





Borthol Joint Forest Management Committee

Innerline Reserve Forest

Hailakandi Division, Hailakandi

MICRO-PLAN

(2016-17 to 2025-26)

Prepared by Borthol JFMC

Assisted by

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



Appresied

List of Acronyms

Acronym	Full Form				
ACF	Assistant Conservator of Forests				
AfD	Agence Franchise de Développement				
APFBC	Assam Project on Forest & Biodiversity Conservation				
APL	Above Poverty Line				
BPL	Below Poverty Line				
CCF	Chief Conservator of Forests				
CF	Conservator of Forests				
CML	Centre for Microfinance and Livelihood				
COMPELO	Consulting Service for Micro Planning Enhancing Livelihood				
	Opportunities				
DCF	Deputy Conservator of Forests				
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	GaonPanchayat				
На	Hectare				
IEC	Information Education & Communication				
IIE	Indian Institute of Entrepreneurship				
JFMC	Joint Forest Management Committee				
MDR	Major District Roads				
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme				
MoEFCC	Ministry of Environment, Forests & Climate Change				
NTFP	Non Timber Forest Produce				
OBC	Other Backward Classes				
ODR	Other District Roads				
PCCF	Principal Chief Conservator of Forests				
РНС	Primary Health Centre				
PMU	Project Monitoring Unit				
PRA	Participatory Rural Appraisal				
REDD+	Reducing Emission from Deforestation and Forest Degradation Plus				
RGVN	RashtriyaGraminVikasNidhi				
RO	Range Officer				
Sc	Scheduled Caste				
SDG	Sustainable Development Goals				
SLF	Sustainable Livelihood Framework				

Spp	Species
ST	Scheduled Tribe
SWOT	Strength Weakness Opportunity & Threat
TV	Taungya Village
TV	Television
WLS	Wildlife Sanctuary
WPA	Wildlife (Protection) Act, 1972
WPC	Working Plan Circle

Vernacular Names of Trees, Shrubs, Herbs, Other Plants

Sl.No.	No.Local Name(s)Botanical Name(s)		
1.	Awal	Vitex spp.	
2.	Badam	Staculiaalata.	
3.	Bohera	Terminallicebellerica.	
4.	Bajrang	Xanthoylumbudrenga.	
5.	Banak	SchimaKhasiana.	
6.	Ban aam	Mangiferrasylarhca.	
7.	Belphai/ Jatpai	Elcocapruegloribundus.	
8.	Bandar fela	Disoxylumbinnectiferum.	
9.	Bandar lathi	Lasia fistula.	
10.	Bon simul	Bamboxinsignoc.	
11.	Barun	Crataerareligiosa.	
12.	Bella	Sapiumbaccatum.	
13.	Bhadruk	Vitexpubesccns.	
14.	Bhatkur	Vitexheterophylla.	
15.	Bhola	Mons lacrigata.	
16.	Bhubi	Baccaureosapidar.	
17.	Bhuri	Trewianudiflora.	
18.	Bonsum	Phocbegoatjearensis.	
19.	Buva	Ailanthus grandis.	
20.	Chatim	Alstoniascholaris	
21.	Kaligoda	Bambusavalgars.	
22.	Karail	Dendracalamusstrictus.	
23.	Khang	Dendrocalamuslongispathus.	
24.	Spring vatch	Viciasativa	
25.	Sunn hemp	Crolatariajuncea	
26.	Anchu plant	Morindaangustifolia	
27.	Anchu plant	Morindatinctoria	
28.	Madar plant	Calotropisgigantea	

29.	Akahulota	Trachelospermumfragrans
30.	Atalari plant	Polygonumbarbatum
31.	Lojjawati	Mimosa pudica
32.	Abu tenga	Antidesmadiandrum
33.	Amsirika	Acacia concina
34.	Sarpagandha	Rauwolfia serpentine
35.	Alokhoni	Cassia tora
36.	Common reed, ekora	Phragmiteskarka
37.	Chalmugra	Hydnocarpuskurzil.
38.	Hartaki	Terminaliachebula
39.	Gamair	Gmelinaarborea.
40.	Kadam	Anthoccphaluscadamba
41.	Jam	Engeniajambos
42.	Nageswar	Messuaferrea
43.	Cham	Artocarpuschaplasha.
44.	GhoraNeem	Meliaazedarach
45.	Rain tree	Samaneasaman
46.	Ping	Cylometrapolyandra
47.	Chatim	Alstoniascholaris
48.	Kash	Sachammprocerum.
49.	Khagra	Sacchommspontarcum.
50.	Ekra	Erianthusraveneac.
51.	Nal	Phragmiteskarka.
52.	Rema	Thysanolaena maxima.
53.	Khor	Imperetaarundinacea.

BORTHOL JOINT FOREST MANAGEMENT COMMITTEE HAILAKANDI FOREST DIVISION, SOUTHERN ASSAM CIRCLE

Micro-Plan (2016-17 to 2026-27)

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BORTHOL JOINT FOREST MANAGEMENT COMMITTEE HAILAKANDI FOREST DIVISION, SOUTHERN ASSAM CIRCLE

Micro-Plan (2016-17 to 2026-27)

PART I

1. Introduction

1.1About the Project

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 nonforest 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'.

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.

1.2 Micro-Planning & Livelihood Development

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.

A consortium comprising of Indian Institute of Entrepreneurship (IIE) Guwahati, *RashtriyaGraminVikasNidhi* (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 'Consulting Service for Micro Planning Enhancing Livelihood Opportunities' - **COMPELO** in short.

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 bothforest development and livelihood development.

1.3 Micro-Plan for the Borthol JFMC

This document gives the Micro-Plan for the Borthol JFMC, which is located in the Hailakandidistrict of Assam. The JFMC falls under the jurisdiction of the Hailakandi Forest Division of Southern Assam Forest Circle. The profile of the community is given in the next section.

2. General Description of the Area

2.1 General Description:

Hailakandi Forest Division falls under the Southern Assam Circle, Lower Assam Zone. The boundaries of the Division are co-terminus with that of the Civil District of Hailakandi.The total geographical area in 1327 Sq. Km. Hailakandi District has a good network of Roads and Railways. Panchgram acts as a gateway to the District. It is connected through Panchgram to other parts of the country. The National Highway 54 passes via Panchgram. The District is connected by rail to Badarpur Junction (in Karimganj), and Silchar Junction (in Cachar) via Panchgram. A branch line runs from Panchgram to Bhairabi (a point close to the Inter-state border with Mizoram), dividing the District virtually in two parts. The western boundary of the District is an extension of the Lushai Hills from South to North. From Gutguti stream to Chatachura ridge, the terrain is full of steep slopes. It is a high hill range up to 600m elevation. The Chatachura ridge gradually tapers down all along as one proceeds northwards, and ends near Badarpur. On the Eastern side, the Lushai hills extend with decreasing altitude upto the point where the boundaries of Hailakandi, Cachar and Mizoram meet. Then onwards, there are scattered low hillocks all below 100m most of the hillocks are under Tea cultivation. River Dholeswari emerges from the Lushai hills. It is joined by some major streams such as Jhalnacherra, Palaicherra, Kukicherra, Rupacherra, on it's northwardly course. Then it is bifurcated by a man-made channel called Katakhal near Rupacherra.

The plain areas of the district are criss-crossed with many abandoned river/stream courses, most of which get rejuvenated and linked up with the present streams during the rainy season. Thus the central flat plains of the district are marked by numerous beels (abandoned river/ stream course which are normally crescent shaped) most of these beels are confined to the northern part of the district above 24° 30′ N latitude. To the south of this parallel, the topography becomes gradually hilly, culminating into the Chatachura ridge.

2.2 Location:

The entire Division falls within 92° 25′E to 92° 46′ E Longitude and 24° 8′ N to 24° 53′ N Latitude at an elevation of 21m (68.8ft). To the north and East lies the Cachar District, and on the West, it is bounded by Karimganj District. To the south it has an Inter-State boundary with Mizoram. The Head Quarters of the District, as well as the Forest Division are situated at Hailakandi itself. Besides Hailakandi, the other main townships of the District are Panchgram, Lalabazar, Katlicherra, Kukicherra and Gharmura Bazar, Panchgram is an Industrial township

housing the Cachar Paper Mill, CPM, (a unit of Hindustan Paper Corporation Ltd., a Government India Undertaking.

2.3 SOIL:

The central alluvial flat land of the district is broken by undulations and low tillas on the eastern and western extremities of the district; and is bounded by higher hills on the south, If the entire Barak valley is seen, Hailakandi is situated is one of the several north-south corrugated geological structures. The reason being, that the strata of the Surma Valley have been bucked into north-south wave like corrugations. This buckling has given rise to alternate strips of hills and valleys. The oldest rocks found in the valley are sand stones of the Barail series. The lower beds of Surma series form compact hills. These hills are covered with forest, and are unsuitable for tea cultivation. There is an overlay of alternate beds of sand stone and shale in this series. The upper beds of Surma series are soft sandy shale mixed with impure sand stones. These beds have given rise to swampy areas broken by line of tillas. Tipam series is also found in the ridge formations. These beds are harder. Most of the tea cultivation is being carried on the Tipam beds or the upper beds of Surma series. The geology of the valley suggests that soil and water conservation measures are very important to check further erosion in the valley. Mankind has only escalated the snail-pace slow geological process of erosion situations. P. Evans, who studied the geology of the region in great details during early part of this century, has called these areas as geologically active as far erosion & situations are concerned.

2.4 Climate:

The climate of the division is a subtropical monsoonal climate with and annual rainfall ranging between 2500-3300mm. the average annual rainfall of the area is over 3000mm and about 80-85% of this rainfall occurs during the month of April/May – September/October. December and January are normally the driest months. During summer, average maximum and minimum temperature is 35° C and 26° C respectively. In winter average maximum and minimum temperature becomes 25° Cand 11° C respectively. During the monsoon, the district is affected by floods.

2.5 Water: A large number of streams in the Longai and Singla sub-watersheds, and the numerous streams north of Barak river serve as drinking water resources. The villager used streams, wells, ring-wells and hand pumps for drinking purpose. The ground water table is normally high and found to be 2-3 m below the ground level in the plains. It sinks to 6-10m during winter. Due to deforestation on the hill slopes, there is flow of a large quantum of silt,

sand and suspended particles. Most of the streams run dry during winter.

2.6 The Eco- system and Biodiversity:

Timber, Bamboo, Cane, Stone, Sand are the major forest products of the division. The forests are rich in various costly timbers like teak, sundi, gamari etc. Huge quantity of bamboo is harvested and supplied regularly to paper mills in the neighboring district. There are some local variation of forest types has been observed. The gamari, Cham, gurjan, mericha-sundi, tilsundi, heruhotia, poma, gandroi, kurta,koroi etc. are found under Hill type forest in the division. Beyond the Hill type, Low Hill type forest namely Tula, Kadam, Jam, Awal, Kurta, Nageswar, Chalita, Bonak, Haritaki, Ping are extensively found in the division. The swampy type forest also occurred in the eco-tone zones where the hills ranges merge with the alluvial flats. Growth of Tara, Ekora, Nall, Khogra mixed with the species such as Jarul, Paroli are also found. There are about nine species of Bamboo that occur in this forest tract. Pure Bamboo brakes also occur extensively in some areas/ abandoned jhums. Four important species of Cane occur. These are Golla, Mona Jalliad and Sundi. The scope for commercial exploitation does not exit, as the areas are few and far between. Through detailed prescriptions have been made in the past regarding the management of cane, the cane extraction trade has remained mainly illegal and uncontrolled. If steps for its conservation are not taken, canes may disappear altogether from the forests.

Like flora diversity, the division is the home of a wide variety of fauna. Fruit bat, Tiger, Elephant Sun bear, Giant squirrel, Hog deer, Jackal, Wild boar, River terrapin pond Turtle, River turtle, Indian python, Bamboo Viper, Cobra etc. Under the Hailakandi Forest Division, there are 2 reserved forests namely Inner Line RF and Katakhal RF which has cover 741.151 sq.km area.

Name of	Name of the	Total Recorded	
Division	RF's	Area (Ha)	
Hailakandi	Inner line	39849.45	
	Katakhal	13986.29	
	Total	53835.74	

Table no .1: List of Reserve Forest under Hailakandi Forest Division

Forest Type: The following two type of forest have been found in the reserve forest area:-

- 1 Cachar Tropical Evergreen Forest.
- 2 Cachar Tropical Semi Evergreen Forest.

