

**CFR MANAGEMENT PLAN OF JAMUBANI VILLAGE,
THAKURMUNDA BLOCK, MAYURBHANJ**

VILLAGE: JAMUBANI

PANCHAYAT: BHALIADALA

BLOCK: THAKURMUNDA

DISTRICT: MAYURBHANJ, ODISHA

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PART ONE

Background

The Schedule Tribes and other traditional forest dwellers recognition of forest rights act 2006 clearly speaks about sustainable management of the Community Forest Rights area (u/s 5 of FRA). Section 5 of FRA empowers the holders of Forest rights, Gramsabha and village level institutions to:

- protect the forest, wildlife and biodiversity
- ensure the adjoining catchment areas, water resources and other ecological sensitive areas are adequately protected
- ensure that the habitat of Forest Dwelling Schedule Tribes and Other Traditional Forest Dwellers is preserved from any form of destructive practices affecting their cultural and natural heritage
- ensure that the decisions taken in Gramsabha to regulate access to community forest resources and stop any activity which adversely affects the wild animals, forest and the biodiversity are complied with.

Much before FRA, in 1990s CFM movement in Odisha had started forest conservation as this is the livelihood support system of ten million people directly and indirectly. Besides, after 2000, greater focus was given on promotion of biodiversity through promulgation of Biodiversity act 2002 and rules 2004. In the context of climate change and biotic pressure on forest it has been globally discussed to enhance the carbon sinks through proper management and save them from further degradation. In case of forest rights act and in biodiversity act, the rights have been given to the communities and PRIs to protect and conserve biodiversity.

Forest acknowledges a great attention because it facilitates poverty eradication. In Millennium Development Goal, focus was given to poverty eradication through enhancing natural resource management. Local institutions are empowered to utilize their local natural resources for better livelihood and food security.

The main objective of SFM is to prepare a practicable model which is people friendly, easy to follow and practice, befitting to the working conditions, need based and community centered in principle. Mere Silvicultural operations cannot augment sustainability in the management process. A holistic approach with greater community participation and sensitization is needed for sustainable forest management.

Goal: Livelihood gains is high, Ecological cost is low

1. MANAGEMENT OBJECTIVES

Objective one: Enhancing forest cover, biodiversity and subsequently improving forest conditions in traditionally managed community forest areas of the village.

Explanation

Jamubani village has traditionally been protecting 752 acres of forest area in their village vicinity. The two decade old efforts have succeeded in controlling rampant logging from their forest area and has brought in the forest in regeneration phase, but now village feel that they also need to put efforts not just in protecting what all resource they have, but also augmenting it by taking up small scale collective reforestation in and around village, adopting agro forestry practice where ever possible, promoting fodder cultivation and ensuring biodiversity with in forest system.

Objective two: Keeping records of forest inflows and outflows to control forest utilization pattern

All the 135 households of Jamubani are dependent on forest for their daily requirement of fuel wood, small timber, NTFP, medicines and fodder. It is expected that a huge volume of these materials are being taken out from forest annually. Villagers do not have any record for this, so by implementing this plan villagers express their needs of maintaining a stock report of forest produce utilization in their village. So that in future this can be used by them as a baseline to control or augment forest resource.

Objective three: Increased efforts to enhance Livelihood and food security of villagers through forest and other alternatives and promoting conservation value in them

Poor households of the village share an intricate relationship with forest, as their direct dependency includes food, shelter and health supplements from forest area. One 3rd of households in Jamubani, are completely dependent on forest produces for their survival for more than 3 months in a year, the management plan seeks to provide space to these forest produce collecting households by initiating NTFP collective trade for selected species in village so as maximum benefits can be accrued.

Objective four: Taking up forest management activities round the year with strong institutional base

The village level forest protection committee in consensus with all its members has prepared a annual calendar for various forest management activities, for which all members will contribute labour. Activities will be supervised and coordinated by Forest Protection Committee and local forester or other local resource person can also be called to monitor activities externally.

2. GENERAL DESCRIPTION OF JAMUBANI

2.1. Village

Jamubani village is located in the valley of Satakosia Reserve Forest, in Bhaliadala Panchayat of Thakurmunda block, and has 135 households constituting its population. It is situated 25 km and 145 km from block & district headquarters by an all weather road. The village is bounded by Satakosia Reserve Forest (R-RF), Salandi Reservoir in east, Baula village in North. Village has four hamlets and a main settlement of School sahi, Kolha sahi, Saunti sahi and Upper sahi. All people are tribals. Literacy rate is very low. Following is the breakup of its population numerals.

Average household size is 5 members per household, and agriculture is the dominant primary occupation followed by migratory labour work by selected families belonging to Kohl tribes. A social map has been annexed showing distribution of village households and other important sites in the village.

2.2. People

Out of 135 households, all households are directly involved in the forest protection activities. Besides, small land hold agriculture in Kharif season is practiced by the people. In a year, the community get 4 months livelihoods from agriculture, 5 months livelihoods from Forestry activities and the rest of the days they depend upon labour activities.

2.3. Village Resources

In common property resources village has one community pond, community forest areas. They own 2 tube wells and 3 open wells.

Infrastructure wise there is one primary school, Sacred groves, Anganwadi in the village. Being a forest dependent community, villagers depend 6 months on forest for their livelihood needs.

As institutional resources village has a community forest management (CFM) committee, five Self Help Groups (SHGs), one Kirtan group, one grain bank and a village committee to look after respective issues.

2.4. Forest Resource

The forest of Jamubani is a typical dry deciduous forest with discontinuous patches of moist tropical deciduous forest, with dominance of Saal and associated species. The terrain is rough and rocky, dominated by exposed boulders, soil cover is minimal and provides harsh conditions for good forest growth.

This village of 51 households is dependent on the adjacent Rambha RF for their daily take of fuel wood, NTFP and timber.

Name of forest	Catagory	Major Species
Chakradhar Hudi (Dense forest)	Khesera, Plain Area	Sal, Karada, Bhandhan, Bhuin Nimba
BatahKhole Hudi (Dense forest)	Reserve Forest	Sal
Barahgarh Hudi (Dense Forest)	RF	Karada and Sal
Patukhol Hudi	Khesara, RF and stones	Sal
Devi Hudi	Khesara	Karada, Giridhani
Balla Munda	Khesara	Karada

The community is managing about 752 acres of forest area under the a voluntary body called “Community Forest Management Committee”, in which all households are members and an executive committee takes care of the operational issues. Right now the committee has 11 members in its executive body and 128 in general body. CFM committee works as per the rules and regulations agreed by village pallisabha.

Karada, Dharua and Saal are the most important timber and fuel wood species for the villagers.

3. Forest History

Village elder say that the village is in existence for more than 200 years and was a leading village under the Bahmunda king dynasty. Villagers since late 1990's have been involved in direct protection of their neighbouring forest patches. Though the village holds a long history of community forest community protection, but they intensified their activities only when a new settlement colony was established in their neighborhood leading to conflicts and increased pressure on the forest.

Table: Time line for Jamubani village

Time	Event
1972	Displaced due to construction of Hadagarh dam on Salandi River
1973	Became a village under Bhaliadala GP
1976	Treated as a Forest village/ Village within the Forest
2001	School building constructed with Govt. help
2014	RCDC started working in the village

4. Dependency of Villagers on Forest

It has been assessed that the villagers are using about 850 quintals of fuel wood annually, which comes from their forest area. Collection of Amla, Harida and Bahada is minimal due to non availability of marketing opportunities in the village. Collection of Mahua is mostly collected from private fields but some trees are also available in village community lands and forest.

Produce	% Households Dependence	Quantity Collected	Income In Rs. for per HH	Degree of Dependence
Mahua Flower	100	9950 Kg	3600	High
Mahua Seed	100	30 lit oil/family	28800	High
Mushroom	100	240 Kg	9600	Fair
Kanta/Hill Broom	100	29 Kg	580	Fair
Sal Seed	100	775 Kg	14400	Fair
Sal Leaf	100	-	Rs.60/Month	High

A list of all households and their requirements from forest areas has been annexed with the report.

Another dimension of forest dependency is the grazing needs of village cattle population where almost 500 cattle's graze in forest area for at least 4 months in a year.

Fodder source	Months	Types of species
Crop Residue	November-December	
Grasses	January-June	Riverbanks
Forest grazing	July-October	Bamboo, Kasi, Mai, Dhwra, Bija, Kendu

Since indiscriminate grazing during round the year has proved to be harmful for them, the village committee has decided to ban that and alternatively adopted to Gotha system by which grazing at a common place is allowed and a man has been appointed for that.

5. Threat to Forest Resource

Following are the various threats for the sustainability of forest

1. Timber theft: The area being accessible through permanent road, it is not difficult to access forest, there has been cases in past when the villagers themselves and villagers from nearby areas were cutting the poles and timber blindly from the forest. Few private timber contractors here and there in the area also pose threat for forest trees. Though after the regularization of forest protection activities this has been controlled to a large extent but this needs to be addressed with more penalties and effective watch and ward system.
2. Poaching/Hunting by community: Biodiversity in the forest wildlife at stake due to regular hunting by villagers for meat of the animals, due to degraded and harsh conditions of forest big animals are not sighted regularly except bear.
3. Changing living standards and forest dependency: Due to exposure of these remote villages to global changes in recent times, people are detaching away from forest for its economic and conservational values, this has created a gap in the community involvements and stakeholdership in protecting these resources.

