



CHRISTIANBASTI JOINT FOREST MANAGEMENT COMMITTEE (JFMC)

LUMDING RANGE, NAGAON SOUTH DIVISION

NORTHERN ASSAM CIRCLE

MICRO-PLAN

(2016-17 to 2025-26)

Prepared by Christianbasti Joint Forest Management Committee

**assisted by
Assam Forest Department
&
COMPELO
(IIE, RGVN and CML)**

July 2016

Approved
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**Divisional Forest Officer
Nagaon South Division
Hojai.**

List of Acronyms

AfD	French Development Agency
APFBC	Assam Project on Forest & Biodiversity Conservation
APL	Above Poverty Line
BPL	Below Poverty Line
CML	Centre for Microfinance and Livelihood
COMPELLO	Consortium On Micro Planning And Enhancement Of Livelihood Opportunities
DFO	Divisional Forest Officer
EDC	Eco-Development Committee
EPA	Entry Point Activity
FCA	Forest (conservation) Act, 1981
FD	Forest Department
FRA	Forest Rights' Act
FV	Forest Village
FYP	Five Year Plan
GHG	Green House Gases
GoI	Government of India
GP	Gaon Panchayat
Ha.	Hectare
IIE	Indian Institute of Entrepreneurship

Christianbasti JOINT FOREST MANAGEMENT COMMITTEE
Nagaon South Forest Division, Lumding Forest Range

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

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1. Introduction

About the Project	<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 Agence France de Développement (AFD) - i.e. the French Development Agency, with co-funding from the Government of Assam. The Assam Project on Forest and Biodiversity Conservation Society (APFBC Society) has the mandate for planning, implementation, monitoring, coordination and management of all the activities under the above mentioned project.</p>
Micro-Planning & Livelihood Development	<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, Rashtriya Gramin Vikas Nidhi (RGVN) and Centre for Microfinance and Livelihood (CML) has been formed to implement (inter-alia) the micro-planning and livelihood development under the above project. The above consortium has been titled as ‘Consortium for Micro Planning and Enhancing Livelihood Opportunities’ - COMPELO in short.</p> <p>As per project guidelines, this micro-plan includes ‘various operations of village and forest development ... livelihood support of forest dependent members and keeping sustainable forest management as the broad objective’. It includes both forest development and livelihood development.</p>
Micro-Plan for the Christianbasti JFMC	<p>This document gives the Micro-Plan for the Christianbasti JFMC, which is located in the Hojai district of Assam. The JFMC falls under the jurisdiction of the Nagaon South Forest Division of the Lumding 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

Location	<p>The Christianbasti Joint Forest Management Committee (JFMC) has been formed to cover the existing community dwelling in Christianbasti, a village located on the fringe of the Lumding Reserve Forest. The area covered by the above JFMC falls within the Lumding Development Block of Hojai District of Assam.</p> <p>Appendix-1 gives the Village Map.</p>																						
Key Information	<p>The key information of the JFMC is furnished below.</p> <p>Table-A: Key Information of the JFMC</p> <table> <tr> <td>Name of the JFMC</td><td>Christianbasti</td></tr> <tr> <td>Habitation</td><td>Christianbasti</td></tr> <tr> <td>Name of Revenue Village</td><td>Christianbasti</td></tr> <tr> <td>Name of the Gram Panchayat / VCDC</td><td>Pub Lumding G.P.</td></tr> <tr> <td>Revenue Circle</td><td>Lanka Circle</td></tr> <tr> <td>District</td><td>Hojai</td></tr> <tr> <td>Forest Division</td><td>Nagaon South Division</td></tr> <tr> <td>Forest Range</td><td>Lumding</td></tr> <tr> <td>Forest Beat</td><td>Borlongphur</td></tr> <tr> <td>Year Formed</td><td>2008</td></tr> <tr> <td>Description of Boundary of JFMC</td><td>As below North: Lumding Diphu Road South: Lumding Railway Station West: National Highway 54 East: Potupather village</td></tr> </table> <p>Source: JFMC Records & Discussions during PRA Exercise in June 2016</p> <p>Additional details are given at Table-1 of Record-I (Given at Annexure)</p>	Name of the JFMC	Christianbasti	Habitation	Christianbasti	Name of Revenue Village	Christianbasti	Name of the Gram Panchayat / VCDC	Pub Lumding G.P.	Revenue Circle	Lanka Circle	District	Hojai	Forest Division	Nagaon South Division	Forest Range	Lumding	Forest Beat	Borlongphur	Year Formed	2008	Description of Boundary of JFMC	As below North: Lumding Diphu Road South: Lumding Railway Station West: National Highway 54 East: Potupather village
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Brief Details of the Executive Committee & General Body	<p>The brief details of Executive Committee & General Body of the JFMC are contained in the table, which is given below.</p> <p>Table-B: Brief Details of Executive Committee & general Body</p> <table> <tr> <td>Name of President</td><td>Biswajeet Das</td></tr> <tr> <td>Name of Member Secretary</td><td>Nobin Chandra Hazarika, Forester - I</td></tr> <tr> <td>Name of Treasurer</td><td>Dhruva Chetri</td></tr> <tr> <td>No. of Members in Executive Committee</td><td>Male:8 Female:6</td></tr> <tr> <td>No. of Members in the General Body</td><td>200</td></tr> </table> <p>Source: JFMC Records</p>	Name of President	Biswajeet Das	Name of Member Secretary	Nobin Chandra Hazarika, Forester - I	Name of Treasurer	Dhruva Chetri	No. of Members in Executive Committee	Male:8 Female:6	No. of Members in the General Body	200												
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Households & Population Structure	<p>The village has 200 households, of which 120 households are BPL (Below Poverty Line) households. The number of female headed households is 15.</p> <p>The total population is 1132, of which 585 are male and 547 are female</p>																						

	<p>members. The population includes 688 SC, 150 OBC and 294 General persons.</p> <p>Table-2 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"> (1) The average number of persons in a household is 5.66. (2) The sex ratio is 935 females per 1000 males in the village.
Education & Skills Development	<p>Over 77.04% 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 & 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"> (a) Bee Keeping (b) Food Processing (c) Tailoring (d) Carpentry <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>
Soil	<p>The soil type of the project area includes:</p> <ul style="list-style-type: none"> • Alluvial soil in low lying (clayey soils) and plain areas (loamy soils). <p>This type of soil can support different kinds of crops, as the soil is reported to be fertile on the whole.</p>
Water	<p>The area is drained by River Borlongphur, which flows from the adjoining hills of Karbi-Anglong into the project area.</p>
Climate: Temperature & Rainfall	<p>The maximum temperature during the summer is 45 ° C. The minimum temperature during the winter is 5.5 ° C.</p> <p>The annual rainfall is about 60-125 mm. About one-third of the rainfall usually occurs during the rainy season (June-September). The village has high levels of humidity (over 90%) during the rainy months and low levels in the winter (Below 30%).Lumding and adjoining areas Rain shadow Zone and is known to be an area with least rainfall.</p>
Forest & Bio-diversity	<p>The local forests have been broadly classified as reserve forest. The main tree species are Teak, Sal, Arjuna, Bogipuma. The forests can yield a range of NTFP like spices, leafy vegetables, ferns, medicinal plants, bamboo, cane, thatch, fodder, broom stick etc.</p> <p>Additional details in this regard are given at the ‘Forest Development Plan’.</p>
Land Use Pattern	<p>Appendix-2 gives the land-use pattern of the village. From the same, it is seen that the land-use in the village is as follows:</p> <p>Cultivable Wasteland: 11.14 %</p> <p>Diphu Road: 0.79 %</p>

	Paddy Field: 20.88 % Firewood Plantation area: 22.63 % Pond: 1.09% River: 0.92 % Road: 1.71 %. Settlement Area:32.64% Stream:7.62% Tree clad area:7.62%
Land Holdings	The type of households as per land-holding is given at Table-3 of Record-I. From the same, it is seen that: <ul style="list-style-type: none"> • 11.90 % of the households are landless; • 80.95 % of the households are marginal farmers (less than 2 Ha) • 7.14 % of the households are small farmers (2-10 Ha).
Livestock	The total number of livestock in the JFMC is 718. The main types of livestock possessed by the households include: Cows: 240 Goats: 124 Hen/Duck: 354 Table-4 of Record-I may be referred to for the details in the above connection.
Village Infrastructure & Communication Facilities	<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 Table-5 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>Physical Infrastructure: The habitation is deprived of basic physical infrastructure like paved roads, electricity, water supply, mobile network etc.</p> <p>Education & Health Facilities: 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>Govt. Offices: The government offices (such as Police station, Gram Panchayat office, Revenue office, Forest Range 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>Financial Inclusion: 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>
Agricultural Crops	The details of the agricultural crops grown in the JFMC is available at Table-6 of Record-I. The above shows that the following are the main crops grown in the JFMC. Kharif Crops: Pankaj, Aijong Rabi Crops: Mustard Others: Mango, Jackfruit, Cabbage, Cauliflower, Chilli, Brinjal, etc Most crops are rain-fed.

