

**GELIPUNG ECO DEVELOPMENT COMMITTEE (EDC)
DIGBOI FOREST DIVISION**

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

**Prepared by
Gelipung Eco Development Committee**

**Assisted by
Assam Forest Department
&
COMPELO
(IIE & RGVN)**

June 2017

Approved

Enki

**Divisional Forest Officer
Digboi Division, Digboi
Tinsukia, Assam**

1) Introduction

<p>About the Project</p>	<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 (AFD)</i>- 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>
<p>Micro-Planning & Livelihood Development</p>	<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 (RGVN)</i> and Centre for Microfinance & 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 ‘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>
<p>Micro-Plan for the Gelipung EDC</p>	<p>This document gives the Micro-Plan for the Gelipung EDC, which is located in the Dibrugarh district of Assam. The Gelipung EDC falls under the jurisdiction of the Soraipung Forest Range under Digboi Forest Division.</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 Centre for Microfinance and Livelihood (CML) Guwahati in June 2016. The micro-plan has been compiled by CML based on the project guidelines. The document has been discussed and finalized for adoption in July 2016.</p>

2. Village Socio Economic Profile

<p>Location</p>	<p>The Gelipung (EDC) was formed comprising two villages namely Gelipung and Soraipung. It is situated 7 kms away from Digboi Forest Division and is located in Dibrugarh district of Assam.</p> <p>The Nearest town of the village is Duliajan and the distance from Gelipung EDC to Duliajan is 20 km. District head quarter of the village is Dibrugarh which is 60 km away. It falls under Tengakhat development block under Dibrugarh district. The EDC falls under the Dehing Patkai WLS.</p> <p>Appendix-1 gives the Village Map and GIS Map</p>																						
<p>Key Information</p>	<p>The key information of the EDC is furnished below.</p> <p>Table A: Key Information of the EDC</p> <table border="1" data-bbox="472 789 1401 1297"> <tr> <td>Name of the EDC</td> <td>Gelipung</td> </tr> <tr> <td>Name of the Gram Panchayat</td> <td>Bhadoi</td> </tr> <tr> <td>Block</td> <td>Tengakhat</td> </tr> <tr> <td>District</td> <td>Dibrugarh</td> </tr> <tr> <td>Forest Division</td> <td>Digboi</td> </tr> <tr> <td>Forest Range</td> <td>Soraipung</td> </tr> <tr> <td>Forest Beat</td> <td>Kathalguri</td> </tr> <tr> <td>Year of formation</td> <td>2015-16</td> </tr> <tr> <td>Description of Boundary of EDC</td> <td>North: Chapatoli Gaon South: Tarahjan Tea Estate East : Dehing Patkai WLS West: Chapatoli Bhadoi Panchali</td> </tr> <tr> <td>Total Households</td> <td>202</td> </tr> <tr> <td>Number of EDC Villages</td> <td>2</td> </tr> </table> <p>Source: EDC Records and Discussions during PRA exercise in June, 2016. Additional details are given at Table-1 of Record-I (Given as annexure).</p>	Name of the EDC	Gelipung	Name of the Gram Panchayat	Bhadoi	Block	Tengakhat	District	Dibrugarh	Forest Division	Digboi	Forest Range	Soraipung	Forest Beat	Kathalguri	Year of formation	2015-16	Description of Boundary of EDC	North: Chapatoli Gaon South: Tarahjan Tea Estate East : Dehing Patkai WLS West: Chapatoli Bhadoi Panchali	Total Households	202	Number of EDC Villages	2
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<p>Brief Details of the Executive Committee & General Body</p>	<p>The brief details of the Executive Committee and General Body of the EDC are contained in the table, which is given below.</p> <p>Table B: Brief details of the Executive Committee & General Body</p> <table border="1" data-bbox="472 1612 1401 1724"> <tr> <td>Name of President</td> <td>Mr. Paneshwar Phukan</td> </tr> <tr> <td>Name of Secretary</td> <td>Mr. Debo Gohain</td> </tr> <tr> <td>No. of Members in Executive Committee</td> <td>11 (Male: 11)</td> </tr> </table> <p>Source: EDC Records</p>	Name of President	Mr. Paneshwar Phukan	Name of Secretary	Mr. Debo Gohain	No. of Members in Executive Committee	11 (Male: 11)																
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<p>Household and Population Structure</p>	<p>The EDC has two villages namely Gelipung and Soraipung with a total households of 202 and the total population of 657. The total male population stands at 370 whereas the total female population is 287. Hindu is the dominant religion of the EDC and residing communities are Sonowal Kachari, Boro, Ahom and Adivasi. Almost 90% of the total population belongs to OBC category and rest are ST and others.</p> <p>The average size of the households is 5 and the sex ratio is 776 females per 1000 males in the EDC villages.</p> <p>As per the household survey conducted, 84% of the households are BPL and 82% possess Government ration cards. 27 villagers possess MGNREGA job card.</p> <p>Table-2 of Record-I may be referred for further details.</p>
<p>Education & Skills Development</p>	<p>The total literacy rate of the EDC villages is 67%. Most of the villagers have attained school education up-to standard IV. Only a mere 7% of the total population have passed Higher Secondary.</p> <p>The literacy rate of Soraipung village at 75.13% is better than the Gelipung village.</p> <p>Table-3 of Record-I may be referred for further details.</p> <p>In the Gelipung EDC villages, the villagers are traditionally skilled in following areas:</p> <ul style="list-style-type: none"> a) Agriculture - 134 households b) Handicraft - 35 households c) Weaving - 82 households d) Daily wage Labour – 18 households e) Carpentry - 6 households <p>Source: Field survey</p>
<p>Soil</p>	<p>The Study has found different types of soil in Gelipung EDC villages. There are three types of soil available: sandy loam, loam and clayey loam in Gelipung EDC villages. These favour the cultivation of winter rice, mustard, pea, vegetables, etc. Of the total area, 82.0 percent is arable, 7.0 percent is non arable land and 11.0 percent is not available for cultivation.</p> <p>The soils of this area may be classified into following classes</p> <ul style="list-style-type: none"> a) Recent riverine alluvial soils (Antisol) b) Old riverine alluvial soils (Inceptisol)

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<p>Water</p>	<p>Ground water is the main source of drinking water. Community consultation revealed that adequacy and quality is not a problem in case for drinking water. Good quality water is available to the villagers around the year. Villages where river or stream present, people also use this for their domestic purpose.</p> <p>Digboi river which flows through the EDC is home to several species of fishes like rohu, grass-carp, cat-fish etc.</p>
<p>Climate, Temperature & Rainfall</p>	<p>Highest temperature is generally observed in the months of July/August (35°C) and lowest is in the months of December/January (7-8°C).</p> <p>Humidity in the morning hours ranges from 90-95% and 50-70% in the afternoon hours.</p> <p>The climate of the region is sub-tropical wet and is characterized by hot and humid summer and dry cool winter.</p> <p>The Gelipung EDC experiences 2300 to 3000 mm rainfall per year. It is observed that on an average 64 to 68% of annual rainfall is received during the monsoon period (June-September) and 22-26% of annual rainfall during pre-monsoon period (March-May).</p>
<p>Forest & Bio-diversity</p>	<p>The local forests have been broadly classified as - Tropical Wet Evergreen and Tropical Semi-Evergreen.</p> <p>The Gelipung EDC forest is enriched with tree species like- Lagerstroemia speciosa (Ajhar), Mansoniadipikae (Badam), Morns laevigata (Bola), Biscofiarmnica (Uriam), Cordial dichotoma (Bual), Bombaxceiba (Simalu), Lagerstroemia parviflora (Sida), Delonixresia (Radhasura), Canariumbenealensis & Cresiniferum (Dhuna, Dhup), Ficushispida (Dimoru), Premnabengalensis (Gohra), Caeslpimapulcherima (Krishnasura), Tetramelesmdiflora (Bheleu), and Tactonasrandis (Segun).</p> <p>A wide variety of plants and animals is available in Gelipung EDC villages, that can easily attract tourists, and thus there is a high possibility for the development of ecotourism in this area. In the rain forest, there are a number of rare plants and animals. A large number of species of orchids, butterflies, birds and wild cats are the attractions of the forest which cannot be found in any other rain forests.</p>
<p>Land-use Pattern</p>	<p>The cropping system is diversified depending upon soil, microclimate condition and socio-economic status</p> <ul style="list-style-type: none"> a) Land under agriculture: 24 % b) Land under non-agricultural use: 33 % c) Cultivable wasteland: 14 % d) Land under Misc. tree crops and groves: 10 %

