



## **SOUTH HATIBANDHA JOINT FOREST MANAGEMENT**

### **COMMITTEE**

**SOCIAL FORESTRY DIVISION, KOKRAJHAR**

**BODOLAND TERRITORIAL COUNCIL FOREST CIRCLE**

## **MICRO-PLAN**

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

**Prepared by SOUTH HATIBANDHA 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

<b>Acronym</b>	<b>Full Form</b>
<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>TQM</b>	Total Quality Management

**SOUTH HATIBANDHA JOINT FOREST MANAGEMENT COMMITTEE**  
**Suparighat Forest Division, Koraghat Forest Range**

**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 South Hatibandha JFMC.</b>	<p>This document gives the Micro-Plan for the South Hatibandha JFMC., which is located in the Kokrajhar district of Assam. The JFMC falls under the jurisdiction of the Parbatjhora Forest Division of the Khoraghat Forest Range. 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 South Hatibandha Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in South Hatibandha, a village located within the jurisdiction of Parbatjhora Forest Division but the JFMC is under S.F. Division, Kokrajhar. The area covered by the above JFMC falls within the South South Hatibandha VCDC, Bogribari Revenue Circle 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><b>Table-A: Key Information of the JFMC</b></p> <table> <tr> <td><b>Name of the JFMC</b></td><td>South Hatibandha</td></tr> <tr> <td><b>Habitation</b></td><td>Rabha</td></tr> <tr> <td><b>Name of Revenue Village</b></td><td>NIL</td></tr> <tr> <td><b>Name of the Gram Panchayat / VCDC</b></td><td>South South Hatibandha</td></tr> <tr> <td><b>Revenue Circle</b></td><td>Bogribari</td></tr> <tr> <td><b>District</b></td><td>Kokrajhar</td></tr> <tr> <td><b>Forest Division</b></td><td>Parbatjhora Division, Suparighat.</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>2010</td></tr> <tr> <td><b>Description of Boundary of JFMC</b></td><td>As below North: North South Hatibandha. South: Suparighat Debitola road &amp; Pakhihaga part 4. West: Paddy field and Kalbandhari river East: Puran Panbari &amp; Plantation</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>	South Hatibandha	<b>Habitation</b>	Rabha	<b>Name of Revenue Village</b>	NIL	<b>Name of the Gram Panchayat / VCDC</b>	South South Hatibandha	<b>Revenue Circle</b>	Bogribari	<b>District</b>	Kokrajhar	<b>Forest Division</b>	Parbatjhora Division, Suparighat.	<b>Forest Range</b>	Khoraghat	<b>Forest Beat</b>	Suparighat	<b>Year Formed</b>	2010	<b>Description of Boundary of JFMC</b>	As below North: North South Hatibandha. South: Suparighat Debitola road & Pakhihaga part 4. West: Paddy field and Kalbandhari river East: Puran Panbari & Plantation
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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><b>Table-B: Brief Details of Executive Committee &amp; general Body</b></p> <table> <tr> <td><b>Name of President</b></td><td>Mahanta Rabha</td></tr> <tr> <td><b>Name of Secretary</b></td><td>Mr. Naresh Basumatary, Fr I</td></tr> <tr> <td><b>Name of Treasurer</b></td><td>Chimosh Rabha</td></tr> <tr> <td><b>No. of Members in Executive Committee</b></td><td>Male:4 Female:7</td></tr> <tr> <td><b>No. of Members in the General Body</b></td><td>110 (Represented by the head of household)</td></tr> </table> <p><b>Source:</b> JFMC Records</p>	<b>Name of President</b>	Mahanta Rabha	<b>Name of Secretary</b>	Mr. Naresh Basumatary, Fr I	<b>Name of Treasurer</b>	Chimosh Rabha	<b>No. of Members in Executive Committee</b>	Male:4 Female:7	<b>No. of Members in the General Body</b>	110 (Represented by the head of household)												
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<b>Households &amp; Population Structure</b>	<p>The village has 110 households. The number of female headed households is nil. The total population is 431, of which 231 are male and the 200 are female members. All the households are belong to Schedule Tribe (ST) caste of Rabha 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</li> <li>(2) The sex ratio is 866 females per 1000 males in the village.</li> </ol>
<b>Education &amp; Skills Development</b>	<p>Over 74.01 % 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(Endi Yarn Spinning)</li> <li>(b) Farming</li> <li>(c) Sericulture</li> <li>(d) Horticulture</li> </ol> <p>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.</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> </ul> <p>This type of soil can support different kinds of crops, as the soil is reported to be fertile on the whole. But, the soil of the present village is found to be less fertile due to rubber cultivation.</p>
<b>Water</b>	The area is drained by the river Kalabandari
<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.</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 Eastern heavy alluvium plain Sal forest. The main tree species are Sal, Makrisal, ,Parali, Ajhar, Koroi, Sicha, Bahera, Sationa, Jia 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>Cultivated wasteland ( low line ) 0.52 %  Firewood Plantation 12.02%  Paddy field 37.19%</p>

	Pond 0.05% Private plantation 3.30% Road 1.25% Saal, Gamari plantation 23.05% Settlement area 22.08% Stream 0.53%
<b>Land Holdings</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• 22.7 % of the households are landless ( 25 HH)</li> <li>• 50 % of the households are marginal farmers (less than 2 Ha) (55 HH);</li> <li>• 27.2 % of the households are 2-10 Ha(30HH)</li> </ul>
<b>Livestock</b>	<p>The total number of livestock in the village is 970. The main types of livestock possessed by the households include:</p> <p>Cows: 332  Goats: 9  Bulls : 5  Pigs :62  Hens : 562</p> <p><b>Table-4</b> of Record-I may be referred to for the details in the above connection.</p>
<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 <b>Record-I</b>, 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 no 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, which gets amplified as the villagers do not have access to regular public transport from either the habitation or from nearby areas.</p> <p><b>Financial Inclusion:</b> Facilities for financial inclusion like bank and post office are located at a considerable distance from the habitation. The community members have accounts in faraway places.</p>
<b>Agricultural Crops</b>	<p>The details of the agricultural crops grown in the village is available at <b>Table-6</b> of Record-I.</p> <p>The above shows that the following are the main crops grown in the village.</p> <p>Kharif Crops: Sali rice, Yum (kachu), Tapioca (Shimalu Aloo), Jackfruit, Mango, Jam, Pumpkin  Rabi Crops: Mustard, leafy vegetables  Others: Rubber, Tomato, Carrot, White melon, Radish, Pineapple</p> <p>All crops are rain fed.</p>

<b>Crop Production Profile</b>	<p><b>Table-7</b> of Record-I may be referred to for the production and yield details of the crops grown in the village.</p> <p>The maximum numbers of households are involved in growing crops like rice and mustard.</p> <p>The production and yield of these crops is given as follows:</p> <table><tr><td>(a) Paddy : Production</td><td>120 MT</td><td>Yield 1.82 MT /ha</td></tr><tr><td>(b) Oil seeds: Production</td><td>8 MT</td><td>Yield 2.4 Qtl /ha</td></tr><tr><td>(c) Rubber: Production</td><td>220 MT</td><td>Yield 5 MT/ha</td></tr></table>	(a) Paddy : Production	120 MT	Yield 1.82 MT /ha	(b) Oil seeds: Production	8 MT	Yield 2.4 Qtl /ha	(c) Rubber: Production	220 MT	Yield 5 MT/ha
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<b>Fodder Availability</b>	<p>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:</p> <p>(a) Crop residue (b) Grazing in forest (c) Household wastage (d) Green fodder</p>									
<b>Markets</b>	<p><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:</p> <p>(a) Grocery / PDS: Debitola at 2 km away (b) Weekly / Bi-weekly Market: : Debitol and Alamganj at 2 km and 5 km away respectively (c) Major Market: : Alamganj at 2 km away</p>									
<b>Water Resources</b>	<p>The water resources are tabulated at <b>Table-10</b> of Record-I. The main water resources with the water availability is as follows:</p> <table><tr><td>(a) Canal</td><td>(Water Availability: <del>Perennial</del> / Seasonal)</td></tr><tr><td>(b) tube well</td><td>(Water Availability: Perennial / <del>Seasonal</del>)</td></tr><tr><td>(c) river</td><td>(Water Availability: <del>Perennial</del>/ Seasonal)</td></tr><tr><td>(d) Ring well</td><td>(Water Availability: <del>Perennial</del>/ Seasonal)</td></tr></table>	(a) Canal	(Water Availability: <del>Perennial</del> / Seasonal)	(b) tube well	(Water Availability: Perennial / <del>Seasonal</del> )	(c) river	(Water Availability: <del>Perennial</del> / Seasonal)	(d) Ring well	(Water Availability: <del>Perennial</del> / Seasonal)	
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<b>Energy Consumption</b>	<p><b>Table-11</b> of Record-I shows the major sources of energy in the village. The same have been listed below.</p> <p>(a) Fuel Wood: Households Depending: 98Nos. Source: forest (b) Kerosene: Households Depending: 93 Nos. Source: Authorized Agency (c) LPG: Households Depending: 7 Nos. Source: Authorized Agency (d) Electricity : Households Depending: 93 Nos. Source: village</p>									
<b>Socio-economic status</b>	<p><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.</p> <p><b>Economic Condition:</b> The economic position is not satisfactory. The main livelihoods are Farming, Daily wages, Sericulture etc. There are 13 government service holder in the village. Most households earn Rs. 35000 to Rs. 40,000 per year.</p> <p>There is some migration of the youth and others for livelihoods. Additional details are available at the next section.</p>									
<b>Maps</b>	<p><b>Appendix-1</b> gives the following maps, based on PRA exercise:</p> <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>Priority ranking through PRA exercise :</b>
<b>PRA Exercise</b>	<p>Team from IIE Guwahati carried out PRA exercise in South Hatibandha village as follows:</p> <p><b>Date:</b> 13<sup>th</sup> June, 2016 <b>Location:</b> Village Church , South Hatibandha  <b>Numbers Present:</b> 60</p> <p><b>In Presence of:</b> JFMC office bearers, Village Headman, community members, Forest Department personnel, etc.</p>
<b>Objective of PRA</b>	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.
<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>