Crop Production Profile	<p>Table-7 of Record-I may be referred to for the production and yield details of the crops grown in the JFMC.</p> <p>The maximum numbers of households are involved in growing crops like Cabbage, Cauliflower, Chilli, Pankaj, Aijong</p> <p>The production and yield of these crops is given as follows:</p> <p>(a) Paddy: Production 5400 qt Yield 118.99 qt /ha (b) Vegetables: Production 820qt Yield 14.24 qt/ha (c) Mustard: Production 220qt Yield 7.64 qt/ha</p>
Fodder Availability	<p>The matter of fodder availability in the village is dealt with at Table-8 of Record-I. The above shows that the main sources of fodder in the JFMC are as follows:</p> <p>(a) Crop residue (b) Grazing in forest (c) Household wastage (d) Green fodder</p>
Markets	<p>Table-9 of Record-I shows the location of the different markets from the JFMC. The main markets used by the community are as follows:</p> <p>(a) Grocery / PDS: Lumding at 12 km away (if in other village) (b) Weekly / Bi-weekly Market: : Lumding at 12 km away (c) Major Market: : Lumding at 12 km away</p>
Water Resources	<p>The water resources are tabulated at Table-10 of Record-I. The main water resources with the water availability is as follows:</p> <p>(a) Ring wells (Water Availability: Perennial / Seasonal) (b) Hand Pumps (Water Availability: Perennial / Seasonal)</p>
Energy Consumption	<p>Table-11 of Record-I shows the major sources of energy in the JFMC. The same have been listed below.</p> <p>(a) Fuel Wood - Households Depending: 180 Nos. Source: Forest, Market (b) Electricity - Households Depending: 180 Nos. Source: Govt (c) Kerosene - Households Depending: 200 Nos. Source: Market</p>
Socio-economic status	<p>Social set-up: The village is inhabited by Hindu Bengali, Bihari, Nepali and Adivashi community. They have a caste system. The society is not marked by deep social divisions. The observed position of women is satisfactory.</p> <p>Economic Condition: The economic status of the village people is not satisfactory. The main livelihoods are agriculture, daily wage earning, vegetable vending etc. The Annual income of the villagers ranges from Rs. 80,000 to 90,000 per year.</p> <p>There is no large-scale migration of the youth and others for any livelihood activity. Additional details are available at the next section.</p>
Maps	<p>Appendix-1 gives the following maps, based on PRA exercise:</p> <ul style="list-style-type: none"> • Village Map • Village Social Map (with the names and particulars of members in PRA) • Village Resource Map

	<ul style="list-style-type: none"> • Venn Diagram • Chapatti Diagram
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3. Livelihood Opportunity Analysis

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

- Livelihood assets
- Livelihood context
- Priority ranking on potential livelihood

The livelihood situation of Christianbasti 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

4. Natural Capital

The major natural capital of Christianbasti JFMC are Teak, Sal, Neem, Arjun and there is only one river namely Borlongphur.

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

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

5. Physical Capital

Majority of the households in the Christianbasti 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 JFMC has 177 numbers of semi-pucca houses and the remaining houses are puccaa and IAY funded. 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, 30 per cent HH have access to tube well, 45 percent HH have access to both ring well.

6. 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 two female SHGS are there in the village. However, the village has one temple where social meetings of the villages are held.

7. Human Capital

77.04 per cent of total population of the JFMC are literate and 40 per cent of them have crossed upper primary level school education. (refer to table 3.3)

8. 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.

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

9. Livelihood Context

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

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

10. Priority Ranking through PRA Exercise

PRA Exercise	Team from IIE Guwahati carried out PRA exercise in Christianbasti JFMC as follows: Date: 7-06-2016 Location: Khatiababa Mandir Numbers Present: 45 In Presence of: JFMC President, JFMC Member secretary, community members, Forest Department personnel, etc. In Presence of: JFMC office bearers, Village Headman, community members, Forest Department personnel, etc.
Objective of PRA	The objective was to study the existing household conditions and obtain other primary data about the community for developing the livelihood options and the forest development plan.
Tools Used & Outcomes of the PRA	Different tools were used and outcomes obtained. These include: Social Mapping Wealth Ranking

	<p>Time Line review Seasonality of Livelihoods Venn Diagram</p> <p>Appendix-3 furnishes detailed information of the above.</p>																								
Ranking	<p>Ranking exercise has been done for the following:</p> <ul style="list-style-type: none">• Livelihoods & Skills Development• Entry Point Activities (EPA) <p>Appendix-3 elaborates the above. From the same, it is stated that:</p> <p>Ranking of Livelihoods & Skills Development</p> <p>1.Bee Keeping 2.Food Processing 3.Tailoring</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>Sanitation</td><td>Providing HHL (House Hold Latrine)- Low cost ,septic and sanitary type.</td><td>Swach Bharart Mission/ PHE</td></tr><tr><td>2.</td><td>Road Connectivity</td><td>Black Topping of road From Lumding to the village (~7 KM)</td><td>PMGSY/PWD</td></tr><tr><td>3.</td><td>Health Centre</td><td>Sub-Centre within the village</td><td>NHM/ H & FW</td></tr><tr><td>4.</td><td>Drinking Water</td><td>At least 4 ring well</td><td>EPA APFBC/ NRDWP</td></tr><tr><td>5.</td><td>School</td><td>Upper Primary School</td><td>SSA/ ElementaryEducation Deptt.</td></tr></table> <p>➤ An arrangement of working capital worth Rs 2 Lacs should be arranged from the EPA fund for promoting Livelihood activities.</p> <p>➤ A low Community work shed cum JFMC office to be setup within the JFMC boundaries for setting up and commissioning of Tool kits/Equipment/Machineries.</p>	Rank	Village EPA as ranked	Details (Appendix-3 has additional particulars)	Probable source of funding/deptt.	1.	Sanitation	Providing HHL (House Hold Latrine)- Low cost ,septic and sanitary type.	Swach Bharart Mission/ PHE	2.	Road Connectivity	Black Topping of road From Lumding to the village (~7 KM)	PMGSY/PWD	3.	Health Centre	Sub-Centre within the village	NHM/ H & FW	4.	Drinking Water	At least 4 ring well	EPA APFBC/ NRDWP	5.	School	Upper Primary School	SSA/ ElementaryEducation Deptt.
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5.	School	Upper Primary School	SSA/ ElementaryEducation Deptt.																						
Livelihood opportunities	<p>Livelihood Opportunities were identified as follows: Agriculture & Horticulture Livestock NTFP Skills Development Credit Facility Additional discussion about the above has been given below.</p>																								
	<p>Table-12 under Record-2 may be seen in this connection for opportunities in the areas of agriculture.</p> <p>The main constraints are: (a) Inadequate rainfall</p>																								

<p>Agriculture & Horticulture</p>	<p>(b) Animal Depredation (c) Prevalence of Pests</p> <p>The opportunities are:</p> <p>(a) Nearness to marketing hub i.e. Guwahati (b) Availability of new technologies and farming practices (c) Rising demand for diversified agriculture product</p> <p>The suggested programmes are:</p> <ul style="list-style-type: none"> • Tractor operation training • Agro-skill development programme. • Training on insecticides, pesticides, hybrid cultivation etc.
<p>Livestock</p>	<p>Table-13 furnishes additional information about opportunities for livestock rearing.</p> <p>The main constraints are:</p> <p>(a) Unable to buy beekeeping equipment from market due to poor financial condition. (b) Insufficient knowledge on bee keeping (c) Lack of knowledge on the increasing demand for honey products</p> <p>The opportunities are:</p> <p>(a) Income generating activity (b) Good domestic market (c) Assist in pollination</p> <p>The suggested programme is: Training on Bee Keeping</p>
<p>NWFP</p>	<p>The opportunities for NWFP are tabulated at Table-14 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 (b) Increasing demand for herbal products</p> <p>The suggested programme are:</p> <p>(a) Plantation of Food plants, (b) Medicinal Plant etc.</p>
	<p>For skills development, the opportunities are tabulated at Table-15 under Record-2</p> <p>The main constraints are:</p> <p>(a) Lack of product diversification (b) Lack of research on product quality</p>

Specialized Skills	<p>(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"> • Training on Modern Tools and Equipment • Providing modern technology to the villagers • Skill Up gradation & Training on New Product Development and Product Diversification • Setting up a raw material bank • Providing a bulk buy arrangement of the finished product with institutional buyers.
Credit Facility	<p>Table-16 under Record-2 discusses this aspect.</p> <p>The main constraints with the reasons are:</p> <p>(a) Financial exclusion (b) Higher rate charged by the private money lender.</p> <p>The opportunities are:</p> <p>(a) Setting up modern financial institution (b) Adequate awareness.</p> <p>The suggested programme is:</p> <p>(a) Setting up modern financial institution in the nearby areas.</p>
Strategic Interventions	<p>Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan:</p> <ol style="list-style-type: none"> 1. Agriculture & Horticulture: Tractor operation training, Agro-skill development programme, Training on insecticides, pesticides, hybrid cultivation 2. Livestock: Poultry and Cattle rearing. 3. NWFP : Plantation of different variety of food plants, Medicinal Plant etc 4. Specialized Skills: Training on Modern Tools and Equipment, Setting up a raw material bank, Providing a bulk buy arrangement of the finished product with institutional buyers. 5. Credit facility: Setting up micro finance institute in the nearby areas

