



## **EAST MAHENDRAPUR JOINT FOREST MANAGEMENT**

### **COMMITTEE**

**SOCIAL FORESTRY DIVISION, KOKRAJHAR**

**BODOLAND TERRITORIAL COUNCIL FOREST CIRCLE**

## **MICRO-PLAN**

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

**Prepared by EAST MAHENDRAPUR 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

**EAST MAHENDRAPUR JOINT FOREST MANAGEMENT COMMITTEE**  
**Kokrajhar Forest Division, Bodoland Territorial Council Forest Circle**

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

[Table of Contents](#)

1. Introduction .....	i
2. Village Socio-Economic Profile .....	ii
3. Livelihood Opportunity Analysis .....	vi
4. Livelihood Development Plan .....	xi
5. Forest Development Plan of East Mahendrapur JFMC .....	xiii
6. List of Annexures .....	xxv
Annexure 1 .....	xxvi
Appendix 2 .....	xxix
Appendix 3 .....	xxx
Annexure 4 .....	xxxix
Annexure 5 .....	xlii
Annexure 6 (Record I) .....	xliii
Annexure 7 .....	I

# 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 East Mahendrapur JFMC</b>	<p>This document gives the Micro-Plan for the East Mahendrapur JFMC, which is located in the Kokrajhar district of Assam. The JFMC was originally formed under Haltugaon FDA( MAEB) and now under S.F Division, Kokrajhar under APFBC. 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 East Mahendrapur Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in East Mahendrapur, a village located under the jurisdiction of Haltugaon Division, Jharbari Range. The area covered by the above JFMC falls within the Mahendrapur VCDC, Dotoma 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 style="text-align: center;"><b>Table-A: Key Information of the JFMC</b></p> <table> <tr> <td><b>Name of the JFMC</b></td><td>East Mahendrapur</td></tr> <tr> <td><b>Habitation</b></td><td>Bodo</td></tr> <tr> <td><b>Name of Revenue Village</b></td><td>Forest village</td></tr> <tr> <td><b>Name of the Gram Panchayat / VCDC</b></td><td>Mahendrapur VCDC</td></tr> <tr> <td><b>Revenue Circle</b></td><td>Dotoma</td></tr> <tr> <td><b>District</b></td><td>Kokrajhar</td></tr> <tr> <td><b>Forest Division</b></td><td>Territorial Haltugaon, Present JFMC-SF Division</td></tr> <tr> <td><b>Forest Range</b></td><td>Jharbari</td></tr> <tr> <td><b>Forest Beat</b></td><td>Jharbari</td></tr> <tr> <td><b>Year Formed</b></td><td>2007</td></tr> <tr> <td><b>Description of Boundary of JFMC</b></td><td>As below North: Forest plantation South: Mahendrapur L.P. school. West: Village road East: Samoka River</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>	East Mahendrapur	<b>Habitation</b>	Bodo	<b>Name of Revenue Village</b>	Forest village	<b>Name of the Gram Panchayat / VCDC</b>	Mahendrapur VCDC	<b>Revenue Circle</b>	Dotoma	<b>District</b>	Kokrajhar	<b>Forest Division</b>	Territorial Haltugaon, Present JFMC-SF Division	<b>Forest Range</b>	Jharbari	<b>Forest Beat</b>	Jharbari	<b>Year Formed</b>	2007	<b>Description of Boundary of JFMC</b>	As below North: Forest plantation South: Mahendrapur L.P. school. West: Village road East: Samoka River
<b>Name of the JFMC</b>	East Mahendrapur																						
<b>Habitation</b>	Bodo																						
<b>Name of Revenue Village</b>	Forest village																						
<b>Name of the Gram Panchayat / VCDC</b>	Mahendrapur VCDC																						
<b>Revenue Circle</b>	Dotoma																						
<b>District</b>	Kokrajhar																						
<b>Forest Division</b>	Territorial Haltugaon, Present JFMC-SF Division																						
<b>Forest Range</b>	Jharbari																						
<b>Forest Beat</b>	Jharbari																						
<b>Year Formed</b>	2007																						
<b>Description of Boundary of JFMC</b>	As below North: Forest plantation South: Mahendrapur L.P. school. West: Village road East: Samoka River																						
<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> <tr> <td><b>Name of President</b></td><td>Bhimsing Narzary</td></tr> <tr> <td><b>Name of Secretary</b></td><td>Dilip Sarkar</td></tr> <tr> <td><b>Name of Treasurer</b></td><td>NA</td></tr> <tr> <td><b>No. of Members in Executive Committee</b></td><td>Male: 3 Female: 8</td></tr> <tr> <td><b>No. of Members in the General Body</b></td><td>44 (Represented by head of the household)</td></tr> </table> <p><b>Source:</b> JFMC Records</p>	<b>Name of President</b>	Bhimsing Narzary	<b>Name of Secretary</b>	Dilip Sarkar	<b>Name of Treasurer</b>	NA	<b>No. of Members in Executive Committee</b>	Male: 3 Female: 8	<b>No. of Members in the General Body</b>	44 (Represented by head of the household)												
<b>Name of President</b>	Bhimsing Narzary																						
<b>Name of Secretary</b>	Dilip Sarkar																						
<b>Name of Treasurer</b>	NA																						
<b>No. of Members in Executive Committee</b>	Male: 3 Female: 8																						
<b>No. of Members in the General Body</b>	44 (Represented by head of the household)																						
<b>Households &amp; Population Structure</b>	<p>The village has 44 households, of which 42 households are BPL (Below Poverty Line) households. There is no any female headed household in this village.</p>																						

	<p>The total population is 220 of which 115 are male and 105 are female. All the people of this village belongs to ST community people.</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 5.</li> <li>(2) The sex ratio is 913 females per 1000 males in the village.</li> </ol>
<b>Education &amp; Skills Development</b>	<p>Over 45.90% 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)Weaving</li> <li>(b)Farming</li> <li>(c)Livestock rearing</li> <li>(d)Sericulture</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>• Area is plain and sandy loam to loamy soil.</li> <li>• No hilly area</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 River Samoka, which flows from Mashbhandar area of Ultapani to Gaurang and then Brahmaputra to the south.</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 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 Moist Mixed Deciduous Forest of lower Bhutan area. The main tree species are Sal, Bahera, Neem, Jia, Sishoo, Ajar, Simul, Bhelkor, Khayar, Koros, Koroj etc. The forests can yield a range of NTFP like leafy vegetables, ferns, medicinal plants. No bamboo in forest area except in village.</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>Crop Land: 40.73 %</p>