4. Forest fires: Forest fire has been a problem of grave concern in this area as every year 70% of the forest suffers fire. Most of the fire is due to human intervention in the form of mischief, collection of Mahua. Sometimes villagers sharing farmlands adjacent to forest areas put fire to increase fertility of their lands and this fire spreads to forest areas. These areas being dry in nature with no perennial or permanent water sources inside forest promoted by dry deciduous patches, fire easily catches up huge tract of forest area.
5. Destructive harvest of important plants: There has been a tendency if villagers to cut down important trees to collect NTFPs like in case of Amla. Due to such practices currently it difficult to find a mature fully grown Amla tree in the forest. There is need to build awareness for discarding such practices at village.

PART TWO

6. Forest Area Demarcation through GPS and GIS Map

Villagers in agreement with the neighboring villages of Baula and Bhaliadala have demarcated their traditions forest boundary which spreads across 752 acres in the Satakosia Amarnama RF.

Total Community forest area: 752 acre (attach Forest area map as per CFR claimed by the community)

Agreement with neighboring villages for boundary: Baula and Bhaliadala

Following are the identification points for Jamubani community forest;

Community forest area and village map of Jamubani with the GPS marking for the boundary are provided in the annexure.

7. Forest Management Rules and Regulations

Following rules and regulations has been framed and passed by the Gramsabha for forest protection activities:

- Regular meetings for the issues concerning forest under the supervision of community forest protection group of the village.
 - Monthly meeting during the “last Sunday” of every month
 - Half yearly review meeting
 - Annual general meeting in “December” month every year
 - Records to be maintained and minimum 2/3rd participation by members and atleast 50% participation of women essential to hold the decisions taken in these meetings
- Forest protection through 4 basic indicators

- **Membership:** All household of the village represented by a women and men will be a member in the CFM committee, new members will have to pay Rs 10 as membership fee and membership will be renewed after every three years. A person or group from outside the village who intends to be a member will have to pay Rs 200 annually to be a member to get facilities from the Jamubani community forest.
- **Group watch guard system:** CFM committee has regularized the traditional Thengapalli system of forest patrolling, where daily four families will be assigned the responsibility to carry the thenga to forest area.
- **Introduction of pass/permit system:** CFM committee has introduced a permit system for its members to access forest area and various products. One permit will be issued to each household, using which a person from that household can visit forest area twice in a week except Monday and Tuesday. Monday and Tuesday will be observed as no forest day every week. The permit can be used for collecting fuelwood, fodder, NTFP, small stones and soil. Monthly records for how many times a family visited forest and how much did they collected forest produces will be kept as a record with the CFM committee.
- **Introduction of fine system:** Those not following the common rules laid by committee in consensus with villagers will have to pay some percentage of the damaged caused to the forests. This will be held high for cases of logging, putting fire in forest, grazing without permission, providing timber illegally to timbers or poles without prior permission, stocking unjustifiably high volume of fuelwood/timber from forest at ones place.
- Development and implementation of forest management plan
A 5 year forest management plan has been prepared by the committee and has been approved in Gramsabha to take up regular management of the community forest to ensure long term benefits and forest growth.
- Regular Watch and Ward system (Thengapalli)
To keep an eye on the forest the villagers under the management of CFM committee will take up Thengapalli, where every day 2 members from two households will participate in the patrolling schedule will be followed by the villagers; schedule will be maintained by the forest protection committee.
- Sustainable harvesting of NTFP
High dependence of villagers on forest has led to severe destruction of forest trees, this has happened majority with the species with high food/commercial value that the wrong harvesting practices followed for extracting important NTFP and medicinal plants from the forest area has led to slow disappearance of these species. But this has been observed that such practices have led to permanent damage to the forest and village, to reserve this process in coming years it has been agreed by all members of the community forest committee that for all kind of NTFP and medicinal plant

collection committee will use and teach its members about the simple and tree friendly harvesting techniques.

- Biodiversity conservation through protection
Loss of biodiversity has been a constant fear for the villagers and now after intensive discussions in village meetings it has been listed as amongst the most important issue to be taken care by the forest protection committee with lead role of biodiversity conservation sub-committee.
- Strengthening forest fund: Every member household will give Rs 5 as Chulichanda for forest protection activities. 50% amount of collected fine will be given to the person providing information and rest will go the forest fund with the CFM committee. Permit system for Fuel wood and NTFP collection will also help increasing fund. Status of funds and its investment decision will be taken in pallisabha or monthly meeting of CFM committee. Public auditing by selected people from village and near annually in general body meeting. The responsibility of conducting public audit will lies with the CFM committee.
- Preventing and controlling forest fire
Satakosia Range has always been prone to forest fire, and during sampling also forest fires came out to as the biggest threat to the protection efforts by the villagers. Major causes of fire in forest have been inter village conflicts, collection of Mahua, Kendu leaves and spread of fire from adjacent forests. Large scale forest fire makes the harsher and destroys many of the potential saplings, killing mature trees and raising the temperature of the whole area. But now since the formation of regular forest protection committee villagers have taken extra precautions in educating and convincing villagers to not to put fire in forest area abruptly.
- Conservation of medicinal plants and other important plants
It has been found that the forest under village management contains good stock of seasonal medicinal plants especially Kalmegh, Shatavari and Anantmul. But the benefits from availability of such valuable herbs is being taken away by some third party as people don't know much about the processing and marketing utilization of these herbs, although they have been extensively using these for their medical requirements.
- Resolving inter and intra village conflicts through mutual discussions
- Networking with other forest protecting committees and District Forest Forums (DFF).
Jamubani share Satakosia RF with other villages and these all villages faces similar problems. CFM committee will increase its reach to other such groups by coordinating with CFM committees of other villages and Block level forest forum and will have a direct association with the District Forest Forum (DFF), Mayurbhanj.
- Coordination with Govt. Department, PRI, NGOS's, Academic institutes and others
CFM committee will take up the responsibility to interact and communicate with the

various other institutions that are stakeholder's so the Satakosia RF, and forest protection.

8. Forest Inventory

Community Forest Management Committee and other villagers conducted 7 days forest inventory exercise in April 2015 from 1st April to 7th April and prepare inventory of flora available in their forest.

The forest of Jamubani is a typical dry deciduous forest with discontinuous patches of moist tropical deciduous forest, with dominance of Saal, and associated species. The terrain is rough and rocky, dominated by exposed boulders, soil cover is minimal and provides harsh conditions for good forest.

These 56 species has been recorded along with others less visible small medicinal herbs and other species, major medicinal species recorded are following:

- Important tree species identified: Sal, Mahua, Kendu, Char and Asana
- Important medicinal plants identified: Kalmegh, Anantmul and Satavari

Other medicinal species documented:

Biskhapari, Panairi, Gilara, Shatavari, Bangaruda, Khajuri, Bhuinimba, Phampi, Gutikhadika, Bankotha, Kanhunijhta Balri, Sinkula, Baribinchi, Muturi Lai, Pingu, Bhainch, Damguruda, Sihiri, Kudungi, Sukhalai, Tal mulia, Panialu, Siari lata, Marda lai, Mura, Katak, Bariamla, Kirakinch, Bichhuati, Apamaranga, Mutha ghash, Dak chhan, Datab, Suganthia, Akandakili, Akhandabindhu, Gopakanhu and Bhalia, Pitaalu.

(See Annexure for enumeration and recording)

Findings of inventory

1. Sal (*Shorea robusta*) is the most common occurring in terms of frequency, density and IVI. The plant adapts well in degraded conditions. This is followed by Mahul (*Madhuca indica*) and Kendu (*Lespyros melanoxylon*) which are also quite common.
2. The forest patches were characterized by absence of big trees and pre-dominance of vegetation at pole stage and saplings represented a good number which is a good sign for future.
3. Sampling of forest was carried out in post monsoon months thus the forest floor was covered with many ephemeral herbaceous species, most of which are of medicinal utilities for the villagers. More than 60 species of medicinal species are present in the forest.
4. Density wise also Sal has the highest density in the recorded forest area, followed by Mahua, Kendu, Char and Asana, 13.25, 4.58, 3.95, 3.92 and 3.75 respectively.

5. Bel, Bahada, Piasal, Dhaura and Bija has very low density, each is less 0.08, Palash, Piasal, Ran, Sidha, Sunari are present as saplings but only 1 or 2 trees could be found during the inventory process.
6. Highest abundance was calculated from Gangasiuli, where it was represented by high presence in one patch of the forest, this specie is found more towards the periphery of forest areas adjoining settlements, with relatively good soil cover. Being an aggressive species it prefers making continuous patches not allowing other species to come up.
7. Saal and Sidha also recorded abundance of 14.49 and 12.50, Sidha is mostly present as saplings and saal has all three forms represented adequately.
8. Bahada saplings are also present throughout the forest area thus it has come up in abundance category, 10 Dhaura plants which is an important timber species was recorded from a single plot. Others species recorded in succession of decreasing abundance are Dhataki, Mahua, Karanja and Rahani.
9. Kendu due to its economic value of "bidi rolls" is represented mostly by saplings due to bush cutting practice followed by the villagers in months of March-April. Thus it has a high frequency but low relative frequency due to absence of mature trees.
10. Asana, Char and Mahua are represented almost equally with 66.67% frequency, all three are important for villagers due to high food, fodder and timber value.
11. Big trees of important NTFP species of amla, Bahada and Harida are absent rather a good percentage of saplings of amla and bahada are present but then also they will require protection to reach a satisfactory population.
12. Some other important timber species like, Sidha, Kusum, Bija, Piasal have a very low % frequency.

