2. Name of the village: VAINE
Taluk : Joida (U.K.)
Forest Division : Haliyal

I. VILLAGE BACKGROUND

Vaine is a revenue village 3 km away from Jagalbet. One has to travel 1 km from Jagalbet in Karwar road to reach Vaine cross. Then to the left, travelling in the mud road at a distance of 2 km Vaine is found. There is no bus facility to the village.

Forest is seen everywhere while going to the village on the left side of the mud road, paddy fields are seen spreading over a wide range. Houses are scattered here and there in a happazard manner. There is a school of Marathi medium upto 4th standard in the village. The dam site (Supa damsite near Ambikanagar is just 3 km away from the village. On one side of the village, paddy fields, are seen. On the other side small hills are seen. Forest is there everywhere at the edge of the fields and around the village. There are nineteen Janata quarters in the village.

Population

There are 65 families in the village. The total population of the village is 325. Out of 65 families 7 families are of Kunubi, 2 families are of Harijan and all other 56 families are of Marathas (Konkan Marathas). There are 74 (54 women and 20 gents) people illiterate in the age group of 9 to 40 years, statistics collected under Saksharata Andolan. There are 17 persons illiterate aboe 40 years. There are 35 Kunubi people, 4 Harijan people and all others are Konkan Marathas.

Land Holding

Out of 7 families of Kunubi 3 families are landless and other 4 ..10

families have 1½ acres of paddy fields each. Out of 2 families of Harijan, one is landless and the other has 1½ acre of paddy field. Out of 56 families of Hindu Maratha, 18 families are landless, other 18 families have paddy fields ranging from ½ acre to 6 acres. Since the land is only rainfed, and economically paddy crop is not sufficient to maintain the needs of the life in many of the families, they have become daily wage earners during the non-rainy season. Along with the landless people they also go towards Goa for earning. They do works like preparation of bricks and working in forest department for KFD. They are paid any 12 rupees as daily wage for working in forests. Due to the loss wages at the native male workers prefer to move towards town for the higher wages.

There is neither gobar gas plant nor pumpset in the village. There are 2 borewells in the village of which one has failed. Villagers dig Khadda (big pit) in their paddy fields, so that water is stored in them during the rainy season. People used to drink water from them. During the hot summer season, villagers suffer from scarcity of water. It leads to a great problem in the village.

Crops

Paddy is the only crop in the village. Since the land is only rainfed paddy is harvested only once in a year. No other crop is grown in the village due to the scarcity of water.

Livestock

The cattle population of the village is 175. Only 8 landless families do not have cattle. The distribution of cattle is uneven. It ranges from 1 to 5 in different families. Cattle population is decreasing year by year. Cattle are used for milk, manure and

ploughing the land. Cattle are worshipped in all the families during Diwali festival.

Dependency on Forest

Villagers depend on forest mainly for fuelwood. Fuelwood is brought on headloads by both men and women. Construction of houses is not done in recent years. Timber is used for agricultural equipments. Soppu and darku is not used.

II. ODA PLANTATION

The plantation is done near the village. It is done in the area more than 40 acres. It is a gap plantation. Different types of natural plants are spread thinly all over the area. More gap places are found where the saplings are planted during the month of June 1993. All the gap places are not filled with plants. The plantation will be completed, in the coming rainy season. The saplingx include acacia, Plants more than 90% and the other types being Matti, Beete, Sheegekai and Nelli. There is no encroachment problem in the plantation area. KFD has special affinity towards acacia plants. Board containing the discription of the plantation is not installed.

III. NEEDS

The plantation area was used mainly as grazing land. Fuelwood is also brought from the area in small quantity as the plants are not concentrated there.

IV. AFFECTS:

After the plantation work, cattle used to move a long distance for grazing. There is no difference in the availability of fuelwood for the villagers.

V. ASSESSMENT

Villagers feel that they are disturbed by the process of too much plantations in the area. In the recent years too much of Acacia plantations have been done in the forest areas near the village. As acacia prevents the growth of fodder, the fodder is lost substaintially in those areas. Morever trench is dug for the plantations. A special problem, the villagers are facing is the attack of tigers on cattle. 5 to 10 cattle are killed by the tigers every year. Tigers are near the dam site where the cattle move for grazing. Due to the above reasons, cattle population is diminishing every year, said Shri Dharmaji Ganapa Thakur. When the panchanama is done for the death of cattle, a poor compensation of Rs. 200 isgiven to the cattle owners by KFD. Eventhough villagers wanted the same situation to be continued (as the area is used for grazing purpose) KFD brought into practice its decision and the plantation was done without consulting the villagers. After one sided work of capturing the land for plantation, KFD held the first meeting. By that time villagers did not find any means to protest KFD. They surrendered and agreed to form JFPM in anticipation of monetary benefits out of the ODA plantation. When they were not able to retain the grazing land, they thought it is wise to have monetary benefits as least.

VI. JFPM

The first meeting was held during July 1993. Ranger (ODA), Ranger, Sub DFO, Forester and Guards were present at the meeting. Two persons from England were at the meeting. 50 villagers attended the meeting. 5 women participated. KFD officers gave the details of the new forestry programme. Villagers asked some questions in the meeting. ODA people enquired about the problems created out of this new

plantation. As usual, people have communication problem. Their speech was translated by KFD officers. When villagers said that the plantation area was a grazing land, the answer given by the KFD was that after 4 years, cattle can graze in the new plantation. upto that time grazing can be done in the remaining available forest areas. People prefered sagavani to acacia. Officers replied that acacia is the only variety which grow well in the area, sagavani does not grow well. Due to acacia the sources of water reduces in due our and the villagers are facing water problem, said the villagers. KFD assured to repair the tank in the village which is now in a very bad condition. Villagers did not argue much in the meeting. The function was almost one sided. Women did not ask any questions. The main committee was formed. Election was not held Shri Dharmaji Ganapa Takur has been selected as Chairman of JFPM. Nirmala Harijan was the Harijan members and Smt. Parwati Eashwar Thakur and Rukmini Ganapati Sambar were the women members. There is no Kushalakarmi in the village and the seat is kept vacant. Neither the certificate nor the booklet was issued to the members.

VII. PARTICIPATORY IDEAS

Villagers say that all types of natural forest plants grow in the area. But KFD desired to have acacia more about which villagers are not able to protest. Villagers even prefer sagavani based on monetary benefits. They want the sagavani plantation dine during 1992 to be included under new forestry programme so that villagers will be benefited. More KFD has assured to include the same. Everything is oral. Agreement is not done on stamp papers. There are no certificates or bonds issued to the villagers regarding the same.

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by: RGB

6. **Name of the village: GOBRAL**
Taluka : Joida (U.K.)
Forest Division : Haliyal

I. VILLAGE BACKGROUND

Gobral is a village 8 km away from Dandeli. One has to travel 6km in Dandeli-Ganeshgudi road so as to reach. Barchi where forest offices and the storage of forest produces are situated. By taking the deviating right and travelling 2 km on the tar road one reaches Gobral. It is a road connecting Barchi and Tavaragatte then through Londa to Belgum. But there are only two KSRTC buses plying on this road, since population is very less in this area. Eventhough there is a good tar road to the village, transport facilities are very less.

Forests are seen on either side of the road, and around the village. The forests contain all types of trees. KFD had planted teakwood plants in the gaps. While going to the village on the left side of the road, irrigated bamboo plantations are seen spread over 7 hectares and 4.5 hectares separately. One km before the village on the right side there is a building having a board installed with the following writings on it: "ಕರ್ನಾಟಕ ಸರ್ಕಾರ, ಜಲಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಜಲಪ್ರವಾಸ್ತ್ರ ವಿಕ್ಷಣಾ ಕೇಂದ್ರ, ಬರ್ಚಿ. ಸ್ಥಾಪನೆ: 1976. ಬೃಹತ್ ನೀರಾವರಿ ಸಂಶೋಧನೆ, ಧಾರವಾಡ".

There is a river called Karkanala flows on one side of the village. Water flows in this river throughout the year. KFD has cultivated a wet nursery on the bank of the river in Gobral village. No hills are seen anywhere near the village. At a long distance towards Tavaragatte, hills are seen. There is no school in the village.

Gobral village consists of 3 hamlets where the houses are clustered. There are called Gobral, Havalimala and Saitanamala. While going to

Gobral from Barchi, one finds Saitanamala just by the left side of road 1 km behind Gobral. There is a bridge near to it where water dries up completely in the summer season. Havalimala is situated on the right side of the road ½ furlong away from Gobral. A well established bus-stop is there in the right side of the road at Gobral contrary to this on the left side, cottages (houses) are made up of tiles which are constructed under Government scheme, all other houses are in bad condition giving uncertain shelter to the villagers. Gobral is absolutely a backward village without electric supply and very poor living conditions.

Population

There are 30 families in Gobral village including 8 families belonging to Havalimala and 5 families belonging to Saitanamala. The total population of the village is 137, including 40 people of Havalimala and 20 people of Saitanamala. Only 7 people of the village are literate. A literate youth of the village is conducting night classes infront of the busstop, people sitting around the fire lit by fuelwoods. There is an assurance to provide a light to conduct the classes under the "complete literacy campaign" (Sampurana Saksharata Andolan).

Out of 17 families whose houses are clustered at the place called Gobral, 2 families are of Christian with 14 people, 5 families are of Harijan with 23 people, 2 Hindu Maratha families with 8 people 1 Malabari family with only one person, 2 Gouli families with 11 people 2 Lingayat families with 5 people, 1 Konkoonkar family with 8 people, and 2 families of Muslim with 7 people.

Havalimala consists of 8 families with 40 people, all the families belonging to Gouli people. Saitanamala consists of 5 families with 20 people. Out of 5 families 3 are of Nayak while 2 families belong

to Muslim community.

Land holding:

Out of 17 families of Gobral, 2 Christian families each have 10 acres of cultivated lands, all the five Harijan families, 2 Hindu Maratha families, 2 Lingayat families, 1 Karkoonakar family, 2 Muslim families are landless, 2 Gouli families are combinedly cultivating 9 acres of land. While the only Malabari man is involved in sand contract, being landless.

In Havalimala all the 8 families are landless. Similarly all the families in Saitanamala are also landless. All the landless families are depending on coolie, engaged in forest works or working in quarries of the sand contractors. Women get work in the forest department throughout the year. Men get Rs. 17/- and women get Rs. 14/- per day as wages for working in Forest Department. Usually 4 members can fill one load of sand per day for which on an average a person gets Rs. 25/- as wage.

Crops

The villagers who have lands, cultivate it for the purpose of paddy crop only. Paddy being the main crop is cultivated during Kharif season. Countable number of banana trees can be seen around the houses in the village. The two Christian families have one pumpset each, by the use of which they cultivate sugarcane crop. Along with the sugarcane they grow vegetables and grass. Grass is sold to these families who are in need of it. There is an area of 7 acres (actually out of 10 acres, 3 acres left uncultivated) owned by a person residing at Dandeli, is meant for cultivating a type of grass. Oil is extracted from this grass and used for medicine. Water is supplied to the grass using a pumpset. People say that, the lands

in this area is not fertile enough and moreover irrigation facility is not provided. This year sugarcane crop is not grown. Shri Balu Ramu Buruke of village said that he was able to get only 5 bagsof paddy out of 9 acres of land, cultivated combinedly with his brother. Crop is spoiled due to the destruction by forest animals. Any other alternative cfop is not possible due to scarcity of water.

Since the river flows by the side of the village, people make use of it for all purposes. The path of the river is near to Saitanamala The people of Havalimala have to more 1 furlong to reach river. There are two borewells in the village, only one is in good condition.

Cattles

There are 65 cattles in the village, including 50 cattles in the Gouli families of Havalimala. There are no cattles in Saitanamala. All the families in Havalimala possess cattles, eventhough they are landless. Only one landless person who is involved in sand contract has 4 cattles of hybrid quality (not 100%) cattles are used for milk, manure and ploughing the land. They are not worshipped by many families. The main income for the Gouli families in Havalimala is selling the milk to Barchi and Dandeli. A family has 5 sheep, milk of which is being used for household purposes.

Dependency on Forest

The villagers depend on the forest mainly for fuelwoods. Theyuse pure manure of cattles and neither the green leaves nor the dry leaves are used. The timber (smaller ones) is used for the purpose of fencing the fields. It is also used for constructing houses (bamboo is used more) and preparing agricultural equipments. Villagers don't get sufficient timber to have strong houses. For the repair works too, they have to get bamboo secretely. The

produces of the forest like honey and Shigekai have been sold to the contractors from Belgum side the KFD. Contractors get the help of villagers for this purposes paying them some wages.

II. ODA PLANTATION

The plantation done under ODA scheme is between Gobral and Havalimala covering the area of 50 acres. It is in the Gobral Forest Survey Number-2. The trench has been dug around the area. The plantation work started in the month of June 1993. The centre land of the area was cultivated by some families (mainly Goulis) for the purpose of paddy crops. In the plantation, acacia and teak are seen on the sides while most of the area is planted with mango, jack, neem and other forest plants. Comparatively acacia and teak are very less in number.

III. NEEDS

The area was used for cultivation as well as grazing land and carrying grass from that land for cattles. It was used for the above purposes not only by Gobral village but also by the nearby villages like Barchi, Vitnal etc. The main purpose of the plantation seems to vacate the encroached families from the place. At the edges of the cultivated area in the plantation there are nearly 200 trees of different natural species. The area is sloped towards the middle, such the water will be stored during the rainy season.

IV. AFFECTS

The people tried to retain their encroached land and fought for it. But at the end they were forced to surrender. As for as the grazing land is concerned, there is vast forest area for the purpose apart from the ODA plantation area. Villagers are permitted to get the

grass(Karada) from this area. The major affect felt by the villagers is the hard reality of loosing the lands which they used for cultivation.

V. ASSESSMENT

At the beginning the villagers did not accept the ODA plantation to be done at the area, since the area was acquired by some families for the cultivation purposes. Those families even tried to construct their cottages (Jopadies) in the area. Many families used to cultivate the land since several years. But five years back, KFD stoped them from cultivation and planted bamboo plants in large scale, matti and other plants on small scale. Thus the land was acquired by KFD and was converted into plantation. But the nature of the land was not good for plantation due to water logging.

In the rainy season too much water is stored in the area which results in rotting the roots of the plants. Then the extreme situation is seen in summer season i.e., land completely dries up and the land breaks everywhere. By this abnormal conditions, the plantation done by KFD, five years back has completely vanished. Nobody acquired the land for 2 years and the land was left fallow. Again the Gouli people started cultivating the land. Even, then KFD officials like Guards acquired the land for the purpose of cultivation Due to stock of water paddy was growing well. Villagers feel that the area is comparatively more fertile and good for getting paddy crop.

The concerned villagers wrote applications to authorities for the permanent acquirition of the land. But nobody responded to them. Before the start of rainy season in 1993, KFD has forced all the encroached families to vacate the place. Even the KFD guards have

acquired the land left it to KFD as they were transfered to other place. Thus even a single family is not allowed to have their land in the plantation area.

Eventhough the villagers fought against the act of KFD, they were not successful. But a person who fought firmly for the same has seen the instant success and was in vain at the end. Shri Gangaram Biru Lambar now residing at Barchi (Vitnal) had his cottage constructed in the plantation area. He was no strike and did not leave the encroached land to KFD. But under the forest act, he was arrested and the released. He approached Shri R.B. Deshpande, MLA of that area, and opposition leader and got a letter from, him. Then KFD has shown him an area in the forest. He rejected the proposal as the place was not good for cultivation and having forest animals. KFD (Barchi range) has shows him a plain area to be cultivated on the bank of the Gobral river. The land was under Dandeli Range Forest. In the last rainy season he cultivated nearly 10 acres of land and sowed paddy seeds. Before the harvest of the paddy crop, his cottage and the fence were destroyed and removed by the RFO, Dandeli Range. Now he does not possess the land at all. He was totally misguided by the officials.

VI. JFPM

When the encroached families were vacated from the area, trench was dug and the plants were planted by the KFD. They did not approach the people during plantation. The first meeting was held on 20/10/93. Special RFO, DFO (ODA) were present along with the Ranger, Forester and Guards. Almost all the villagers including women were present at the meeting. The meeting was held infront of the bus-stop. KFD officers explained about the new plan. But the people did not

understand the project. A very interesting doubt was raised in the meeting by the villagers. It was like this ODA plantation consists more of forest plants, acacia and teak being very less in number. It takes nearly 25 years for the natural plants to grow well. There is nothing in expecting 25% of the income after 25 years. It is almost useless and meaningless. After 3 years, the responsibility of protecting the plantation is on the shoulders of the villagers. There is no meaning in doing such work in anticipation of profit the KFD officials diverted the matter. The asked the people to accept the project. In turn they assured the villagers assisting the helps from government like providing tiles, electricity, borewell and medicines for the cattles. Villagers were attracted by such promises.

Another demand put forth by the villagers at the meeting was that they wanted 2 acres of land per family on the banks of the river. But officers denided the proposal and said that it is out of their reach and are helpless. The villagers are so poor that they could not purchase tiles for their houses. Such being the economic condition and attracted by the expected facilities, villagers were ready to form JFPM.

All the families were made members (of Rs. 2/-) of the committee. For the main committee election was not done. The members were elected unanimously. Shri John George was made Chairman of JFPM. The other members selected were Shri T.R. Chandrashekhar, Shri Kallapp Harijan, Shri Navalu Janu Jore, Shri Amit Dundappa Kambli, Smt Laxmavva Shamba Kankoonkar, Smt Madevi Kempamma Kambli, Shri Bammu Sonu Gorake, Shri Motu Ramu Gorake. In the first meeting 50 cups of tea was distributed and the expense was met by KFD. Certificates were

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not issued. The booklet containing by laws were given to the members.

In the second meeting, Barchi Ranger along with the Forester and Guard were present. He told the villagers to use the grass from the plantation area, for the cattles and sell Nelli. Even he permitted the villagers to sell timber (dry trees) and to include the income to JFPM fund. Really there is not timber (dry trees) in the plantation area. The villagers remainded him of his promised to provide tiles for their houses. But now he told the people to ask MLA and the government and bring pressure on them. Thus he escaped from the responsibility. Villagers were surprised by his act. To have the tiles is the need of the hour for the villagers, otherwise they can not live in the cottages in the coming rainy season. For the roof the cottages, since several years, they were using the dry leaves of sugarcane. But this years sugarcane crop is not grown. They even warned the Ranger that if they were not provided with the facilities, they will quit the village and migrate to other place and there will be no persons to look after the plantation. Just by installing one pole, electricity can be provided to the village. It is an irony that eventhough electric line passes through the village, the village is deprived of the same. Now the Chairman of JFPM is trying to get the tiles and electricity to the village. In the subsquent meetings, villagers are putting the same demands.

VII. PARTICIPATORY IDEAS

Since these are forests seen every where people do not see the necessity of growing forests through plantations. The density of population is comparatively very less in this village. They want to have lands for cultivation, especially in the ODA plantation area of on the banks of the river. As it is said by Shri Balu Ramu Gorake, there are many gap places found in the forest areas, if the KFD want

to develop forest through plantations they have suffieient work to be done in such areas for the coming ten years. It is good to leave the ODA plantation area for the purpose of paddy cultivation.

It is already experienced that, without the proper arrangement of water and other facilities to the plantation area no one can except plantations there, villagers strongly feel that almost all the pla are going to die in the summer season.

NOTE: The two rupees receipt given to all the families of the village read as follows:

ಪಶ್ಚಿಮಘಟ್ಟ ಅರಣ್ಯಯೋಜನೆ, ಹಳಿಯಾಳ ವಿಭಾಗ,
ಸಂಯುಕ್ತ ಅರಣ್ಯಯೋಜನೆ ಹಾಗೂ ನಿರ್ವಹಣೆ
ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿ.

ಸಂ.:_____ ದಿನಾಂಕ:_____

ಶ್ರೀಮತಿ/ಶ್ರೀ._____ ಊರು._____

ತಾಲ್ಲೂಕು_____ ಇವರಿಂದ ರೂ._____ (ಅಕ್ಷರಗಳಲ್ಲಿ_____
_____) ಮಾತ್ರ ಸದಸ್ಯತ್ವದ ಶುಲ್ಕ ಸಂದಾಯವಾಗಿದೆ.

ಸಹಿ.

ಎನಹಾಲರೆ ಹಾಗೂ ಕಾರ್ಯದರ್ಶಿ.

For the SC/ST families the membership fees charged is only Rs.1/-

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Report by: RGB

13. Name of the village: HITLAHALLI
Taluka : Yellapur (U.K.)
Forest Division : Yellapur

Discription of village families:

There are about 70 families in the village. The total population is 765 (1991 census), literates-691, illiterates-74. Out of 70 families nearly half of them belong to Havyak Brahmins and almost cent percent of them are literate. Most of the village land belongs to these people which includes paddy fields, areca gardens and bettaland (semi forest land). Majority of them possess biogass plant. so they need very less quantity of fuelwood which is supplied mainly by their own betta lands. Fodder for cattle is also collected through private land. The cattle is not allowed to graze outside during summer months. Few of them allow their cattle to graze outside during rainy season. Almost seventy percent of the cattle population belong to these community.