	e) Barren and uncultivable land: 19 %														
Land Holdings	<p>The land-holding pattern of the EDC can be depicted as below:</p> <ul style="list-style-type: none"> a) Homestead land: 95% of the total households have homestead lands. b) Farm land: 66% of the total households have farm lands c) Wasteland: 5.44% of the total households have waste lands d) Share-cropping: Almost 9 % of the total households are practicing share-cropping e) Land lease: 9% of the total households have taken land on lease. <p>The details of the land-holding pattern is provided at Table 4 of Record-I</p>														
Livestock	<p>The total numbers of livestock in the EDC villages are - cows, bulls, buffaloes, duck, local poultry, pigs and goats. The details of the livestock reared are provided as below:</p> <table border="1" data-bbox="472 825 1021 1081"> <tr> <td>Cow</td> <td>206</td> </tr> <tr> <td>Bull</td> <td>258</td> </tr> <tr> <td>Buffalo</td> <td>65</td> </tr> <tr> <td>Duck</td> <td>430</td> </tr> <tr> <td>Local poultry</td> <td>597</td> </tr> <tr> <td>Pig</td> <td>98</td> </tr> <tr> <td>Goat</td> <td>106</td> </tr> </table> <p>Table 5 of Record-I can be referred for details on the above.</p>	Cow	206	Bull	258	Buffalo	65	Duck	430	Local poultry	597	Pig	98	Goat	106
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Village Infrastructure & Communication Facilities	<p>The infrastructures which are available in the villages can be categorized under the following heads:</p> <p>Physical Infrastructure: The households have the basic amenities including electricity, mobile phones, cycles and motorbikes for communication purposes. Almost 67% of the households have access to electricity. The road to the EDC from Digboi through Soraipung range office is in a motorable condition but requires repair. There are three approach roads to reach the EDC namely Soraipung road, Bhadoi Nagar road and Shanti Tea estate road. The nearest market is located at Bhadoi Panchali.</p> <p>Education and Health facilities: Education and health facilities include two primary schools, 2 Anganwadi centers, one Public Health Centre at Bhadoi Panchali. The nearest ME school is 0.5 kms from the EDC located at Fecalajan Tea estate. For medical emergencies and regular check-up, people mostly refer to Oil India Hospital located at Digboi.</p> <p>Govt. Offices: The Government offices and line departments which are existing at a reasonable distance from the EDC are Panchayat office, Revenue office, local police station, Forest beat office and range office.</p>														

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	<p>Financial Institutions: There are banks and post offices which are present in the area but they are at a considerable distance of at an average distance of 3-5 kms from the villages.</p> <p>Details of infrastructures are given in Table 6 of Record I</p>
Agriculture Crops & Crop Production Profile	<p>The principle cultivated crops grown in the EDC villages is:</p> <p>Kharif: Paddy (Sali) Almost 42% of the households cultivate paddy with an average harvest of 1233.54 kilograms. The average investment made by a farmer for paddy cultivation is INR 3475.</p> <p>It was also seen that there is no irrigation facility in the farm lands and 100% of the farm land under paddy cultivation is rain-fed.</p> <p>The field survey has not reported cultivation of seasonal vegetables and fruits which clearly indicates that most of the farmers go for a single crop in their farm land.</p> <p>Table 7 of Record-I depicts the details on agriculture crops.</p>
Fodder Availability	<p>The main sources of fodder are:</p> <ol style="list-style-type: none"> a) Collection from Forest b) Household kitchen waste c) It is seen that almost 42% of the households let their livestock graze especially cow, bull and bullocks on forests and the peak season of forest grazing starts from June till December. <p>Table 8 of Record-I depicts the seasonality of grazing</p>
Markets	<p>The main markets used by the community and its distance from the EDC villages are mentioned below:</p> <p>The Grocery / PDS shops are nearly 3-5 km distance from village at Bhadoi Panchali.</p> <p>The Weekly / Bi-weekly Market is nearly 3 km away. Major Market is at Digboi and Duliajan which is 15 kms and 20 kms respectively from the EDC villages.</p> <p>Table 9 of Record-I depicts the location of different markets from the village.</p>
Water Resources	<p>The main water resources within the EDC villages are as follows:</p> <ol style="list-style-type: none"> a) Tube-well: 115 (Water availability: Perennial)

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	<p>b) Ring Well: 14 (Water availability: Perennial) c) River: 1 (Water availability: Perennial) d) Pond: 2 (Water availability: Perennial)</p> <p>It has been observed that in most of the water sources, iron content has been found to be high.</p> <p>Table 10 of Record-I depicts the availability of water resources.</p>
<p>Energy Consumption</p>	<p>The major sources of energy in the village have been listed below:</p> <p>Firewood: Households Depending: 132. Source: Local forest area Average HH consumption of firewood: 303.10 kg</p> <p>Kerosene: Households Depending: 131. Source: Local market. Average HH consumption of Kerosene: 4.19 litres</p> <p>LPG: 3. Source: Local Gas Agency Average HH consumption of LPG: 1 cylinder/month</p> <p>Table 11 of Record-I depicts the energy use of villagers</p> <p>In case of household lighting, 41% of the households completely depend on kerosene lamp which clearly shows that poor penetration of electricity in the EDC villages. Again, 35% of the total households depend both on kerosene lamps and electric run bulbs for household lighting.</p>
<p>Socio-Economic Status</p>	<p>Social set-up: The population caste break-up is quite diverse in the EDC villages as there multiple communities inhabiting the villages namely Ahom, Adivasi and Sonowal Kachari.</p> <p>Economic Condition: The overall economic condition of the villagers is not found to be satisfactory. The average household income has been found to be INR 27, 653 as per the field survey undertaken.</p> <p>If we compare the standard of living between the Adivasi community on one hand and the Ahom and Sonowal Kachari on the other, it is seen the socio-economic condition of the latter is much better than the former.</p>
<p>Maps</p>	<p>Appendix-1 gives the following maps, based on PRA exercise: Village Map (Resource and Social) GIS Map Wealth Ranking</p>

3. Livelihood Opportunity Analysis

PRA Exercise	The CML team conducted the PRA exercise on 3 rd June, 2016 at Gelipung village in presence of representatives from both Gelipung and Soraipung villages, EDC President, Executive Committee Members and Personnel from Forest Department.												
Objectives of PRA	<p>The specific objectives of the exercise are to:</p> <p>To understand the livelihood options existing within the region, its prevalence and challenges.</p> <p>Better understand the credit needs of the poor and their coping mechanism. Examine the options, challenges, and opportunities for financial institutions interested in delivering financial services and</p> <p>Identify existing livelihood support mechanisms and explore viable options of providing livelihood support services for increasing income and employment opportunities of the people.</p>												
Tools Used for PRA	<p>The tools applied for PRA are given as below:</p> <p>Focus Group Discussion (FGD)</p> <p>Seasonality Analysis</p> <p>Social and Resource Mapping</p> <p>Appendix-2 furnishes the details on the above</p>												
Ranking	<p>Ranking exercise has been conducted for the following:</p> <p>Livelihood & Skills Development</p> <p>Entry Point Activities (EPA)</p> <p>Appendix-2 elaborates the above.</p> <p>Ranking of Livelihood & Skills Development:</p> <p>Bamboo Craft</p> <p>Livestock Rearing</p> <p>Eco-Tourism</p> <p>Ranking of EPAs</p> <table border="1" data-bbox="581 1560 1425 1877"> <thead> <tr> <th data-bbox="581 1560 678 1738">Rank</th> <th data-bbox="686 1560 930 1738">Village EPA as Ranked</th> <th data-bbox="938 1560 1182 1738">Details (Appendix-2 Additional Particular)</th> <th data-bbox="1190 1560 1425 1738">Probable source of funding/Deptt.</th> </tr> </thead> <tbody> <tr> <td data-bbox="581 1738 678 1812">1</td> <td data-bbox="686 1738 930 1812">LPG connection</td> <td data-bbox="938 1738 1182 1812">Connection to BPL families</td> <td data-bbox="1190 1738 1425 1812"></td> </tr> <tr> <td data-bbox="581 1812 678 1877">2</td> <td data-bbox="686 1812 930 1877">Electricity/Solar Lighting solution</td> <td data-bbox="938 1812 1182 1877">Connection to BPL families</td> <td data-bbox="1190 1812 1425 1877"></td> </tr> </tbody> </table>	Rank	Village EPA as Ranked	Details (Appendix-2 Additional Particular)	Probable source of funding/Deptt.	1	LPG connection	Connection to BPL families		2	Electricity/Solar Lighting solution	Connection to BPL families	
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	3	Veterinary Extension Services	Establish al-least one vet care to promote the livestock activity	Dept. Veterinary (Assam)
	4	Road Connectivity	Black Topping Road	PMGSY/PWD
	5	Skill Training School	Up-gradating the existing skills	NSDC
Livelihood Opportunities	<p>The identified livelihood opportunities were as follows:</p> <ol style="list-style-type: none"> 1. Bamboo craft 2. Livestock Rearing (Piggery and development of Cluster for rearing of local poultry) 3. Eco-Tourism 			
Bamboo Craft	<p>The main constraints towards promotion of bamboo craft as a potential livelihood option are:</p> <ol style="list-style-type: none"> 1. Lack of design development 2. Lack of knowledge on market and pricing 3. Poor infrastructure 4. Lack of mechanization- more use of traditional tools and equipment <p>Some of the possible interventions in the promotion of bamboo craft sub-sector are as follows:</p> <ol style="list-style-type: none"> 1. Basic skills-development training on bamboo craft which can be again upgraded for advanced-level training on bamboo craft making 2. Introduction of specialized tools for enhancing production 3. Training on entrepreneurship and business orientation <p>Table-12 under Record-II cab be referred for details</p>			
Livestock Rearing	<p>The main constraints towards promotion of livestock rearing as a potential livelihood option are:</p> <ol style="list-style-type: none"> 1. Outbreak of diseases 2. Lack of knowledge on scientific method of livestock rearing 3. Lack of initial investment on the part of the villagers 4. Unavailability of quality feed - nutrients and other sources of fattening and growth. <p>Some of the possible interventions in the promotion of livestock rearing sub-sector are as follows:</p> <ol style="list-style-type: none"> 1. Specialized training on livestock rearing and para-vet professional 2. Setting up of a community/EDC run agro-veterinary care centre 			