Important Value Index (IVI)

Important Value Index is calculated by summing there variables; Relative index (RI), Relative Density (RD), Relative Frequency (RF) while calculating IVI in a forest ecosystem herbaceous species are not considered.

Table4: Species with high IVI in Jamubani community forest

Scientific Name	Oriya Name	IVI
<i>Shorea robusta</i>	Sal	143.12
<i>Madhuca indica</i>	Mahua	33.63
<i>Bhuchania lenzen</i>	Char	16.59
<i>Terminalia tomentosa</i>	Asan	16.42
<i>Diospyros melanoxylon</i>	Kendu	10.38
<i>Anogeissus latifolia</i>	Dhaura	8.65
	Karada	6.74
<i>Woodfordia floribunda</i>	Dhataki	4.73
	Rahani	4.72

Other observation on the sampling sites

1. It was noted in all the quadrates that the soil thickness is very low. The terrain is rocky and lacks water holding capacity. Lack of soil cover in many places makes forest hostile for many species to establish successfully.
2. There were visual proofs for high incidence of forest fire. More than 90% plots had signs of past fire incidences. This is a major threat for the forest management in the area.
3. Felling of trees was evident as signs of freshly cut plants were seen. This suggests, that though community is protecting these community forest areas but still there is lot of felling going on for supporting household needs.
4. A good part of the forest floor is highly infested with termite's mounds, and the infection on tree trunks is cosmopolitan. Termites are always a friend in forest areas but surplus population in regenerating forests holds a challenge for growing trees and mother trees.
5. There were some pits and excavation of soil activity was also seen. Animal scats and claw marks on tree trunks indicates for a decent wildlife movement in the area.

9. Biodiversity Record of Jamubani community forest area

The Jamubani community forest had lost most of its faunal diversity 5 years back, it with regeneration of forest due to community protection the biodiversity is again visible in its various forms. Smaller forms of wildlife have now occupied forest floors and moist areas. Bear being an indicator species in the area has two bears and two cubs reported by the community. Casual walk in the forest area gives visible evidences of regular wildlife movement near village areas. Abundant population of reptiles, amphibians and insects in there in the forest.

Following is the list of species noted in and around Jamubani community forest area:

Sl. No	Scientific names	Common names	Host plant species
1	<i>Hasora badra</i>	Common Owl	<i>Derris scandens</i>
2	<i>Tagaides litugiosa</i>	Water snow flat	NA
3	<i>Spialia galba</i>	Indian skipper	<i>Hibiscus sp., Sida rhombifolia</i>
4	<i>Iambrix salsala</i>	Chertnut bob	<i>Bambusa arudinaceae</i>
5	<i>Polanthus pseudomaesa</i>	Indian Dart	NA
6	<i>Graphium doson</i>	Common jay	<i>Michelia champaca, milusa tomentosa, polyanthia</i>
7	<i>Graphium agammemnon</i>	Tailed jay	<i>Michelia champaca, milusa tomentosa, polyanthia</i>
8	<i>Pachiolpta aristolochia</i>	Crimson Rose	NA
9	<i>Princeps memnon</i>	Great mormon	NA
10	<i>Papilia demoleus</i>	Lime Butterfly	<i>Murraya koenigii, Aegle marmelos</i>
11	<i>Chilasa clytia</i>	Common Mime	NA

12	<i>Leptosia nina</i>	Psyche	NA
13	<i>Papolia polytes</i>	Common mormon	<i>Aegle marmelos, Murraya koenigii, Murraya paniculata</i>
14	<i>Pieris canidia</i>	Indian Cababge White	NA
15	<i>Pareronia veleria</i>	Common gull	NA
16	<i>Cepora nadina</i>	Lesser gull	NA
17	<i>Dalias eucharis</i>	Common jezebel	NA
18	<i>Catopsila Pomona</i>	Common Emigrant	<i>Cassia fistula</i>
19	<i>Eurema hecabe</i>	Common Grass Yellow	<i>Acacia sp., Albizia sp., Caesalpinia sp., Cassia fistula</i>
20	<i>Appias sp.</i>	Puffin	NA
21	<i>Spindasis vulcanus</i>	Common silverline	<i>Clerodendrum indicum, Ziziphus, rugosa</i>
22	<i>Arhopala amantes</i>	Large Oakblue	<i>Terminali alata</i>
23	<i>Loxura atymnus</i>	Yam Fly	NA
24	<i>Melanitis leda</i>	Evening Brown	NA
25	<i>Orsathriona medus</i>	Nigger	NA

10. Income generation from forest area

Convergence of Government Schemes in FRA titles (both IFR AND CFR)

- **In case of IFR**
 - Mo Pokhari (pond for cultivation)
 - Indira Awas
 - Land development
 - Social security schemes
 - Agricultural and Horticultural schemes
- **In case of CFR**
 - Plantations in gaps and degraded areas
 - Convergence of ecotourism
 - Tuber crops (CTCRI)
 - Other programmes as planned by the committee

Jamubani forest area has a good potential to provide for supplementary livelihood for very poor households of the village. Forest and Community areas good potential for initiating collective trade of:

1. Saal seeds
2. Mahul

NTFP trade subcommittee will take up the responsibility to coordinate the trade activity in the village with the support of CFM committee, SHGs and other traders from the area.

Following table presents the record of last three year trade in Jamubani:

Product	Quantity Available (Quintal)	Quantity Sold (Quintal)	Year	Range of Price
Mahua Flower	200	198	2006	600-700
	200	195	2007	800-1000
	150	148	2008	600-700
Saal Seeds	3	3	2006	200-300
	3	3	2007	400
	3	3	2008	1200

It is predicted that the forest of Jamubani if conserved can yield up to 550 quintals of NTFP taken together. Of which Mahul, Sal seeds and Char holds promise to fetch good price to villagers. There are 3-4 local traders in the Mayurbhanj town who all can be influenced if the community starts collectively trading the forest produce collected sustainably. For every poor households NTFP collection and its sale is the primary occupation in the lean summer months, these identified households will be supported directly by the forest protection community.

Community forest protection committee will also look for the various opportunities to promote NTFP and forest based income for its members specially belonging to lower strata in the society.

A NTFP trade management subcommittee has been formed within the CFM committee whose key responsibility is to regulate and coordinate forest produce trade in village. This subcommittee has specified task which has been shared in the plan.

Presently forest resources provides on an average Rs 3,000/- to 10,000/- per household annually. The income is volatile in nature due to different factors affecting harvest of NTFP:

Factors Affecting NTFP harvest:

- Fire
- Predators
- Lantana
- Hemi parasite
- Theft
- Weather and climatic condition
- Pesticides
- Availability of flowers
- Tools and implements used

NTFP functions positively for the ecosystem:

- It helps in pollination
- It provides food for other animals
- Required for human consumption
- Mulching
- Water retention
- Creates habitat for wild animals, insects and other animals
- Checks siltation
- Carbon sink
- Associated plants

For increasing the likelihood of sustainable harvest, the community should look for the following aspects:

- Low intensity and frequency of harvest
- Single use rather than multiple use, less complex
- Species resilient to harvest
- Ecological generalists
- To tolerate a wide range of conditions
- Produce many offspring and ecologically abundant
- Persistent
- Fast growth rate
- Focus on harvesting leaves, flowers, seeds and fruits rather than bark, whole plant, roots and bulbs

11. Annual activity schedule

For sustainable forest management of community forest areas following will be the considerations to take up various activities round the year:

1. Forest watch and ward through thengapali

Duration/Most suitable time: Daily, alternate days in rains

Nature of activity: Compulsory

Activities to be considered: Weekly chart for participants in thengapali, monthly reporting by thengapalli team (forest management subcommittee) on issues identified during thengapalli.

2. Forest fire prevention and control

Duration/Most suitable time: February-May

Nature: Compulsory

Activities to be considered: Forest floor cleaning in March, Fire brake or line preparation in March, formation of voluntary fire fighting group consisting of youths in Jan, promoting forest fire awareness through folklores during festivals like maker sankranti in January, identification of low laying area with possibility of water conservation with in forest area.

3. Excessive grazing control

Forest being in regenerative phase cattle grazing is a threat if gone uncontrolled, though presently the cattle population seems within capacity of the forest but then forest protection committee will take few initiatives to avoid any stressing conditions in future.