	<p>Village plantation: 14.46 %  Habitation: 10.64 %  Stream: 1.87 % (incl. water logged areas)  Road: 1.59%</p>
<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>• 4.5 % of the households are landless (2 HH)</li> <li>• 95.4 % of the households are marginal farmers (less than 2 Ha) i.e 42 HH</li> <li>• None of the households belong to small and large categories.</li> </ul>
<b>Livestock</b>	<p>The total number of livestock in the village is 681. The main types of livestock possessed by the households include:</p> <p>Cows: 197  Goats: 56  Pigs: 67  Poultry: 341</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 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 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 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. Hence, the community members do not have bank accounts or postal savings accounts.</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.  Kharif Crops: Sali paddy, yam, Ginger, ladies finger  Rabi Crops: Mustard, Sesame, potato  Others: Jute, jack fruit, maize etc.</p> <p>All the 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> <p>(a) Paddy: Production 55 MT Yield 1.9 MT /ha (b) Mustard : Production 5 MT kg Yield 1.2 MT/ha</p>
<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) Grazing in forest (b) Household wastage (c) Crop residue</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: Jharbari at 4 km away (if in other village) (b) Weekly / Bi-weekly Market: : Jharbari at 4 km away (c) Major Market: : Patgaon at 8 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> <p>(a) Tube well (Water Availability: Perennial / <del>Seasonal</del>) (b) Ring Well (Water Availability: Perennial / <del>Seasonal</del>) (c) Canal (Water Availability: <del>Perennial</del> / Seasonal)</p>
<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: 42 Nos. Source: Forest (b) LPG - Households Depending: 12 Nos. Source: Authorised Agency (c) Solar power - Households Depending: 31 Nos. Source: Open market</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 two government service holder( teacher) in the village. Most households earn Rs. 15000 to Rs. 35,000 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 East Mahendrapur village as follows:</p> <p><b>Date:</b> 8<sup>th</sup> June, 2016 <b>Location:</b> JFMC President's house, East Mahendrapur  <b>Numbers Present:</b> 57</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>																						
<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. Agriculture</li> <li>2. Livestock/Piggery</li> <li>3. Sericulture (Endi yarn spinning)</li> <li>4. Driving</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>1.</td><td>Community hall</td><td>To organise meeting</td><td>Panchayat and Rural Development department</td></tr> <tr> <td>2.</td><td>Electricity</td><td>Solar light facility to each HH</td><td>APFBC</td></tr> <tr> <td>3.</td><td>Drinking water</td><td>Providing tube well (At least 15 )</td><td>EPA APFBC/NRDWP</td></tr> <tr> <td>4.</td><td>Fishery</td><td>Redevelopment of existing ponds</td><td>Dept. Fishery</td></tr> </tbody> </table>			Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.	1.	Community hall	To organise meeting	Panchayat and Rural Development department	2.	Electricity	Solar light facility to each HH	APFBC	3.	Drinking water	Providing tube well (At least 15 )	EPA APFBC/NRDWP	4.	Fishery	Redevelopment of existing ponds	Dept. Fishery
Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.																				
1.	Community hall	To organise meeting	Panchayat and Rural Development department																				
2.	Electricity	Solar light facility to each HH	APFBC																				
3.	Drinking water	Providing tube well (At least 15 )	EPA APFBC/NRDWP																				
4.	Fishery	Redevelopment of existing ponds	Dept. Fishery																				

	5.	School	Upper Primary School	SSA/ Elementary Education Deptt.
	<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 programme is:</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) Unable to buy fodder from market due to poor financial condition. (b) Trees fodder and crop residue are available only for 3-6 months. Green fodder is also not available for the whole year. (c) No veterinary care clinic (d) Lack of knowledge about the proper rearing of live stock</p>			

	<p>The opportunities are:</p> <p>(a) Higher income from livestock rearing. (b) A huge demanded market for milk is available as Kokrajhar district.</p> <p>The suggested programme is:</p> <p>(a)Piggery (b)Poultry</p>
<b>NTFP</b>	<p>The opportunities for NTFP 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 are:</p> <p>(a)Availability of fertile fallow land</p> <p>The suggested programme is:</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 (c) Lack of TQM techniques.</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:  (a) Financial exclusion  (b) Higher rate charged by the private money lender.</p> <p>The opportunities are:  (a) setting up modern financial institution  (b) Adequate awareness.</p> <p>The suggested programme is:  (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>

**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 East Mahendrapur JFMC has been analysed during the PRA exercise using sustainable livelihood framework of DFDI (Department of Funding for International Development). The existing livelihood situation of JFMC is outlined in terms of

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

## NATURAL CAPITAL

The major natural capital of East Mahendrapur JFMC is Chirang reserve forest and one river namely Samoka.

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 East Mahendrapur 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.

All the household of the village has thatch houses and no any pukka and IAY houses are there. 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, 32 HH have access to tube well, 10 HH have access to ring well.

## SOCIAL CAPITAL

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

Only two female SHGS are there in the village. However, the village has no youth club and one temple inside the village

## HUMAN CAPITAL

45.90 per cent of total population of the JFMC are educated and 7. 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.

42 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 East Mahendrapur 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>	<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>1.poultry and piggery</li> <li>2. Sericulture</li> <li>3.Horticulture</li> </ol> <p><b>Non-Farm sector:</b></p> <ol style="list-style-type: none"> <li>1.Handloom/ Weaving</li> <li>2.Driving</li> <li>3. Electrician</li> </ol>
<b>SHG Activities</b>	<p>SHGs of the village can plan the following activities:</p> <ol style="list-style-type: none"> <li>1. To create awareness.</li> <li>2. To organise and form group</li> <li>3. To involve the villagers in Livelihood Activities collectively.</li> </ol>
<b>Exposure Trips</b>	<p>The exposure trips may planned</p> <p><b>Source:</b> Table-34 of Record-4</p>
<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> <p>(a) National Rural Employment Guarantee Scheme - for rural employment</p>

	<ul style="list-style-type: none"> <li>(b) Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied development</li> <li>(c) Rashtriya Krishi Sinchay Yojana (RKSY) - 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> <li>(g) MGNREGA/DRDA, Fishery, PHE etc.</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 East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur JFMC have been summarized below.

**Table-1: Conditions of the Forests of East Mahendrapur 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: RF Beat: Jharbari Compartment:	30 Ha	0.25 km	Area: - degraded	Once in week
<b>(B) Other Planted Area</b>				
Location: Type of Forest: VF / Other _____	45 Ha (under FDA)	0.25 km	Area:-Good	Once in a week
<b>TOTAL</b>	75 ha		Good Area: -45 Ha Degraded Area: 30 Ha	

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



It is seen that the East Mahendrapur JFMC has 75 Ha under its forests, of which 45 Ha is 'Good' and 30 Ha is 'Degraded'.

## 1.2. Forest Soil Type

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

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

Parameter	Status in Assigned Forests	Status in Other Planted Areas
Fertility Level	High	High
Soil Erosion Status	No Soil Erosion	No Soil Erosion
Presence of:		
(a) Silt	Nil	Nil
(b) Mud-flat	Nil	Nil
(c) Newly accreted land	Nil	Nil
(d) Sand dune	Nil	Nil

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

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

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

## 1.3. Existing Composition of Flora

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

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

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

**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 East Mahendrapur JFMC.

### 2.1. Past Protection Measures of the JFMC

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

- (a) Number of households involved: 75
- (b) Number of people involved: 170
- (c) Summary of the measures: Plantation of Major and Associates Species, Non Grazing of Cattle in Plantation Area, Protection against illegal tree felling and encroachment etc.
- (d) Any formal mechanism: Nil

[**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 East Mahendrapur JFMC**

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	Regularly	6-7 kg daily	Cutting Branches	Plantation Area
Timber for House	-	-	-	-
Small timber for Implements	-	-	-	-
Pole / Bamboo	Frequently	2-3 Monthly	-	-
Fodder from Forest	Not Available	-	-	-
NTFP	Not Available	-	-	-
Other	-	-	-	-

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

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

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	More than 120000 annully	Usage of Firewood Branches

Timber for House	30-40 large tree trunks	Usage of Sal, Teak for timber
Small Timber for Implements	50 small trunks, big branches	Usage of Sal, Teak for making ploughs,
Pole / Bamboo	1000 bamboo	Fencing, Sale
Fodder from Forest	Not Available in large scale	-
NTFP	Not Available in large scale	-
Other	Not Available	-

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

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

### 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 East Mahendrapur JFMC is given in the following table.

**Table-5 (A): Collection & Marketing of Forest Produce by Villagers of the East Mahendrapur 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 [East Mahendrapur 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

## 2.4. 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 East Mahendrapur 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	-	-	-
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 East Mahendrapur JFMC have been summarized below.

