

GOVERNMENT OF KERALA

**REPORT OF THE
FARM FORESTRY SURVEY
IN KERALA
1994**

DEPARTMENT OF ECONOMICS AND STATISTICS

1995

GOVERNMENT OF KERALA

**Report of the
Farm Forestry Survey
in Kerala
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**Department of Economics and Statistics
1995**

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Report of the
Forest Survey
in Kerala
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Report of Farm Forestry Survey

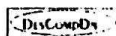
(Social Forestry) Kerala 1994

**Farm Forestry
Survey Report No. 6**

Department of Economics and Statistics

Government of Kerala

1995



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Farm forestry is an integral part of the Social Forestry programme envisaged by the National Commission on Agriculture (1976). According to the Commission Social forestry programme was defined to include in addition to farm forestry, extension forestry, afforestation in degraded forests and recreation forests etc. The objectives of the programme is to meet the growing demand for fuel wood, timber, fodder, green manure etc. and also to avert further deterioration in the forest resources. The success of the farm forestry programme is measured on the basis of the survival rate of seedlings distributed to the public.

In order to assess the survival percentage of the seedlings distributed to the public during 1989, Government of Kerala gave sanction to the Director of Economics & Statistics to conduct a farm forestry survey. The results of the survey are presented in this report.

The report is prepared by Smt.S.INDIRA, Joint Director, with the assistance of Smt.K.Tulsi Bai, Research Officer. Sri.M.P.Madhu, Typist, typed the entire manuscript. The sincere services rendered by the investigators appointed for this survey and District level Officers of this Department for field supervision and tabulation are acknowledged. I am also thankful to Smt.M.S.Valsala, Statistician and other officers of the Social Forestry wing of the Forest Department for their sincere co-operation for the successful conduct of this survey.

It is hoped that the findings of this survey would be useful to the planners and those interested in the Social Forestry Programme of Kerala. Suggestions for improvement are most welcome.

29-9-1995.

Dr. M.KUTTAPPAN,
DIRECTOR,
DEPARTMENT OF ECONOMICS & STATISTICS,
THIRUVANANTHAPURAM.

The first part of the report deals with the general situation in the country. It is a very interesting and detailed account of the political and economic conditions. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country.

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The fourth part of the report deals with the social situation. It is a very detailed and interesting account of the social conditions and the policies of the government. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country.

DEPARTMENT OF ECONOMIC & STATISTICAL AFFAIRS
HONG KONG

INTRODUCTION

Forests, from ancient time onwards was an integral part of India's Cultural and Spiritual Life. Vedas and epics are full of instances giving evidence of congenial relationship between man and nature. Forest resources are essential not only to meet social and economic needs of the people but also to balance the ecological condition of the various regions. The importance of forests and its resources are further stressed when the Government of India through its national forest policy of 1952 prescribed that forest area should be one third of its geographical area.

During the last two decades area under forests has decreased drastically due to the interaction of a number of factors like illegal encroachment, natural calamities like soil erosion, lopping and felling of trees for fuel and timber etc. According to the latest official statistics, India's forest cover is only 22.22 percent of the geographical area.

The situation in Kerala is not better. According to latest official statistics of 1992-93, the area under forest is 10.81 lakh hectares which constituted 27.8 percent of the total geographical area of the state. But the actual area under forest is likely to be considerably less as large tracts of land have been cleared either for cultivation or for other purpose through illegal encroachment, during the last few decades. Construction of hydro electric projects and establishment of wild life sanctuaries have further reduced the availability of forest area.

Such circumstances necessitated to find out alternative methods, to meet the timber and firewood requirements of public from outside the forest area, by giving least disturbance to existing forest area. With this in view programmes like distribution of seedlings at "Vanmahotsva", N.R.E.P., 20 point programme etc. were launched by the state government along with other states.

It was only in 1984-85 that a major project social forestry programme was started in the state with the assistance of World Bank.

