Ramsarobar JFMC** from the issues discussed earlier at Sub-section 3.1

**Table-8: Protection Plan of the Ramsarobar 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]
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Social Fencing	Boundary	Along the Demarcation of the Plantation Area	Grazing Season	High
Fire Protection	Within the Forest	-	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 **Ramsarobar JFMC** (with high / medium priority) are as follows:

(a) Social 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 **Ramsarobar JFMC** are given hereunder.

**Table-9: Types of Operations Proposed in the Ramsarobar 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
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 **Ramsarobar JFMC**:

(a) Seed Sowing

(b) Root & Shoot Cutting & Plantation

(c) Physical Fencing

(d) Social Fencing

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

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

**Table-10: Forest Improvement Planned in the Ramsarobar 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	3m x 3m; 2m x 2m
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	50	High	NTFPs	2m x 2m
Enrichment Plantation	-	-		
Direct Plantation	-	-	-	-
Other	-	-	-	-
TOTAL AREA (in Ha)	250	-	-	-

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

### 4.4. Forest Improvement – Action Plan

#### Action Plan for Block Plantation of Saal Mixed with Associates

Name of Plantation	: Block Plantation of Saal Mixed with Associates
Plantation Period	: 2016-17 to 2025-26 (10 Years)
Plantation Area	: 100 ha
Spacing	: 3m X 3 m-1100 plants per ha
No. of Plants to be Raised	: 110000 (44000 approx. annually)
Number Blocks	: 4 Numbers(25 ha each)
Species	: Saal; Associates-Gamari, Sissoo, Titasopa, etc.
Rates	: As Approved by APFBCS(to be increased by 20% every two years)

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 100 ha, Demarcation of land during the month of December-January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha
2017-18*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area
2018-19*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area

	1st Weeding; Replacement of dead/struggling saplings raised in the previous year
2019-20*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area
	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year
2020-21*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area
	3rd Weeding
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year
2022-23*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year
2024-25*	7th Weeding
2025-26*	8th Weeding

\* Silvicultural 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 Raised : 2,50,000 (62,500) approx. annually)

Number Blocks : 4 Numbers(25 ha each)

Species : Teak; Associates-Ajar, Khoroi, Khayer, Sissoo, Jia, Arjun, Ghora Neem, Bamboo(Jaati, Kako, Bholoka, Bijili), etc

<b>Financial Year</b>	<b>Activities</b>
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 100 ha, Demarcation of land during the month of December-January, Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area
2018-19*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area
	1st Weeding; Replacement of dead/struggling saplings raised in the previous year
2019-20*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area
	2nd Weeding; Replacement of dead/struggling saplings raised in the previous year
2020-21*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of April-June; GPS marking of the area
	3rd Weeding
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year
2022-23*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year
2024-25*	7th Weeding
2025-26*	8th Weeding

\* Silvicultural 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 Raised	: 1,25,000 (31,250) approx. annually)
Number Blocks	: 4 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
2017-18*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area
2018-19*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area 1st Weeding; Replacement of dead/struggling saplings raised in the previous year
2019-20*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area 2nd Weeding; Replacement of dead/struggling saplings raised in the previous year
2020-21*	Block Plantation 2m x 2m, 2500 plants/ha-during the season of <b>April-June</b> ; GPS marking of the area 3rd Weeding & Pruning
2021-22*	4th Weeding & Pruning; Replacement of dead/struggling saplings raised in the previous year
2022-23*	5th Weeding & Pruning; Replacement of dead/struggling saplings raised in the previous year
2023-24*	6th Weeding & Pruning
2024-25*	7th Weeding
2025-26*	8th Weeding

#### **4.5. Nursery Development Plan**

The Nursery Development Plan for the **Ramsarobar** 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 **Ramsarobar** JFMC. This includes the Departmental Nursery involved in JFMC works.

**Table-11 (A): JFMC Nurseries of the Ramsarobar JFMC**

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
Within the Village	Major- Saal, Teak	2016-17	37000	Provide sapling for plantation to be under taken in the 2017-18
	Associates- Gamari, Sissoo, Titasopa, Ghoraneem, Khayer, etc		37000	
	NTFP		50000	

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

**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 **Ramsarobar JFMC** is given below. This covers a period of ten years.

(A) Timber Species Saal, Teak, Associates

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

#### 4.7. Miscellaneous Operations Plan

The miscellaneous operations planned in the **Ramsarobar JFMC** are given below.

**Table-13): Miscellaneous Operations in the \_\_\_\_\_ 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 **Ramsarobar 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 **Ramsarobar 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 Ramsarobar 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	-	-	-
Fodder from Forest Trees & Grass			
NTFP	June-July	2021-22 onwards	1 MT
Wages	Planation and Weeding Season	2016-17 onwards	-
Other	-	-	-