	<p>3. Training on entrepreneurship and business orientation</p> <p>Table-13 under Record-II can be referred for details</p>
Eco-Tourism	<p>The main constraints towards promotion of eco-tourism as a potential livelihood option are:</p> <ol style="list-style-type: none"> 1. Inadequate infrastructure - proper roads, electricity etc. 2. Non-availability of tourist guides in the circuit 3. Unawareness on the part of the villagers about the concept of eco-tourism <p>Some of the possible interventions in the promotion of eco-tourism are as follows:</p> <ol style="list-style-type: none"> 1. Basic skills-development training on tourism and hospitality for the unemployed youth of the EDC which can be again upgraded for advanced-level training on specialized tourist guides and support. 2. Promotion of eco-tourism by establishing camps for tourist stay 3. Training on entrepreneurship and business orientation <p>Table-14 under Record-II can be referred for details</p>
Credit Facility	<p>The main constraints with regard to credit facility in the EDC are as follows:</p> <ol style="list-style-type: none"> 1. High rate of interest charged by the unorganized village money lenders 2. Reluctance on the part of the financial institutions to provide loans to interested borrowers <p>Some possible interventions in order to foster better credit facilities among the villagers may be follows:</p> <ol style="list-style-type: none"> 1. Facilitating bank linkage program on a regular basis 2. Penetration of Microfinance institutions into the area 3. Promotion of SHGs or village level institutions <p>Table-15 under Record-II can be referred for details</p>
Strategic Interventions	<p>Some of the strategic interventions for the above mentioned livelihood opportunities are as follows:</p> <p>Bamboo Craft:</p> <ul style="list-style-type: none"> ▪ Basic skills-development training on bamboo craft which can be again upgraded for advanced-level training on bamboo craft making ▪ Introduction of specialized tools for enhancing

	<p>production</p> <p>Training on entrepreneurship and business orientation</p> <p>Livestock Rearing:</p> <ul style="list-style-type: none">▪ Specialized training on livestock rearing and para-vet professional▪ Setting up of a community/EDC run agro-veterinary care centre▪ Training on entrepreneurship and business orientation <p>Eco-Tourism:</p> <p>Basic skills-development training on tourism and hospitality for the unemployed youth of the EDC which can be again upgraded for advanced-level training on specialized tourist guides and support. Promotion of eco-tourism by establishing camps for tourist stay Training on entrepreneurship and business orientation</p> <p>Credit Facility:</p> <ul style="list-style-type: none">▪ Facilitating bank linkage program on a regular basis▪ Penetration of Microfinance institutions into the area▪ Promotion of SHGs or village level institutions
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4. Livelihood Development Plan :

<p>Income Generating activities</p>	<p>The main income generating activities as planned for the EDC villages are as:</p> <p>Farm Sector:</p> <ul style="list-style-type: none"> ▪ Promotion of livestock cluster (Piggery and local poultry) <p>Non-Farm Sector:</p> <ul style="list-style-type: none"> ▪ Promotion of bamboo craft cluster with special focus on household utility items ▪ Promotion of eco-tourism circuit <p>Source: Table 32 of Record-IV</p>
<p>SHG Activities</p>	<p>SHGs can play a very pivotal role in harnessing the social capital of the EDC by taking up the following activities:</p> <ul style="list-style-type: none"> • To generate awareness on importance of skill development and entrepreneurship among the villagers • To promote Village Organizations (VO) through formation of multiple SHGs • Promotion of micro-enterprises with focused livelihood interventions among the SHGs thereby creating a cluster of specialized interventions in the EDC villages. • To also play as an agent to check social evils available within the villages <p>Source: Table 33 of Record-IV</p>
<p>Exposure Trips</p>	<p>No exposure trips are planned yet.</p> <p>Source: Table 34 of Record-IV</p>
<p>Summary of Action</p>	<p>Attached in the subsequent pages of the plan</p>
<p>Convergence</p>	<p>The planned initiatives have a lot of possibilities to invite convergence from multiple stakeholders including Government and Private players:</p> <ul style="list-style-type: none"> • National Bamboo Mission • Department of Industries & Commerce, Govt. of Assam

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	<ul style="list-style-type: none">• All India Artisan and Craft-workers Welfare Association (AIACA)• Assam Tourism Development Corporation Ltd.• Directorate of Tourism, Govt. of Assam• The National Smallholder Poultry Development Trust (NSPDT)• Indian Council of Agricultural Research: National Research Centre on Pig, Guwahati• Indian Oil Corporation Limited (IOCL)• Coal India Limited (CIL)• National Livelihood Mission.
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5.Action Plan

Action Plan of Gelipung EDC

Sl. No.	Activity	Numbers	Method
A. Participatory Micro Planning			
1	Preparation of Micro Plan	1	PRA, Baseline Survey
B. Organize Producers and Build Entrepreneurial and Technical Capacities (Capacity Building)			
1	Awareness Build-up Programme	1	Awareness Programme
B1	Training on Skill development		
1	Skill Development Training Programme in Bamboo craft	1	Conducting Training on skill development in Bamboo craft (200 hours)
2	Skill Development Training Programme in Livestock Rearing	1	Conducting training on Livestock rearing and development of Para Professional (20 days)
3	Training on Promotion of Eco-Tourism	1	Conducting training on Eco-tourism development (for 30 days)
4	Training on Entrepreneurship Orientation	1	Entrepreneurship Orientation programme(30 days)
C. Social Mobilization			
1	Awareness generation camp on Formation of collective units (e.g. SHGs, Societies, NGOs, Bodies, Producers Companies)		4 days awareness camp on formation of collective units through cooperative experts
2	Hand Holding guidance support and linkage promotion programme for self-employment and placement		Hand holding support from agencies experts throughout the year up to march 2017
D. Value Chain Improvement			
D1	Product improvement Through Value Chain Improvement		
1	Value Chain Improvement in Bamboo craft	1	7 days Training on processing activities
B2	Supply of modern tools		
1	Supply of modern tools kits for artisans	1	supply of modern tools
2	Rearing Tools	20	
B3	Improved Production and Processing Capacity		

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E. Support for Access to Market			
D1	Linkage with institutional buyers and/or govt. Organizations. (throughout the year)	2	Creating platform for buyers' and sellers' interactions (5 days)
D2	Setting Up Ban Bazar	Throughout the year	Linkage through van bazar
D3	Trade Fair & Exhibition Participation	1	Participation in one exhibition and Fair through forest department
D4	Access To Other Geographical Markets	1	Exposure visit
D5	Publicity through E-portal, brochure, catalogue etc.	1	2 day training and awareness programme taken by marketing experts

6. Forest Development Plan

This Forest Development Plan has been prepared after a detailed PRA exercise at the village level as a part of the Micro-Plan of Gelipung. The objective of the 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 EDC; while meeting the consumption and livelihood needs of the community in a sustainable manner.

1. Status of the EDC Forests

The micro-plan takes into consideration the following categories of the Gelipung EDC Forests:

- (a) Forest areas assigned to the EDC 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 EDC forests is briefly discussed below.

1.1 Forests & Their Conditions

The details of the status of forest areas assigned to the EDC 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 Gelipung have been summarized below.