11. Livelihood Development Plan

Income Generating Activities	<p>The main income generating activities as planned at the JFMC are:</p> <ol style="list-style-type: none"> 1) Bee keeping 2) Food Processing 3) Tailoring 4) Driving
SHG Activities	<p>SHGs of the village can plan the following activities:</p> <p>No SHG's formed within the JFMC</p>
Exposure Trips	<p>The following exposure trips are planned:</p> <ol style="list-style-type: none"> 1. NIL 2. NIL <p>Source: Table-34 of Record-4</p>
Summary of Action Plan	<p>As attached in next page.</p>
Convergence	<p>The planned initiatives may be converged with the following schemes of the Government of India:</p> <ol style="list-style-type: none"> (a) National Rural Employment Guarantee Scheme - for rural employment (b) Rashtriya Krishi Vikas Yojana (RKVY) - for agricultural and allied development (c) Swarna Jayanti Gram Swarajgar Yojana (SJGSY) - for irrigation, including watershed development (d) National Rural Livelihood Mission (e) Skills Development schemes (f) Other schemes for rural development and livelihoods as found appropriate. <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>

12. Forest Development Plan of Christianbasti 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 Christianbasti 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 Christianbasti 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 Christianbasti JFMC have been summarized below.

Table-1: Conditions of the Forests of Christianbasti JFMC

Identification	Area of JFMC Forest (Ha)	Distance from Village (Km)	Condition of Forest [Good - Forest with crown density of 40% of more Else 'Degraded']	Frequency of Use by Community [2-3 m / 3-6 m / 6-9 m / Over 9 m]
(A) Assigned Forest				
RF / PF Name: Lumding Forest Beat: Borlongphur Compartment:	300	5km	Good Area: 300 Ha Degraded Area: Nil	3-6m
(B) Other Planted Area				
Location: Type of Forest: VF / Other _____	-	-	-	-
TOTAL	300		Good Area: 300 Ha Degraded Area: Nil	

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

It is seen that the Christianbasti JFMC has 300 Ha under its forests, of which 300 Ha is 'Good' and none is 'Degraded'.

1.2. Forest Soil Type

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

Table-2: Forest Soil Type in JFMC

Parameter	Status in Assigned Forests	Status in Other Planted Areas
Fertility Level	2.3 to 2.94% organic. The available N, P205 and K20 content of the Soil is comparatively less.	-
Soil Erosion Status	-	-
Presence of:	15%	-
(a) Silt	20%	-
(b) Mud-flat	Low	-
(c) Newly accreted land	65%	-
(d) Sand dune	-	-

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

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

- Entisol (32.3%)
- Inceptisol (49.3%)
- Alfisols (12.3%)
- Ultisols (6.1%)

1.3. Existing Composition of Flora

In the forests of the Christianbasti JFMC, the existing composition of the Flora has been given as follows. It may be noted that the local Forests are classified as Reserved Forests

Table-3: Existing Composition of Flora in the Christianbasti JFMC

Parameter	Local Name(s)	Botanical Name(s)
Major Forest Species	Teak, Sal,	<i>Tectona Grandis</i> , <i>Shorea robusta</i> ,
Associates	Arjuna, Bogipuma	<i>Terminalia arjuna</i> <i>Bogipuma</i> ,
Shrubs		
Medicinal Plants	Amla, Arjun, Neem	<i>Phyllanthus emblica</i> , <i>Terminalia arjuna</i> , <i>Azadirachta indica</i>
Produces	Pahari Jati Bah	<i>Oxytennera parvifolia</i>

	Dulu Bah	<i>Schizostachyum dulloa</i>
	Amlakhi	<i>Emblica officinalis</i>
	Halakh	<i>Terminalia myriocarpa</i>
	Hollong	<i>Dipterocarpus macrocarpus</i>
	Arjun	<i>Terminalia arjuna</i>
	Agar	<i>Aquillaria agallocha</i>
Others, if any	-	-

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

2. Other Inputs for the Forest Development Plan

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

2.1. Past Protection Measures of the JFMC

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

- (a) Number of households involved: 100 HH
- (b) Number of people involved: 170
- (c) Summary of the measures: Patrolling by forest officials
- (d) Any formal mechanism: Not available

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

2.2. Domestic Requirements of Forest Produce

The dependency of the local community on forest produce for household requirements is available in the table given at below.

Table-4 (A): Domestic Requirement of Forest Produce per Household of the Christianbasti JFMC

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	High	60-70 kg/month		Forest
Timber for House	Low	2nos./yr		Forest
Small timber for agriculture Implements	-	-	-	-

Pole / Bamboo	Low	2 nos./yr		Forest
Fodder from Forest	Low	4kg/month		Forest
NTFP	-	-	-	-
Other _____	-	-	-	-

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

There are 200 households in the Christianbasti JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the Christianbasti village for forest produce for own use is as follows:

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	14000	Throughout the year
Timber for House	400 nos./yr	Dec - Jan
Small Timber for Implements	-	-
Pole / Bamboo	400 nos./yr	Dec - Jan
Fodder from Forest	9600	Throughout the year
NTFP	-	-
Other _____	-	-

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

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

2.3. Collection & Marketing of Forest Produce by Villagers

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

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

Name of Forest Produce	Collection for Marketing			Location of Collection
	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	
Firewood	-	-	-	-

Timber for House	-	-	-	-
Small timber for Implements	-	-	-	-
Bamboo	-	-	-	-
Pole	-	-	-	-
Fodder from Forest	-	-	-	-
NTFP	-	-	-	-
Other	-	-	-	-

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

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

Table-5 (B): Collection & Marketing of Forest Produce - Additional Information
Christianbasti JFMC

Name of Forest Produce	Surplus Marketed (Kg)	How marketed	Average Income per HH from sale of Forest Produce
Firewood	-	-	-
Timber for House	-	-	-
Small timber for Implements	-	-	-
Bamboo	-	-	-
Pole	-	-	-
Fodder from Forest	-	-	-
NTFP	-	-	-
Other	-	-	-

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

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

The total requirements of forest produce by the community members of the ChristianbastiJFMC have been summarized below - based on the information in the previous sub-sections.

Table-6: Total Requirements of Forest Produce by Villagers of the Christianbasti 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	14000	-	14000
Timber for House	400 nos.	-	400 nos.
Small timber for Implements	-	-	-
Bamboo	400 nos.	-	400 nos.
Pole	-	-	-
Fodder from Forest	9600	-	9600
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 ChristianbastiJFMC have been summarized below.

Table-7: Protection Problems of the Christianbasti 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	Yes	Yes
Encroachment of Forest Lands	Yes	Yes
Incident of snake bites/life threat/risk while protecting forest	Yes	Yes

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

Thus, it is seen that the significant forest protection issues facing the above JFMC are:

- (a) Grazing - Local Animals
- (b) Accidental Fires
- (c) Encroachment of Forest Land

3.2. Reasons for Degradation of the Forest

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

- (a) Deforestation
- (b) Accidental fire
- (c) Grazing of 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 Christianbasti 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 Christianbasti JFMC from the issues discussed earlier at Sub-section 3.1

Protection Work [to be filled from Table 3.7 of Proforma- 3 as applicable]	Location in Forest Area	Quantification of the Measures [Length, Area, Size etc.]	Timing	Priority [High / Medium / Low]
Engagement of watcher	Forest area		Morning/Evening	Low

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

- (a) Engagement of watcher

4.2. Types of Operations Proposed

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

Table-9: Types of Operations Proposed in the Christianbasti 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	-
Protection to Cut Stumps of Trees	Yes	Yes	Anytime	
Watershed Treatment	Yes	Yes	Anytime	
Water Reservoirs	Yes	Yes	Anytime	
Grass & Silvi-pasture	No	No	No	
Bamboo Plantation	No	No	No	
Seed Sowing	Yes	Yes	June/July	
Root & Shoot Cutting & Plantation	Yes	Yes	June/July	
Cut Back & Coppice Treatment	No	No	No	
Physical Fencing	No	No	No	
Social Fencing	No	No	No	
Other Activities	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 Christianbasti JFMC:

- (a) Seed Sowing
- (b) Root & Shoot Cutting & Plantation
- (c) Restoration of Degraded Forests
- (d) Protection to Cut Stumps of Trees
- (e) Watershed Treatment
- (f) Water Reservoirs

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 Christianbasti JFMC

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
Assisted Natural Regeneration (with plantation in gap)	25 HA	Yes	Teak, firewood	2m*2m
Block Plantation	150 HA	Yes	Teak, firewood	2m*2m
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	-	-	-	-
Enrichment Plantation	-	-	-	-
Direct Plantation	-	-	-	-
Other	-	-	-	-
TOTAL AREA (in Ha)	175 HA	Yes	Teak, firewood	2m*2m