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

#### 5.2. Sharing Mechanisms

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

**Table-15: Sharing Mechanism for Ramsarobar JFMC**

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

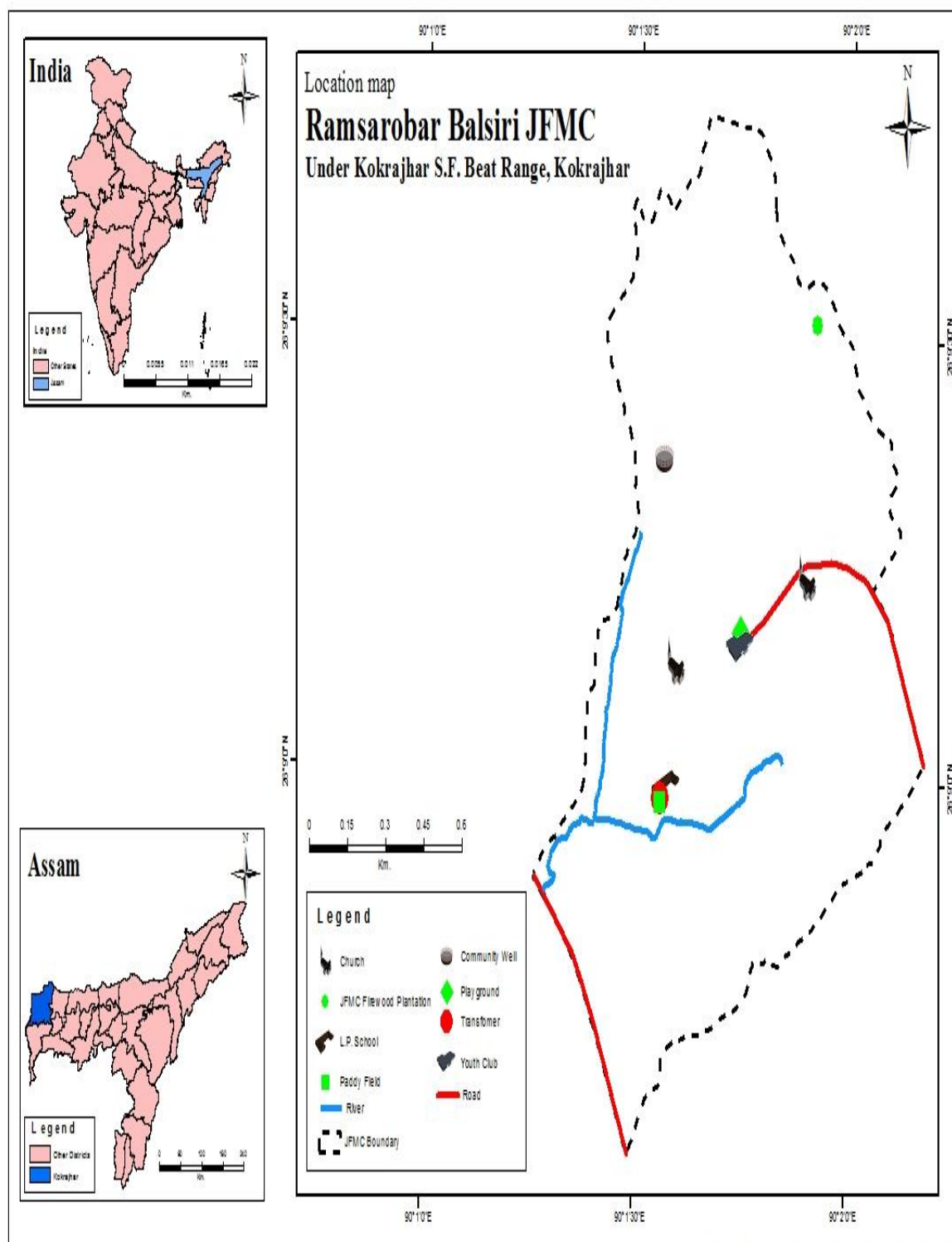
**Source:** Proforma-3, Table-3.15 / Discussions with Forest Department personnel & Community members

## 6. List of Appendices

<b>Appendix No</b>	<b>Heading</b>	<b>Page No</b>
1	<b>Maps</b> Village Location Map Village Social Map Village Resources Map Household location Map	29 30 31 32
2	<b>Land Use Map of Village (GIS)</b>	34
3	<b>PRA Exercise</b>	35
	Social Mapping Wealth Ranking Time Line review Seasonality of Livelihoods Priority Ranking Venn Diagram Chapatti Diagram	36 37 40 41 42 43 44
4	<b>Photographs</b>	45-46
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6	<b>Filled Up Tables</b> (Proforma-1 to Proforma-4) Table Nos. 1-37	48

## Annexure 1

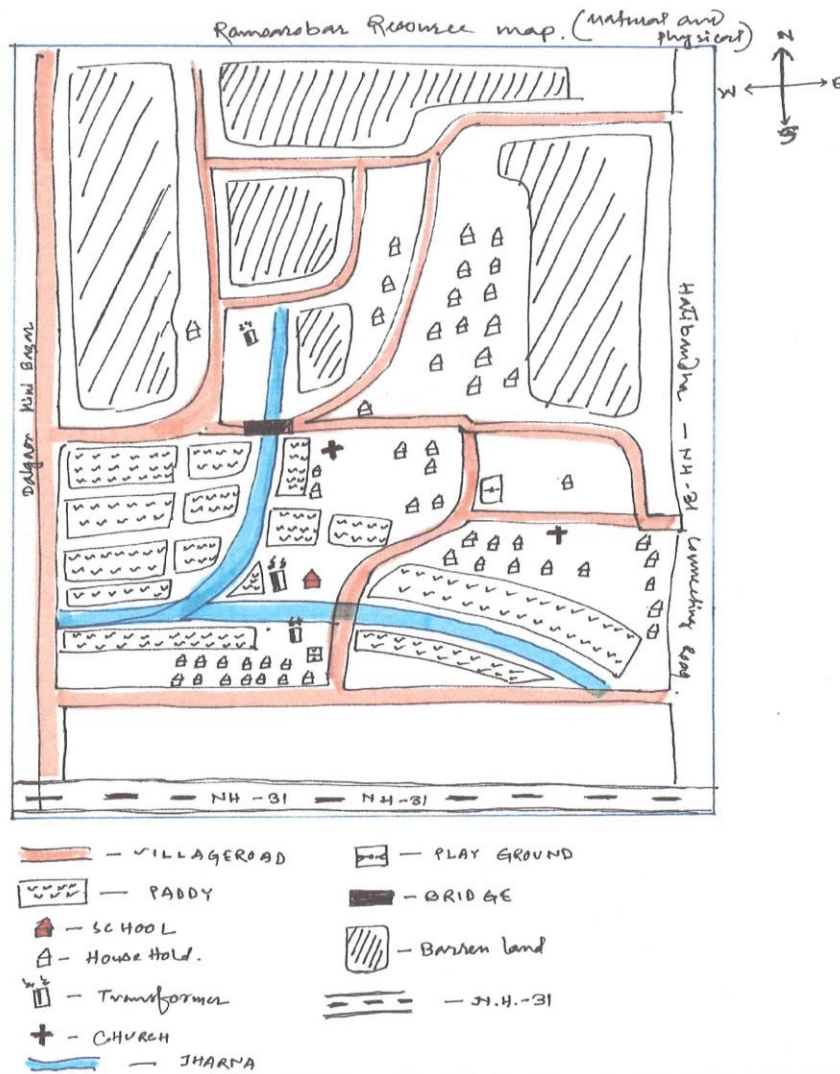
### Locational map



Prepared by: Indian Institute of Entrepreneurship

## Village Resource Map

R.S



1. Tulben Sangma (President)
2. Marandsa Marak
3. James Marako

4. Rakshina Sangma
5. Jellen Marak



### Village social Map:





[illegible]



# Ram Sarovar Batsiri JPMC

- |                               |                      |
|-------------------------------|----------------------|
| 1. Jriban Sangma. P           | 21. Chelal Sangma    |
| 2. Rupin u P                  | 22. Rajini Marak K   |
| 3. Bitraj " K                 | 23. Minati " P       |
| 4. Mutri " K                  | 24. Puriswari " K    |
| 5. Sonamti u P                | 25. Nimitsen " P     |
| 6. Beniswari u P              | 26. Puxam " P        |
| 7. Medini u P                 | 27. Bepul " I        |
| 8. <del>Firou</del> Mopin " K | 28. Jen " I          |
| 9. Tinari u P                 | 29. Newla Sangma K   |
| 10. Jems P                    | 30. Aloyon marak K   |
| 11. Kerol Marak P             | 31. Mojen Sangma I   |
| 12. Danen " K                 | 32. Manen marak P    |
| 13. Rial Marak P              | 33. Manchi Sangma P  |
| 14. Kriper Sangma P           | 34. Kengoni Sangma K |
| 15. Unit Marak P              | 35. Temoth Sangma K  |
| 16. Rajeswar Marak P          | 36. Lakwin " P       |
| 17. Utindon Marak P           | 37. Doleth marak P   |
| 18. Goshen Sangma I           | 38. Nibban Sangma K  |
| 19. Plandra Marak P           | 39. Chorin Sangma K  |
| 20. Sarma Marak P             | 40. Waferson " K     |
|                               | 41. Jhon u K         |
|                               | 42. Saemil u K       |
|                               | 43. Premesh u K      |
|                               | 44. Babilis u P      |
|                               | P, T, O              |