Ranking	<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> <p>1. Endi Yarn Spinning</p> <p>2. Handloom</p> <p>3. Livestock rearing</p> <p>4. horticulture</p> <p>Ranking of EPA</p> <table><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><tr><td>1.</td><td>Road Connectivity</td><td>Mettled road/pucca road connecting South Hatibandha from NH 31 with distance of 6 km</td><td>PWD Deptt.</td></tr><tr><td>2.</td><td>Fishery</td><td>1 Ha of pond to be done</td><td>Deptt. Of Fishery</td></tr><tr><td>3.</td><td>Drinking Water</td><td>At least 4 ring well</td><td>EPA APFBC/ NRDWP</td></tr><tr><td>4.</td><td>Sanitation</td><td>Providing HHL (House Hold Latrine)- Low cost ,septic and sanitary type.</td><td>Swach Bharart Mission/ PHE</td></tr><tr><td>5.</td><td>Bridge</td><td>Wooden bridge inside the village over Kalbandari river.</td><td>PWD Deptt.</td></tr></table> <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/ Equipment/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>	Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.	1.	Road Connectivity	Mettled road/pucca road connecting South Hatibandha from NH 31 with distance of 6 km	PWD Deptt.	2.	Fishery	1 Ha of pond to be done	Deptt. Of Fishery	3.	Drinking Water	At least 4 ring well	EPA APFBC/ NRDWP	4.	Sanitation	Providing HHL (House Hold Latrine)- Low cost ,septic and sanitary type.	Swach Bharart Mission/ PHE	5.	Bridge	Wooden bridge inside the village over Kalbandari river.	PWD Deptt.
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Livelihood opportunities	<p>Livelihood Opportunities were identified as follows:</p> <p>Agriculture &amp; Horticulture</p> <p>Livestock</p> <p>NTFP/MAP</p> <p>Skills Development</p> <p>Credit Facility</p> <p>Additional discussion about the above has been given below.</p>																								
Agriculture & Horticulture	<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.</p> <p>(b) Lack of irrigation facilities</p> <p>(c) Lack of agricultural infrastructure, modern tools and equipment’s viz, power</p>																								

	<p>tillers, tractors etc.</p> <p>(d) Lack of marketing institutions safeguarding farmers' interest</p> <p>(e) Bad road condition to reach the market</p> <p>The opportunities are:</p> <p>(a) Nearness to marketing hub.</p> <p>(b) Use of modern irrigation and machineries which directly lead to increase production with less cost</p> <p>(c) Smooth transportation facility will help the farmers to carry their products to the nearby markets.</p> <p>The suggested programmes are:</p> <ul style="list-style-type: none"> <li>• Tractor operation training</li> <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) Lack of monetary assistance to buy fodder</p> <p>(b) Insufficient knowledge about the proper rearing of live stock</p> <p>(c) No veterinary care clinic</p> <p>(d) Remoteness of the producers from the supplier market.</p> <p>The opportunities are:</p> <p>(a) Higher income from livestock rearing.</p> <p>(b) A huge demanded market for milk is available as Kokrajhar district head quarter and West Bengal state is too far from the JFMC.</p> <p>(d) Increases the life span</p> <p>(e) Encourage livestock rearing for earning purpose</p> <p>The suggested programme is:</p> <p>(a) Training on Livestock rearing</p>
<b>NWFP</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</p> <p>(b) No technical know-how</p> <p>(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,</p> <p>(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> <ul style="list-style-type: none"> <li>(a) Raw material are not available in the nearby areas</li> <li>(b) Lack of product diversification</li> <li>(c) No direct contact with the institutional buyers</li> <li>(c) Use of modern machinery and equipment</li> </ul> <p>The opportunities are:</p> <ul style="list-style-type: none"> <li>(a) Use of modern machinery and equipment</li> <li>(b) Training of the skill holder</li> <li>(c) Financial assistance from govt.</li> <li>(d) Providing good communication facility</li> </ul> <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> </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> <ul style="list-style-type: none"> <li>(a) Financial exclusion</li> <li>(b) Higher rate charged by the private money lender.</li> </ul> <p>The opportunities are:</p> <ul style="list-style-type: none"> <li>(a) setting up modern financial institution</li> <li>(b) Adequate awareness.</li> </ul> <p>The suggested programme is:</p> <ul style="list-style-type: none"> <li>(a) Setting up modern financial institution in the nearby areas.</li> </ul>
<b>Strategic Interventions</b>	<p>Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan:</p> <ul style="list-style-type: none"> <li><b>1 Agriculture &amp; Horticulture:</b> Tractor operation training, Agri-skill development programme ,Training on insecticides, pesticides, hybrid cultivation</li> <li><b>2.Livestock:</b> Piggery, Poultry</li> <li><b>3.NWFP :</b> Plantation of Food plants, Medicinal Plant (MAP)etc</li> <li><b>4. 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><b>5. Credit facility:</b> Setting up modern financial institution in the nearby areas</li> </ul>

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

- A) Livelihood assets
- B) Livelihood context
- C) Priority ranking on potential livelihood

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

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

### **NATURAL CAPITAL**

The major natural capital of South Hatibandha JFMC is Mahamaya reserve forest and a river namely Kalbhandari.

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

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

### **PHYSICAL CAPITAL**

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

The village has 21 numbers of pucca houses, 87 numbers of thatch houses and 2 numbers of IAY houses. Among the various sources of energy consumption such as Biomass, kerosene, electricity, LPG and candle, villagers depend on the firewood and kerosene for household and other uses. Although, some of the household have LPG, but reliability is very less. (refer to table 10,11)

There is only LP school present within the JFMC area. And one Middle school is very nearby just on the boundary of the JFMC. No other education institution is present. (refer to table 5)

In case of water sources, 12 HH have access to tube well, 2 HH have access to both ring well.

## SOCIAL CAPITAL

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

Only one NGO is in the village. The name of the NGO is Rhinos and the functions of the NGO is Social Development. However, the village has two churches where social meetings of the villages are held.