The Cachar Tropical Evergreen Forest is found in the northern and eastern aspects where slope are steep and uncultivable. It is also found in rocky and shady stream banks. Most of the formation occurs in the lower slopes of the hills. The *Dipterocarpusterbinatus and Palaquiumpolyanthum* are the main characteristic species of this formation. Due to the continuous vast expansion of *jhum* cultivation in the reserve forest area the formation has been intensely changed. The top hill slopes of the division are the favoured location of the formation of Cachar Tropical Semi Evergreen Forest. *ArtocarpusChaplasa* and *Dipterocarpusterbinatus* are the dominant species of this formation. But this type of formation has rapidly degraded into either bamboo brakes or deciduous type, and now is restricted to a small patch due to *jhuming* practices.

2.7 Concern For Biodiversity Conservation:

- The current human pressure on the forest for large-scale collection of fuel wood and minor forest products, as well as the practices of grazing and trampling may alter the habitats of many species. The division has observed rapid forest deforestation by men by unauthorized settlement, **jhuming** in high altitude area, cultivation on flat lands, pan jhuming and illegal felling As a result there is a lot of spatial and temporal variation in species richness, composition and productivity.
- As remedial measures against unauthorized tenancy & "adhiar" system, were not taken the
 reserved forest slowly started to be filled up. It is interesting to note that the authorized
 villagers themselves became nuclei of encroachment. As time passed, their families grew in
 size. Earlier, they used to obtain permission for extra land, which was duly granted after
 completing official formalities. After the enactment of the Forest (Conservation) Act, 1980,
 even this practice was discontinued. The villagers went on occupying tilla after tilla and
 bringing more land under cultivation.
- The Riang refugee issue: To the south of Hailakandi lies the state of Mizoram which has
 predominant Christian populations. The majority of inhabitants of this State were converted
 into Christians about a century ago. As a result of conversion, a new social dimension has
 emerged in the region i.e. communal tension among different social groups i.e. Christian tribal
 and non-Christian Hindu tribal. Such conflicts in the past have been mentioned by P.N.
 Bhattachajee in this plan. The Reang and Mizo communities were involved in minor and major

clashes earlier as well.

• In the conflicts of December, 1997, about sixty six [eye witnesses put the figure to two hundred] Reang refugees families migrated to the Mukam and Bhairabi blocks of Inner line RF. It needs to be mentioned that these forest areas already have a considerable population of displaced Reangs. If measures are not taken to stop further influx of persons across the Mizoram border, the entire Mukam and Bhairabi blocks would be encroached in near future. The Department has not been able to make its presence felt in this region. The refugees must be repatriated back to their original homes at the earliest. (Ref. WP 1999- 2010)Proper conservation and management strategies are required for protecting this fast depleting flora and fauna diversity. Nowadays tropical forests face a serious threat, natural as well as anthropogenic. Eventually, several species have become endangered. Thus, the need to set priorities for conservation of tree diversity has become inevitable

3.Village Socio-Economic Profile

3.1 Key Information

The Borthol JFMC is under Lala revenue circle. It is a Forest village and is located in Hailakandi District. The JFMC was registered on July, 2005 (Appendix III as per the registration certificate) in the office of the Divisional Forest Officer, Hailakandi cum office of the Chief Executive Officer, Hailakandi. The JFMC registration was again renewed on 06-06-2015.

Sl. no	Particulars	Key Information		
1	Name of the JFMC	Borthol		
2	Name of Forest Village	Borthol		
3	Name of Revenue Circle	Lala		
4	Name of revenue Sub Division	Lala		
5	Name of District	Hailakandi		
6	Name of Forest Division	Hailakandi Forest Division		
7	Name of Forest Range	Matijuri Range		
8	Name of Forest Beat	Belaipur Beat		
9	Name of GaonPanchayat	Dhalchera – Belaipur		
10	Reg. No	SAC/HKD/08/Dated 06-06-		
		2015		
11	Description of Boundary of	North:Bilaipur F/V		
	JFMC	South:Balicherra		
		West:Triganga		
		East:Lalpani		

Table-A: Key Information of the JFMC

Source: JFMC Records & Discussions during PRA Exercise in June 2016

3.2 Brief Details of the Executive Committee & General Body

The brief details of Executive Committee & General Body of the JFMC are contained in the table, which is given below.

Name	Age	Address	Educational qualification	Designation
SmtiRunu Das	52	C/O Lt. Kokhil Das	IX	President
Sri	58	C/O Lt.	B.A	Member Secretary
KhullakppaSing		KamalakantaSingha		(Fr I)
ha				
HandaKurmi	37	C/o Lt. KirlaKurmi	IX	Member
PutulBala Das	45	C/o Sukundra Das	IV	Member
Sri Srinath	61	C/O Aslini Barman	XI	Member
Barman				
Sri Sishir Das	32	C/O Surendra Das	VII	Member
Sri RanjuKurmi	25	C/o BidapatiKurmi	IX	Member
Shanti Rani Das	40	C/o Ranjan Das Laskar	VII	Member
Laskar				
Litin Das	37	C/o Uma Ch. Das	IX	Member
		Laskar		
Sri Rajen Das	28	C/o Runu Das	IX	Member

Table-B: Brief Details of Executive Committee & general Body

Source: JFMC Records

3.3 Households & Population Structure

The village has 254 households, of which **244** households are **BPL** (Below Poverty Line) households.

Cable-C: Demographic Profile of JFMC

Caste/Community	Household	Male	Female	Total
General	5	30	25	55
OBC	98	311	290	601
SC	136	425	447	872
ST	15	32	38	70
Total	254	798	800	1598

The total population is 1598, of which 798 are male and the rest are female members. The population includes 872 SC, 70 ST, 601 OBC and 55 General persons.

From this, it is inferred that:

- (1) The average number of persons in a household is 6.
- (2) The sex ratio is 1002 females per 1000 males in the village.

Age	< 5 years	5-18	18-45	45-60	>60
Class		years	years	years	years
Male	72	112	372	175	67
Female	65	115	395	181	44
Total	137	227	767	356	111

Table-D: Age Group Distribution

3.4 Education & Skills Development

Over 62.51% 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.

Table-E: Educational Profile

Age	Primar	Middle	High	HS	Graduat	Masters	Illiterate
class	У		School		e		
<25	137	135	41	10	2	0	21
years							
>25	395	231	12	3	0	0	578
years							
Total	532	366	53	13	2	0	599

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:

(a) Bamboo crafts(b)Carpentry(c) Mason

3.5 Land Use Pattern

From the land-use pattern of the village, it is seen that the land-use in the village is as follows:

Crop Land: 130 ha Tree Cover: 112 ha (+95 ha) Habitation: 32 ha Water Bodies: 2 ha Barren Land: 70 ha occupied by encroachers

3.6 Land Holdings

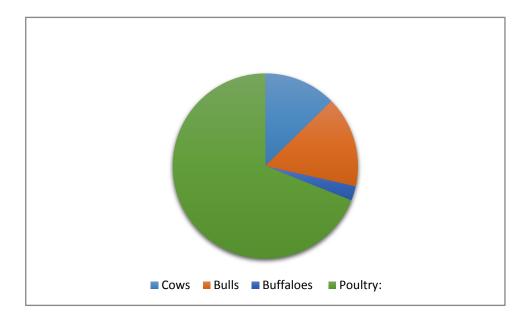
From the type of households as per land-holding, it is seen that:

- 3.93 % of the households are large farmers (>10ha)
- 78.74 % of the households are marginal farmers (less than 2 Ha); and
- 17.33 % of the households are small farmers (2-10 Ha).

3.7 Livestock

The main types of livestock possessed by the households include:

	Livestock Details									
Cows	CowsBullsBuffaloesPoultry									
170	214	34	928							



3.8 Village Infrastructure & Communication Facilities

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.

SI. No	Point Infrastructure	Location inside village or Outside	Number (If applicable)	Approximate Distance from Village, if outside (m/Km)	Condition and status of present use	
1	Bus stand	Outside	1	2 km	Bilaipur	
2	Primary Health Centre	Outside	1	2 km	Bilaipur	
3	Primary School	Inside	3		Fair	
4	Middle School	Outside	1	2 km	Bilaipur	
5	High School	Outside	1	2 km	Bilaipur	
6	HS School	Outside	1	14 km	Duwarbond	
7	College	Outside	1	14 km	Duwarbond	
8	Post Office	Outside	1	2 km Bilaipur	Fair	
9	Bank	Outside	1	14 km	Duwarbond	
10	Telephone	Inside	Every household		Personal Mobiles	
11	Anganwadi Centre	Inside	3			
12	Gram Panchayat Office	Outside	1	8 km	Fair	

Table-F: Physical Infrastructure

13	Revenue Circle Office	Outside	1	70 km	Hailakandi
	Onice				
14	Police Outpost	Outside	1	2 km	Bilaipur
15	Forest Beat Office	Outside	1	2 km	Bilaipur
16	Forest Range Office	Outside	1	26 km	Matijuri
17	Railway Station	Outside	1	70 km	Hailakandi
18	Drinking Water Sources	Inside	6		Well for every household
19	Community Hall	Inside	4		
20	House with Electricity	Inside	254		Most of the houses are electrified
21	Temple	Inside	6		
22	District Head Quarter	Outside	1	70 km Hailakandi	
23	Nearest Market	Outside	1	2 km	Bilaipur market

This gives the present status of the village infrastructure.

From the above table, the following have been noted with regard to village infrastructure:

Physical Infrastructure: The habitation is deprived of basic physical infrastructure like paved roads, electricity, water supply, mobile network etc.

Education & Health Facilities: There are minimal educational and health facilities. Public

transport is not available, and the community members have to use bicycles to move around.

Govt. Offices: The government offices (such as Police station, Gram Panchayat office, Revenue office, Forest Beat office etc.) are located at a considerable distance, which gets amplified as the villagers do not have access to regular public transport from either the habitation or from nearby areas.

Financial Inclusion: Facilities for financial inclusion like bank and post office are located at a considerable distance from the habitation. Hence, the community members do not have bank accounts or postal savings accounts.

3.9 Agricultural Crops

The above shows that the following are the main crops grown in the village.

Kharif Crops: Paddy

Others: Vegetables

Most crops are rain-fed, which are cultivated under irrigated conditions.

The production and yield of these crops is given as follows:

(a) Paddy: Production 7000 kg

3.10 Fodder Availability

The fodder availability in the village shows that the main sources of fodder in the village are as follows:

- (a) Agricultural land
- (b) Forest land
- (c) Homestead Garden

3.11 Markets

The main markets used by the community are as follows:

- (a) Grocery :Borthol F.V (Inside the village)
- (b) Weekly Market: Bilaipur at 2 km away
- (c) Major Market: : Dwarbond at 20 km away

3.12 Water Resources

The main water resources with the water availability is as follows:

(a) Ring Well (Water Availability: Seasonal)

(b) Supply Water (Water Availability: p/Seasonal)

3.13 Energy Consumption

a) Fuelwood: Household depending: 254 No. Source: Forest

b) Kerosene: Household Depending: 52 Households

3.14Socio-economic status

Social set-up: The village is mostly inhabited by Bengali, Muslim community.

They have a caste system. The society is marked by deep social divisions.

The observed position of women is not satisfactory.

Economic Condition: The village persons were found to be engaged in different activities like farming, Bamboo crafts, carpentry. Most of the household earns Rs. 36000 to Rs. 120000 per year.

4. Livelihood assets profiles and vulnerability contexts

This section deals with the livelihood assets and their current status in the village. The vulnerability context has also been analysed in the section

4.1 Livelihood Assets Analysis

As per the sustainable livelihood framework (SLF) there are five most important livelihood assets i.e. Human capital, financial capital, social capital, natural capital and physical capital that are needed for livelihood enhancement in a village. The status of the five capitals have been analysed and are given below:

Human Capital:

The village has a decent size of human capital which stands at 1598 as per the census 2011. There is a large percentage (nearly 70%) of people in the working age group (18 - 60 years) of age which shows a high potential for growth in the future. As for the literacy rate of the village is concerned, it is around 62.51%.

Many traditional skills like cane and bamboo craft making and carpentry have a huge potential to grow and hence these skills need to be harnessed. Also, proper healthcare facilities have to be provided at the right time.

Natural Capital

The village is rich in natural capital. The total agricultural land can be divided as

Low productivity area - 20 Ha

Water logged area - 10 Ha

High land area – 10 Ha

These forms of land act as a major source of livelihood to nearly 201 households. The forest has some aesthetic values too. The villagers gather from nearly 15 Ha of forest land.

Social Capital

The village sets an example of religious harmony and unity. With the Hindu majority, the village has 6 temples inside its territory. It also has a SHG but no NGOs. The only SHG tries to achieve its goal but poor physical infrastructure acts as a barrier for them and hence more attention needs to be focused in these areas.

Physical Capital

The physical capital of the village can be analysed by looking at its infrastructural growth such as roads, schools, PHCs, and so on. The kutcha roads make communication very costly. The village has no nearby bus stands. The absence of a PHC in the village is the reason for the increasing health

problems as already mentioned above. It is good to see that the village has 3 primary schools but at the same time it is also important to note that the village has no middle, high and H.S school inside its territory.