Table-1: Conditions of the Forests of Gelipung EDC

Identification	Area of EDC 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	30 ha	4 KM	Good area 10 ha degraded 20 ha	6-9
Along the periphery of UDRF(WB) under Digboi Range with GPS	Digboi Kathalguri	-	Good area 10 ha degraded 20 ha	6-9
(B) Other Planted Area	-	-	-	-
Location: Type of Forest: VF / Other _____	Gelipung	-	-	6-9
TOTAL	808 hac. NR606hac .IP-202hac.	4 KM	Good area 10 ha degraded 20 ha	6-9

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

Microplan for Gelipung EDC (2015-16 to 2025-26)

It is seen that the Gelipung has 30 Ha under its forests, of which 10 Ha (33 %) is 'Good' (Crown density >40%) and the rest 20 ha is 'Degraded'.

1.2 Forest Soil Type

The forests of Gelipung EDC are located in Margherita West. Some salient points of the forest soil type have been given in the following table.

Table-2: Forest Soil Type in Gelipung EDC

Parameter	Status in Assigned Forests	Status in Other Planted Areas
Fertility Level	4.5 to 5 organic	NA
Soil Erosion Status	Accelerated erosion	NA
Presence of:		
(a) Silt	37.5 %	NA
(b) Mud-flat	26.4 %	NA
(c) Newly accreted land	23.10 %	NA
(d) Sand dune	13 %	NA

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

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

1. Alluvium
2. Entisol
3. Alfisols

1.3 Existing Composition of Flora

In the forests of the Gelipung EDC, the existing composition of the flora has been given as follows. It may be noted that the local forests are classified as: Tropical Semi-Evergreen and Tropical Wet Evergreen

Table-3: Existing Composition of Flora in the Gelipung EDC

Parameter	Local Name(s)	Botanical Name(s)
Major Forest Species	Bhelkar Rain Tree Simolu, Velkor	

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Associates	Bandordima Morhal Poma Bhat ghila	
Shrubs	Putukola Bagdhoka Dighloti	
Medicinal Plants	Nefafu Narahingha hatibhekuri	
Produces	-	
Others, if any	-	

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

2. Other Inputs for the Forest Development Plan

The following sub-sections discuss the other inputs for the Forest Development Plan of the Gelipung EDC

2.1 Past Protection Measures of the EDC

No measures have been taken by the Gelipung EDC for the forest protection in the past.

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

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of Requirement	Approx. Qty		
Firewood	Whole year	80,000	-	Local
Timber for House	3-4 months	2000-2500 cft	-	Local
Small timber for Implements	Plantation time	100 cft	-	Local
Pole / Bamboo	Whole year	2000 pieces	-	Local
Fodder from Forest	Whole year	40000-60000	-	Local
NTFP	-	-	-	-
Other _____	-	-	-	-

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

Microplan for Gelipung EDC (2015-16 to 2025-26)

There are 202 households in the Gelipung EDC. From the above table and this number of households, it is inferred that the total annual requirements of the two villages under Gelipung EDC for forest produce for own use is as follows:

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

Name of Forest Produce	Community Requirement (Kg per annum) (*)	Remarks
Firewood	80,000	-
Timber for House	2000-2500 cft	-
Small Timber for Implements	100 cft	-
Pole / Bamboo	2000 pieces	-
Fodder from Forest	40000-60000	-
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 202 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 Gelipung EDC villages is given in the following table.

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

Name of Forest Produce	Collection for Marketing			Location of Collection
	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	
Firewood	Whole year	180	3	Local
Timber for House	Dec-Jan	180	2-3	Local
Small timber for Implements	April-May	180	45	Local
Bamboo	Dec-Jan	180	2000	Local
Pole	winter	180	700	Local
Fodder from Forest	Whole year	180	40000-60000	Local
NTFP	-	-	-	-
Other _____	-	-	-	-

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

Microplan for Gelipung EDC (2015-16 to 2025-26)

The community collect the above mentioned forest produces for their self-consumption. In the above connection, the following table gives additional pertinent information.

Table-5 (B): Collection & Marketing of Forest Produce - Additional Information Gelipung EDC

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

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 Gelipung EDC have been summarized below - based on the information in the previous sub-sections.

Table-6: Total Requirements of Forest Produce by Villagers of the Gelipung EDC

Name of Forest Produce	Community Requirement (Kg per annum) From Table-4(B)	Surplus Marketed (Kg) From Table-5(B)	Total Requirements (Kg)
Firewood	80,000	NA	80,000
Timber for House	2000-2500 cft	NA	2000-2500 cft
Small timber for Implements	100 cft	NA	100 cft
Bamboo	2000	NA	2000
Pole	-	-	-
Fodder from Forest	40000-60000	NA	40000-60000
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 Gelipung EDC have been summarized below.

Table-7: Protection Problems of the Gelipung EDC

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 EDC are:

- (a) The grazing animals destroy the crop during harvesting period.
- (b) Due to increase in population, land are encroached by the people.
- (c) Accidental fire and smuggling is another factor that is contributing in degradation of forest.

3.2 Reasons for Degradation of the Forest

In the Gelipung EDC, increase of population is the reasons for degradation of forest are as follows:

[**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 Gelipung EDC; 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 Gelipung EDC from the issues discussed earlier at Sub-section 3.1

Table-8: Protection Plan of the Gelipung EDC

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]
Hiring of local Chowkidar	Gelipung EDC	30 ha	Round the year	High
Bring awareness through camp regarding importance of forest for environmental balances	Gelipung EDC	90 radius	Round the year	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 Gelipung EDC

(with high / medium priority) are as follows:

1. Hiring of local Chowkidar should be given high priority. He can give regular monitoring within and nearby the EDC area.
2. Bringing awareness about environmental and eco-logical balances among the villagers should also provide high priority. It can reduce the un-necessary cutting of forest trees.

4.2 Types of Operations Proposed

The types of operations proposed for the treatment of degraded areas of the EDC Forest Gelipung EDC are given here under.

Table-9: Types of Operations Proposed in the Gelipung EDC

Treatment	Required (Yes/ No)	Responsibility of EDC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
Restoration of Degraded Forests	Yes	Yes	Nov-Jan	50
Protection to Cut Stumps of Trees	Yes	Yes	Nov-Jan	50
Watershed Treatment	Yes	Yes	Nov-Jan	50
Water Reservoirs	Yes	Yes	Whole year	50
Grass & Silvi-pasture	Yes	Yes	Nov-Jan	50
Bamboo Plantation	No	No	-	-
Seed Sowing	No	No	-	-
Root & Shoot Cutting	Yes	Yes	Nov-Jan	50

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Treatment	Required (Yes/ No)	Responsibility of EDC (Yes / No)	Month / Year when can be done	Extent of Area proposed for Treatment (Ha)
&Plantation				
Cut Back & Coppice Treatment	Yes	Yes	Nov-Jan	50
Physical Fencing	No	No	-	-
Social Fencing	Yes	Yes	Nov-Jan	50
Other Activities	-	-	-	-

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 Gelipung EDC:

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 Gelipung EDC

Treatment	Area in Ha under Plantation Module	Priority for Block Plantation	Species	Spacing (metre x metre)
Assisted Natural Regeneration (with plantation in gap)	30	-	Bhelkar Rain Tree Simolu, Velkor	2*2
Block Plantation	-	-	-	-
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	-	-	-	
Enrichment Plantation	-	-	-	
Direct Plantation	-	-	Bhelkar Rain Tree Simolu, Velkor	2*2
Other		-		
TOTAL AREA (in Ha)	30	-	-	-

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

4.4 Forest Improvement - Annual Targets

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

Table-10 (A): Annual Targets of Forest Improvement in Gelipung EDC (Year-1 to Year-5)

Treatment	2016	2017	2018	2019	2020
Assisted Natural Regeneration (with plantation in gap)	30	60	90	120	150
Block Plantation					
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)					
Enrichment Plantation					
Direct Plantation					
Silvi-cultural Operations					
Intermediate Operations					

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

Table-10 (B): Annual Targets of Forest Improvement in Gelipung EDC (Year-6 to Year-10)

Treatment	2021	2022	2023	2024	2025
Assisted Natural Regeneration (with plantation in gap)	180	210	240	270	300
Block Plantation	-	-	-	-	-
Sowing of Neem, Amla, Mahua, Bahera (Medicinal Plants)	-	-	-	-	-
Enrichment Plantation	-	-	-	-	-
Direct Plantation	-	-	-	-	-
Silvi-cultural Operations	-	-	-	-	-
Intermediate Operations	-	-	-	-	-

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

4.5 Nursery Development Plan

The Nursery Development Plan for the **Gelipung EDC** depends on the following types of Nurseries:

- (a) Site Nursery (Gelipung EDC)

The details are given below.

EDC Nurseries

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

Table-11 (A): Nurseries of the Gelipung EDC

Location of Nursery	Species	Year of Development	Number of Seedlings	Remarks
Site Nursery Gelipung EDC)	Velkor Ajhar Rain tree	2016-17	3000	Individuals will be assisted
	Velkor Ajhar Rain tree	2016-17	3000	Individuals will be assisted

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 Gelipung EDC.