**Table-7: Protection Problems of the East Mahendrapur 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	No	No
Accidental Fires	No	No
Encroachment of Forest Lands	No	No
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 East Mahendrapur JFMC, the reasons for degradation of forest are as follows:

(a) Illicit Feling of Timber

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

**Table-8: Protection Plan of the East Mahendrapur JFMC**

<b>Protection Work</b> [to be filled from Table 3.7 of Proforma-3 as applicable]	<b>Location in Forest Area</b>	<b>Quantification of the Measures</b> [Length, Area, Size etc.]	<b>Timing</b>	<b>Priority</b> [High / Medium / Low]
Social Fencing	Boundary	Along the Demarcation of the Plantation Area	Grazing Season	High
Fire Protection	Within the Forest	-	Dry hot or summer season	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 East Mahendrapur JFMC (with high / medium priority) are as follows:

(a) Social Fencing

(b) Fire Protetcion

### 4.2. Types of Operations Proposed

The types of operations proposed for the treatment of degraded areas of the JFMC Forest of East Mahendrapur JFMC are given hereunder.

**Table-9: Types of Operations Proposed in the East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur 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,	3m x 3m; 2m x 2m
Sowing of Neem, Amla, Bahera (Medicinal Plants)	50	High	NTPFs	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
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 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 : 1,25,000 (31,250) approx. annually)  
 Raised  
 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 & Prunning
2021-22*	4th Weeding & Prunning; Replacement of dead/struggling saplings raised in the previous year
2022-13*	5th Weeding & Prunning; Replacement of dead/struggling saplings raised in the previous year
2023-24*	6th Weeding & Prunning
2024-25*	7th Weeding



2025-26*	8th Weeding
----------	-------------

#### 4.5. Nursery Development Plan

The Nursery Development Plan for the East Mahendrapur 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 East Mahendrapur JFMC. This includes the Departmental Nursery involved in JFMC works.

**Table-11 (A): JFMC Nurseries of the East Mahendrapur 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 etc		37000	
	NTFP		50000	
	Major- Sal, 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- Sal, 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- Sal, 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 East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur 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 Aromatic Plantation in the East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur 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 East Mahendrapur JFMC**

Item	Month	Year (Indicative)	Quantity
------	-------	-------------------	----------

Firewood	Throughout the year	2020-21 onwards	2 quintals annually /household
Timber for House	Throughout the year	2025-26 onwards	2-3 trunks per household annually
Small timber for Implements	Throughout the year	2025-26 onwards	6-7 pieces per household annually
Bamboo		2017-18 onwards	100 pieces
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 East Mahendrapur JFMC.

**Table-15: Sharing Mechanism for East Mahendrapur JFMC**

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

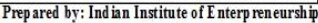
**Source:** Proforma-3, Table-3.15 / Discussions with Forest Department personnel & Community members

## 6. List of Annexures

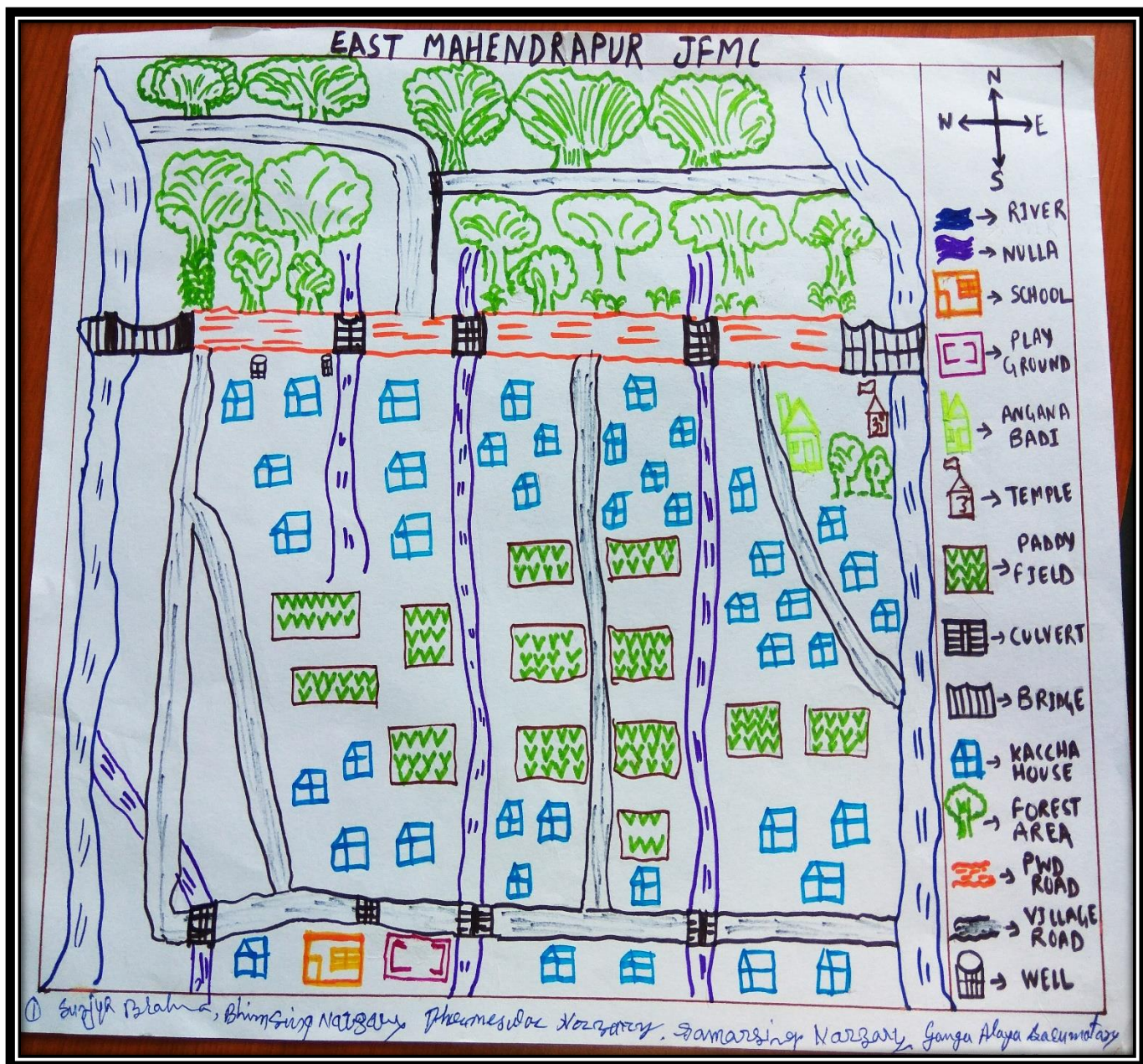
Appendix No	Heading
1	<b>Maps</b> Village Map Village Social Map Village Resources Map
2	<b>Land Use Map of Village (GIS)</b>
3	<b>PRA Exercise</b>
	Social Mapping Wealth Ranking Time Line review Seasonality of Livelihoods Venn Diagram
4	<b>Photographs</b>
5	<b>List of JFMC Members</b>
6	<b>Filled Up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