## HUMAN CAPITAL

74.01 per cent of total population of the JFMC are educated and 7.66 per cent of them have crossed upper primary level school education. (refer to table 11. I)

## FINANCIAL CAPITAL

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

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

## Livelihood Context :

Livelihood activities of the South Hatibandha JFMC are identifies on the basis of following criteria:

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

## 4. Livelihood Development Plan

<b>Income Generating Activities</b>	The main income generating activities as planned at the village are: <ol style="list-style-type: none"><li>1. Farming</li><li>2. Livestock rearing</li><li>3. Horticulture</li><li>4. Handloom/weaving</li><li>5. Cane and Bamboo</li><li>6. Tailoring</li></ol>
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<b>SHG Activities</b>	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.
<b>Exposure Trips</b>	The exposure trip may be planned.
<b>Summary of Action Plan</b>	As attached in next page.
<b>Convergence</b>	<p>The planned initiatives may be converged with the following schemes of the Government of India:</p> <ul style="list-style-type: none"> <li>(a) National Rural Employment Guarantee Scheme - for rural employment</li> <li>(b) Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied development</li> <li>(c) Rashtriya Krishi Sinchay Yojana (RKSJ) - for irrigation, including watershed development</li> <li>(d) National Rural Livelihoods Mission</li> <li>(e) Skills Development schemes</li> <li>(f) Other schemes for rural development and livelihoods as found appropriate.</li> </ul> <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>

## 5. Forest Development Plan of South Hatibandha 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 South Hatibandha 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 South Hatibandha 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 South Hatibandha JFMC have been summarized below

**Table-1: Conditions of the Forests of South Hatibandha 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	0.5 km	Degraded Area: 30 Ha	3-6 m
<b>(B) Other Planted Area</b>				
Location: Nil Type of Forest: Nil VF / Other _____			Good Area: - Nil Degraded Area: Nil	
<b>TOTAL</b>	30 ha		Degraded Area: 30 Ha	

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

It is seen that the South Hatibandha 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 South Hatibandha 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	Less fertile	Nil
Soil Erosion Status	low	Nil
Presence of:		
(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 South Hatibandha JFMC; the salient points of the forest soil type are summarized below:

- (a) Loam soil
- (b) Less fertile



### 1.3. Existing Composition of Flora

In the forests of the South Hatibandha 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 South Hatibandha JFMC**

Parameter	Local Name(s)	Biological Name(s)
Major Forest Species	Khair	Senegalia Catechu
	Arjun	Terminalia arjuna
	Bhelkor	Trewia nudiflora
	Ghora neem	Melia azedarach
	Diesel	<i>Copaifera langsdorffii</i>
	Teak	<i>Tectona grandis Linn</i>
	Gamari	<i>Gmelina Arborea</i>
Associates		
Shrubs	Dhekia	Ferns
	Jharmoni bann	Atropa bellodonna
Medicinal Plants	Arjun,	Terminalia arjuna
	Hilikha	Terminalia Chebula
	Neem	Azadirachta indica
	Amla	Phyllanthus emblica
Produces		
Others, if any		

**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 South Hatibandha JFMC.

### 2.1. Past Protection Measures of the JFMC

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

- (a) Number of households involved: 46
- (b) Number of people involved:80
- (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 South Hatibandha JFMC**

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	Once in a week	65-70 kg		JFMC Forest
Timber for House	Once in a year	2-3 qntl/yr		JFMC Forest
Small timber for Implements	Nil			
Pole / Bamboo	Once in a month	2-3 bamboo / per month		JFMC Forest
Fodder from Forest	Frequent	5-6 kg per day		JFMC Forest
NTFP	Frequent	2-3 kg per day		JFMC Forest
Other _____				

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

There are 110 households in the South Hatibandha JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the South Hatibandha village for forest produce for own use is as follows:

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	<b>161000</b>	<b>Through out the year</b>
Timber for House	<b>110400</b>	<b>Dec - Jan</b>
Small Timber for Implements	-	
Pole / Bamboo	<b>1656 bamboo</b>	
Fodder from Forest	-	
NTFP	<b>NIL</b>	
Other _____	<b>NIL</b>	

**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 South Hatibandha JFMC is given in the following table.

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

Name of Forest Produce	Collection for Marketing			Location of Collection
	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	
Firewood	Autumn/winter	70	100-150 kg annually	Plantation
Timber for House	Autumn/winter	-	-	-
Small timber for Implements	Autumn/winter	-	-	-
Bamboo	Throughout the Year	75	10-15 pieces annually	Plantation
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 [South Hatibandha 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
Bamboo	10-15 per household	Sold in the Local Market	500-1000
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

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

The total requirements of forest produce by the community members of the East Mahendrapur 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 South Hatibandha 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	140000
Timber for House	-	-	-

Name of Forest Produce	Community Requirement (Kg per annum) From Table-4(B)	Surplus Marketed (Kg) From Table-5(B)	Total Requirements (Kg)
Small timber for Implements	-	-	-
Bamboo	1000 pieces	150 pieces	1150 pieces
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 **South Hatibandha** JFMC have been summarized below.

**Table-7: Protection Problems of the South Hatibandha JFMC**

Type of Problem	Relevant (Yes / No)		Significant (Yes / No)
Grazing - Local Animals	Yes		Yes
Grazing - Animals from Other Area	Yes		Yes
Illicit Felling of Timber	No		No
Smuggling of Timber	Yes		Yes
Accidental Fires	Yes		Yes
Encroachment of Forest Lands	Yes		Yes
Others	No		No

Source: Proforma-3, Table-3.5 / Discussions with Forest Department personnel & Community members  
Thus, it is seen that the significant forest protection issues facing the above JFMC are:

- (a) Grazing of Local Animals
- (b) Illegal Deforestation

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

In the **South Hatibandha** JFMC, the reasons for degradation of forest are as follows:

- (a) Illicit felling of timber
- (b) Encroachment of Forest lands.
- (c) Grazing – Local animals.

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

**Table-8: Protection Plan of the South Hatibandha 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]
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 **South Hatibandha 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 **South Hatibandha JFMC** are given hereunder.

**Table-9: Types of Operations Proposed in the South Hatibandha 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	NTPF 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 **South Hatibandha 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 South Hatibandha JFMC**

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
Assisted Natural Regeneration (with plantation in gap)			Sal, Teak, Gamari,	4m x 4m
Block Plantation	200	High	Sal, Teak, Gamari, Sissoo, Ghoraneem,	3m x 3m; 2m x 2m

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
			Khayer	
Sowing of Neem, Amla, 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 - Annual Targets

The annual targets in the above connection are given below for a ten year period.

Name of Plantation	: Block Plantation of Sal 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 (11000 approx. annually)
Number Blocks	: 10 Numbers(10 ha each)
Species	: Saal; Associates-Gamari, Sissoo, Titasopa, etc.
Rates	: As Approved by APFBCS(to be increased by 20% every two years)

Action Plan for Creation of Plantation	
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

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

**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

Action Plan for Creation of Plantation	
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
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
2022-13*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year
2024-25*	7th Weeding
2025-26*	8th Weeding

\* 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, 3 wired barb fencing
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
2022-13*	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 **South Hatibandha 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 **South Hatibandha JFMC**. This includes the Departmental Nursery involved in JFMC works.

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

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

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

(A) Timber Species Sal, Teak, Associates

**Table-12 (A): Maintenance Plan of Plantation in the South Hatibandha 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 South Hatibandha 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 South Hatibandha 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 South Hatibandha 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 **South Hatibandha JFMC** are given below.

**Table-13): Miscellaneous Operations in the South Hatibandha 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 **South Hatibandha 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 **South Hatibandha 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 South Hatibandha 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 **South Hatibandha JFMC**.

**Table-15: Sharing Mechanism for South Hatibandha JFMC**

Method	Items
To be shared equally	NTFP

To be collected by the members	Firewood, (Need regulation)
Other Methods	Processing of NTFPs