In order to achieve the objectives of the project the tasks have been broadly classified into farm forestry and planting in the public lands ie. planting in extensive areas of waste lands and degraded forests.

Farm Forestry in Kerala

Kerala, a small state with a density of population of 747 persons per Sq.Km., second only to West Bengal, has a unique land utilisation and cropping pattern. Per capita availability of land in Kerala is only 0.13 hectares compared to all India average of 0.39 hectares leading to high intensity of cropping ie. 135 as against 127 at All India level. The recent trend in the land utilisation pattern given in Table 1.1 shows that there is significant reduction in the proportion of land under miscellaneous tree crops from 2.2% in 1975-76 to 0.87% in 1992-93 indicating a substantial reduction in the tree population meant primarily for firewood and timber*. At the same time more than 92% of the holdings in the state are below 1 hectare of land size. Only about 6% of the total operational holdings come under the size group of 10 hectares and above**.

In view of the above circumstances there was scepticism about the scope of farm forestry in Kerala. To allay all such doubts Kerala Forest Department conducted a social forestry land use survey in 1982 to ascertain from the land holders their willingness to plant more trees in their homesteads.

Encouraged by the positive results of the survey a major project of "Social Forestry Programme" has been started in 1984-85 with the assistance of World Bank. The major share of the fund of the project 81% was earmarked for farm forestry and most of the extension

* Farm Forestry Survey Report No.4, Department of Economics and Statistics, 1992.

** Agricultural Census Report 1990-91.

activities were also meant for educating the farmers to take up tree planting in their homesteads so that they not only get increased income but also fulfill their fuel wood and small timber demand from the planted trees to the maximum possible extent.

Table 1.1

Land Utilisation Pattern in Kerala 1975-76 & 1992-93.

Sl. No.	Land use	1975-76		1992-93	
		Area (000 ha)	% to total	Area (000 ha)	% to total
1	2	3	4	5	6
1.	Total area	3885	100	3885	100
2.	Forest	1081	27.8	1081	27.82
3.	Land put to non agriculture uses	259	6.8	303	7.80
4.	Barren & un-cultivable land	78	2.1	55	1.42
5.	Permanent pasture and other grazing land	20	0.5	29	0.06
6.	Land under miscellaneous tree crops not included in net area	84	2.2	34	0.87
7.	Cultivable waste	113	2.9	91	2.34
8.	Fallow other than current fallow	23	0.6	27	0.69
9.	Current fallow	37	1.0	42	1.08
10.	Net area sown	2189	56.0	2250	57.92
11.	Area sown more than once	792		797	
12.	Total cropped area	2981		3046	

(contd..4)

CHAPTER - 2

OBJECTIVES OF THE PRESENT SURVEY.

Background of the Survey

In the World Bank Scheme the target under farm forestry is to distribute 340 million tree saplings covering 81% of total physical target of Social Forestry programme of the World Bank. Under this scheme farmers are supplied with seedlings free of cost (now it is priced for persons requiring large number of seedlings) to be planted in their farms. Social forestry wing of the forest department is the implementing agency of social forestry programmes in Kerala State. Every district has social forestry office headed by an Assistant Conservator of Forests under whom two or more ranges are functioning each under the control of Range Officer. The Department raises the nurseries and the seedlings are distributed by involving voluntary agencies like Mahila Samajams, Forestry Clubs, School Clubs, Arts and Sports Clubs, Trade Unions, National Service Schemes, Local Libraries etc. These organisations are given distribution Registers to record the name and address of beneficiaries and also the specieswise number of seedlings distributed to each beneficiary. Every year lakhs of seedlings are distributed and it is necessary to know whether the seedlings distributed are planted and looked after properly. This feed back information is necessary to rectify the defects if any in the system and further improve the distribution system. The World Bank and the Government of India wanted the social forestry programmes to be evaluated regularly and prescribed an 'operational guide' popularly known as "Red Book". A detailed questionnaire was designed as per the guideline to collect data for the purpose of evaluation.

