



Government of Kerala

REPORT ON COST OF CULTIVATION OF IMPORTANT CROPS IN KERALA 2012-2013



Department of Economics & Statistics, Kerala 2014

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***Report On
Cost of Cultivation of
Important Crops in Kerala
2012-13***

**Department of Economics & Statistics
KERALA**



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PREFACE

The growth trend in the agricultural sector has not been consistent in Kerala. Food crops in general have shown a decreasing trend in area and production. The contribution of agriculture to State Income has been on the decline. For formulating proper price policies and for achieving economic efficiency of the crop production sector, studies on Cost of Cultivation of Important Crops in Kerala is essential. With this end in view, this Department conducts annual study on Cost of Cultivation of Important Crops in Kerala.

This report is based on the field study on Cost of Cultivation of Important Crops conducted during the year 2012-13. The crops covered during this year are Paddy (3 seasons), Coconut, Arecanut, Pepper, Banana, Tapioca, Ginger and Turmeric.

The first chapter of this report deals with introduction, concepts and definitions. The chapter two of the report gives state wise details. The district wise tables based on the survey are given in Appendix.

The field work of the survey was carried by Statistical Investigator/Enumerators of the Taluk under the control of the Taluk Statistical Officer and Deputy Director of District Office. The report was prepared in the Cost of Cultivation Division of the Directorate of Economics and Statistics. The dedicated efforts made by all officers to bring out this publication are very much appreciated. I hope the report will be useful to, planners, Policymakers and researchers.

Suggestions and comments for improvement of this report are most welcome.

11-06-2014
Thiruvananthapuram.

V.Ramachandran
Director General

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Chapter I

GENERAL

1.1 Introduction

Government of Kerala accorded sanction for conducting annual survey of cost of cultivation of important crops in the State from 1980-81 onwards vide G.O.(Rt) 466/79/plg dated 27/10/1979. The present report relates to the 32nd round of survey conducted during the agricultural year 2012-13. The Department of Economics and Statistics is conducting cost of cultivation survey annually.

The crops covered under the round are given below:-

1. Paddy (3 seasons)
2. Coconut
3. Tapioca
4. Banana
5. Pepper
6. Arecanut
7. Ginger
8. Turmeric

1.2 Objectives

The main objective of this survey was to estimate the cost of cultivation per hectare of important crops in Kerala and to compare the cost under different concepts, over a period.

1.3. Period of the Survey

The period of the survey was the Agricultural Year (July to June) 2012-13

1.4. Design of the Survey

The survey covered all the districts of Kerala by selecting 61 Taluks. From each selected Taluk, two investigator zones were selected using circular systematic sampling method.

Selection of cultivators

In selected Investigator zones, a list of cultivators growing paddy in the previous autumn season is prepared from the last year's Form I Diary connected with the EARAS works. From this, a list of 5 cultivators who are likely to be engaged in paddy cultivation during the current year are selected at random for cost of cultivation study for the autumn paddy. Similar procedure is adopted for the selection of cultivators for winter and summer paddy.

In case the cultivators selected for cost of cultivation study on Autumn Paddy possess suitable number of plots of other specified crops in stipulated area/numbers those will also be selected for the cost of cultivation study on other crops like Coconut, Pepper, Arecanut, Banana, Tapioca etc.

If sufficient numbers of suitable plots of other crops are not available with the cultivators selected for the study of Autumn Paddy, the required number of plots growing crops other than paddy will be selected from the list of wet and dry land plots of the same investigator zone in the last year. If the selected investigator zone in a Taluk does not provide the required number of plots for these crops, another Investigator zone in the same Taluk will be selected at random for selection of the remaining (required) number of plots/cultivators for the study on other crops.

The number of holdings selected for each crops in a Taluk was as follows:

1	Paddy	Autumn	10 (5 holdings each from one Investigator zone)
		Winter	10 (5 holdings each from one Investigator zone)
		Summer	10 (5 holdings each from one Investigator zone)
2	Coconut		10 (5 holdings each from one Investigator zone)
3	Arecanut		10 (5 holdings each from one Investigator zone)
4	Pepper		5 (Minimum 2 holdings in one Investigator zone)
5	Banana		5 (Minimum 2 holdings in one Investigator zone)
6	Tapioca		5 (Minimum 2 holdings in one Investigator zone)
7	Ginger		5 (Minimum 2 holdings in one Investigator zone)
8	Turmeric		5 (Minimum 2 holdings in one Investigator zone)

A holding is considered for the study only if it contained at least 25 cents under the crops in the case of paddy and 10 cents for tapioca, banana, ginger and turmeric. In the case of perennial crops like coconut, arecanut and pepper the holdings should have 25 trees/plants of which a minimum of 50% should be bearing trees/plants.

The holding size group (small, medium and large) of a crop is determined on the basis of the area under the crops under study in the holding as shown below:

Size Group	Holding size	
	Paddy	Other crops
Small	< 0.40 hectare	<0.2 hectare
Medium	0.40 to < 2 hectare	0.20 to < 0.80 hectare
Large	≥ 2 hectare	≥ 0.80 hectare

1.5 Schedules

Five schedules were designed for the survey

Schedule -1	Selected Investigator zone
Schedule -2	Summary of Form I Diary
Schedule -3	List of selected cultivators
Schedule -4	General Particulars
Schedule -5	In this schedule, the cultivation expenses incurred for a crop in each fortnight is reported.

1.6 Field work

Fieldwork was done in 61 selected Taluks. One Investigator is posted in each Taluk for this purpose. The investigators visited the selected holdings/cultivators every fortnight and recorded fortnightly details of agricultural operations in schedule 5. The fieldwork was supervised by Taluk Statistical Officer/Statistical Inspector at the Taluk level and Deputy Director/ District officer /other district level Officer at the District level.

1.7 Processing and Analysis of Data

The compilation and tabulation were done at district level. The state level consolidation of the data, the report writing and analysis are done at the Directorate of Economics and Statistics.

1.8 Method of Estimation of Cost

(a) Concepts of Cost.

Different cost concepts, cost 'A' cost 'B1', Cost 'B' and Cost 'C' have been followed in the analysis as shown below:

Cost 'A'

Cost 'A' consists of cash and kind expenses (paid out costs) actually incurred by the cultivators. This includes expenses incurred for

- i. Hired human labour
- ii. Animal labour
- iii. Machine labour
- iv. Seed/ seed lings
- v. Farm yard Manure and Chemical fertilizers
- vi. Plant protection
- vii. Land tax and Irrigation Cess
- viii. Repair and maintenance charges of implements, machinery and buildings
- ix. Interest on working capital
- x. Other expenses

Cost 'B1': Cost 'A' + Interest on fixed assets (excluding land)

Cost 'B': Cost 'B1' + interest on land value

Cost 'C': Cost 'B' + Imputed value of family labour

(b) Procedure for imputation of values of owned inputs

In the production process, certain inputs from home stocks are used. In order to estimate the cost of cultivation, it is necessary to impute the value of these inputs. The procedures used for the imputation of values of such home stock inputs are indicated below:

- | | | |
|-----|---|--|
| i | Family labour | Imputed on the basis of average wage rate per work hour of hired labour. |
| ii | Owned and
Exchange human
labour | The rate of wages per hour for hired human labour is taken for imputing the value of own stock and exchange human labour |
| iii | Owned and
Exchange animal
labour | The charges paid per hour for hired animal labour is taken for imputing the value of owned and exchange animal labour. |
| iv | Owned and
Exchange machine
labour | The hire charges per hour for machine labour has been taken |
| v | Implements | Repair and maintenance charges of implements |
| vi | Owned seed | Farm produced (house grown) seed has been imputed at the prices prevalent in the investigator zone concerned at the time of sowing |
| vii | Farm produced
manure | Imputed at the rate prevalent in the zone concerned. |

viii	Interest on fixed capital	Interest on the present value of fixed assets such as land, farm, building, implements, machinery, irrigation structure, equipments and livestock (only draught animals) at the rate of 10 % per annum has been calculated.
ix	Interest on working capital	Interest has been charged at the rate of 10% per annum on the working capital, cash and kind expenses excluding items in respect of which payments are generally made after harvest (i.e. rent, land tax etc) incurred during the period of cultivation
x	Payments of kind	The payments in kind have been evaluated at the market prices prevalent in the locality at the time of payment. Perquisites have been included in the payments in kind calculated at the market prices.