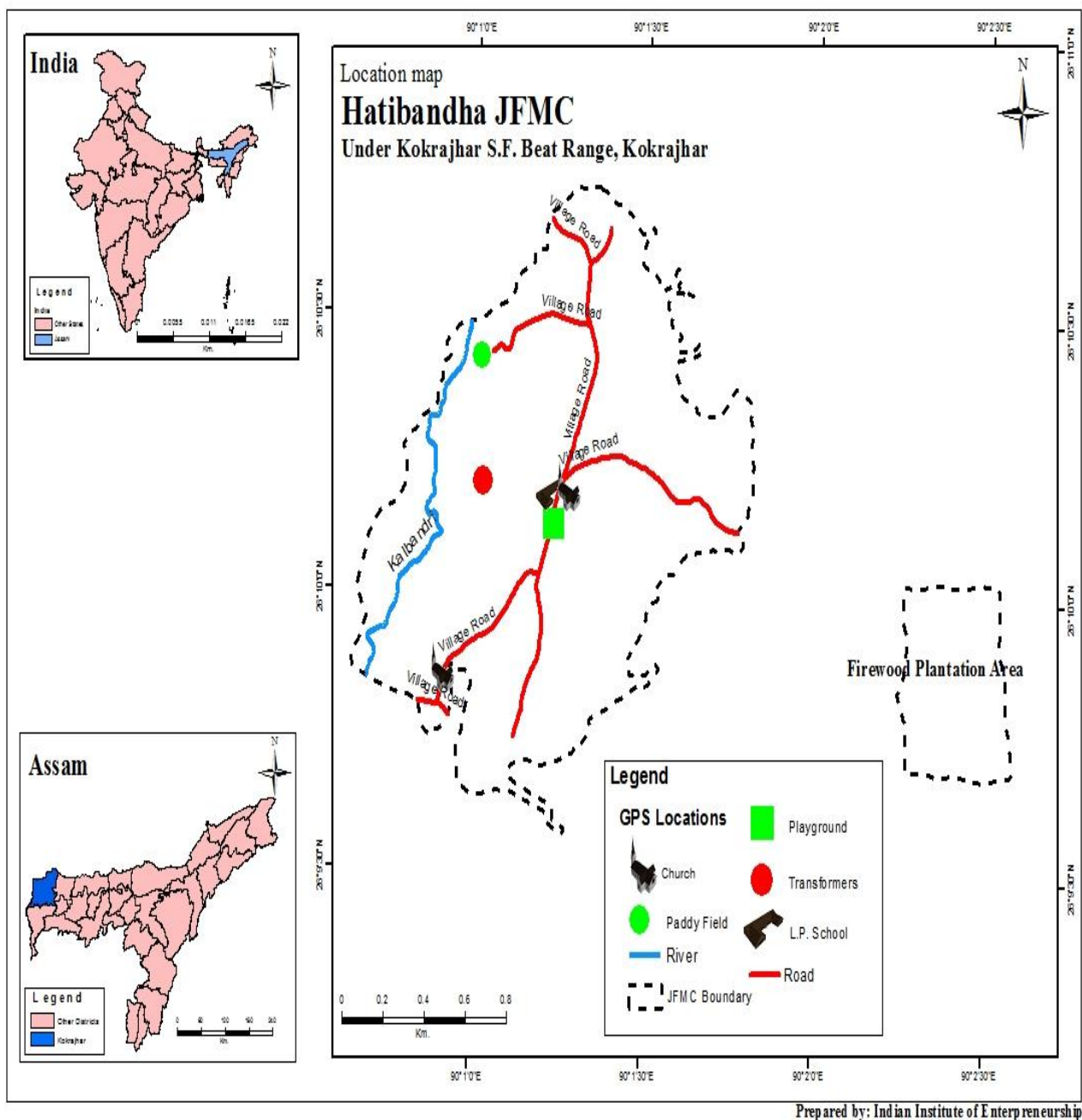
Source: Proforma-3, Table-3.15 / Discussions with Forest Department personnel & Community members

## 6. List of Annexures

Appendix No	Heading
1	<b>Maps</b> Village Map Village Social Map Village Resources Map
2	<b>Land Use Map of Village (GIS)</b>
3	<b>PRA Exercise</b> Social Mapping Wealth Ranking Time Line review Seasonality of Livelihoods Venn Diagram Chapatti Diagram Priority ranking and EPA
4	<b>Photographs</b>
5	<b>List of JFMC Members</b>
6	<b>Filled Up Tables (Proforma-1 to Proforma-4)</b> Table Nos. 1-37