## Annexure 1

**Village Map:**

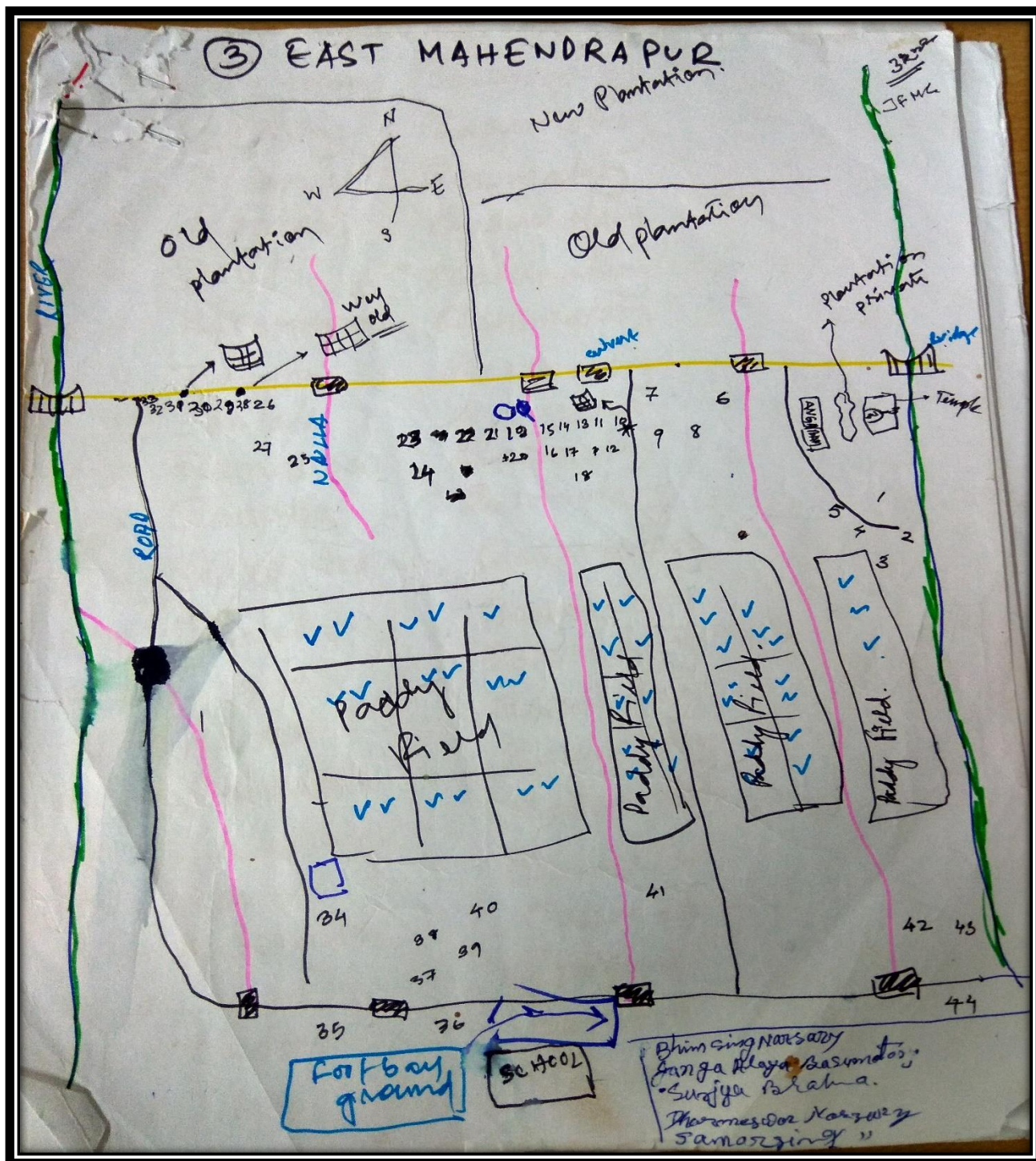


**Social Map:**



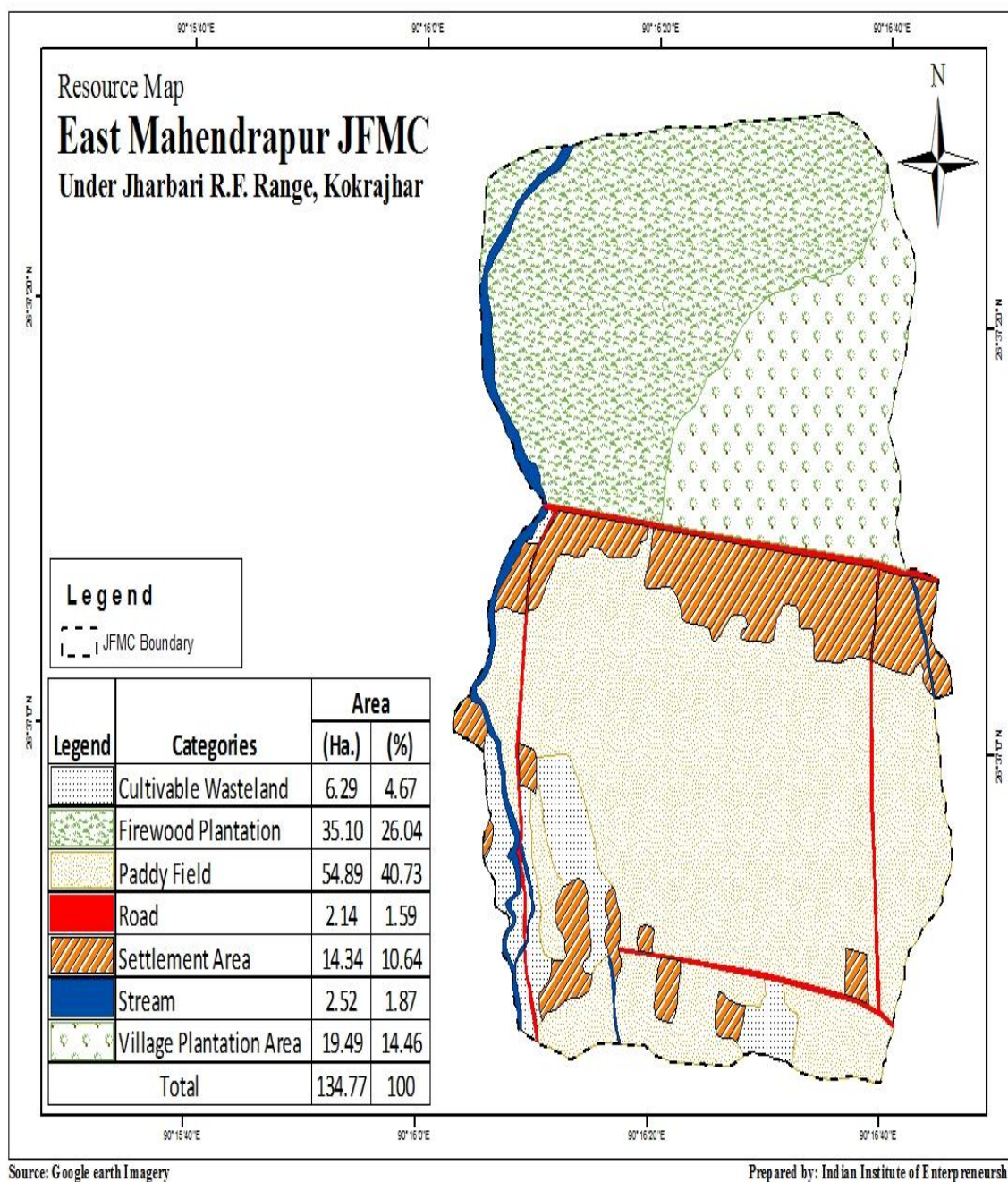


# Resource Map:



## Appendix 2

### Land Use map of GIS





## Appendix 3

### PRA ACTIVITY

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

Numbers of participants :	60
Time :	11.30 pm, 8 <sup>th</sup> June 2016
Venue :	JFMC president's house

**Table – 3.1** Brief about the villages under East Mahendrapur JFMC

Sl. No.	Name of the Village	No. of households	Population		
			Total	Male	Female
1	East Mahendrapur	44	220	115	105

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 East Mahendrapur 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 →	East Mahendrapur
	Total population	220
	Male	115
	female	105
	Total households	44
	Numbers of Pucca Houses	0
	No of thatch house	44
	Nos of semi pukka house	0

<b>Landmarks</b>	Bridges	2
	Canal	14
	River	1
	Community Hand pump	5
	Well	3
	Tube wells	15
	Play Ground cum Grazing filed	1

### Findings of Social Map:

- The participants of social mapping have identified all 44 households households are thatch house or kuccha house. There is no semi Pucca house and no IAY household though the entire village come under BPL category. 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 schools, playground, well, temple, hand pump and bridges 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).
- For education there is a primary school inside the village. But for upper primary and higher education one have to go Jharbari, which is 4 kms away from 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 Bodo community and are of schedule tribe caste. The religion of all the villagers is Hindu.

### Learnings:

- Electricity is not available inside the villages of the East Mahendrapur JFMC. However, few of them use solar light to tackle their electricity deficiency problem. There is no LPG gas connections in the villagers of the JFMC villages. The Household still dependent on forest and use firewood for their cooking purposes. They used to go to the forest for collecting the firewood which is still a concern for the forest department for degradation of the forest.
- The primary health center along with post office is located in Jharbari, which is 4 KM away from the JFMC. The villagers have to cover a long distance for their health check-up.
- There is no community hall in the JFMC where various meetings are held. Major meetings are – Gram panchayat meeting, village head meetings, forest department meetings and other political meetings. So, this is one of major priorities of this village.
- The availability of fodder for domestic animals depends on the resource available in the forest area and the capacity of the household who can rear the livestock's. The two villages of the JFMC are fully dependent on crop residue, trees fodder, grasses, and green fodder.

Field residues are materials left in an agricultural field after the crop has been harvested. These residues include stalks and stubble (stems), leaves, and seed pods.