(c) Allocation of joint costs to different crops

Some of the inputs used for the cultivation of one crop are common for many other crops also. For the purpose of computing the cost share of individual crops, the cost of such inputs is apportioned in the following manner.

I	Repair and maintenance charges of implements	In proportion to the area under the crop
li	Interest on fixed capital (excluding land)	In proportion to the area under the crop
lii	Interest on land value	Interest on the value of land under the crop

(d) Procedure for valuation of farm assets

I	Own farm buildings (cattle sheds, storage shed etc)	Valuated at prices prevailing in the locality
Ii	Implements and other machinery	Valuated at prevalent market prices
Iii	Livestock (only draught animals)	Valuated at prevalent market prices

In calculating the cost of production of paddy crop in each season the interest on land value at the rate of 10% per annum for the period of 6 months is taken in to account. The land value is estimated at the current market rate in the different areas. There is a controversy in the assessment of land value. The land value is increasing considerably. If the actual value is taken for calculating the interest on land value, no cultivation is profitable in the State. However, there is always a tendency to under report the land value. It is therefore necessary to evolve a method or criteria to estimate the land value reasonably while calculating the cost of cultivation of crops.

CHAPTER 2

RESULTS OF THE SURVEY

The crops selected for this round of study were Paddy (autumn, winter and summer) Coconut, Tapioca , Banana, Pepper, Arecanut, Ginger and Turmeric. The cost of cultivation of crops are calculated under three different cost concepts viz Cost 'A', Cost 'B', and Cost 'C' respectively.

2.1.1 Paddy- Autumn during 2012-13

For this study details of holding selected and area coverage are given below. The data collected from 457 holding by covering 399.90 hectares of land.

Table 1 - Area and number of holdings under autumn paddy

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
Small	265	56.60	14.15	0.21
Medium	148	121.40	30.36	0.82
Large	44	221.90	55.49	5.04
Total	457	399.90	100.00	0.88

From the above table it can be seen that average area per holding was 0.88 hectare

Cost of cultivation

When Cost A is considered about 51 percent of cost constitutes to hired human labour, Machine labour cost shares 17% and farmyard manure and chemical fertilizers accounts to 11% .

Table 2- Cost of Cultivation per hectare(in Rs.) of paddy (autumn)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	23452	20748	15695	18336
2	Animal labour	501	177	50	153
3	Machine labour	5974	5948	5917	5934
4	Seed / seedlings	1840	1805	2366	2120
5	Farmyard manure and chemical fertilizers	8483	5102	2193	3973
6	Plant protection	500	224	91	190
7	Land tax and irrigation cess	403	108	66	127
8	Repair and maintenance charges of implements, machinery and building	3047	914	229	839
9	Interest on working capital	2291	1847	1407	1667
10	Other expenses	5060	2939	1832	2629
11	Total cost 'A' (1-10)	51551	39812	29846	35968
12	Interest on fixed capital	2461	1007	786	1092
13	Cost 'B1' (11+12)	54012	40819	30632	37060
14	Interest on land value	137545	67487	45396	65243
15	Cost 'B' (13+14)	191557	108306	76028	102303
16	Imputed value of household labour	7393	3758	1221	2871
17	Cost 'C' (15+16)	198950	112064	77249	105174

**Percentage Distribution of "COST A" per hectare of
Autumn Paddy during 2012-13**

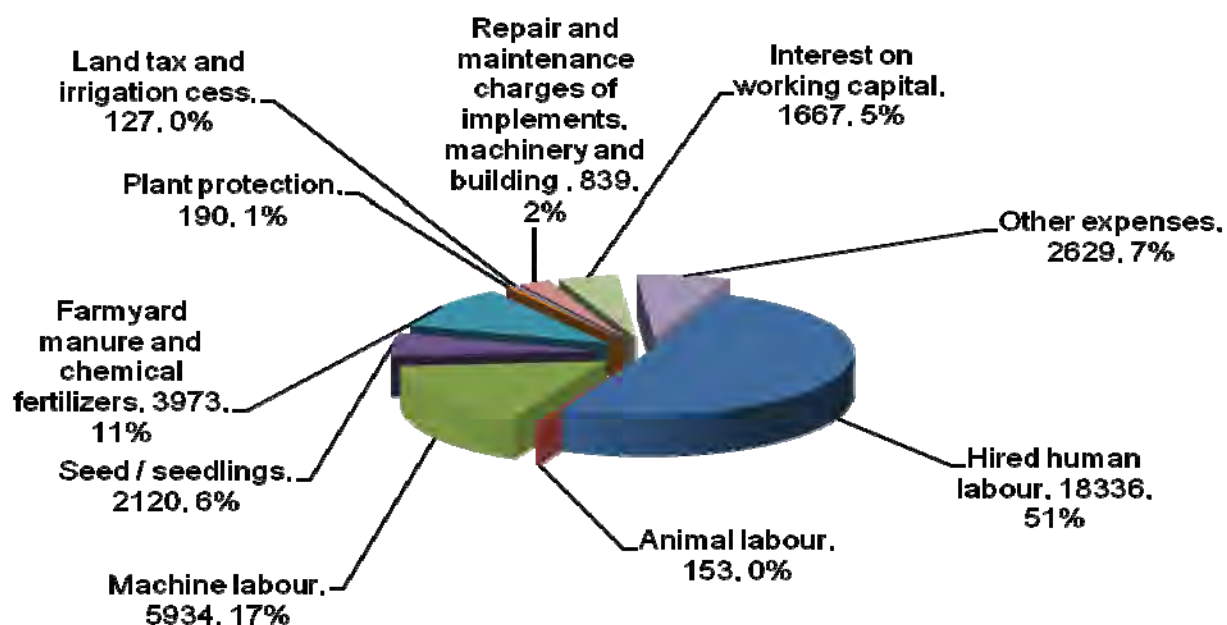


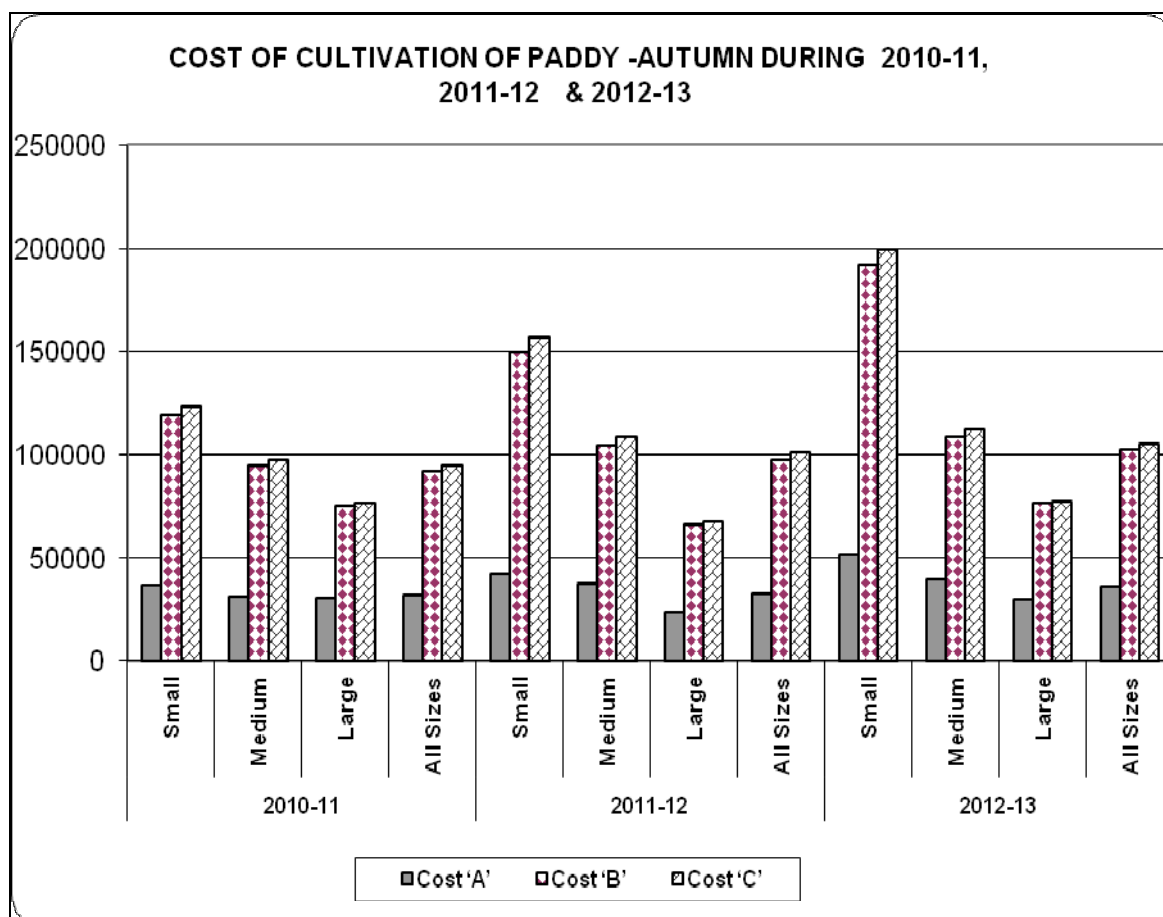
Table 3: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	32.98	28.81	29.95	30.23
Female	46.69	45.70	61.12	51.11
Total	79.67	74.51	91.07	81.34

In Autumn paddy cultivation 51.11% of total labour hours shares to female participation.