## Annexure 1

### 1. Village Map:

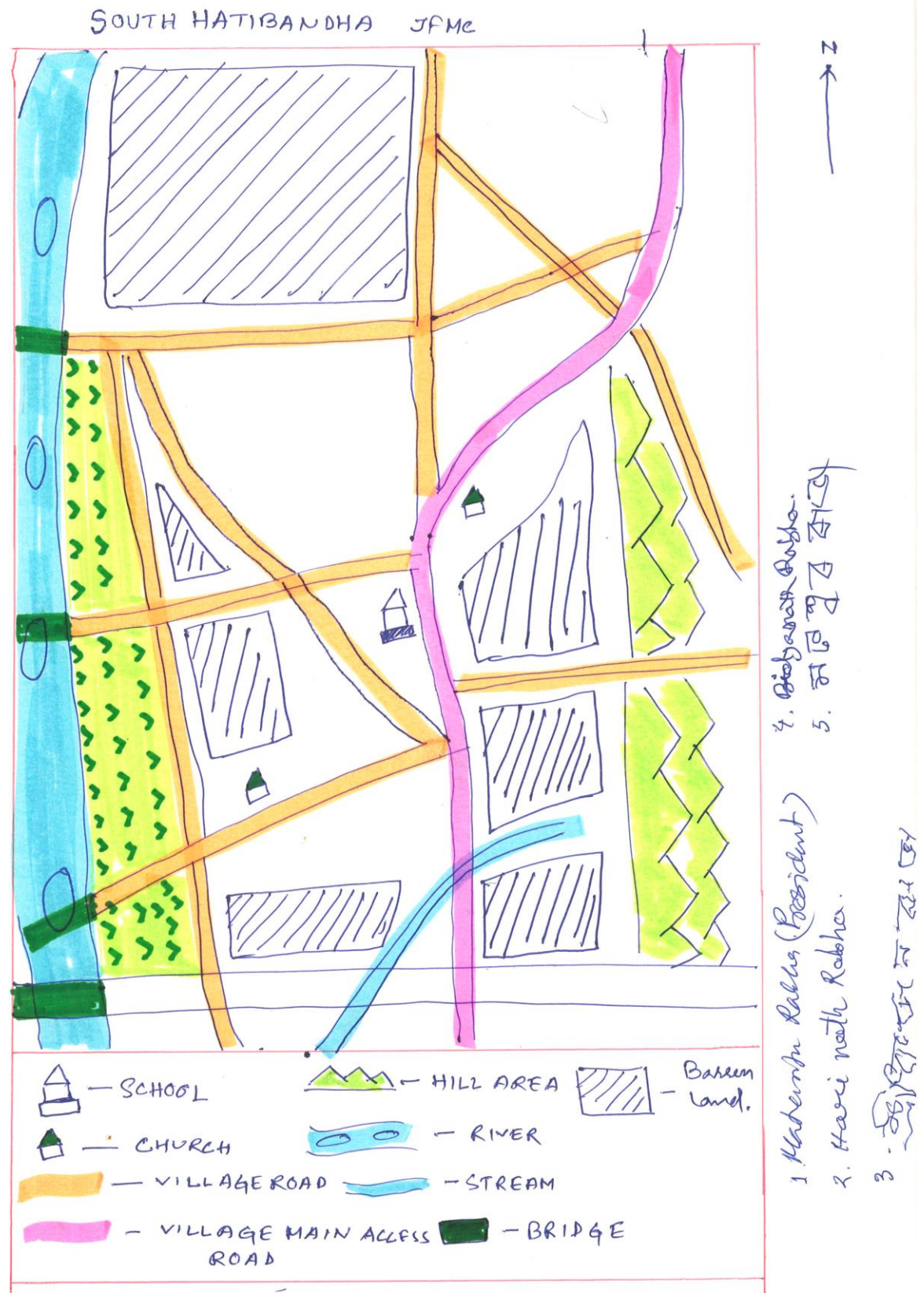


## 2. Social map



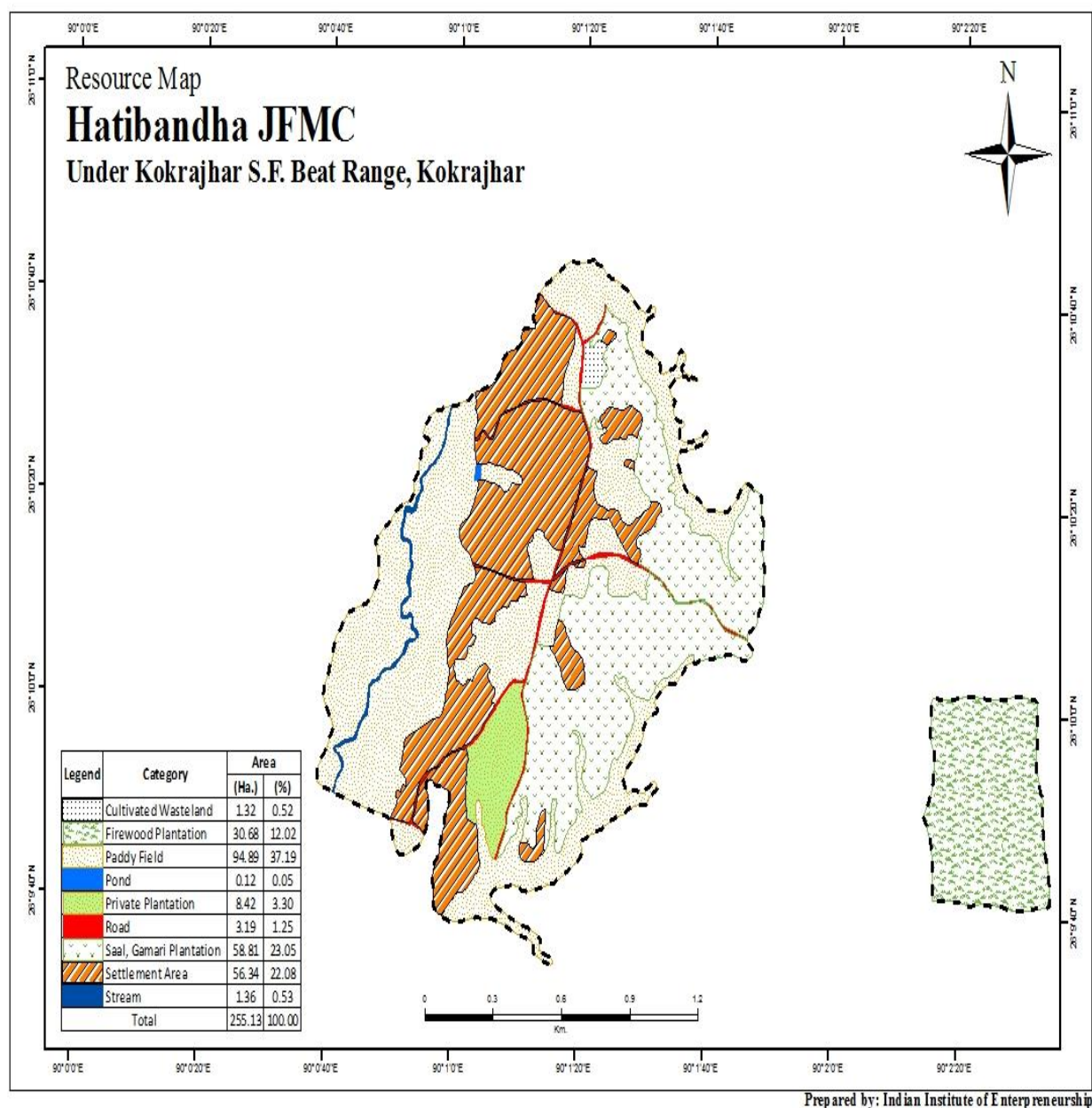


### 3. Resource Map:



## Annexure 2

### Land Use map of GIS



## Annexure 3

### PRA ACTIVITY

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

Numbers of participants :	60
Time :	11.30 am, 13 <sup>th</sup> June 2016
Venue :	Village church, South Hatibandha

**Table – 3.1 Brief about the villages under SOUTH HATIBANDHA JFMC**

Sl. No.	Name of the Village	No. of households	Population		
			Total	Male	Female
1	South Hatibandha	110	431	231	200

Source: Field Survey

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

- Social Mapping
- Wealth Ranking
- Time Line Review
- Seasonality Analysis
- Chapatti diagram

### 3.1 Social Mapping:

Social mapping is used to visualise the socio-economic aspects of the South Hatibandha 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**

Social information	Village →	South Hatibandha
	Total population	431
	Male	231
	female	200
	Total households	110
	Numbers of Pucca Houses	21
	No of thatch house	87
	No of IAY house	2
Landmarks	Bridges	2
	River	1
	Church	2
	PHE	1
	Community hall	1
	Transformer	2
	Ring well	4
	Canal	2
	Play Ground cum Grazing filed	1

#### Findings of social map:

- The participants of social mapping have identified all 110 households out of which 87 households are thatch house or kuccha house. There are 21 Pukka houses and only 2 IAY household though the entire village. This signifies that the IAY scheme of Government has not achieved considerable coverage of poor people residing in rural area yet.
- Other than the class based division of the households, important places like church, school, playground, stream, well, hand pump, bridge etc. are mapped.
- Main sources of water for the villagers are the community hand pump and the streams and the river which is used by villagers for their day to day use. But the water is available only for 4-6 month (during monsoon season).
- There is a Primary School inside the village. There is one Anganawadi centre in the village but the interesting fact is that there is no infrastructure of the centre.
- All of the people belong to the Rabha community and are of schedule tribe caste. The religion of all the villagers is Christian.

#### Learnings:

- The main road accessible by the village is National Highway (NH 31) and is 8 km away from the village. And the roads connecting the village with the national highway are kutcha motorable.
- Electricity connection is there in about 95 per cent households of the South Hatibandha village. But daily availability of the electricity is very less (less than 5 hours/a day).



- There is a lack of LPG gas connections in households. 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 centre along with post office is located in Debitola which is 2KM away from the JFMC. As public transport is not available, and the villagers have to walk and use bicycles to avail the basic facilities.
- There is a lack of community hall in the JFMC where various meetings are held. Major meeting are – Gram panchayat meeting, village head meetings, forest department meetings and other political meetings.

### 3.2 Wealth Ranking:

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

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

- Land holding
- Occupation

As such about 22.73 per cent people are poor, about 50 per cent are belong to middle class and about 27.27 per cent are categorised to be rich. Poor people are mainly irregular wage earners, sometimes they lease (adhi lua) others land. They also have good amount of agricultural land.

**Figure 3.1: Wealth Ranking**



### 3.3 Timeline Review

**Table 3.3: Timeline review**

Year	Event	Type
1950	Earthquake	Environmental
1960	First matric qualified in the village	Educational
1963	Cyclone	Environmental
1983	NGO (Rhino) was formed	Social
1983	Church was established in the village	Social
1988	Severe Flood in the village.	Environmental
1993	LP school was established	Educational
1995	Plantation of Sal, Bamboo was done	Environment
2010	JFMC was registered	Social
2013	First outward migration from, the village to Kerela in search of work.	Economic.

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

### 3.4 Seasonal Mapping of livelihood activities:

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

In the present JFMC, Seasonal mapping was done in such a process to cover mainly seasonal variation of crops, where we have considered agricultural crops and the timing of three activities viz. showing, cropping and harvesting details throughout the year. From the seasonal mapping, it has been noticed that the main crops grown in the village are rubber, rice, yam, tapioca. Laos etc. The focus Group Discussion (FGD) conducted revealed that other major livelihood options available in the South Hatibandha JFMC are Livestock rearing (Piggery, poultry), shop-keeping, weaving, daily wage laborers, mason, electrician, tailoring and carpentry which are not seasonal in nature but is showed in the seasonal mapping. It has also been expressed that few of them also go to cities outside Northeast as temporary workers and get engaged in factories.