Duration/Most suitable time: Sept-Jan

Nature: Optional or selective

Activities to be considered: Taking up grass cultivation in the low lying open areas of the forest, where soil cover does not support trees. Grass species like stylo, napier can be cultivated which are excellent fodder grasses in selected areas, management of these areas can be given to marginal farming households which are in urgent need of fodder for their cattle's. Ideally a fodder bank can be built to distribute fodder cultivated from these common property lands for benefits of those in dire need. Villagers with the help of CFM committee should divide the whole of forest area in different compartments to initiate stall grazing which will help in better regeneration of forest saplings, one part of forest with heavy over growth of edible creepers, climbers should be considered for limited grazing.

Complete ban on taking out forest mud, stones and sand from forest area for commercial purpose:

Duration: Round the year

Nature: Compulsory

Forest committee and villagers will make sure that no from and out side village is allowed to dig forest area for commercial extraction of mineral resources from forest. Heavy penalty in form of fines for defaulters.

5. Conservation of wildlife in forest

Duration: Round the year

Nature: Compulsory

Activities: Preparation of Community Biodiversity Register with the help of external support, Bio diversity subcommittee will be responsible for maintaining CBR, updating it after every two years. Total ban on hunting of any wildlife by any villager and discouraging others by imposing high amount of fine and imposing strict legal action against them. Special effort will be done to conserve endangered species of importance in forest by providing extra protection to species available.

6. Forest management through basic silvicultural operations

6.1. Areas identified for fuel wood and timber: Selective Cutting/Thinning/Cleaning

Every six months in Jan and July, an area of 0.5 hectare will be identified by the villagers where the poles have outgrown the normal density of forest to allow other plants to grow competitively. This will also include cleaning exercise for removing entangled creepers and climbers from the trees of potential. This will provide better structure to forest. During such operations non destructive practices for cleaning will be followed.

Duration: January and June

6.2. Areas identified for NTFP development: Enrichment plantings

This is will be done in forest with poor natural regeneration; selected important species will be planted. Villages will pool in community labor and minimal will be responsible for execution of the task.

Duration: June- July year

6.3. Areas for high natural regeneration

Every year one patch of forest with relatively better scope of regeneration will be left completely undisturbed to promote natural regeneration. Upon identification of such a potential plot CFM committee will arrange for basic preparation of the forest land for enhanced productivity.

Duration: Pre and post June, left undisturbed for one year

Basic considerations

- Harvest or thin trees which are diseased or twisted.
- Ensuring that the forest canopy after selective harvest or cleaning is not less than 50% of the original.
- Enduring appropriate distance between species of various diameter classes.
- Not to harvest trees form an area where sufficient number of small trees or established saplings are present to replace tree in coming years.
- Villagers will use dead and fallen twigs for fuelwood rather than cutting trees for the same similarly green fencing and adoption of alternate fuels to be promoted with in village so as to reduce the direct demand of timber and small poles from forest.

Activity	Time	Area	Responsibility
Thangapalli Chulichanda Collection	All Days 1 st week of every month March- June	Different patches	Forest Protection Forest Protection Forest protection
Forst Fire control Measures: Floor Cleaning And Fire Line Forest Growth Measurements In 10 Mother Plots			
Hunting Petrolling	Dec.	Pre identified plots	Biodiversity Conservation
Forest Grazing Monitoring/ Check	March-June	once in a week	Biodiversity conservation Conflict
Bi-annual Cleaning Of 0.5 Hectors Forest Area	Jan and June	Once in a fortnight	Forest protection

Forest Folrr Preparation For Annual Enrichments Planting Of Important Species In A Selected Patch.	June-July	Two 0.5 hectare plots to identified	BDC and Fp
Identifying And Marking A Patch For Natural Regeneration.	June	Areas to be identified	FP
General Assembly Monthly Meeting	Jan 1 st week every month	To be left us touched for a year	CFM committee
Participatory Audit Of CFM Fund And Activites In One Year - Chulichanda - Trade fund - Fines and others	Audit team of selected members	1 st week 50% participation	President And vice president President, Secretary and treasurer
Bi annual distribution of ceased timber, fuel wood and others	Feb and july	Representation from each sun committee	CFM Committee
Update forst protection notice board Monitoring CFM forest boundary after evry six moths	Monthly Dec	Priority to poor	Secretary Conflict resolution
Trade preparations before collection season for NTFP			NTFP trade
Record Gross check - Pass book - Resotiuon book/Monthly meeting register - General meeting register - Chulichanda register - CBR - NTFP trade book - Revision of SEMP	Before every Collection season Atleast once in a month	Individual subcommittee leader subcommittee leader to take initiative	Secretary and Vice Secretary of CFM committee

12. **Sustainable forest management indicators identified from national set of Criterion and indicators for CFR Management**

Following 22 indicators will form the assessment criterion for the CFM activities in long run:

1. Area of forest under management plan: Complete forest area to be ought under the forest management plan in 2nd plan after 5 years.

2. % of Forest with secured boundaries: Boundary demarcation with the consensus of villages with issues over shared boundaries.
3. Change in area of forest cover: Change analysis of forest cover after every five year, use of available satellite imageries and digital maps.
4. Change in tree cover outside forest area: Promoting agro forestry in the agricultural fields as most of these fields remain for 7-8 months in a year, promoting community plantations at open areas within village.
5. Species diversity: updating forest inventory every 5 years with appropriate changes in the forest management options if any
6. Status of Biodiversity conservation in forests; Baseline for biodiversity developed through biodiversity assessment and forest inventory, assessment of changes will be carried out every year though direct observation and systematically after every 5 years.
7. Status of non destructive harvest of NTFP: Record to be kept with the forest protection committee.
8. Status of regeneration: Regeneration of the saplings to be ensured and assessed again against the baseline I three consecutive years.
9. Incidences of forest fire: Efforts to be made to completely control the cases of forest fire in coming season, constant record to be maintained for the incidences of forest fire for future references.
10. Area Protected from grazing: Reduction in the intensity of grazing in forest , implementation of stall grazing.
11. Area protected from grazing: Reduction in the intensity of grazing in forest, implantation of stall grazing.
12. Efforts towards enhancement of forest productivity: Community initiatives in taking regulate cleaning, thinning and pruning exercised. Leaving some part of the forest for natural regeneration conducting enrichment planting of important species in availability in coming years will be measure to assess this indicator.
13. Recorded removal of timber: CFM committee to keep records of timber removed from forest by members and non members foxed annual limit to the timber volume that can be taken out of forest. Replacement of removed timber from forest by the joint efforts of community.
14. Recorded removal of Fuel wood: Recorded to be maintained about the annual household consumption of fuel wood for every member household, by the Forest protection Team.
15. No of forest protection committees and area protected by them: Detail of the Community forest protection committee and details about the forest area is being kept.
16. Status of people's participation in management and benefit sharing: Whole initiative is a people's based program and conditions for benefit sharing has been finalized in Gramsabha.
17. Use of indigenous knowledge: CFM practices have their foundation in the traditional knowledge of forestry , committee members being illiterate and not exposed much to new techniques of management still adhere to their traditional systems for watch and ward, identifying harvesting time of major species, protection system for endangered species etc.
18. Number of forest related offences: CFM committee for4esees drastic reduction in the forest related offences in their management areas, by next planning phase it is expected that such incidences will fall to almost zero. Recording of forest crime is being done in the CFM registers.

19. Human resource capacity building efforts: it is expected that villagers will develop their capacity by taking up various responsibility in managing forest. Individual sub committee will help indentifying future leaders for forest protection activities.
 20. Monitoring and evaluation of forestry development activities: In govt forest matters CFM committee will represent Jamubani. The conflict resolution committee will also get involved in monitoring of various forestry development activities by forest Department and other government institutions.
- It is expected that after successful achievement these 22 parameters the Jamubani village will satisfactory move towards achieving sustainability in forest management.

PART THREE: COMMUNITY FOREST MANAGEMENT INSTITUTION

13. Self initiated community forest protection institution

13.1 Objectives

Jamubani CFM committee will work with following objectives.

1. Coordinating and executing the activities of forest management in transparent manner with support from all its members.
2. Looking after daily operational issues and taking appropriate decisions taking into considerations the view of its members.
3. Record keeping and sharing with the members.
4. Initiating programs to support livelihood requirements of members and management requirement of forests simultaneously
5. Representing Jamubani villagers in their forest management issues with other stakeholders like forest department, Others Protection group, NGO's social forum etc.
6. Working for the progress of village through forest resource improvement and related matters.

13.2 Structure of self initiated community forest management group

The forest management committee represents the whole population of Jamubani village where, members part of the executive body and rest forms the general body.

Brief about General body (GB) and Executive Body (EB)

13.2.1 General body (GB)

One man and one woman from each family are the members of the General body. Yearly membership is Rs. 5. The members is finalized in the General body meetings. General body meets once in any year for annual planning and auditing and bi annually for sharing and discussing progress and issues. For these meetings to be consolidate an attendances of 51% of total members and 50% of women members is essential.

Tenure of the committee is for two years. The committee may be dissolve before two years with the two third member majority in case of unsatisfactory performance by the committee as a whole or by a particular person in position. All the members of the General body have voting rights and the rights to give independent view. The meeting of the General Body will conducted by the Executive body with 7 days written or verbal notice from president.

Functions of the General Body

- Pass the annual plan for next year and annual report of the existing year.
- Selection or election of executive body.
- Finalizations of annual income and expenditures.
- The GB can Amend the bylaw of the CFM committee with two third majority.