Table-11 (B): Other Nurseries near the Gelipung EDC

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 **Gelipung EDC** is given below. This covers a period of ten years.

a) Timber Species: firewood (Velkor, Mojj, Ajhar,)

Table-12 (A): Maintenance Plan of Teak Plantation in the Gelipung EDC

Year(s)	Treatment
1 st Year	Weeding
2 nd Year	Removal of creepers
3 rd Year	Weeding in more effectively
4 th to 6 th Year	Trimming up
7 th to 9 th Year	Pruning
10 th Year	Removal of side branches

Source: Discussions with Forest Department personnel & Community members

b) Bamboo

Table-12 (B): Maintenance Plan of Bamboo Plantation in the Gelipung EDC

Year(s)	Treatment
1 st Year to 3 rd Year	Weeding
4 th year	Removal of heavy weeds
5 th Year	Separation of culmps
6 th Year	Trimming of criss cross culms
7 th Year	Light pruning
8 th Year	Light pruning
9 th Year	Trimming
10 th Year	Removal of clumps

Source: Discussions with Forest Department personnel & Community members

c) Fuel wood Plantation

Table-12 (C): Maintenance Plan of Fuel Wood Plantation in the Gelipung EDC

Year(s)	Treatment
1 st Year to 2 nd Year	Weeding and Ring formation around the seedlings
3 rd Year to 4 th Year	Removal of side branches
5 th Year	Weeding
6 th Year	Cutting of unwanted branches
7 th year	Cutting of unwanted branches
8 th Year	Weeding
9 th Year	Pruning
10 th Year	Light pruning

Source: Discussions with -Forest Department personnel & Community members

d) NTFP / Medicinal Plantation

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

Year(s)	Treatment
1 st & 2 nd Year	weeding
3 rd Year	Disbudding
4 th Year	Minimum pruning
5 th 6 th & 7 th Year	Fruit yield
8 th & 9 th Year	Fruit yield and pruning
10 th Year	Thinning up and Fruit yield

Source: Discussions with Forest Department personnel & Community members

4.7 Miscellaneous Operations Plan

The miscellaneous operations planned in the **Gelipung EDC** are given below.

Table-(13): Miscellaneous Operations in the Gelipung EDC

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

4.8 Marketing Operations

For produce from the Gelipung EDC the planned marketing operations are:

- (a) Linkages will be established with traders inside and outside the district
- (b) Selling to the Ban Bazar
- (c) Participating in Exhibition and food festivals

5. Expected Benefits

This sub-section furnishes the benefits expected from the forests protected by members of the Gelipung EDC, 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 Gelipung EDC. 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 Gelipung EDC

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 Gelipung EDC.

Table-15: Sharing Mechanism for Gelipung EDC

Method	Items
To be shared equally	-
To be freely collected by the members	-
Other Methods	-

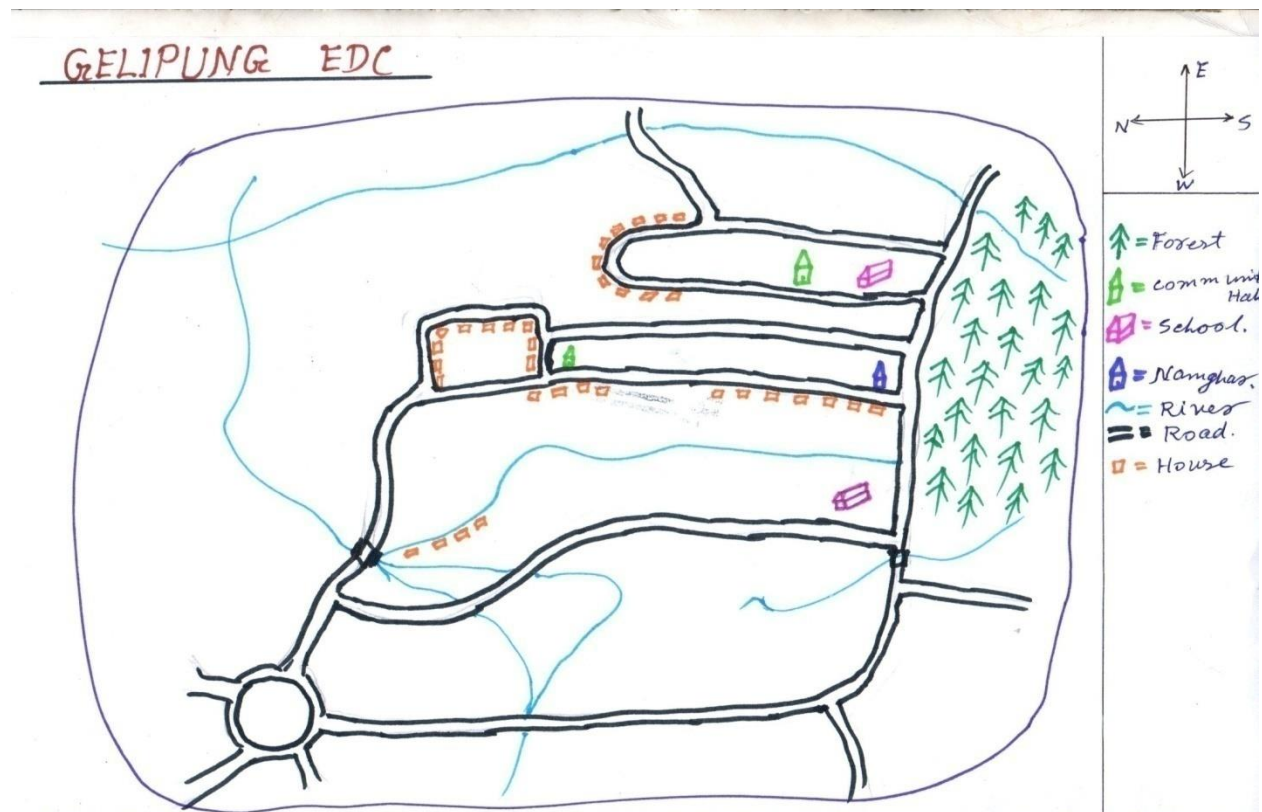
Source: Proforma-3, Table-3.15 / Discussions with Forest Department personnel & Community members

List of Appendices

Annexure No.	Heading
1	Maps <ul style="list-style-type: none">• Village Map (Social and Resource Map)• GIS Map
2	PRA Exercise <ul style="list-style-type: none">• Focus Group Discussion• Seasonality Analysis• Social Mapping• Wealth Ranking• Venn Diagram• Chapatti Diagram• Ranking Exercise
3	Photographs
4	Filled up Table (Proforma 1 to Proforma 4) Table nos. 1-37