**Figure 3.2: Seasonal Map of South Hatibandha JFMC**



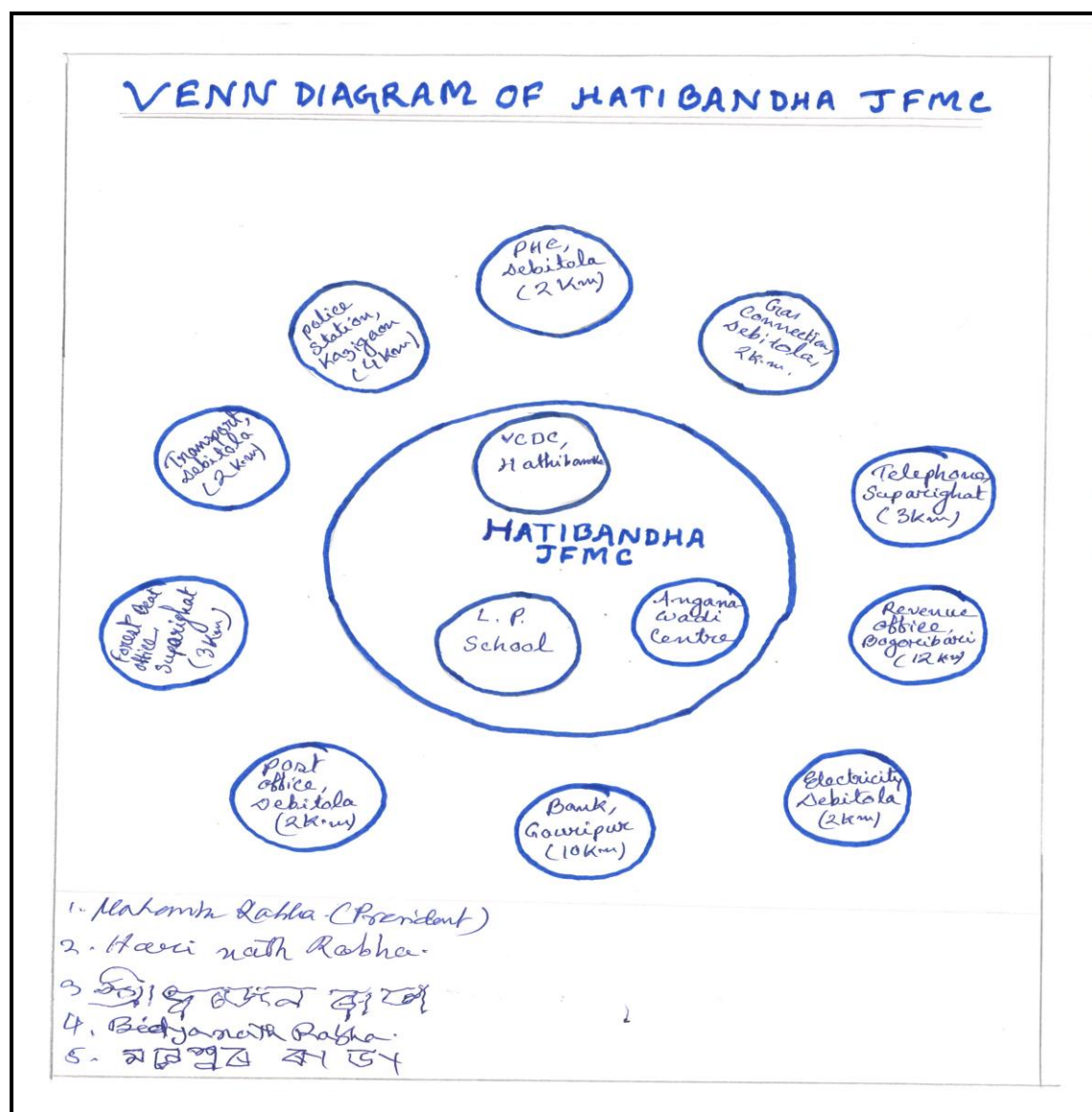
Table 3.4 Seasonal Pattern of Livelihood Activities

Categories	Time of Activity			
		Sowing	Harvesting	Plucking
Farming	Sali	June- July	August- October	November-December
	Yam	February- March	April- August	September-October
	Mustard	November-December	January	March-April
	Rubber	(April-December )Collection of latex		
	Betel-Nuts	June-December		
	Tapioca	Throughout the year		
	Weaving			
Non-Farming	Livestock Rearing			
	Daily Wage Earning			
	Shop-keeper			
	Bamboo-craft			
	Electrician			
	Tailoring			
Service	Govt Job/Retired/ Company Insurance Agent	Throughout the year		

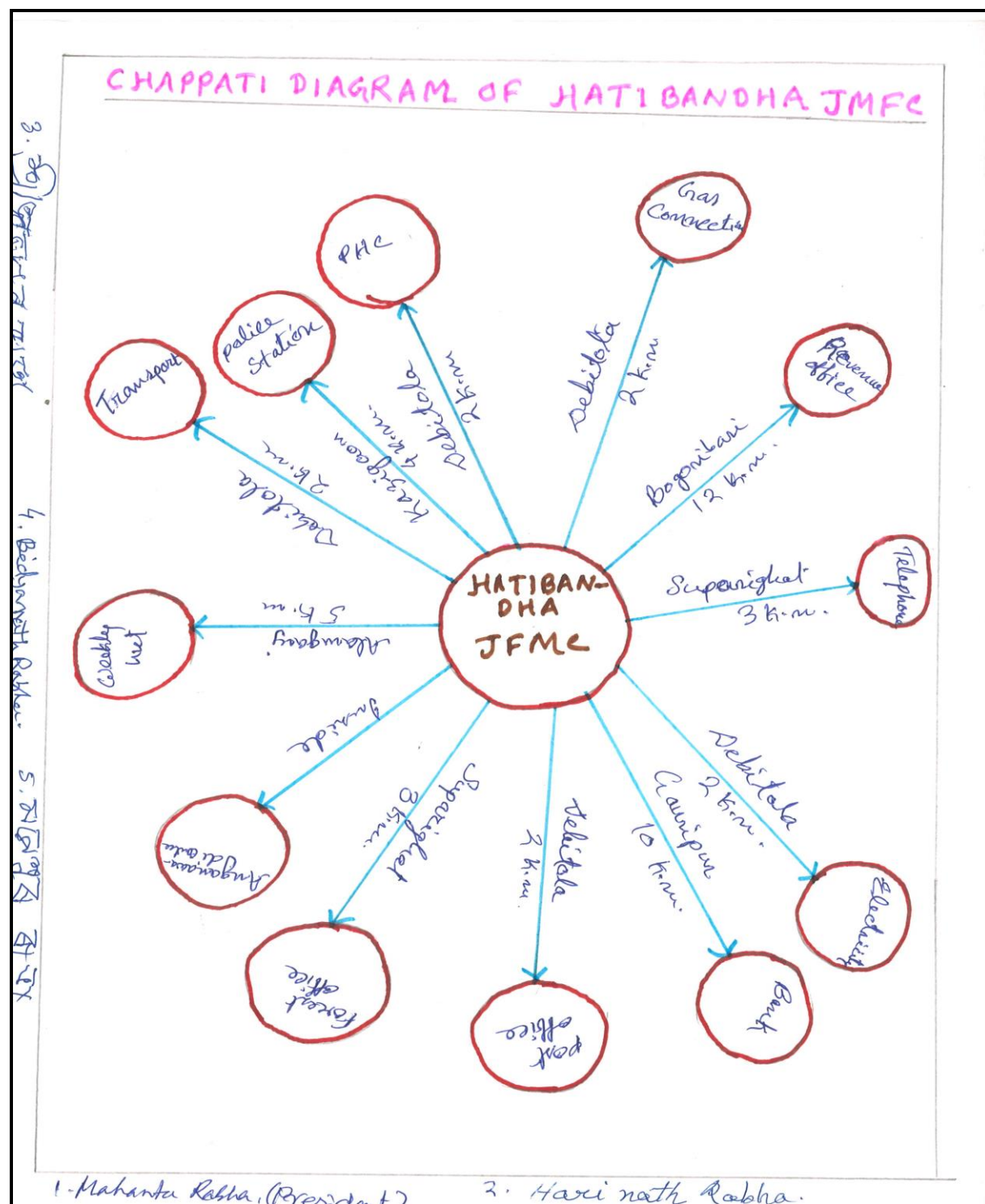
## Learnings:

- All horticulture outputs of the village includes mango, jack-fruits, etc are abundant in number, though these are not marketed by the households as there is proper market for selling these outputs. Additional benefits may be earned by the households if these outputs can be value added in form of processing and preservation. By selling those households can enhance their monthly income, which will in turn benefit them for covering up their standard of living.
- The numbers of available trained or skilled resources have been found to be very less in the JFMC. A very few of the JFMC dwellers are skilled in weaving and take to part-time weaving for their own consumption. Villagers know the production and process of eri silk production, but due to high expense, and low demand (according to them) they gradually stopped the keeping of eri silk worm and production of eri thread. Some have keep eri worm only for consumption purpose. Many of the rubber cultivators have certificate training in the rubber productions. And some of the youth got training in electricity works.