In the past, evaluation studies to assess the survival rate of seedlings distributed and to find out the reasons for the mortality of seedlings were conducted by different agencies based on small samples.

(contd..5)

The first State-wide Sample Survey to assess the survival rate of seedlings distributed under the farm forestry was carried out by this department in 1988 with respect to seedlings distributed in 1986. But the sample size was only 0.2% of the total beneficiaries listed in the Distribution Registers. The next survey was conducted in 1991 relating to the seedlings distributed during 1987. A third survey was conducted in 1992 relating to the seedlings distributed in 1988. The present survey intends to assess the survival rate and other related aspects of the seedlings distributed in 1989-90. The sample size is 2% of the total beneficiaries.

Objectives of the Survey

The major objectives of the present survey are:-

- 1) to assess the survival rate of seedlings distributed under farm forestry during 1989
- 2) to find out the reasons for mortality of seedlings
- 3) to find out the adequacy of extension activities and
- 4) to assess the specie-wise future requirement of seedlings.

Besides collecting relevant data for the above objectives, data relating to main occupation of beneficiaries of seedlings, specieswise number of seedlings planted, cultural practices followed, extension services availed etc. were also collected.

Coverage and Sample design

The survey covered all the 14 districts of the state. Multistage systematic sampling method is used for the selection of beneficiaries. First stage of the selection is the seedlings Distribution Register. The seedlings distribution Registers in each district were arranged in ascending order on the basis of the number of beneficiaries. The total number of recipients of seedlings as per the Distribution Registers during 1989 was 5,42,367 and the sample size for this survey was 2% ie. 10,846 beneficiaries.

Method of Enquiry and the Field Work

Data for the survey were collected in a schedule separately designed for this survey by interviewing the household members and by enumerating the seedlings planted. The field work was carried out by the investigators selected for this survey from persons registered in the Employment Exchanges under the supervision of one of the District level Officers of the Department of Economics & Statistics. The field work was carried out in January and February 1994. The report writing was done in the Directorate of Economics & Statistics.

Limitations of the Survey

A number of limitations were noticed in the course of the survey. In certain centres beneficiaries could not be indentified on the basis of the address mentioned in the Distribution Register of these addresses. On enquiry it was found that no such person existed in the locality. In many other cases seedlings were distributed only to certain persons and not to all persons listed in the Distribution Register. When contacted they reported that they have not received any seedlings. Since many of the voluntary agencies, involved in the distribution of seedlings, had no proper identity it was difficult to check with them the correctness of the details in the distribution register. Another noticeable feature is that many of the beneficiaries planted trees without actually knowing the idea behind the project. The various limitations mentioned above have to be borne in mind while using the results of the survey.

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CHAPTER - 3

Results of the Survey

The present survey, as in the case of the previous surveys, covered all the 14 districts of the state. The district-wise distribution of beneficiaries is furnished in the Table 3.1.

Table 3.1

District-wise Distribution of Beneficiaries for the year 1989.

S1. No.	District	No. of beneficiaries	percentage	Density of population	% of forest area to total area
1	2	3	4	5	6
1.	Thiruvananthapuram	2663	26.93	1344	22.80
2.	Kollam	907	9.17	967	32.33
3.	Pathanamthitta	528	5.34	450	57.75
4.	Alappuzha	1251	12.65	1415	-
5.	Kottayam	1392	14.08	830	3.71
6.	Idukki	218	2.21	215	50.67
7.	Ernakulam	114	1.15	1170	3.45
8.	Thrissur	474	4.80	903	34.62
9.	Palakkad	126	1.28	532	31.03
10.	Malappuram	542	5.48	872	28.48
11.	Kozhikode	91	0.92	1118	17.74
12.	Wayanad	483	4.88	315	37.06
13.	Kannur	900	9.10	759	16.42
14.	Kasaragod	199	2.01	538	2.87
State		9888	100.00	749	27.83

It should be seen from the table that Thiruvananthapuram with 2663 beneficiaries accounts for the largest share (26.93%) of the total number of beneficiaries. Though 22.80% of the total area of the district is under forest, it has the highest density of population next to Alappuzha. The other densely populated districts like

(contd..8)

Alappuzha, Ernakulam and Kozhikode have only very low number of beneficiaries ie. 12.65%, 1.15% and 0.92% respectively. It may be noted that there is no forest land in Alappuzha district and the proportion is very low in Kottayam, where as the area under forest in Kozhikode is as high as 17.74%. The above analysis clearly reveals that the distribution of beneficiaries has no bearing either on density of population or on the forest area.