The other half consists of Naiks, Sherugars, Gowdas and Siddis etc. In these category illiteracy is common. Many of them are landless labourers. Their cattle depend on forest for grazing. Fuelwood supply is also mainly from the forest. Many of them depend on forest for honey, wild spice and fruit collection, bamboo and other agricultural implements are furnished through major or minor forest areas.

WOMEN AND FOREST

The dependency of women forest is not less than the men. They collect fuelwood from the jungle. Daily they move around to gather dried twigs, roots, branches etc., specially lower class women

collect plant partsto use as fuelwood. They collect leaves to feed their cattle. Dried leaves and cowdung are collected from minor forest which are used for making Farm Yard Manure.

Collection of green leaves, of vegetables, curry, leaves, mushrooms wild fruits etc., is done mainly by women folk of the village. In minor jungles fruits like Nelli (Emblica officianalis) 'Carambola' (Carissa carondas) etc., are collected. These fruits are help full in preparing pickles, and jams. Many poor women, collect leaves of Beautea monosperona which are used as plates for eating food.

II. ODA PLANTATION

This year more than 30 hectares of minor forest lands are used for teak plantations in survey No. 200. Thousands of teak plantswere planted during June-July month (1993). Barbed wire fence was errected around the plot to protect against human and cattle intrustion. Thus, it is an attempt to alineate part of common property resources.

Real motive is to-

1) Increase plant/tree coverage on the area.
2) To stop animal grazing and fuelwood collection
3) Growing many types of usefull trees like fruit trees, bamboos, Green leaf giving trees (soppu and darku) and soapnut trees etc. Fuelwood collection is allowed when sufficient fuelwood trees are grown in that plantation.

III. NEEDS

In survey number 200 it was a minor forest before fencing. This land was mainly useful for:

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1) Animal grazing during rainy season since grass used to grow here.

2) Fuelwood collection, dried plant parts were collected from this land mainly by agricultural labourers of the village.

3) Villagers used to collect- thorny plants for (fencing). Minor agricultural implements were prepared by using various kinds of plants that were grown like Kare (Carthium parviflorum) for fencing, Gonagilu (Canthium spp for fening), Mathi (Terminalia spp) Honne (Plerocorpus morsupium). Green leaves (soppu), and dry leaves (darku) were collected from this area by some farmers who are nearer to the area. This area had lot of wild fruitbearing shrubs. Many of them giving sweet fruits like 'Paragi'(Kari mulle) and Bélemulle hannu etc. The other usefull plant which grown here were Emblica officianalis, village women collect fruits of this plant in particular season of the year for pickle.

Todpy due to the fencing, all these activities have stoped. Fuel wood collection and grazing has become impossible.

As the community members say the real need of converting this land is to get the -

1) Timber and fuelwoods (2) Fodder and bamboos (3) Green leaves (soppu) and dry leaves (darku) from the area (4) Getting fruits like jack (Artocarpus heterophyllus), kokam etc. (5) other uses like getting soapnuts (Terminalia chebula) etc.

IV. AFFECTS OF PLANTATION

On people:

1) Primary affect is to the people who are nearer to the area. They can't get short cut route to their home, because of the fencing. They have to walk along the road. The plantationhas disrupted common briddle path used by villagers.

2) Fuelwood collection has become impossible due to fencing. If teak plants are allowed to grow continuously then other fuelwood plants will not grow under the shade of this tree.

3) Animal grazing and fodder collection has become impossible due to the fencing and teak plantation. Again nothing will grow under the shade of the teak plant so fodder availability will be reduced.

4) Villagers are not free to collect timbers for, house and for agricultural implements. They are not allowed to collect thorny shrubs and poles for fencing.

5) Village women can't collect the fruits like Emblica officinalia paragi or even natural dye like Terminalia chebula

On Cattle

Today cattles can't graze in the area. The available grazing area is reduced due to the fencing in 30 ha of area. This created pressure on the other forest area and poor people. In this area cattle from weaker sections used to graze during summer and rainy seasons. Less availability of fodder keeps the cattles unhealthy. In order to fullfil their fodder needs they encroach upon other farmers field. It created dispute among the people. These cases are becoming more common now. ODA plantation has aggravated the tension in the village due to increased pressure on grazing land.

On ecology

Growth and development of naturally regenerating plants is hindered. This land mainly consisted of grasses, shrubs, herbs and many type. of deciduous trees. Thorny bushes themselves controlled the animal grazing on certain extent and thus allowed natural regeneration of like Emblica officinalis, Honne (Pterocorpus marsupium), Matti

(Terminalia panialita), Terminalia chebula.

Medicinal plants like- Holarrhena antidysenterica will not grow here if other plants start to supress it.

Teak plants will certainly supress all other forms of the life including plants, animals, insects and microbs. Nothing will grow underneath teak plants. So various needs of the farm and family will not met.

V. Initiation of new forestry programme is done mainly by forest department. During July-August months teak plantation were established in the village. People began to realise about this programme very recently. In the beginning of the November 1993 itself villagers heard about the JFPM. Village forest guards visited each houses and collected name of each family member. They told that they were going to form village committee members for JFPM. When first joint meeting was conducted, villagers were hinted about the joint forest programme. Detail information regarding the project is not known to many people.

VI.

First meeting of Joint Forest committee was held on 20th November 1993. This meeting was conducted nearly for two hours in the evening in between 5 to 7 PM. Officials attended were DFOs from Yellapur division and Mundgod division. Area Supervisor (Ranger) Manchikeri, Foresters and Guards (local) etc. About 50 villagers attended the meeting which includes former Mandal Pradhans (President) of the area. Both higher and lower class people equally attended the meeting.

Village women did not attended the meeting and there was no women member present in the meeting.

Assurage given:

1) About the programme: Information regarding the programme and essentiality about joint forest committee. Members are free to express their opinion regarding the improvement of forest and needs of the villagers etc.

2) Financial facility and plant supply is done through department. Farmers can also plant with the help of government assistance. Initial financial assistance is through mainly government.

3) In the selected area, teak and other type of (mainly acacia) timber and fuelwood plants are already planted. Other type of desired plants will be cultivated if farmers committee members desired it like fruit plants bamboo, kokam plants which give green leaves (soppu and darku etc.).

4) Initially those areas are selected where plant density is below 9.25. Betta or semi forest land can also be used for this purpose if the farmers desire to cultivated it.

5) Sharing the forest income or out put is according to the rule, generally for timber plants 50% goes to department, 25% is distributed in the name of village committee and other 25% can be shared among the village committee members.

VI AND VII OPINIONS:

1) D.T. HEGDE, JALIMANE (Chairman of the village committee and former Mandal Pradhan of the area). About committee: It is good if government and public people are equally involved in forest

management. But committee does not have any power over any officials. All power is remaining with government officials. Committee can't decide anything against government officials.

Participation: Farmers can suggest about improvement of the forest planting. Plan supply is done mainly through forest department.

2) G.I. BHAT, COMMITTEE MEMBER: About committee- it is really a positive movement if public is involved, it gives good opportunity to the villagers to improve and share the forest products.

Participation: Farmers can plant any desired species with the assistance of government.

3) GAJANANA HEGDE (MEMBER): About committee: Committees do nothing except giving some suggestion to the government. So for village committee is represented by all sections of the village.

Participation: Not exactly known. He will plant if proper assistance is given in any type of land, provided that some returns he should get out of it.

4) RAHU SHERUGAR (MEMBER): Not participated in the meeting. No ideas regarding the role of committee-

Improvement: He will plant, any type of plant provided that he should earn something from it.

5) MADEVI HEGDE: No idea regarding committee or improvement.

(6) PARU NAIK: She heard something about Joint Forestry Programme. Committee members will be definately helpfull in improving the

forest, she wants to cultivate useful plants like mango, jack, kokam, soapnut plants. Provided that she should get some fruits/ or products.

Report by: TSH

14. Name of the village: GOTAGODIKOPPA
Taluka : Mundggd (U.K.)
Forest Division : Yellapur

I. VILLAGE BACKGROUND

Village families: 200
Population : 1,500

The village is near Malagi in Mundgod taluk called Gotagodikoppa. The village is 34 km from Sirsi, on Sirsi-Hubli road. Gotagodikoppa is nearest big village for Malagi. To go to Gotagodikoppa we have to walk 4 km from Malagi.

The village is surrounded by the forest. It is on the edge of Western Ghats.

Description of village families

Totally 200 families are living in the village. All of them are farmers. Out of 200 families 180 families are having their own land recognised by the government, and other 20 families in which Muslims are more do not have land. Eventhough government has given 4 acres of government land to each family.

The whole village depends on agriculture. All of them depend on the rain water for their occupation. The main crops of the village are paddy, chilly and maize. The people of the village are adopting the old method of cultivation. The people are not interested in the modern methods for the production of crops. The farmers are using different types of paddies like Jaya, Intan, Dadiga, Haldodiga etc.

Population of the village

Village population: 1,500

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Total population of the village is thousand five hundred, This population shows that each family has an average of 7 to 8 members. But 50% of the people belong to Lingayat caste, 30% are of backward class, that is of SC and ST and remaining 15% are Muslim. Out of 1500 population 800 people are males and remaining 700 females.

Literate & Illiterate:

Only 40% of the people are able to read and write and nearly 60% don't know how to read and write. Out of 1500 population only a single person is in government job that is in Forest department (Watch men). Due to illiteracy of the village and high population, the village is very backward. There is a middle school in the village. Totally 200 children are studying in different classes from I to VII.

WOmen Dependency on Forest

Fuelwood/Fodder

Only two gobar gas plants can be seen in the village. So it is clear that their families are using wood as fuel for cooking purposes. All most all the families have their own tiled houses. This is clearly shows that the villagers are using the wood as building materials and agricultural quipments are also wood products. The village women are also depend on forest product for their daily needs. In the rainy season women go to the forest area for grazing the cattle. In the summer season they go to forest to collect fuelwood for cooking purposes. Due to this, the people are using the plants which is available easily. In another way the people are cutting the plants and also wasting the wood. In the village, some of the people are saying that the whole forest may come extinct if the cutting of plants for wood continues in the same manner.

Cattle Population

Cattle population: 2,000
Sheeps population: 30

Total cattle population of the village is 2,000 out of 200 families 180 families are having their own cattles. They are using these cattles for the cultivation of land and also to get milk for daily uses and to get manure. And in some Lingayat caste uses the cattles for religious purposes. The remaining 20 families are not having their cattles due to the poverty. They are buying the milk, and manure from their neighbourhood. Out of 200 families only a single family is having the sheep. He is mainly using the sheeps for sale and he get manure and milk.

In the rainy season, all the families will leave their cattles freely. The cattles usually go to the forest for grazing and they will return back to the home in the evening. But in summer season. Some families do not allow the cattles to go out for grazing. In the home they will supply everything to the cattles. Even the people of the village are using the forest in many ways, the environment at the present movement is good.

II. ODA PLANTATION

Area: 25 acres
Survey No.: 25
Model: All purposes
Preparation for plantation on: 10/6/93
Plantation were done on: 25/7/93
To stop encroachment on: 26/7/93

Under the "Western Ghat Development Planning Scheme" 25 acres of land had been transplanted in the survey number 25. To protect the plants they covered the whole plantation area by the fence. The

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entrance the plantation for the cattles is strictly prohibited. All type of seedlings are planted in this area. Those are sapindus, Latifolius, Bamboo, Lagerstroemia, lanceolata, Terminalia indica, jackfruit tree etc., are planted. So it is all purposes Model.

III. NEEDS:

Some day before, the village people were using the plants both from the forest as well as from the plantation area. But now the situation is quite changed. People are not using any plants which are available in the plantation area. But they did not stop the cutting of plants in the forest.

- Fuelwood
- Fodder
- Fertilizer (green leaves)

Now the village peoples are going to another forest for their fuel wood, fodder and fertilizer. That forest is very long distance from the village. Even though they go to that forest, forest product is not easily available to the villagers.

IV. AFFECTS OF PLANTATION

On People: Now the villagers face so many problems, because their daily needs (minor forest product, agriculture, implements, timber for houses) are not easily available. They go to long distance for these things.

On Cattle: The village cattles going to long distance for grazing because the nearest forest is covered by fence and strictly prohibited.

On Ecology of the area: According to some farmers the new plant which are going in the area, develops the environment of whole

Village. Some people are getting fruits from the plantation area. Also government is providing the work on daily wages to the poor people which made the whole village satisfactory.

V-VI:

Under the scheme of Western Ghats Development had arranged a function on June 1993 in the primary school Gotagodikoppa. For the function show S.H. Naik, DFO Yellapur, and Ranger Forest of the division participated in the function. Two hundred people attended the function. In the function with others DFO discussed about their preplanned plantation. In function S.H. Naik told the forest department had already decided to prepare a plantation in 25 acres of government land. He requested the people to help the forest department. He explained the preplanned plantation in front of others he told that forest department is going to put every type of plants in the area. He requested the people not to leave the cattle inside the plantation till 3 years and not to cut the trees for any other purposes. In his speech he told they will make a forest committee in the village for the development of plantation. From the village any one can become the member of the committee giving Rs. 2.00 as a entrance fee. The member has the authority about plantation area. The officer continued that after some years the forest will be cut the plants and they will sell the wood. Half of the income will be given to the members of the committee. He told that the money can be used in any way by the members or even the members can use the plants woods, instead of meney giving all these information DFO concluded his words.

By the help of the people plantation is made already. But till now committee is not constructed in the village.

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After some days that is on 2nd August, the forest department had arranged another function in the middle school of Gotagodikoppa. S.H. Naik (DFO), H.P. Joshi (AEO) of Mundgod, V.R. Naik Asst. Range Forest Officer, Mundogd, B. H. Naik Subregion Forest Officer Katur, V.D. Naik Range Forest Officer Mundgod, Teachers of the Middle School and 250 people of the village attended the function but village women are not attended that function. All they discussed about plantation by putting a plant in the school compound. The people of the village made a fence for the school compound. But in the second function also the officer didn't tell anything about the construction of the committee.

Totally plantation was completed some days before the village only the people of the village in a meeting discussed to make a committee themselves. People are telling that they are going to constrct a committee very soon.

VII.

The participation of the village people in planting trees shows that they are supporting the forest department in this respect. No cattle of the village enter the plantations area which makes clear that the people are taking interest about the plants. For any single purpose they are not using plant of this area. They are taking more and more care about the plantation.

The idea of the people about the plantation is to construct big plants and in this respect they want to make their village as a model to the others.

Report by : Girish

18. Name of the village: KERAVALLI
Taluka : Honnavar (U.K.)
Forest Division : Honnavar

I. VILLAGE BACKGROUND

Keravalli is a revenue village 19km away from Honnavar town. One has to travel 17km in the Honnavar-Gerusoppa Main Road and get down at Keravalli cross. Then to the right, a mud road moves to the village. At a distance of ½ km, a primary school upto 4th standard is situated. By the side of the primary school a mill (rice, oil and flour) owned by Shri S.N. Hegde covering the area of12 gunats is seen. In the compound there is a hosiery shop too. Before the primary shool, to the right side, acacia plantations are seen in a troubled or planted five years back. Plants are cut off everywhere and the plants are weak due to use of green or leaves from these plants.

Plain area is seen on either side of the mud road around the school. Most of the area is under Malki of some families, partitions are observed by compound walls. Spreading groundnut and grass are grown in these areas. The area is absolutely plantless. At a distance to the right a hill starts. Some families have encroached the lands on the hill. Some cashew plants are seen along with groundnut fields. On the way to Keravalli, 3-4 shops are seen. At a distance of about 1 km from the school, at the foot of the hill (Keravalli) houses are built. There is a big hill back to the village. ODA plantation is done on this hill which welcomes people at the entrance of the village.

Keravalli is spread on the right bank of Sharavati river. The cultivated area contains paddy and sugarcane fields. Then the arecanut plantations appear all along the bottom of the hills. Coconut trees and banana trees rarely appear in the plantation.

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Opposite to the village, on the other side of Sharavati river, the hills are seen with green vegetation.

Population:

Total number of families in the village is 102. The total population of the village is 539. 263 males and 276 females. There are 150 illiterates (25%) in the village (below 6 years not included). 70 persons in the age group of 9-40 years are attending the night schools run under 'Sampurna Saksharata Andolan'. There are 40 Patgar (Gram Okkal) families with 250 people, 35 Namadhari (Naik) families with 280 people, 21 Christian families with 84 people, and 6 Havyak Brahmin families with 25 people. There is 100% literacy in Havyak Brahmin and Christian families. Illiteracy is seen more in Gram Okkal families. In these families all persons with age more than 40 years illiterate.

Land Holding

Out of 35 Namadhari families, 5 families are not having their own land, 3 families have 20 gunta each of coconut plantation, 3 families have 15 gunta each of arecanut and coconut plantations. Other have paddy fields ranging from 5 gunta to 1¼ acre. Out of 40 families of Patagars 2 are landless, 9 families have 15 gunta each of arecanut plantations, others having 5 to 15 gunta of arecanut plantations. One of 21 Christian families 10 families are landless, 3 families have 15 gunta each of arecanut and coconut plantations, 2 families possess half acres of paddy fields, others having 5 to 19 gunta lands. All Havyak Brahmin families own cultivated lands, 15 gunta to ¼ acre of arecanut plantations along with 20 gunta to 1 acre of paddy fields. The landless families depend on coolie like cutting the rocks, seasonally going to upper hill regions (Sirsi, Siddapur, Yellapur) to harvest arecanuts and working for other families in the village on daily wage basis.

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Since a part of the ODA plantation area covers Forest Survey Number of Jalawallikarki a neighbouring village, 15 families of Jalavallikarki are included in the JFPMC

Details of JALAVALLIKARI (Another Hamlet included in VFC)

10 families of Kumbars and 5 families of Namadhari (Naik totally 15) families are included in JFPMC. There are 55 people in Kumbar families and 30 people in Namadhari families. The Kumbar families are landless now, as they left the encroached land on the hills for the purpose of ODA plantations. Out of 5 Namadhari families, 1 family has ½ acre of arecanut plantation, 2 families have 1 to 2 acres of paddy fields, other 2 families are landless. Nearly 25% of the total population (85) are illiterate.

Women Dependancy on Forest

The people of the village are depending on the forest for green leaves and dryleaves and fuelwood. More number of women is involved in bringing the necessaries from the forest. They wake up at 4 am and to the nearby forest 3 km away from the village and bring headloads of fuelwood. Fuelwood and other forest produce are used as usual only for household purposes not for selling.

Livestock

There are 275 cattle in the village including 20 from the 15 families of Jalavallikarki. The distribution of cattle is uneven. It ranges from 2 to 12. Some families do not possess cattle, more non-possession is with landless families. Cattle is used for milk, manure and ploughing the lands. In most of the families cattle is worshipped.

An Unique Feature of the Village

There is a "Kalpataru water, Irrigation Co-Operative Society" existed in the village. It came into existence five years back

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under the leadership of Shri Shivaram Venkatramana Hegde, the Chairman of the above society. He is a dynamic person, always plans for the total combined progress of the village. He has a vast experience of social life served in many organisations. The above society meant for irrigation purposes is first of its kind in the state getting the loan and establishing the society. 30 families are the direct beneficias of the society, 35 families get water supply at certain time period, 2 days per week, and paying for it in accordance with the size of the land. 30 families have pledged their land in the society and the loan made for the society is already cleared by 60% in 5 years. Two electric pumpsets of 10 HP each are established on the bank of Sharavati river and water is pumped from 1 pumpset to the height of 160 ft above to the tank situated on the hill back to the village. Water is supplied through the canals flows in the Hadis of some families and then to arecanut plantations and paddy fields. From the one more pumpset, water is supplied to the sugarcane fields and to arecanut fields for the left part of the village. It is a succdssful experiment and has been proved very fruitful on the part of the villagers.

II. ODA PLANTATION

The plantation under ODA scheme is done on the entire hillarea back to the village. It is a multipurpose model plantation. It is in the Forest survey number 63 covering 10 hectares of land. Plantation has 16,000 plants, 90% acacia plants, others being cashew, Kairaga, teak, and mango. The plantation work started in the month of July 1993. The motives of the ODA plantation as it is written on the board in the plantation is that "W e stern Ghat Development and Environment Planning". Other motives seems to be to stop encroachment as it is evident from the fact that the plantation area now includes

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the lands encroached by 25-30 families of Namadharies and Patgars for the purpose of growing cashew and groundnut. One more motive seems to be to grow more acacia plants for the purpose of fuelwood.

III. NEEDS:

The area covered under ODA plantation was mainly used as a grazing land for cattle. Soon after the rains, sufficient fodder for the cattles of the village was available in that area. Some of the areas were encroached by the people for the purpose of growing groundnut and cashew. There maining area was a fine grazing land.

5 Havyak Brahmins, 5 Patgar families and 1 family of Namadhari have Malki land on the other side of the hill. In the plain area groundnut and grasses are grown.