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

4.4. Forest Improvement – Action Plan

Action Plan for Block Plantation of Non Saal Mixed with Associates

Name of Plantation : Block Plantation of Non Saal Mixed with Associates
 Plantation Period : 2016-17 to 2025-26 (10 Years)
 Plantation Area : -
 Spacing : -
 No. of Plants to be Raised : -
 Number Blocks : -
 Species : -
 Rates : -

Financial Year	Activities	Amount
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 100 ha, Demarcation of land during the month of December-January,	-

	Partition of land in 4 blocks, Land development, Soil Working @ Rs 1000/ha	
2017-18*	Block Plantation 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	-
2018-19*	Block Plantation 3m x 3m, 1111 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 3m x 3m, 1111 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 3m x 3m, 1111 plants/ha-during the season of April-June ; GPS marking of the area	-
	3rd Weeding	-
2021-22*	4th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2022-23*	5th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2023-24*	6th Weeding; Replacement of dead/struggling saplings raised in the previous year	-
2024-25*	7th Weeding	-
2025-26*	8th Weeding	-
Total Budgetary Requirement		-

* 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 : -

Spacing : -

No. of Plants to be Raised : -

Number Blocks : -

Species : -

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

* 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 : -
Spacing : -
No. of Plants to be Raised : -
Number Blocks :-
Species : -

Financial Year	Activities	Amount
2016-17	Identification of suitable site for regeneration-examine possibilities of natural seed fall-determine intensity and nature of biotic interference-Area Not Less than 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 April-June ; 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 & Pruning	-
2021-22*	4th Weeding & Pruning; Replacement of dead/struggling saplings raised in the previous year	-
2022-23*	5th Weeding & Pruning; Replacement of dead/struggling saplings raised in the previous year	-
2023-24*	6th Weeding & Pruning	-
2024-25*	7th Weeding	-
2025-26*	8th Weeding	-
Total Budgetary Requirement		-

4.5. Nursery Development Plan

The Nursery Development Plan for the Christianbasti JFMC depends on the following types of Nurseries:

- (a) JFMC Nurseries (incl. Departmental Nursery)
- (b) Other Nurseries - SHG & Private.

The details are given below.

JFMC Nurseries

The following table gives the details of the nurseries of the Christianbasti JFMC. This includes the Departmental Nursery involved in JFMC works.

Table-11 (A): JFMC Nurseries of the Christianbasti JFMC

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
Christianbasti	Neem, Teak, Arjun, Laucaena leucocephala (subabool), Bhelgor, Silk cotton tree(shimul), Haritaki(hilikha),Baheda(bhomora)	2009-2010	About 1Lakh	

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

Other Nurseries

The following table gives the details of other nurseries near the Christianbasti JFMC.

Table-11 (B): Other Nurseries near the Christianbasti JFMC

Name of Nursery	Species	Year of Development	Number of Seedlings	Remarks
-	-	-	-	-

Source: Proforma-3, Table-3.12 / Discussions with Forest Department personnel & Community members

4.6. Maintenance Plan - 10 Years

The maintenance plan for plantations raised in the Christianbasti JFMC is given below. This covers a period of ten years.

(A) Timber Species NonSal, Teak

Table-12 (A): Maintenance Plan of Teak Plantation in the Christianbasti JFMC

Year(s)	Treatment
-	-
-	-

Source: Discussions with Forest Department personnel & Community members

(B) Bamboo

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

Year(s)	Treatment
-	-

Source: Discussions with Forest Department personnel & Community members

(C) Fuel wood Plantation

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

Year(s)	Treatment
-	-

Source: Discussions with Forest Department personnel & Community members

(D) NTFP / Medicinal Plantation

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

Year(s)	Treatment
---------	-----------

Year(s)	Treatment
-	-

Source: Discussions with Forest Department personnel & Community members

NB::As Confirmed by DFO there is no available area for Plantation(Copy enclosed below)

To,

The Range Forest Officer,
Lumding Range, Lumding

Sub: Unavailability of area for creation of
plantation under Christanbasti JFMC area.

Sir,

I have the honour to inform you that
no area is available for creation of
plantation under Christanbasti JFMC. Since,
the vacant 50 Hec. have already been covered
by fuelwood plantation under APFBC scheme
during 2015-16.

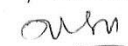
This is for favour of your kind
information & necessary action.

Yours faithfully,

Forwarded


Forest Range Officer
Lumding Range, Lumding


Confirmed


(S. Rahman, AFS.)
SRO, NS. Division,
Hojai.

1). Biswajit Das.

(President)
President
Christian Basti J.F.M.C
Lumding

2)


(Member Secretary)
Member Secretary
Christian Basti J.F.M.C.
Lumding

4.7. Miscellaneous Operations Plan

The miscellaneous operations planned in the ChristianbastiJFMC are given below.

Table-13): Miscellaneous Operations in the Christianbasti JFMC

Operation	Required (Yes / No)	Responsibility	Month / Year	Area (Ha)
(i) Medical/Health care Camp	Yes	VSS	Feb-Mar	JFMC
(ii) Centre For Non-Formal education	Yes	VSS	Feb-Mar	JFMC
(iii) Promotion of Fuel Saving Devices	Yes	VSS	Feb-Mar	JFMC
(iv) Cattle improvement/health improvements	Yes	VSS	Feb-Mar	JFMC

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

Marketing Operations

For produce from the ChristianbastiJFMC, the planned marketing operations are:

- (a) Marketing directly to private purchasers
- (b) Marketing to retail outlet

5. Expected Benefits

This sub-section furnishes the benefits expected from the forests protected by members of the Christianbasti 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 Christianbasti 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 Christianbasti JFMC

Item	Month	Year (Indicative)	Quantity
Firewood	-	-	-
Timber for House	-	-	-
Small timber for Implements	-	-	-

Bamboo		-	-
Pole	-	-	-
Fodder from Forest Trees & Grass	-	-	-
NTFP	-	-	-
Wages	-	-	-
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 Christianbasti JFMC.

Table-15: Sharing Mechanism for Christianbasti JFMC

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

According to Forest Officials of Lumding Range the sharing mechanism process has not been started officially and the people who work in the plantation collect the residual remains only.

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

13. List of Appendices

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HOW TO REACH:

Lumding to Guwahati distance, location, road map and direction

Lumding is located in **India** at the longitude of 93.17 and latitude of 25.75. Guwahati is located in **India** at the longitude of 91.75 and latitude of 26.19.

Distance between Lumding and Guwahati

The total straight line distance between Lumding and Guwahati is **150 KM** (kilometers) and 188.93 meters. The miles based distance from Lumding to Guwahati is **93.3** miles. This is a straight line distance and so most of the time the actual travel distance between Lumding and Guwahati may be higher or vary due to curvature of the road.

Lumding to Guwahati travel time

Lumding is located around 150 KM away from Guwahati so if you travel at the consistent speed of 50 KM per hour you can reach Guwahati in 3 hours. Your Guwahati travel time may vary due to your bus speed, train speed or depending upon the vehicle you use.