Table: 4 Cost of cultivation of Autumn paddy per hectare(in Rs.) during 2010-11 , 2011-2012 and 2012-13

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2010-11	36609	30990	30767	32019
	2011-12	42440	37355	23313	32713
	2012-13	51551	39812	29846	35968
Cost 'B'	2010-11	118587	94396	74668	91877
	2011-12	149329	104307	65501	97358
	2012-13	191557	108306	76028	102303
Cost 'C'	2010-11	123290	97581	76168	94738
	2011-12	156353	108390	67189	101043
	2012-13	198950	112064	77249	105174



Cost of Production of paddy per quintal

Cost of production of paddy per quintal is estimated by dividing the cost of cultivation per hectare (after deducting the value of by-product per hectare from the cost of cultivation per hectare) by the quantity of paddy produced per hectare. The survey results show that during 2012-13 for producing one quintal of paddy Rs.1277/- has been expended by the farmer when Cost 'A' is considered. Details are given below:

Table: 5 Per Quintal Cost(In Rs.) of Production of Autumn paddy during 2010-11, 2011-12 & 2012-13

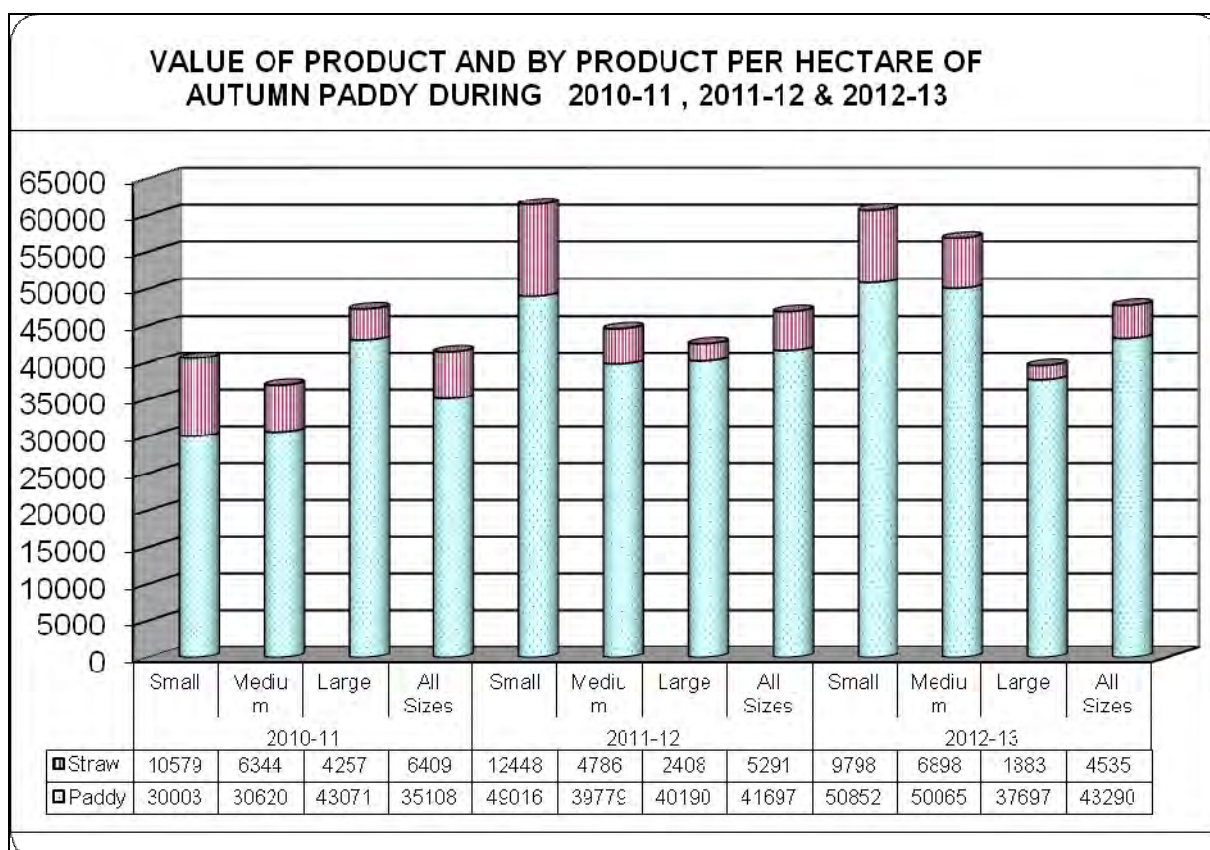
Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2010-11	1053	1091	819	970
	2011-12	1436	1165	582	942
	2012-13	2005	1679	958	1277
Cost 'B'	2010-11	3413	3327	1987	2782
	2011-12	5048	3256	1635	2802
	2012-13	7451	4568	2437	3634
Cost 'C'	2010-11	3548	3439	2027	2869
	2011-12	5286	3384	1677	2908
	2012-13	7739	4727	2476	3736

Output

The details of product and by-product of Autumn Paddy cultivation are given below.

Table: 6 Value of product and by-product per hectare(in Rs.) of Autumn paddy during 2010-11, 2011-12 & 2012-13

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2010-11	Paddy	30003	30620	43071	35108
	Straw	10579	6344	4257	6409
	Total	40582	36964	47328	41517
2011-12	Paddy	49016	39779	40190	41697
	Straw	12448	4786	2408	5291
	Total	61464	44565	42598	46988
2012-13	Paddy	50852	50065	37697	43290
	Straw	9798	6898	1883	4535
	Total	60650	56953	39510	47825



2.1.2 Paddy-Winter during 2012-13

During 2012-13 Cost of cultivation study on winter paddy was conducted in 564 holdings by covering 506.50 hectare of land. Details of these holdings are given below:

Table 7 – Area and number of holdings under winter paddy

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Area per holding (ha)
Small	263	61.50	12.14	.23
Medium	222	172.10	33.98	.78
Large	79	272.90	53.88	3.45
Total	564	506.50	100.00	.90