In the ODA/plantation area, apart from grasses neither the green leaves nor the fuelwood were available. 5 families have 10 gunta each Hadi, where dryleaves and green leaves are available for those families. In this area coconut and cashewplants are also seen.

Since 2-3 years, villagers are habituated to use dryleaves of acacia. Even the green leaves of acacia are brought from the nearby plantations. The people of the village are depending on Tumballi-Kanagedu forest which is 3 km away from the village. The people of the surrounding villages like Mudkani, Jalavallikarki, Jalawalli etc. (6 to 7 villages) are also depending on the same forest. Villagers used to bring dry leaves, fuelwood and even green leaves from this thin forest. It is becoming thinner day by day. Due to heavy pressure vegetation is exhausting rapidly in this area.

Some villagers of Keravalli are leading their life by selling fuelwood. A bundle carried on their heads weight 40 kg to 50 kg. They charge 25 rupees per bundle for fine pieces of wood (chekke)

and 15 to 18 rupees for simple fuelwoods. They even cross Sharavati river in non-rainy season on boats to reach the forest on the side of the river namely Anilgodu, Beranki and Mannige for bringing fuelwood from those areas.

The huge amount of fuelwood is saved by carrying sugarcanes to Samskarana Kendra (purifying centre) situated at Magod on Gerusoppa road which is under private ownership. One of the main crops along with rice and arecanut is sugarcane because of the implementation of water cooperative society.

IV. AFFECTS

The area covered under ODA plantation was a fine grazing land. Now the fence has been erected and the cattle is prohibited to graze inside the area. Cattle have to wander in the remaining piece of land. The affect of plantation is so severe that the people of the village are planning to reduce the number of cattle in the village. Cattle have to more otherwise a long distance where they find less fodder compared to the above area.

The second affect of the plantation is that, 12 families have lost their land which they have encroached for the purpose, of groundnut and grass. They are not satisfied with the action of KFD. Since timber, greenleaves fuelwood are not available in the area (ODA), such things have no affect. The people of Keravalli are slowly coming in contact with the environmental protection organisations, they are getting the ideas about the ecological effect of vegetation (forests). But the ecological effect of the monoculture has to be convinced to the people.

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V. ASSESSMENT

First of all, all the villagers were fully against the plantation programme. They united in the leadership of Shri Shivaram Venkatramana Hegde and fought against this. He is a man with enromous knowledge in social activities. Smt. Laxmi of "Snehakunja" and Shri Madhav Rao Gadgil, famous environmentalist, have visited the village and in a meeting explained about, the environment protection, before the plantation work. On behalf of the villagers Shri Shivaram Hegde wrote applications to DFO and Tahashildar explaining the need to protect the grazing land. Tahasildar ordered the DFO to take necessary action.

Then KFD officials came to the village with a fresh proposal. They narrated the fresh proposal and the monetary benefits of the new forestry programme. They said their helplessness and to carry out the order of the government and started plantation work. Slowlythe board was installed. Then the oppose appeared by the people was gradually nutralised and KFD took them into confidence.

VI. JFPM

In a hurry was formed, committee was formed on 29/10/93. There was a big programme to be held at the nearby village Jalavalli on 4/11/93. The ODA people from England were about to come and talk to the people. So as a preparation part, KFD became very alert and formed the JFPM committees in both the villages- Keravalli and Jalavalli.

In the first meeting held at primary school of Keravalli on 29/10/93. There was a total attendence of 200 villagers. 8 women have participated in the programme. DFO, Sub-DFO, Tahasildar, Ranger Forester and Guards were present at the meeting. All the families have been made 2 rupees members. A committee of 15 members was formed. There was no election. The members were elected unopposed according to the by laws. Shri Shivaram Venkatramana Hegde was

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selected as Chairman of JFPM. Smt Laxmi Narayana Naik and Smt. Ammenna Kuppa Gouda were elected as women members. Shri Babu Sannputta Shetty has been selected as artisan (Kushalakarmi) who is resident of Jalavallikarki. From the minority community (Christianity) Shri Ashesh Santan Rodrigues was selected as the member. Since it was a formal meetings to form JFPM and every quarrel about the plantation was settled earlier, there was no discussion in the meeting. The duration of the meeting was just half an hour. The dicision to conduct a meet ng at every month was taken. But the meeting was not held. When the Chairman of JFPM enquired about themeeting he was told that the meeting has been postponed due to the continuous tour of the special ranger appointed for the purpose of ODA plantations. (Details of Jalavalli meeting is given in Jalavalli report).

VII. PARTICIPATORY IDEAS

Due to irrigation the farmers are getting paddy crop twice in a year. Villagers are in a high need of greenleaves, dryleaves for the purpose. They want to get the requirements from the nearest place. Their opinion is to plant different varieties of plants which provide sufficient greenleaves and dryleaves for them. But at the time being the KFD has succeeded in planting acacia plants (nearly 90%). As explained earlier some other plants are seen, but villagers are not satisfied with the number of such plants. They say that atleast after the first cutting, the varieties of plants like Matti, Honagalu, Neralu etc. Have to be planted so as to fullfil the needs of the villagers. In the whole hill where the plantations are done, a piece of land about 1 acre is seen with full of vegetation containing acacia and cashew trees and a few number of matti and others, encroached and owned by Shri Ramachandra Kharvi. That land has not been left for the ODA plantation. It is not included in the ODA plantation area.

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Name of the Village :- Mamadapur.

Range :- Bijapur.

Forest Devision :- Bagalkot. (Regular wing)

Plantation : Area - 15 ha.

Survey NO: 345A

Model : 8

Year of plantation : 1998

BACKGROUND OF THE VILLAGE :-

The village Mamadapur is located in Bijapur which Taluk, which is about 50 km away from Bijapur. The village is present highly in remote area. No communication fecility is available. The No. of buses were also less (i.e. only Two). The Roads are also very wrost.

The present population of the village is about 13000 and total families in the village is about 1500. Most of the families still fallow the traditional Indian culture, and still under joint family system.

The quantity of land holding ranges from 3-20 Acer amoung those lands most of the lands were dryland and more than 75% of the farmer's were practising / dryfarming. The farmer's were dont know what is scientific farming. They asked me what do you mean by scientific farming? I had given slight hint and I asked them to go to your Gramshevak / tell him please arrange Extension Education teaching classes

on Scientific farming. The village was facing high water problem during summer and in winter. The local people used to ~~brought the~~ bring water 5-10 km away from village by bicycle or Tractor.

The most common crops grown ~~the~~ that ~~to~~ village was, Jawer. Sunflower. Safflower. groundnut and Bajra, etc. The mean annual rainfall ranges from (MAR) - 250-300. Almost 60% of poplation meanly depend coolie. and about 25% of village population depend on Agriculture. & about 10-15% people depend on govt jobs. (?) Mostly - primary school teacher.

too high ?

The economy of people ~~also~~ is also depend livestock population to the some extent. Before plantation work. the livestockholders used to graze that land. but now the area was completeletly prohibited for grazing. due to this reason some of livestockholders saled their animals and they were doing coolie for their livilihood.

livestock holders
OBJ ?
Bad
how many
why sell ?

The fuelwood for domestic need was ~~obtained~~ obtained from govt lands & near by lands. The common fuel wood used was prosopis jouliflora. The fodder for cattles was obtained from their own fields and from govt lands.

II) TOPOGRAPHY :-

The plantation area was fully plain without any undulation. The Soil type present in that area is Black cotton Soil to Alluvial Soil. The present plantation was established near the Tank. The Soil is highly fertile but the condition in which plantation was maintaing is very bad.

Cleared ? established year ? near ?

According rules before establishing any plantation. The plantation area must be cleaned before pitting. but here pitting was done without any proper cleaning. and pits were dugout where ever the slight gap is present in Area, and none of the bushes were cut. Still today. So the plantation area contains large (now number) of bushes. Shrubs, herbs weeds and grasses among those most common are.

already established

Trees - Eucalyptus, Neem prosopis juliflora
Shrubs - Acacia Spp wild castor cassia Sps. Rubber
weeds - cassia tora, parthenium etc.

live fence ?

The plantation Area is very nearer to the village. earlier the Area was used for grazing purpose but now the area is completelly prohibited by providing live fense. local people still used to collect the wild castor fruits which were used for medicinal purpose. but this type activity was also stoped now. The village boys collect the fruits of prosopis juliflora for which were used as a nutritious feed for goats.

→ livefence: It was already existing fence - Sps - prosopis juliflora - just Forest Department maintaing it

III) JFPM:- While asking about JFPM / VFC... NO one person know about these two... they were asking me what is JFPM / VFC... at that time I had given slight information about JFPM / VFC... Still that some of the people not understood properly, they were joking me even forest Department official dont know what is JFPM / VFC.

IV) plantation:

Model NO:- 8

The Topography of the plantation Area is fully plain. but the Management or Maintanance of plantation Area was fully worst.. NO one official came to see the plantation Area. and it was very difficult to findout planted seedlings in the area. this is because. NO cleaning was done before pitting. and NO weeding was done. Because of these two reasons. The bushes. grasses, weeds were fully overtoped planted Seedlings. The seedlings remained at the same height. there was no growth atall. this type of condition occured mainly due to the tall grass. bushes and weeds. fully block the incoming Solar radiation. there be affect the growth of tree.. Those unwanted plants also also absorb lot of Moisture and nutrient from the soil. created more problem on tree growth. and watchers also donot took interest on protection of the plantation Area. They were also wondering unnessary in the

village.

The plantation Area was divided into two equal parts [i.e. 7½ & 7½ hacter] Amoung these two parts; one part (i.e. 7½ ha) was planted with Mixed crops. another half was planted by monocrop. [i.e Acacia nilotica]. The plantation was established in June 1998;

The common Trees planted on the mixed plantation was - Dalbergia sisso. Neem. pongamia pinnata Bambusa arundinasea. philanthus emblica. Syzizium cumini. and Tapsi

Naturally occuring are :- prosopis jouliflora. Eucalyptus. cassia. weeds like parthenium cassia tora;

Species planted in monocrop plantation was :- Acacia nilotica
Syn - Acacia arebica

pit digging work:

The Actually, the plantation work was started in Feb 1998 onwards upto May 1998. The site prepration work was started on 3rd Feb 98. in the site prepration work only pit digging work was done. The total No. of pits dug out are -

1) In mixed plantation - 3000 pits at a spacing of 5Mt x 5Mts. and cost paid for digging each pit was about 5Rs/pit. The size of the pit was - 60cm x 60cm x 60cm.

2) In Monocrop plantation: The total no. of pits dugout were - 12000 pits. The spacing adopted was 2.5Mt x 2.5Mt. The rate paid for digging

each pit was about 2-Rupees 43 paise (2.43) and the size of the pit followed here was. 45cm×45cm×45cm.

The labourers for pit digging work was came from Mamadapur and near by village and only male labourers were employed for pit-digging work and totally about 10-12 labourers were got the employment for more than 3-4 months. that was from Feb 1998 - June 1998

Permanent

each labourer dugout atleast 15 pits/day of the size 60cm×60×60cm (For Mixed plantation)
Similarly one labour dugout atleast 40 pits/day of the size 45cm×45×45cm (For Monocrop plantation)

The seedlings were brought from Babanager which was about 50 km away from Mamadapur. The seedling were brought in Tractor: each trip of Tractor costs about 250-300Rs and for Truck about 900-1100 Rs/trip. each trip of truck carrier - 4000-5000 seedlings. Tractor - 450-600 seedlings

V) PLANTINGS:-

The total nos of seedlings brought from Babanager Nursery was:-

1) For Mixed plantation - 3500 seedlings nos pits dugout was - 3000.
2) For Monocrop plantation - 13000 seedlings nos of pits dugout was - 12000.

VI) ENUMERATION:-

The total plantation area is 15 ha and It was divided into two equal parts of 7½ ha each. one half was planted with Mixed tree sps. another half was planted by Monocrop i.e. A. nilotica.

For enumeration of these two plantation we have to fallow different technique and different percentage of enumeration.

1) Enumeration of mixed plantation:-

The total Area of plantation - 7½ ha
Spacing Adopted - 5 Mt × 5 Mts

For 10% of Enumeration - $\frac{7\frac{1}{2} \times 10000}{10} = \frac{75000}{10} = 7500$

So we have to do atleast 7500 sq mts.

So in order to cover representation of population the quadrate size adopted was - 20 Mt × 20 Mts which gives good representation of the population.

No. of polts = $\frac{7500}{400}$ = Approximately $\boxed{19 \text{ plots}}$

we have to enumerate 19 plots of size 20 Mt × 20 Mts

2) Enumeration of monocrop plantation:-

Sps - Acacia nilotica Area - 7½ hacter.
Spacing - 2.5 Mt × 2.5 Mt.

Here the percentage of Enumeration done was 5% because the plantation was monocrops ~~and atleast gives same result~~ and each quadrate gives same result with slight change in mortality percentage.

For 5% Enumeration = ~~75000~~ we have Enumerate

at least 3500 Sq mts.

Total No. of plots = $\frac{3500}{20 \times 20 mt} = \frac{3500}{400} = 9$

Approximately = 9 plots

We have to enumerate atleast 9 plots of size 20×20 Mts

Here in both plantation Enumeration was done randomly. the plots are also selected randomly.

VII) COMMENTS ON PLANTATION:

The plantation Area is located in remote area. There were only two buses daily for that village. The plantation was under worst condition. Nothing was seen in plantation except weeds, grasses and large sized bushes. There was 0% growth of seedlings. The seedlings remain at the same size. If that condition was maintened in future days definately entire plantation vanishes within short period.

(repetition)

It is better to take preventive measure for controlling the weed, grasses & bushes which otherwise kills entire seedlings.

One Forester came to see the plantation Area once in 15 day. but he is unable to do that work because he was incharge person. According to watchers and local people, the management practices were held up because of internal quries between Forest officials. often watchers are also not doing work properly, because they were all permanent workers & they were all localites

After complete enumeration, ~~the distance between the seedlings~~ it was confirmed that the distance between the Seedlings was correctly maintained, The most common spp planted in Mixed plantation are. - Neem, Sisso, Hulgal (Honge), Bamboo, Tapsi Nelli, Nerale, etc.

In Monocrop plantation - Acacia nilotica (Karijali),

Many number of local people ~~baled~~ sold their cattles / sheeps / goats, because of non availability of feed for the domestic animals, earlier, those people used to graze their animals in that plantation only, but now the plantation was fully prohibited from grazing.

What is the criteria?

The most ~~adopted~~ locally adopted tree spp in plantation are Pongamia pinnata, Neem & Dalbergia, remaining tree spp not properly adopted, A nilotica is also not adopted, due high weed, its growth percentage was Nil.

Protection Measures:

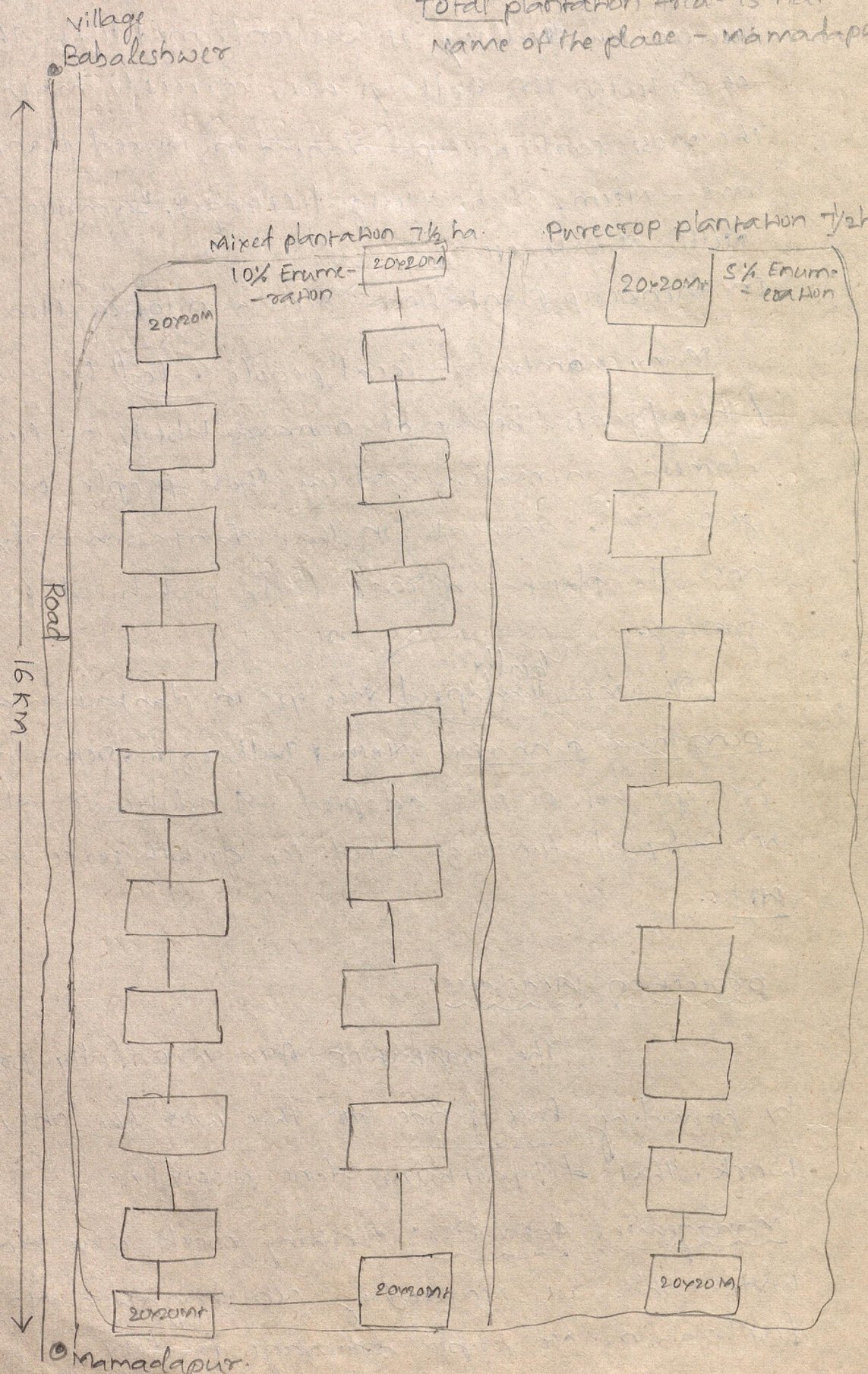
Livefence?

The plantation Area was fully protected by providing live fence, ~~and~~ This was the only work that Department done properly,

Management Activities: Nothing works was done under this, i.e. No weeding, No irrigation, No fertilization, No proper drainage facility,

:- Rough Sketch of plantation Area :-

Total plantation Area - 15 ha.
Name of the place - Mamadapur.



⑥ Name of the village → Mamadapur
Forest Range → Bijapur
Forest Division → Bagalkot (Regular wing)

ENUMERATION SHEET
[Mixed plantation]

Quadrate Size - 20 Mt x 20 Mts.

[OECF] Japan Aided project
Area - 15 ha. (half Area 7½ ha.
Model :- 8
Year :- 1998

continued

Sl.No.	Local Name/ common name	Botanical Name of species	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
	Planted.																	
1	Neem	Azardichta indica	6	10	8	6	12	9	11	5	5	6	—	—	—	—	—	78
2	Sissum	Dalbergia sisso	5	5	5	4	6	7	2	6	6	6	8	5	10	7	10	92
3	Hulgalu	pongamia pinnata	7	8	4	6	6	7	7	9	5	2	7	8	6	4	9	95
4	Bamboo	Bambusa arundinaceae	3	2	1	1	1	—	1	1	4	4	1	2	2	6	4	33
5	Nelli	philanthus emblica	1	—	3	1	—	1	1	—	2	2	3	3	2	3	2	24
6	Nerale	Syzizium cumini	1	—	1	1	—	1	4	2	3	2	2	1	4	3	1	26
7	Tapsi		—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
	Natural.																	
1	Bellary jali	prosopis jouliflora	5	10	7	8	3	8	10	11	4	5	6	10	13	7	6	113
2	Nilageri	Eucalyptus teriticornis	1	3	4	2	1	—	—	3	2	—	5	2	4	1	—	28
3	Jali	Acacia sps.	3	—	—	2	1	—	—	3	2	—	5	—	1	—	—	17
4	Adavi castor (wild)	Recinus cuminus	15	11	17	14	20	13	11	10	20	15	10	12	11	7	13	199
5	cassia	cassia sps	10	9	5	8	7	10	5	3	2	5	7	—	—	2	10	83

COMMENTS ON SPS Destribution of plantation Area.

The plantation Area mainly contains Three main tree sps such as Dalbergia Sisso, Azardichta indica and pongemia pinnata. Amoung those tree-species Dalbergia Sisso holds highest representation of the population i.e. 24.77%. fallowed by Azardichta indica. 24.33% and next was pongemia-pinnata 21.65%. The species destribution of the remaining tree species was very sparse. Tapsi holds the lowest percentage of population i.e. 5.35%. fallowed by Nerale. 5.80%.