Classification of beneficiaries according to their main occupation reveals that cultivators and labourers together constitute more than half of the total number of beneficiaries. They account for about 61.37% in the present survey. Comparison with the previous years shows that more or less the same trends is maintained all these years with little variation.

Table 3.2

Comparison of the Distribution of Beneficiaries according to their main source of Income.

Sl. No.	Category	Percentage to total		
		1987	1988	1989
1.	Cultivators & labourers	61.57	58.95	61.37
2.	Government employees	7.90	7.88	9.92
3.	Private employees	9.19	10.20	7.71
4.	Others	21.34	22.97	21.00
		100.00	100.00	100.00

The fact that government and private employees account for only a very small proportion of the total beneficiaries and also their number is not making any marked increase shows the need for wide publicity among this group of income earners in future programmes. It is also necessary to go deep in to the causes of reluctance on the part of this group, since they can bear the long gestation period of the plant species generally supplied.

(contd..9)

Distribution of beneficiaries according to their operational holding, shows that generally beneficiaries with large size of holding i.e. 250 cents and above shows only modest interest in accepting the species distributed through farm forestry programme. This indicates the need for further studies in the species acceptable to such groups who has more land to cultivate. Small holders with less than 49 cents accounts for about 60% of the total number of beneficiaries as in the case of previous surveys. Details are given in Table 3.3.

Table 3.3

Distribution of Beneficiaries according to Operational Holdings
for the year 1989.

(Area in cents)

Sl. No.	Size of holding	Number	Percentage to total
1.	Less than 10 cents	1715	17.65
2.	Between 10 to 49 cents	4332	43.81
3.	-do- 50 to 99 cents	1635	16.54
4.	-do- 100 to 249 cents	1436	14.51
5.	-do- 250 to 999 cents	686	6.94
6.	1000 cents and above	54	0.55
7.	No land holdings	-	-
All sizes		9888	100.00

No. of seedlings distributed

Table No.3.4 shows that 1.73 lakh seedlings were distributed to 9888 beneficiaries during the reference year, thus accounting for 18 seedlings per beneficiary. The district-wise analysis shows that Kasaragod district accounts for the maximum number of seedlings per beneficiary - 82 followed by Idukki and Wayanad, whereas Thrissur accounted for only 4 seedlings per beneficiary. It may be noted that Kasaragod, Idukki and Wayanad has only 2.01%, 2.21% and 4.85% of the total number of beneficiaries respectively. In the previous surveys also seedlings per beneficiary was highest in Kasaragod district.

(contd..10)

Suitability of the plant species distributed, availability of barren land etc. might have contributed to this phenomenon.

Table 3.4

District-wise Distribution of Seedlings Distributed during 1989.

Sl. No.	District	Seedlings distributed		Average No. of seedlings per beneficiary
		Number	Percentage to total	
1	2	3	4	5
1.	Thiruvananthapuram	28036	16.18	11
2.	Kollam	11088	6.40	12
3.	Pathanamthitta	4668	2.69	9
4.	Alappuzha	15355	8.86	12
5.	Kottayam	24823	14.32	18
6.	Idukki	14510	8.37	67
7.	Ernakulam	1705	0.98	15
8.	Thrissur	1956	1.13	4
9.	Palakkad	5379	3.10	43
10.	Malappuram	5401	3.12	10
11.	Kozhikode	1482	0.86	17
12.	Wayanad	31122	17.96	64
13.	Kannur	11466	6.62	13
14.	Kasaragod	16310	9.41	82
Total		173301	100.00	18