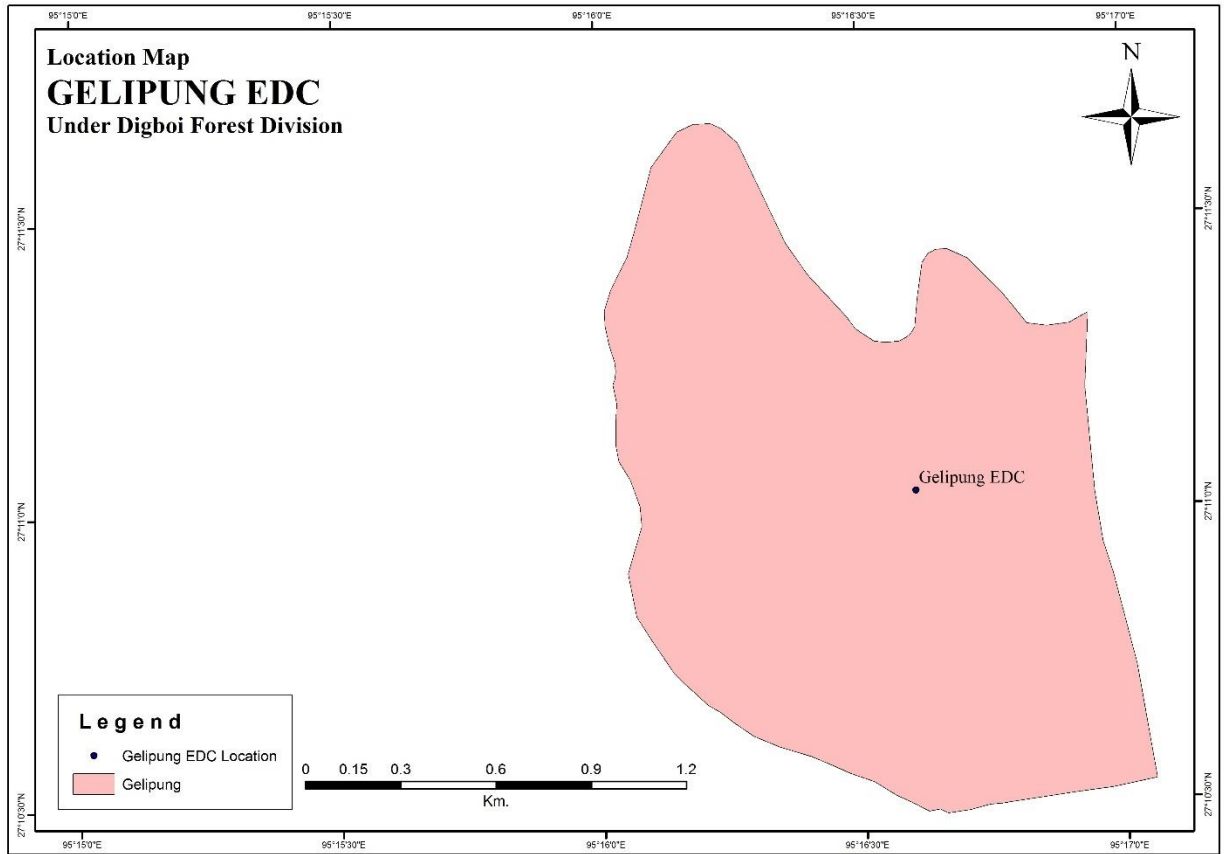
Annexure 1

Social and Resource Map



nature of participant:- Biswajit Tanti, Sati Anup, Hadimurua Sree Kalpa Joyti Phukan, Dandi, Harsarika, Sri Chandan Phukan, Sri Digambar Gogoi, Suran Nagawala, Sri Hebananda Harsarika, Sri Prasanna Chiring Phukan, Akul Tanti, Bisoy Panika, Sunu Bhumig

GIS Map



Annexure 2

PRA EXERCISE

Location and Timing of PRA

Numbers of participants	28
Time	12:30 noon
Venue	Gelipung Village

Table 3.1 Brief about the villages under Gelipung EDC

Sl. No.	Name of village	Households (No.)	Population (No.)		
			Total	Male	Female
1	Gelipung	100	287	170	117
2	Soraipung	102	370	200	170
	Total	202	657	370	287

Source: Village Survey

The tools used for conducting PRA in Gelipung EDC are as follows:

- Focus Group Discussions (FGD)
- Seasonality Analysis
- Social Mapping
- Venn Diagram
- Chapatti Diagram
- Ranking Exercise

3.1- Focus Group Discussions:

The entire FGD were centered on the elements of rural economy namely- primary livelihood options of the EDC, agriculture, livestock, skill-sets, available support services, infrastructure etc. and also considering the important determinant of the presence of forests area all around. These factors have been blended well before extracting the information out from the respondents.

Findings from FGD

- The existing livelihood options available in the EDC villages are agriculture, daily wage labour and a few private jobs. Few of the villagers have of late started doing backyard tea cultivation, betel-nut, yam and black-pepper cultivation as well.
- Some of the emerging livelihood options are mid-scale poultry and security guards where some of the unemployed youth are working outside Northeast India.
- Some of the serious challenges faced by the villagers practising agriculture are concurrent floods, elephant depredation, poor irrigation facility and spoilage of farm land due to leakage from the nearby crude oil fields.
- There is no support services available in the field of agriculture.
- The villagers rear cow, duck, local poultry and pig. Almost in 90% of the cases, it is mostly the womenfolk who looks after the reared livestock. However, the villagers face serious challenges like outbreak of diseases, attack of wild animals etc. while rearing livestock.
- There is no support services provided by the Government authorities in ensuring proper rearing of livestock. Even the veterinary sub-centre available in Bhadoi Panchali is non-functional.
- Some of the traded where the villagers are skilled at are bamboo craft, weaving, driving, electrician, plumbing etc. In few of these courses, the villagers have been provided basic training as well under the Forest Department project.
- Some of the Government schemes through which some of the villagers have been benefitted are MGNREGA, IAY, provision of tube-well etc. However, these benefits have covered only 20-30% of the villagers.

3.2- Seasonality Analysis:

Seasonality analysis was done to generate information about and identifying periods of particular stress and vulnerability. In the context of a group discussion with respondents during the PRA, parameters such as expenditure, income, credit and savings were probed in sync with the factors such as employment trend, health conditions, education etc. associated with its increase or decrease in one's households.

Expenditure & Income

Children's education is also a component where most of the households spend during the start of the year. It is especially during the months of January to March when the new academic session of schools begin and apart from admission fees, the people also spend on buying new uniforms, textbooks and stationaries. The community also spends during April as it marks the onset of festival of Bihu. Again, for those engaged in paddy cultivation spends significantly during sowing season starting May till July along with harvest season starting in the months of October till December.

When it comes to income, it is seen that selling of paddy, arecanut and livestock provides a good source of income to the villagers in the months of October and November. Those are engaged as daily wage labour in nearby tea estates earn good amount of income in the months of June and July as these months are considered to be peak season for plucking.

Savings and Credit

It was mostly found that amount of savings increases with the increase in income and most of the dwellers resort to institutional savings with likes of Post Office and bank savings. There are almost 10 number of SHGs who are also engaged in inter-loaning as well as provides credit to other members. It is to be noted that the rate of interest for credit varies between group inter-loaning and outside members.

Seasonality of Engagement_ Farm Activities

Crop	Sowing	Harvesting
Paddy	May-July	October- December

Seasonality of Engagement_ Non-Farm Activities

Engagement	Period of Engagement
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Daily Wage Labour	June- August
Carpenter	Throughout the year
Petty business	Throughout the year
Security Service (Company guards)	Throughout the year
Mason	August to March
Other Private Service	Throughout the year

3.3- Social Mapping:

Social mapping is used to visualize the socio-economic aspects of the Gelipung EDC where the land holding patterns of the households, the numbers of schools, social infrastructure, and religious beliefs among households. Awareness among the villagers was carried out by the field teams, in order to infuse the self-consciousness for protection and enhancement of the forest areas. People from all the households of the village gathered for the PRA process, which was conducted in the community hall of the village. The PRA process was marked with enthusiasm and active participation from all people present.

The social and resource mapping process, was undertaken with the help of the villagers in identifying and marking the village. Villagers voluntarily came out to draw the maps. All the villagers spotted their households in the map. After the mapping process the team members collected the information about the pattern of their dwelling namely pucca, semi pucca, IAY and thatch house.

Table 2.2: Information about the villages

	Village	Gelipung	Soraipung
Social information	Total Population	287	370
	Male	170	200
	Female	117	170
	Total households	100	102
	Numbers of semi pucca Houses	107	20
	Numbers of Pucca Houses	10	2
	Numbers of IAY Houses	Not reported in survey	Nor reported in survey

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Landmarks	Bridges	1	
	Stream	1	
	River	1	
	PHE		
	Power Transformer	-	-
	Community hall	Nil	Nil
	Primary School	1	1
	Anganwadi Centre	1	1
	ME, High School & College	-	-
	Approach Roads	3 approach roads	

3.4- Findings of Social Map

- Under social mapping study a total of 202 households have been identified. Of which 12 households are having a proper pucca house with tin roof and cemented floor and 83 households having a kachcha house (thatched roof)
- Physical infrastructure like primary schools, Anganwadi centres and bridges in poor condition were mapped by the participants. Provision of Education facility up to primary level is quite satisfactory. However, ME school is located 0.5 to 1 km from the villages at Bhadoi Panchali but it does not fall within the EDC area.
- The Gelipung village is dominated by the Ahom community but there is also concentration of Sonowal Kachari and Boro community. Whereas, the Soraipung villages is completely dominated by the Adivasi community.
- There is Digboi river which flows by the EDC villages.
- There are 3 approach roads to reach Gelipung EDC namely Soraipung road, Bhadoi Panchali road and Shanti tea estate road.