On other hand, the main tree sps/bushes found naturally in a plantation Area is wild castor. cassia sps and prosopis jouliflora. Amoung those wild castor holds highest percentage of destribution i.e. 43.76% fallowed by cassia sps with 24.78% and next was Bellary jali - 22.39%

on the other half of the plantation area was mainly planted by Acacia nilotica. No other tree species were planted in that area but the destribution of Natural vagetation in the plantation area was quite similer to that of mixed plantation here also wild castor holds maximum representation of population i.e. 45.69 fallowed by cassia sps 24.9% next was Bellary jali - 22.04

① Name of the village - Mamadapur

Forest Range - Bijapur.

Forest Devision - Bagalkot (Regular coring)

ENUMERATION SHEET

[Mixed plantation]

Quadrate Size: 20Mtr x 20Mtr

[OECF] Japan Aided project

Area - 15 ha (Half Area i.e 7½ ha mixed)

Model - 8

Year - 1998.

Sl No	Local Name	Botanical Name	Q16	Q17	Q18	Q19	Total	Percentage (%)	Mortality.
	Planted								
1	Neem	Azardachta indica	—	—	19	12.	32+78=109	24.33	
2	Sissum	Dalbergia sisso	1	1	5	12.	19+92=111	24.77	
3	Halgala	pongemia pinnata	—	2	—	—	2+95=97	21.65	
4	Bamboo	Bambusa arundinacea	9	8	—	—	17+33=50	11.16	
5	Nelli	phlanthus emblica	4	3	—	—	7+24=31	06.91	
6	Nerale	Syzigium cumini	—	—	—	—	=26	05.80	
7	Tapsi		11	8	1	3.	23+1=24	05.35	
						Total	= 448		
	Natural.								
17	Bellary jali	prosopis juliflora	3	8	5	2.	18+113=131	22.39	
2	Nilagiri	Eucalyptus tereticornis	1	3	—	2.	6+28=34	05.81	
3	Jali	Acacia sps	1	—	—	1	2+17=19	03.24	
4	Wild castor	Recinus cumunis	20	16	12	9.	57+199=256	43.76	
5	Cassia	cassia sps	12	14	19	17	62+83=145	24.78	
						Total	= 585		

(8) Name of the village - Mamadapur (pure crop plant)
Forest Range - - Bijapur
Forest Division - Bagalkot (Regular wing)

ENUMERATION SHEET

(OECF) Japan Aided project
Area - 15 ha Effective area 7½ ha
Model - 8 pure crop]
year - 1998

Quadrate Size: 20MH x 20MH

SL NO.	Local Name common name	Botanical Name of the species	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Total	percentage (%).	mortality
	Planted													
4)	Karijali	Acacia nilotica	69	67	71	72	73	69	65	72	69	627		
		Mortality	3	5	1	-	-	2	3	-	3	17		2.71%
	Natural													
1.	Bellary jali (9)	prosopis juliflora	5	3	8	15	-	-	3	7	-	41	22.04	
2	Nilagiri	Eucalyptus hybrid comor	2	3	1	1	5	2	-	1	-	15	08.06	
3	wild castor	Recanus cuminus	11	13	9	7	5	3	13	14	10	85	45.69	
4	cassia	cassia tora	5	4	7	9	5	2	3	2	9	45	24.19	
												186		

I) Name of the village : Balganur

II) Range (Forest) : Sindagi (Regular forest wing)

III) Forest Devision : Bagalkot (Regular forest wing)

IV) plantation : Area - 15 ha.
Survey No -
Model - 8
Year of plantation - 1997-98

V) BACKGROUND OF THE VILLAGE:

The village Balganur is present in Sindagi Taluk of Bijapur Districts. which is about 25 km and 70 km away from Sindagi and Bijapur respectively... The village is present in remote area. No direct bus facility was available to that village.

The population destribution is somewhat thick. The total population of village is about 11000. and the total no's of families are 1700. among those families most of the families were Agricultrist background. and about 25-30% of population mainly depind on coolie/daily wage labourers. and about 10% of population depend on govt jobs.

The land holding ranges from 4 - 75 Acer. Among those lands most of lands are drylands. & people of that still following dry farming. The (MAR) mean annual rainfall

ranges from 200-250 mm with 20-25 days rainy days [Rainy day - A day which got atleast 2.5 mm of rainfall]. The No. of houses in a village was less and most of the people live in their field only, hence plantation area does not play major effect on local people.

More 50% of population of the village hold livestock popul-n. earlier those animals were grazed under this plantation Area but now the area was fully protected by live fence. this may be created great problem for the local grazers.

Earlier The local people used to collect the fuel wood from the plantation area itself. but now it was also fully prohibited. this may lead greater problem for lower class people. this was also created cond-n like use of new gas stoves/ kerosene stover which may further lead to environ-mental hazards, [Lower class people like - daily wage labour small land holder, keri people & landless farmers

explain

The economy of the people mainly depend on Agril and on coolie. The people of village still maintaing Traditional Indian culture and most of families still fallowing joint family system

VI) TOPOGRAPHY:

The topography of the plantation area is some what undulating with small to medium sized gullies within the plantation Area. The common soil type found in the

plantation is Alluvial soil to Black cotton soil. with medium size rocks on one side of the plantation. In some parts of the plantation area we also found Red to loamy soil. The soil is highly fertile one.

The common existing vegetation in and around the plantation area are.

Natural Trees - Azardichta indica. prosopis jouliflora. Acacia nilotica. prosopis cineraria. cassia cyamia

The leaves are used as feed for goats & sheeps. This was considered as a religious tree. It was Nitrogen fixing

plantes: Neem Bamboo: Nelli Nerale, Tapasi. Hulgula. Sisso Atti A nilotica.

which is worshiped by local Hindu people

useful was local spices to people

Bushes: cassia articulata. cassia tora. Natural control of parthenium

leaves are used for ripening of Banana

weeds: parthenium. Lantana cemera.

The plantation Area does not contain any fruit trees. but the fruits of prosopis jouliflora were collected by the local grazers. & plantation area does not contain any fiber yielding sps. other nonwood products were also not present in plantation area.

VII) JFPM:

The locals donot know what is JFPM/VFC. but some of Forester's know only longform of JFPM. but they also donot know meaning of JFPM/VFC. but according to local people. They donot know what the Forest Department does.

VIII) PLANTATION:-

Model:- 8

The plantation was established under Model 8 (Tank forse area plantation) The plantation was not fully plain. The plantation contains lot of weeds, bushes & small trees which are highly affecting the normal growth of the seedlings. The common soil type found on plantation area is Alluvial to black cotton soil which is rich in almost all nutrients but maintanance of plantation was not good... Tall grasses, bushes & weeds are still found on plantation Area.

The plantation area is present near the villages which is under more influence from the local people. The plantation was established in 1998 (June Month).

Here also the entire plantation area was divided into two equal parts of 7½ mixed plantation & another 7½ hectr. pure plantation. The total nos. of pits dugout in the mixed plantation was about 3000 at distance of 5mt x 5mt apart. Between the seedlings and the rate paid for digging each pit was 6Rs/pit & size of pit dugout was 60cm x 60cm. & each labour can dugout atleast 15-17 pits/day. only male labourers were employed for pit digging work.

On the other half of plantation area was planted

with pure crop i.e. Acacia nilotica.

The total number of pits dugout was about 12000 at the spacing of 2.5x2.5 Mts. and rate paid for digging each pit was 3Rs/pit, and each labour can dugout atleast 30-35 pits in a day. The size of the pit fallowed was 0.45cm x 0.45cm here also only male labourers were employed. and female labourers were also employed for cleaning and weeding purposes. but the no. of female labourer used was very less.

Actually the plantation work was started in January 1998 ~~[illegible]~~, and site preparation work i.e. pit digging/cleaning work took atleast 3-4 Months. About 5-6 male & 3-4 female labourers ~~go~~ were got the employment for 5 & 1 Months respectively.

The plantation work was actually started in 1998 January Month. The seedling for planting purpose was collected or brought from Sindagi Nursery which was about 25km away from ~~[illegible]~~ Balganur

IX) PLANTINGS:-

The total number of saplings brought for both mixed and pure plantation were as fallows

Mixed plantation - 3500 saplings, amoung those 3000 seedlings were planted & remaining seedlings were ~~in the~~ kept in the plantation Area, for gap filling.

pure plantation:- The total no% of seedlings brought from Nursery was 13000. among these 12000 seedlings were planted. remaining were kept in plantation area

Total plantation costs = Rs.

The seedling were brought in Tractor. and each tractor trip costs about - 400-450 Rs & each tractor trip carries approximately about 500-600 seedlings

X) ENUMERATION:-

The total plantation Area was about 15 ha. and it was seperated into two equal parts of 7½ ha & 7½ ha. one half was planted with mixed crops another half was by pure crop (i.e. Acacia nilotica)

Enumeration of mixed plantation:- Here total Area is - 7½ hacter. Spacing adopted between the seedling was 5MT X 5MTS in order to cover representation of the population in the plantation area. The common quadrate size adopted was 20MT X 20MTS. and for any type of enumeration it is wise better to do atleast 5-10% of enumeration. Since I had done 10% of enumeration for mixed plantation.

10% (percentage) Enumeration = $\frac{75000 \text{ sq mt}}{10}$

So we have to enumerate atleast 9500 sq mts area which will cover 10% enumeration.

Total no% plots = $\frac{7500}{20 \times 20 \text{ mt}} = \frac{7500}{400}$ = Approximately 19

we have to enumerate 19 (20MT X 20MTS) plots in a mixed plantation.

Enumeration of pure plantation:

The Area - 7½ hectrs. and spacing adopted between the seedlings is 2.5 Mt x 2.5 Mts. Here also the quadrate size selected was 20Mt x 20Mt but the total enumiration done was only 5% because the plantation contain monocrop or pure crop. which will give optimum expresintation of population for 5% of enumeration,

$$5\% \text{ Enumeration} = \frac{75000}{100} \times 5\% = 3700 \text{ sq mts}$$

So we have to enumerate 3700 sqmts for 5% of Enumeration.

$$\text{Total no}_{\text{s}} \text{ of plots} = \frac{3700}{400} = 9 \text{ plots}$$

We have to enumerate 9 plots of 20Mt x 20Mts quadrate size. which will cover 5% of enumeration

Here entire enumeration work was done randomly and quadrates were also selected randomly,

Management practices:- No any major management practices were carried out except weeding and weeding was also not properly done. and small lot of bushes grasses of natural vegetation is present. which are affecting the growth of seedlings The plantation condition was quite same as that of Mamarbapur area. but the intensity of weed was somewhat less.

XI) COMMENTS ON PLANTATION AREA

The plantation Area was located in remote area. No direct bus facility is available from Bijapur. we have to get down atleast in 3 places for buses. The plantation area constitutes good fertile soil. but the condn in which platation was manageing is fully worest. No proper communication facility is available. No one higher forest officials came to see plantation area. except one forester. he is also coming once in 15 day's The entire plantation athority was with watchn only.

The growth of the sapling was some what good but increased compitation of weeds bushes grasses may lead to stunted growth of seedling. because those vagetation block the solar radiation there by reducer the photosynthetic activity of the plant. because light is must for photosynthetic activity. and those vagetation unnecessary absorb lot of water and nutrients from the soil. leading to deficit condn.

The plantation area was under high biotic influence. the local people donot think on protection of Area. instead they use to graze Area during early morning hours This was created great problem for wacher watchn. because he use to get up early in the morning at 4 o clock.

Due to plantation establishment
:- the availability of the fuel wood. fodder
are completely reduced to local people

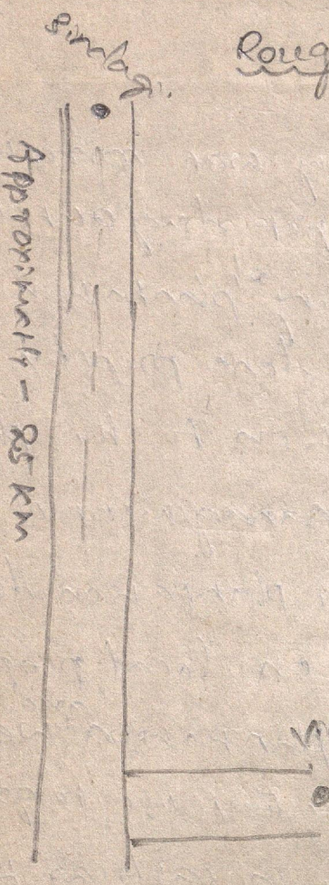
Explain adverse effect on local people

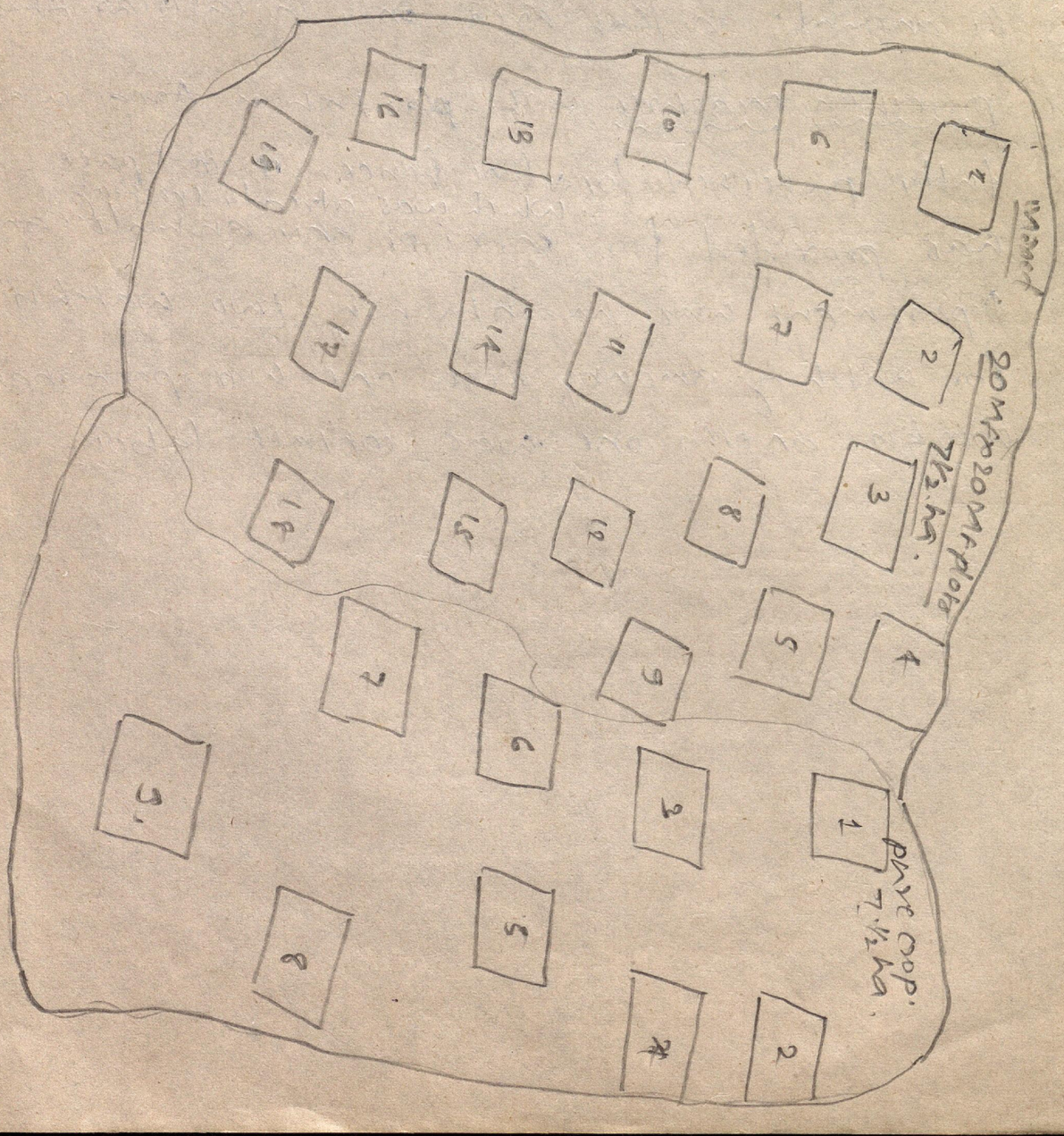
The distance between the seedling was correctly maintened. and The size of pit dugout was also correct.. only the cleaning of plantation area befor digging pits were not done propely.. remaining things like protection to the plantation area was good. but management of plantation was not good.. & the plantation does not play any major effect on local people and local environment but.. the plantation area was affected for local grazers because they use to graze the animals in that area. only in earlier times

protection measures :- The plantation Area was fully protected by live fence.. & no space which was already existing was provided for entry of any animals. and Department was maintaining two watchers for watching among those one was permanant worker another one was contact labour

Rough Sketch of the plantation Area.

Total Area of the plantation - 15 ha
Model - 8.
year - 1998.
place of plantation - Bilgannur.
Quadrate Size - 20M x 20M.
percentage of Enumeration -
For Mixed crop = 10% (19 plots)
For Mono crop = 5% 9 plots





Name of the village - Balganur.
Forest Range - Sindagi
Forest Division - Bagalkot (Regular wing).

ENUMERATION TABLE.

(OECF) Japan Aided project
year - 1998
Model - 8
Area - 15 ha [7½ hactn Mixed crops)

Quadrate Size - 20Mt x 20Mts.

Sl.No	Common Name /local name.	Botanical Name of Sps.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total.
	Planted																	
1)	Hulgalu (Honge)	pongemia pinnata	6	5	8	5	6	7	5	7	4	8	8	4	7	5	4	89
2)	Bamboo	Bambusa arundinaceae	2	1	1	3	1	2	1	4	2	1	4	2	2	3	2	31
3)	Neem.	Azardichta indica	9	7	5	8	5	6	8	10	7	6	5	10	7	9	11	113
4)	Sissum	Dalbergia Sisso.	5	8	5	4	4	5	5	2	3	3	4	3	4	2	3	60
5)	Nerale.	Syzium cumini	2	1	2	1	2	—	1	—	3	1	—	3	1	1	2	20
6)	Nelli	philanthus emblica	1	3	2	2	3	2	3	1	2	—	2	—	1	2	—	24
7)	Tapsi		—	—	1	—	1	1	—	—	1	2	1	2	2	3	3	17
	Natural.																	
1)	Bellary jali	prosopis jouliflora	3	1	7	5	7	8	3	1	9	7	5	6	5	6	7	80
2)	cassia spp	cassia articulata	7	4	9	6	4	4	5	2	1	7	4	7	9	2	1	72
3	Acacia spp.	Acacia senegal.	1	—	—	—	2	—	—	—	1	—	—	1	—	—	—	03
4)	cassia	cassia tora.	H	H	H	H	M	H	H	H	H	H	H	H	M	H	H	H
5)	Eucalyptus	Eucalyptus tetraticornis	—	—	1	—	—	—	—	3	2	1	—	—	1	1	—	09

H - Heavy
M - Medium
L - least

COMMENTS ON PLANTATION AREAS

The plantation area mainly contains three main tree spp. such as Azardichta indica, pongamia pinnata & and Dalbergia sisso. Among those tree spp Azardichta indica holds highest representation of population i.e. 32.30% followed by pongamia pinnata. 25.44% next was Dalbergia sisso 17.25%. The spp distribution of remaining tree spp was somewhat sparse. Here Tapsi tree spp holds lowest population i.e. 3.98% followed by Syzigium cumini 5.53% next was phylanthus emblica. 6.85%.

On the other half of the plantation area mainly represents Acacia nilotica only. No other tree spp were planted. Then coming to the distribution of natural vegetation in entire plantation area. The main natural vegetation found in a plantation area are prosopis juliflora, cassia articulata and Eucalyptus Among those prosopis juliflora holds highest percentage of population in Mixed plantation i.e 48.48%, followed by cassia articulata 43.43% but in case of pure plantation cassia articulata holds highest population i.e. 46.66%, followed by prosopis juliflora 39.28%.

ENUMERATION TABLE

Name of the village → Balganur
Forest Range → Sindagi
Forest Division → Bagalkot (Regular wing)

(OECF) Japan Aided project ⑦
Year - 1998
Model - 8
Area - 15 ha [7½ ha
Mixed plantation

Quadrate Size 20 Mt x 20 Mts

Sl No.	Common Name (local Name planted)	Botanical Name of the sps.	Q16	Q17	Q18	Q19	Total	Percentage %	Mortality
1)	Hulgalu (Honge)	pogamia pinnata	5	7	9	5	89+26=115	25.44	
2)	Bamboo	Bambusa arundinacea	2	1	2	3	31+8=39	08.62	
3)	Neem	Azardichta indica	9	8	7	9	113+33=146	32.30	
4)	Sissum	Dalbergia sisso	4	6	3	5	60+18=78	17.25	
5)	Nerale	Syzizium cumini	1	1	2	1	20+5=25	05.53	
6)	Nelli	philanthus emblica	1	2	2	2	24+7=31	06.85	
7)	Tapsi		1	–	–	–	17+1=18	03.98	
						Total	452		
	Naturals								
1)	Bellary jali	prosopis jouliflora	2	5	4	5	16+80=96	48.48	
2)	Cassia sps	cassia articulata	5	1	3	5	14+72=86	43.43	
3)	Acacia sps	Acacia senegal	1	–	1	–	03+2=5	02.52	
4)	Cassia	cassia tora	H	H	M	H	H	H	
5)	Eucalyptus	Eucalyptus tericornis	1	1	–	–	9+2=11	05.55	
						Total	198		

Name of the village - Balganur.
Forest Range - Sindagi
Forest Division - Bagalkot (Regular wing)

ENUMERATION TABLE.