Lumding to Guwahati Bus

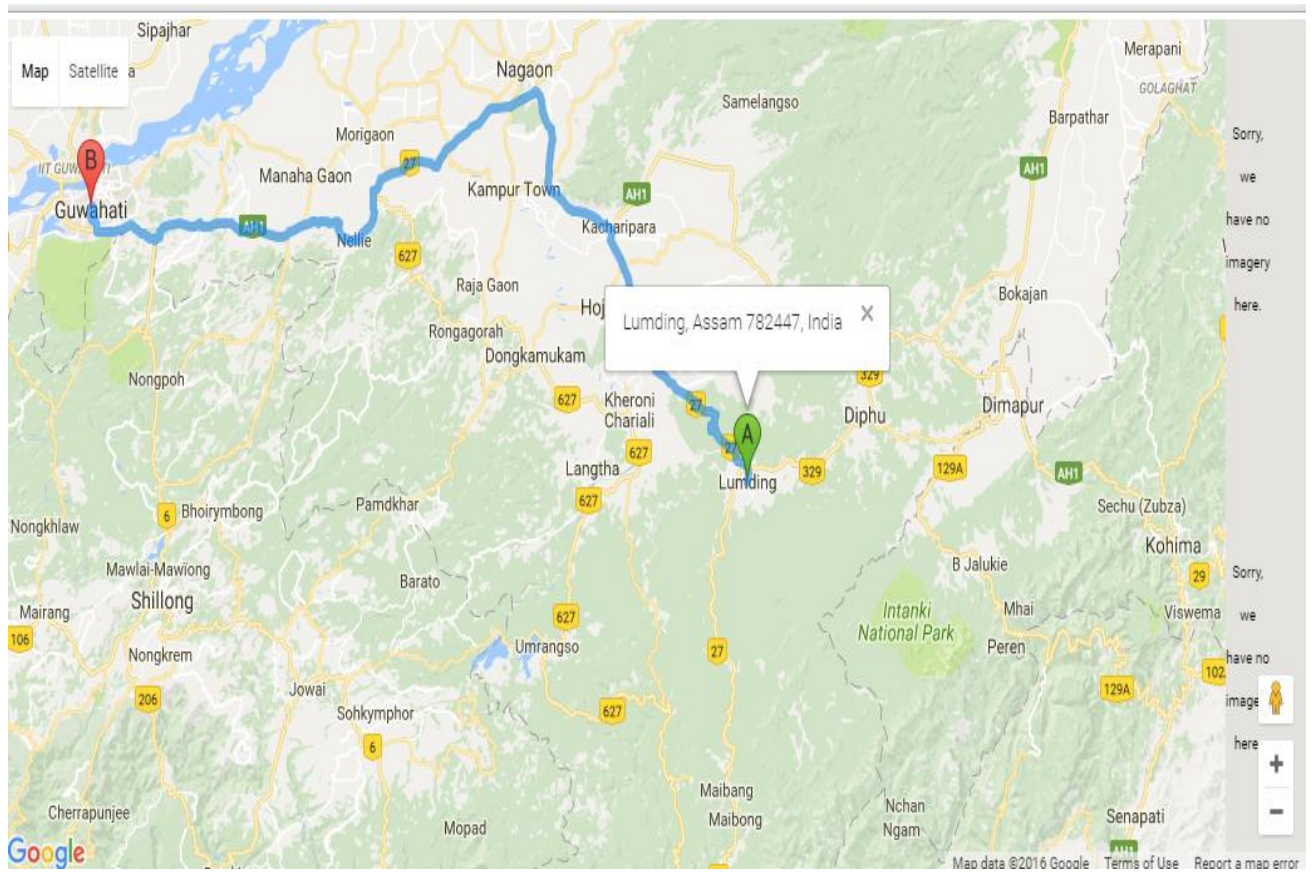
Bus timings from Lumding to Guwahati is around **2.5 hours** when your bus maintains an average speed of sixty kilometer per hour over the course of your journey. The estimated travel time from Lumding to Guwahati by bus may vary or it will take more time than the above mentioned time due to the road condition and different travel route. Travel time has been calculated based on crow fly distance so there may not be any road or bus connectivity also.

Bus fare from Lumding to Guwahati

May be around Rs.120.

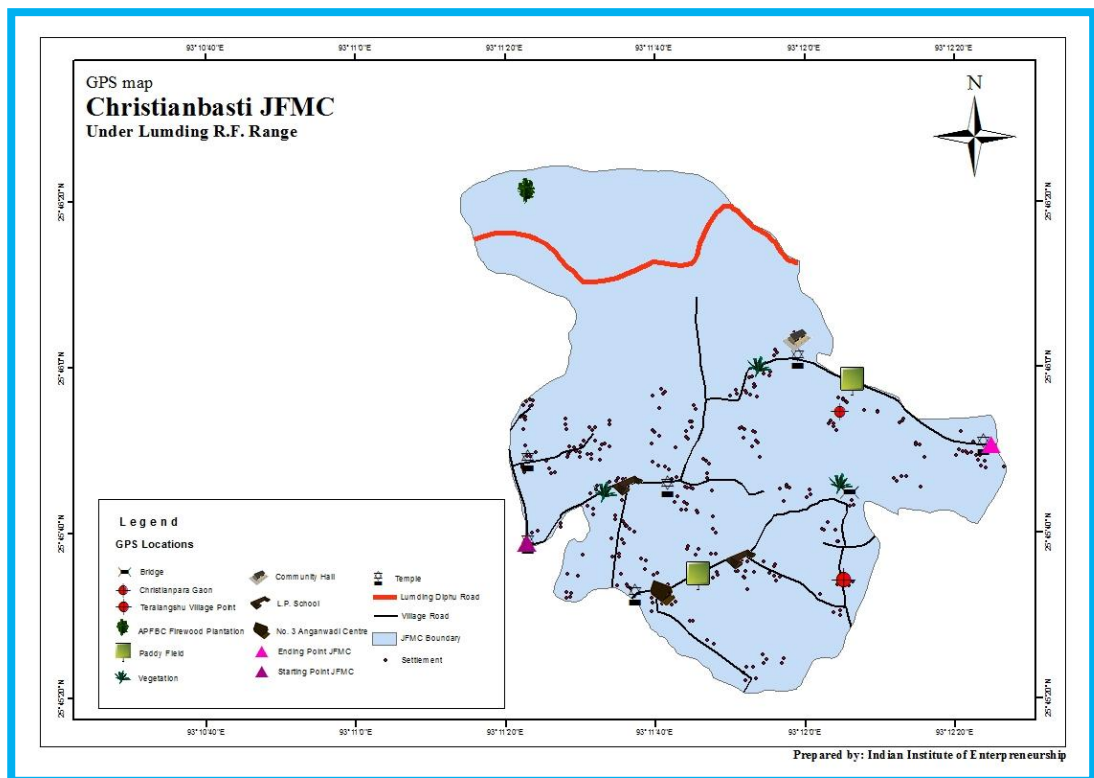
Lumding to Guwahati road map

Lumding is located nearly **east** side to Guwahati. The given east direction from Lumding is only approximate. The given google map shows the direction in which the blue color line indicates road connectivity to Guwahati. In the travel map towards Guwahati you may find enroute hotels, tourist spots, picnic spots, petrol pumps and various religious places. The given google map is not comfortable to view all the places as per your expectation then to view street maps, local places see our detailed map here.



Appendix 2

1. Village Map:



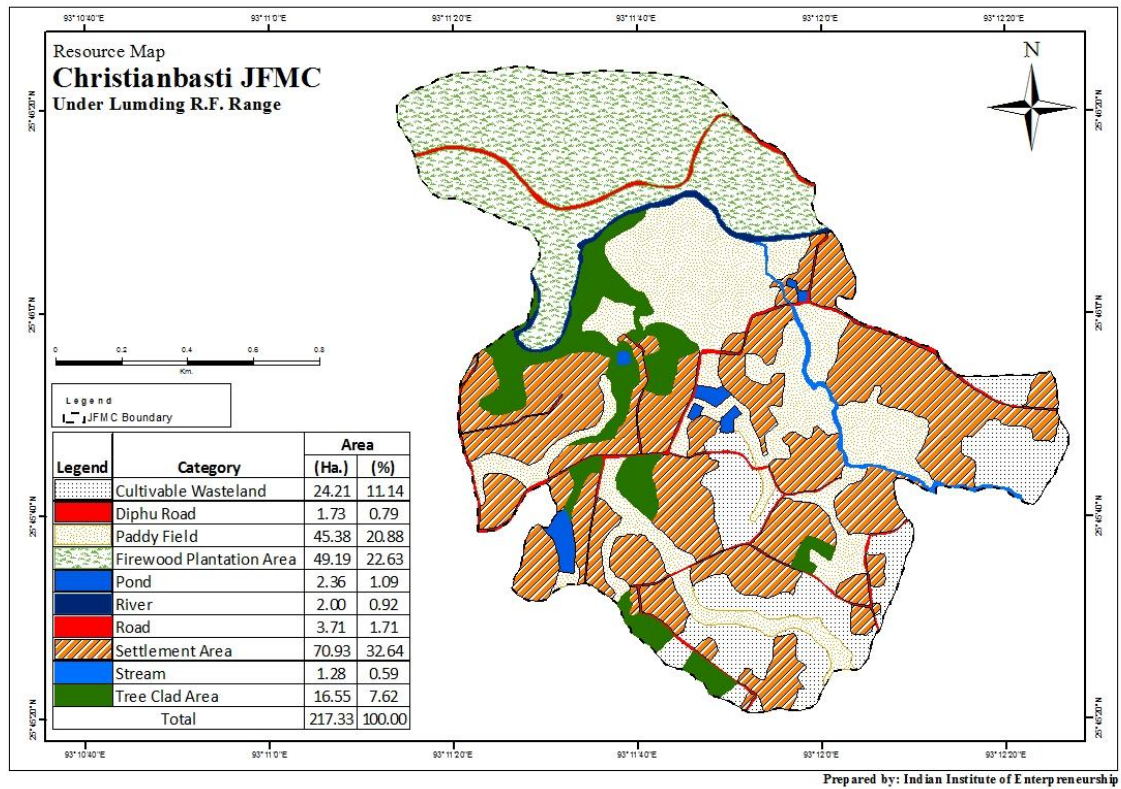
2. Social map



3. Resource Map:



Land Use map of GIS



Appendix 4

PRA Exercise

Location and timing of PRA exercise

Numbers of participants :	45
Time :	10.30 am, 11 th June 2016
Venue :	Khatiababa Mandir

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

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

3.1 Social Mapping:

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

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

Table 3.2: Information about the villages

	Village →	Christianbasti	Teralangshu	Murabasti
Social information	Total population	243	323	566
	Male	122	168	290
	Female	121	155	276
	Total households	40	60	100
	No. of Pakkahouses	7	6	10
	No's of semi pakka house	33	54	90
Landmarks	Bridges	Yes	No	No
	Stream	No	No	No

	River	Yes	Yes	Yes
	PHE	Lumding		
	Community hall	Yes	Yes	Yes
	Community Hand pump	No	No	No
	Well	Yes	Yes	Yes
	Embankment	Nil	Nil	Nil
	Check Dam	Nil	Nil	Nil
	Play Ground cum Grazing filed	Yes	Yes	Yes
	Anganwadi	Yes	Yes	Yes

Findings of social map:

- The participants of social mapping have identified 200 households out of which 177 households have semi pakka houses and 23 have pakka houses. Out of the 177 Semi Pakka houses, 40 houses are funded by Indira Awas Yojana (IAY).
- Other than the class based division of the households, important places like community hall, schools, and playground, stream, well, river, hand pump and bridges are mapped.
- Main sources of water for the villagers are the limited number of tube wells and the railway supply water line which is used by villagers for their day to day use.
- Provision of Education facility is not satisfactory in the villages as there is no high school level education facility within the JFMC which results in maximum number of school drop outs. There is only one Anganwadi centre in the entire village.
- Majority of the population belongs to the Bengali and Bihari community and are of General caste.