4.2 Livelihood asset pentagon

Based on the analysis and assessment of the existing five livelihoods assets in the village a livelihood pentagon was studied. The livelihood pentagon is not balanced and gaps could be plugged by taking appropriate livelihood strategies and actions that are mentioned in the village development plan and livelihood development plan.

4.3 Vulnerability Context analysis

The village faces 3 types of vulnerabilities:

- i. Malaria
- ii. Dysentery
- iii. Cyclones and storms

Malaria shows its devastating face during the months of May to July. Dysentery also poses a serious health problem for a lot of people from the month of April to July. As far as cyclones and storms are concerned, it affects the lives and property of the people particularly during the period of March to May. Last year, 12 families were badly affected by these cyclones and storms.

4.4 Seasonality

The seasonality calendar of the crops grown and the vulnerability due to flood was prepared through participatory approach. Sali paddy is cultivated from May – Sept and Rabi crop is cultivated from Sept to April. Also Ahu paddy is cultivated from August to December.

Mont	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
hs				il			у					
						Sa	li pad	dy				
								Ahu p	addy			
Crop												
s	Rabi	i crops (Vegetab	les)						Rabi	i crops	
5												
RISK]	Flood					
FAC												
TOR												

5. Existing Plans and Programmes

This Chapter deals with certain essential linkages with other key planning and execution mechanisms and processes which have direct bearing upon microplanning. The topmost among these is the Working Plans which provide an overall umbrella for sustainable development and forestry and wildlife conservation in forest areas of the State. In wildlife areas, these plans are known as Management Plan, and in Tiger Reserves, as Tiger Conservation Plans. In addition, there are several plan scheme components such as the Tribal Sub Plan (TSP), and Scheduled Caste Component Plan (SCP) which also get implemented in forest villages through the Forest Department. There are several line departments providing health, education, power, irrigation and livelihood services. Often these departments also implement schemes in the forest villages.

After the promulgation of the Assam Joint (Peoples' Participation) Forestry Management Rules, 1998 in Assam, the joint forest management got initiated, and the JFMCs and EDC were constituted in 2002. Prior to this, some working plans had prescriptions for joint forest management or constituted JFM circles. However, the National Working Plan Code, 2014 gave the right impetus to the microplanning and has incorporated detailed guidelines to this effect. This Microplan is based on the 2014 National Working Plan Code.

5.1 Linkage With Working Plan

The Hailakandi Forest Division was created in the year 1992. Prior to this, the forest areas of this Division were administered under Cachar and Karimganj Forest Divisions. The JFMC namely falls in the Katakhal RF. As per the Working Plan of Hailakandi Forest Division (1998-99 to 2009-10) by M.K. Yadava. This is the latest available Working Plan for the Division. As per this Working Plan, all the forest village areas along with nearly degraded areas or encroachment areas were clubbed together into "Energy Plantation Working Circle (EPWC)".

As per the Working Plan, the forest composition in these areas consists of Simul, Erythrina, Dillenia, Magifera, Ajharetc. Some of the areas are undulating and form tillas. Some of them have isolated patches of forest mixed with bamboo. The Working Plan prescribes certain species for plantation namely Mallotus alba, Ailanthus excels, Acacia, AnthocephalusKadamba etc. asfuelwood species meant for fuelwood production. The Working Plan also prescribes for development of agro-forestry models on vacant spaces such as bunds, farms, roadside and external boundaries of forests etc. Quick growing species are recommended for plantation. The recommended silvicultural system is short rotation crop followed by a final felling with a rotation

period of 10 years. The Plan predicts that per ha yield could be achievable could be more than 275 CuM at the end of the 10th year.

Prescriptions: The following prescriptions have been laid down in the EPWC areas:

- 1 Fast growing species recommended for plantation
- 2 Agro-forestry models to be tried
- 3 Nursery of fast growing species to be raised departmentally or through private growers
- 4 Thinning regimes could be altered locally
- 5 Teak not to be planted
- 6 Conservator of Forests may permit felling
- 7 No individual claim on any tree planted. Disposal of produce as per the Assam Joint (Peoples' Participation) Forestry Management Rules, 1998.
- 8 Plantation target 390 ha annually

Other Working Circles: The Working Plan has other relevant working circles namely Non Wood Forest Produce Overlapping Working Circle (NWFPOWC) and Bamboo Overlapping Working Circle (BOWC). In addition, there are Miscellaneous Prescriptions notable among which are "Organizing of Forest Protection & Regeneration Committees", and "Forest Village Management". The important inputs from these prescriptions are:-

- 1 Execution of all field works through the Committees
- 2 Integrated Watershed management (IWM) groups to be formed for watershed management
- 3 Labour cooperatives to be formed for supply of bamboo
- 4 Forest village register, jamabandi register, to be updated
- 5 Forest village census should be held every five years
- 6 Along with census, count of livestock and socio-economic status of people should be recorded

Other Prescriptions: The Working Plan prescribes watershed based compartments. The watersheds mostly falling in these areas appear to be Gendaicherra, Lalacherra, Kukicherra. Most of the watersheds seem to be degraded. As per the Administrative prescriptions, the watershed compartments should be the unit of responsibility.

5.2 Forest Department Initiative in the Past:

The forest department under the National Bamboo Mission had taken up plantations from the year 2006-07 to the year 2013- 2014. In the same years NBM improvement of degraded Bamboo was also taken up. Under the APFBC in the year 2015 -16 Firewood plantation was taken up in the 10 JFMC of Hailakandi as mentioned below.

			NBM	/ Planta	tion				NBM	NBM imp. of degreded bamboo					Total	APFBC(FW)	SMPB	G.Total	Name of JFMC
06-07	07-08	08-09	09-10	10-11	12-13	12-13	13-14	Total	06-07		08-09	09-10	13-14	Total	NBM	15-16	15-16	Phy.(Ha)	
10	15	10		11			10	56	10		I I	20		40	96	20			N Bagbahar
10	15	10	20	12			10	- 11	20	10		20		50	127	20			O. Bagbahar
5	5			12		20	10	52			40	20	20	80	132	20	15		Protappur
10	10	10	20	12		50	10	122			36	20	20	76	198			328	Dhalchena
5							10	15					20	20	35	20			Borthal
5	5			12		10	10	42	20	10		20	20	70	112	20			Bilaipur
5								5							5	20		250	Kacharithal
5								15	10	10				20	35				Nunai
10	15					30		55							55				Kukichena
10						30	10	50	20	15			20	55	105	50		307	Baruncherra

Schemes Of the Forest Department

Capacity Building and Skill Development programmes have also been undertaken by the Forest Department under the APFBC project in the year 2015-16.

Assam Project on "Forest and Bio-diversity Conservation Society" (APFBC) Project Management Unit (PMU) accorded Financial sanction amounting to Rs. 2,06,800/- (Rupees two lakhs six thousand eight hundred) only for Organising training on nursery and Plantation Management of Horticultural Crops at J.F.M.C level under Hailakandi forest Division. Trainings in four batches were conducted by the department of Agriculture, Hailakandi in the months of January and February, 2016. Total 164 persons were trained.

5.3 Schemes of other Departments:

Tribal Sub Plan: The central Government scheme of The Tribal Sub Plan was implemented under the division in the past. In the year 1995-96 development initiatives like construction of Ringwells, Road improvement and Construction of LP school was undertaken under the TSP schemes. The budget allocation for the same being Rs. 3,68,000.00.

	Fo	orest Villa	age Dev	elopment	Schem	e		
SL	Name of Forest			Ite	em of w	orks		
No	village	Roa	ad	Culv	ert	Market	Shed	Total
		Amt.	K.M	Amt.	Unit	Amt.	Unit	
1	Borthol	6.36		1.25	1			7.61
2	Belaipur	6.36		1.25	1			7.61
3	Protappur	6.36		1.25	1			7.61
4	DhalcherraTiprapunji	6.36		1.25	1			7.61
5	Lalpani	6.36				3.26	1(P)	9.62
6	Dhalcherra	6.36				3.26	1(P)	9.62
7	Noxatilla	6.36		1.25	1			7.61
8	Old Bagbahar	6.36		1.25	1			7.61
9	New Bagbahar	6.36		1.25	1			7.61
10	Nowgaon	6.36	1.70	1.25	1			7.61
11	Lalcherra	6.36	1.70	1.25	1			7.61
12	Kacharithal	6.09	1.70			3.23	1(P)	9.32
13	Nunai	6.36	1.70	1.25	1			7.61
14	Baruncherra	6.36	1.70	1.25	1			7.61
15	Jhalnacharra	6.36	1.70	1.25	1			7.61
16	Kukicherra	6.36	1.70	1.25	1			7.61
17	Gharmura	6.36	1.70			3.26	1(P)	9.62
18	Duttapur	6.36	1.70	1.25	1			7.61
19	Jacobpur	6.36	1.70	1.38	1			7.74
20	Ramnathpur	6.36	1.70	2.50	1			8.86
	Total	126.93	4.00	21.38	16	13.01	4(P)	161.32

Schemes under Tribal Sub Plan 2009-10

Source: DFO office Hailakandi Forest Division

BORTHOL JOINT FOREST MANAGEMENT COMMITTEE HAILAKANDI FOREST DIVISION, SOUTHERN ASSAM CIRCLE

Micro-Plan

(2016-17 to 2026-27)

Livelihood Development Plan & Forest Development Plan

Part II

6. Microplan Objectives, SWOT and Gap Analysis

6.1 Microplan Objectives

A village Level Micro Plan is a village development plan and forest development plan which is need based and site specific, commensurate to available resources. As the unit of the plan is small, it is called micro plan. The micro plan tries to meet the win objectives of :

- i. Enhancing livelihood
- ii. Biodiversity Conversation and maintaining the ecological balance

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 the following Participatory Rural Appraisal (PRA) process undertaken by the community and personnel of the RastriyaGraminVikasNidhi(RGVN) in May2016 the various steps followed as follows

- (a) Community meetings organized at the outset in May 2016 to discuss the objective of the project and obtaining their cooperating together the required information about the and its contexts
- (b) Collection of the baseline data on the community and its contexts ;
- (c) Validation of collected information through community discussions held thereafter and feedback
- (d) Preparing the outline of the action as per the community participation and feedback. The micro plan has been compiled by RGVN on the project guidelines. The document has been discussed and finalized for final adoption in July 2016 with the JFMC members and the local Forest Department Officials

6.2 Need Assessment and Gap Analysis

Based on the resource assessment, capacity assessment, livelihoods assets mapping and vulnerability assessment through focused group discussions, PRA exercises, village level and household level survey, the need assessment, gap analysis and SWOT analysis was carried out. The action plan, livelihood, village development strategies and forestry development plan were conceptualized for the JFMC primarily based on this analysis.

Training Need Assessment:

a. Capacity building of communities through regular awareness programmes on important development issues like Forests and Biodiversity, Sustainable

development, climate change issues, Gender issues, Financial inclusion, importance of WATSAN, Soil and water conservation,Flood management should be carried out. A mechanism for the same is proposed in the action plan for village development.

b. **Skill Development:** Conducting regular review of livelihood skills and providing specialized training on use of equipments and tools and processes and procedures for livelihood enhancement to be conducted on a regular basis as proposed in the action plan for livelihood development.

6.3 SWOT Analysis

The SWOT analysis was carried out through participatory approach by involving both male and female members of the community.

Strengths

- i. Homogeneous community
- ii. Agriculture land in comparison to the population is more and hence leads to higher agricultural opportunities.

Weaknesses

- i. Lack of higher educational institutes
- ii. Lack of access to bank loans
- iii. Unemployment

Opportunities

- i. Weaving expansion
- ii. Livestock rearing.
- iii. Agriculture expansion
- iv. Vegetable production.

Threats

- i. Encroachment
- ii. Flood

6.4 PRA Exercise

Team from RGVN Guwahati carried out PRA exercise in BORTHOL village as follows:

Date: 18.6.2016 Location: BORTHOL

Numbers Present:38

In Presence of: JFMC office bearers, Village Headman, community members, Forest Department personnel, etc.