## 3.5 Venn Diagram



### 3.6 Chapatti Diagram





## Priority Ranking- LIVELIHOOD and EPA

SOUTH

**PRIORITY RANKING: EPA AND LIVELIHOOD FOR A HATIBANDHA JPMC**

**Livelihood Activities:**

Livelihood Activities	Horti-Culture (A)	Livestock (B)	Seed-Culture (C)	Handloom (D)	Dairying (E)	Tailoring (F)	Masonry (G)	Carpentry (H)	Cane & Bamboo (I)	Marks	Rank
Grain Farming (A)	X	B	C	A	A	A	A	A	A	6	1
Livestock (B)	X	X	B	B	E	B	G	H	B	5	3
Handloom (C)	X	X	X	D	C	C	C	C	C	6	1
Horticulture (D)	X	X	X	X	E	D	G	D	D	4	5
Dairying (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
Masonry (G)	X	X	X	X	X	X	X	G	I	4	5
Carpentry (H)	X	X	X	X	X	X	X	X	H	3	7
Cane & Bamboo (I)	X	X	X	X	X	X	X	X	X	2	8

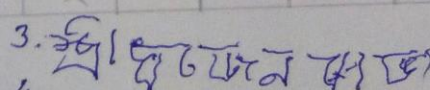
**EPA Activity:**

EPA Activity	Road (A)	Bridge (B)	Sanitation (C)	Fishery (D)	Tube well (E)	Community Health Centre (F)	JPMC Office (G)	Market Shed (H)	Community Hall (I)	Marks	Rank
Road (A)	X	A	A	A	A	A	A	A	A	8	1
Bridge (B)	X	X	C	D	E	B	B	B	B	4	5
Sanitation (C)	X	X	X	D	E	C	C	C	C	5	4
Fishery (D)	X	X	X	X	D	D	D	D	D	7	2
Tube well (E)	X	X	X	X	X	E	E	E	E	6	3
Community Health Centre (F)	X	X	X	X	X	X	G	H	F	1	8
JPMC Office (G)	X	X	X	X	X	X	X	X	X	3	6
Market Shed (H)	X	X	X	X	X	X	X	X	X	2	7
Community Hall (I)	X	X	X	X	X	X	X	X	X	0	9

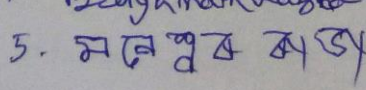
**Signature:**

1. Mahesh Kumar (President)

2. Hareesh Nath Robha.

3. 

4. Bidyamath Robha.

5. 

PHOTOGRAPHS



*PRA ACTIVITY*



*COMPLETION OF SOCIAL MAPPING*





*WATCHING AWARENESS PROGRAMME*



*TRANSIT WALK IN THE JFMC AREA*





*HANDLOOM PRODUCT OF THE VILLAGE*

## Annexure 5

### LIST OF JFMC MEMBERS

#### RECORD 7 : MEMBERSHIP REGISTER

Hatibandha  
 Name of JFMC Division Range - Khosaghat  
 Suparighat  
 Beat Suparighat JFMC Code

Sr. No.	Name	Father's / Husband's name	Age	Male / Female	Education	SC/ST / BC/OBC
1	Mahanta Rakha		42	M	H.S.	ST
2	Amid Rakha		41	M	IX	ST
3	Shimshi Rakha		38	M	VIII	ST
4	Sonyoy Rakha		45	M	IX	ST
5	Badra Rakha		48			

6. Rabin Rakha 35
7. Joymati Rakha 50
8. Archana Rakha 28 — F
9. Riobala Prabha 27 — F
10. Rahul Rakha 35
11. Jyoti Rakha 40

## Annexure 6 (Record I)

**Table 1: Basic data of the village:**

*Table 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
	South Hatibandha	2010	11	Mahanta Rabha	Naresh Basumatary			Yes		

**Table 2: Village wise population data:**

*Table -2: Demographic status of the project villages*

Sl. No.	Name of village	Households (No.)	ST			Sex ratio (per 1000 male )	Avg. HH size
			Total	Male	Female		
1	South Hatibandha	110	431	231	200	866	3.91

Source: - Field survey report.

**Table 3: Village wise farmer category on the basis of land holding :**

*Table3 Village wise farmer category on the basis of land holding*

Sl no	Name of the village	Type of famer according to land holding				
		Large farmer >10 ha.	small farmer 2-10 ha.	Marginal farmer (household) <2ha.	Land less (household)	total

<b>1</b>	South Hatibandha	NIL	30	55	25	110
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**Table 4: Cattle Population:**

*Table 4 : Cattle Population of the JFMC*

Sl no	Name of the village	village wise no of cattles or type of animal							
		cows	buffaloes	goat	Sheep	bulls	Hen/Cocks	pig	total
<b>1</b>	South Hatibandha	332	NIL	23	NIL	5	238	62	660

**Table 5: Village wise Infrastructure:**

Infrastructure	Location	Distance from Village (in km)
<b>Main Road</b>	NH 31	5 km
<b>Electricity</b>	Debitola (outside village)	2 km
<b>Cooking Gas</b>	Gauripur (outside village)	20 km
<b>Public Transport</b>	Not available	---
<b>Primary Health Centre</b>	Debitola(outside village)	2 km
<b>School</b>	1 Lower Primary School	300 m
	1 Middle School	2 km
	1 High School	2 km
	2 HS School	5 km
<b>College</b>	2 Colleges	20 km
<b>Post Office</b>	Debitola	2 km
<b>Bank</b>	Gauripur	10 km
<b>Telephone</b>	Not available	---
<b>Drinking Water</b>	Piped supply not available	---
<b>Anganwadi Centre</b>	South Hatibandha	---
<b>VCDC</b>	South South Hatibandha	Inside
<b>Revenue Office</b>	Bogribari	12 km
<b>Police Station</b>	Kazigaon	4 km
<b>Forest Beat Office</b>	Suparighat	3 km

<b>District Head Quarter</b>	Kokrajhar	27 km
------------------------------	-----------	-------

Source: field survey

**Table 6: Agricultural crops**

*Table 6 Agriculture Crops*

	Rain Fed		Irrigation	
	Name of the crop	Area (in ha.)	Name of the crop	Area (in hac)
<b>Kharif</b>	<b>Sali rice</b>	<b>32.11</b>	<b>NA</b>	
<b>Rabi</b>	<b>Mustard</b>	<b>42</b>	<b>NA</b>	
<b>Rubber</b>	<b>Rubber</b>	<b>40.62</b>	<b>NA</b>	
<b>Others</b>	<b>Vegetable, Fruits</b>	<b>6.9</b>	<b>NA</b>	

**Table 7: Crop production profile of SOUTH HATIBANDHA JFMC:**

*Table 7 Crop production profile of SOUTH HATIBANDHA JFMC*

Type of crop	Total Production (approx) in quintals	No of household growing	Average production (quintal/ hac) approx	Area under crop (hac) approx
<b>Paddy</b>	560	110	21	26.67
<b>Oil seeds</b>	20	54	1.5	13.33
<b>Vegetable</b>	15	80	3	5
<b>Fruits</b>	.66	40	1	.66

**Table 8: Fodder Availability (animal)***Table 8 fodder availability of the JFMC*

	1 – 3 months	3 – 6 months	> 6 months
<b>Crop residue</b>	X	✓	X
<b>Trees fodder</b>	X	✓	X
<b>Grasses</b>	X	X	✓
<b>Green fodder</b>	X	✓	✓
<b>Grazing in forest</b>	X	✓	X

**Table 9: Location of market from the village**

Table 9: Location of the markets from the village

<b>For Purchase</b>	<b>Location</b>	<b>Distance from village if in other village (in km)</b>
<b>Grocery shop</b>	Debitola	2
<b>Weekly Market</b>	Debitola	2
	Alamganj	5
<b>Major Market</b>	Alamganj	5
<b>Forest Corporation Sale Depo</b>	NA	
<b>Tendu Patta PHAD</b>	NA	
<b>Fish Market</b>	Debitola	2
<b>Medicinal Plant collection Center</b>	NA	

**Table 10: Water Resources Facility:***Table 10: showing the water resource facility available in the village*

<b>Water source</b>	<b>number</b>	<b>Availability of water</b>	<b>uses</b>
<b>Check dam</b>	1	Seasonal	Irrigation, livestock rearing
<b>Stream</b>	1	Seasonal	Irrigation, livestock rearing
<b>Tube well</b>	12	Perennial	Domestic use
<b>River</b>	1	Seasonal	All type of use
<b>Community ring well</b>	2	Perennial	Domestic use

**Table 11: Energy consumption:**

Table- 3.11: Energy Consumption

Type of Fuel	Number of household depending	Number of months dependent	Sources (local, village, forest, other sources)	Major/ Secondary
Fuel wood	98	12	Forest	Major
Kerosene	93	4	Authorized Agency	Secondary
Gobar/Bio gas	NA			
LPG	7	3	Authorized Agency	Secondary
Electricity	93	12	Village	Major