13.2.2. Executive Body (EB)

In 11 member committee six are position holders and 5 are executive members. All non position holder executive members are divided in four sub committees to take care of daily operations and to execute specific responsibilities.

Roles and responsibilities of the position holders as decided by members of the institution.

President: Leading the committee for escalated growth, enduring regular meetings and chairing them, taking final decisions in case of crisis and emergency with consultation from vice president. Preparing and presenting the annual activities, growth and future planning in the general assembly. Representing CFM group in various forums and acting as a medium between villagers and other stake holders in management .Acting authority on the major on the major activities of the committee and accountable for the actions and activities of the whole group.

Secretary: Maintain and keep records of resolution, operational expenses, cash book, receipts/permits and annual activity budgets statement. Helping other sub committees in maintenance of their records and acting as an adviser to them. Presenting record of the committee to other groups.

Joint secretary: Coordinating supporting secretary in his work taking up secretary's responsible in his/her absence. Keeping daily dialogues with other subcommittee members for getting updates about their plans.

Treasurer: Compiling and updating the CFM group cash inflow and out flow as whole. He/She will present the group financial status in general meeting, facilitating healthy discussions, and preparing budget in the annual and bi annual participatory and external audits of the CFM committee.

Joint Treasure: Assist and coordinate treasurer in his work and take up treasurer responsibilities in his/her absence.

Other executive members: All will work towards the achievement of CFM objectives and assist villagers in successful completing of task outlined during annual planning, effective representation they are part of.

Following is the diagrammatic representation of structure:

Activity sharing of the functional units of selected CFM committee

1. NTFP Trade sub committee

This committee will be headed by a member from EB, and three other members will be the key persons to take care of the various activities by this committee. Primarily the NTFP Subcommittee will be fully responsible for promoting and managing NTFP trade of produces from the CFM area. Their responsibilities can be listed as:

- Conservation of NTFP species through protection and enrichment plantations
- Ensuring sustainable harvesting of NTFP and medicinal species
- Providing platform for traders and collectors interface.
- Keep record of NTFP removal from forest and market record of its sale
- Work in collaboration with the SHG groups and individual collectors to provide them with better returns on their collections..

- Attend workshops and meetings related to NTFP promotion statewide and disseminate the learning in the village.
- Keep written records of trade and forest potential study, updating it every two years, and presentation of NTFP status in monthly meetings and annual general meeting with support of Treasurer.

2. Forest Protection sub committee

This committee headed by a leader and three supporting members will arrange for the major activities of forest protection decide in the annual general assembly:

- Thengaplalli
- Chulichanda
- Forest inventory
- Small community plantation and gap filling exercise
- Grazing watch guard and demarcation of grazing area
- Cleaning, Thinning and pruning of overgrown vegetation in forest
- Record maintenance of permits issues, chulichanda collected and forest offences recorded

3. Bio diversity sub committee

4. The major responsibility of this sub committee will be to make arrangements for biodiversity conservation and enhancement in the forest area, which can be done through.

- Preparation and maintenance of Community biodiversity register (CBR)
- Coordinating forest inventory and biodiversity assessment exercise every three years.
- Creating awareness amongst villagers and in near by area to start working on a cluster level bio diversity conservation forum.
- This team will also play major role in species selection for community plantations and enrichment planting of important species in forest.
- Attending biodiversity trainings and act as local resource group for others.
- Arranging and updating the biodiversity record of the forest area, taking up 3 days assessment in all three seasons in forest (Winter, Summers and Rains)

Conflict resolution sub committee

This sub committee will take up all issues regarding law and order within and outside forests area which affects the working of CFM group, major responsibilities will be:

- Resolving inter and intra village conflicts over forest use or protection
- Fine and penalty related decisions will be handled by this committee: other sub committees will coordinate with them for their individual experts areas.
- This group along with president will represent CFM objective in any other village institution and outside unless specified.
- Liaisoning with other CFM groups, VSS, DFF and other organizations for better networking and mutual shafting.
- Developing CFM by laws for forest managements and committee working
- Keeping records of all their activities and sharing in monthly meetings and annual general assembly.

All these four sub committees will work independently and will work according to an annual plan finalized in by the body. But they will cooperate with each other in activities

which require mutual planning and implementation. In case of any irregularity in cooperation the president and vice president will resolve the doubts.

Overall Considerations for EB

- The executive body is selected or elect by the general body of the CFM committee.
- Women representation of the EB would be at least 50% in any conditions, right now its is 80%
- More than one person of nay family could not be elected to the EB.
- Representatives from all hamlets and all caste will be in the EB
- Persons having good record and experience would be selected
- Within the 6 office bearers 3 must be women, and alternate positions to be shared by men and women.
- The tenure of the EC is for 2 years.
- The EC will be prepared its rules regulations for its own management, there will be a separate document for management of the CFM committee.
- All the decision would be taken as final by 51% of majority, incase of conflict or emergency decisions will be taken by president and vice president together
- All the decision taken will be recorded in resolution book
- All the conflict would be resolved in village meeting, incase of conflict with other villagers inter village meetings will be called. A conflict resolution subcommittee has been formed to look after conflicts. Incase of committee fails to resolve the conflicts the matter may be referred to the cluster, zonal or District level committee. Legal action may be taken if the matter is not resolved or beyond comprehension.
- Women members will be the signatory of the CFM account.

Fund management

- A Joint account will be open in the name of the Committee in the nearest bank or Post Office. In the name of the president. Secretary and Treasurer.
- Committee will develop its own receipt book.
- Cash book to be written in Oriya.
- All the transaction will be made by the EC resolution.
- Committee will collect funds in terms of one time membership fee, chulichanda, fine, introducing pass/permit system, trade of NTFP and other contributions.
- Financial auditing to be done annually, results to be shared with all members in meeting
- Secretary will present the financial status in every monthly meeting.
- Funds can be utilizing in village development activities and the decision will be made at the EC level with consensus of members.

Records to be maintained by CFM group

The committee will maintain following records at village level.

1. Monthly meeting register.
2. Annual meeting register.
3. Chulichanda register
4. Receipt book.
5. NTFP exchange register
6. NTFP exchange register.
7. Notice book and Bank pass book.

All the records will be maintained by the leaders of individual sub committees and one copy to be provided to secretary of the CFMC in Oriya language, Final responsibility of the record lies with secretary.

Not permitted in any circumstances

Following actions can never be allowed in the Community forest management of Jamubani:

- No decision can be taken on wild life hunting and poaching.
- No members can encourage the forest fire.
- Commercial activities inside forest area (Logging, agriculture for cash crop, mining)
- Office bears can't decide anything without the ignorance of the committee

Important needs for SFM:

- Affordable time and money
- Focus on priority species and at the right scale
- Reliable and sufficiently accurate
- Starts with an initial assessment
- Multiyear planning
- Building the stakeholders capacity
- Management at a landscape level
- The practices should be culturally sensitive
- Enforcement of management rules by institution/gramsabha
- Monitoring
- Convergence

Table 1: Results from Baseline Survey Jamubani

Occupation	No of HH	House Hold Size	NO of HH
Agriculture	36	2 Only	
Business	2	2-5 members	27
Labour	8	6-8 members	12
		More than 8	6
Fuel Collection days	No of HH	Fuel Collection Q	
Less than 7 days	1	Less than 5 Q	1
Between 7-10 days	45	.Between 5-10 Q	
		More than 10 Q	
Kendu Collection days	No of HH		5
No Collection	10		10
One week	32		
Two weeks	4		
Saal seed collection days	No of HH	Saal Seed Quantity Kg	
No collection	38	Less than 10 Kg	38
4-10 days	8	10-30 Kg	2
		30-50 Kg	
		More than 50 Kg	5
Mahua seed collection days	No of HH	Mahua quantity kg	
No collection	4	Less than 10 Kg	928
8-15days	42	10-50 kg	5
		50-100 kg	2
		More than 50 kg	8
Mahua Flower collection days	No of HH	Mahua flower quantity	No of HH
No collection	2	Less than 50 kg	2
7-15 days	41	50-100 kg	8
		100-300kg	31
		More than 300kg	5

Table-2

Sl.no	Oriya Name	Scientific	Family	Trees	Poles	Saplings	Reported from no of Quadrates
1	Amla			0	1	58	15
2	Anchu			3	7	57	16
3	Asan			19	52	154	40
4	Atandi			0	3	10	4
5	Bahada			1	0	8	1
6	Bandhan			2	4	17	7
7	Barada			0	0	6	2
8	Bela			0	0	2	1
9	Bhaincha			6	0	6	26