Awareness and orientation programme was conducted at village level before taking up the participatory mapping and transect walk. The main themes covered during awareness and orientation included the following:

- (a) Participatory Planning
- (b) Participatory tools & Methods
- (c) Importance of Microplanning and role of JFMC
- (d) Environmental issues
- (e) Climate change and Climate variation
- (f) Ecological balance and Ecosystem management (traditional and scientific)
- (g) Sustainable livelihood Framework
- (h) Livelihood Assets Pentagon and importance of social capital
- (i) Cluster formation & SHG , Financial inclusion
- (j) Marketing and Value addition
- (k) Development agenda and its relationship with environment and ecological balance
- (l) Gender Issues and gender equality

Observations: The communities actively participated during the discussions and PRA exercise. The following important points have emerged:

- People expressed that the JFMC have not been very active in the past due to lack of funds and projects
- There have been very few awareness and orientation programs in the JFMC in the past.
- They appreciated the importance of micro planning and were very supportive and cooperated during the micro planning process.
- While some NGOs have been visiting the JFMC they only collected data and information but did not take up any development activity.
- It was for the first time that Under the APBFC the NGO has come and interacted with the community and created awareness and proper orientation not only about the project but also on the development issues including

environmental and ecological aspects to growth and development.

- The communities have good local wisdom and traditional knowledge regarding the environment, forestry and other livelihood issues like pest control, livestock management etc.
- They shared their concern over the climate variation and its ill effects on agriculture and health in the village. They are keen to learn more on the scientific facts about climate change issues.
- A sense of importance was observed among the people as they understood the important role they had towards reducing causes leading to climate variation by protecting the nearby forests and a sense of ownership seems to be gripping them boosting their self-esteem.

Community Need Assessment: Based on the PRA exercise, Focus group discussions, consultations with village community, JFMC members, forest staff and other stakeholders the Village Development plan and Livelihood development Plan was prepared for the JFMC. Through the participatory approach the community Need Assessment was carried out. The people's needs can be categorized as follows:

1. Structural Needs

2. Non Structural needs

These needs can be classified further into long term needs and short term needs. The details of the community needs are given in the village development plan.

The structural needs of the people have direct and indirect linkage with livelihood improvement. These include improvement of infrastructure like roads, school buildings, Health care infrastructure, drinking water supply system, water tanks, ring wells etc. Construction of toilets, community halls and training sheds, market sheds.

The non-structural needs of the people include provision for skill training, provision of veterinary services, health care services, mobile doctors team, requirement of teachers for schools in the villages, capacity building through training and awareness on financial inclusion, SHG and cluster formation, provision for raw materials, village maintenance & development fund/ community fund for JFMC, Value addition of traditional products and marketing linkages. Exposure visits to best practice sites relating to joint forest management, community participatory project cites, artisans' villages and participation in melas, trade fairs etc.

7. Village development Plan

For village development the community proposes to take up a number of entry point activities. The entry point activities include infrastructure development and skill development and both are directly linked with each other.

Considering the long term and short term needs for village development a village development plan was prepared in consultation with the community members as well as the JFMC members. The measures planned by the community members for the village development are as follows:

- (A)Drinking water facility is not adequate. The quality of drinking water is not tested since long time. Water supply project was there but all these are non-functioning. They demanded that each of these should be renewed and all the villages should be connected.
- (B) Some part of the village is enjoying electricity facility but the entire village is not connected properly. Most of the village people were deprived of the facility. It is a common demand for proper electrification.
- (C) Primary schools are there in the village but the teachers are not coming regularly, a local higher secondary passed boys is fixed by him on a fixed pay of rupees 2000/m. To continue studying, villagers cannot send their children to outside. One high school (private) is there but it is a matter of cost bearing, most of the villagers cannot afford the cost. The villagers demanded a high school and a college in the village to achieve higher education.
- (D) They demanded one public sector bank in the village.
- (E) Earlier they depended on the forest but during the last two decades resources are diminishing. They need training to rebuild the forest resource.

7.1 Ranking

Ranking of Entry Point Activities

Ranking of EPA

Rank	Activity	Activity Details					
1	Construction of community hall	GPS :- N 24° 30' 341"					
	with tent house including chair and generator	E 092° 42' 859"					
2	Road	GPS:-	Rs. 1250000.00/-				
	a) Ranjan Das house	a) N 24° 30' 235" E 92° 42' 667"					
	to Ranu Das	b) N 24° 30' 828"					

DIVISION

Magalian Str

	House. Approx. 1.5 km b) Bhanu Das House to Balicherra main road approx 2km including culvert	E 92° 42' 985"	
3	Ring Well 3nos.		Rs. 200000.00/-

, with a DIVISION SURA

8. Livelihood Development Plan

8.1 Ranking

Ranking of Livelihoods & Skills Development

- 1. Agriculture & allied activities
- 2. Tailoring
- 3. Livestock rearing
- 4. NTFP
- 5. Small scale industries like pickle making

8.2 Livelihood opportunities

Livelihood Opportunities were identified as follows:

- Agriculture & allied activities
- Tailoring
- Livestock rearing
- NTFP
- Small scale industries like pickle making

Additional discussion about the above has been given below.

8.3Agriculture & Horticulture

Constraints:

a)Flood

b)Poor road connectivity and market facilities

c) Pest and disease attacks

Opportunities:

- a) Organic farming
- b) Commercialisation of agriculture
- c) Agro-based industries

8.4 Livestock

Constraints:

(a)Disease

- (b)Poor access to veterinary facilities
- (c) Fodder

Opportunities:

a) Poultry farming

8.5 NTFP

The main constraints are

a) Scarce availability of NTFP

b) Lack of knowledge by community about NTFP utility

c)Poor utility of available NTFP

Opportunities:

a)Fruits and medicinal plants can be used for commercial processing and value addiction

b)Awareness about conservation and judicial uses of NTFP

8.6 Specialized Skills

The main constraints for skill development are:

a) Lack of access to proper training and guidance

b)Illiteracy

c)Lack of modern tools and equipment for agriculture

Opportunities:

- a)Young entrepreneurs
- b) tailoring and embroidery
- c) Weaving

8.7 Credit Facility

Constraints:

a)No access to bank loans

b) High rate of interest

c) Lack of awareness and knowledge about Micro finance institutions and government schemes

Opportunities:

a)Motivation to form SHGs

b)Awareness about Micro finance provision and institutions

c)Coverage of government schemes for provision of loans

8.8 Strategic Intervention

Summarizing the suggested programmes at above as strategic interventions for the Livelihood Development Plan:

- 1. Skill development
- 2. Nursery training and development
- 3. Livestock
- 4. Agriculture expansion

8.9Income Generating Activities

The main income generating activities as planned at the village are:

- 1. Agriculture and allied activities
- 2. Tailoring
- 3. weaving
- 4. Bamboo crafts
- 4. Handicrafts

8.10 SHG Activities

SHGs of the village can plan the following activities:

- 1.Weaving
- 2.Cane and Bamboo Craft
- 3. Tailoring and weaving

8.11Exposure Trips

The following exposure trips are planned:

- 1. Good practice of JFMC livelihood in other states of India.
- 2.Participation in Melas and fairs like SARAS mela and other melas organised by TRIFED
- 3. Trips to nearby countries for training on bamboo treatment and handicraft.

8.12 Convergence

Summarizing the suggested programmes above as strategic interventions for the Livelihood Development Plan:

- 1. Agriculture and allied activities
- 2. Tailoring

- 3. weaving
- 4. Bamboo crafts
- 5. Handicrafts

The planned initiatives may be converged with the following schemes of the Government of India:

- (a) National Rural Employment Guarantee Scheme for rural employment
- (b) RashtriyaKrishiVikasYojana (RKVY) for agricultural and allied development
- (c) RashtriyaKrishiSinchayYojana (RKSY) for irrigation, including watershed development
- (d) National Rural Livelihoods Mission
- (e) Skills Development schemes
- (f) Prime Minister UjjwalaYojana
- (g) NRLM
- (h) NRHM
- (i) Bamboo Mission
- (j) Other schemes for rural development and livelihoods as found appropriate.

The above convergence will yield synergies for the present plan, as well as help in sustaining the planned works in the post-project period.

9. Forest Development Plan of BortholJFMC

This Forest Development Plan has been prepared after a detailed PRA exercise at the village level as a part of the Micro-Plan of Borthol 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.

The micro-plan takes into consideration the following categories of the JFM Forests of the Borthol 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.

9.1 Forests & Their existing Conditions

After considering other areas planted (or to be planted), the conditions of the forests of the Borthol JFMC have been summarized below.

Identification	Area of	Distance	Condition of	Frequency of
	JFMC	from	Forest	Use by
	Forest	Village	[Good - Forest with	Community
	(Ha)	(Km)	crown density of	[2-3 m / 3-6 m
			40% of more	/ 6-9 m / Over
			Else 'Degraded']	9 m]
(A) Assigned Forest				
RF / PF Name:	450	0.50 to	Good Area: 40	Over 9 m
Katakhal		1.80	На	
Beat: Bilaipur			Degraded Area: 90	
Compartment:			На	
(B) Other Planted				
Area				
Location: Borthol	180	0.50 to	Good Area: 180 Ha	
Type of Forest:		1.80		
Semi Evergreen				
VF / Other R.F				
TOTAL			Good Area: 220 Ha	
			Degraded Area: 90	
			На	

Table-1:	Conditions	of the Fore	ests of Borthol J	FMC
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It is seen that the Borthol JFMC has 450 Ha under its forests, of which 220 Ha (49 %) is 'Good' (Crown density >40%) and the rest is 'Degraded'.

9.1.1 Forest Soil Type

The forests of Borthol JFMC are located in Clay to clayey loam and alluvial type(s) of soil. Some salient points of the forest soil type have been given in the following table.

Parameter	Status in Assigned Forests	Status in Other Planted
		Areas
Fertility Level	Medium	Average
Soil Erosion Status	Poor	Nil
Presence of:		
(a) Silt	Nil	Nil
(b) Mud-flat	Yes	Yes
(c) Newly accreted land	-	-
(d) Sand dune	-	-

Table-2: Forest Soil Type in Borthol JFMC

Source: Discussions with Forest Department personnel & Community members

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

(A) The flat land comprises soil like clay to clayee loam and in some places alluvial. The Central alluvial flat land of the division varies from low to high and upto the higher attitude in tillas.

9.1.2 Existing Composition of Flora

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

Parameter	Local Name(s)	Botanical Name(s)	
Major Forest Species	Bohera	Terminallicebellerica.	
	Bajrang	Xanthoylumbudrenga.	
	Banak	SchimaKhasiana.	
	Ban am	Mangiferrasylarhca.	
	Belphai/ Jatpai	Elcocapruegloribundus.	
	Bandar fela	Disoxylumbinnectiferum.	
	Bandar lathi	Lasia fistula.	
	Bon simul	Bamboxinsignoc.	
	Barun	Crataerareligiosa.	
	Bella	Sapiumbaccatum.	
	Bhatkur	Vitexheterophylla.	
	Bhola	Mons lacrigata.	
	Chatim	Alstoniascholaris	
Associates	Kaligoda	Bambusavalgars.	
	Karail	Dendracalamusstrictus.	
	Khang	Dendrocalamuslongispathus.	
Shrubs	Spring vatch	Viciasativa	
	Sunn hemp	Crolatariajuncea	
	Sarpagandha	Rauwolfia serpentine	
	Alokhoni	Cassia tora	
	Common reed,	Phragmiteskarka	
	ekora		
Medicinal Plants	Chalmugra	Hydnocarpuskurzil.	
	Hartaki	Terminaliachebula	
Produces	Gamair	Gmelinaarborea.	

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

	Kadam	Anthoccphaluscadamba
	Jam	Engeniajambos
	Nageswar	Messuaferrea
	Cham	Artocarpuschaplasha.
	GhoraNeem	
	Rain tree	
	Ping	
	Moroi	
	Chatim	Alstoniascholaris
Others, if any	Kash	Sachammprocerum.
	Khagra	Sacchommspontarcum.
	Ekra	Erianthusraveneac.
	Nal	Phragmiteskarka.
	Rema	Thysanolaena maxima.
	Khor	Imperetaarundinacea.

Source: Discussions with Forest Department personnel & Community members

9.1.3 Forest Village management in the past:

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

- (a) Number of households involved: 25 Nos. Households
- (b) Number of people involved: 195 Nos. Persons.
- (c) Summary of the measures: Forest Protection Committee is formed and functioning sinceinception of the JFMC in the year 2015.
- (d) Any formal mechanism: To develop the socio-economic status of the villagers under short term benefit is not fruitful. They are demoralised about the price hike and taxation age of Nation. So depending on protection community of the JFMC for forest protection is not advisable.

Nowadays, any citizen cans readout the taxation system and welfare activities of the overseas states. So the people living below poverty line in the locality are in dismayed. In deed the term Patriotism is now confined within the emotional stair only. Peoples are now in search

of instantaneous key to meet the life and need. So any formal mechanism may be treated as nil.