- There are some grazing field where villagers use for their cattle rearing. These fields are available for a maximum of six months. Seasonal grazing incorporates “grazing animals on a particular area allows the land that is not being grazed to rest and allow for new forage to grow.
- The villagers of the East Mahendrapur JFMC have to move Patgaon, a distance covered with 8 km, for their weekly marketing activity. Domestic materials, utensils, bangles, cloths and stationeries are sold in different stalls.

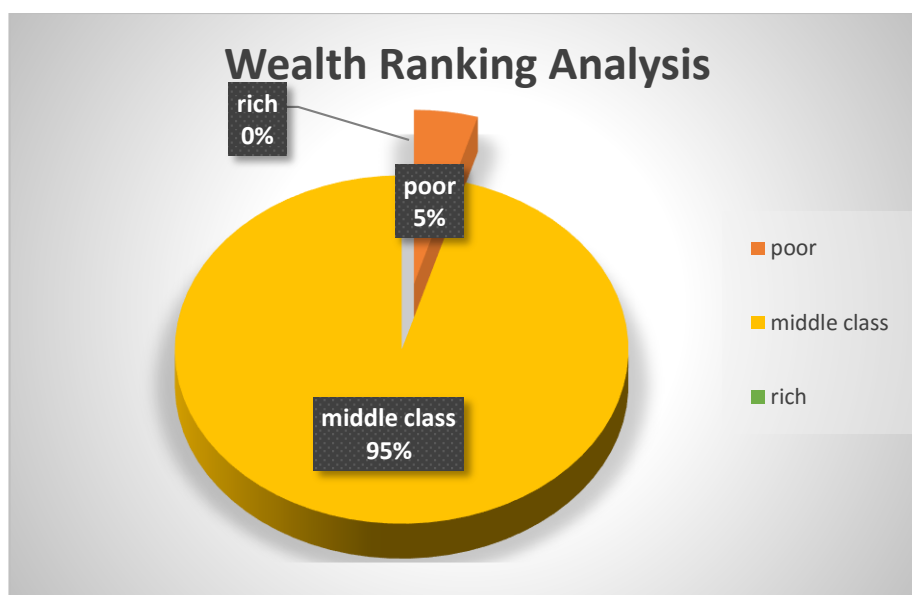
### 3.2 Wealth Ranking :

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

- a) Land holding
- b) Occupation

As such about 4.55 per cent people are poor, about 95.45 per cent are belong to middle class and about 0 per cent are categorised to be rich. Poor people are mainly irregular wage earners, sometimes they lease (adhi lua) others land.

*Figure 3.1: Wealth Ranking*



### 3.3 Timeline Review :

In order to know the past important cum historical events over time, the team has conducted the timeline analysis. The team members discussed about the local events to the village head, elderly persons and also to some young people to have an idea about how they dealt with those situations and what was the

impact of those events on their lives as well as on the development of the village. Our time line illustrates the following events.

**Table 3.3: Timeline review**

Year	Event	Type
1947	Village was established by British	Construction
1947	The People of this village migrated from Dotoma, Balhaibari, Sosakhatwa etc.	Construction
1947	Temple established	Construction
1950	Bunka river was blocked and Samuka river was created.	Construction
1978	Severe Flood in the village.	Environmental
1980	Severe Flood in the village.	Environmental
1980-1987	Deforestation	Environmental
1982-83	First government employee (Teacher) of the village	Social
1986	Range office in Jharbari, but due to ABSU movement is escaped	Social
1990	Water shortage in the river samuka	Environmental
1995	No agriculture in the village due to lack of water	Environmental
1995	No agriculture in the village due to lack of water	Environmental
1996 & 1998	There was ethnic violence in Kokrajhar District.	Social
2006-07	Construction of road by PWD	Construction
2007	JFMC was formed	Social
2009	First rice mill was started	Social
2015	Water shortage in the village	Environmental

In 1947 people from Dotoma, Balhaibari, Sosakhatwa village migrated to the area and established a new village named East Mahendrapur. The main reasons of the migration were scarcity of land, water and labour reason. The village road was constructed in 2006-07 by the PWD. In this village, there was a big problem of water shortage which faced in most of the years. Due to this reason, no agriculture has been seen in the village during the time of 1995 and 2004. There was severe flood in the year 1978 and 1980, which effects the people of the village badly.