Purpose of planting

The most important objective of social forestry programme is to encourage land holders to cultivate trees so as to meet their own requirement of fuel, fodder, timber etc. and thus to limit the encroachment upon forest lands. The success of the project depends to a great extent on the ability to cater to the needs of specific area or group, within the broad objective. Explanation of the beneficiaries, given in table 3.5 regarding the purpose for which they

(contd..11)

planted trees will give an idea of the needs of particular area or group. Most of the beneficiaries reported that trees providing timber either for sale or for self use is preferred by them than any other species. Cultivation of trees for firewood and fodder are not common in Kerala as firewood requirements are met largely from coconut trees and other fruit trees. Rearing of cattle on a large scale is not common in this area may be the reason for the beneficiaries not giving much emphasis to fodder cultivation. This is clearly seen from the table 3.6 that more than 57% of the beneficiaries do not have any cattle of their own. Only 4% of the beneficiaries do have more than three cattle. Cultivators also have a preference for trees which provide fruits as well as timber like Jack.

Table 3.5

Main purpose of Planting for the year 1989.

Sl. No.	Purpose	No. of beneficiaries
1.	Fuel wood	2743
2.	Fodder	181
3.	For sales	6857
4.	Ornamental purpose	1257
5.	Timber for own use	6737
6.	Fruits	2922
7.	Other uses	905
8.	Not with any other specific purposes	1314

Table 3.6

Distribution of Beneficiaries according to number of Cattle
for the year 1989.

Sl. No.	No. of cattle	Number	Percentage to total
1.	No. of families with no cattle	5589	56.52
2.	No. of families with 1 cattle	1953	19.75
3.	No. of families with 2 cattle	1475	14.92
4.	No. of families with 3 cattle	504	5.10
5.	More than 3 cattle	367	3.71
Total		9888	100.00

Planted area

Kerala being a densely populated state most of the cultivable land is brought under cultivation and as such intensity of cropping is the highest in India. Every household is surrounded by a courtyard where few trees like Coconut, Mango, Jack etc. are cultivated. The type of land in which beneficiaries plant the seedlings distributed give an insight into the type of species to be selected in future. Though it is difficult to calculate the actual area covered by seedlings distributed under the scheme, a rough estimate given in Table No.3.7 shows that seedlings are planted mainly in bunds and fences separating the land of one cultivator from another. Such area covered 59% of the total estimated area of 3185 hectares. Only 57 hectares accounting for 2% of the total estimated area was barren at the time of planting the seedlings. About 21% of the area comes under the category 'under planted'. This shows that trees providing timber and at the same time can be planted in bunds and fences are preferred mostly by the beneficiaries.

Table No. 3.7

Planting area according to land use (Before planting) 1989.

S1.No.	Land use	Area in hect.	Percentage to Total
1	2	3	4
1.	Barren	57	1.79
2.	Under planted	679	21.32
3.	Substituted	3	0.09
4.	Bunds, Fences etc.	1875	58.87
5.	Home Steads	571	17.93
Total		3185	100.00

Survival of the Seedlings and the Causes of Mortality

One of the most important objectives of the study is to find out the survival rate of the species distributed. In 1989 about 1.73 lakh seedlings were distributed including both basketed and non basketed. As per the report of the beneficiaries about 1.64 lakh seedlings were planted. Survival percentage is worked out to the total seedlings planted. Survival rate for the state as a whole is 49.68 %.

District-wise distribution shows that Thrissur has the highest survival rate of 60%, where as Ernakulam has the lowest survival rate of 30.03%.

Analysis of the survival rate of few important species cultivated throught out the state shows that Matti and Silver Oak top the list with 54% each. Other species like Cashew, Mahogany, Teak etc. also shows a survival rate of more than 40%.