[Source: Discussions with Forest Department personnel & JFMC members]

9.1.4 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

Name of Forest Produce	Average Household Requirement		How met at Present	Source
	Frequency of	Approx. Qty		
	Requirement	Qty		
Firewood	90%	1.825 Tons per annum	Procured from nearest jungle & homestead land	Mostly Illegal extracted from R.F.
Timber for House	100	0.100 cum	Procured from nearest jungle	Illegal extracted from R.F.
Small timber for Implements	"	0.041 cum	"	"
Pole / Bamboo	,,	35 Nos.	,,	,,
Fodder from Forest	,,	8.00 Kg.	,,	,,
NTFP	,,	6.00 Kg.	,,	,,
Other Gandhi, Bamboo suit Bon – aalu. etc.		2.00 Quintals	,,	,,

Borthol JFMC

Source: Discussions with Forest Department personnel & Community members

There are 27 households in the Borthol JFMC. From the above table and this number of households, it is inferred that the total annual requirements of the Bortholvillage for forest produce for own use is as follows:

Name of Forest Produce	Community Requirement	Remarks
	(Kg per annum) (*)	
Firewood	40.1505 Tons per annum	
Timber for House	2.50 cum	
Small Timber for Implements	1.025 cum	
Pole / Bamboo	875 Nos.	
Fodder from Forest	2.00 Quintals	
NTFP	1.50 Quintals	
Other Gandhi, Bamboo suit Bon – aalu. Dekhisak etc.	50 Quintals	

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

 the Borthol JFMC

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

(*) = Approx. Qty. of Average Household Requirement (from Table-4 (A) x 254 Households

9.1.5 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 Borthol JFMC is given in the following table.

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

	Colle	Collection for Marketing			
Name of Forest Produce	Season / Months	No of Households Collecting	Average Qty. Collected (Kg)	Location of Collection	
Firewood	0	0	0	0	
Timber for House	0	0	0	0	
Small timber for Implements	0	0	0	0	
Bamboo	0	0	0	0	
Pole	0	0	0	0	
Fodder from Forest	0	0	0	0	
NTFP (Broom)	December January & February	10	2.500 Quintals	R. F Area.	
Other Gandi, Bamboo suit	June, July	15	5 Quintals	R. F Area.	

Borthol JFMC

Source: 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 Borthol JFMC

Name of Forest	Surplus	How marketed	Average Income per
Produce	Marketed (Kg)		HH from sale of Forest Produce
Firewood	0	0	0
Timber for House	0	0	0
Small timber for	0	0	0
Implements			
Bamboo	0	0	0
Pole	0	0	0
Fodder from Forest	0	0	0
NTFP (Broom)	25 Quintals	Sold in rural	Rs.1200/-
		market	
Other _ Gandi,	75 Quintals	,,	Rs. 1500/-
Bamboo suit,			
Dekhisak			

9.1.6 Total Requirements of Forest Produce - Domestic Use & Marketing

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

Name of Forest	Community	Surplus	Total	
Produce	Requirement	Marketed (Kg)	Requirements	
	(Kg per annum)	From Table-5(B)	(Kg)	
	From Table-4(B)			
Firewood	49.275 Tons per	0	40.1505 Tons	
	annum		per annum	
Timber for House	3.51 cum	0	2.50 cum	
Small timber for	1.377 cum	0	1.025 cum	
Implements				
Bamboo	750 Nos.	0	750 Nos.	
Pole	125 Nos.	0	125 Nos.	
Fodder from Forest	2.70 Quintals	0	2.00 Quintals	
NTFP	1.62 Quintals	25 Quintals	26.62 Quintals	
Other _ Gandi,	243 Quintals	75 Quintals	318.0 Quintals	
Bamboo suit,				
Dekhisak				

Table-6: Total Requirements of Forest Produce by Villagers of the Borthol JFMC

Source: Tables 4 (B) & 5 (B) of this Section, given at the previous pages

9.2 Forest Protection Issues

9.2.1 Protection Problems

The protection issues of the forests of Borthol JFMC have been summarized below.

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	Yes	Yes
Smuggling of Timber	Yes	Yes
Accidental Fires	No	No
Encroachment of Forest Lands	Yes	Yes
Others	_	-

Table-7: Protection Problems of the Borthol JFMC

Source: Discussions with Forest Department personnel & Community members

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

- (a) Cattle problem.
- (b) Encroachment.

(c) Poor staff strength and unscientific distribution of labour system in the department.

9.2.2 Reasons for Degradation of the Forest.

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

- (a) Cattle problem.
- (b) Encroachment.
- (c) Dedicated Forest Staff meant for protection duty are badly involved with furnishing various data/correspondences/awareness and advertising programme including civil duty like NRC, Election related duty round the year as prime aspect and consequent of which discharging of protection duty hampered inadequately.

9.3 Components of the Forest Development Plan

The following sub-sections discuss the main components of the Forest Development Plan of Borthol JFMC; viz. the plans for Protection, Forest Improvement (Treatment), Nursery Development, Maintenance and Miscellaneous Operations.

9.3.1 Protection Plan

The Protection Plan given at below, discusses the measures for the protection of the forests of Borthol JFMC from the issues discussed earlier at Sub-section 3.1

Protection Work	Location	Quantification	Timing	Priority
[to be filled from Table	in Forest	of the		[High /
3.7 of Proforma-3 as	Area	Measures		Medium /
applicable]		[Length, Area,		Low]
		Size etc.]		
Grazing - Local Animals	Borthol	600 Ha.	During Day	High
	JFMC		hours	
	area			
Grazing - Animals from	Borthol	600 Ha.	During Day	Medium
Other Area	JFMC		hours	
	area			
Illicit Felling of Timber	Borthol	600 Ha.	Round the	-do-
	JFMC		Clock	
	area			
Smuggling of Timber	Borthol	600 Ha.	Round the	-do-
	JFMC		Clock	
	area			
Accidental Fires	Borthol	600 Ha.	December	Low
	JFMC		& January	
	area			
Encroachment of Forest	Borthol	600 Ha.	During Day	High
Lands	JFMC		hours	
	area			
Others	Nil	Nil	Nil	-

Table-8: Protection Plan of the Borthol JFMC

Source: Discussions with Forest Department personnel & Community members

Thus, it is seen that the significant protection measures planned to be undertaken in the Borthol JFMC (with high priority) are as follows:

(a) Eviction operation to drive out the encroachers.

(b) Regular patrolling duty in the vulnerable areas.

(c) Installation of boundary pillar with an interval of 15 metre in R.F boundary meets with revenue land.

(d) Activities of Forest Protection Community of JFMC required to be geared up properly.

9.3.2 Types of Operations Proposed

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

Treatment	Require	Respons	Month / Year	Extent of Area
	d	ibility of	when can be done	proposed for
	(Yes/ No)	JFMC		Treatment (Ha)
		(Yes /		
		No)		
Restoration of	Yes	Yes	Advance Work in	Artificial
Degraded Forests			November to	regeneration of
			January.	indigenous species
			Creation in	in 20 Ha. land in
			February to April	segments of plots of
			Maintenance in	2 and 3 Ha. only as
			subsequent month.	no at a stretch
				degraded land
				available. Hence
				proposal for 10 Ha.
				Or 20 Ha etc. block
				plantation in such
				degraded R.F area
				may be treated as
				Nil.
Protection to Cut	Yes	Yes	In every months of	Regular monitoring
Stumps of Trees			the year	the 200 Ha forest
				area by the forest

Table-9: Types of Operations Proposed in the Borthol JFMC

Treatment	Require	Respons	Month / Year	Extent of Area
	d	ibility of	when can be done	proposed for
	(Yes/ No)	JFMC		Treatment (Ha)
		(Yes /		
		No)		
				staff & JFMC.
Watershed Treatment	No.	No.	-	-
Water Reservoirs	No.	No.	-	-
Grass &Silvi-pasture	No.	No.	-	-
Bamboo Plantation	No.	No.	-	-
Seed Sowing	No.	No.	-	-
Root & Shoot Cutting	Yes	Yes	In every months of	Regular monitoring
& Plantation			the year	the 200 Ha forest
				areas by the forest
				staff & JFMC.
Cut Back & Coppice	No.	No.	-	-
Treatment				
Physical Fencing	Yes	Yes	Throughout the	In regeneration
			year	area. 5 Ha.
Social Fencing	No.	Yes	Throughout the	
			year	
Other Activities	No.	No.	-	-

Source: 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 Borthol JFMC:

 (a) Artificial regeneration of indigenous species under 20 Ha. land in the segment of 2 or 3 Ha. in the JFMC area.

9.3.3 Forest Improvement Plan - Advance Works & Creation

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

Treatment	Area in Ha	Priority for	Species	Spacing
	under	Block		(metre x
	Plantation	Plantation		metre)
	Module			
Assisted Natural	2 Ha.	Nil	Teak,	
Regeneration			Gamari,	
(with plantation in gap)			Cesiachama.	
			Rata, Jam etc.	
Block Plantation				
Sowing of Neem, Amla,				
Mahua, Bahera				
(Medicinal Plants)				
Enrichment Plantation				
Direct Plantation	2 Ha		Teak,	2X2
			Gamari,	
			Cesiachama.	
			Rata, Jam etc.	
Other				
TOTAL AREA (in Ha)				

Table-10: Forest Improvement Planned in theBorthol JFMC

Source: Discussions with Forest Department personnel & Community members

9.4 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 Borthol JFMC (Year-1 to Year-5)

Treatment	2016	2017	2018	2019	2020
Assisted Natural	2 Ha.				
Regeneration					

Treatment	2016	2017	2018	2019	2020
(with plantation in gap)					
Block Plantation					
Sowing of Neem, Amla,					
Mahua, Bahera					
(Medicinal Plants)					
Enrichment Plantation					
Direct Plantation	2 Ha.				
Silvi-cultural Operations					
Intermediate Operations					

Source: Discussions with Forest Department personnel & Community members

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

Treatment	2021	2022	2023	2024	2025
Assisted Natural	2 Ha.				
Regeneration					
(with plantation in gap)					
Block Plantation					
Sowing of Neem, Amla,					
Mahua, Bahera					
(Medicinal Plants)					
Enrichment Plantation					
Direct Plantation	2 Ha.				
Silvi-cultural Operations					
Intermediate Operations					

Source: Discussions with Forest Department personnel & Community members

9.4.1 Nursery Development Plan

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

Table-11	(A): JFMC	Nurseries	of theBorthol JFMC
----------	-----------	-----------	--------------------

Location of	Species	Year of	Number	Remarks
Nursery		Development	of	
			Seedlings	
Nil	Nil	Nil	Nil	Nil

Source: Discussions with Forest Department personnel & Community members

Other Nurseries

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

Name of Nursery	Species	Year of Development	Number of Seedlings	Remarks
Lalcherra	GhorahNeem, Jam, Hatkor, Cham, Sundi, Chatim, Bhat, Puma, Rata, Am , Khatal, Raintree, Horitoki, Amla, Krishnachura, Moj, Boherah Teak, Gamari, Cesiachama etc.	2015-16	100000	

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

9.4.2 Maintenance Plan - 10 Years

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

(A) Timber Species Teak, Gamari, Cesiachama. GhorahNeem, Jam, Hatkor, Cham, Sundi, Chatim, Bhat, Puma, Rata, Am ,Khatal, Raintree, Horitoki, Amla, Krishnachura, Moj, Boherah etc.

Year(s)	Treatment
2016-17	Nil
2017-18	Nil
2018-19	Nil
2019-20	Nil
2021-22	Nil
2022-23	Nil
2023-24	Nil
2024-25	Nil
2025-26	Nil
2026-27	Nil

Table-12 (A): Maintenance Plan of Tree Plantation in theBorthol JFMC

Source: Discussions with Forest Department personnel & Community members

(B) Bamboo

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

Treatment
nere is no Bamboo Plantation under maintenance exists in
eBorthol JFMC and hence question of maintenance plan doesn't
ise.
•

(C) Fuel wood Plantation

Year(s)	Treatment
2016-17	As per approved norms of the Project for the year.
2017-18	As per approved norms of the Project for the year.
2018-19	As per approved norms of the Project for the year.
2019-20	As per approved norms of the Project for the year.
2021-22	Nil
2022-23	Nil
2023-24	Nil
2024-25	Nil
2025-26	Nil
2026-27	Nil

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

Source: Discussions with Forest Department personnel & Community members

(D) NTFP / Medicinal Plantation

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

Year(s)	Treatment
2016-17	There is no NTFP / Medicinal Plantation in theBorthol JFMC and
to	hence question of maintenance doesn't arise.
2026-27	

9.4.3 Miscellaneous Operations Plan

The miscellaneous operations planned in the Borthol JFMC are given below.