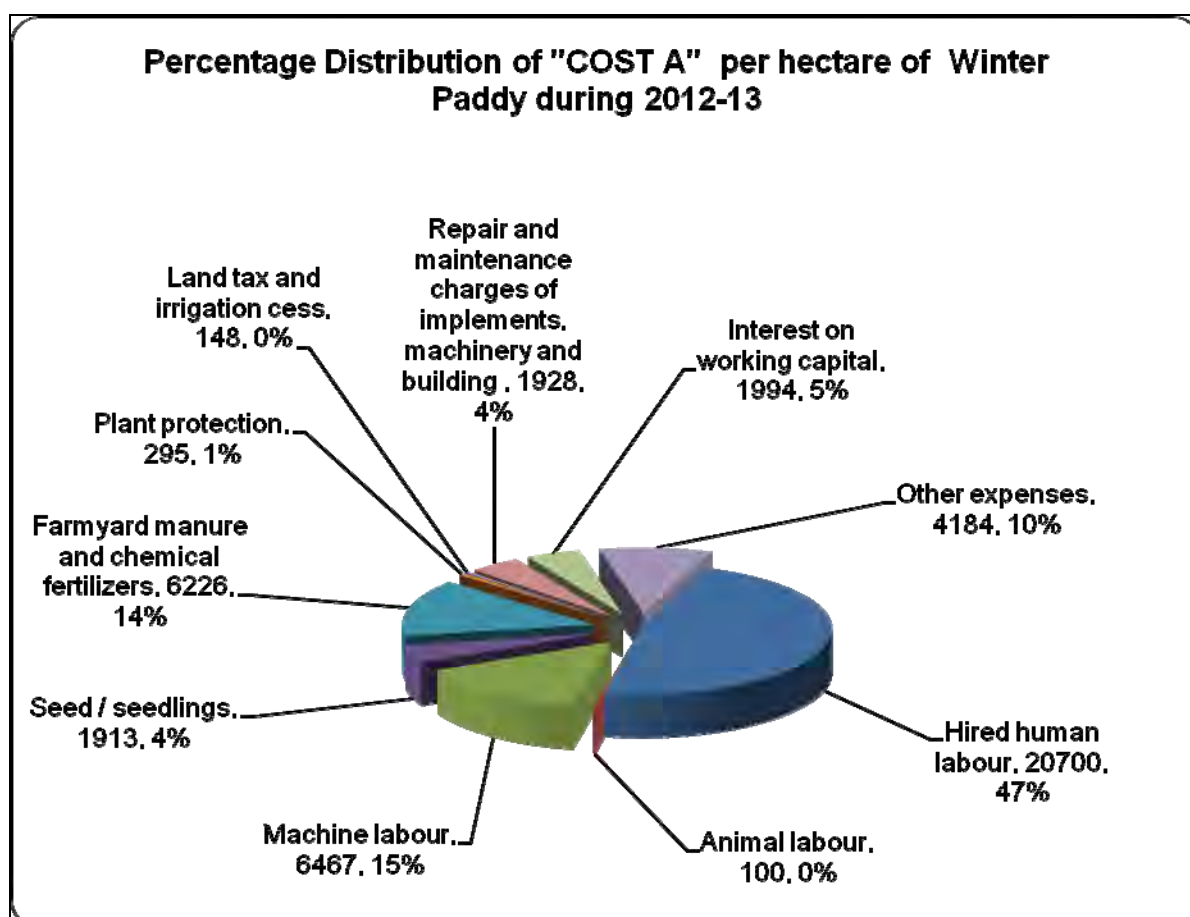
For the study on winter paddy cultivation during 2012-13, an area of 506.50 hectares was included. The average size of the holding was 0.90 hectares.

Cost of Cultivation

In Cost A, the major share of the cost component was hired human labour. It constitutes 47% per cent. Another two major items were machine labour and farmyard manure and chemical fertilizers. It shows to 15% and 14% respectively. Interest on working capital accounts was 5%. By considering the various cost component of winter paddy cultivation it can be seen that per hectare cost calculated as Rs.43955/-

Table 8 – Cost of cultivation per hectare(in Rs.) of paddy(winter)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	30106	21181	18257	20700
2	Animal labour	184	80	93	100
3	Machine labour	7774	6649	6054	6467
4	Seed / seedlings	2073	1866	1906	1913
5	Farmyard manure and chemical fertilizers	7193	6106	6081	6226
6	Plant protection	483	272	267	295
7	Land tax and irrigation Cess	331	140	112	148
8	Repair and maintenance charges of implements, machinery and building	5540	1896	1126	1928
9	Interest on working capital	2597	2001	1853	1994
10	Other expenses	4126	3873	4393	4184
11	Total Cost 'A' (1-10)	60407	44064	40142	43955
12	Interest on fixed capital	2275	1023	756	1033
13	Cost 'B1' (11+12)	62682	45087	40898	44988
14	Interest on land value	122627	84579	48880	70034
15	Cost 'B' (13+14)	185309	129666	89778	115022
16	Imputed value of household labour	8224	4553	2326	3804
17	Cost 'C' (15+16)	193533	134219	92104	118826



Sex wise work participation in hired human labours for winter paddy cultivation reveals that 52.93% of work shared by Female whereas 38.43% shared by male workers.

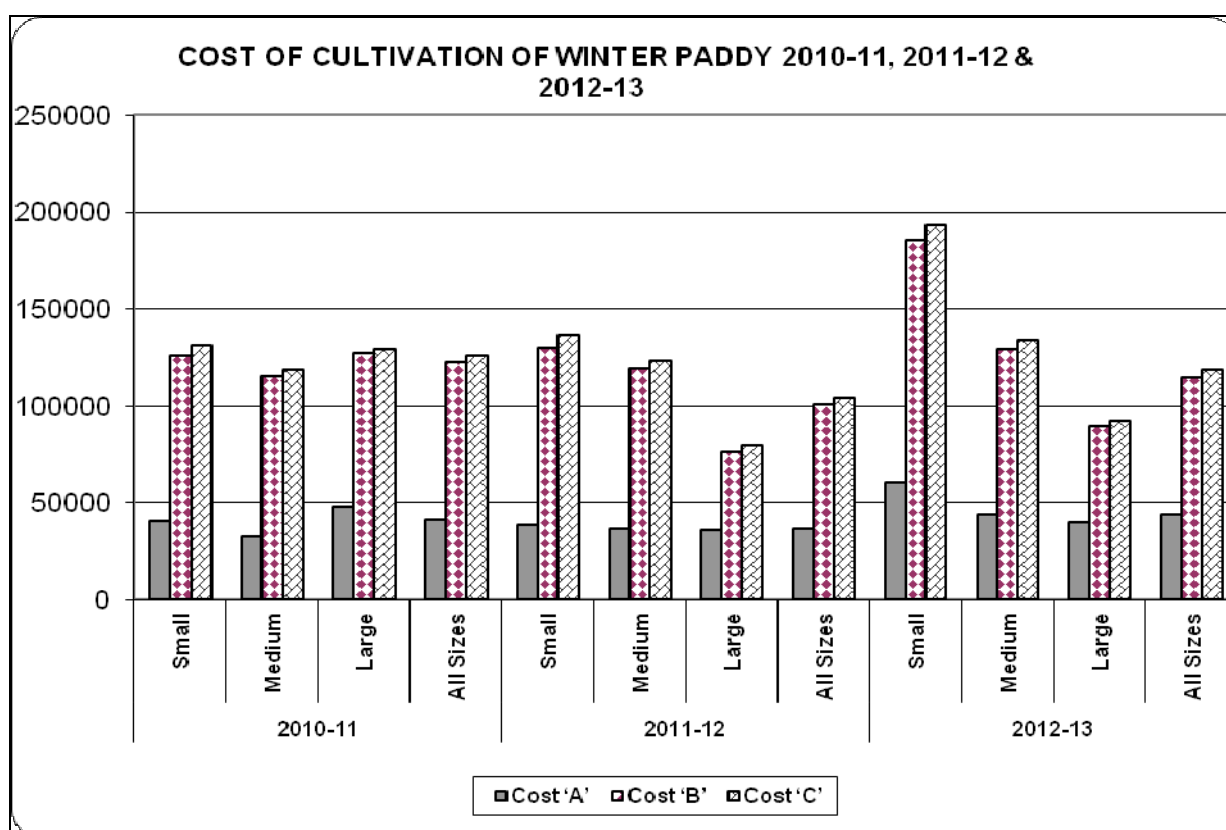
The following table reveals the percentage of hired human labours hours to total human labour hours.