10	Bhaila			6	6	54	17
11	BHeru			0	1	6	2
12	Bhiunkuruma			0	0	110	24
13	Bidanga			0	2	3	2
14	Bija			21	61	153	40
15	Char			0	1	10	3
16	Chauli			2	5	28	7
17	Damaguruda			0	1	8	1
18	Dhara			0	14	97	16
19	Dhataki			8	29	105	29
20	Dhaura			3	1	5	2
21	Dhobuni			3	1	9	3
22	Gandhiari			0	1	24	1
23	Gangasiuli			0	0	4	1
24	Ghantuki			0	2	57	12
25	Ghunduru			0	2	57	12
26	Gihri			0	0	26	6
27	Halaimanjha			0	2	3	2
28	Harida			2	3	19	9
29	Indrajaba			0	0	7	2
30	Jamu			0	6	15	6
31	Karada			3	13	153	27
32	Kasi			3	5	26	8
33	Kendu			6	23	208	45
34	Khaked			1	5	44	12
35	Kudingi			0	1	23	5
36	Khumbi			0	2	8	3
37	Kumbhaarkain			0	0	2	1
38	Kureet			0	0	83	16
39	Kurum			2	1	8	3
40	Kusuma			3	4	24	7
41	Lehpalasha			0	0	7	2
42	Mai			8	5	13	10
43	Mahua			86	39	150	40
44	Muturi			0	0	8	2
45	Palash			0	0	18	5
46	Paisal			0	1	8	2
47	Pijuli			0	0	3	1
48	Pingu			0	0	12	3
49	Rae			1	5	14	7
50	Rahani			6	11	69	14
51	Saal			372	140	285	55
52	Salai			9	6	12	6
53	Siali			0	1	35	8
54	Sidha			1	8	41	4
55	Sunari			0	2	14	4
56	Tilei			2	7	22	9

Table 3: Diversity wise representation for recorded species

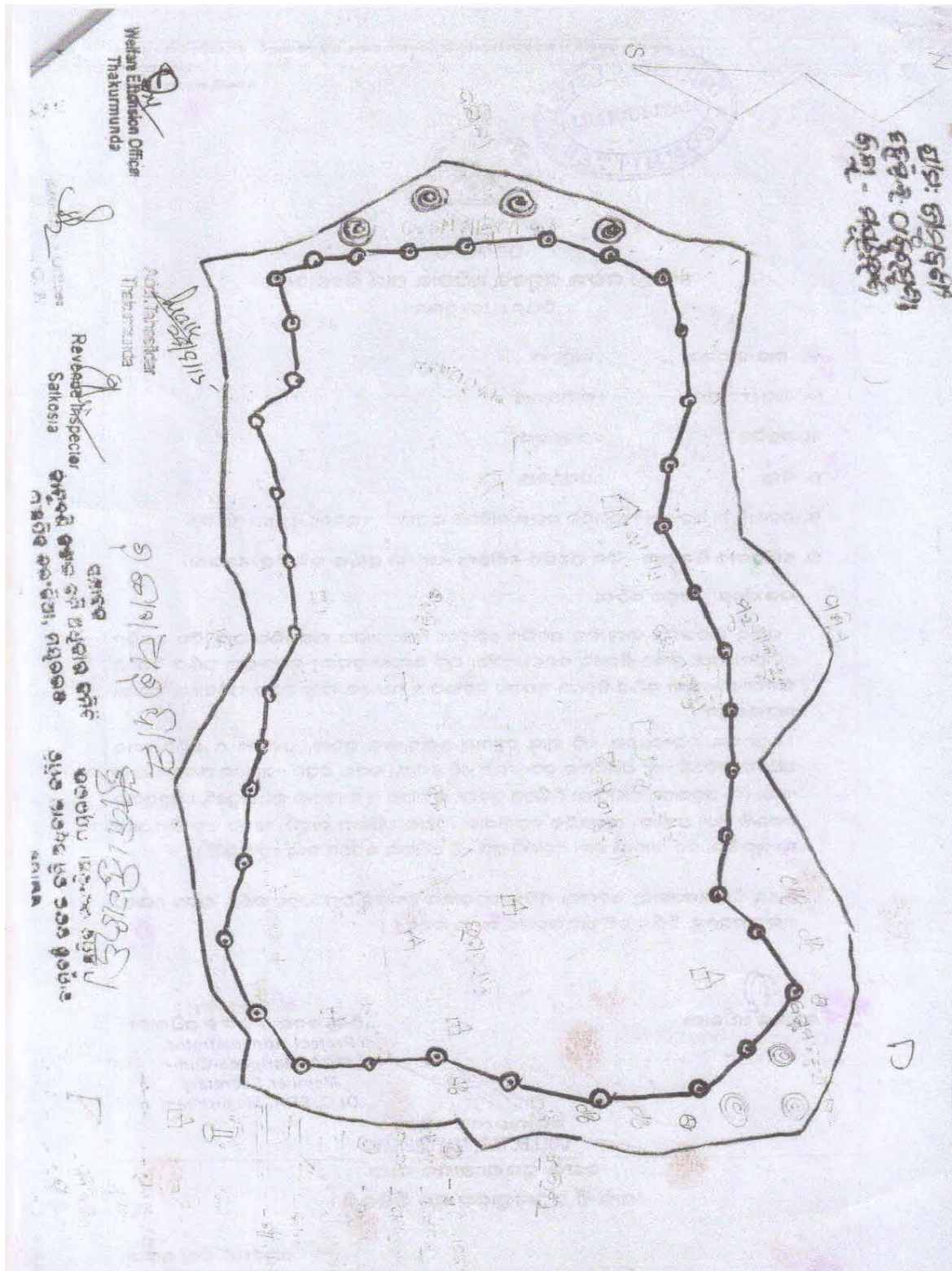
Name Oriya	% Frequency	Density	Abundance	RI_ Dominance	RI_ Frequency	RI_ density	IVI
Amla	25.00	0.98	3.93	0.02	0.09	173	184
Anchu	26.67	1.12	4.19	0.16	0.94	1.96	3.06
Asan	66.67	3.75	5.63	3.15	6.67	6.59	16.42
Atandi	6.67	0.22	3.25	0.03	0.28	0.38	0.69
Bahada	1.67	0.15	9.00	0.03	0.09	0.26	0.39
Bandhan	11.67	0.38	3.29	0.21	0.56	0.67	1.450.18
Barada	3.33	0.10	3.00	0.00	0.00	0.18	0.06
Bela	1.67	1.10	2.00	0.00	0.00	0.06	0.82
Bhaincha	43.33	0.02	0.23	0.08	0.56	0.18	3.43
Bhaila	28.33	1.83	3.88	0.36	1.13	1.93	0.31
Bheru	3.33	0.07	3.50	0.01	0.09	0.21	3.22
Bhiunkuruma	40.00	0.08	4.58	0.00	0.00	3.22	0.12
Bidanga	1.67	3.92	4.00	0.00	0.00	0.12	0.39
Bija	3.33	0.08	2.50	0.05	0.19	0.15	16.59
Char	66.67	3.92	5.88	2.00	7.71	6.89	0.42
Chauli	5.00	0.18	3.67	0.01	0.09	0.32	1.94
Damaguruda	11.67	0.58	5.00	0.26	0.66	1.03	0.36
Dhara	1.67	0.15	9.00	0.00	0.09	0.26	4.73
Dhataki	26.67	1.85	6.94	0.16	1.32	3.25	8.65
Dhaura	48.33	2.37	4.90	1.01	3.48	4.16	1.96
Dhobuni	3.33	0.15	4.50	1.32	0.38	0.26	0.95
Gandhiari	5.00	0.22	4.33	0.19	0.38	0.38	0.83
Gangasiuli	1.67	0.42	25.00	0.01	0.09	0.73	0.12
Ghantuki	1.67	0.07	4.00	0.00	0.00	0.12	1.94
Ghunduru	20.00	0.98	4.92	0.02	0.19	1.73	0.76
Gihri	10.00	0.43	4.33	0.00	0.00	0.76	0.76
Halaimanjha	3.33	0.08	2.50	0.02	0.19	0.15	0.36
Harida	15.00	0.40	2.67	0.12	0.47	0.70	1.29
Indrajaba	3.33	0.12	3.50	0.00	0.00	0.21	0.21
Jamu	10.00	0.35	3.50	0.08	0.56	0.62	1.26
Karada	45.00	2082	6.26	0.29	1.50	4.95	6.74
Kasi	13.33	0.57	4.25	0.38	0.75	1.00	2.13
Kendu	75.00	3.95	5.27	0.72	2.73	6.94	10.38
Khaked	20.00	0.83	4.17	0.05	0.56	1.46	2.08
Kudingi	8.33	0.45	5.40	0.05	0.38	0.79	1.22
Khumbi	5.00	0.17	3.33	0.03	0.19	0.29	0.51
Kumbharkain	1.67	0.03	2.00	0.00	0.00	0.06	0.06
Kurei	26.67	1.38	5.19	0.00	0.00	2.43	2.43
Kurum	5.00	0.18	3.67	0.22	0.28	0.32	0.82
Kusuma	11.67	0.52	4.43	0.23	0.66	0.91	1.79
Lehpalasha	3.33	0.12	3.50	0.00	0.00	0.21	0.21
Mai	16.67	0.43	2.60	0.51	1.22	0.76	2.50
Mahua	66.67	4.58	6.88	13.82	11.75	8.06	33.63