Operation	Required (Yes / No)	Responsibility	Month / Year	Area (Ha)
Filled u	p by the commu	nity member afte	er due resolu	ition.
	I			

Table-13): Miscellaneous Operations in the Borthol JFMC

Source: Discussions with Forest Department personnel & Community members

9.4.4 Marketing Operations

For produce from the Borthol JFMC, the planned marketing operations are:

- (a) Marketed by in the local market directly
- (b) Quality Improvement of the product by screening / selection etc.
- (c) Scientific enhancement of Traditional preservation system of the harvested product without using comical etc.
- (d) Avoid middlemen/broker in marketing.

9.5 Expected Benefits

This sub-section furnishes the benefits expected from the forests protected by members of the Borthol JFMC, as well as the sharing mechanism for the usufruct benefits.

9.5.1 Expected Benefits Related to Wood & Grass

The above has been tabulated below for the Borthol 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 Borthol JFMC

Item	Month	Year	Quantity
		(Indicative)	
Firewood	Aug/2016 to	2016-17	Nil
	March/2017.		
Timber for House	-do-	2016-17	Nil
Small timber for	-do-	2016-17	Nil
Implements			
Bamboo	-do-	2016-17	Nil
Pole	-do-	2016-17	Nil
Fodder from Forest Trees	-do-	2016-17	Nil
& Grass			
NTFP	-do-	2016-17	Nil
Wages	-do-	2016-17	Nil
Other	-do-	2016-17	Nil

Source: Discussions with Forest Department personnel & Community members

9.5.2 Sharing Mechanisms

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

Table-15: Sharing Mechanism	for Borthol JFMC
------------------------------------	------------------

Method	Items
To be shared equally	As per provision of prevailing Govt. Rules /Notification.
To be freely collected by the members	-do-
Other Methods	-do-

10.Implementation Strategies, Timelines and Budget

10.1.1 Roles and Responsibility Matrix

For the three sub plans namely Livelihood Development Plan, Village Development Plan and Forest Development Plan, a matrix of roles and responsibilities has been developed. The matrices have been shown below for each of the sub plans separately.

Livelihood Development Plan

Stakeholder s	Planning	Manpower	Training	Funding	Production & Value Addition	Marketing	M&E
JFMC	\checkmark	\checkmark			~	~	\checkmark
NGO	✓	\checkmark	✓		✓	~	
Skilling Agencies	~	~	~		~		
Forest Deptt	\checkmark	\checkmark		\checkmark		~	\checkmark
Line Deptt.	\checkmark	\checkmark		\checkmark			\checkmark

Village Development Plan

Stakeholders	JFMC	Forest Department	Line Departments	NGO	Training Institution s	Govt of India/Corp
Solar Power	✓	✓	✓	✓		\checkmark
Solar/Hybrid Street Lights	√	✓	~	✓		✓
Sprinkler Irrigation	\checkmark	✓	✓			
LPG	\checkmark	✓		✓		\checkmark
Power Pumps	\checkmark	✓	✓	~		\checkmark
Training Center	\checkmark	✓		✓	✓	\checkmark
Community Hall cum JFMC Office	√	√				
Roads	\checkmark	✓	✓			
WATSAN	✓	✓	✓	✓		\checkmark
School	\checkmark	✓				
Health Infra	\checkmark	✓	✓	~	✓	\checkmark
Organic farming/ vermicomposting	✓	✓	~	1	✓	\checkmark

Forest Development Plan

Stakeholders	JFMC	Forest Department	Line Departments	NGO	Training Institutions	District Admin
Forest Protection	✓	~		✓		
Wildlife Protection	\checkmark	~		~	✓	
Habitat Improvement	√	√		~		
Nursery Development	✓	√		✓	~	
Wetland Conservation	\checkmark	√		~		~
Man-Animal Conflict	\checkmark	√		~		
Grazing Control	\checkmark	~	~	~		

10.2Finance and Budget

The budget for the micro-plan has been prepared based on annual requirement of the three sub plans namely the Livelihood Plan, Village Development Plan and Forest Development Plan. The consolidated table is given below.

Sl No.	Plan	Amount (Rupees)	Remarks
1.	Livelihood Development Plan		
2.	Village Development Plan		
3.	Forest Development Plan		
	TOTAL		

Livelihood Development Plan

Sl No.	Item of Work	Amount (Rupees)	Remarks
	Skill Development & Training		
2.	Dairy Farming		
3.	Poultry/ Fishery/ Duckery		
4.	Computers		
5.	Trades and Callings		
6.	Handicrafts		
7	Kits and Equipment		
8	Value Addition & Certification		

9	Packaging and Marketing	
10	Exposure Visits	
11	SHG/ JLG/ Cluster Formation & Credit	
	TOTAL	

Annual Village Development Plan:

Sl No.	Item of Work	Amount	Remarks
1.	Solar Power		
2.	Solar/Hybrid Street Lights		
3.	Sprinkler Irrigation		
4.	LPG		
5.	Power Pumps		
6	Training Center		
7	Community Hall cum JFMC Office		
8	Roads		
9	WATSAN		
10	School		
11	Health Infra		
12	Organic farming/ vermi-compost		
	TOTAL		

Annual Forest Development Plan

Sl No.	Item of Work	Amount	Remarks
1.	0.25 Ha Nursery		
2.	50-100 Ha Fuelwood Plantation Creation		
3.	Local Protection Squad Cost for 5 nos. of youth from the JFMC (Wages component) @ Rs. 280.00 per day for 365 days for 5 persons per annum	511,000.00	
4.	Uniform and equipment cost	60,000.00	
5.	Training of Local Protection Squad	5000.00	
6.	Desiltation of water bodies	5,00,000.00	
7.	Crop Insurance	100,000.00	
8.	Life Insurance	200,000.00	
9.	Cattle Insurance	50,000.00	
	TOTAL		

10.3Action Plans and Strategies:

Each of the **three** plans namely the Village Development Plan, Forest Development Plan and Livelihood Development Plan would require short term and long term action plans strategies in order to realize the prescriptions of the Microplan. Short term strategies should focus on activities to be taken up from 0-5 years, and long term plan should focus on activities to be taken up in 5-10 years of this Plan.

Livelihood Development Action Plan:

The livelihood action plan may be divided into three parts namely, skilling, production & marketing and value addition. The most immediate want of the population is skilling. The skilling requirements needs to be viewed at basic level and advanced level. Once the trades and skill requirements have been frozen, the basic skills should be imparted within a period of 1 year for all willing members of the village both men and women in a phased manner. During this period, some of the trainees could also start production. The most marketable outputs need to be channelized to the available markets in order to create the brand effect and assess the marketability of the production in terms of quality and value.

Village Development Action Plan:

The village development action plan may be divided into the short term plan and the long term. In the short term plan activities like Solar lighting, Providing LPG connections, construction of Community hall and training centre and water sanitation needs would be addressed. In the long term plan for the village the activities like construction of schools, health care facilities would be taken up. Providing improved tools and equipment for enhancing agriculture production along with water sprinklers, power pumps would be provided.

Forest Development Action Plan: The forest development action plan comprises of the short term action plan and the long term plan. The short term plan includes formation and strengthening of forest protection squads, Nursery development, desiltation of water bodiesand firewood plantations. In the long term action plan activities like Plantation, Crop improvement and habitat improvement would be taken up.

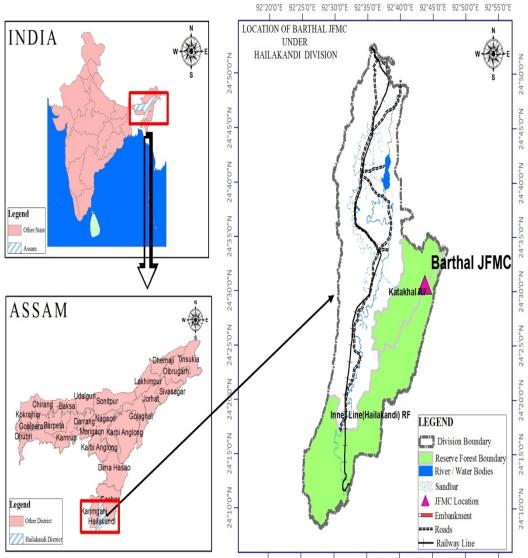
10.4Institution Building, Networking and Partnership

JFMC: The JFMC to be upgraded both in terms of its infrastructure assets and in terms of acting as a resource centre for village and forestry development. The proposed JFMC office along with the community hall in the entry point activity to be provided with modern equipment like computer/ TV and support equipment like generator etc.Building capacity of JFMC members through training programs on use of computers, maintaining and updating records/ accounts keeping and village level/ forestry data on a regular basis.TheJFMC office to be upgraded as a resource center, an activity and training hub.Improving their networking skills and creating awareness regarding development schemes of other departments and modalities for partnership.

LIST OF APPENDIX

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IV	Executive Members of Borthal JFMC
V	Executive Members Group photo of Borthal JFMC
VI	List of members present during PRA & FGD (Signed list)
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VII (D)	Venn Diagram of Borthal JFMC
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IX(A)	Training list of Borthal JFMC (Proposed)
IX(B)	Training list of Nursery(Completed)
X	Photographs
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XII	SDP Report

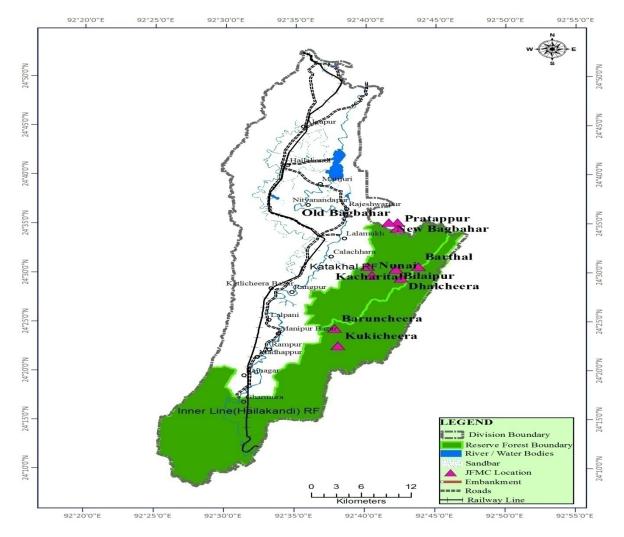
Appendix – I(A) Location Map of JFMC in India



92°20'0"E 92°25'0"E 92°30'0"E 92°35'0"E 92°40'0"E 92°45'0"E 92°55'0"E 92°55'0"E

APPENDIX I(B)

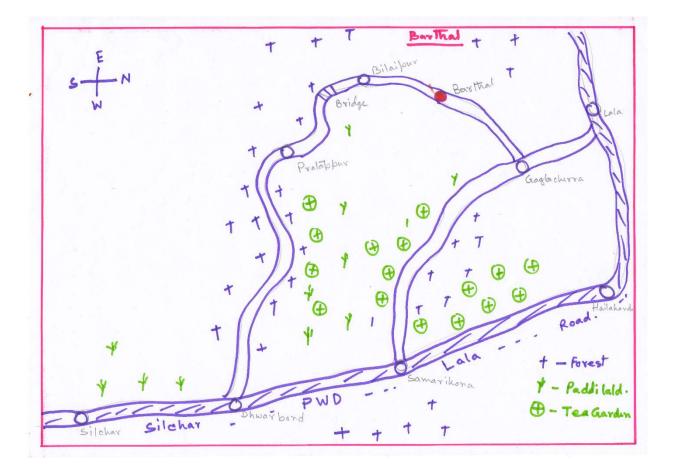
Location of Borthol JFMC



LOCATION OF JFMC UNDER HAILAKANDI DIVISION

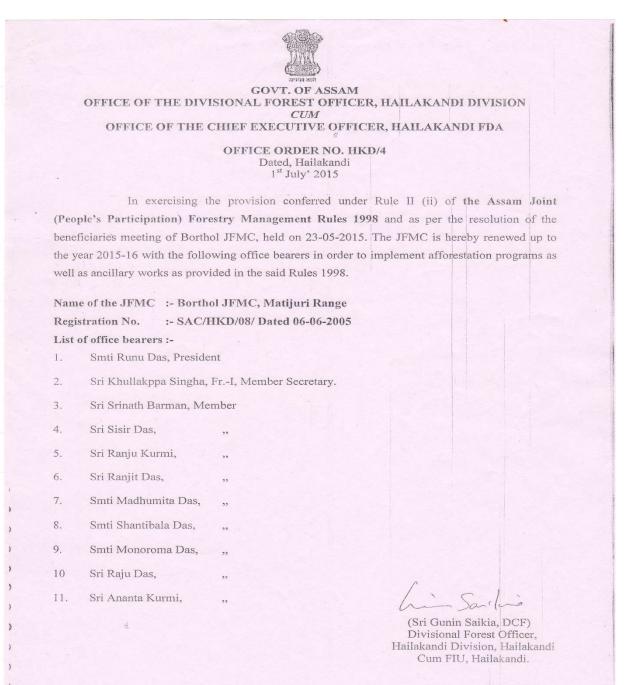
Appendix- II

Approach to the JFMC



APPENDIX-III (A)

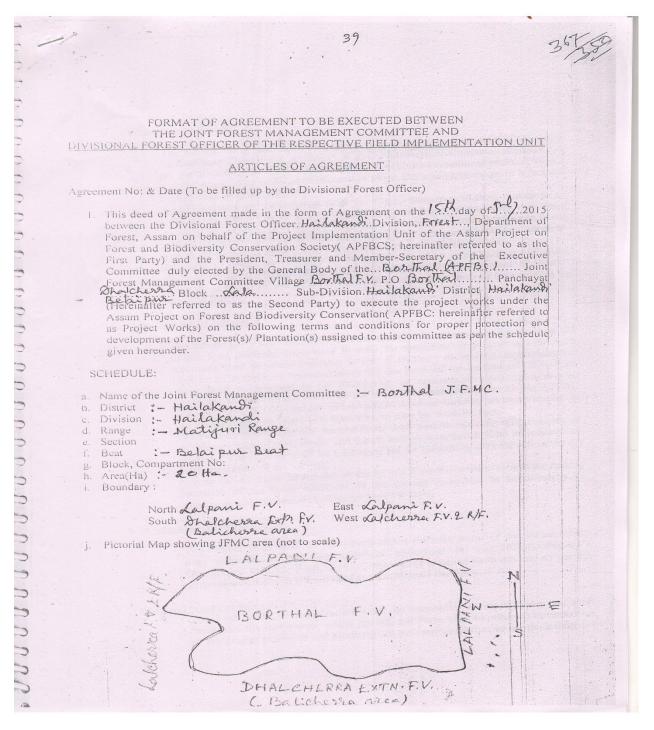
JFMC registration certificate



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APPENDIX–III (B)

MoU/ Resolution Certificate



Contd.....