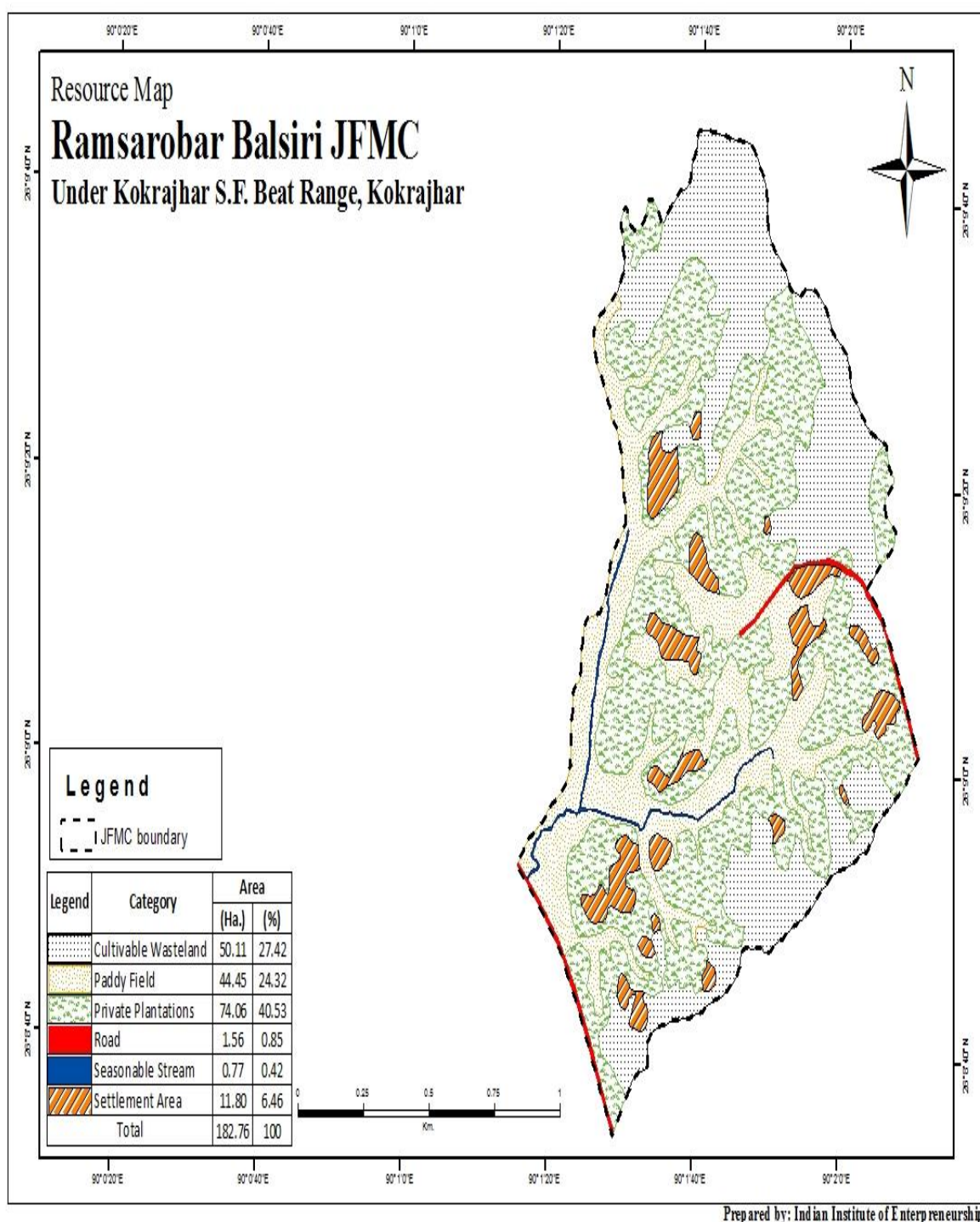


47. Sun	marab	P	71. Ubid	marab	K
48. Seel	u	K	72. Moneswar	sargma	K
49. Sejin	sargma	K	73. Dapson	marab	K
50. Lolita	marab	P	74. Tito	u	P
51. Dango	sargma	K	75. Bijumun	sargma	K
52. Aojin	marab	K	76. Joyanti	u	K P
53. Deri	sargma	P	77. Rakine	u	K
54. Klamad	u	K	78. Narejan	u	K
55. Tenish	u	K	79. Putime	sargma	P
56. Loken	Marab	K	80. Midip	u	K
57. Mejin	u	K			
58. Repni	u	K I			
59. Manik	sargma	P			
60. Sita	u	P			
61. Ishak	u	P			
62. Ashok	u	P			
63. T.D. Thapa	u	P			
64. Teji Marab	u	I			
65. Choksi	u	P			
66. Inosia	u	P			
67. Jexi	u	K			
68. Nelson	sargma	K			
69. Anil	u	P			
70. Ship	marab	P			
71. Inodip	u	K			
72. Hpal	sargma	K			

\*P- pakka house, \*K- kuccha house, \* I- IAY house

## Annexure 2

### Land Use Map of Village (GIS)



## Annexure 3

### PRA ACTIVITY

#### Location and Timing of Participatory Rural Appraisal:

Numbers of participants :	30
Time :	2pm, 13 <sup>th</sup> June 2016
Venue :	House of Mr. Triben Sangma

*Table – 3.1 Brief about the villages under RAMSAROBAR JFMC*

Sl. No.	Name of the Village	No. of households	Population		
			Total	Male	Female
1	Ramsarobar	80	366	206	160

Source: Field Survey

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

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

### 3.1 Social Mapping:

Social mapping is used to visualise the socio-economic aspects of the Ramsarobar JFMC where the housing patterns of the households, the numbers of schools, social infrastructure, and religious beliefs among households. Awareness camp about the project was carried out beforehand. So it was easy to gather people for the PRA process in the community hall. And due to time constraint we have to skip the transect walk. The villagers were enthusiastic about the mapping process and they actively participated in the process.

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



information about the pattern of their households namely pukka , semi pukka, IAY and thatch house.