Table 9 – Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	35.61	40.16	38.09	38.43
Female	51.67	50.20	55.82	52.93
Total	87.28	90.36	93.91	91.36

Table: 10 Cost of cultivation of Winter paddy per hectare (in Rs) during 2010-11, 2011-12 &2012-13

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	40774	32780	48053	41133
	2011-12	38713	36431	35819	36491
	2012-13	60407	44064	40142	43955
Cost 'B'	2010-11	125777	115320	127661	122697
	2011-12	130131	119508	76257	100738
	2012-13	185309	129666	89778	115022
Cost 'C'	2010-11	131099	119071	129535	125822
	2011-12	136557	123093	79403	104549
	2012-13	193533	134219	92104	118826



Cost of production of Winter paddy

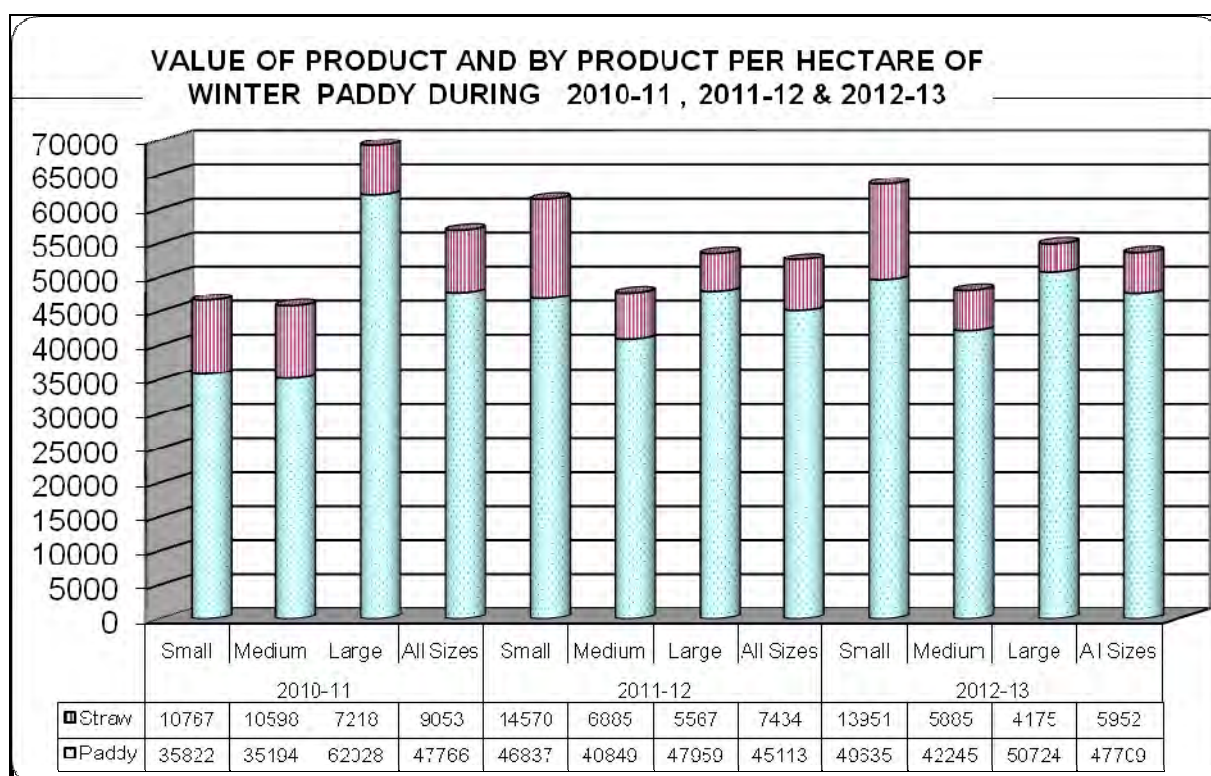
Table: 11 Per Quintal Cost(in Rs.) of production of winter paddy during 2010-11,2011-12&2012-13

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2010-11	1287	1040	1048	1077
	2011-12	1039	1206	963	1054
	2012-13	2114	1506	1080	1314
Cost 'B'	2010-11	3968	3660	2785	3212
	2011-12	3493	3956	2051	2913
	2012-13	6469	4433	2414	3439
Cost 'C'	2010-11	4136	3779	2826	3294
	2011-12	3666	4075	2136	3023
	2012-13	6757	4589	2477	3553

Output

Table: 12 - Value of Product and Byproduct per hectare(in Rs)of Winter paddy during 2010-11,2011-12 and 2013-13

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2010-11	Paddy	35822	35194	62028	47766
	Straw	10767	10598	7218	9053
	Total	46589	45792	69246	56819
2011-12	Paddy	46837	40849	47959	45113
	Straw	14570	6885	5567	7434
	Total	61407	47734	53526	52547
2012-13	Paddy	49635	42245	50724	47709
	Straw	13951	5885	4175	5952
	Total	63586	48130	54899	53661



2.1.3 Paddy - Summer (Punja) during 2012-13

For the cost of cultivation study on summer paddy during 2012-13 the total number of holdings selected was 457. Number of holdings selected in large holding size is 55. The details of these holdings are presented below:

Table 13 : Area and number of holdings under Summer Paddy

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	240	51.20	12.44	0.21
Medium	162	121.50	29.51	0.75
Large	55	239.00	58.05	4.35
All Size	457	411.70	100.00	0.90

The above table reveals that the total area under cultivation in the selected sample holdings covers to 411.70 hectares and the average size of a holding is 0.90 hectare.

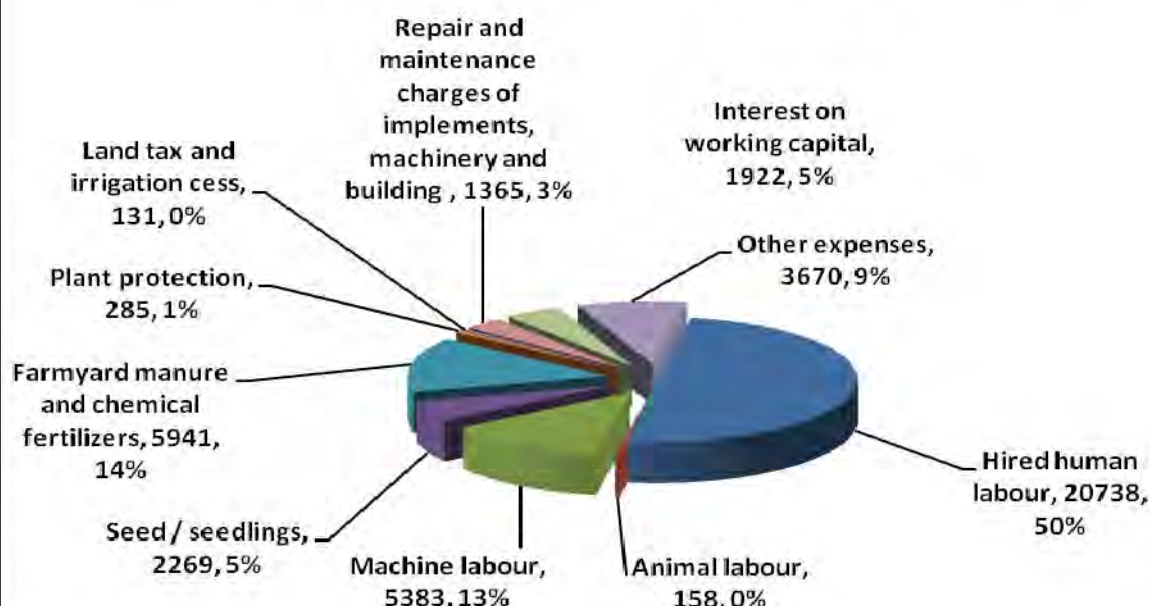
Cost of Cultivation

Cost of cultivation of summer paddy per hectare is estimated as Rs. **41862/-** when cost 'A' is considered. Component wise holding size class details are presented below:

Table 14: Cost of Cultivation per hectare(in Rs.) of paddy(summer)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	29442	22374	18014	20738
2	Animal labour	312	174	116	158
3	Machine labour	9980	5559	4296	5383
4	Seed / seedlings	2013	2170	2376	2269
5	Farmyard manure and chemical fertilizers	8968	5691	5411	5941
6	Plant protection	458	366	206	285
7	Land tax and irrigation Cess	209	126	116	131
8	Repair and maintenance charges of implements, machinery and building	4472	1658	542	1365
9	Interest on working capital	2747	2043	1682	1922
10	Other expenses	3762	4518	3218	3670
11	Total Cost 'A' (1-10)	62363	44679	35977	41862
12	Interest on fixed capital	3088	1302	1051	1381
13	Cost 'B1' (11+12)	65451	45981	37028	43243
14	Interest on land value	132009	88133	37109	64102
15	Cost 'B' (13+14)	197460	134114	74137	107345
16	Imputed value of household labour	7423	4092	2031	3318
17	Cost 'C' (15+16)	204883	138206	76168	110663