Disbursement of funds:

The second The second

1

And and

- The Second Party shall open a Joint Current Account in the name of 'Forestry Account and Community Account' in any Nationalized Commercial Banks, as per the guidelines prescribed in the APFBC Society's Operational Manual, JFMC & EDC Manual as annexed herewith and as per the amendments made in it from
- The First party in consultation with the Circle Conservator shall nominate an time to time by the First Party. Officer not below the rank of Forester-1 for opening and operating the Joint Account in the name of 'Forestry Account' as per the guidelines prescribed in the APFBC Operational Manual and/ or JFMC&EDC Manual as annexed herewith
- and as per amendments made in it from time to time by the First Party. Payment of necessary funds to the Second Party shall be released by the First Party as per the guidelines prescribed in the APFBC Society' Operational Manual as annexed herewith and as per the amendments made in it from time to time by the First Party.

Maintenance of Accounts:

ii.

The second party shall maintain separate accounts for all expenditure incurred out of the fund provided from time to time for execution of Project works. Such Accounts shall be made available to the First Party or Project Implementation Unit or its authorized representatives for the purpose for inspection . The First Party shall be responsible for submission of expenditure statement and also necessary records to the PMU, as per the guidelines prescribed in the APFBC Society's Operational Manual, JFMC &EDC Manual as annexed herewith and as

per the amendments made in it from time to time by the First Party. The First Party and also the Second Party shall have to maintain a register where all relevant data of civil works and inputs receipt records etc. shall be maintained property. The register shall be kept open for all inspecting officers related to the

- In case of any event of misuse of funds, the First Party shall have right to stop implementation of the APFBC operation of the Bank Accounts of the Second Party and to be followed by
- iii. enquiry as may be deemed proper by the First Party.
- 4. Completion of Project work:
 - The Project Work shall be completed within the time frame of the annual action plan prepared as per the guidelines prescribed in the APFBC Society's Operational Manual, JFMC & EDC Manual as annexed herewith and as per the amendments made in it from time to time by the First Party.
- The First party in consultation with the respective Circle Conservator shall Duties and responsibilities of the First party demarcate the forest area, where the Second Party shall be allowed to undertake all the project activities and discharge all the responsibilities as per the guidelines 1

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prescribed in the APFBC's JFMC & EDC Manual, as annexed herewith and as per the amendments made in it from time to time by the First Party.

16

per the amendments made in it from time to time by defined with the Second Party are in The First Party shall ensure that the activities of the Second Party are in accordance with the guidelines prescribed in the Manual and JFMC & EDC Manual, other rules, instructions and directions of Government of India and Government of Assam in force.

Government of India and Government of Assam in Toles. Until such time as the Second Party can undertake the task, any Forest Officer not below the rank of the Range Officer, as nominated by the First Party, shall

iv. The First Party in consultation with the PMU, APFBC Society shall impart training to Joint Forest Management Committee members on aspects of Forest Management including basic inventory collection, management interpretation, silviculture, nursery raising, grafting of HYV, etc.

The First Party shall have the right to instruct to stop or suspend any activity at any stage if there is any deviation from the specification prescribed in the APFBC Society's Operational Manual, JFMC & EDC Manual as annexed herewith and as per amendments made in it from time to time by the First Party, or violation of any of the terms of this agreement and demand recovery of its payments.

Duties and responsibilities of the Second Party:

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- i. Apart from observing all the duties and responsibilities as prescribed in the APFBC Society's Operational Manual, JFMC & EDC Manual as annexed herewith and as per the amendments made in it from time to time by the First Party; the Second Party shall be responsible to manage and implement all the decisions of the Joint Forest Management Committee.
- decisions of the Joint Forest Management Commute.
 The Second Party shall be responsible for maintaining the record of the proceedings and other documents like Chequebooks, joint Account, Minutes Book, Executive Committee Resolution book, Annual Plan, Micro-plan, and
- Estimates for Works etc. The Second Party shall assign duties and responsibilities to the members and may constitute sub-committees as needed with a view to ensure implementation of the Joint Forest Management Committee micro-plan and for effective discharge of
- their prescribed duties and responsibilities. iv. The Second Party in consultation with the General Body shall evolve methodology on all issues relating to membership, conflict resolution,
- encroachments, customary rights and benefit sharing.
 The Second Party shall prepare a Micro Plan for Project Works as per the guidelines prescribed in the APFBC Society's Operational Manual, JFMC & EDC Manual as annexed herewith and as per the amendments made in it from time to

vi. It shall be the responsibility of the Second Party to account for and manage the funds and other resources received from the Government, other sources and the funds internally generated, in accordance with sound financial standards and

vii. practices. The Second Party shall identify and fix the responsibility on the members of the Joint Forest Management Committee who commit specific offences like grazing

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in the Forest and plantation areas, non-cooperation and disobedience towards decisions of the General Body and Executive committee and inflict Penalties as per the guidelines prescribed in the APFBC Society's Operational Manual, JFMC & EDC Manual as annexed herewith and as per the amendments made in it from time to time by the First Party

42

The Second Party shall ensure that the procurements are made as specified in the Procurement Procedure Manual of the APFBC Society as provided by the First Party and also as per the guidelines prescribed in the APFBC Society's Operational Manual, as annexed herewith and as per the amendments made in it from time to time by the First Party.

The Second Party shall be responsible for bringing any discrepancy or irregularity ix. to the notice of the representative of the First Party

- The Second Party shall abide by the technical suggestion/ direction of the First X. Party or his representatives.
- The Second Party shall ensure that there is no mis-utilization of the fund during xi. execution of the Project Works.
- The Second Party shall pay all duties, taxes and other levies payable against xii. procurement of inputs.
- The Second Party shall exercise its rights under this agreement in such manner as xiii. to protect the interests of the French Development Agency and First Party.

The second party shall be responsible for maintenance and security of the xiv. property / equipment, if any supplied to individuals / communities as part of the project and ensures the same is not mis-utilized.

Dispute Settlement: 7.

During execution of work, any dispute arises between the two parties, relating to any aspect of this agreement, the parties shall first attempt to settle the dispute through mutual and amicable consultation. If the dispute is not settled through such consultation, the matter may be referred for arbitration to the Chairman of the DACC.

Signature of the First Party (Officers of the Forest Department, Assam.)

B. P. G. I. Name & Designation SI.No. (Divisional Forest Officer) 1. HKC LINN Signature of the Second Party (Members of the Committee) Name & Address : (President) Runn Davo 1. Runn bers (Treasurer) Rajen Davo 2. Rotten Dos (Member-Secretary) Y. Khullakpe sigh 3. Y. Khullakpe sigh 1. (Treasurer) 2. 3.

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43 Signature of Witnesses Signature 1. JA Foorfond 282 4154 2. Soj Morinatik Barman 3. Rangan Das Laskar Name & Address : 1. Sidis Ranjan bas 2. Soi nette Bagnen Ravijem Das Labker 3.

APPENDIX-IV

Executive Members of Borthol JFMC

Sl. No.	Name & Address	Age	Education Qualification
1	Khullappa Singha	58	BA
2	Putul Bora Das	45	IV
3	Shanti Rani Das Laskar	40	VII
4	Litin Das	37	IX
5	Shishir Das	32	VII
6	Ranju Kurmi	25	IX
7	Nanda Kurmi	37	IX
8	Runu Das	52	IX
9	Rajen Das	28	IX
10	Shrinath Barman	61	XI

APPENDIX-V

Executive members group Photo of Borthol JFMC



Left to Right : 1. Putul Bora Das, 2. Shanti Rani Das Laskar, 3. Lilu Das, 4. Shishir Das,

- 5. Khullappa Singha (Member Secy.), 6. Ranju Kurmi, 7. Nanda Kurmi,
- 8. Runu Das, 9. Rajen Das.

APPENDIX-VI

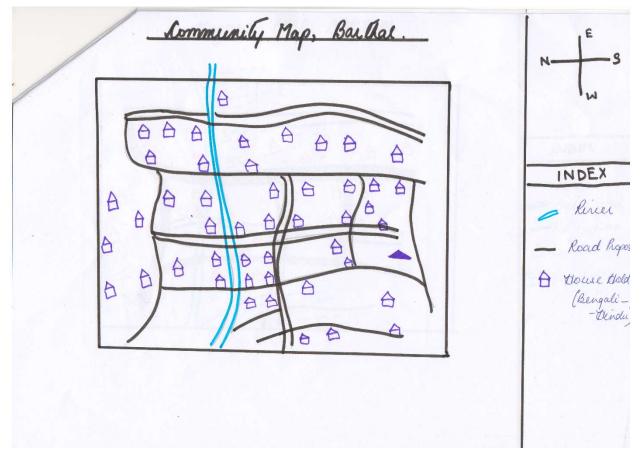
List of members present during PRA & FGD

FGD & PRA. The manbons present in the FGD. 1 . 21 3, 4. 175111 5. Juydeep Broswamm 351 REC 6. Repristar Uni Dol) A. Timpone along 8. Rupak Day Levskas. Moni la pas Laskar 9. 10, - To cora) (are a brar 112 12 Jayanta Ders. 12. 13-13, Debashis Paul. son penyil Des 14-131 shebali Der 16/ 17/ Sulopa Das 18/ Rimanta Dar. 191 Rimpi Res 201 अग्रिम की माम 211 71 98 24 71 44 56 Rune Sas 221 231 ABGGATZI 241 Daresh Das 261 Cetág hrat Roghu state Morimi Se Cal 4 - STH 29/ Shankor soon 301 Shiren dra Mum

FGD. FPRA the mondone descent 31/ Silangshu Jab 321 Guru Churon Der 331 अयुर्व हाश 110 341 SAUROV DOS 351 pantit Ree S. Intgach Prostaction 26. 1 Shoi Shoi rul Beenrous 34. Shot zy the Sv 38. Malendra Chandhasdd 37. 5643,475 Morri Lal Fran Lankart TRUE REMAD (LATED RE 12 Jayanta Dera. B. Debastis Paul. KL2 Proje son panyit Das Shefali Bolt 1 Sulepa Das Rimanta Dor. Pino: R 2日前雨雨,夏雨 KAN INTO TO IL (B) CM ZI paroit bas Right staff Kinami

APPENDIX-VII (A)