**Additional tables:****(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	Hatibandah	110	431	319	74.01

**Source: - Field survey report.**

Sl no	Categories	Percentage
1	Illiterate	25.98
2	Up to LP	74.01
3	Up to college	7.66

**(ii) Income Distribution**

Categories	Percentage of households in each category
15000 and below	52.17391

1600 to 30000	39.13043
31000 and above	15.7

## 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 14: NWFP****Table 14 NWFP**

Constraints	Reasons	Opportunities	Programme
Less collection	<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>
Unsustainable extraction	<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>
Low rates	<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>
Value addition	<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*

Constraints	Reasons	Opportunities	Programme
<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*


Constraints	Reason	Opportunities	Programme
<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

<b>Trade:</b>	<b>MIXED LIVESTOCK</b>	<b>SOUTH HATIBANDHA MIXED LIVESTOCK</b>						
<b>Location:</b>	<b>SOUTH HATIBANDHA</b>							
<b>Start Date</b>	<b>26-Aug-16</b>							
<b>End Date</b>	<b>4-Sep-16</b>							
<b>Master Trainer</b>	<b>DR. BHASKAR JYOTI DAS</b>							
<b>SL.NO</b>	<b>Name of Participants</b>	<b>Guardian Name</b>	<b>Address</b>	<b>Qualification</b>	<b>Age</b>	<b>Gender</b>	<b>Category</b>	<b>Contact No</b>
1	SARALA RABHA	RAHINDRA RABHA	SOUTH HATIBANDHA	NIL	42	F	ST	NP
2	PRASANYA RABHA	JAYTAN RABHA	SOUTH HATIBANDHA	CLASS X	32	M	ST	NP
3	JISHAYA RABHA	RISHNU RABHA	SOUTH HATIBANDHA	CLASS X	27	M	ST	NP
4	NIRABATI RABHA	SUBIDAS RABHA	SOUTH HATIBANDHA	CLASS IX	42	F	ST	NP
5	NAMAL RABHA	LT. SURENDRA RABHA	SOUTH HATIBANDHA	CLASS X	33	M	ST	NP
6	SUNITA RABHA	SUDRA RABHA	SOUTH HATIBANDHA	CLASS IV	35	F	ST	NP
7	MANJULI RABHA	ANATA RABHA	SOUTH HATIBANDHA	NP	38	F	ST	NP
8	ANUPAMA RABHA	PUKAN RABHA	SOUTH HATIBANDHA	HSLC PASS	24	F	ST	NP
9	SEBIKA RABHA	MRITEN RABHA	SOUTH HATIBANDHA	HSLC PASS	38	F	ST	NP
10	CHILOMATI RABHA	PRADESH RABHA	SOUTH HATIBANDHA	CLASS VI	36	F	ST	NP
11	NERO BALA RABHA	NP	SOUTH HATIBANDHA	CLASS VIII	42	F	ST	NP
12	RABINA RABHA	NIKUNJA RABHA	SOUTH HATIBANDHA	HS PASS	29	F	ST	NP
13	JIBITA RABHA	SWARANJIT RABHA	SOUTH HATIBANDHA	HS PASS	24	F	ST	NP
14	SULEKHA RABHA	SUDHIR RABHA	SOUTH HATIBANDHA	CLASS IV	38	F	ST	NP
15	PRANITA RABHA	BLESSING RABHA	SOUTH HATIBANDHA	CLASS IV	36	F	ST	NP
16	PELANI RABHA	HAPISON RABHA	SOUTH HATIBANDHA	CLASS V	36	F	ST	NP
17	SANAKI RABHA	LIPENDRA RABHA	SOUTH HATIBANDHA	NP	42	F	ST	NP
18	LILABATI RABHA	MANESWAR RABHA	SOUTH HATIBANDHA	CLASS III	38	F	ST	NP
19	RIU RABHA	SUNIL RABHA	SOUTH HATIBANDHA	CLASS X	34	F	ST	NP
20	JARIPA RABHA	KARSEN RABHA	SOUTH HATIBANDHA	CLASS X	36	F	ST	NP
21	ARCHNA RABHA	CHIMAS RABHA	SOUTH HATIBANDHA	CLASS X	33	F	ST	NP

  
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 Hatibanda J.F.M.C.  
 Date.....

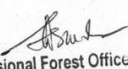
22	SAPILA RABHA	DARMENDRA RABHA	SOUTH HATIBANDHA	CLASS X	28	F	ST	NP
23	BHABANI RABHYA	NIRMAL RABHA	SOUTH HATIBANDHA	NP	28	F	ST	NP
24	PHULESWARI RABHA	RABISWAR RABHA	SOUTH HATIBANDHA	NP	43	F	ST	NP
25	REPALI RABHA	BARTAKUMAR RABHA	SOUTH HATIBANDHA	NP	37	F	ST	NP
26	JARANI RABHA	SATYENDRA RABHA	SOUTH HATIBANDHA	NP	48	F	ST	NP
27	RUMA RABHA	SANJAY RABHA	SOUTH HATIBANDHA	CLASS IX	32	F	ST	NP
28	SARIPA RABHA	LT. DUPENDRA RABHA	SOUTH HATIBANDHA	III	36	F	ST	NP
29	SANDYA RABHA	DAJENDRA RABHA	SOUTH HATIBANDHA	CLASS III	38	F	ST	NP
30	RANATI RABHA	TAY NATH RABHA	SOUTH HATIBANDHA	CLASS X	45	F	ST	NP
31	TEKASWARI RABHA	NALENDRA RABHA	SOUTH HATIBANDHA	NP	42	F	ST	NP
32	BISWABATI RABHA	NILU RABHA	SOUTH HATIBANDHA	NP	41	F	ST	NP
33	SUMULA RABHA	AMRIT RABHA	SOUTH HATIBANDHA	NP	32	F	ST	NP
34	NIRUPA RABHA	HARINATH RABHA	SOUTH HATIBANDHA	CLASS IX	33	F	ST	NP
35	KANAK LATA RABHA	NITAI RABHA	SOUTH HATIBANDHA	NP	35	F	ST	NP
36	SARALA RABHA	BIDYANATH RABHA	SOUTH HATIBANDHA	NP	37	F	ST	NP
37	CHEDI BALA RABHA	APRIN RABHA	SOUTH HATIBANDHA	CLASS IV	42	F	ST	NP
38	KUNJABATI RABHA	KANURAM RABHA	SOUTH HATIBANDHA	NP	39	F	ST	NP
39	SAHENI RABHA	KANINDRA RABHA	SOUTH HATIBANDHA	NP	44	F	ST	NP

13	JIBITA RABHA	SWAGANIT RABHA	SOUTH HATIBANDHA	NP	24	F	ST	NP
14	SULEKHA RABHA	SUJHIR RABHA	SOUTH HATIBANDHA	CLASS IV	38	F	ST	NP
15	PRANITA RABHA	BLESSING RABHA	SOUTH HATIBANDHA	CLASS IV	36	F	ST	NP
16	PELANI RABHA	HARISON RABHA	SOUTH HATIBANDHA	CLASS V	40	F	ST	NP
17	SANAKI RABHA	LIPENDRA RABHA	SOUTH HATIBANDHA	NP	42	F	ST	NP
18	LILABATI	MANISWAR	SOUTH HATIBANDHA	CLASS	38	F	ST	NP

  
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 Date.....

## 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	South Hatibandha	Apparel and Made-ups Making	26-Oct-16	24-Nov-16	Pooli Barman, Dimpi S. Barooah	ROMIO RABHA	RONIM RABHA	HSLC	21	M	ST
2	Kokrajhar SF	South Hatibandha	Apparel and Made-ups Making	26-Oct-16	24-Nov-16	Pooli Barman, Dimpi S. Barooah	MARADHANA RABHA	LT. NIJARAM RABHA	HS	20	M	ST
3	Kokrajhar SF	South Hatibandha	Apparel and Made-ups Making	26-Oct-16	24-Nov-16	Pooli Barman, Dimpi S. Barooah	RAHUL RABHA	LT. SANARAM RABHA	VI	30	M	ST
4	Kokrajhar SF	South Hatibandha	Apparel and Made-ups Making	26-Oct-16	24-Nov-16	Pooli Barman, Dimpi S. Barooah	JHISKRIYA RABHA	TRIPHAL RABHA	X	29	M	ST

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