Percentage Distribution of "COST A" per hectare of Summer Paddy during 2012-13



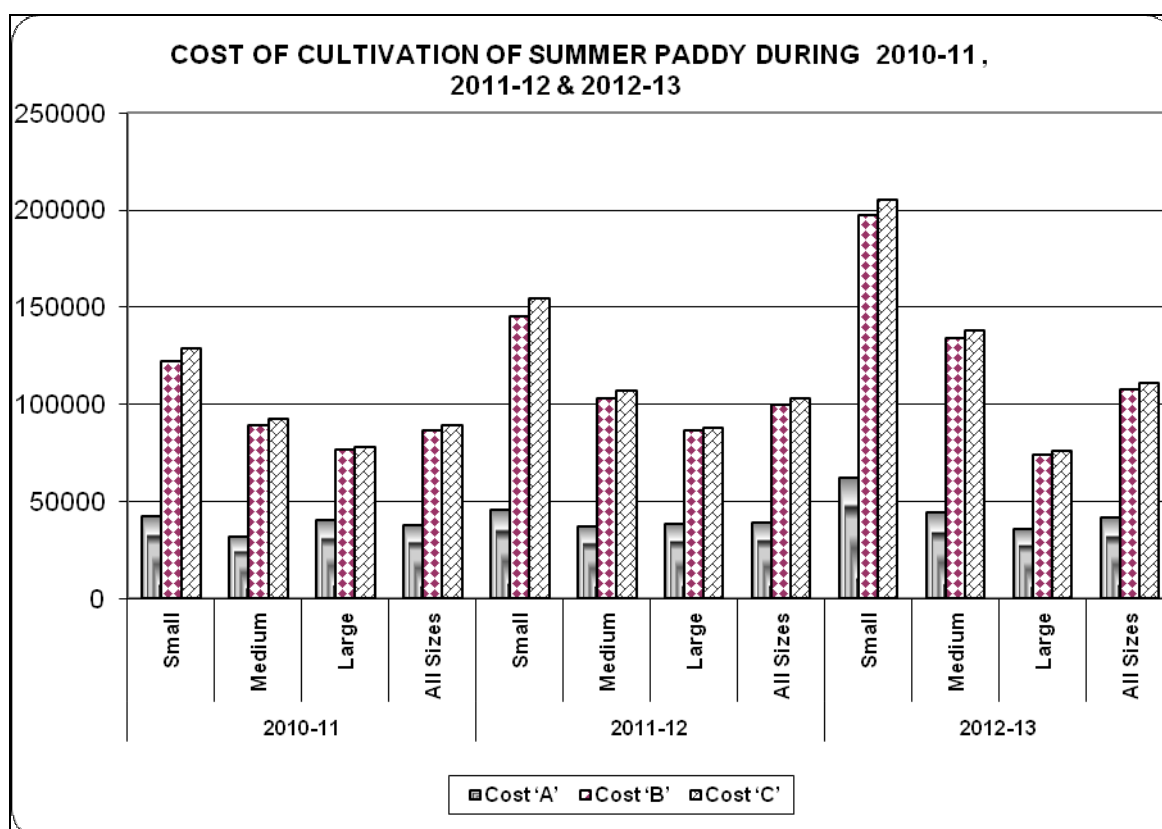
In summer paddy cultivation female labour participation accounted as 37.08 % of the total labour hours. Details are given below:

Table 15: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	28.27	31.17	20.80	24.87
Female	44.92	49.34	28.82	37.08
Total	73.19	80.51	49.62	61.95

Table: 16 Cost of Cultivation of Summer paddy per hectare(in Rs) during 2010-11,2011-12 and 2012-13

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	42292	31649	40498	37957
	2011-12	45679	36969	38604	38878
	2012-13	62363	44679	35977	41862
Cost 'B'	2010-11	122013	88875	76863	86712
	2011-12	145384	103203	86431	99861
	2012-13	197460	134114	74137	107345
Cost 'C'	2010-11	128635	92352	78238	89454
	2011-12	154182	107182	87687	103046
	2012-13	204883	138206	76168	110663



Output

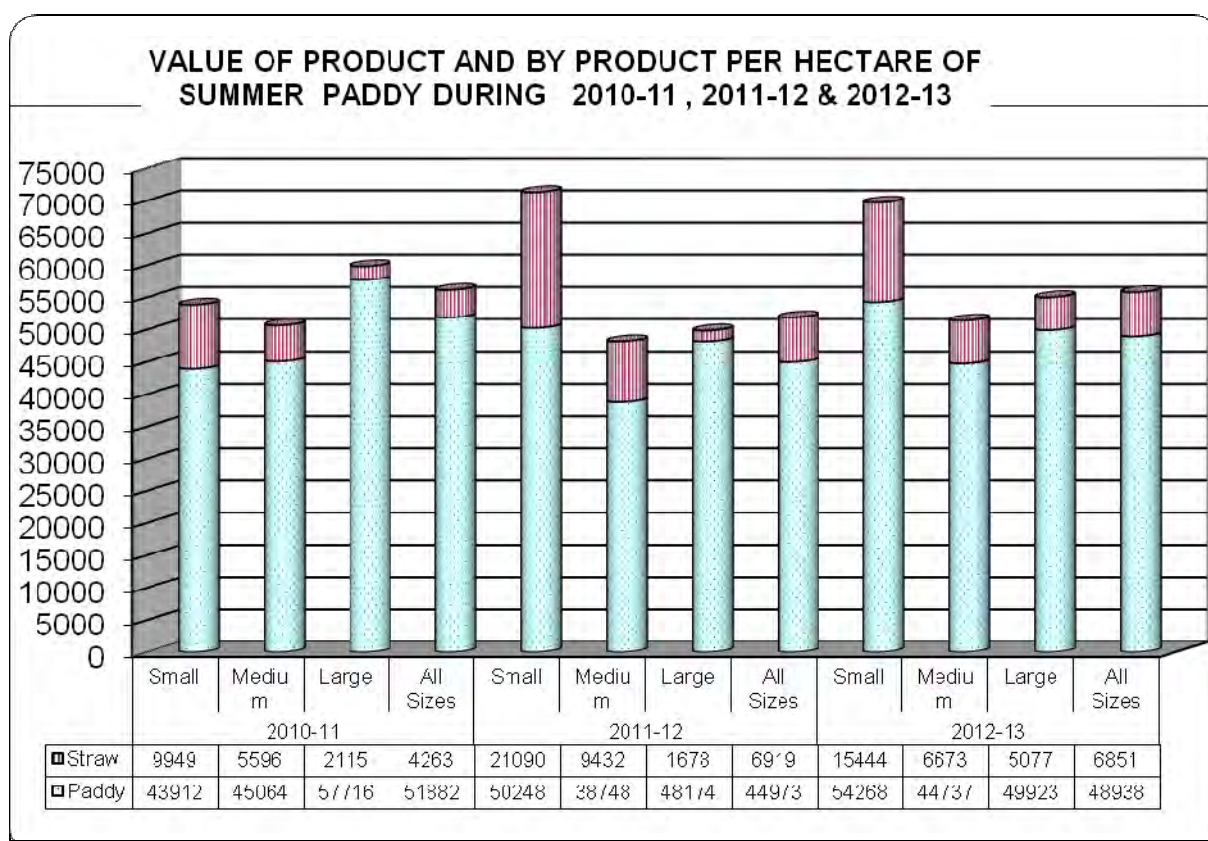
Table: 17 Per Quintal Cost(in Rs.) of production of Summer paddy during 2010-11, 2011-12& 2012-13

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2010-11	1124	923	985	986
	2011-12	1271	1063	1010	1058
	2012-13	2071	1294	946	1164
Cost 'B'	2010-11	3244	2593	1870	2254
	2011-12	4041	2966	2260	2720
	2012-13	6557	3886	1951	2984
Cost 'C'	2010-11	3420	2694	1903	2325
	2011-12	4286	3080	2293	2807
	2012-13	6803	4005	2004	3076

Above tables reveal that for producing one quintal of paddy in summer season an amount of Rs 1164/- is required when cost 'A' is considered. Per hectare value of product paddy is calculated as **Rs.48938/-** and the value of by-product viz. straw is estimated as **Rs.6851/-**

Table 18: Value of Product and by product per hectare(in Rs) of summer paddy during 2010-11,2011-12 and 2012-13

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2010-11	Paddy	43912	45064	57716	51882
	Straw	9949	5596	2115	4263
	Total	53861	50660	59831	56145
2011-12	Paddy	50248	38748	48174	44973
	Straw	21090	9432	1678	6919
	Total	71338	48180	49852	51892
2012-13	Paddy	54268	44737	49923	48938
	Straw	15444	6673	5077	6851
	Total	69712	51410	55000	55789



2.2 Coconut during 2012-13

Coconut is grown in over 93 countries. Kerala's share in area as well as production of coconut in the country has been declining years after years. Still the State is known as "**Kera Nadu**" and it provides livelihood to over 3.5 million families in Kerala. As such data regarding the Cost of Cultivation of Coconut is significant. Details of the study conducted during 2012-13 are presented below.