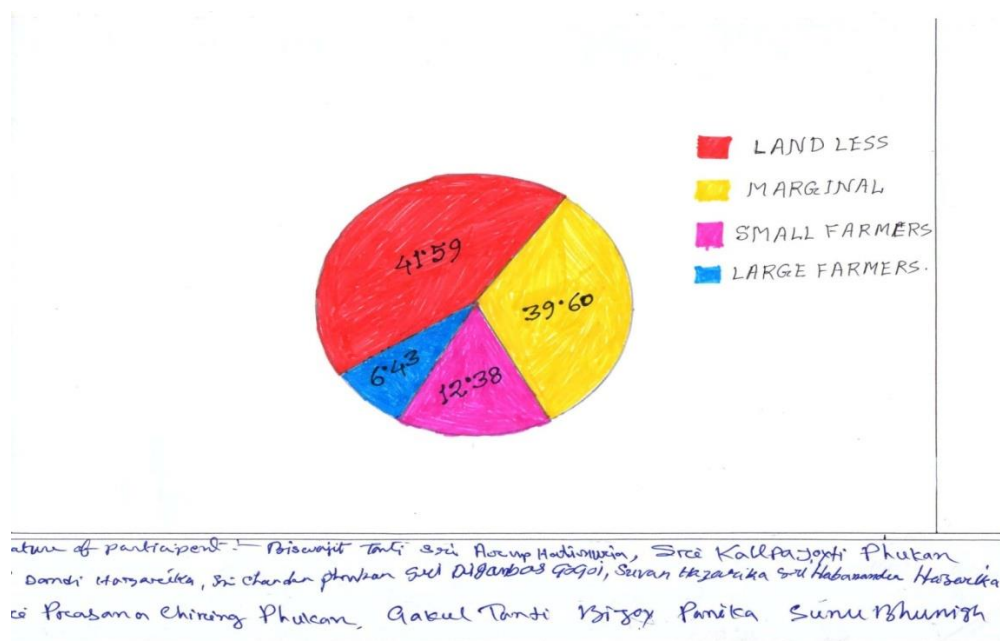
3.5- Wealth Ranking :

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 socio-economic 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 information about the households

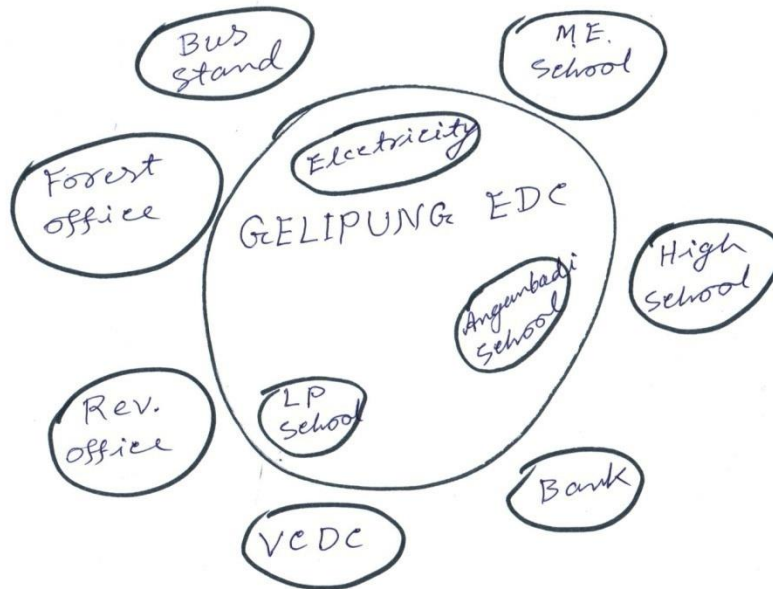
- a) Occupation/livelihood
- b) Land holding
- c) Types of living house
- d) Ownership of assets

As such it is found that about 38.30 % per cent people are poor, about 38.89% per cent are belonging to middle class and about 22.81% per cent are categorized to be rich. Poor people are mainly irregular wage earners and mostly mortgage land for the paddy cultivation. Rich people are mainly involving in tea cultivators and paddy cultivators with good amount of agricultural land. They also have televisions sets, two wheelers, and four wheeler etc. Middle class people are doing cultivation of Tea, horticulture products as well as of paddy with own agriculture land along with mortgaged lands.



3.6- Venn Diagram

VENN DIAGRAM GELIPUNG EDC



nature of participant :- Bisarajit Tanti sri Acup Hatimwin, Stee Pansawun Phukom
Domasi Harsarika sri Chander phukar sri Digambes gogoi, Suran Hagarika sri Hubomanden Harsarika
i Prasana Chitring Phukom, Gakul Tanti Bijoy Panika Sumerzhugh

3.7- Chappati Diagram



3.8-Ranking Livelihood and EPA

Livelihood Ranking

Priority Matrix Ranking of Galipung EDC.

Potential Livelihood Activity	Cane & Bamboo (A)	Driving (B)	Tailoring (C)	Livelihood (D)			Mark	Position
Cane & Bamboo (A)	A	A	A	A			4	1st
Driving (B)	X	B	B	B			3	2nd
Tailoring (C)	X	X	C	C			2	3rd
Livelihood (D)	X	X	X	D			1	4th

name of participant :- Biswajit Tanti, Sri Anup Habimulia Sri Pineswore Phukan
 ni Danda Harsarika. Sri Chandan praka Sri Dhanbar Gopal, Sevan Hazarika Sri Habamanda Hazarika
 Kampa Joyti Phukan, Sri Prasana Chitroy Phukan, Bisoy Parika, Sunu Bhening

EPA Activity Ranking

Priority Matrix Ranking of Gelipung EDC.

Entry Point Activity	LPG (A)	Electricity (B)	Veterinary (C)	Drinking Water (D)	Road (E)		Rank	Position
LPG (A)	A	A	A	A	A		5	1st
Electricity (B)	X	B	B	B	B		4	2nd
Veterinary (C)	X	X	C	C	C		3	3rd
Drinking Water (D)	X	X	X	D	D		2	4th
Road (E)	X	X	X	X	E		1	5th

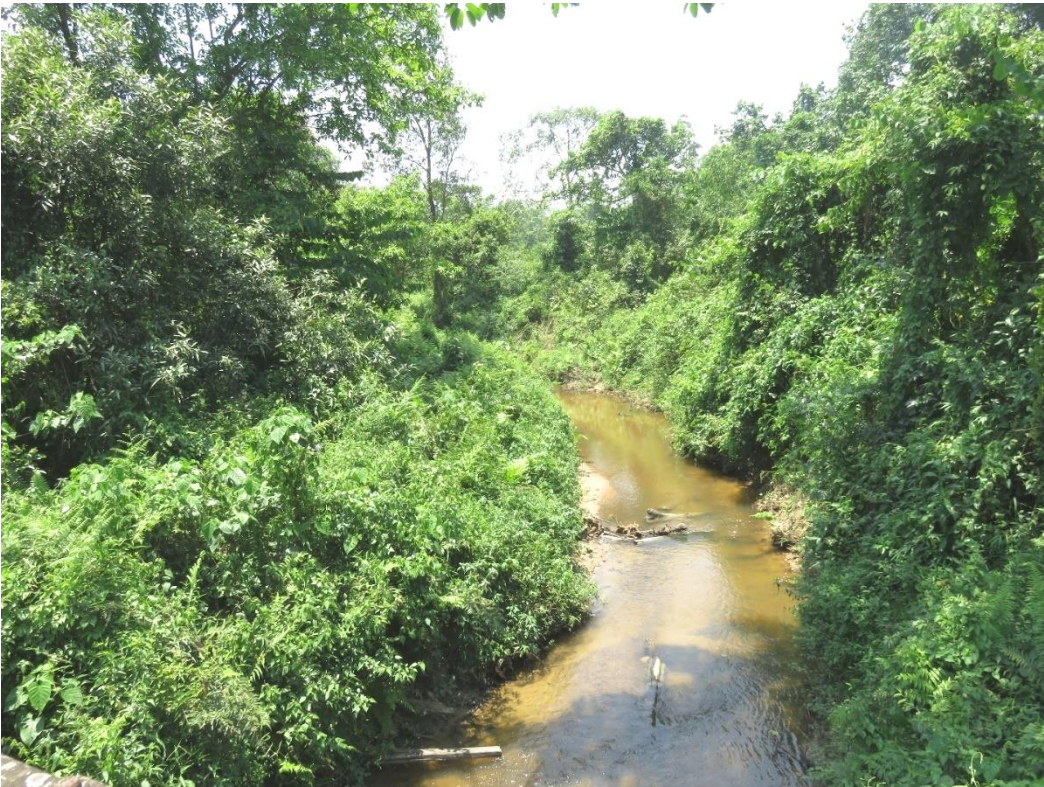
name of participant :- Biswajit Tanti, Sri Anup Madhusudan, Sri Kalpa Jyoti Phukan, Dandi Chandraika, Sri Chandan Phukan, Sri Dibakar Gogoi, Suran Chandraika, Sri Habandan Chandraika, Sri Prabanta Chirang Phukan, Gukul Tanti, Bijoy Panika, Sunu Bhumiya

Annexure 3

Photographs



Microplan for Gelipung EDC (2015-16 to 2025-26)





Microplan for Gelipung EDC (2015-16 to 2025-26)



Annexure 4

Record-I

Table 1: Basic data of the EDC

Sl. No	Name of the EDC	Date of Establishment	No. of Members in Executive Committee	Name of the President	Name of the Secretary
1	Gelipung	2015	11	Paneshwar Phukan	Thaneshwar Saikia

Table 2: Demographic Status of the EDC villages

Sl. No.	Name of village	Households (No.)	Population (No.)			Sex Ratio	Avg. HH size
			Total	Male	Female		
1	Gelipung	100	287	170	117	776	4
2	Soraipung	102	370	200	170		6
	Total	202	657	370	287	776	5