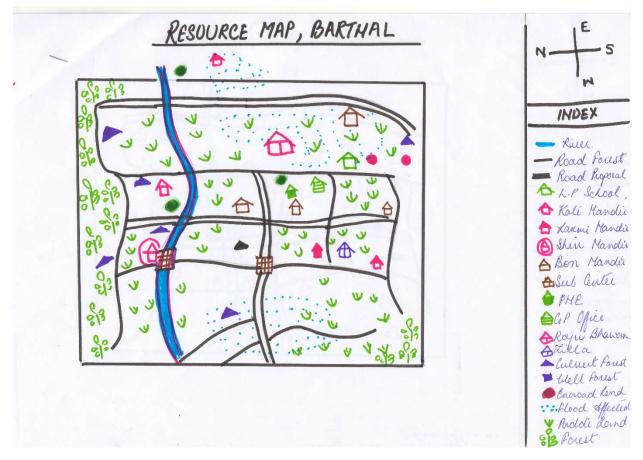
PRA-Community map of Borthol JFMC



- Dipukan Kalita (RGVN) S/o-Bharat Kalita, Maligaon, Ghy-11, Mobile No-9508844746
- Jaydeep Goswami (RGVN)
 S/o : G.C. Goswami, Vill: Borjalenga, P.O.-Borjalenga, Dist. Cachar, Mobile No-9435885662
- Khullappa Singha (JFMC Member Secy.) S/o-Kamala kanta Singha, Silchar, Mobile No- 9435372750

APPENDIX-VII (B)

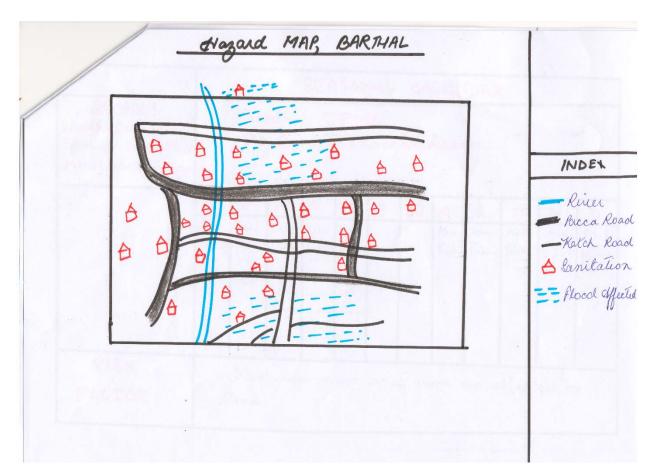
PRA-Resource map of Borthol JFMC



- Dipukan Kalita (RGVN) S/o-Bharat Kalita, Maligaon, Ghy-11, Mobile No-9508844746
- Jaydeep Goswami (RGVN)
 S/o : G.C. Goswami, Vill: Borjalenga, P.O.-Borjalenga, Dist. Cachar, Mobile No-9435885662
- Khullappa Singha (JFMC Member Secy.) S/o-Kamala kanta Singha, Silchar, Mobile No- 9435372750

APPENDIX–VII (C)

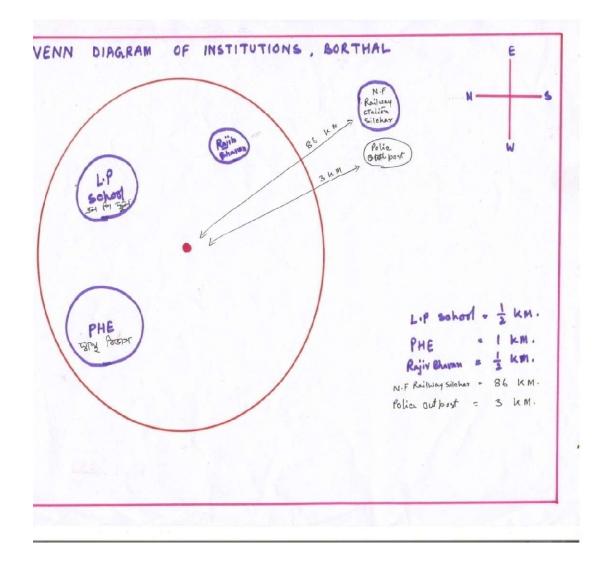
PRA-Hazard map of Borthol JFMC



- 1. Dipukan Kalita (RGVN) S/o-Bharat Kalita, Maligaon, Ghy-11, Mobile No-9508844746
- Jaydeep Goswami (RGVN)
 S/o: G.C. Goswami, Vill: Borjalenga, P.O.-Borjalenga, Dist. Cachar, Mobile No-9435885662
- Khullappa Singha (JFMC Member Secy.)
 S/o-Kamala kanta Singha, Silchar, Mobile No- 9435372750

APPENDIX- VII (D)

Venn Diagram of Borthol



- 1. Dipukan Kalita (RGVN) S/o-Bharat Kalita, Maligaon, Ghy-11, Mobile No-9508844746
- Jaydeep Goswami (RGVN)
 S/o: G.C. Goswami, Vill: Borjalenga, P.O.-Borjalenga, Dist. Cachar, Mobile No-9435885662
- Khullappa Singha (JFMC Member Secy.)
 S/o-Kamala kanta Singha, Silchar, Mobile No- 9435372750

APPENDIX-VIII ENTRY POINT ACTIVITY FOR BARTHAL JFMC

Rank	Activity	Details	Budget
1	Construction of community Hall with Tent house including Chair &Generetor	Near Ranu das house GPS'- N 24°30'341 E 092'42'859	Rs10,00000/- Rs50,000/-
2	Road a)Ranjan das house to Ranu das house approx 1.5km.	Gps:-N24°30'235 E92°42'667	Rs5,25000/-
	b)Bhanu das house to Balicherra Main road approx2km including culvart.	Gps:- N 24° 30' 828 E 92° 42' 985	
3	Ring Well 3 nos		Rs2,00000/-
		What ours	Lathaing

Sl. No	Name	Father's Name	Age	Male/ Female	Educational Qualification	Trade for Training
1	Sourav Das	Nishikanta Das	20	Male	HSLC	Computer
2	Ajit Kurmi	Hari Prasad Kurmi	23	Male	VII	Mobile Repairing
3	Ripon das	Ranjit Das	21	Male	IX	Computer
4	Rumit Barman	Khalendra Barman	19	Male	V	Driving
5	Ranu Das	Runu Das	20	Male	IX	Driving
6	Rinku Das	Nobo Ram Das	21	Male	VII	Driving
7	Rajesh Das	Raju Das	19	Male	IX	Driving
8	Biju das	Nilkanta Das	20	Male	IX	Driving
9	Raju Kurmi	Kripa Mohan Kurmi	22	Male	IX	Driving
10	Nandita Das	Nikhil das	23	Female	HS	Computer
11	Puspita Das	sanju das	20	Female	IX	Tailoring
12	Dipsikha Das	Avinash das	21	Female	HSLC	Computer
13	Kuti Kurmi	Mahabir Kurmi	20	Male	HSLC	Computer
14	Tupan Das	Parash Das	22	Male	IX	Driving
15	Juna Das	Dilip Das	25	Female	HS	Computer
16	Sankar Das	Nischainta Das	22	Male	HS	Mobile Repairing
17	Raku Das Laskar	Ranjan Das Laskar	21	Male	IX	Driving
18	Miton Das	Mani Lal Das	22	Male	IX	Driving
19	Pyari Kurmi	Lt. Lakshi Kanta Kurmi	21	Female	HSLC	Computer
20	Rompi Ree	Ranjit Ree	21	Female	HSLC	Computer
21	Goutam Das	Molendra Das	23	Male	HSLC	Computer
22	Kalpita Das	Ranjit Das	20	Female	IX	Tailoring
23	Konikha Das Laskar	Ranjan Das Laskar	19	Female	IV	Tailoring
24	Rimanta Das	Noboram Das	20	Male	HSLC	Tailoring
25	Dhirendra Mura	Bipul Mura	23	Male	IV	Driving
26	Binoy Kurmi	Dhasarath Kurmi	21	Male	IX	Driving
27	Uttama Kurmi	Kalicharan Das	20	Female	IV	Tailoring

APPENDIX–IX (A) Training List of Borthal JFMC (Proposed)

APPENDIX-IX (B)

Training list of Nursery (Completed)

Sl.	Name of	Name of	Age	Qualificatio	Contact	Name	Name of
N N	Candidate	Guardians	1180	n	No.	of	Trade
0					1.00	Village	
52	Biswanath	Bharat Kurmi	40	V		Borthal	Nursery
	Kurmi		Yrs				Technicia
							n
53	Joyanta Kurmi	Joy Kishore	27	IV		Borthal	Nursery
		Kurmi	Yrs				Technicia
							n
54	Sishir Das	Sushendra Das	34	VII		Borthal	Nursery
			Yrs				Technicia
							n
55	Mukti Rani	Prafulla Das	35	VII		Borthal	Nursery
	Das		Yrs				Technicia
							n
56	Jyotindra	Ahllad Kurmi	45	VII		Borthal	Nursery
	Kurmi		Yrs				Technicia
						D 11	n
57	Sitangshu Das	Surendra Das	36	VI		Borthal	Nursery
			Yrs				Technicia
50	C D	11 ¹ - 1 - 1 D	20			D - 1	n Name and
58	Swapan Das	Hiralal Das	38 Var	IV		Borthal	Nursery
			Yrs				Technicia
59	Srinath	Aswini Barman	58	III		Borthal	n Nursery
59	Barman	Aswiili Daiman	Yrs	111		Dormai	Technicia
	Darman		115				n
60	Rabindra Das	Rai Mohan Das	47	VI		Borthal	Nursery
	Ruomara Dus	Ital Monali Dus	Yrs			Dorthar	Technicia
							n
61	Kalicharan Das	Giri Mohan Das	45	III		Borthal	Nursery
			Yrs				Technicia
							n
62	Runu Das	Kokil Das	55	V		Borthal	Nursery
			Yrs				Technicia
							n
63	Modhumita					Borthal	Nursery
	Das						Technicia
							n

APPENDIX-X Photo-File



APPENDIX-XI

GPS Coordinates

- 1. $E 92^{0} 43' 48''$, 2. $N 24^{0} 30' 36''$

APPENDIX - XII

SDP Report

SKILL DEVELOPMENT PROGRAM AT BORTHOL, HAILAKANDI

A Skill Development Training Programme has been taken up under the Assam Project on Forests and Biodiversity Conservation (APFBCP), with financial support from the French Development Agency (Agence France de Development). RGVN, a COMPELO partner (Consulting Service for Micro planning Livelihood Opportunities) has conducted skill development programmes in Borthol under Hailakandi Division.

Name of trade	Start Date	End Date	No.of Equipments/ Cost	No.of trainees	Name of the master trainers/affiliation
Nursery Technician	26-08-2016	30-08-2016	Poly bags, training kits and brochures given Rs 20,856/-	12	District Agriculture office, Hailakandi(Horticulture Deptt)

Skill development program on nursery management was inaugurated on 21st August, 2016 at Borthol (Hailakandi Forest Village). The programme was inaugurated by Mr. B Biswas, DFO, Hailakandi. Among those present on the occasion included Debashish Chakraborty, Range officer, Jirighat Range, Cachar, Mr. Akhil Dutta, ACF, Mr. Khullakppa Sinha, Beat officer, Bilaipur, Mr. Parameshwar Debnath, Beat officer Dhalcherra Beat And RGVN officials.

FIELD VISIT: The trainees were taken on a one day exposure trip to Shridhar Apex Tissue Culture Lab at Dwarbond as a part of the training.

PEOPLE'S VOICES:

Jyotindra Kurmi, a trainee expressed his heartfelt thanks to the RGVN team for taking up such skill training programmes which have given them a new and better prospect of earning their livelihood.

PHOTO GALLERY



Fig: Training sessions on Nursery management at Borthol

LIST OF TRAINEES OF BORTHOL

Sl	Name of	Father's Name	Age	Qualification	Trade
no.	Candidate				
1	Biswanath Kurmi	Bharat Kurmi	40 Yrs	V	Nursery Technician
2	Joyanta Kurmi	Joy Kishore Kurmi	27 Yrs	IV	Nursery Technician
3	Sishir Das	Sushendra Das	34 Yrs	VII	Nursery Technician
4	Mukti Rani Das	Prafulla Das	35 Yrs	VII	Nursery Technician
5	Jyotindra Kurmi	Ahllad Kurmi	45 Yrs	VII	Nursery Technician
6	Sitangshu Das	Surendra Das	36 Yrs	VI	Nursery Technician
7	Swapan Das	Hiralal Das	38 Yrs	IV	Nursery Technician
8	Srinath Barman	Aswini Barman	58 Yrs	III	Nursery Technician
9	Rabindra Das	Rai Mohan Das	47 Yrs	VI	Nursery Technician
10	Kalicharan Das	Giri Mohan Das	45 Yrs	III	Nursery Technician
11	Runu Das	Kokil das	55 Yrs	V	Nursery Technician
12	Modhumita Das				Nursery Technician

	Hailakandi Division	- ··· · D
S.No.	Amendments Suggested	Corrections Done
1.	Table no 1 (List of Reserved Forest under Hailakandi Forest Division)	Chapter 1
	of 10 Nos. JFMC	Cl. ton Q and
2.	Entry Point Activities	Chapter 9 and Appendix III

DIVISION STATE