*Table 3.2: Information about the villages*

<b>Social information</b>	<b>Village →</b>	<b>Ramsarobar</b>
	Total population	<b>366</b>
	Male	206
	female	160
	Total households	62
	Numbers of Pucka Houses	37
	No of thatch house	38
	No of IAY House	5
<b>Landmarks</b>	Bridges	1
	Stream	1
	PWD road	1
	Play ground	2
	Culvert	1
	Power Transformer	4
	Community hall	1
	School	1
	Church	2
	Well	1
	School	1

#### Findings of social map:

- The participants of social mapping have identified all the households out of which 46.25 % of HH are pukka household, 47.25 HH are thatch house or kuccha house. There are 5 no of IAY household.
- Other than the class based division of the households, important places like schools and playground, stream, well, embankment, culvert and bridges are mapped.
- Main sources of water for the villagers are the private ring well, hand pump and the streams which is used by villagers for their day to day use. But the water is available only for 4-6 month (during monsoon season).
- Provision of Education facility is not satisfactory in the village. Only primary school facility is available within the boundary of the village.

## 4.4 Wealth Ranking:

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

The most common version of this technique involves a series of individuals, a focus group of community members, ranking their entire community (or a particular section of the community if there are too many households to rank it all-say more than 100-or if the participants are familiar with only their own neighbourhood). The PRA facilitators introduce the technique using local terms for wealth and poverty and encourage participants to first discuss how they define these terms and how they would describe a poor household or a rich household (that is, their criteria for assessing a household's relative wealth).

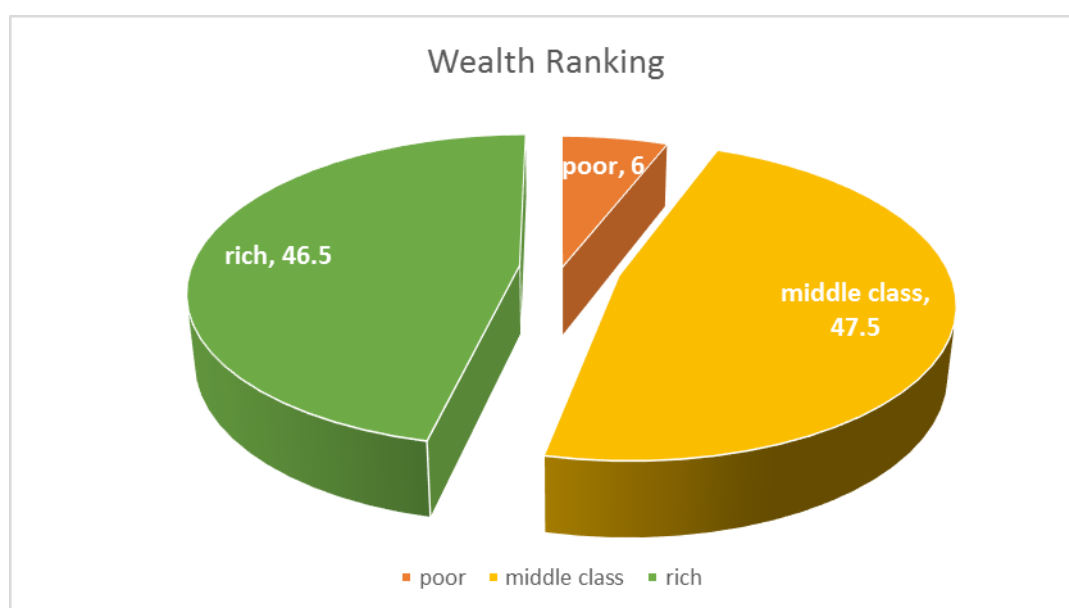
Wealth ranking was done with the help of the following criteria:

- a) Land holding
- b) Occupation

The pattern of house hold was not a criteria for the wealth ranking of this JFMC as almost 100 % of the house were thatch house.

As such about 6 per cent people are poor, about 47.5 per cent are belong to middle class and about 46.5 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 2: Wealth Ranking**



#### 4.5 Time Line Review:

*Table 4.2: Timeline review*

Year	Event	Type
1835	Five families started the village, namely Thema Sangma, Ochut Sangma, Nanan Marak, Thamam Marak, asaree Marak from Meghalaya state	
1918	Pest attack in the village	
1943	LP school was established	Physical construction
1945	First Govt. Employee	
1953	First church was established	
1971	First Matriculate	
1988	Flood in the village	
1991	First electricity connection	
1992	Destruction of forest by cutting lot of Sal tree	
2013	JFMC formation	
2013-14	1 <sup>st</sup> plantation	
2013	J. Marak from the JFMC played football in the national level	
2013,15	Ramsarobar won the club football championship in Parbatjhora	

#### 4.6 Analysis of the time line of Ramsarobar JFMC :

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

The Ramsarobar village is one of the oldest village of the region. It was established in year 1835, as reported by the villagers. The first villagers of the region came from MEGHALAYA State of INDIA .



In 1918 a big pest attack destroyed the paddy production of the JFMC

In 2013-14, the first plantation in the village was initiated by the forest department. In

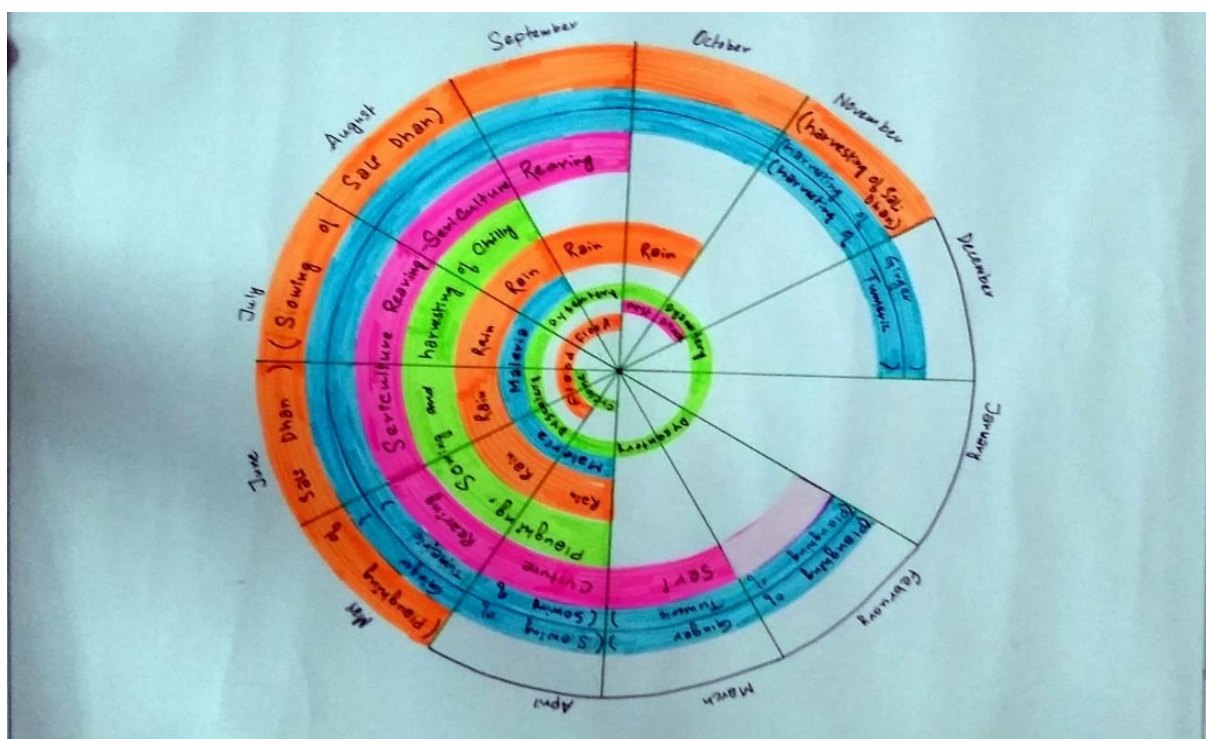
In the year 2013 the Ramsarobar JFMC was formed.