Source: Field Survey Report

Caste Profile:

The caste profile of EDC from the two villages in the area is:

Sl. No	Caste	Number of HHs	Percentage of HH
1	OBC	190	95 %
2	ST	7	3 %
3	Others	5	2 %

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

Sl. No.	Name of village	Type of farmers according to land holding				Total
		Large Farmers >10 Hact.	Small Farmers 2 to 10 hact.	Marginal Farmers < 2 Hact.	Landless	
1	Gelipung	6	11	39	41	97
2	Soraipung	7	14	41	43	105

Microplan for Gelipung EDC (2015-16 to 2025-26)

Total	13	25	80	84	202
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Table 3: Literacy status of the EDC villages

Level of Education	Name of Villages		Total
	Gelipung	Soraipung	
Illiterate	117	78	195
I-IV	89	121	210
V-VII	58	70	128
VIII-X	18	44	62
XI-XII	0	30	30
Graduate	0	10	10
Post Graduate	0	3	3
Total	282	356	638

Sl. No.	Name of village	Households (No.)	Population (No.)			Total Literates	Literacy Rate (In %)
			Total	Age group (0 – 6 yrs)	Excluding Age group		
1	Gelipung	100	287	5		165	57.49
2	Soraipung	102	370	14		278	75.13
	Total	202	657	19		443	

Source: Field survey

If we refer to **table 3**, we see that the literacy status of Soraipung village which is 75.13% is better than Gelipung's rate of 57.49%. Altogether, there are 10 graduates in the EDC with 3 post graduates. Most of the population have attained education upto class IV.

Table 4: Village wise farmer category on the basis of land holding

Land Type	Total Households	Possession/Use (in %)	Average holding (in acre)
Homestead	192	95	0.34
Farm	134	66	1.552
Waste Land	11	5.44	0.80
Lease in/out	18	8.91	1.17
Share-cropping	18	8.91	1.60

Table 5: Details on Cattle population of the EDC

Type of livestock	Total number possessed	% of HH rearing it	Average herd size
Cow	206	50.9	2
Bull	258	51.9	2.4
Buffalo	65	4.45	7.2
Duck	430	32.67	6.5
Local Poultry	597	48.01	6.15
Pig	98	30.1	1.58
Goats	106	21.28	2.46

Table 6: EDCVillage Infrastructure

Sl. No	Infrastructure	Location	Distance from villages
1.	Electricity	Within the village	-
2.	Gas connection	Bhadoi Panchali	5 km
3.	Transport	Bhadoi Panchali	5 km
4.	PHC	Bhadoi Panchali	5 km
5.	LP school	Within the Village	
6.	High school	Bhadoi Panchali	5 km
7.	Bank	Bhadoi Panchali	5 km
8.	Anganwadi centre	Within the village	-
9.	VCDC	Bhadoi Panchali	5 km
10.	Revenue Office	Tengakhat	10 km
11.	Police station	Bhadoi Panchali	5 km
12.	Forest Office	Soraipung	4 km
13.	Post office	Bhadoi Panchali	5 km
14.	Bus facility	Bhadoi Panchali	5 km
15.	Railway Station	Duliajan	20 km
16.	District head quarter	Dibrugarh	60 km

Table 7: Details on agricultural crops

<i>Crop Season</i>	<i>Rain Fed</i>					<i>Irrigation</i>	
	<i>Name of the Crop</i>	<i>Households cultivating (in %)</i>	<i>Avg. Area in cultivation (in acres)</i>	<i>Avg. harvest quantity (in kg)</i>	<i>Avg. investment (in INR)</i>	<i>Name of the crop</i>	<i>Area (in ha)</i>
Kharif	Paddy (Sali)	42%	4.7	1233.54	3475	NA	NA

Table 8: Details on Fodder availability for livestock

Types	1-3month	3-6month	>6month
<i>Cropresidue</i>			
<i>Treesfodder</i>			
<i>Grasses</i>			
<i>GreenFodder</i>			
<i>GrazinginForest</i>			

Table 9: Details on Market availability

For Purchase	Location	Distance from village if in other village (in km)
Groceryshop	Bhadoi Panchali	5 k
WeeklyMarket	Bhadoi Panchali	5
Major Market	Digboi &Duliajan	12
Forest CorporationSale Depot.	-	-
TenduPattaPHAD	-	-
FishMarket	Bhadoi Panchali	-
Medicinal Plant collection	-	-
Forest Corporation Medicinal plant Collection	-	-

Table 10: Water resource availability

Source of Water	Ownership households (in %)	Availability	Average depth of water source (in feet)	Purpose
Tube well	57	Perennial	22.58	Household use
Ring well	7	Perennial	27.45	Household use
Pond	0.99	Perennial	10	Household use and fish rearing
River	-N/A-	Perennial	-	Household use

Table 11: Energy Consumption

Energy form	Availability in HHs	Source	Average monthly consumption of HHs	Purpose
Fuel Wood	132	Forest area	303.10 kg	Household consumption
LPG Cylinders	3	Local Gas agencies	3 units	Household consumption
Kerosene	131	Local market	4.19 litres	Household consumption

Record II

Livelihood Opportunities Analysis

Table 12: Bamboo Craft

Constraints	Reasons	Opportunities	Programme
Product quality and diversification	<ul style="list-style-type: none"> * Shortage of Highly skilled craftsmen * Use of Traditional tools and implements * Lack of strategies for product diversification. 	<ul style="list-style-type: none"> * Good export potential * E-commerce platform * Huge potential for tourism-Craft based tourism may be an option 	<ul style="list-style-type: none"> * Skill Up-gradation & Training on New Product Development and Product Diversification
Marketing potential	<ul style="list-style-type: none"> *No pricing policy *No linkage with the institutional buyers *No Product Diversification 	Exploring new markets	*Providing a bulk buy arrangement of the finished product with institutional buyers.
Credit facilities-Seed funding	<ul style="list-style-type: none"> * No linkage with the banks and other FIs * Unaware of the development schemes * Inadequate initial investment capacity * Lack of sound business orientation 	<ul style="list-style-type: none"> *Financial assistance by the Govt. or MFI players Providing easy access to credit. 	*Financial Literacy is an important area of intervention along with entrepreneurship development programmes for emerging entrepreneurs in this sub-sector

Table 13: Livestock Rearing

Constraints	Reasons	Opportunities	Programme
Veterinary care facility	<ul style="list-style-type: none"> * Inadequate support services related to veterinary care * Lack of knowledge about scientific rearing of livestock 	<ul style="list-style-type: none"> * Enhancing income from livestock rearing * Good market * Healthy breed of livestock 	<ul style="list-style-type: none"> * Training on para-veterinary professional * Setting up community own and run agro-vet are centre in the EDC villages

Table 14: Eco-Tourism

Constraints	Reasons	Opportunities	Programme
Infrastructure Support	<ul style="list-style-type: none"> * Access to proper roads to reach Gelipung EDC * Unawareness on the part of the villagers on the prospects of eco-tourism 	<ul style="list-style-type: none"> * Close proximity to Dehing Patkai WLS * Employment opportunity for the youth * Investment potential * Potential for craft and agro-tourism 	<ul style="list-style-type: none"> * Construction of all-weather roads under EPA decided by the community * Training on tourism and hospitality to the unemployed youth of the villages * Development of proper tourist circuit for Dehing
Marketing and Branding	<ul style="list-style-type: none"> * No successful demonstration of eco-tourism prototype close to EDC area * More emphasis to already established tourist destinations viz. Kaziranga and Manas NP 	<ul style="list-style-type: none"> * Huge inflow of tourists thereby giving a boost to the tourism eco-system * Revenue generation for the State Government as well as the EDC 	<ul style="list-style-type: none"> * Vibrant and effective promotion of Northeast tourism all across the globe * Using social media to spread awareness
Credit facilities-Seed funding	<ul style="list-style-type: none"> * No linkage with the banks and other FIs * Unaware of the development schemes * Inadequate initial investment capacity * Lack of sound business orientation 	<ul style="list-style-type: none"> * Financial assistance by the Govt. or MFI players Providing easy access to credit. 	<ul style="list-style-type: none"> * Financial Literacy is an important area of intervention along with entrepreneurship development programmes for emerging entrepreneurs in this sub-sector

Table 15: Credit Facility

Constraints	Reason	Opportunities	Programme
Rate of interest	Higher rates charged by the private money lender	Penetration of MFIs into the EDC area	*Financial literacy
Availability of loan	*Lack of proper documentation/proof on the part of the borrowers *Lesser interest shown by banks and other financial institutions	* Fostering the enterprise eco-system * Promotion of village level institutions	*Facilitating the bank linkage programme

Approved

[Signature]

Divisional Forest Officer
Digboi Division, Digboi
Tinsukia, Assam