(OECF) Japan Aided project
Year - 1998
Model - 8
Area - 15 ha (7½ pure crop)

Quadrate size - 20 mts x 20 mts

Sl No	Common Name (local name)	Botanical Name of the species	Q-1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Total	percentage %	Mortality
1)	planted	planted												
	Karijali	Acacia nilotica	70	68	72.	73	71	72	69	68	70	633		
		Syno- Acacia arebica.												
		Mortality No.-	2.	3	—	—	—	1	3	3	2.	14		
	Natural													
1	Bellary jali	prosopis jouliflora	4	4	7	3	9	7	3	9	7	53.	39.25	
2)	cassia spr	cassia articulata	7	9	5	9	9	7	9	3	5	63	46.66	
3)	Acacia spr	Acacia senegal.	—	—	2	1	1	—	1	—	1	06	04.44	
4)	cassia	cassia tora	H	H	H	H	H	H	H	H	H.			
5)	Nilageri	Eucalyptus tericornis	3	2	2	3	1	1	—	—	1.	13.	09.62.	
												135		

H = Heavy
M = Medium
L = least

I NAME OF THE VILLAGE : Adgal.

II FOREST RANGE : Badami

III FOREST DEVESION : Bagalkot

IV. PLANTATION : Area : 220 hacter

Survey Number - 106 (Adgal)
535 (Badami)

year of plantation : 1998

Model : 2.

V BACKGROUND OF THE VELLAGE :-

The village Adgal is located in Badami Taluk of Bagalkot Districts. which is about 8 km away from Badami. and 27 km away from Bagalkot The village was present on the way of Bagalkot Badami Road. The village is located near the Badami Railway station.

The present population of that village is about 3000 and the number of families ranges from 500-550. and most of the people of that village reside in badami. and they came to village once or two times in week. and some of the people they daily do their job in Badami. and return to their village at night. The land holding ranges from 7 - 25 Acher. and most of the lands are dryLands. & farmers practising

dryfarming. The most common crops grown in that villages are. jawar, groundnut. Maize, Sugarcane, and onions.

And half of the plantation area comes under Badami city. The Survey number of Badami area is already mentioned above (585 Ha approximately about 100-120 hector of area comes under Badami city. The present population of Badami is 40000-45000. and the number of families ranges from 10000-12000. and the land holding is quite similar of Adgal but the ratio may be higher in Badami (7-50 hectre)

The people of both Adgal and Badami mainly depend on Agriculture. about 50-60% of the population mainly depend on farming. and about 20-25% of people depend on the coolie. This category includes - landless labour, small land holder and Rehabilitated people. and the economy of some of the people is also depend on livestock rearing. about 5-10% of population holds the livestock population And those cattles of buffloes were usually taken for grazing to the govt lands - like Roadside grazing in on hilly area's. and the fuelwood for the local people is met through their own lands and also from govt lands. and the most common fuelwood species used was prosopis juliflora.

VI) TOPOGRAPHY:

The Full plantation area is higly undulating with high hills dominated by hard rocks. Some of the area inside the plantation area is fully covered by rocks upto 5-10 mts depth. and most common soil type present in area is Red soil with frable rocks. and most common natural vagetation found in a plantation area are.

Trees:- Nilagiri (It was planted in 1974 but not it was considered as natural) cassia cyamia, Massalli Acacia arcabica, Acacia catechu, Prosopis jouliflora prosopis cineraria, Neem.

Bushes/shrubs- calotropis sps, Halgathi sps. Goddhi spines plant. Honnambari. cassia sps. Acacia sps. Agave sps. grasses. kavale fruit plant

Weeds- parthenium, lantana camera, cassia tora.

The uses of all above tree species already discussed in the other case studies: ie. in case stud. I & II. Here in this area also almost all tree species are used for same purpose.

The plantation area contains lot of Agava sps and kavale plants. yearly about 5-10 people alone extract the Agave sps for fiber making for about 15 day, and some of the people also used to collect the kavale fruits from the plantation and Mashroom were also extensively collected from the plantation area

(VII) JFPM.

Here. The people at Adgal knows something about VFC. but not about JFPM.. The people explained about VFC. For me. like. .. The local forest department people arranged one programme on VFC. on November 1997. (1st week). The departmental people assured the local villagers about supplying of vanis seedling for planting purpose. but. afterwards they were not came to their village. and. the local people also lost interest on that programme. Know the local people did not respecting the Forest department people because of false assurance by the Department.

(VIII) PLANTATION:

model-B

The total plantation area is 220 hector.. The area is very highly undulating. & we find large hills with small to medium sized rocks and in. some of parts of plantation area contains fully rocks afeten about 5-10mts depth. in such case the pits were not done that area was simply left unplanted... The pot-digging work was done mainly where the land is easy. & smooth. The common soil found in a entire plantation area was Redsoil. to with laterite soil. and. The most common natural and planted vegetation found in a plantation area area as follows.

Natural vagetation - massual. Halgathi; Godachi Spines. Togali. cassia sps. Honnambari prosopis jouliflora. Nilagiri sps; calotropis sps. Neem cassia cyamia. Agave sps.

planted vagetation :. Neem.. Basari; Ficus bengalensis. F. religiosa. Hardwikia binnata. Hulgalu. Tamarindus indica. Agave sps

The plantation was established 1998 May-June months. The entire plantation work took atleast 5-6 months & the labourers were employed for different activities like. pit digging. weeding cleaning... construction of stone wall around the plantation area. & seedling distribution for planting and for Fertilizer application. and, The labours were came from Adgal. Badami & from Nandekeshwer. Gulad-gudda. both male and female labours were employed for all those work. The

The total number of pits dugout in a plantation area were about 12000. at a spacing of about 10Mts x 10Mts. and common pit size fallowed was 60cm x 60cm. for this work mainly male labour was employed. daily about 80-90 labourers were employed for atleast 3-3½ Month. for pit digging work. The rate paid for each male

labour was 40Rs/day. and each male labourer had dugout atleast 6-7 pits/day. and other works like construction of stone wall was also done by male labour. That work alone took atleast 1½ Month. for 40-50 labour. The size of wall is 1mt height & 1ft width. The stones were used from the plantation area itself. The stones were simply arranged in correct order. There was no any cement concreate.

And female labours were mainly employed for weeding. Fertilizer application & cleaning purposes. Seedling destribution works. This all work took atleast for 4 Months for 20-25 female labours. The rate paid for each female labour was 30Rs/day.

Actually the plantation work was started on November 15th (1997) onwards. The work was completely stoped for 15 days during December Month due to bad climatic condition The seedlings were brought from the Anthapur Nursery, which was about 7 km away from Badami & about 15 km away from plantation area. The seedlings were also brought from the near by nursery like Gulabgudda Nursery, etc.

IX) plantings:- The total number of pits dugout in a plantation area was 12000. of size 60cm x 60 cm. at the spacing of 10 Mts x 10 Mts along with different seedlings there a large number of Agave sps [About approximate. 120000 seedlings were planted randomly in entire plantation. For those planting there was no any pit digging work was done. Those were planted in small trenches made by workers. about 10 seedlings were planted within 5 Mts trench. Very close spacing was maintened, because here the main intention of Agave is to provide complete prevention of soil erosion. and to supply the more quantity of raw material for fiber purpose to the local farmers. The Agave was mainly planted in gap area.

The total number of seedlings were brought from the nursery was about 13500. amoung those, about 12500 were planted during 5st planting and remaining seedlings were planted or used for gap filling purpose.

And, the Agave plantling were brought from Bagalkot. The total number of Agave seedling brought was approximately, about 130000 Those were brought in Trucks. It took atleast two trips at the rate of 1500 Rs/Trip.

II) ENUMERATION:-

The total plantation area is 220 hacter and the spacing fallowed in between the seedlings was 10M x 10Mts. So in order to cover the maximum representation of the population. It is better to fallow the 50Mts x 50Mts plots (quadrate size) and most commonly in almost all enumeration work usually do atleast 5-10% of enumeration for maximum representation of population. and 5% of enumeration will give reliable information regarding the population distribution, so I had done 5% enumeration.

For 5% enumeration:- =

$$\frac{220 \times 10000}{100} \times 5\% = \frac{2200000}{100} \times 5$$

$$= 110000 \text{ sq. mts}$$

So we have to enumerate atleast 11 hacter of land for 5% of enumeration. but I had done less enumeration due to labour problem. individualy it was not possible. This work require atleast 7-8 days for two members.

Number of plots to Enumerate $= \frac{\overset{44}{\cancel{110000}}}{\cancel{2500}} = 44-45$ plots (Aproximate)

So we have to enumerate atleast 45 plots of size 50Mt x 50Mts for 5% enumeration, but I had done only 10 plots for our study.

NAME OF THE VILLAGE :- ADAGAL.

Forest Division :- Bankapur Bagalkot

Forest Range :- Badami

Enumeration sheet

OECF (Japan Aided project)

year - 1998

Area :- 220 hectare

Model :- 8.2.

Quadrate Size :- 50M x 50M

SL NO.	common name / local name.	Botanical Name of the species	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total	percentage (%)
	Planted.													
1	Neem.	Azardichta indica	12	13	10	9	13	14	10	8	11	12.	102.	29.14
2	Basari mara.	Ficus religiosa	9	7	10	9	8	9	11	9	8	7	87	24.85
3	Aalad mara.	Ficus bengalensis	3	4	2	3	4	4	5	3	2	1	31	8.85
4	Anjan	Hardwikia binnata	5	4	3	2	1	3	2	4	4	3.	31	8.85
5	Hulgala	pongemia pinnata	6	5	7	6	5	6	4	2	5	3	49	14.0
6	Hunse	Tamarindus indica	2	1	1	2	1	3	1	1	—	—	12	3.4
7	Sirasalu.	Albezia lebbeck	2	3	4	4	3	1	2	2	3	1	25	7.14
8	Bamboo	Bambusa arundinacea	1	1	1	3	2	1	1	1	1	1	13	3.7
9		Mortality.	1	2	1	3	1	2	—	3	2.	—	23 Grand total 350	100
	Natural													
1	Massual.		5	4	6	7	5	3	1	4	3	4	42	25.14
2	Halgathi		2	3	1	1	2	4	3	1	4	4	21	12.57
3	Godachi spines	Acacia sps	5	4	7	9	3	4	2	7	4	3.	48	28.74
4	Honnambari		3	1	1	1	3	4	2	1	1.	1	18	10.7
5	Billary jali	prosopis juliflora.	5	6	7	2	4	5	4	6	6	2	30	17.96
6	Nilagiri		1	1	—	—	—	1	—	—	2.	3	208 167	4.647 100.

comments on destribution of tree species

The plantation area is highly undulating and topography is not fully plain. and we found hard rocks inside the plantation. These all condition creating a more problem during pit digging work to due to hard surface. The pit digging work took a lot of time and the pits were also not done properly. there were be a proper spacing between the seedling one seedling may be planted at 7mt apart another may be 5 mts distance. But the actual spacing was 10mt x 10mt. In the part where pit digging was problematic under such situation the pit was not done their. Instead that pit was dug-out in smooth area.

The plantation Area mainly constitute about 8 planted tree species and 6-7 type of natural vegetation. and amoung the planted vegetation Azardichta indica. (Neem) holds topmost percentage of population destribution i.e. 29.14% followed by then Ficus religiosa holds second position with 24.85% and next was pongemia pinnata with 14.0%. and the destribution of the remaining tree species were very sparse. amoung those very least was Tamarindus indica. with 3.1%.

on the other hand the destribution natural vegetation is some what interesting

comments on plantation:

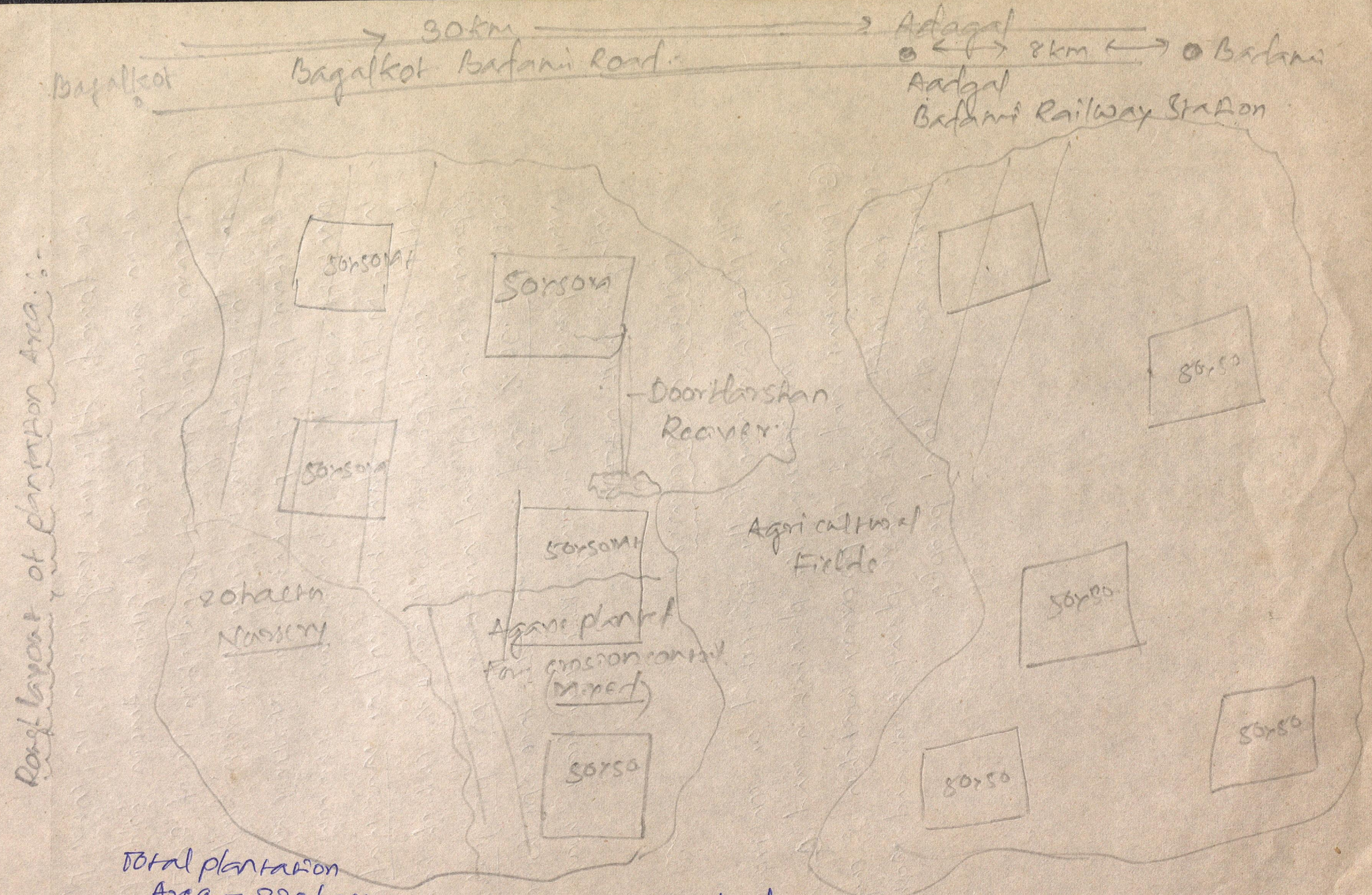
The total plantation area is 220 hacter. This was the one of the biggest plantation established under OECF Japan Aided project in Bijapur District. (Bagalkot Division/Dist) The plantation was superily maintained and most of pre-plantation works were done good. The work like cleaning, weeding and shrub-cutting were also done but not to the extent/mark because the plantation area itself was large which requires lot of fund for cleaning, weeding & due to this reason Department people did cleaning only near the pit/plant and cleaning and weeding were not done where the weed growth of other undanted species growth is very high and planting was also not done in those areas.

The area's was higly undulating and soil depth was also less in some parts of plantation & soil is also very poor in nutrient content. these all natural conditions highly affecting the growth of seedlings in some parts of plantation and we found laxurient growth of some seedlings in some parts of the plantation. In the middle of the plantation there we find Agril fields which were also creating some impact on the plantation establishment because they were used to graze the tall grass grown in plantation Area.

we found different vegetation in entire plantation among those a genus Acacia holds the topmost percentage of population i.e. of 28.74% and this population is somewhat restricted to the southern part of plantation to Northern part of plantation, but the distribution was somehow sparse in the middle of plantation, and a massual plant holds second position with 25.14% (which has all spines on nodes) and next was prosopis juliflora with 17.96% and remain other tree spp were very sparse and among those very least was Nilagiri with 0.47%.

Protection Measures:-

The plantation was fully protected by constructing stone wall all around the plantation and 4 watcher (3 [permanent] and 1 temperorary watcher is employed for watching the entire plantation, and most of watcher are of local people.



Total plantation Area – 220 hacter
Model – 2.

Name of village – Adgal

i) NAME OF THE VILLAGE :- HOLADUR.

ii) RANGE :- Gaddenkeri

iii) FOREST DEVESION :- Bagalkot.

iv) PLANTATION : :- AREA → 65 hectr.
SURVEY NUMBER :-
MODEL - 4
YEAR OF PLANTATION :- 1998

V) BACKGROUND OF THE VILLAGE :-

The village Holadur is located in Bagalkot Districts (Taluk - Bagalkot) which is about 45 km away from Bagalkot. The village is present highly in remote area. There were only two buses in a day for that village. earlier this village was located near the krishna River basin. due to the increase in the water level of krishna River after construction of Almatti Dam near Alamatti which lead to submergence of the village. due to this reason the karnataka government had shifted almost all villages which were due for submergence by the krishna water.

Like that the village Holdur was shifted to new area, which was about 20-25 km away from the Almatti Dam Sight. The people who lossed their land on krishna river they were provided by compansation money of

of about 30000 - 1 lakh Rs/hacter area. & They were also given money for building construction. but presently the most people of that village donot have land in the new area. & They were not purchased any new land. unless they over expenced all money for bad habits like. drinking; smoking & drug addicts etc.

The present population of that village is about 2000. and the number of families ranges from 500-550. and some of the people constructed a new houses and some of the people still leaving in temprory houses. but the destribution of the population was fully sparse. and about 20-25% of people still residing under government made cottages and they were trying to build up their own houses. but the money provided by the karnataka government was not sufficient. The amount of money given to each families ranges from 25000 - 75000. for building construction and some of the people took the money & expensced for other requirements.

The ratio of the land holding ranges from 4-10 hacter. & in most of the lands dryforming was commonly fallowed. The common crops grown are. Jawer; Safflower; Wheat; Sunflower; and greengram.

The Mean annual (MAR) rainfall ranges from 850 - 500mm The people of that village mainly depend on daily wages / coolie.

The Landless labour do the coolie work, and some of the people, who have small landholding also complet-ely depend on the coolie work. Most of the people leaving in the village are belongs to scheduled castes (S.C) - among those, dominant caste was Lambani Naik, Rathods, & Chavan's.

Here also, the main aim of establish-ing the large plantation was to provide a jobs for local people as much as possible. and there were large number of plantations were established under a different projects like, U.K.P. (Upper Krishna project) J.R.Y. Jawahar Rojagar Yojana. and EAS projects Employment assurance Scheme. The people that village is also fully dependent on the government compensation money.

VI) TOPOGRAPHY:

The topography of the land is somewhat undulation with 2-4% slope on the western side of the plantat-ion area. The most common soil type found was fully red soil, with rich nutrients; The soil is fully drained, and there wont be any problem of water logging cond-n. during the heavy rain.

The remaining plantation area is somewhat plain and the most common existing vegetation found in a plantation area are as follows.

Trees: Neem. Eucalyptus spp cassia spp
Acacia arebica. prosopis jouliflora.
Bushes: Karikanti is very heavily distributed. then massal. kavale fruits tree. Donni spine plant. cassia tora. & calotropis spp. Agave spp
weeds: parthenium spp and lantana cemera
cassia tora

The uses of all above tree species is already mentioned in case study - I & II. and the uses of remaining tree sps like Acacia arebica. this tree is commonly called as babul. and the gum of babul is extensively used as addessive material in sweet preparation and the young leaves were also used as feed for goats and sheeps and fruits of tree is also used for fodder purpose and the local people also used to collect the Agave spp for fiber purpose. this was also completely discussed in previous case studies.

VII) JFPM:

The people of that village donot know anything about JFPM/NFC and some of people even donot know hirechial system of Forest Department and the Departmental people themself donot know what is JFPM & NFC.

VIII) plantation.