## Learning:

### 4.7 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, labor 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.

*Figure 3: Seasonal map*



Seasonal mapping mainly covers the seasonal variation of crops. In seasonal mapping, we considered agricultural crop and the timing of three activities viz. sowing, 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 Salidhan, Mustard, Jute, Bettle-nut, Ginger and Corn.

**Table 3.4 Seasonal cropping pattern**

Categories	Time of Activity			
<b>Farming</b>		<b>Sowing</b>	<b>Harvesting</b>	<b>Plucking</b>
	<b>Sali</b>	May-June	July-Aug	Oct-Nov
	<b>Betel-Nut</b>	May-June	Jan-Feb	July-Dec
	<b>Mustard</b>	Oct-Nov	Oct-Nov	Jan-Feb
	<b>Ginger</b>	Feb- March	.....	Aug-Sep
	<b>Turmeric</b>	Feb- March	.....	Aug-Sep
	<b>Sericulture</b>	March-April		July
	<b>Chiily</b>	April-May		August -Sep
<b>Non-Farming</b>	<b>Weaving</b>	Throughout the year		
	<b>Livestock Rearing</b>			
	<b>Daily Wage Earning</b>			
	<b>Shop-keeper</b>			
	<b>Masonry</b>			
	<b>Electrician</b>			
	<b>Tailoring</b>			

**Table 4.4: Seasonal vulnerability Mapping**

	January	February	March	April	May	June	July	August	September	October	November	December
<b>Rain</b>												
<b>Dysentery</b>												
<b>Malaria</b>												
<b>Floods</b>												
<b>Cyclone</b>												
<b>Pest attack</b>												



»» indicates the affected months

**Learnings:**

- Water availability is less during the period October to March, so agricultural productivity become less in this period.
- Due to non availability of water the paddy field remains vacant for the month of
- The major disease is dysentery and people suffers from it round the year. The non-availability of sanitary system is also one of the reason of dysentery.
- Flood comes during May to August. Flood also depends on the rain in hills of Bhutan.

## **PRIORITY RANKING: EPA and LIVELIHOOD**

PRIORITY RANKING: EPA AND LIVELIHOOD FOR RAM SAROVAR BALSTRI JFMC

LIVELIHOOD ACTIVITIES:

Livelihood Activities	Weaving (A)	Endy Silk Spinning (B)	Livestock Rearing (C)	Elec-tution (D)	Drivng (E)	Tailoring (F)	Cane & Bamboo (G)	Carpentry (H)	Masonry (I)	Marks	Rank
Weaving (A)	X	B	C	A	A	A	A	A	A	6+	1
Endy Silk Spinning (B)	X	X	B	B	E	B	G	H	B	5	4
Livestock Rearing (C)	X	X	X	D	C	C	C	C	C	6	2
Election (D)	X	X	X	X	E	D	G	D	D	4+	5
Drivng (E)	X	X	X	X	X	I	E	E	E	5+	3
Tailoring (F)	X	X	X	X	X	X	G	H	F	1	9
Cane & Bamboo (G)	X	X	X	X	X	X	X	G	I	4	6
Carpentry (H)	X	X	X	X	X	X	X	X	H	3	7
Masonry (I)	X	X	X	X	X	X	X	X	X	2	8

EPA ACTIVITY:

EPA ACTIVITY	Road	Tube well	Stay Arrangment	Community Hall	Dam	Community Health Centre	JFMC Office	Market Shed	Sanitation	Marks	Rank
Road	X	A	A	A	A	A	A	A	A	8	1
Tube well	X	X	C	D	E	B	B	B	B	4	5
Stay Arrangment	X	X	X	D	E	C	C	C	C	5	4
Community Hall	X	X	X	X	D	D	D	D	D	7	2
Dam	X	X	X	X	X	E	E	E	E	6	3
Community Health Centre	X	X	X	X	X	X	G	H	F	1	8
JFMC Office	X	X	X	X	X	X	X	X	X	3	6
Market Shed	X	X	X	X	X	X	X	X	X	2	7
Sanitation	X	X	X	X	X	X	X	X	X	0	9

Signature:

1. Purnes mureb  
2. P. P. mureb

3. Rakshina Sangma  
4. Teibem Sangma (President)  
5. Marenkore Marak  
6.

## VENN DIAGRAM OF RAMSAROBAR JFMC:

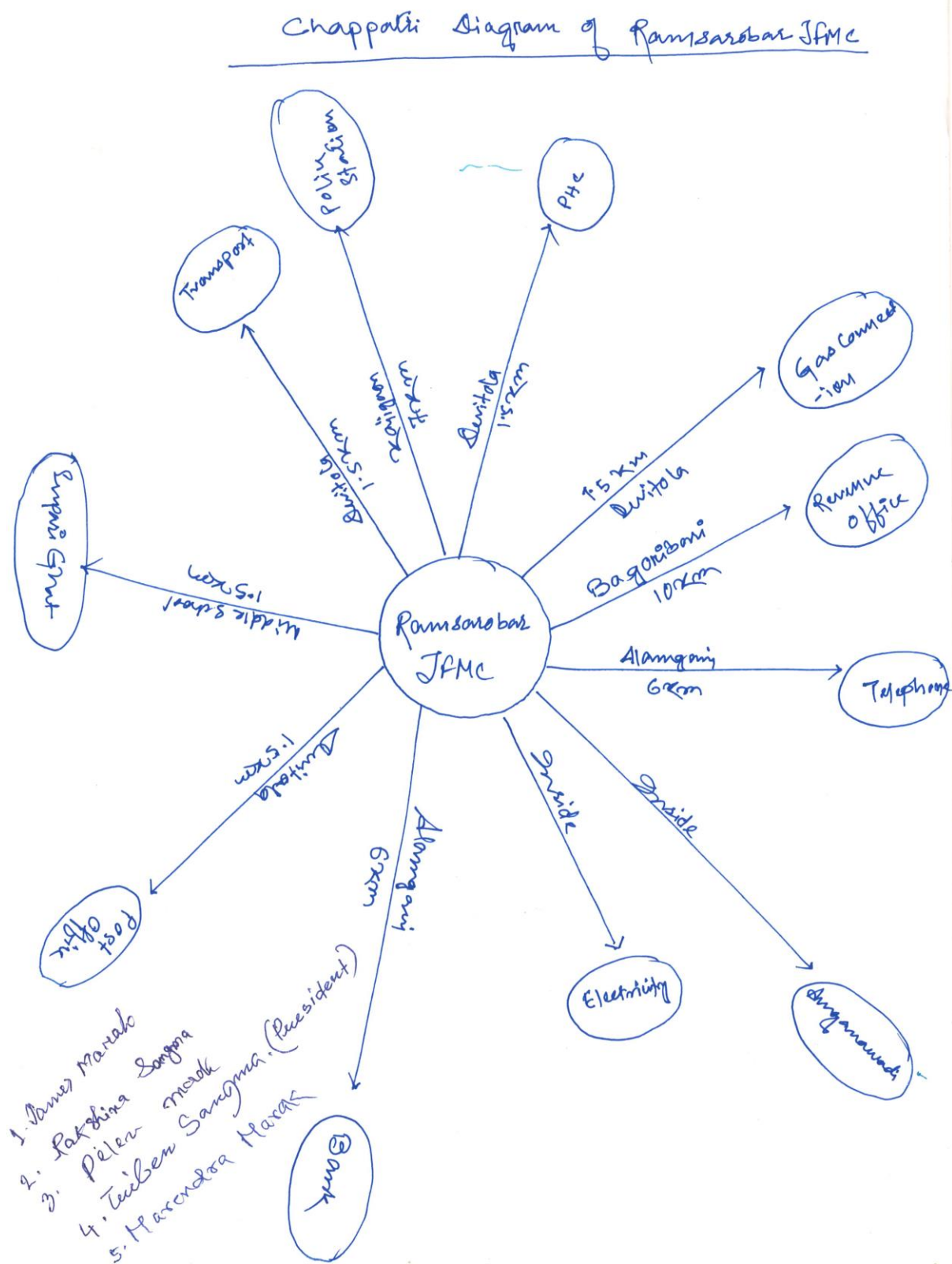
Venn Diagram of Ramsarobar JFMC



1. Jannes Marak
2. Ratihine Sangha
3. Pelera morak
4. Tuibem Sangma (President)
5. Maranetra Marak



# CHAPATTI DIAGRAM OF RAMSAROBAR JFMC:



PHOTOGRAPHS



**Photo 1: Social Mapping in the JFMC**



**Photo 2 : mapping process done by villagers**



**Photo 3: With the villagers**



**Photo 4: team members in the plantation area**



## Annexure 5

### LIST OF JFMC MEMBERS

#### RECORD 7 : MEMBERSHIP REGISTER

Name of JFMC *Ramsarobar* Division *Kok* Range *SR Kok*

Beat *SR Beat, Kok* JFMC Code

Sr. No.	Name	Father's / Husband's name	Age	Male / Female	Education	SC/ST / BC/OBC
1	<i>Tiben Changra</i>		<i>42</i>	<i>M</i>	<i>H.S</i>	<i>ST</i>
2	<i>Jamch Marak</i>		<i>43</i>	<i>M</i>	<i>IX</i>	<i>ST</i>
3	<i>Nimithson Marak</i>		<i>45</i>	<i>M</i>	<i>H.S.LC</i>	<i>ST</i>
4	<i>Marenda Marak</i>		<i>41</i>	<i>M</i>	<i>VIII</i>	<i>ST</i>
5						

## Annexure 6

### RECORD: I

#### Socio Economic Profile

##### Key Information

The key information of the Ramsarobar JFMC is contained in the table, which is given at overleaf.

##### 3.1 Basic data of the village:

Name of the forest division: Kokrajhar

Name of the forest range: Holtugaon

*Table 3.1 Basic data of the JFMC*

Sl no	Name of the JFMC	Date of establishment	No. of members in executive	Name of the president	Name of the secretary	Money in VDF	Contribution per family /per person	Social fencing used	Yes / No	Remarks on special attainment	Grading %of success by RFO
1	Ramsarobar	2009	10	Triben Sangma	Ranjit Sur						

##### 3.2 Demography

*Table -3.2: Demographic status of the project villages*

Sl. No.	Name of village	Households (No.)	Population (No.)			Sex ratio (per 1000 male )	Avg. HH size
			Total	Male	Female		
1	Ramsarobar	80	366	206	160	776.69	4.56

Source: - Field survey report.

### 3.3 Village wise farmer category on the basis of land holding :

The land ownership of the Swmkar JFMC is as following table which was informed during focus group discussion:

*Table 3.3 Village wise farmer category on the basis of land holding*

Name Of The Village	Type of Famer				
	Large Farmer >10 Ha.	Small Farmer 2-10 Ha.	Marginal Farmer (House hold) <2ha.	Land Less (Household)	Total
Ramsarobar	0	6	64	10	80

### 3.4 Cattle Population:

*Table 3.4 : Cattle Population of the JFMC*

Sl no	Name of the village	village wise no of cattle or type of animal (approx.)							
		cows	buffaloes	goat	Duck	bulls	hen	Pig	total
1	Ramsarobar	244	-	37	196	-	34	196	841

### 3.5 Village wise Infrastructure:

*Table 3.5 showing village wise infrastructure*

Sl no	Infrastructure	Location	Distance from village
1	Electricity	Inside	
2	Gas connection	Devitola	1.5km
3	Transport	Devitola	1.5km
4	PHC	Devitola	1.5 km
5	LP school	Inside	
6	Middle school	Supari ghat	1.5 km
7	Post office	Devitola	1.5 km

8	Bank	Alamganj	6km
9	Anganawadi centre	inside	
10	Telephone	Alamganj	6km
11	Revenue Office	Bagoribari	10 km
12	Police station	Kajigaon	7 km
13	Forest beat Office	Kokrajhar	50 km
14	Bus facility	Supari ghat	1.5 km
15	Railway Station	Kokrajhar	50 km
16	District head quarter	Alamganj	2km