In the case of silver Oak it may be noted that the cultivation of the crop is confined to Idukki and Kasaragod alone. The favourable climatic condition and the care taken by the beneficiaries, being a valuable timber item, contributed to high survival rate of the crop.

Besides this a number of other species are also cultivated by the beneficiaries depending upon the space available. In the case of such crops for eg: Guava, Gooseberry etc. the survival rate is 100%. Tables 3.8 and 3.9 gives the details of district-wise and specie wise survival rate of seedlings planted.

Table No. 3.8**District-wise distribution of Seedlings planted and survived**

Sl.No	District	Planted	Survival	
			Number	Percentage
1	2	3	4	5
1.	Thiruvananthapuram	27758	11987	43.18
2.	Kollam	9902	5349	54.02
3.	Pathanamthitta	4668	2611	55.93
4.	Alappuzha	15365	9281	60.40
6.	Kottayam	27394	13674	49.92
6.	Idukki	13822	8007	57.93
7.	Ernakulam	1705	512	30.03
8.	Trissur	1992	1619	81.28
9.	Palakkad	5379	1905	35.42
10.	Malappuram	5401	1755	32.49
11.	Kozhikode	1482	663	44.74
12.	Wayanad	27456	12234	44.56
13.	Kannur	10636	5802	54.55
14.	Kasargode	11175	5700	51.01
State		164135	81099	49.68

Table No. 3.9**Specie-wise distribution of important seedlings planted and Survived during 1989**

Sl.No.	Specie	Planted	Survived	
			Number	Percentage
1	2	3	4	5
1.	Alianthus (Perumaram or Matti)	47984	25866	53.91
2.	Casaurina	4604	1718	37.32
3.	Swietenia Macrophylla (Mahagony)	19627	8453	43.01
4.	Teak	19876	8946	45.01
5.	Acasia	1789	826	46.17
6.	Silver Oak	13490	7222	53.54
.	Cashew	2541	1222	48.09
8.	Others	1000	474	47.40

(contd..15)

The reason pointed out by the beneficiaries as the major cause for the mortality of the seedlings planted is drought, as in the case of previous surveys. More than 68% of the households explained this as the main reason for the high mortality. Heavy rain, insects, animals, soil condition and fire are some other factors listed as the cause for mortality. Since the seedlings in the early stages require irrigation it would be proper if the seedlings are distributed at the beginning of the monsoon season in the state.

Table No.3.10

Reasons for mortality for the year 1989

Sl.No.	Reason	Numbers	Percentage
1	2	3	4
1.	Animals	2333	2.81
2.	Insects	5501	6.61
3.	Heavy rain	5528	6.65
4.	Weeds	217	0.26
5.	Soil Conditions	7061	8.49
6.	Drought	57197	68.77
7.	Pests	1148	1.38
8.	Fire	5	0.01
9.	Other reasons	4178	5.02
	Total	83168	100.00

(contd.: 16)

Cultural Practices:

Timely and proper cultural practice contribute to a great extent to the success of any agricultural enterprise like farm forestry. One of the major causes pointed out by the beneficiaries for the mortality of the seedlings is the draught. That clearly points out the importance of irrigation especially in the early stages of the growth of the seedlings. An analysis of the cultural practice of the beneficiaries reveals that only about 44.24% of the total beneficiaries resorted to irrigation. About 16.11% did manuring to the seedlings planted by them. Only about 8% of the beneficiaries adopted plant protection measures and weeding. However compared to other two survey periods there is an increase in the number of beneficiaries adopting to cultural practices. Details are given in table No.3.11

Table 3.11
Distribution of beneficiaries resorting to cultural practices
for the year 1989.

Sl.No.	Cultural Practices	Number	Percentage
1.	2.	3.	4.
1.	Irrigation	4374	44.24
2.	Manuring	1593	16.11
3.	Plant Protection measures	789	7.98
4.	Weeding	805	8.14
Total No. of beneficiaries		9888	

Extension Services:

The gross inadequacy of extension service in the social forestry programme, which educate and help the cultivators in selecting the species suited to their locality and the cultural practices to be followed, was clearly evident from the surveys conducted earlier. The present survey also attempted to elicit the opinion of the beneficiaries regarding the adequacy of the extension service under farm forestry programme.