Table 19: Area and number of holdings under Coconut cultivation

Holding size class	No of selected holdings	Area under the coconut in the sample (ha)	Percentage	Area per holding (ha)
Small	193	31.20	10.34	0.16
Medium	301	122.80	40.72	0.41
Large	101	147.60	48.94	1.46
Total	595	301.60	100.00	0.51

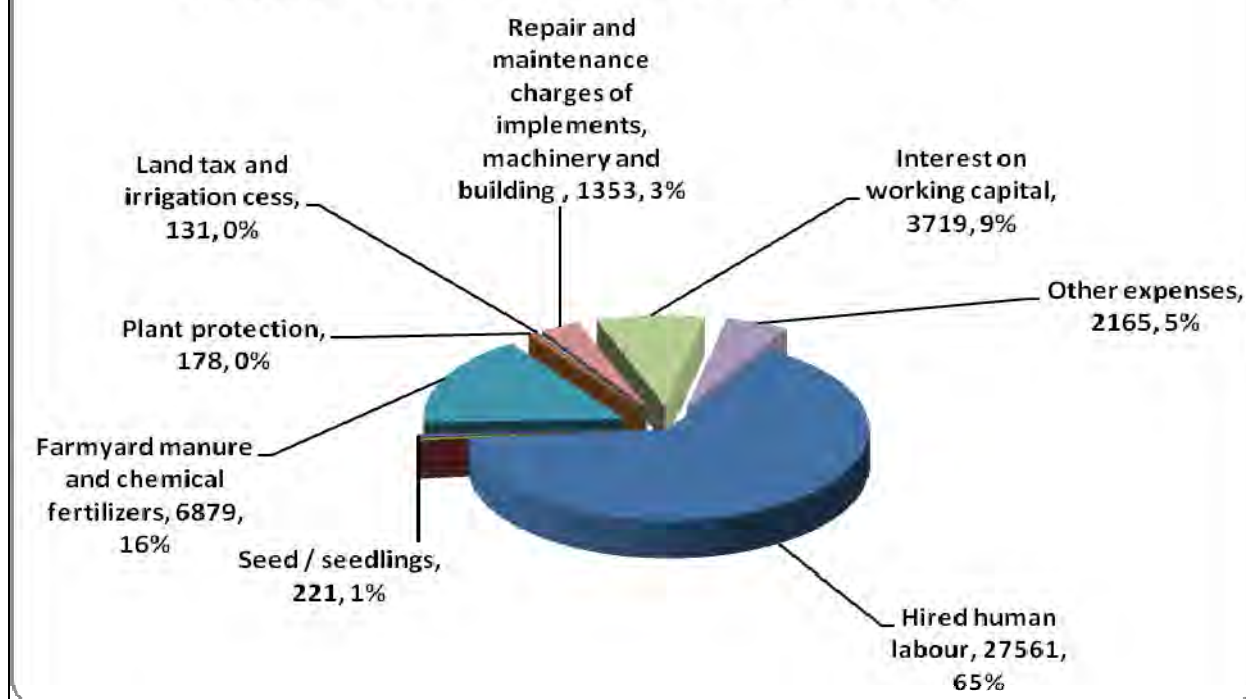
Cost of Cultivation

The cultivation practices and expenditure patterns of coconut tree is entirely different when compared to paddy. Details are given below.

Table 20: Cost of Cultivation per hectare (in Rs.) of Coconut

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	39784	25632	26536	27561
2	Animal labour	0	0	0	0
3	Machine labour	127	209	173	183
4	Seed / seedlings	721	190	138	221
5	Farmyard manure and chemical fertilizers	7790	5469	7857	6879
6	Plant protection	687	141	99	178
7	Land tax and irrigation Cess	287	127	100	131
8	Repair and maintenance charges of implements, machinery and building	6609	978	534	1353
9	Interest on working capital	5178	3370	3695	3719
10	Other expenses	2673	2057	2145	2165
11	Total Cost 'A' (1-10)	63856	38173	41277	42390
12	Interest on fixed capital	7563	1707	902	1929
13	Cost 'B1' (11+12)	71419	39880	42179	44319
14	Interest on land value	1057968	608717	396263	552222
15	Cost 'B' (13+14)	1129387	648597	438442	596541
16	Imputed value of household labour	7300	5816	3045	4619
17	Cost 'C' (15+16)	1136687	654413	441487	601160

Percentage Distribution of "COST A" per hectare of COCONUT during 2012-13



The above data reveals that the major two inputs are hired human labour and farmyard manure and chemical fertilizers. Both of these items are accounted as 65% and 16% respectively.

The following table reveals percentage distribution of hired human labour hours to the total human labour hours.

Table 21: Percentage of hired human labour hours to the total human labour hours

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	26.24	53.85	35.72	39.57
Female	9.89	19.12	14.64	15.23
Total	36.13	72.97	50.36	54.80

Table 22: Cost of cultivation of coconut per hectare(in Rs.) during 2010-11, 2011-12 & 2012-13

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	35540	36576	30754	33343
	2011-12	42493	38419	35719	37361
	2012-13	63856	38173	41277	42390
Cost 'B'	2010-11	752937	627483	440969	538739
	2011-12	691594	417412	329797	395695
	2012-13	1129387	648597	438442	596541
Cost 'C'	2010-11	760209	631874	443272	542275
	2011-12	699215	422330	332184	399521
	2012-13	1136687	654413	441487	601160

Value of output

Table 23: Value of Output per hectare (in Rs) of Coconut

Product/By-product	Holding Size Class			
	Small	Medium	Large	All Sizes
Product	60650	60582	50229	55535
By-Product	2930	2745	2217	2507
Total	63580	63327	52446	58042

The table shows the value of output is Rs.58042/- per hectare.

2.3 Arecanut during 2013-13

Arecanut, a traditional crop of the state is also facing certain problems especially in this area. Details of the area covered under this study are as follows:

Table. 24 Area and Number of holdings under Arecanut cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	441	37.50	33.97	0.09
Medium	134	47.10	42.66	0.35
Large	32	25.80	23.37	0.81
All size	607	110.40	100.00	0.81

For this study 607 holdings were selected. It had an operational area of 110.40 hectare. The average size per holding was 0.81 hectare.

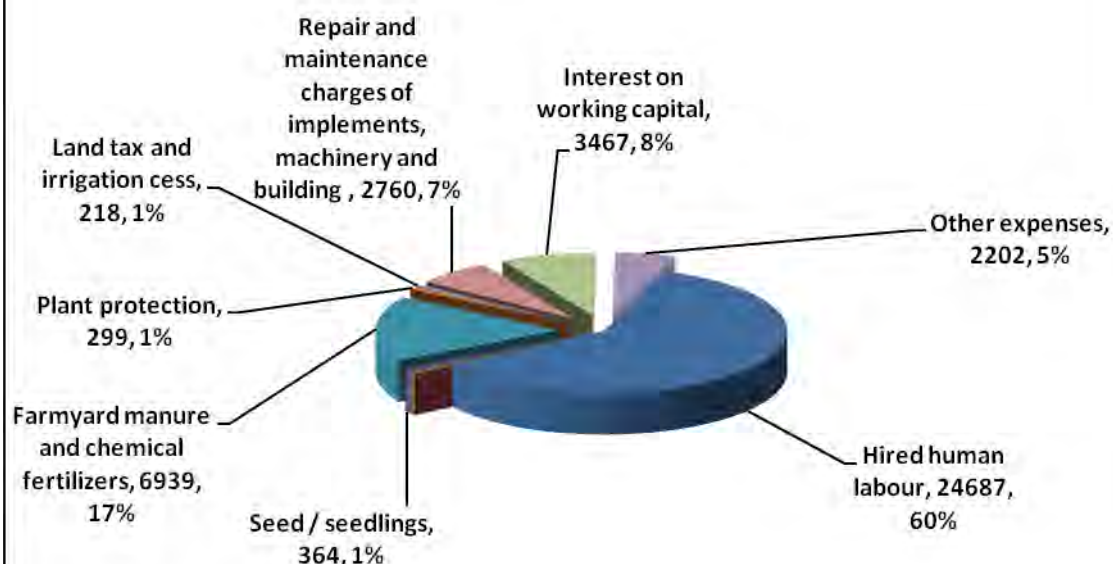
Cost of Cultivation

The different cost components of Arecanut cultivation is given below: Per hectare cost C expenses is worked out as Rs. 440102/-