### 3.6 Agricultural crops :

*Table 3.6 showing the agricultural pattern of the JFMC*

Name of crop	Area in hac.
Paddy	15.8
Oil seeds	2
vegetable	1
Fruits	1
Spice	.2

### 3.7 Crop production profile of RAMSAROBAR JFMC:

*Table 3.7 Crop production profile of RAMSAROBAR JFMC*

Type of crop	Total production	No of household growing (approx.)	Average production (quintal per / hector) approx	Area under crop ( hector ) approx
Paddy	334	75	21	15.8
Oil seeds	3	8	1.2-1.5	2
vegetable	1	85	.5-1	1
Fruits	1	85	.5-1	1
Spice	.75	85	1-1.5	0.5

### 3.8 fodder Availability (animal)

*Table 3.8 fodder availability of the JFMC*

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

### 3.9 Fodder availability (household ):

*Table 3.9 showing fodder availability of the Ramsarobar JFMC*

For Purchase	Location	Distance from village if in other village (in km)
Grocery shop	Alomganj	6 km
Weekly Market	Alomganj	6 km
Major Market	Alomganj	6 km
Forest Corporation Sale Depot.	NA	-
Tendu Patta PHAD	NA	-
Fish Market	NA	-
Medicinal Plant collection Centre	NA	-
Forest Corporation Medicinal plant Collection Centre	NA	-

### 3.10 Water Resources Facility:

*Table 3.10: showing the water resource facility available in the village*

Water source	number	Availability of water	uses
Check dam	-	-	-
Tube well ( HH)	43	adequate	Home use
River	-		
Community ring well	1	Whole year	Drinking
Stream	1	Whole year	irrigation

### 3.11 Energy consumption:

*Table3.11 showing the Energy Consumption of the JFMC*

Type of Fuel	Number of household depending	Number of months dependent	Sources (local, village, forest, other sources)	Major/ Secondary
Fuel wood	80	12	Forest	primary
Kerosene stove	50	12	Market	Secondary
Gobar/Bio gas	-	-	-	-
LPG	35	12	Market	Primary
Electrictricity	76	-	-	-

## Additional Table

### (i) Literacy Rate

*Table – 3.12: Status of literate person in the project villages*

Sl. No.	Name of village	Households (No.)	Population (No.)	Total Literates	Literacy Rate (in %)
1	Ramsarobar	80	366	233	64.56

Source: - Field survey report.

### (ii) Educational Status

*Table-3.13: classification of educational status*

Sl no	Categories	Percentage
1	Illiterate	35.44
2	Up to school	44.20
3	Up to college	20.38

Source: field survey report

### (iii) Human resource profile

*Table -3.3: Status of workforce in the project villages.*

Sl. No.	Name of Village	Work Force(approx.)				
		Service	Cultivator	Livestock	business	Wage-Labour
1	Ramsarobar	8.89%	90%	40%	5%	10%

Source: - PRA exercise.

### (iv) Income status and sources

The baseline survey information reveals that most of the farmers are marginal farmers with not more than an annual income of about Rs. 10,000 /- to 15,000/- year (12.5 approx..) in each of the project villages. The main activities of the community are reported to be agriculture, livestock and horticulture.

## RECORD II

### LIVELIHOOD OPPORTUNITY ANALYSIS

**Table 12: Agriculture and Horticulture:**

*Table 12: showing the agricultural and horticultural status*

Constraints	Reason	Opportunities	Programme
<b>Low Production</b>	<ul style="list-style-type: none"> <li>Traditional way of cultivation.</li> <li>Only one crop undertaken annually (Sali)</li> <li>Very negligible use of fertilizers and pesticides, insecticides.</li> <li>Lack of irrigation facilities.</li> <li>Lack of agricultural infrastructure, modern tools and equipment's viz, power tillers, tractors etc.</li> <li>Non usages of high yielding seeds.</li> </ul>	<ul style="list-style-type: none"> <li>Application of proper and controlled pesticides and insecticides.</li> <li>Introduction of new and advance technology.</li> <li>Well-structured training programme. The villagers are inherited with the skill of cultivation. But an improvisation of skills is the need of the hour.</li> <li>Usage of high yielding seed programme.</li> </ul>	<ul style="list-style-type: none"> <li>Tractor operation training</li> <li>Agri-skill development programme.</li> <li>Training on insecticides, pesticides, hybrid cultivation</li> </ul>
<b>Storage and Production</b>	<ul style="list-style-type: none"> <li>Lack of common storing place</li> <li>Lack of cold storage facility due to non-availability of electricity</li> </ul>	<ul style="list-style-type: none"> <li>Helpful in preserving unsold products for a longer period of time.</li> <li>They can store their product and sell it when there is a higher demand.</li> </ul>	<ul style="list-style-type: none"> <li>Packaging</li> <li>Transportation and distribution.</li> </ul>
<b>Marketing</b>	<ul style="list-style-type: none"> <li>Lack of transporting facilities for carrying products</li> <li>Less contact with the direct market; much dependency upon middle man</li> <li>No knowledge on marketing know-how, dependence on traditional system of selling.</li> </ul>	<ul style="list-style-type: none"> <li>Smooth transportation facility will help the farmers to carry their products to the nearby markets.</li> <li>Generate highest market price by removing middle men.</li> <li>More knowledge about the current market situation as well as the current value of their products.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Buyers sellers meet</li> </ul>



**Table 13: Livestock****Table 13 Livestock**

Constraints	Reasons	Opportunities	Programme
Less grazing land	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>		
Availability of fodder	<ul style="list-style-type: none"> <li>Unable to buy fodder from market due to poor financial condition</li> <li>Trees fodder n crop residue are available only for 3-6 months. Green fodder is also not available for the whole year.</li> </ul>	<ul style="list-style-type: none"> <li>Higher income from livestock rearing.</li> <li>The villagers can make it as an alternative livelihood opportunity if they have the easy access of livestock fodder.</li> </ul>	
Veterinary care facility	<ul style="list-style-type: none"> <li>No veterinary care clinic</li> <li>Lack of knowledge about the proper rearing of live stock</li> </ul>	<ul style="list-style-type: none"> <li>Disease control</li> <li>Increases the life span of cattle.</li> <li>It will also help to aware the villagers and will encourage them for livestock rearing.</li> </ul>	
Production of milk	<ul style="list-style-type: none"> <li>Less availability of fodder</li> <li>No scientific knowledge on cattle rearing to increase the milk production.</li> </ul>	<ul style="list-style-type: none"> <li>Training on the milk production can enhance the skill of milk production.</li> <li>Availability of supplements like cattle “Milk Booster, Milk Plus” etc. can increase the production of milk in the area.</li> </ul>	
Milk market	<ul style="list-style-type: none"> <li>Less contact with the direct market for milk</li> <li>Unaware of the market demand of different milk made products.</li> </ul>	<ul style="list-style-type: none"> <li>A huge demanded market for milk is available as Kokrajhar district head quarter and West Bengal state is too far from the JFMC.</li> </ul>	