Learnings:

- The Households are still dependent on forest and use firewood for their cooking purposes 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 Lumding, which is 7 KM away from the JFMC. The villagers have to cover a long distance for their health check-up.
- 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 three villages of the JFMC are fully dependent on crop residue, trees fodder, grasses, and green fodder. Field residues are materials left in an agricultural field after the crop has been harvested. These residues include stalks and stubble (stems), leaves, and seed pods.
- The villagers of the Christianbasti JFMC have to move to Lumding, a distance covered with 10 km, for their weekly marketing activity.

3.2 Wealth Ranking:

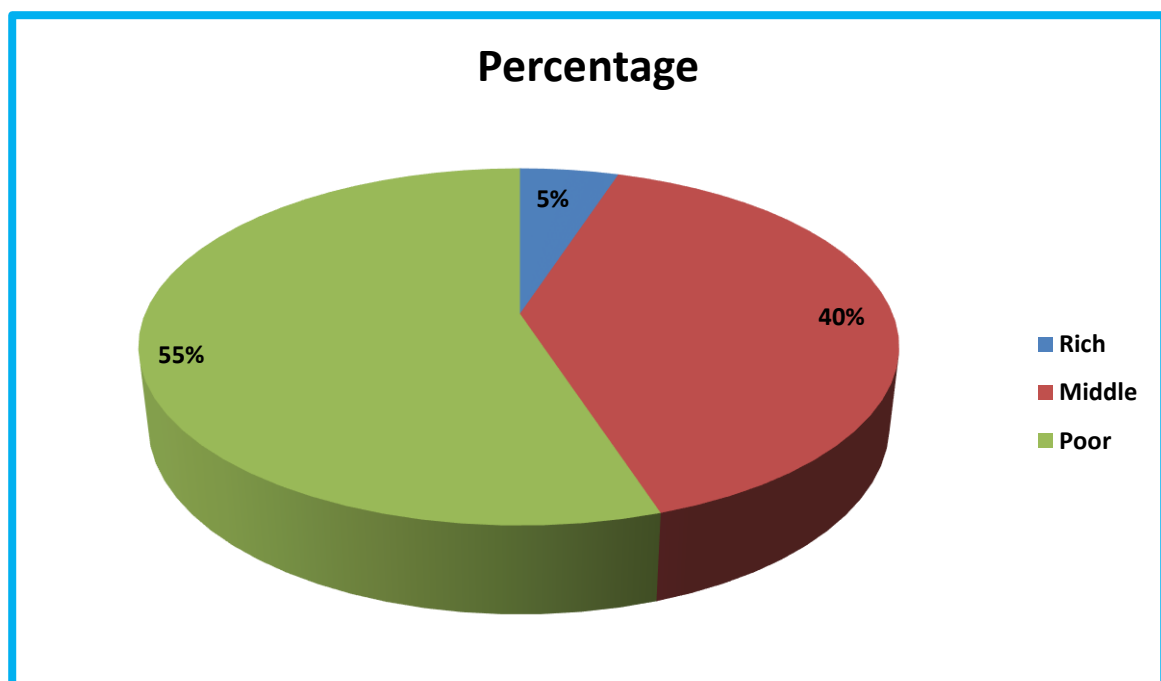
Wealth ranking, or well-being ranking, involves community members identifying and analysing the different wealth groups in a community. It enables evaluators to learn about the socioeconomic stratification of project beneficiaries and local people's definitions and indicators of wealth/well-being.

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

- a) Land holding
- b) Occupation

As such about 55 per cent people are poor, about 40 per cent belong to middle class and about 5 per cent are categorised to be rich. Poor people are mainly irregular wage earners, sometimes they lease (adhi lua) others land. They also have good amount of agricultural land.

Figure 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. When asked it was found out that the village did not had any past events except the fact that earlier the village was populated by Christian people hence the name Christianbasti came into being.

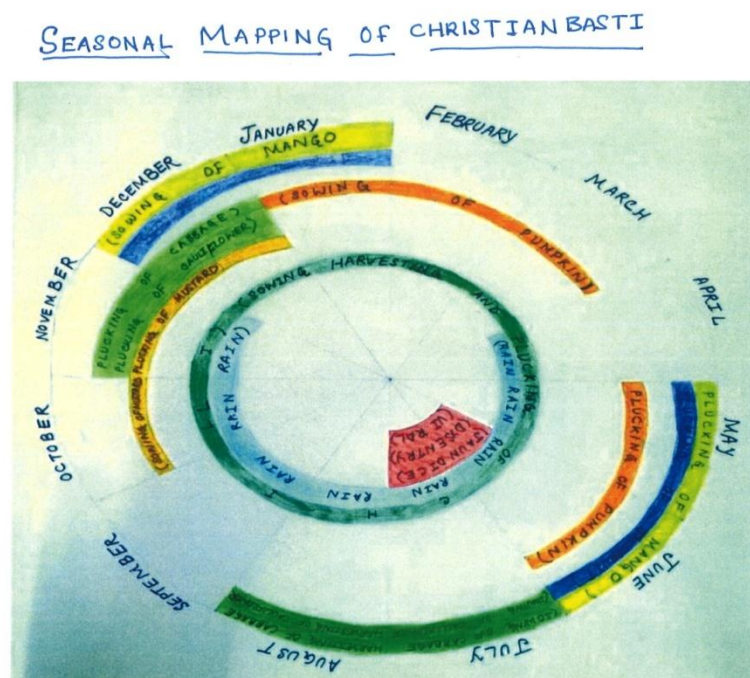
3.4 Seasonal Mapping of livelihood activities:

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 Aijong, Pankag, Ranjit rice, chilli, cabbage, cauliflower, mango etc. The FGD conducted revealed that other major livelihood options available in the JFMC are Food processing, bee keeping, shop-keeping, daily wage labourers, mason, tailoring, carpentry which are not seasonal in nature but is showed in the seasonal mapping.

Figure 3.2: Seasonal Map of Christianbasti JFMC



- ① Aradi Prasad
- ② Rukmini Gowder
- ③ Shale Basbasa
- ④ Helen Mahakar
- ⑤ SPSM 13