Model - 4

The plantation area is some what plain except on the western side with slight undulation. The total plantation area is 65 hacter. For their convience the entire plantation area was divided in 2 parts but not demarketed... one of plot is nearer to the village, & another plot is about 1km away from village. and entire plantation was established under Model - 4. The common soil type found was Red soil with rich nutrients but the soil is very hard and it is very difficult to dugout by the labourers. hence, the most of the plantation work was done by using Dogers and other mechanical Instruments. And the most common vagetation found in the plantation area are.

Natural vagetation: Neem, prosopis jouliflora Eucalyptus spr. cassia sps., karikanti, Donni mullu, calotripis spr. Acacia nilotica, prosopis cineraria, Massal, kavale, gida, etc.

Among these spr. the uses of different plants were already discussed in case study - 6 & 7" and the main uses of prosopis cineraria - is this tree was considered as one of the holy tree of Hindu Religion, people used to worship this tree during Dasara or vijaya Dasami Festival, because this tree helped in preserving weapons of pandva in the forest.

and the uses of different plants were already mentioned And the most common planted vegetation are as follows:

planted tree species → Anjan. Aalad. Mara, Karijali. Neem. Avale Mara, Basari Mara, Acacia auriculiformis Aulgalu. Sirasalu. Zyzyphus. Sisso. etc.

The plantation was established in 1998 June. & Actually the plantation work was started in 1997 December. The entire soil working was done within the 4-5 months period.. The most of the plantation work was done by using doger.. The planting of the tree sps were mainly done in trenches made by using doger. The Rate paid for Doger was 4000-4500/day. (The amount of Rupees depend on number of hours work done by doger). like this the entire trench digging work was done for atleast 4 months..

And removing of the soil ~~[illegible]~~ from the trenches was done by using labourers. The labourers were mainly coming from Holadur. Tanda (Lamani). Illyal. & Shiragappi. both male & female labourers were employed for removing the soil, this work alone took atleast 3 months For 80 male labourers and 40 female labourers and the Rate paid for each male labour was 50Rs/day and For female labour 35 Rs/day. Remaining work like cleaning weeding and removing of soil from the cattle proof trenches were also done by male & female labour.. this work took atleast 2 months.

for same number of labourers.

The Actual plantation work was started during December 1997. The seedling were mainly brought from Alamatti Nursery, & Gaddenkeri cross. and some of the tree species like Hardwikia binnata, Nelli & Nerale was brought from Dharwad. Bellary. The seedlings were brought in trucks & each trip of truck carries atleast 1500-2000 seedling of bag size 8"x4". And the Rate paid for each trip of truck was 2500-3000Rs.

IX). PLANTINGS :-

The total number of trenches dugout in plantation area was 27000. The trenches were dugout in a continuous lines and the spacing between the each line of trenches is 5mt apart and atleast the size of trenches followed within the line of trench is 4mt x 0.45 x 0.65cm.

And atleast two seedlings were planted in each trench at the spacing of 2mt x 2mts. and the total number of saplings brought from the Nursery was 65000. amoung those, about 55000 seedling were planted during the main planting work and remaining seedling were used for gap filling purposes.

8) ENUMERATION:-

The total plantation area is 65 hectares and the spacing followed in & between the seedlings in a trench is 2MT x 2MTS and the spacing between the line of continous trench was 5MTS apart. So in order to cover the maximum representation of the population. the common quadrate size adopted was 20MTS x 20MTS.

And for most of Forest enumeration work it is better to do atleast 5-10% of enumeration. So I had done 5% enumeration for this plantation which will give a maximum represent of population.

For 5% of Enumeration = $\frac{65 \times 10000}{100} \times 5 = \frac{6500\cancel{0}}{\cancel{100}} \times 5$

= 32500 sq. mts.

So we have enumerate atleast 32500 sq MT area. randomly. for 5% of enumeration.

Number of plots to Enumerate = $\frac{32500}{400}$ =

= 81 plots (Approximate).

So we have to enumerate atleast 81 plots of size. 20MTS x 20MTS. for 5% Enumeration.

But I had done only 80 plots which will give maximum representation of population

NAME OF THE VILLAGE :- Holdur
FOREST RANGE :- Gadlenkeri
FOREST DEVISION :- Bagalkot

Enumeration Sheet

(OECF) Japan aided project
Area - 65 hacter
model - A
year - 1998.

Quadrate size - 20m x 20mt

SINO	common Name / local Name	Botanical name of the spc	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
	Planted														
1	Aalad Mara	Ficus bengalensis	11	10	11	8	7	10	12	9	7	8	7	13	8
2	Anjan	Hardwikia binnata	48	53	52	45	51	50	48	45	51	53	50	43	44
3	karijafi	Acacia arabica	5	3	6	2	4	3	3	2	4	6	5	3	7
4	Neem	Azardichta indica	21	19	30	21	24	18	17	19	25	18	10	26	25
5	Arale Mara (Fig)	Ficus sps	3	2	3	1	1	2	3	1	4	4	3	1	2
6	Basari mara	Ficus religiosa	3	1	1	2	3	4	2	1	3	1	2	1	4
7	Acacia	Acacia auriculiformis	2	3	1	1	1	7	8	10	1	5	7	2	1
8	Hulgalu	pongemia pinnata	3	1	3	2	2	2	1	3	2	4	4	—	—
9	sirasalu	Albezia lebbeck	1	3	2	5	4	2	1	4	3	2	4	5	2
10	zizyphus	zizyphus jujaba	1	—	—	—	2	—	—	—	—	3	—	1	1
11	sissum	Dalbergia sisso	1	1	1	—	—	2	2	—	—	1	2	2	—
	Natural														
1	Eucalyptus	Eucalyptus hybrid	1	1	3	2	1	—	—	—	2	—	3	1	1
2	kari kanti	Acacia sps	3	2	2	1	4	2	2	1	3	1	3	1	2
3	Donni spines	Acacia sps (Bigerspon)	3	4	7	2	1	3	4	3	3	2	1	5	7
4	Bellary jali	prosops joulliflora	3	4	5	2	3	4	2	1	4	2	1	3	4
5	calotropis	calotropis speciosa	1	1	—	—	—	—	—	—	1	1	—	—	1
6	cassia spc	cassia fora	H	H	H	H	H	H	M	H	M	M	H	H	H

(6) NAME OF THE VILLAGE - Holdur.

FOREST RANGE :- Gaddenkeri

FOREST DEVISION :- Bagalkot.

Enumeration sheet

OECF (Japan Aided project)
Area - 65 hacter
Model - 4
Year - 1998.

Quadrate size :- 20 x 20 mts

SI NO.	common name / local Name	Botanical Name of the Tree. sps / plants.	Q14	Q15	Q16.	Q17	Q18	Q19	Q20	Total	percentage (%)
	planted										
1	Aalad mara.	Ficus bengalensis	9	8	9	11	11	13	9	174	9.02.
2	Anjan	Hardwikia binnata	49	46	53	51	47	49	51.	979	50.77
3	kari jali	Acacia arebica	7	3	2	4	3	1	4.	77	3.99
4	Neem	Azardichta indica.	24	20	21	18	15	24	23.	416	21.57
5	Arale mara Fig	Ficus sps	1	1	3	5	4	2	1	47	2.43
6	Basari mara	Ficus religiosa.	3	3	2	1	1	3	2.	43	2.23
7	Acacia	Acacia auriculiformis	1	2	5	2	—	3	1	63	3.26
8	Halgalu	pongemia pinnata.	3	1	4	1	2	1	3.	42	2.17
9	Sirasalu	Alberia lebbeck.	1	2	1	1	3	1	4	51	2.64
10	Zizyphus	Zizyphus jujaba.	—	—	1	1	1	—	1.	12	0.06
11	Sissum	Dalbergia sisso.	2	3	2	2	1	1	1	24	1.24
										1928	100
	Natural.										
1	Eucalyptus	Eucalyptus hybrid.	1	2	1	1	—	3	—	23	11.00
2	kari kanti	Acacia sps	3	2	1	3	2	1	2	41	19.61
3	Donni spines	Acacia sps (bigger spines)	7	2	3	4	5	2	1	74	35.40
4	Bellary jali	prosopis jouliflora	3	4	2	1	5	7	2	62	29.66
5	calotrophos	calotropis species	—	1	—	—	—	1	2.	09	4.30
6	cassia sps	cassia tora.	H	H	H	H	M	M	M	14	
										209	100

comments on plantation:-

The total plantation area is 65 hacter .. The plantation was maintained somewhat under a good condition.... but most of the plantation work were done by machines. thats why the distance between the trenches and their direction was not correct .. and local also people have developed jeolousy on Department. because most of the work was done by using Doger. They think that if Department did not use the Doger for plantation work. we may get employment for another two months. hence people are very angry on Department people.

The plantation area was somewhat clean .. i.e. proper cleaning was carried before establishing plantation. and weeding (often managemental practices like irrigation, fertilizer application were also done properly.. even though doing all these management activities. The plantation have not upto the mark. The saplings were still very small in height. This may be due to the climatic factor soil factor (Edaphic factor) of soil is somewhat hard, & poor in nutrient.. and protection to the plantation was not good.. still they have to erect fence or cattle proof trench. Lower the activity of live stock population was more in damaging the seedling

comments on species distribution in plantation area

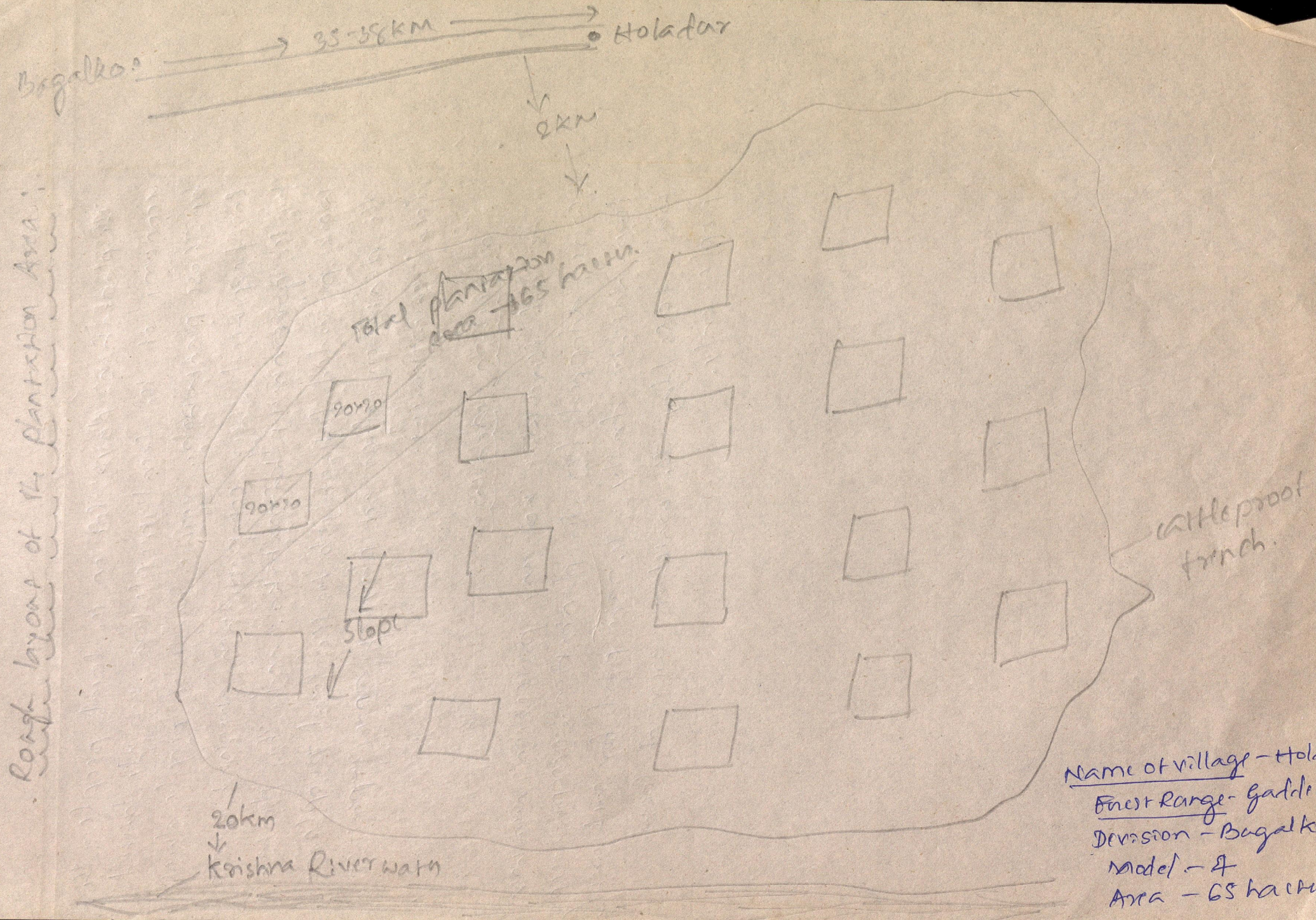
Here most of the plantation work was done by mechanical means. hence it was very difficult to maintain the proper spacing between the seedlings in a trenches and spacing between the line of trenches. The plantation area mainly constitute 11 different tree species which were planted in trenches at 2mt×2mt distance. among all those different tree species planted Hardwikia binnata (Anjan) holds topmost position in density (population) distribution i.e. 50.77% followed by that Azadirchta indica holds the second number in population distribution i.e. 21.57% & next was Ficus bingalensis. 9.02% and the distribution of remaining other tree species were very sparse. among those Zizyphus species holds the very least population in entire plantation

on the other hand. the distribution of natural vegetation was somewhat medium may not affecting heavily on growth of the tree species. we identified atleast 6 different natural vegetation in plantation area among those Acacia species holds topmost position with 35.40% followed by that prosopis juliflora holds second position with (29.66%) & next was Acacia arabica with 19.61% and remaining other trees species were not heavily distributed and very least was calotropis sps with 4.30%.

The plantation play's lot on the local people. The economy of the local people was mainly busted by those plantation. because most of people almost lost/exprienced their compansation amount given by the government of karnataka. and this plantation work provided lot of job to the local people. and the plantation does not playing any impact on local environment.

protection Measures

As such there was not any protection measures were adopted for the plantation. except keeping two watcher daily. The rate paid for each watchers was 40Rs/day. The watchers were of local people only.



Name of village - Holdur
Forest Range - Gaddenkeri
Division - Bagalko
Model - 4
Area - 65 hactu.

case study - II:

i) NAME OF VILLAGE : ELLYAL.
ii) RANGE : GADDENIKERI
iii) FOREST DEVESION : BAGALKOT
iv) PLANTATION : Area : Bohachar
survey number : 90, 91, 92, 94.
model :- 3.
year : 1998

v) BACKGROUND OF THE VILLAGE:

This plantation area is located in ELLYAL village. which is about 35 km away from Bagalkot. remaining other information like population, families, landholding, how they live and their dependence on common poperty, all these information were clearly furnished in case study - I. The plantation Area is just 1km away from the model-4 plantation Area. but there will be lot of difference in between those two plantations one of the plantation was established under model - 4 and another one was established under model - 3 and the destribution of both natural and artificial vegetation was also had great difference and the topography and soil types also have some difference between those two plantation I explained almost all information regarding background of village in the case study - I please refer that:

VI) TOPOGRAPHY:-

The plantation area is somewhat plain without any undulation. The common soil type found is Red soil with smooth rocks and most common vegetation found in the plantation area are as follows.

Natural vegetation:- Tarekanti (ಚಿಲಿಕಂಟಿ), Neem, Hulikanti (ಹುಲಿಕಂಟಿ) cassia sps mass al. sps calotropis sps Eucalyptus sps. prosopis jouliflora, Kavale fruit opensia sps

Amoung all those natural vegetation Tarekanti was mainly used for fuelwood purpose and leaves of that shrub also used as fodder for goats and sheeps

Neem - fully ripened Neem fruits were collected by the local people during March - April month. which were saled to the local bussinessment at the rate of 15 Rs/box/ like that each women collect atleast 3-4 boxes in a day. This entire work will takes atleast 1-2 months.

leaves of the Neem tree were also used for medicinal purpose. It that area Neem wood was considered as a poor mens teak. because it will give a excellent quality of wood. which was extensively for building construction work.

cassia sps - leaves of cassia sps were also used for ripening of mango. Banana.

calotropis → It was considered as a one of the religious plant. because it helps in knowing the approximate

yield of Agril crops. people leaving around the plantation area. used to collect the flower of this plant. which gave the astronomy of their field outcome.

prosopis juliflora :- This tree spc was extensively for fuelwood purpose. and which is considered as one of good spc for erosion control. in slopy area. It had also got good resistance against doought condition.

The local people used to collect the kavale fruits during october - november month. and along with this fruit. the local people also collect fruit of opuntia. which are red in colour with small spines on a fruit and those fruits were eaten by the their family members.

Rich people of that village used to send their labourers for the collection Mushrooms. - during August - sept : which was used as vegetables. And. livestock holders collects the tall grasses from the forest to feed their cattles

entirely the plantation provided a better economic condition for the local people. remaining other Nonwood products that available in previous plantation were also available in this plantation.

VII) JFPM :-

Here also the people ~~doesn't~~ donot have any knowledge regarding JFPM / VFC. The people

of that village. Simply know the what activities presently forest Department is doing. Of the Department was also not fully interested in implementing the JFPM programmes.

VIII) PLANTATION:-

Model:- 3.

The total plantation Area is 20 hacter. The area is somewhat rectangular. The topography of land is also fully ~~plain~~ plain. The plantation area is about 2 km away from the old plantation (it was about 8 km away from the village. The plantation was maintained under good condition. The common soil type found is. Red soil/with small rocky upper position, and most ~~the~~ common vegetation found in a plantation area are.

Natural vegetation:-

Trees - Neem. Eucalyptus spp Cassia fistula. Acacia arabica. prosopis juliflora etc

Bushes - cassia spp calotropis spp kanikanthi. Hulikanthi. massal. etc

planted vegetation are:- Ficus benglinsis. Ficus religiosa. Neem. Hardwickia binnata. Albizia lebbeck. pongamia pinnata. Acacia auriculiformis. Dalbergia sisso. ~~etc~~.

The plantation was established in 1998 June. The entire plantation work was done by using the same labourers which were used in 35 ha plantation area but the work done in this plantation was somewhat different from that here the pits were dugout by for planting the seedlings and the spacing followed between the pits was 1.0Mts × 2.0Mts along with pits, trenches were also dugout by using Dogers. The digging of pits alone took atleast 1½ month for 20-25 labourers (men/day) & the total number of pits dugout in a plantation Area was 2000 at the size of 1Mt × 1Mt × 1Mt and the Rate paid for digging each pit was 10Rs/pit and each labour can dugout atleast 4-5 pits/day. The pits were also dugout by (paying 50 Rs/day/labour) daily wages.

And the remaining trench digging work was done by using doger. The total number of trenches dugout in a plantation area was 8000 at the size of 4Mt × 0.45 × 0.50cm and the trenches were dugout in a continous line and spacing between the line of trenches is 5Mts × 5Mts. This work alone took atleast 2 months time and the rate paid for the doger/day was 4000-4500 Rs and remaining work like removing the soil from the trenches were done by.

by using male and female labours. This work took atleast 2½ Months for a 40-45 labours and the rate paid for each female labour was 35 Rs/day. and for the male labours was 50Rs /day. and the labours were daily ~~[illegible]~~ coming from near by villages like.. Shiraguppi Talagihall and Illyal.. Most of the labours were lossed their land in krina river. They were got lot of compensation money from the government of karnataka but they were expenced all money for bad habits & unnecessary purposes this all created a poor living condn.

The plantation area was fully protected by ~~[illegible]~~ digging a cattle proof trench of size. 2 meters deep & 2.5 Mts width. This work was done by using J.C.B Machines. which took atleast 1 Month for entire work and the rate paid for J.C.B. Machine was. 2200-2500 Rs /day. and the removing of soil from the trench was took atleast 15 days for 20-25 labours.

The entire plantation work took atleast 4-4½ months for 75-100 labours at the rate of 50 Rs/day/male labour & 35 Rs /day/. female labour. Actually the plantation work was started during December 1997. But the planting of seedling was done

during 1998 June..

The seedling for the plantation was mainly brought from Gaddenkeri cross. which was 40km away from Illyal. & some seedlings were also brought from the Almatti Nursery. which was about 20km away from plantation area.

(IX) PLANTINGS

The total number of pits dugout in a plantation area was 2000 at the spacing of 10Mts x 20Mts and the total number of trenches dugout in a plantation area was 8000 at the spacing of 5Mts between the line of continuous trenches & atleast two seedlings were planted in each trench at the spacing of 2Mt x 2Mts.

The seedlings were brought from Gaddenkeri cross. The total number of seedling brought from nursery was 20000, The seedling were brought in trucks each trip of Truck carries atleast 1500-2000 seedling ~~seedlings~~. & the Rate paid for each trip was 2000-2500 Rs/Trip. Some times the seedling were also brought from Dharwad. Bellary. Kudal sagam Nursery, under shortage of stock in Gaddenkeri Nursery.