**Table 13: NWFP****Table 14 NWFP**

Constraints	Reasons	Opportunities	Programme
<b>Less collection</b>	<ul style="list-style-type: none"> <li>Less availability of NWFP</li> </ul>	<ul style="list-style-type: none"> <li>Availability of fertile fallow land</li> </ul>	<ul style="list-style-type: none"> <li>Plantation of Food plans, Medicinal Plant etc.</li> </ul>
<b>Unsustainable extraction</b>	<ul style="list-style-type: none"> <li>NA</li> </ul>	<ul style="list-style-type: none"> <li>Availability of fertile fallow land</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Low rates</b>	<ul style="list-style-type: none"> <li>NA</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Value addition</b>	<ul style="list-style-type: none"> <li>No processing units</li> <li>Non availability of required resources</li> <li>No technical know-how</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

**Table 15: Specialised skill***Table 15: Specialised skills: Handloom*

<b>Constraints</b>	<b>Reasons</b>	<b>Opportunities</b>	<b>Programme</b>
<b>Raw material availability</b>	<ul style="list-style-type: none"> <li>Non-Availability of Raw Materials within reachable location (market 7km away)</li> <li>No Storage</li> </ul>	<ul style="list-style-type: none"> <li>Common place for setting a raw material storage</li> </ul>	<ul style="list-style-type: none"> <li>Setting up a raw material bank</li> </ul>
<b>Product quality</b>	<ul style="list-style-type: none"> <li>Shortage of High Quality Materials</li> <li>Use of Traditional machineries</li> </ul>	<ul style="list-style-type: none"> <li>Developing Quality Products for new market exploration.</li> </ul>	<ul style="list-style-type: none"> <li>Training on Modern Tools and Equipment.</li> <li>Providing modern technology to the villagers</li> </ul>
<b>Marketing potential</b>	<ul style="list-style-type: none"> <li>No standardised market</li> <li>No pricing policy</li> <li>No linkage with the institutional buyers</li> <li>No Product Diversification or New Product Development.</li> </ul>	<ul style="list-style-type: none"> <li>Exploring new markets with diversified products</li> </ul>	<ul style="list-style-type: none"> <li>Providing a bulk buy arrangement of the finished product with institutional buyers.</li> </ul>
<b>Credit facilities</b>	<ul style="list-style-type: none"> <li>No linkage with the banks or post office saving banks.</li> <li>Unaware of the development schemes of banks and government</li> </ul>	<ul style="list-style-type: none"> <li>Financial assistance by the Govt.</li> <li>Providing easy access to credit.</li> </ul>	<ul style="list-style-type: none"> <li>Microfinance, Term Loans, Working Capital Arrangement</li> </ul>
<b>Product Diversification</b>	<ul style="list-style-type: none"> <li>No Product Diversification or New Product Development.</li> <li>Lack of concept for product diversification.</li> </ul>	<ul style="list-style-type: none"> <li>Developing Demand Based Products, as per the needs of the modern day market.</li> </ul>	<ul style="list-style-type: none"> <li>Skill Upgradation &amp; Training on New Product Development and Product Diversification</li> </ul>

**Table 16: Credit facility***Table 16 Credit facility*

<b>Constraints</b>	<b>Reason</b>	<b>Opportunities</b>	<b>Programme</b>
<b>Indebtness</b>	Nil	<ul style="list-style-type: none"> <li>Setting up modern financial institution in the nearby areas.</li> </ul>	
<b>Rate of interest</b>	<ul style="list-style-type: none"> <li>Higher lending rates charged by the private money lender</li> </ul>	<ul style="list-style-type: none"> <li>Subsidised credit arrangement</li> </ul>	
<b>Availability of loan</b>	<ul style="list-style-type: none"> <li>Fear of risk taking</li> <li>No knowledge of documentation</li> </ul>	<ul style="list-style-type: none"> <li>Start-ups entrepreneurial venture</li> </ul>	
<b>Mortgage difficulty</b>	<ul style="list-style-type: none"> <li>Unavailability of proper documentation of mortgaged property.</li> </ul>	<ul style="list-style-type: none"> <li>Proper awareness about documentation in the area</li> </ul>	

## Annexure 7

List of Beneficiaries identified for livelihood Generation activities

### 1. Mixed Livestock

Trade:	MIXED LIVESTOCK	<b>RAMSAROBAR (MIXED LIVESTOCK)</b>					
Location:	RAMSARABOR BOLSIRI						
Start Date	26-Aug-16						
End Date	4-Sep-16						
Master Trainer	DR. BHASKAR JYOTI DAS						
SL.NO	Name of Participants	Guardian Name	Address	Qualification	Age	Gender	Category
1	MOHILA MARAK	LT JOGENDRA SANGMA	RAMSARABOR BOLSIRI	CLASS VII	35	F	ST
2	ERINA SANGMA	PUARAM MARAK	RAMSARABOR BOLSIRI	CLASS X	35	F	ST
3	MARENDRA MARAK	LT JOGENDRA SANGMA	RAMSARABOR BOLSIRI	HSLC PASS	45	M	ST
4	REKHA MARAK	LT JOGENDRA SANGMA	RAMSARABOR BOLSIRI	CLASS IX	28	F	ST
5	JOYA MARAK	LT JOGENDRA SANGMA	RAMSARABOR BOLSIRI	CLASS IX	36	F	ST
6	PUTTAM SANGMA	LT. KOHINDRA SANGMA	RAMSARABOR BOLSIRI		28	M	ST
7	NIMITSON MARAK	LT. JENGWAN SANGMA	RAMSARABOR BOLSIRI		53	M	ST
8	JAMES MARAK	LT. DEVENDRA SANGMA	RAMSARABOR BOLSIRI		48	M	ST
9	PHILLENDRA MARAK	NP	RAMSARABOR BOLSIRI		54	M	ST
10	TARAMONI SANGMA	LT. THUBIN MARAK	RAMSARABOR BOLSIRI		32	F	ST

*Ranjit Singh*  
Member Secretary  
Ramsarabar Bolsiri JFMC

### 2. Apparel & Made-Ups Making

Sl. No.	Forest Division	JFMC	Skill (trade)	Start Date	End Date	Master Trainer (Name, Organization)	Participant	Guadian	Qualification	Age	Gender	Category
1	Kokrajhar SF	RamsarabarBolsiri	Apparel and Made-up Making	26-Oct-16	24-Nov-16	Pooli Barman, Dimpi S. Barooah	KWNCHWK RABHA	MANENDRA RABHA	X	18	M	ST
2	Kokrajhar SF	RamsarabarBolsiri	Apparel and Made-up Making	26-Oct-16	24-Nov-16	Pooli Barman, Dimpi S. Barooah	JONA KR RABHA	SARBANJIT RABHA	HSLC	23	M	ST

*[Signature]*  
Divisional Forest Officer  
Field Implementation Unit  
S.F. Division, Kokrajhar