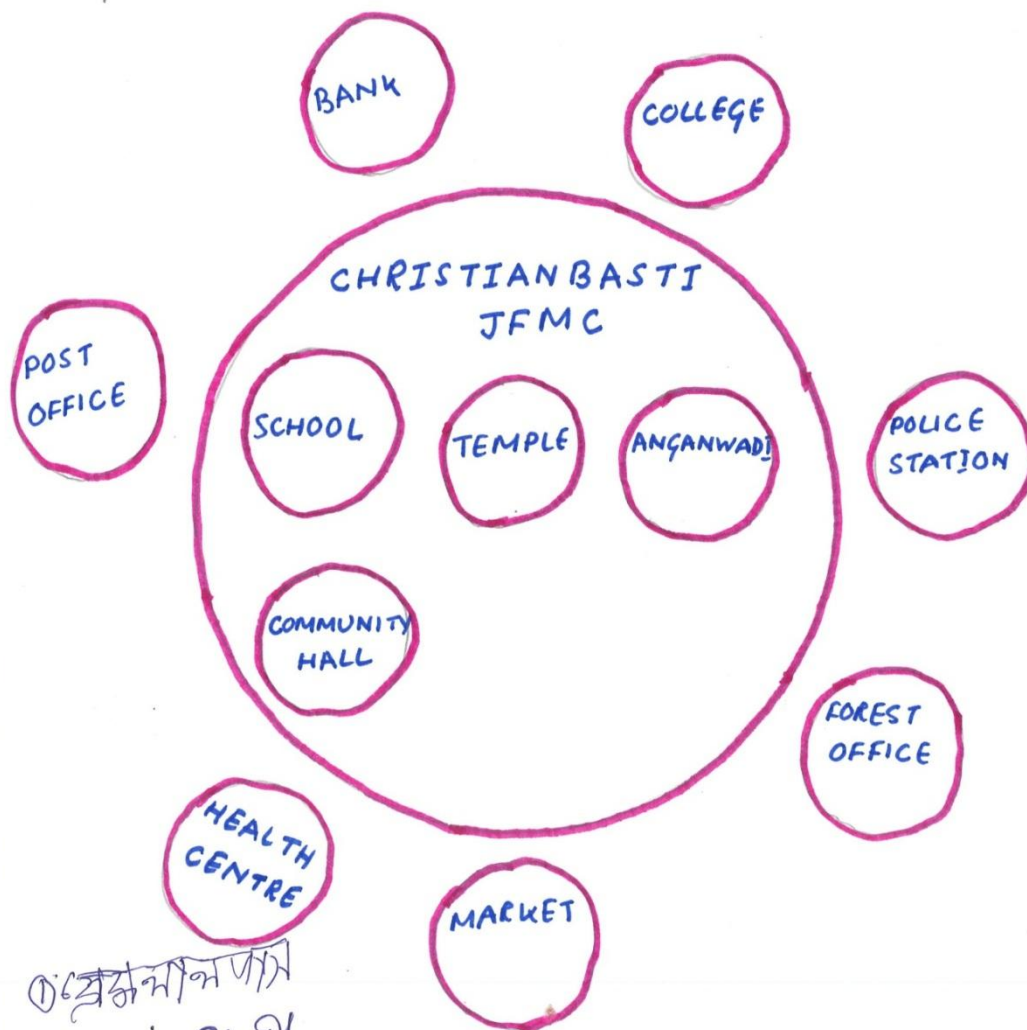
Table 3.4 Seasonal cropping pattern

Categories	Time of Activity			
Farming		Sowing	Harvesting	Plucking
	Cabbage	July	August	Nov-Dec
	Cauliflower	July	August	Nov-Dec
	Chilli	Throughout the year		
	Pumpkin	Jan-Mar	-----	May-June
	Mustard	October	-----	Nov-Dec
	Mango	March-April	-----	May-June
	Jackfruit	April-May	-----	May-June
Non-Farming	Weaving	Throughout the year		
	Livestock Rearing			
	Daily Wage Earning			
	Shop-keeper			
	Masonary			
	Electrician			
	Tailoring			

Learnings:

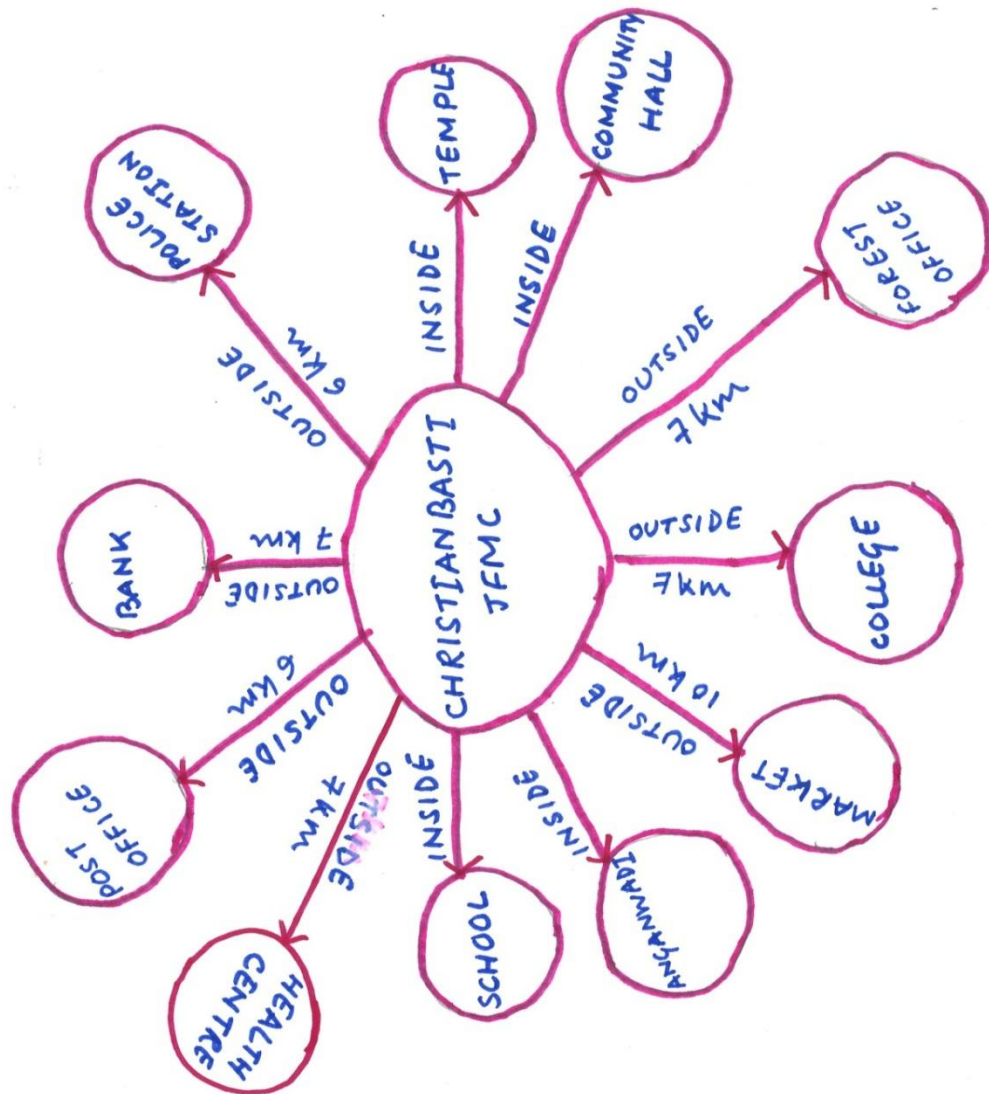
- Water availability is less during the period October to March, so agricultural productivity become less in this period.

3.5 Venn Diagram



- ① ~~मोनि सिंह~~
- ② MONI Singh
- ③ Shipra dey.
- ④ Yanga Das.
- ⑤ ~~शिवसिंह~~

3.6 Chapatti Diagram



- ① Shipra Dhar.
- ② Mampi Dhar
- ③ Kalika Shoma
- ④ Madhimita Munde.
- ⑤ Pa Pixa Bas Bode

Priority Ranking- EPA

	Drinkin g Water (A)	Sanit ation (B)	Road (C)	Health Centre (D)	Commu nity Hall (E)	School (F)	Mark Scoring	Position
Drinking Water (A)	X	B	C	A	A	A	3	3
Sanitation (B)	X	X	C	B	B	B	3+	2
Road (C)	X	X	X	C	C	C	3++	1
Health Centre (D)	X	X	X	X	C	D	1++	4
Community Hall (E)	X	X	C	D	X	E	1+	5
School (F)	X	X	X	X	F	X	1	6

Priority Ranking-Livelihood

	Food Processing (A)	Bee Keepin g (B)	Driving (C)	Tailo ring (D)	Carpe ntry (E)	Electr icia (F)	Mark scoring	Position
Food Processing (A)	X	B	A	A	A	A	4	2
Bee Keeping (B)	X	X	B	B	B	B	4+	1
Driving (C)	X	X	X	C	C	C	3	3
Tailoring (D)	X	X	X	X	D	D	2	4
Carpentry (E)	X	X	X	X	X	E	1	5
Electricia n (F)	X	X	X	X	X	X	0	6

Priority Ranking of christianbashi

Priority Ranking- EPA

	Drinkin g Water (A)	Sanit ation (B)	Road (C)	Health Centre (D)	Commu nity Hall (E)	School (F)	Mark Scoring	Position
Drinking Water (A)	X	B	C	A	A	A	3	3
Sanitation (B)	X	X	C	B	B	B	3+	2
Road (C)	X	X	X	C	C	C	3++	1
Health Centre (D)	X	X	X	X	C	D	1++	4
Community Hall (E)	X	X	C	D	X	E	1+	5
School (F)	X	X	X	X	F	X	1	6

Priority Ranking-Livelihood

	Food Processing (A)	Bee Keepin g (B)	Driving (C)	Tailo ring (D)	Carpe ntry (E)	Electr icia (F)	Mark scoring	Position
Food Processing (A)	X	B	A	A	A	A	4	2
Bee Keeping (B)	X	X	B	B	B	B	4+	1
Driving (C)	X	X	X	C	C	C	3	3
Tailoring (D)	X	X	X	X	D	D	2	4
Carpentry (E)	X	X	X	X	X	E	1	5
Electricia n (F)	X	X	X	X	X	X	0	6

- ① chandra Thapa
- 2) Poppi Karamkaton
- ③ Anjan Ray.
- ④ Shalu Boshor

⑤ Dd chandra Das.

ANNEXURE 5

Photographs 1



Photographs 2



Annexure 6

LIST OF JFMC MEMBERS

RECORD 7 : MEMBERSHIP REGISTER

Christiana Basti
Name of JFMC Division Range Lurding .