X) ENUMERATION:-

The total plantation Area is 20hacter and the spacing between the seedlings in a plot was 10mts x 20mts and the spacing between the seedlings in a trench was 2mts x 2mts & the spacing between the line of consecutive trenches was 5mts apart. So, in order to cover the maximum representation of the population, the common quadrate size adopted was 20mts x 20mts.

And for almost all enumeration work it is better to do atleast 5-10% of enumeration so I had done 5% enumeration for the plantation which will give maximum representation of population.

For 5% Enumeration = $\frac{20 \times 10000}{100} \times 5 = \frac{200000}{100} \times 5$

= 10000 sq. mt

So we have to enumerate atleast 1 hacter area for 5% enumeration

Number of plots to Enumerate (20mts x 20mts) = $\frac{10000}{20 \times 20}$

= $\frac{10000}{400}$ = 23 plots (Approximately)

So we have to enumerate atleast 23 plots of size 20mts x 20mts for 5% of enumeration.

But I had done only 15 plots which will give maximum representation of population.

(4)

NAME OF THE VILLAGE: ILLYAL.

FOREST RANGE :- Gaddenkeri

FOREST Division :- Bagalkot

Enumeration Sheet

(OECF) Japan Aided project

Area - 20 hectar

Model - 3

Year - 1998

Quadrate Size :- 20mt x 20mt

Sl.No.	Local Name/ common Name	Botanical Name of the species	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total	percentage (%)
	Planted.																		
1	Anjan	Pardwikia binnata	42	42	33	44	41	39	43	41	42	40	41	43	40	42	43	616	71.6
2	Aalad Mara.	Ficus bengalensis	7	5	4	5	5	4	5	6	3	5	5	4	3	2	3	66	7.67
3	Acacia sps	Acacia auriculiformis	1	2	7	9	9	8	7	9	5	4	3	5	7	3	4	83	9.65
4	Neem	Azardichta indica	1	2	2	3	1	2	1	1	3	4	2	2	1	1	2	28	3.25
5	Arale (Fig)	Ficus sps	–	1	3	2	1	1	–	–	1	1	2	1	2	3	1	19	2.20
6	Bamboo	Bambusa arundinacea	2	2	1	1	3	2	3	2	1	1	1	2	–	–	2	23	2.60
7	Hunse.	Tamrindus indica	2	2	1	2	2	1	1	1	2	3	4	1	1	1	–	25	2.90
																		27	
																		860	100
	Natural.																		
1	Bellary Jali	prosopis jouliflora	–	–	1	1	2	1	1	–	–	–	1	–	2	1	–	10	7.63
2	Karijali	Acacia arabica	3	2	4	5	3	3	2	1	1	3	2	4	5	3	2	43	32.8
3	Tarekanti	Acacia sps	4	5	4	3	6	3	2	3	5	1	1	1	2	3	1	44	33.5
4	Calotropis	Calotropis sps	1	1	–	1	1	–	–	–	1	–	–	1	1	–	1	08	6.1
5	Neem	Azardicta indica	1	1	1	1	–	–	–	–	2	–	2	–	–	1	2	11	8.3
6	Eucalyptus	Eucalyptus hybrid	2	3	1	1	1	1	–	1	–	2	1	1	1	–	–	15	11.45
																		131	100

comments on plantation destribution of species

The entire plantation work like digging of trenches & digging cattle proof trenches were fully done by using mechanes and remaining other work like pit digging removing soil from the trenches weeding cleaning were done by using local labours. here also the spacing between the seedling was not properly given one of the seedling may be planted at 10mt distance other may be 7mts. They were planted the seedling according to their requirement... the spacing within the trenches was also not proper. It was also highly varying.

The plantation area mainly constitues about 7 tree species which were planted. among those. Hardwikia binnata holds topmost position in population destribution. i.e. of 71.6% followed by Acacia auriculiformis 9.65% next was Ficus bingalensis 7.67% and remaining other tree species were destributed very sparsally.

on the other hand. The destribution pattern of natural vegetation was some what medium there were about 6 different natural vegetation was identified. among those Acacia species holds the topmost position. i.e. 33.5% followed by that was Acacia arabica 32.8% & next was Eucalyptus hybrid 11.45%. remaining other vegetation was some what less and they dont play any major role growth of seedling. The plantation helped lot to the local people. farmers & daily wage labourers. which provided lot of employment

comments on plantation :-

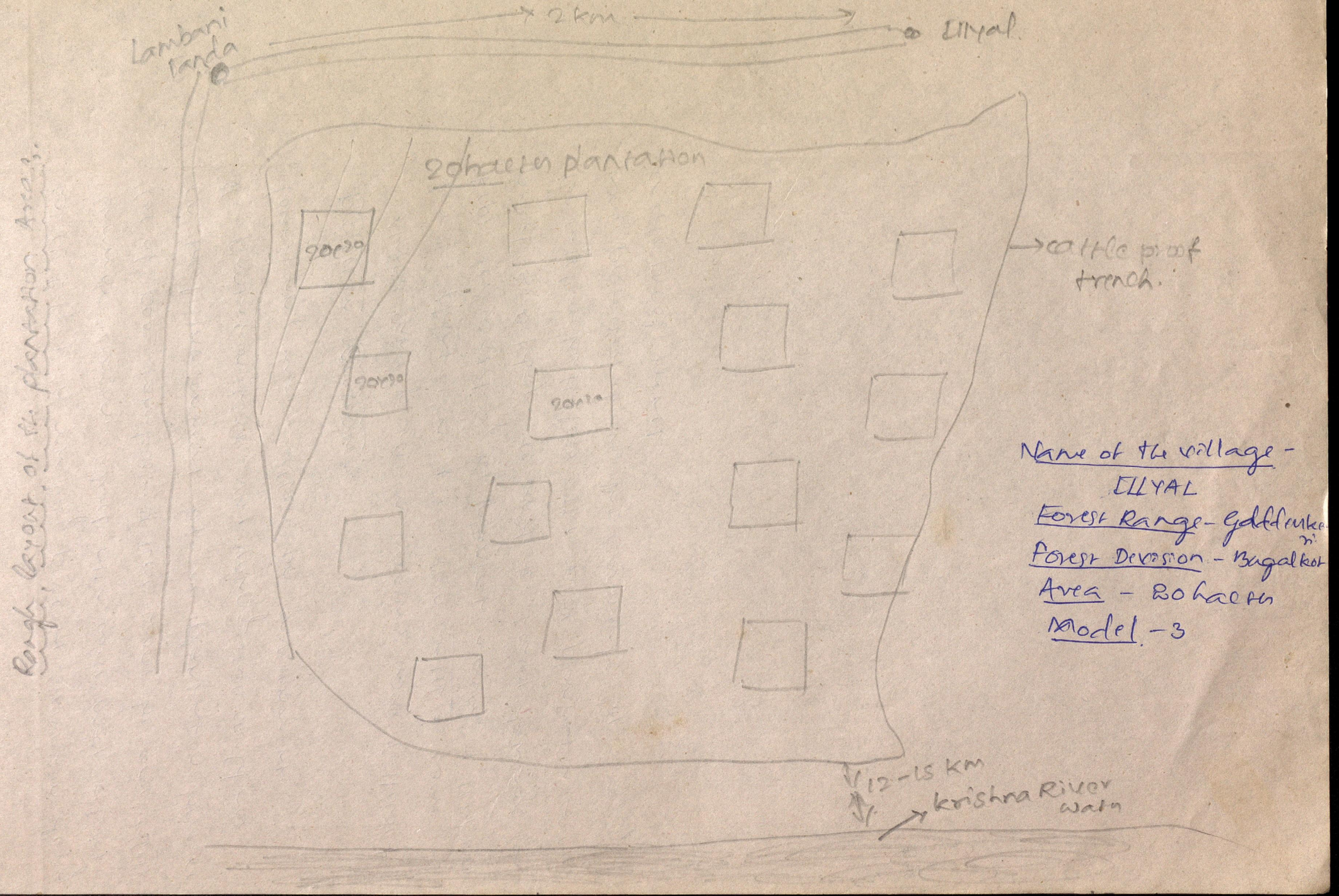
The total plantation Area is 20 hector. This plantation was some what different from earlier plantation. This was established under model 3. The soil condition, texture of structure and destribution of natural vegetation was some what change. Then that of 35 hector plantation established under model 4. and the plantation was maintened under good condin somehow little bit cleaning was done before establishing the plantation but not upto the mark. only the boodir of the plantation area was kept free from weed and other natural vegetation. and in the core of the plantation area we found lot of weeds. large number of big trees of big shrubs. it was very difficult to enter into the plantation area. except in one or two places we may enter without any problem.

Those all above problems hampering the actual growth of the sapling. leading to death of some of planted seedlings. and the watcher are interested to keep the plantation clean. but the Dipartmental people donot give any money for them i.e. for employing local labourers for weeding, cleaning purpose hence the watcher also lost interest / faith on the maintainance of plantation area and on Forest Dipartment. and the local people were thinking that those plantation work was mainly sanctioned for to provide employment to them. not for Environmental balance purpose.

which helped in removing poverty. Starvation during summer season... which otherwise may affects lot of poor families... & there wont be any effect on local environment by this plantation. because the plantation was very young. we could not found any major effect on environment

protection measures:

Almost same protection measures were followed for this plantation. & i.e. two watchers were kept for watching the plantation area. & they were paid 35 Rs/day. To avoid the heavy damage from the cattles buffaloes the entire plantation area was protected from those animals by digging cattle proof trench.



Name of the village - ILLYAL
Forest Range - Gaddenkeri
Forest Devision - Bagalkot
Area - 20 hacter
Model - 3

case study - V.

i) NAME OF THE VELLAGE :- Nandakeshawer.

ii) FOREST RANGE :- Badami

iii) FOREST DEVESION :- Bagalkot

iv) PLANTATION :- AREA = 15 hacter
SURVEY NO :- 195, 197.
MODEL :- 8
YEAR OF PLANTATION :- 1998

V) BACKGROUND OF THE VELLAGE :-

The village Nandakeshwara is located in Badami Taluk of Bagalkot District. which is about 20km away from Badami and 45km away from Bagalkot. The village is situated on the main Road. which reaches the Guladgudda. The village is somewhat bigger. The population of the village is about 5000. and the number of families ranges from 1200-1500. and among those families most of them have small-medium range of land holding. The Maximum number of farmers still practising dryfarming. The Mean annual rainfall ranges from 400-480 mm. (MAR) and most of the lands were dominated by Redsoil. and most common crops grown in that area are Maize, Jawar, groundnut. Sugercane etc. The land holding ratio ranges from 5-55 hacter.

The economy of the people mainly depend on coolie about 35% of population of that village. they dont have any land & their economy is fully dependent on daily wages and on government jobs.

And some of the people holds live stock population and those animals were usually grazed on the banks of National Roads, State highway's and on their ownlands. Nevertheless the local people highly depend on government land for grazing purpose

VI) TOPOGRAPHY:-

The Topography of the land is highly undulating & entire plantation was established under hilly slope condition. No planting was done at the Top of hill presently due to heavy rain almost 25% of the plantation area was submerged under local Tank. because of this natural calamites. some of the seedling were falldown and forest Department people thinking to replant after slowdown of waterlevel.

The common soil type found in the plantation was Red soil often with lower depth. In some parts of the plantation we also found rock layer (smooth) (ಗರಿಗಿ) (Smooth Rock layer). & most common existing vegetation are as fallows

Free species:- Nilagiri, Neem, cassia cynthia, prosopis jouliflora, p. cineraria, Acacia arebica, Acacia concinna

~~Bases~~ The uses or advantages of the some of the tree species is already mentioned in other case studies; but other than those are like Acacia concinna.. we find one or two trees in that plantation. The people worked in plantation they earlier donot know about that tree. The R.F.O of that area told them it is of Shikakai Tree which is used for (fruits) hair smoothing purpose after words some of the people starts using the fruits of that tree. for their daily uses.

prosopis jouliflora - is a good fuel wood sps which is most extensively used in that area. It is highly versatile sps which grow very fastly

prosopis cineraria - Banni or shammi - The leaves of this tree is used in Dasara festival. which is considered as gold., the people living in the community. They transfer their leaves each other. and uprises. we live like gold. for large number of years

Bushes:.. kavalekanti. massual, Halgathi. Godachi spine. Honnambri. calotropis. Cassia. sps Agave amoung those plants some of them are used for medicinal purpose.. The milk coming from the calotropis. is used for fracters.

~~Kot~~ of people used to collect the fruits of kavale for consumption purpose. The use is already mentioned in other case studies.

Agave Spp:- This bush is naturally present in the plantation & some of the plantings also planted by the Department people. The main aim of the growing Agave inside plantation area is to provide proper protection to the land against severe soil erosion. and to some extent provide fibre to the local people on free basis. The uses of Agave as already mentioned.

Other non wood & wild fruits like fruits of prosopis juliflora, kavale fruits, and mushrooms were collected by the local people in different season of the years.

VIII) JFPM:-

Here also people dont know the proper long-form of JFPM / VFC. They says there was no activity held on the related to JFPM / VFC.

IX) PLANTATION:-

Model:- 8.

The plantation Area is mainly located on the slope of the hill. Saplings were planted along the slope. The total plantation area is 15 hects. The pits were dugout along the slope. common soil type found as Redsoil often with medium depth may be about 1½-2 mts depth. and in some parts of the

plantation area may also have lateritic soil. and most common natural and planted vegetation found in plantation area are:

Natural vegetation - Massual., Halgathi calotropis spp opentia spp ; cassia spp Honnambari prosopis Nilagiri spp. Agave spp Neem Godachi Mullu, etc.

planted vegetation includes - Anjan., Neem., Hanse (Tamarind). Albezia lebbeck. pongemia pinnata Ficus bengalensis or F. religiosa etc.

The uses of all above plant species is already discussed in other case studies.

The plantation was established in 1998 June month. planting of the seedling was started on April 15th onwards. That work completed within 15 days.. The site preparation work was actually started in January month of 1998. It took atleast 3-3½ Month for 50-60 male labours and 45 female labours. The amount of Rupees paid for each male labour is 50Rs/day. and that of female labour is 40Rs/day.. The female labourers were employed for other works like cleaning of weeds cutting of grasses. and removing the soil from the pits. all the labours were coming from Nandi-keshwar, Adagal, & Halkari villages which are about 18 & 20 km away from Nandakeshwar

Here in this plantation area was also protected from cattles, goats, Buffalos by constructing stone wall around the plantation area. This work took atleast 15 days for about 20-25 male labours & 20 female labours. The rate paid for each male & female labour is quite same as above. The stone wall is constructed by using small rocks in the present in the plantation area.

The plantation is actually started in January 1998 & the entire work was completed in June 1 week. The seedlings were brough from Anantpur Nursery near Barami, which is about 30 kilometer away from plantation area. The seedlings were brought on tractor. each tractor trips costs about 550 Rs/trip and each tractor carries about 1500-2000 seedlings of 5x8cm bag size.

X) PLANTINGS:-

The total plantation area is about 15 hactor and the total number of pits dugout in a entire plantation area was 15000 at the spacing of 3Mtr x 3Mtr. The size of pits followed was 50cm x 50cm and 0 in one side of (North) plantation Trenches are dugout in those trenches some seedlings also planted at the spacing of 10M x 10Mtr

The total number of seedlings brought from the Anathpur Nursery was about 17000. among those, 15500 seedlings were planted in the during 1st planting and remaining seedling are planted during 2nd planting i.e. during gap filling

X) ENUMERATION:

The total plantation area is 15 hector and the spacing followed between the seedling is 3mt×3mt so inorder to cover the maximum representation of the population in the plantation area we have to select a proper quadrate size. so it is better to follow the 20mts × 20mts size plots which will give maximum representation of population and for any kind of enumeration work usually follow or ~~also~~ 5-10% of enumeration out of whole plantation area. and For this plantation I had done 5% of enumeration which will gave reliable description of planted tree species

$$\text{For 5\% Enumeration} = \frac{15 \times 10000}{100} \times 5$$

$$= \frac{150000}{100} \times 5 = \underline{7500} \text{ sq. mts}$$

So we have to enumerate 7500 sq mts of area. which will cover 5% of Enumeration

Number of plots to Enumerate (20M×20M) = $\frac{7500}{20 \times 20} = \frac{7500}{400} = 19$ plots

So we have to enumerate atleast 19 plots which will cover 5% of enumeration. but I had done 15 plots enumeration. All the plots are laid randomly. and entire enumeration work was also done randomly.

Managemental practices

Some of the managemental practices ~~are~~ were followed. for increasing the growth of seedlings. among those one. irrigation was given during ~~M~~ August Month. and fertilizer application was also followed during September Month. weeding & cleaning was also followed once in a year. but these two are not done still.

Case Study - V

Enumeration Sheet

OECF (Japan Aided project

Name of the village :- Nandakeshawra

Forest Range :- Badami

Forest Devision :- Bagalkot

Year = 1998

Area :- 15 hacter

Model - 8.

Quadrate size :- 20 Mt x 20 Mts

SL No.	Common Name / local Name	Botanical Name of Species	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total	percentage (%)
	Planted																		
1	Anjan.	Hardwikia binnata	17	15	19	17	12	13	18	14	15	14	13	15	19	13	14	214	29.80
2	Neem	Azardichta indica	10	11	5	7	4	7	7	5	3	2	4	3	3	5	6	82.	11.42
3	Hunse.	Tamarindus indica.	5	3	5	4	3	2	3	4	8	10	5	4	2	7	4	69	9.61
4	Hulgalu	pongemia pinnata	12	15	9	14	10	8	9	11	13	11	14	9	11	8	13	167	23.25
5	Aalad. mara.	Ficus bengalensis	5	3	4	5	3	2	1	5	4	2	2	4	3	4	3	50	6.96
6	Basari -"-	Ficus religiosa	2	5	5	2	7	4	4	2	3	2	4	5	1	3	1	50	6.96
7	Nilagiri	Eucalyptus hybrid	—	1	1	3	2	3	1	3	1	1	—	2	2	—	1	21	2.92
8	Sirasalu	Alberia lebbeck	2	5	4	3	4	2	3	4	3	4	5	3	4	5	4	53	7.38
9	Sissam.	Dalbergia sisso	—	—	1	2	—	1	—	1	1	—	—	1	1	2.	2.	12	1.67
																		42	
	Natural	Mortality :-	3	1	4	3	2	5	2	—	1	3	2	3	2	4	2.	718	100
1	Nilagiri	Eucalyptus hybrid.	3	3	2	1	3	4	2	3	2	1	3	2	3	1	3	36	14.06
2	Massual.		2	5	4	3	1	3	4	2	1	—	3	4	5	3	2	42	16.40
3	Honnambri		1	3	1	1	3	1	2	1	—	3	2	3	5	1	2	29	11.32
4	Halgathi		2	1	3	1	1	1	2	4	2	3	4	2	5	1	2	34	13.28
5	Bellary jali includes	prosopis jouliflora	7	9	10	12	11	5	7	9	7	5	6	3	5	7	8.	111	43.35
6	Cassia spr	Godachi spines also -	M.	H.	H.	H	H	H	H	M.	M.	L.	H	H.	H.	H	H		H
7	Calotripis.	Calotropis species	1	1	—	—	—	—	—	—	1	—	—	1	—	—	—	124	0.15
																		256	100.

comments on species destribution

The plantation area mainly constitutes about 9 planted tree species and about 7 type of natural vegetation. and amoung the planted vegetation. Hardwickia binnata. holds the topmost perentage of population with 29.60%. followed by that pongemia pinnata holds the IInd position. with 23.85% and next was Azarilchta indica holds 3rd position. and remaing other tree species destributed very sparsly. amoung those very least was Dalbergia Sisso. i.e. 1.67%

on the other hand. the destribution of the natural vegetation is some what medium the density of population was not that heavy. amoung different type existing natural vegetation prosopis juliflora holds the topmost position in population destribution. i.e. with 43.35% followed by that Massual holds IInd position with 16.40% and next was Eucalyptus hybrid with 14.06% and the remaing tree's sps and natural vegetation was some what low amoung the natural vegetation. very least population was calotropis with 0.15%.

Protection Measures =>.