The present Joint Forest Management Committee (JFMC) was formed in 2007.

#### **Learning:**

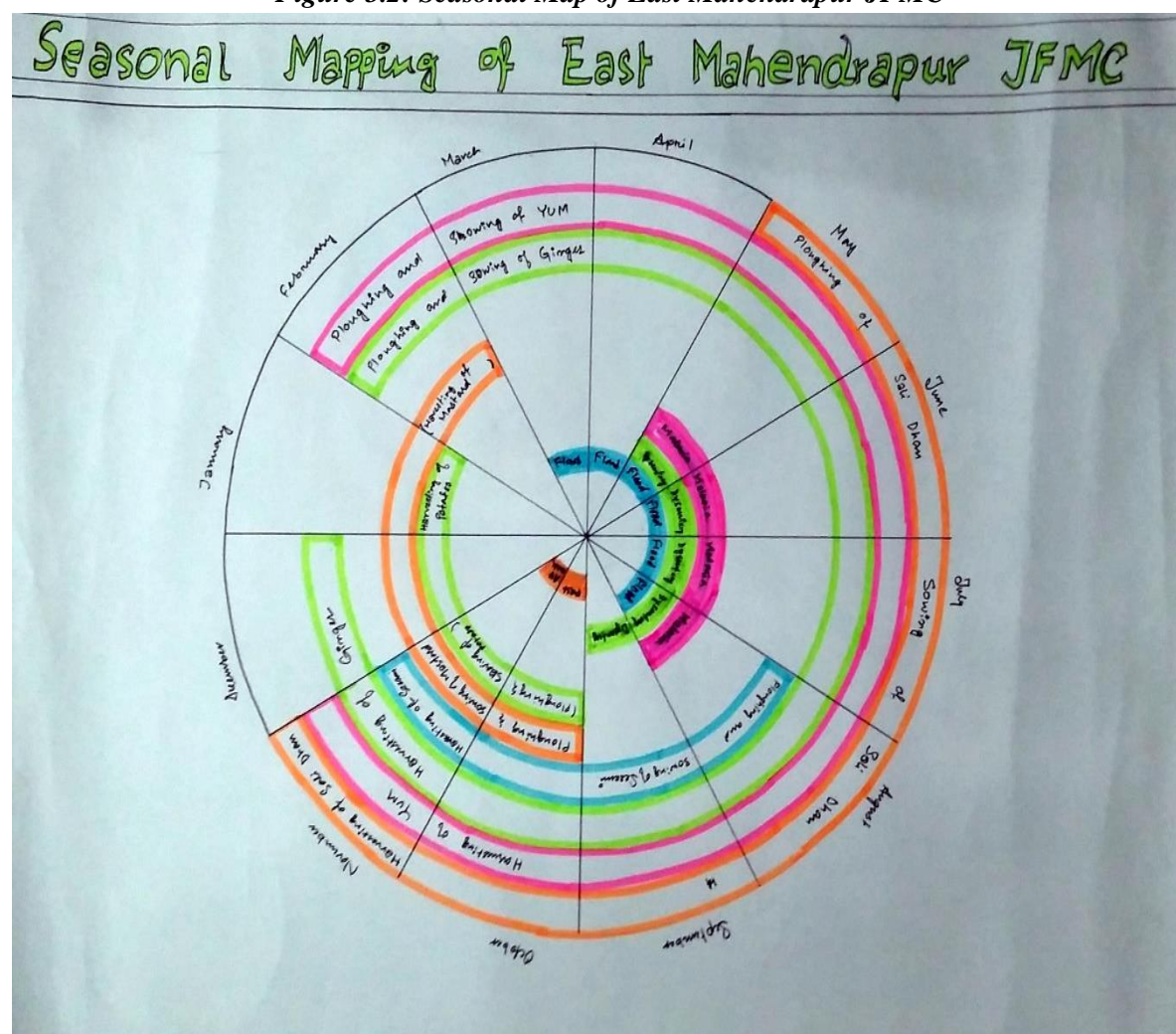
- The village was established to overcome the land shortage in the neighbouring village.
- After the formation of 1<sup>st</sup> self-help group in 2006, the villagers initiated some kind of social activities like – formation of JFMC(2007) .

### 3.4 Seasonal Mapping of livelihood Activities:

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

Seasonal mapping mainly covers the seasonal variation of crops. In seasonal mapping, we considered agricultural crops and the timing of three activities viz. 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 Sali rice, Corn, Ginger, Ladies finger, Sesame, Cucumber, Yam etc. The FGD conducted revealed that other major livelihood options available in the JFMC are Livestock rearing (Piggery, poultry), weaving, daily wage labourers, mason, cane & bamboo craft, carpentry which are not seasonal in nature but is showed in the seasonal mapping

*Figure 3.2: Seasonal Map of East Mahendrapur JFMC*



**Table 3.4 Seasonal cropping pattern**

<b>Categories</b>	<b>Time of Activity</b>			
<b>Farming</b>		<b>Sowing</b>	<b>Harvesting</b>	<b>Plucking</b>
	<b>Sali</b>	May-June	July-Aug	Oct-Nov
	<b>Yam</b>	Feb-March	Oct-Nov	Dec-Jan
	<b>Mustard</b>	October	February	March-April
	<b>Sesame</b>	August/September	November	December/January
	<b>Ginger</b>	April-May	Oct-Dec	June-Sep
	<b>Sericulture</b>	Throughout the year		
<b>Non-Farming</b>	<b>Weaving</b>	Throughout the year		
	<b>Livestock Rearing</b>			
	<b>Daily Wage Earning</b>			
	<b>Shop-keeper</b>			
	<b>Carpentry</b>			
	<b>Govt. service holder</b>			