Muturi	3.33	0.13	4.00	0.00	0.00	0.23	0.23
Palash	8.33	0.30	3.60	0.00	0.00	0.53	0.53
Paisal	3.33	0.15	4.50	0.01	0.09	0.26	0.37
Pijuli	1.67	0.05	3.00	0.00	0.00	0.09	0.09
Pingu	5.00	0.20	4.00	0.00	0.00	0.35	0.35
Rae	11.67	0.33	2.86	0.13	0.56	0.59	1.28
Rahani	23.33	1.43	6.14	0.61	1.60	2.52	4.72
Saal	91.67	13.28	14.49	71.65	48.12	23.35	143.12
Salai	10.00	0.45	4.50	1.49	1.41	0.79	3.69
Siali	13.33	0.60	4.50	0.01	0.09	1.05	1.15
Sidha	6.67	0.83	12.50	0.19	0.85	1.46	2.51
Sunari	6.67	0.27	4.00	0.01	0.19	0.47	0.67
Tilei	15.00	0.52	3.44	0.30	0.85	0.91	2.06

Table 4: Biodiversity listing from Jamubani forest area

SL. No	Common Name	Scientific	Status
1.	Indian peafowl	Pavo Cristatus	Endemic/Common
2.	Pied hornbill	Anthracoceros albirostris	Resident/fairly common
3.	Indian gray hornbill	Ocyeros birostris	Endemic/Fairly Common
4.	Greater flame back	Chrysocolaptes lucidus	Resident/ Fairly Common
5.	Black rumped flame back	Dinopium benghalensis	Near endemic Common
6.	Coppersmith barbet	Megalaima haemocephala	Resident/ abundant
7.	Common Whoopee	Upupa epops	Resident / common
8.	Indian Roller	Coraceous bengalensis	Resident / common
9.	Common Kingfisher	Alecodo atthis	Resident /abundant
10.	White throated Kingfisher	Halcyon smynensis	Resident /abundant
11.	Green bee eater	Merops orientalis	Resident /abundant
12.	Blue tailed bee eater	Merops Philippinus	Resident/ Fairly Common
13.	Chestnut headed bee eater	Merops leschenanlti	Resident/ Fairly Common
14.	Pied cuckoo	Clamator Jacobinus	Resident / uncommon
15.	Common Hawk cuckoo	Hierococcyx varius	Resident / common
16.	Asian koel	Eudynamys scolopaced	Resident /abundant
17.	Greater coucal	Centropus sininsis	Resident /abundant
18.	Alexandrine parakeet	Psittacula eupartia	Resident/ Fairly Common
19.	Rose ringed parakeet	Psittacula Krameri	Resident /abundant
20.	Plum headed parakeet	Psittacula cyanocephala	Resident / common
21.	House swift	Apus affinis	Resident /abundant
22.	Crested tree swift	Hemiprocne coronala	Resident/ Fairly Common
23.	Barn owl	Tyto alba	Resident/ Fairly Common
24.	Collared Scops owl	Otus bakkamoena	Resident / uncommon
25.	Spotted owlet	Athene brama	Resident /abundant
26.	Indian Nightjar	Caprimulgus asiaticus	Resident /abundant
27.	Rock Pigeon	Columba livia	Resident /abundant
28.	Spotted dove	Streptopelia chinensis	Resident /abundant
29.	Eurasian collared dove	Streptopelia decaocta	Resident /abundant
30.	Emerald dove	Calcophaps indica	Resident / common
31.	Yellow footed green pigeon	Treron phoenicoptera	Resident / common

ANNEXURES





ପରିଶିଷ୍ଟ-୪
ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳର ଅଧିକାର ପାଇଁ ଶିରୋନାମା
 ନିୟମ ୮ (ଖ) ଦ୍ଵୟକ୍ୟ

୧. ଗ୍ରାମ/ଗ୍ରାମସଭା : କାମୁବଣା
 ୨. ଗ୍ରାମ ପଞ୍ଚାୟତ : ଭାଲିଆଡାଳ
 ୩. ତହସିଲ : ଠାକୁରପୁଣ୍ଡା
 ୪. ଜିଲ୍ଲା : ମୟୂରଭଞ୍ଜ
 ୫. ଜନକାତି ବା ଅନ୍ୟାନ୍ୟ ପାରମ୍ପରିକ ଜଙ୍ଗଲ ବାସିନ୍ଦା: ଭରସ (ଭକବା: ୧.୭୫୨.୦୦ ଟି.)
 ୬. ଚୌହଦାର ବିବରଣୀ - ତିର ପ୍ରଚଳିତ ଚୌହଦା ଏବଂ/ବା ସୁସ୍ଥ ଲୁମ୍ପି ଚିହ୍ନ/ଖେମରା/

କମ୍ପାଉଣ୍ଡେ ନମ୍ବର ସହିତ:

ଗ୍ରାମର ପାରମ୍ପରିକ ସାମା/ତିର ପ୍ରଚଳିତ ଚୌହଦା ଯଥା: ଗ୍ରାମର ପାରମ୍ପରିକ ସାମା/ତିର ପ୍ରଚଳିତ ଚୌହଦା ଯଥା: ଉତ୍ତର ଦିଗରେ ବରଲା ମୌଜା ପୂର୍ବ ଦିଗରେ ହୁଦଗଡ଼ ଜଳଭଣ୍ଡାର ପଶ୍ଚିମ ଦିଗରେ ମାତବେଳା ମୌଜା ଦକ୍ଷିଣ ଦିଗରେ ହୁଦଗଡ଼ ଜଳଭଣ୍ଡାର ମଧ୍ୟରେ ପରିବେଷ୍ଟିତ/ପରିବ୍ୟାପ୍ତ 'ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳ' ।

ଉପରୋକ୍ତ ବନ୍ଦାବଳରେ ଏହି ଗ୍ରାମ ସମୁଦାୟ/ଗୋଷ୍ଠୀଜଙ୍ଗଲ ସୁରକ୍ଷା, ସଂରକ୍ଷଣ ଓ ପରିଚାଳନାର ଅଧିକାର ରହିଥିବ ଏବଂ ଶିମ୍ବିଳିପାଳ ବନ୍ଦାବଳର ଏହି ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳ ସେମାନେ ଆଇନର ଧାରା ୩(୧) (ଖ) ଅନୁସାରେ ଦାୟିତ୍ଵା ଉପରେ ସୁରକ୍ଷା, ସଂରକ୍ଷଣ ଓ ବ୍ୟବହାର କରିଆସୁଛନ୍ତି । ଅନୁସୂଚିତ ଜନକାତି ଏବଂ ଅନ୍ୟାନ୍ୟ ପାରମ୍ପରିକ ବନ୍ଦାବଳୀ (ଜଙ୍ଗଲ ଅଧିକାର ସାବୁତି) ଆଇନ ଏବଂ ନିୟମରେ ଉଲ୍ଲେଖ ଥିବା ସର୍ବ ବ୍ୟତୀତ ଅନ୍ୟ କୌଣସି ସର୍ବ ଏହି ଅଧିକାର ଉପରେ ଲାଗୁ ହେବ ନାହିଁ ।

ଆମେ, ନିମ୍ନସ୍ୱାକ୍ଷରକାରୀ, ଏତଦ୍ଵାରା, ଓଡ଼ିଶା ସରକାରଙ୍କ ତରଫରୁ ଉପରୋକ୍ତ ବର୍ଣ୍ଣିତ ଗ୍ରାମର ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳକୁ ନିର୍ଦ୍ଦିଷ୍ଟ କରି ଆମ୍ଭମାନଙ୍କର ସ୍ୱାକ୍ଷର କରୁଛୁ ।

ବନଖଣ୍ଡ ଅଧିକାରୀ
 Divisional Forest Officer
 Karanjia Division

ଜିଲ୍ଲା ଜନକାତି ମଙ୍ଗଳ ଅଧିକାରୀ
 Project Administrator,
 ITDA, Baripada-Cum-
 Member Secretary
 DLC, FRA, Mayurbhanj

ଜିଲ୍ଲାପାଳ/ଉପ କମିଶନର
 COLLECTOR, MAYURBHANJ

ଜଙ୍ଗଲ ସୁରକ୍ଷା ଆମର ଦାୟା'
'ଶାନ୍ତି ହିଁ ସହାବସ୍ଥାନର ମୂଳ ଉଦ୍ଦିଷ୍ଟି ।'

ମୟୂରଭଞ୍ଜ ଜିଲ୍ଲା ପ୍ରଶାସନ



ପରିଶିଷ୍ଟ-୩

ନିୟମ ୮ (କ) ଦ୍ୱୟକ୍ୟ

ଗୋଷ୍ଠୀ ଅଧିକାରକୁ ଗିରୋନାମା

୧. ଗୋଷ୍ଠୀଗତ ଜଙ୍ଗଲ ଅଧିକାରଧାରୀଙ୍କ (ମାନ୍ଦଙ୍କ) ନାମ: କାମୁବଣା ଗ୍ରାମବାସୀଙ୍କୁ

୨. ଗ୍ରାମପଞ୍ଚାୟତ : କାମୁବଣା

୩. ଗ୍ରାମ ପଞ୍ଚାୟତ : ଭାଲିଆଡାଳ

୪. ଚତୁର୍ଥ : ଠାକୁରପୁରୀ

୫. ଜିଲ୍ଲା : ମୟୂରଭଞ୍ଜ

୬. ଜନଜାତି ବା ଅନ୍ୟାନ୍ୟ ପାରମ୍ପରିକ ଜଙ୍ଗଲ ବାସିନ୍ଦା: ଉଭୟ

୭. କି ପ୍ରକାର ଗୋଷ୍ଠୀ ଅଧିକାର:

(କ) ପାରମ୍ପରିକ ଭାବରେ ନିଜ ଗ୍ରାମ ମଧ୍ୟରେ ଏବଂ ଗ୍ରାମ ବାହାର ସୀମାରୁ ସଂଗ୍ରହ ହୋଇ ଆସୁଥିବା
ଲଗ୍ନ ବନଜାତ ଦ୍ରବ୍ୟ ଉପରେ ମାଲିକାନା, ସଂଗ୍ରହ, ବ୍ୟବହାର ଏବଂ ବିକ୍ରୟ ନିମନ୍ତେ ଅଧିକାର ।

(ଆଇନର ଧାରା ୩(୧) 'ଗ' ଏବଂ ନିୟମ ୨(ଘ) ଅନୁସାରେ)

(ଖ) ପାରମ୍ପରିକ ଭାବରେ ବ୍ୟବହୃତ ହୋଇ ଆସୁଥିବା ଜଳଉତ୍ସରୁଟିକୁ ମାଛ, ଜଳାୟବନ୍ତ ଆଦି ସଂଗ୍ରହ
ଉପରେ ଅଧିକାର ।

(ଆଇନର ଧାରା ୩(୧) 'ଘ' ଅନୁସାରେ)

(ଗ) ଗୋବର ଉଦ୍ଦେଶ୍ୟରେ ପାରମ୍ପରିକ ଭାବରେ ବ୍ୟବହୃତ ହୋଇ ଆସୁଥିବା ବନାମକ ଉପରେ
ଅଧିକାର ।

(ଆଇନର ଧାରା ୩(୧) 'ଘ' ଅନୁସାରେ)

(ଘ) ଶ୍ରେଣିବିବିଧତା, ଶୈଳିକ ସମ୍ପତ୍ତି ଓ ପାରମ୍ପରିକ ଜ୍ଞାନକୁ ପ୍ରବେଶ ପାଇଁ ଅଧିକାର ।

(ଆଇନର ଧାରା ୩(୧) 'ଗ' ଅନୁସାରେ)

(ଙ) ଦେବସ୍ଥଳୀ/କାହ୍ନିରା ଗୁଡିକ ପାରମ୍ପରିକ ରୀତିନୀତିରେ ପୂଜା କରିବାର ଅଧିକାର ।

(ଆଇନର ଧାରା ୩(୧) 'ଠ' ଅନୁସାରେ)

(ଚ) ପାରମ୍ପରିକ ଭାବରେ ବ୍ୟବହୃତ ହୋଇଆସୁଥିବା ଜଙ୍ଗଲ ଲାଞ୍ଜ ଉପରେ ଅଧିକାର ।

(ଆଇନର ଧାରା ୩(୧) 'ଠ' ଅନୁସାରେ)

(ଛ) ଗ୍ରାମର ପାରମ୍ପରିକ ସୀମା ମଧ୍ୟରୁ ଏବଂ ବାହାରୁ କାଳେଶାକାଠ, କୃପି ଉପକରଣ, ଘର ତିଆରି
ଇତ୍ୟାଦି ଉଦ୍ଦେଶ୍ୟରେ ପାରମ୍ପରିକ ଭାବରେ କାଠ ସଂଗ୍ରହ ଓ ବ୍ୟବହାର କରିବାର ଅଧିକାର ।

୮. ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ଅଧିକାରଧାରୀମାନଙ୍କ ଦାୟିତ୍ୱ ଓ ଅଧିକାର::

(ଆରମ୍ଭର ଧାରା ୩(୧) 'ଡ' ଅନୁସାରେ)

- (କ) ବନ୍ୟଜନ୍ତୁ, ଜଙ୍ଗଲ ଏବଂ ଜୈବ ବିବିଧତାର ସୁରକ୍ଷା ।
- (ଖ) ଜଳ ବିଭାଜନ, ଅଞ୍ଚଳ, ଜଳଭସ୍ମ ଏବଂ ଅନ୍ୟାନ୍ୟ ପରିବେଶୀୟ ସ୍ୱର୍ଣ୍ଣକାନ୍ଦର ଅଞ୍ଚଳଗୁଡ଼ିକୁ ପର୍ଯ୍ୟାପ୍ତ ଭାବେ ସୁରକ୍ଷା ପ୍ରଦାନ କରିବା ।
- (ଗ) ବନବାସୀ ଅନୁସୂଚିତ ଜନଜାତି ଏବଂ ଅନ୍ୟାନ୍ୟ ପାରମ୍ପରିକ ବନବାସୀଙ୍କ ବାସସ୍ଥଳୀର ସୁରକ୍ଷା ଏବଂ ଝାମ୍ପକାରୀ ପ୍ରକ୍ରିୟା ଦ୍ୱାରା ସେମାନଙ୍କର ସାମ୍ବୃଦ୍ଧିକ ଏବଂ ପ୍ରାକୃତିକ ଐତିହ୍ୟକୁ ସୁରକ୍ଷିତ ନହେବା ପାଇଁ ସୁରକ୍ଷା କରିବାର ପ୍ରଦାନ କରିବା ।
- (ଘ) 'ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳ' ର ବ୍ୟବହାର ନିୟନ୍ତ୍ରଣ ପାଇଁ ଗ୍ରାମସଭା ଦ୍ୱାରା ନିଆଯାଇଥିବା ନିୟମିତିକୁ ସୁନିଶ୍ଚିତ କରିବା ଏବଂ କୌଣସି କାର୍ଯ୍ୟ ପାହା ଜଙ୍ଗଲ, ବନ୍ୟପ୍ରାଣୀ ଓ ଜୈବ ବିବିଧତାକୁ ପ୍ରଭାବିତ କରୁଥିବା ତାହାକୁ ବନ୍ଦ କରିବା ।


୯. ଚୌହଦାର ବିବରଣୀ - ତିର ପ୍ରଚଳିତ ଚୌହଦା ଏବଂ /ବା ପୁରୁଷ ଭୂମି ଚିତ୍ର / ଖେମରା / କମାରମ୍ପୋର ନମ୍ବର ସହିତ::


- (କ) ଗ୍ରାମର ପାରମ୍ପରିକ ସାମା/ତିର ପ୍ରଚଳିତ ଚୌହଦା ଯଥା: ଉତ୍ତର ଦିଗରେ ବରଲା ମୌଜା ପୂର୍ବ ଦିଗରେ ହୁଦଗଡ଼ ଜଳଭଣ୍ଡାର ପଶ୍ଚିମ ଦିଗରେ ସାତବେଳା ମୌଜା ଦକ୍ଷିଣ ଦିଗରେ ହୁଦଗଡ଼ ଜଳଭଣ୍ଡାର ମଧ୍ୟରେ ପରିବେଷିତ/ପରିବ୍ୟାପ୍ତ 'ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳ' ।
- (ଖ) ଗ୍ରାମର ପାରମ୍ପରିକ ସାମା ବାହାରେ ଲଗ୍ନ ବନଜାତ ହୁବ୍ୟ ମଂଗ୍ରହ ଉଦ୍ଦେଶ୍ୟରେ ବ୍ୟବହୃତ ଜାମ୍ବବଣା ମୌଜାର ବସନ୍ତ ପାହାତ, ମହାଭୂତ, ପୁଟିଘାଉତୁଟି, ମେଣ୍ଟାମରା ଦୁଟି ଓ ଶିମିଳିପାଳ ବନାଞ୍ଚଳ ।

ଗୋଷ୍ଠୀଗତ ଜଙ୍ଗଲ ଅଧିକାରଧାରୀଙ୍କ ନାମ: ଜାମ୍ବବଣା ଗ୍ରାମବାସୀ ବୃନ୍ଦ ।

ଆମ୍ଭେ, ନିମ୍ନସାକ୍ଷରକାରୀ, ଏତଦ୍ୱାରା, ଓଡ଼ିଶା ସରକାରଙ୍କ ତରଫରୁ ଉପରମତେ ବର୍ଣ୍ଣିତ ଗ୍ରାମର ଗୋଷ୍ଠୀ ଜଙ୍ଗଲ ସମ୍ବଳକୁ ନିଶ୍ଚିତ କରି ଆୟମାନଙ୍କର ସାକ୍ଷର କରୁଛୁ ।


ବନଖଣ୍ଡ ଅଧିକାରୀ
Divisional Forest Officer
Karanja Division


କଲେକ୍ଟର/ରମ୍ଭ କମିଶନର
COLLECTOR, MAYURBHANJ


ଜିଲ୍ଲା ଜନଜାତି ମଙ୍ଗଳ ଅଧିକାରୀ
Project Administrator,
ITDA, Baripada-Cum-
Member Secretary
DLC, FRA, etc.

ଜଙ୍ଗଲ ସୁରକ୍ଷା ଆମର ଦାୟା
'ଶାନ୍ତି ହିଁ ସହାବସ୍ଥାନର ମୂଳ ଉଦ୍ଦିଷ୍ଟମି' ।

ମୟୂରଭଞ୍ଜ ଜିଲ୍ଲା ପ୍ରଶାସନ