The plantation was fully protected from the cattles, buffloes goats & sheeps by erecting

Comments on plantation:-

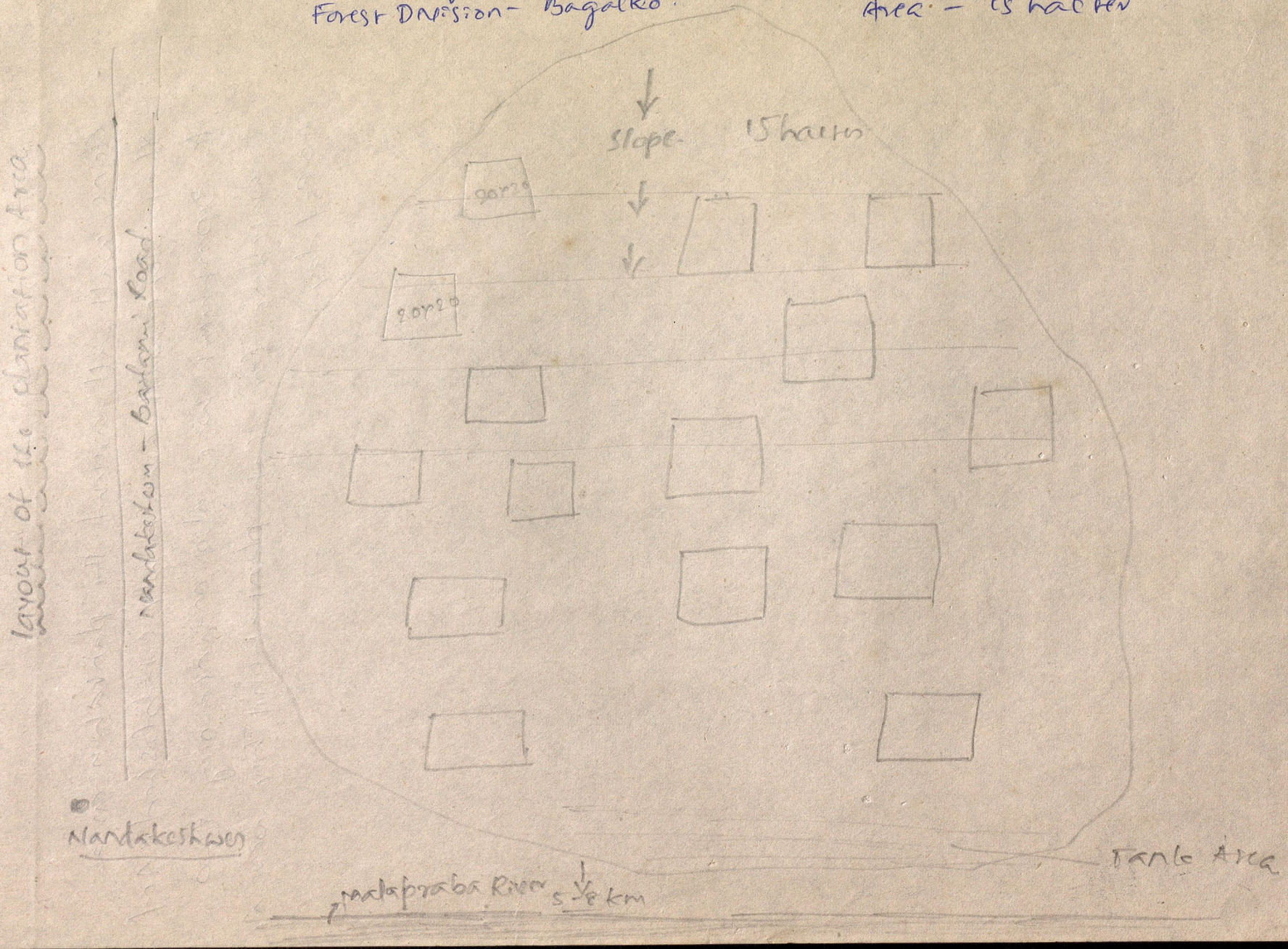
The total plantation area is 15 hacter. The plantation was some what good. but natural calamities created planted under bad condition. due to the heavy rain in last month about 25% of the plantation area is fully submerged under water. due to this reason lot of planted seedling were died. The topography of the plantation Area is very undulating. the entire plantation was established on hilly slope. The depth of soil is also very low. & soil contains very less amount of nutrient. Those all above condition hampering the proper growth of the seedlings

The spacing between the seedlings was also not properly maintened. The spacing was highly varying. This was mainly due to hard surface coat. which was very difficult to dugout pits & the pits were dugout only where the digging easily possible. The plantation plays very important role in busting the economy of local people like. Lambani, Rathod, Naik & Gavali and Talwar; but the plantation does not playing any role on environment building. & maintaining environment stability. because the plantation is still young.

Stone wall all around the plantation area
That stone wall was newly established. And
the Department was also maintaining two
watchers for that plantation & They were at
40 Rs / day.

Name of village - Nandakeshwar.
Forest Range - Badmi
Forest Division - Bagalkot.

OECF Japan project
Model - 8
Area - 15 hectare



case study-I :

i) NAME OF THE VELLEGE :- ELLYAL

ii) RANGE :- Gaddenkeri

iii) FOREST DEVISION :- Bagalkot

iv) PLANTATION :

AREA :- 35 hacter

SURVEY NO :- 100, 102, 103, 104, 105, 106

MODEL :- 4

YEAR OF PLANTATION :- 1997

v) BACKGROUND OF THE VILLAGE :

The village ELLYAL is located in Bagalkot District which is about 35 km away from Bagalkot. The village is present in remote area. There were only 3 buses for that village in a day. The village ILLYAL was earlier located near the ALMATTI DAM area. but now that village was shifted to other area, which is about 15-20km away from ALMATTI Dam. The previous ILLYAL village was fully submerged by krishna river water. The people of that village was Rehabilitated to ILLYAL plot. along with that village Shiraguppi, Mannal, village were also included in the Rehabilation camp of ELLYAL. The people of that village almost lossed their land by the submergence of krishna water. and They were provided compansation about 30000 - 1 lakh Rupees / hacter.

like that. the people of that village got lot of money. but presently they were over expenceing that money for drinking purpose... and they were not purchased any land in that village. most of people of that village was shifted their family to Bagalkot & Bijapur.

The present population of that village is about 2000. and number of families ranges from 500-600. among those families most of them are presently poor families. The land holding ratio was also very low. i.e. 4-10 hacter and the economy of the people is fully dependent on coolie.

The village Illyal was included together with Shiraguppi, Talgihall. All together constitute about 7000-8000 population. and number of families ranges from 4000-4500. those villages were also shifted from Krishna River basin. after Government Rehabilited them. presently those all villager are commonly called. ILLYAL. Shiraguppi & Talgihall plots.

The destribution of families were very sparse. we may find only 5-7 families within a half kelometer area. and some of the people are still building their houses. in the new area. and still about 20% of people leaving in govt made cottages. the karnataka govt had

provided compensation for house building. The compensation money ranges from 20000-50000/families.

Presently the economy of the people is completely dependent on daily wages./coolie. ~~In~~ not on farming... and, the main aim of establishing plantation was... to provide employment for a local people.. due to this reason... there were lot of plantations were established in and around the village under different projects like, U.K.P (upper krishna project). Social Forestry project. and under (OECF) Japan Aided project under (OECF) project two plantation were established under different models. around the village. Illyal.

presently the people of that village is fully dependent on government compensation money and on daily wages..

VI) TOPOGRAPHY:

The topography of that plantation was some what undulating. with 5-8% slope on the western side of the village.. The most common soil type found is ~~Red~~ Red soil. (fully red) to smooth rocky. soil and the common vagetation found in the plantation area are.

Trees:. Eucalyptus, Acacia Sps karikanti prosopis, cassia, Sps. karigrass. Neem.

Amoung these. ~~Acacia~~ leaves of Acacia arebica

was used as feed for goats and sheeps.

Fruits of prosopis juliflora was also used as a feed for goats & karigrass is most commonly used as fodder for the cattles, buffalo's & Horses.

Leaves of cassia was also using for ripening of Banana fruits. This was the traditional method of ripening Banana fruits in villages.

Bushes: cassia sps (tora), kasikanta: calotropis spo

The people of LILYAL & other surrounding villages used to collect the kavale fruits (ಕವಳೆ ಹಣ್ಣು) during December-January months, which was considered as a nutritious fruit.

The Rich people used to send their labourers to those plantations during August - November months for collection of Mushrooms (ಅಣಬೆ) which is being used as vegetables, and the rate paid for each labourers/day was 45-50 Rs/day.

To the some extent Agave was planted in and around the plantation, which is also used as a source of fiber for Agril purposes by the local farmers.

Remaining other nonwood products r already mentioned above.

VII) JFPM:-

They dont know what is JFPM & VFC, but they have complete idea about the Forest Department because lot of plantations were established under different projects, and those plantation work provided

lot of employment for local people. hence they were fully aware ~~of~~ about Forest Department activities. and no one officials tried to convince about JFPM and VFC.

VIII) PLANTATION:

Model:- 4

The total plantation Area is 35 ha. The Area ~~was~~ is highly undulating & the common soil found ~~is~~ is Red soil. and most common natural vagetation found are..

Trees:- Neem., Eucalyptus (planted under social forestry) Acacia sps. karikanti. cassia ~~[illegible]~~ sps

Bushes & Shrubs:- prosopis zouliflora. cassia tora. calotropis sps. etc.

planted vagetation:- Anjan. (Hardwikia binnata) Neem., pongemia pinnata, Acacia auriculiformis Albezia lebbeck.

The plantation was actually established in 1998 (June). The labourers were brought from different ~~[illegible]~~ near by villages like. Talgihall, Shiraguppi, Holdur, & Ellyal.

In a plantation the site prepration work was mainly done by the Mechanical method. i.e. by using Doger. The site prepration work mainly includes. dugging of trenches of size 4M x 0.45cm x 0.65 cm..

Those all trenches were dugout by using Doger. and the remaining work like removing of soil from the trenches were done by using labourers. That work done took atleast 3 months for 100 male labourers and the Rate paid for each labour was 50 Rs/day. and the time taken for excavating trenches was about 1½ Months. This work was done by using dogers. and the Rate paid for a doger/day was about 4000 - 4500 Rs/day.

Along with male labourers, female labourers were also employed in a plantation work. i.e. for transferring the Seedlings from the Truck and other activities like cleaning weeding purposes etc. and the Rate paid for each labourer (female) was 35 Rs/day. They were done those work atleast for 2 Months Time.

Actually the plantation work was started in December 1997 and planting of the seedlings was done in June 1998. The Seedlings were brought from Gaddenkeri cross which about is about 40km away from plantation area. Of some of Seedlings like Hardwickia binnata were brought from Alamathi Nursery.

PLANTINGS:

The total number of trenches dugout in the plantation Area was 15000. The size of the trenches followed is 4MTS X 0.45CM X 0.65CM. The spacing between the trenches is 4MTS. and two seedlings were planted in each trench. The total number of saplings brought from the nursery is 33000. (Approximately)

ENUMERATION:

The total plantation area is 35 hectre and spacing between the seedlings in a trench was 2MTS X 2MTS. The trenches were dugout by using Jager. The trenches were in correct line. The distance between each line is 4MTS apart. So in order to covere the entire orpresentation of population the common quadrate size adopted here was 20MTS X 20MTS.

For Any type of Enumeration work. It is better to do atleast 5-10% of enumeration. because of that reason I had done 5% of enumeration for that plantation

$$\text{For 5\% Enumeration} = \frac{35 \times 10000}{100} = \frac{350000}{100} \times 5$$

$$= 17500 \text{ sq. mts}$$

So we have to enumerate 17500 sqcmts of Area for 5% enumeration.

Number of plots to Enumerate. = $\frac{17500 \text{ Sq.mt}}{20m \times 20m}$.

$= \frac{17500}{400}$ = Approximately About 44 plots

But I had done 20 plots because it will give almost all information regarding species distribution, and other aspects.

Here the entire enumeration was done randomly and plots were also chosen randomly,

Management practices:-

The plantation was maintened under a good condition. The Area is some what free from weeds and other unwanted plants. One weeding is done during the August month. The entire weeding work was done by female workers at for about 15 day's at the rate of 35 Rs/day/labour. total number of labourers employed in each day is 15 members. and other managemental practices like. Fertilization irrigation. were also followed in that plantation. ; The amount of fertilizer added to the each seedling was 20gm. (DAP) one irrigation was also done. during july month.

(9) Name of the village - ILLYAL.
Forest Range :- Gaddenkeri
Forest Devision :- Bagalkot.

Enumeration Sheet.

(OECF) Japan Aided project
Area - 35 ha Hr
Model - A
year - 1998

Quadrate Size - 20M x 20M Hr

Sl No	common/ local Name	Botanical Name of the species	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
	Planted													
1	Anjan.	Hardwikia binnata	30	51	48	51	49	45	47	49	51	60	52	47
2	Hulgalu	pongemia pinnata	32.	7	6	6	9	12	10	7	4	3	1	9
3	sirsalu	Albezia lebbeck	-	1	1	2	1	2	3	4	2	-	1	2
4	Neem.	Azardichta indica.	-	1	1	-	-	1	2	1	1	-	-	1
5	Acacia	Acacia auriculiformis	-	-	1	-	1	-	-	1	1	-	-	-
	Natural													
1	Eucalyptus	Eucalyptus hybrid.	1	3	1	2	3	4	3	2	1	3	-	3
2	Acacia sps.	Acacia arabica	3	2	4	3	2	4	5	3	4	3	2	1
3	Kari kanti	Acacia sps	4	4	5	3	4	3	2	4	6	3	2	1
4	Bellary jali	prosopis juliflora	3	3	2	4	1	1	3	4	1	3	4	3
5	cassia sps	cassia sps	M	M	M.	H	H.	M	H	H	M	H	M	M.
6	Neem.	Azardichta indica	3	2	4	1	1	1	2	1	1	2	1	1
7	kari grass.	.	H	H	H	H	H	H	H	H	H	H	H	H

Name of the village – ELLAL

Forest Range – Gaddenkeri

Forest Division – Bagalkot

Enumeration sheet

OECF (Japan Aided project)

Area – 35 hectrs

Model – 4

year – 1998

Quadrate Size – 20M × 20M.

Sl No.	common / local Name.	Botanical Name of the Species.	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Total	percentage (%).
	Planted.											
1	Anjan	Hardwikia binnata	50	53	49	49	45	48	48	51	973	81.28
2	Hulgala	pongamia pinnata	3	5	6	9	6	9	11	8	163	13.62
3	Sirasalu	Albezia lebbeck	4	1	2	1	4	5	1	–	36	3.00
4	Neem	Azardichta indica	2	1	2	1	3	–	2	1	19	0.15
5	Acacia	Acacia auriculiformis	1	–	–	–	–	–	1	–	06	0.005
											12	
											1197	100.
	Natural											
1	Eucalyptus	Eucalyptus hybrid	2	4	3	2	2	1	2	3	45	18.67
2	Acacia sps	Acacia arebica	1	1	1	2	1	1	2	2.	47	19.50
3	karikanH	Acacia sps	4	3	4	3	2	3	2	1	63	26.14
4	Bellary jali	Prosopis jouliflora.	4	4	2	4	3	3	2	1	55.	22.82
5	cassia sps	cassia spr	H	M	H	H	H	M	H	M.	H	+1
6	Neem	Azardichta indica	1	1	2	2	2	1	1	1.	31.	12.86
7	karigrass.										242	100.

comments on the plantation :-

The plantation was somewhat mainten-ed under good condition... Some of the managemental practices are also carried out such as cleaning before establishment of plantation was done properly. and weeding was also done with great care and fertilizer application is also done. but. In the plantation area we find some of noxious weed species which are hampering the growth of the sapling.

Most of the site prepration work were done by Mechanical means. thats why we find lot of variation in spacing between the seedlings in a trenches and between the line of treches in entire plantation. Some of the seedlings may be planted with 4Mt distance & some may be 5Mts. we dont find proper spacing.. ~~but~~

This

comments on plantation, species, destribution

The total plantation Area is 3 shacter. & seedlings were planted at 2Mt x 2Mt distance.... There were 5 different tree species were planted in entire plantation area at 2Mt x 2Mt distance apart in a 4Mts long contin-our trenches. amoung those 5 Tree species planted. Hardwikia binnata (Anjan) holds Topmost position in density destribution. i.e. 81.28 % fallowed by this pongemia pinnata (Hulgalu) holds second position with 13.62 %. Then comes 3% by Albezia lebbeck

and the destribution of other tree species like Neem & Acacia auriculiformis is very sparse. i.e. 0.15 & 0.005 % respectively.

Then coming to the destribution pattern of natural ~~pl~~ vagetation is some what low. mainly 6 different natural plants are ~~[illegible]~~ identified in entire plantation amoung those prosopis jouliflora (Bellary jali) holds ~~[illegible]~~ second position i.e. 22.82% and 1st postion is occupied by Acacia species i.e. 26.14% and 3rd position is dominated by Acacia arebica ie. 19.80. remaining other species like cassia cyamia Azardichta indica & Eucalyptus were present in small numbers. but the destribution of noxious weed like parthenium. cassia tora & kari grass is very high. it was not possible to count those all sps. because it is unnecessary work.

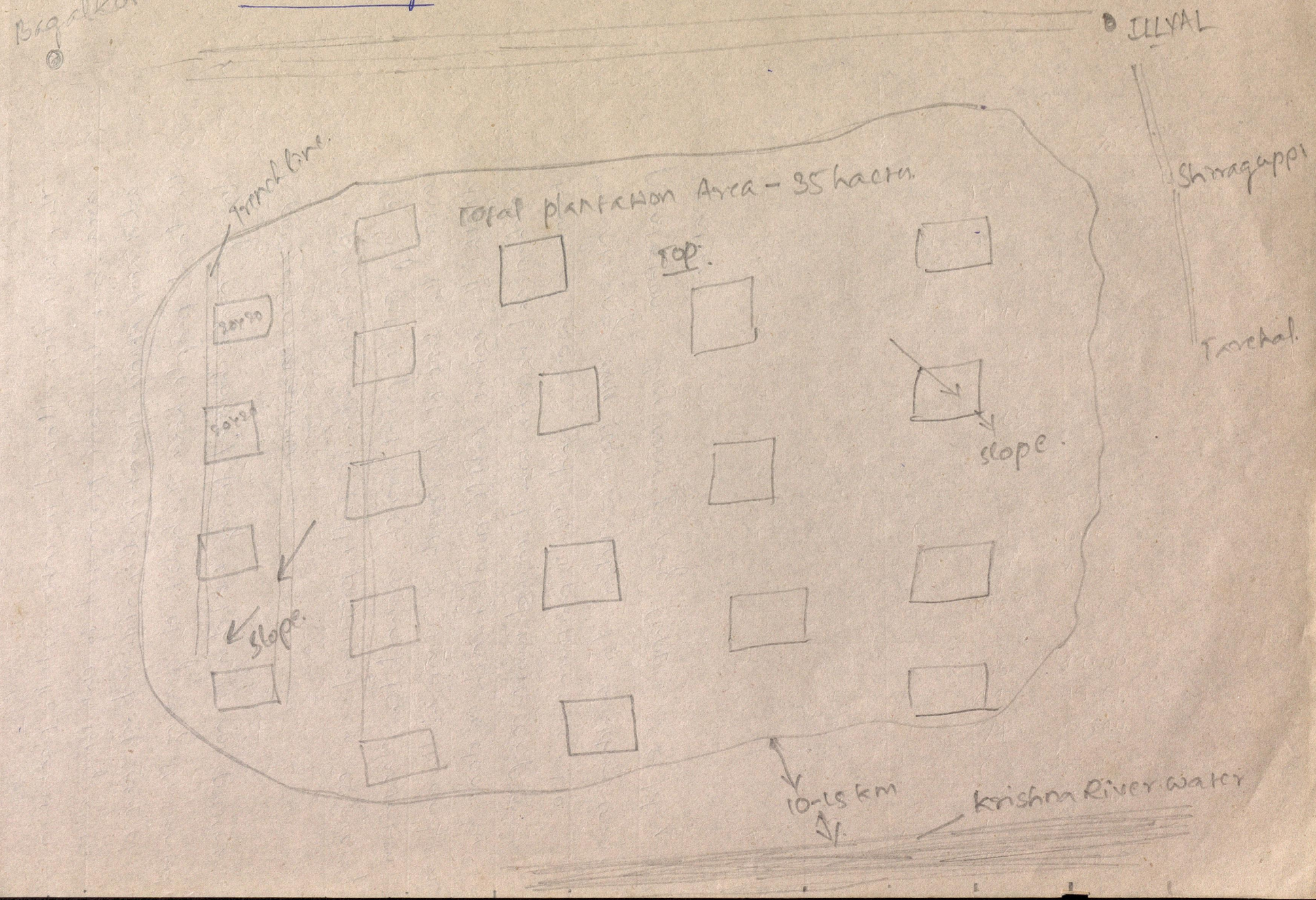
These plantations provided lot of work to the local people. hence local people uprasing the Forest Department presently. the economy of the local farmers / coolie labourers is fully dependent on the money came from this plantation work. because almost all family members did the labour work during that period. & they earned lot of money from plantation work. but this plantation attracted lot to the local grazers. because earlier those peoples like Govali-Lamani used to graze these plantation. but know it was complitely stoped. These people see the heavy grass in the plantation area. but the entire area is fully protected

They were not allowed to enter on to the plantation area. but they were permitted to cut the grasses. what ever amount quantity they required. & some of the local people have the habit of grazing their animals during night hours. / during watcher is not present.

protection measures:-

The plantation area is fully protected by excavating the big cattle proof trench around the plantation area. The size of the trench is 1mts width and 2mts depth. The entire cattle proof trench is done by mechanical means. which costed more. compare to manual work. and. The Department is also maintaing two watcher. for watching entire plantation. they were paying Rupees 35 Rs / day / watcher.

Name of village - ILLYAL Area - 35 hacts model - 4



Rough: layout of the plantation area