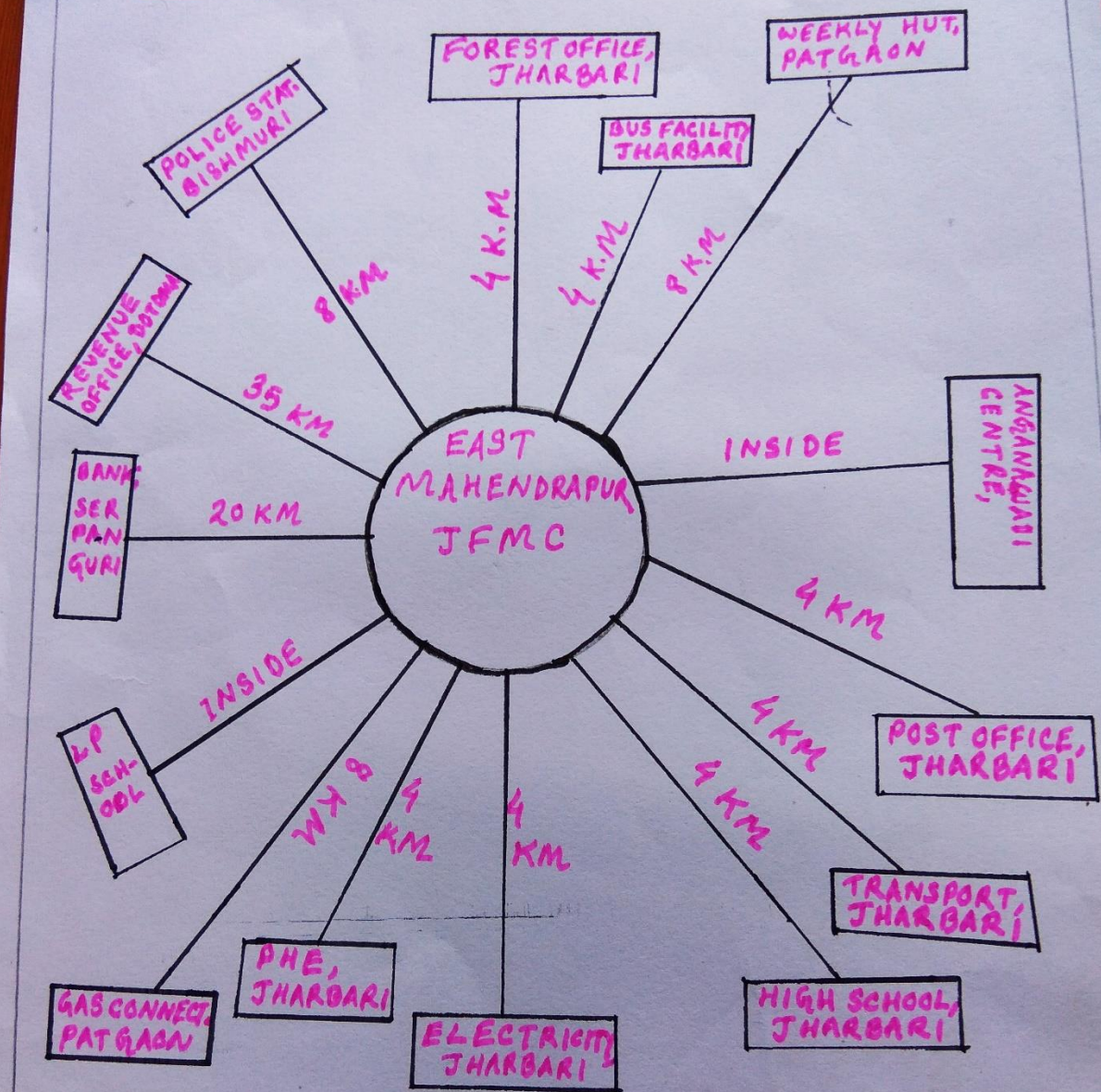


### 3.6 Chapatti Diagram:





# CHAPATTI DIAGRAM (EAST MAHENDRAPUR JFMC)



Signature

1. Surjya Brahma

2. Ganga Alaya Basumatary

3. Samarsing Nargary

① Bhimsing Nargary (President)

② Dharmeswar Nargary



# Priority Ranking: Potential Livelihood and EPA activity -

Livelihood Activities	Weaving (A)	Endy Silk Spinning (B)	Livestock Rearing (C)	Handloom (D)	Drivins (E)	Tailor (F)	Carve & Bamboo (G)	Carpen-try (H)	Masonry (I)	Marks	Rank
Weaving (A)	X	B	C	A	A	A	A	A	A	6	2
Endy Silk Spinning (B)	X	X	C	B	E	B	G	H	B	4	3
Livestock Rearing (C)	X	X	X	C	C	C	C	C	C	8	1
Handloom (D)	X	X	X	X	E	D	G	D	D	3	5
Drivins (E)	X	X	X	X	X	I	E	E	E	4	3
Tailor (F)	X	X	X	X	X	X	G	H	F	1	9
Carve & Bamboo (G)	X	X	X	X	X	X	X	G	I	3	5
Carpen-try (H)	X	X	X	X	X	X	X	X	H	2	7
Masonry (I)	X	X	X	X	X	X	X	X	X	2	7
EPA Activities :											
EPA Activities	Comm. Hall (A)	UPPER Primary (B)	Fishery (C)	Electricity (D)	Drinking Water (E)	Comm. Health Centre (F)	JPMC Office (G)	Market Shed (H)	Comm. Hall (I)	Marks	Rank
Comm. Hall (A)	X	A	A	A	A	A	A	A	A	8	1
UPPER Primary (B)	X	X	C	D	E	B	B	B	B	4	5
Fishery (C)	X	X	X	D	E	C	C	C	C	5	4
Electricity (D)	X	X	X	X	D	D	D	D	D	7	2
Drinking Water (E)	X	X	X	X	X	E	E	E	E	6	3
Comm. Health Centre (F)	X	X	X	X	X	X	G	H	F	1	8
JPMC Office (G)	X	X	X	X	X	X	X	G	G	3	6
Market Shed (H)	X	X	X	X	X	X	X	X	H	2	7
Comm. Hall (I)	X	X	X	X	X	X	X	X	X	0	9

- 1) Sujya Narahar
- 2) Ganga Alaya Basumatary
- 3) Samarsing Narzary
- 4) Bhimsing Narzary
- 5) Dharmeswar Narzary

## Annexure 4

### PHOTOGRAPHS



*PRA ACTIVITY*





*A photo with the village*



*PRA Activity*



*Awareness with villagers*





*Final Social Map*



Social Map

## Annexure 5

### LIST OF JFMC MEMBERS

#### RECORD 7 : MEMBERSHIP REGISTER

Name of JFMC East Mahendrapur Division Kakrajha Range Tharbari  
Beat Tharbari JFMC Code

Sr. No.	Name	Father's / Husband's name	Age	Male / Female	Education	SC/ST / BC/OBC
1	Saimata Nargary			M		ST
2	Nayan Banumata			M		ST
3	Babita Nargary			F		ST
4	Kabita Banumata			F		ST
5	Uma Banumata			F		ST

6. Pajit Banumata (M) ST  
7. Arjun Nargary (M) ST  
8. Abhimark Banumata (M) ST  
9. Jitendra Nargary.

## 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
1.	East Mahendrapur	2007	11	Bhimsing Narzary	Dilip Sarkar			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	East Mahendrapur	44	220	115	105	913	5

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
1	East Mahendrapur	-	-	42	2	44

### Table 4: Cattle Population:

*Table 4 : Cattle Population of the JFMC*

Sl. No	Name of the village	Cows	Buffaloes	Goat	Sheep	Hens/Cocks	pig	total
1	East Mahendrapur	197	-	53	-	357	76	683

**Table 5: Village wise Infrastructure:***Table 5 showing village wise infrastructure*

Sl no	Infrastructure	Location	Distance from village
1	Electricity	Jharbari	4km
2	Gas connection	Patgaon	8km
3	Transport	Jharbari	7km
4	PHE	Jharbari	4km
5	LP school	Mahendrapur	Inside
6	High school	Jharbari	4km
7	Post office	Jharbari	4km
8	Bank	Serpanguri	20km
9	Anganawadi centre	Inside	Inside
10	VCDC	East Mahendrapur VCDC	Inside
11	Revenue Office	Kokrajhar	30km
12	Police station	Bishmuri	8km
13	Forest Office	Jharbari	4km
14	Post office	Jharbari	4km
15	Bus facility	Jharbari	4km
16	Railway Station	Kokrajhar	35km
17	District head quarter	Kokrajhar	35km