Beat Borlongkar JFMC Code

Sr. No.	Name	Father's / Husband's name	Age	Male / Female	Education	SC/ST / BC/OBC
1	B. Das .	St. Jatin Das	45	M	B Com	SC
2	Jaya Pal (P)	Anjay pal	35	F	8+	Gen
3	Nabin (MS)	—	—	M	10	n
4	Dhruva Chetri (T)	Debabrata Chetri	42	M	8 pass	n
5	Ram Rajbar	St. Dinkar Rajbar	45	M	8 pass	n

Anjan Rai Hindu 39 M n OBC
Santosha Gaur - 50 M Primary Gen
Manu Dey Chandrajaya 48 M n Gen
Suresh Guala St. Motilal 50 M netric T tribe
Sadhana Karmi nages 40 F Primary ST
Meri Singh St. Shiv 35 F n ST
Lalita Guala Gaurdhan 45 F n To tribe
Rita Mondal
Radhika Sarmah shankar Sarmah 35 netric pass Gen
Gauri Dhar Ripunjay 42 netric pass OBC
Dhar.

Annexure 7 (Record I)

Table 1: Basic data of the JFMC:

Sl. No	Name of JFMC/Village	Date of Establishment	No. of Members In Executive Commt.	Name of President	Name of Member Secretary	Money in village Dev. Fund (VDF)	Contribution per family or per person	Social fencing used Yes/ No	Remarks on special attainments	Grading % of Success of JFMC by RFO
1	Christianbasti	2008	14	Biswajeet Das	Nobin Ch Hazarika, Forester-I	-	-	-	-	80%

Table 2: Population data of the JFMC:

Name of Village	No. of House hold	SC		ST		OBC		General		Total-all category
		Male	Female	Male	female	Male	Female	Male	Female	
Christianbasti	40	76	79	-	-	18	15	28	27	243
Teralngshu	60	98	91	-	-	23	19	47	45	323
Murabasti	100	174	170	-	-	41	34	75	72	566
Total	200	348	340	-	-	82	68	150	144	1132

Source: - Field survey report.

Table 3: Age profile of the JFMC

Age Class	<5 years	5-18 years	18-45 years	45-60 years	>60 years
Male	22	233	216	104	10
Female	15	216	211	93	12
Total	37	449	427	197	22

Table 3: Education profile of the JFMC

Age Class	K.G./ Nursery	Up-to IV	V-VII	VIII-X	X-XII	Graduate	Masters	Illiterate
< 25 Years	7	112	132	247	156	-	-	15
>25 Years (Adult)	-	118	22	43	12	-	-	238
TOTAL	7	230	154	290	168	-	-	253

Table 4: Income Distribution of the JFMC

Income Category(in Rs) Yearly	No of HHs
>5000 Rs	-
5,0000-10,000	-
11,000-20,000	10
21,000-30,000	152
31,000-40,000	38
41,000-50,000	-
<50,000	-

Table 5: JFMC farmer category on the basis of land holding :

Sl.No	Name of Village	Type of Farmers according to land holding				Total
		Large Farmer > 10ha.	Small Farmer 2 – 10 ha.	Marginal Farmer <2 ha.	Land Less	
1	Christianbasti	-	9	20	8	37
2	Teralangshu	-	-	41	5	46
3	Murabasti	-	3	75	7	85
Total		-	-	136	20	168

Table 6: Cattle Population of the JFMC

Sl.No	Name of Village	Village wise no of cattle							
		Cow s	Buffaloes	Goats	Sheep	Bulls/ Oxeing	Hen/ Coc k	Oth ers	Total
1	Christianbasti	48	-	25	-	-	71	-	144
2	Teralansghu	72	-	37	-	-	106	-	215
3	Murabasti	120	-	62	-	-	177	-	359
Total		240	-	124	-	-	354	-	718

Table 7: Infrastructure of the JFMC

SL.N o	Infrastructure	Location	Distance from village, if in another location (in Kilometers)	Condition and status of present use
1	Main Road	Yes	Under Village area	Poor
2	Electricity Office	Lumding	5km	Average
3	Gas connection	Lumding	5km	Average
4	Transport	Lumding	6 km	Poor
5	Primary Health Centre	Lumding	6 km	Poor
6	School (LP)	Yes	Under Village area	Good
8	Bank	SBI, UBI, Gramin vikash Bank, Umrongso	7 km	Poor
9	Anganwadi Centre	Yes	Under Village area	Average
10	Gram Panchayat Office	Nil	-	-
11	Revenue Office	Nil	-	-
12	Police Office	Lumding	6 km	Poor
13	Forest Office (Beat)	Lumding	7 km	Good

14	Post Office	Lumding	7 km	Poor
15	Bus facility	Lumding	Under Village area	Poor
16	Railway Station	Lumding	7 KM	Good
17	Drinking Water	Ring well (30 Nos.), Hand Pumps (2 Nos)	Under Village area	Average
18	Community hall	Yes	Under Village area	Average
19	District Head Quarter	Nil	-	-
20	Degree College	Lumding	7km	-

Table 8: Agricultural crops of the JFMC

	Rain fed		Irrigation	
	Name of Crop	Area in ha.	Name of Crop	Area in ha.
Kharif	Paddy	45.38	-	-
Rabi	Mustard	29	-	-
Others	Horticulture (cabbage, cauliflower, brinjal, etc)	58	-	-

Table 9: Crop production profile of the JFMC

Crop	Total production (approx)	Number of households growing	Average production (quintal per/ha)
Paddy	5400 q	140	118.99
Vegetables	840 q	120	14.24
Mustard	220 q	110	7.64

Table 10: Fodder Availability (animal) of the JFMC

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

Green fodder		✓	-
Grazing in forest	✓	-	-

Table 11: Location of market from the JFMC

For purchase	Location	Distance from village if in other village kilometer
Grocery Shop/PDS center	Under village area	-
Weekly Market	Lumding	10 KM
Major Market	Lumding	15 KM
Forest corporation sale depo.	-	-
Tendu Patta PHAD	-	-
Fish Market	Lumding	10KM
Medicinal Plant Collection Center	-	-
Forest Corporation Medicinal	-	-
Plant Collection Center	-	-
Other Specify	-	-

Table 12: Water Resources Facility available in the JFMC

Water Source	Number	Water Availability (Adequacy, seasonality)	Uses (drinking, irrigation, livestock bathing)
Water Harvesting Structure	-	-	-
Check dam	-	-	-
Tube well	2	Adequacy	drinking
River/Nala	1	Adequacy	drinking
Ring well	30	Adequacy	drinking
Canal	-	-	-

Water Reservoir	-	-	-
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Table 13: Energy consumption of the JFMC

Type of fuel	Number of household depending	Number of months dependent	Source (local village, forest, other source)	Major/Secondary
Fuel wood	200	12 month	Forest, Village area	Major
Kerosene stove	200	-	-	-
Gobar/Bio Gas	-	-	-	-
Cow dung cake	-	-	-	-
LPG	80	12 month	-	Secondary
Electric Heater	-	-	-	-
Other, pl specify, Solar	-	-	-	-

RECORD II

LIVELIHOOD OPPORTUNITY ANALYSIS

Table- 14: Agriculture and Horticulture

Constraints	Reasons	Opportunities	Programme
Low production/ collection	Traditional way of cultivation. Lack of agricultural infrastructure, modern tools and equipment's viz, power tillers, tractors etc.	Nearness to marketing hub i.e. Guwahati	
Storage & processing	Lack of common storing place Lack of cold storage facility due to non-availability of electricity	Availability of new technologies and farming practices	Training programme
Marketing	Lack of cold storage facility due to non-availability of electricity Lack of transporting facilities for carrying products	Rising demand for diversified agriculture product	Awareness programme on marketing know how

TABLE- 15: Livestock

Constraints	Reasons	Opportunities	Programme
Less grazing land	Not applicable	Income generating activity	
Availability of fodder	Trees fodder and crop residue are available only for 1-3 months.	Good domestic market	
Lack of skilled manpower	Insufficient knowledge on bee keeping		
Honey Market	Proper linkage with the market Unaware of the market demand of different honey made products.		

Problems related to other Livestock	Poor nutrition		Cattle improvement /health programmes
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TABLE- 16: NWFP

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

TABLE- 17: Specialized skills

Constraints	Reasons	Opportunities	Programme
Raw material availability	Lack of monetary assistance	Diversified market products	Training on Skill development
Product quality	Lack of training Use of Traditional machineries		Training on Modern Tools and Equipment. Providing modern technology to the villagers
Marketing potential	Lack of domestic market knowledge No linkage with the institutional buyers		Providing a bulk buy arrangement of the finished product with institutional buyers
Credit facility	Lack of Micro Finance Institutions like SHG'S		Microfinance, Term Loans, Working Capital Arrangement

TABLE- 18: Credit facility

Constraints	Reasons	Opportunities	Programme
Rate of interest	Higher lending rates charged by the private money lender		
Availability of loan	Lack of Micro Finance Institutions like SHG'S	Creating SHG'S	Awareness programme on SHG