The analysis given in table 3.12 shows that though a slight improvement is noticed, it is far below the requirement. Only 2 to 16 percent of the beneficiaries received advice on any of the cultural practices to be followed by them under farm forestry programme. About 57.43% expressed the view that they need advice from the experts.

Table 3.12

Distribution of beneficiaries according to advice on tree husbandry - 1989

S I.No	Item	Number	Percentage to total beneficiaries
1	2	3	4
1.	Farmers who needed advice	5203	57.43
2.	Farmers who got advice on:		
(i)	Choice of species	252	2.78
(ii)	Planting technique	1428	15.76
(iii)	Manuring	373	4.12
(iv)	Esplacement	273	3.01
(v)	Irrigation	956	10.55
(vi)	Disease control	230	2.54
(vii)	Plant protection	345	3.81

Specie-wise requirement of seedlings

One of the objectives of the survey is to assess the Specie-wise future requirement of seedlings and the willingness of farmers for planting more trees. An analysis of Specie-wise number of beneficiaries requiring additional seedlings reveal that about 43.26% of the total number of beneficiaries expressed a preference for Teak, where as 21.22% require Mahogany seedlings Cashew (10.50%) and Maffi (7.73%) are other important seedlings preferred by the beneficiaries. The details are given in Table 3.13

(contd..18)

Table 3.13
Specie-wise requirement of Seedlings

Sl.No.	Species	No of beneficiaries requiring additional seedlings	Percentage to total No. of beneficiaries
1	2	3	4
1.	Teak	4278	43.26
2.	Ailanthus (Malli)	764	7.73
3.	Mahagony	2098	21.22
4.	Cashew	1038	10.50
5.	Ucalyptus	184	1.86
6.	Casuarina	494	5.00
7.	Almond (Badam)	198	2.00
8.	Acacia	43	0.43
9.	Sibabul	14	0.14

Reasons for not planting

A number of beneficiaries expressed reluctance to plant more trees in the near future. The reasons attributed by them for not planting the trees are given in table 3.14. Lack of space is the most important reason for deciding against any planting programme.

Table 3.14
Reasons for not planting trees for the year 1989

Sl.No.	Reason	No. of beneficiaries	Percentage to total
1	2	3	4
1.	No Space	1566	61.08
2.	Poor growth	306	11.93
3.	High mortality of seedlings	225	8.77
4.	Required species are not available	172	6.71
5.	Other species are more profitable	284	11.08
6.	Others	11	0.43
Total		2564	100.00

CHAPTER - 4

SUMMARY OF FINDINGS

A summary of the findings of the Farm forestry survey to assess the seedlings distributed under Social Forestry programme 1989 is given below:

- 1) The survey covered about 9888 households accounting for about 2% of the total number of beneficiaries.
- 2) Small holders with less than 49 cents accounts for about 60% of the total number of beneficiaries.
- 3) Kasaragod District accounts for the maximum number of seedlings per beneficiary - 82. Thrissur has the lowest number of seedlings per beneficiary - 4.
- 4) Beneficiaries generally preferred trees providing timber either for sale or for self use.
- 5) Most of the beneficiaries - 58.87% - planted seedlings supplied, in bunds, fences etc.
- 6) Survival rate of the seedlings planted is 49.68%.
- 7) Species wise survival rate shows that Matti and Silver Oak top the list with 54% each. Other species like Cashew, Mahogany, Teak etc. also shows a survival rate of more than 40%.
- 8) 68% of the households surveyed pointed out drought as the major cause for the mortality of the seedlings planted.
- 9) The gross inadequacy of the extension service in the Social forestry programme was clearly evident from the data collected in the present survey.
- 10) A large number of beneficiaries expressed a preference for Teak, Mahogany and Cashew to be planted in future.

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