**Table 6: Agricultural crops***Table 6 Agriculture Crops*

Type of Crop	Rain Fed		Irrigation	
	Name of the crop	Area (in ha.)	Name of the crop	Area (in hac)
Kharif	Sali rice	29.13	NA	
Rabi	Mustard	4	NA	
Others	Vegetable, Fruits	7.9	NA	

**Table 7: Crop production profile of East Mahendrapur JFMC:***Table 7 Crop production profile of East Mahendrapur JFMC*

Type of crop	Total Production (approx) in quintals	No of household growing	Average production (quintal/ hac) approx	Area under crop (hac) approx
Paddy	611.73	38	21	29.13
Oil seeds	6	12	1.5	4
Vegetable	2.6	46	1	2.6
Fruits	5.3	44	1	5.3



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

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

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

For Purchase	Location	Distance from village if in other village (in km)
Grocery shop	Jharbari	4km
Weekly Market	Jharbari	4 km
Major Market	Patgaon	8 km
Forest Corporation Sale Depot.	NA	-
Tendu Patta PHAD	NA	-
Fish Market	Patgaon	7 km
Medicinal Plant collection Centre	NA	-
Forest Corporation Medicinal plant Collection Centre	NA	-

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

Water source	number	Availability of water	uses
Check dam	-	-	-
Canal	14	Seasonal	Irrigation, livestock rearing
Tube well	32	Perennial	Domestic use
River	1	Seasonal	All type of use
Community ring well	10	Perennial	Domestic use

**Table 11: Energy consumption:***Table11 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	44	12	Forest	Major
Kerosene stove	-	-	-	-
Gobar/Bio gas	NA	-	-	-
LPG	9	12	-	Secondary
Electric Heater	NA	-	-	-



Solar power	27	12		Secondary
-------------	----	----	--	-----------

## 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	East Mahendrapur	44	220	101	45.90

Source: - Field survey report.

Sl no	Categories	Percentage
1	Illiterate	54.01
2	Up to LP	45.90
3	Up to college	7.66

### (ii) Income Distribution:

Categories	Percentage of households in each category
15000 and below	52.18
1600 to 30000	39.13
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</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> </ul>	<ul style="list-style-type: none"> <li>Tractor operation training</li> <li>Agri-skill development programme.</li> <li>Training on insecticides, pesticides,</li> </ul>

	tools and equipment's viz, power tillers, tractors etc. • Non usages of high yielding seeds.	• Usage of high yielding seed programme.	hybrid cultivation
<b>Storage and Production</b>	• Lack of common storing place • Lack of cold storage facility due to non-availability of electricity	• Helpful in preserving unsold products for a longer period of time. • They can store their product and sell it when there is a higher demand.	• Packaging • Transportation and distribution.
<b>Marketing</b>	• Lack of transporting facilities for carrying products • Less contact with the direct market; much dependency upon middle man • No knowledge on marketing know-how, dependence on traditional system of selling.	• Smooth transportation facility will help the farmers to carry their products to the nearby markets. • Generate highest market price by removing middle men. • More knowledge about the current market situation as well as the current value of their products. • They can sell their products outside of the state, as the JFMC is located in Assam West Bengal border and Bhutan border is also not far from it.	• Buyers sellers meet

**Table 13: Livestock**

*Table 13 Livestock*

Constraints	Reasons	Opportunities	Programme
Less grazing land	• Not Applicable		
Availability of fodder	• Unable to buy fodder from market due to poor financial condition • Trees fodder n crop residue are available only for 3-6 months. Green fodder is also not available for the whole year.	• Higher income from livestock rearing. • The villagers can make it as an alternative livelihood opportunity if they have the easy access of livestock fodder.	
Veterinary care facility	• No veterinary care clinic • Lack of knowledge about the proper rearing of live stock	• Disease control • Increases the life span of cattle. • It will also help to aware the villagers and will encourage them for livestock rearing.	
Production of milk	• Less availability of fodder	• Training on the milk production can enhance	

	<ul style="list-style-type: none"> <li>No scientific knowledge on cattle rearing to increase the milk production.</li> </ul>	<ul style="list-style-type: none"> <li>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
Raw material availability	<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>
Product quality	<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>
Marketing potential	<ul style="list-style-type: none"> <li>No standardised market</li> <li>No pricing policy</li> <li>No linkage with the institutional buyers</li> </ul>	<ul style="list-style-type: none"> <li>Exploring new markets with</li> </ul>	<ul style="list-style-type: none"> <li>Providing a bulk buy arrangement of the finished</li> </ul>

	<ul style="list-style-type: none"> <li>No Product Diversification or New Product Development.</li> </ul>	diversified products	product with institutional buyers.
<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

<b>Trade:</b>	<b>MIXED LIVESTOCK</b>	<b>EAST MAHENDRAPUR (MIXED LIVESTOCK)</b>						
<b>Location :</b>	<b>EAST MAHENDRAPUR</b>							
<b>Start Date</b>	<b>24-Aug-16</b>							
<b>End Date</b>	<b>9-Sep-16</b>							
<b>Master Trainer</b>	<b>Dr MRINMOY KALITA &amp; RITU BAHADUR LAMA</b>							
SL.NO	Name of Participants	Guardian Name	Address	Qualification	Age	Gender	Category	Contact No
1	BINAD BASUMATARY	DWIJENDRA BASUMATARY	EAST MAHENDRA PUR	HSLC PASS	22	M	ST	95774 45381
2	BHIMSING NARZARY	LT. MANENDRA NARZARY	EAST MAHENDRA PUR	HS PASS	36	M	ST	NP
3	RASENDRA BASUMATARY	ABIRAM BASUMATARY	EAST MAHENDRA PUR	CLASS X		M	ST	78964 59404
4	KHWRWMDAO BASUMATARY	DWIJENDRA BASUMATARY	EAST MAHENDRA PUR	HS PASS	22	M	ST	81360 46683
5	SWMAOSAR NARZARY	JITENDRA NARZARY	EAST MAHENDRA PUR	BA PASS	23	M	ST	73993 56056
6	GANGA ALAYA BASUMATARY	LOKENDRA BASUMATARY	EAST MAHENDRA PUR	HSLC PASS	27	M	ST	87498 69950
7	ARJUN NARZARY	MANINDRA NARZARY	EAST MAHENDRA PUR	HS PASS	34	M	ST	73993 56599
8	BIRKHAND NARZARY	MONDA NARZARY	EAST MAHENDRA PUR	HSLC PASS	19	M	ST	95774 45669
9	SANJIT NARZARY	NARSING NARZARY	EAST MAHENDRA PUR	HS PASS	24	M	ST	NP
10	SWMAODAR NARZARY	PURNA NARZARY	EAST MAHENDRA PUR	CLASS X	23	M	ST	70862 61469
11	SAMARSING NARZARY	RASENDRA NARZARY	EAST MAHENDRA PUR	CLASS IX	18	M	ST	96789 92202
12	DANSWRANG BASUMATARY	PRABIN BASUMATARY	EAST MAHENDRA PUR	HS PASS	24	M	ST	NP
13	LWITHWNA BASUMATARY	PRANJIT BASUMATARY	EAST MAHENDRA PUR	HSLC PASS	18	M	ST	91321 07137
14	NIJWM BASUMATARY	THANGWN BASUMATARY	EAST MAHENDRA PUR	BA PASS	25	M	ST	NP

  
**Secretary**  
 East Mahendrapur: J.F.M.C.  
 Date.....