Table 25: Cost of Cultivation per hectare (in Rs.) of Arecanut

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	26617	24040	23044	24687
2	Animal labour	0	0	0	0
3	Machine labour	221	187	96	178
4	Seed / seedlings	534	303	229	364
5	Farmyard manure and chemical fertilizers	6747	5783	9327	6939
6	Plant protection	416	201	308	299
7	Land tax and irrigation Cess	221	205	234	218
8	Repair and maintenance charges of implements, machinery and building	3976	2196	2012	2760
9	Interest on working capital	3697	3234	3554	3467
10	Other expenses	2439	1829	2537	2202
11	Total Cost 'A' (1-10)	44868	37978	41341	41114
12	Interest on fixed capital	5617	2709	2538	3661
13	Cost 'B1' (11+12)	50485	40687	43879	44775
14	Interest on land value	642770	328807	133580	390308
15	Cost 'B' (13+14)	693255	369494	177459	435083
16	Imputed value of household labour	6227	4799	3655	5019
17	Cost 'C' (15+16)	699482	374293	181114	440102

Percentage Distribution of "COST A" per hectare of Arecanut during 2012-13



When Cost A is considering, 60% comes under hired human labour and followed by 17% in Farmyard manure and chemical fertilizers.

The following table illustrates the work participation of arecanut cultivation. It shows that 70.63 per cent of the total labour hours has been shared by human labour.

Table 26: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	41.25	50.52	55.30	49.06
Female	21.41	19.76	24.88	21.57
Total	62.66	70.28	80.18	70.63

Table 27: Cost of production of Arecanut per hectare (in Rs) during 2010-11,2011-12 and 2012-13

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	44424	45481	46210	45534
	2011-12	42569	41463	38145	40560
	2012-13	44868	37978	41341	41114
Cost 'B'	2010-11	667614	519397	462889	532218
	2011-12	483827	317661	339319	371815
	2012-13	693255	369494	177459	435083
Cost 'C'	2010-11	675707	524595	464308	536497
	2011-12	492514	323536	343227	377754
	2012-13	699482	374293	181114	440102

Value of Out put

Table 28: Value of Output per hectare (in Rs) of Arecanut

The estimated value of output per hectare is Rs.68755/-

Holding Size Class			
Small	Medium	Large	All Sizes
72813	68440	63401	68755

2.4 Tapioca during 2012-13

Area under the crop in this study was 73.5 hectare which covers 297 holdings. Number of holding in large holding size class is very less. Holding size class wise details are given below.

Table 29: Area and Number of Holdings under Tapioca cultivation

Size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to total area of Selected holdings	Area per holding (ha)
Small	180	17.30	23.54	0.10
Medium	99	33.70	45.85	0.34
Large	18	22.50	30.61	1.25
All Size	297	73.50	100.00	0.25

The average size of a selected holding is 0.25 hectare and number of holding selected for the survey is 297.

Cost of Cultivation

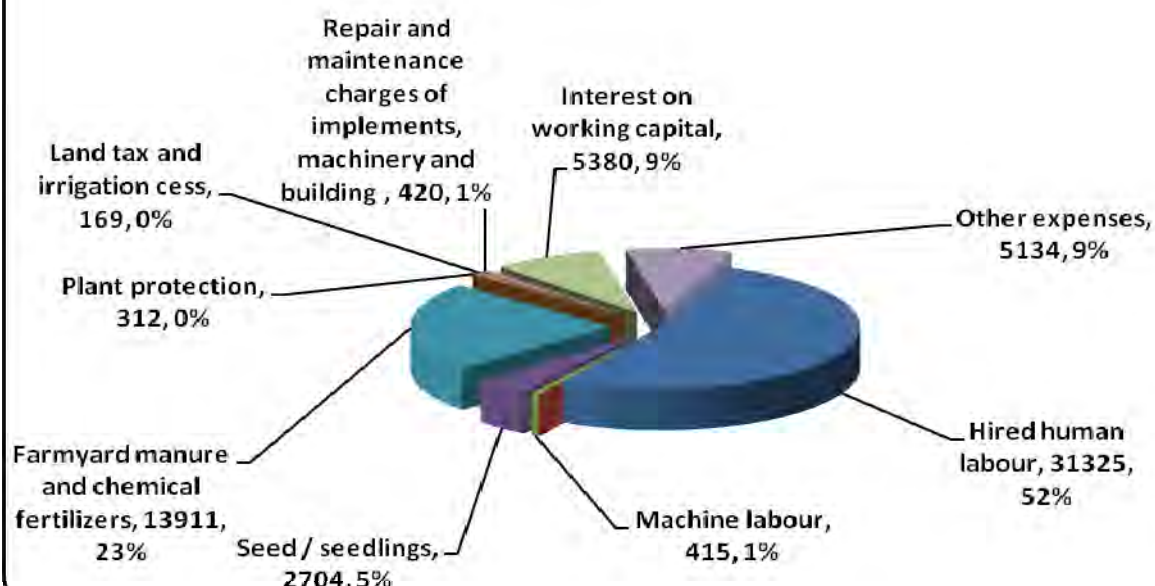
When Cost A is considered per hectare cost of cultivation of tapioca is worked out Rs. **59770/-**. In this hired labour cost constituted **52%** where as farmyard manure and chemical fertilizers shares **23%** of the Cost A.

The cost of cultivation of Tapioca under different concepts is given below.

Table 30: Cost of cultivation per hectare (in Rs) of tapioca

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	36401	27012	33850	31325
2	Animal labour	0	0	0	0
3	Machine labour	338	348	578	415
4	Seed / seedlings	3021	2829	2267	2704
5	Farmyard manure and chemical fertilizers	15399	13557	13278	13911
6	Plant protection	447	340	163	312
7	Land tax and irrigation Cess	286	155	99	169
8	Repair and maintenance charges of implements, machinery and building	913	296	221	420
9	Interest on working capital	6027	4861	5657	5380
10	Other expenses	4660	4519	6433	5134
11	Total Cost 'A' (1-10)	67492	53917	62546	59770
12	Interest on fixed capital	1319	455	154	570
13	Cost 'B1' (11+12)	68811	54372	62700	60340
14	Interest on land value	462572	230795	133275	256382
15	Cost 'B' (13+14)	531383	288167	195975	316722
16	Imputed value of household labour	23687	12185	11227	14634
17	Cost 'C' (15+16)	555070	297352	207202	331356

Percentage Distribution of "COST A" per hectare of Tapioca during 2012-13



The following table shows the percentage distribution of hired human labour hours engaged in tapioca cultivation.

Table 31: Percentage of hired human labour hours to total human labour hours

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	44.85	52.21	52.23	50.27
Female	20.27	21.23	26.54	22.43
Total	65.12	73.44	78.77	72.70

In tapioca cultivation 72.70% of the total human labour hours has been shared by hired human labour.

**Table 32: Cost of production of tapioca per hectare (In Rs.) during
2010-11, 2011-12 & 2012-13**

A comparative statement for 2010-11 ,2011-12 and 2012-13 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	56494	48982	42340	48474
	2011-12	50242	52024	49948	50907
	2012-13	67492	53917	62546	59770
Cost 'B'	2010-11	601371	506643	230527	434258
	2011-12	389729	352135	166043	310953
	2012-13	531383	288167	195975	316722
Cost 'C'	2010-11	620129	516325	235191	444359
	2011-12	402061	364334	173439	321839
	2012-13	555070	297352	207202	331356

Value of Out put

Table 33: Value of Output per hectare (In Rs.) of Tapioca

Holding Size Class			
Small	Medium	Large	All Sizes
142705	162952	183407	164342

The value of output for all holding size is comparable. Value of output from tapioca is estimated Rs.164342/- per hectare.

2.5 Banana during 2012-13

In the cost of cultivation study on banana 293 holdings were selected by covering an area 83.50 hectares. Details of these holdings are given below.

Table 34: Area and Number of holdings selected under Banana cultivation

Size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to Total area	Area per holding (ha)
Small	158	14.30	17.13	0.09
Medium	111	38.90	46.59	0.35
Large	24	30.30	36.29	1.26
All Size	293	83.50	100.00	0.28

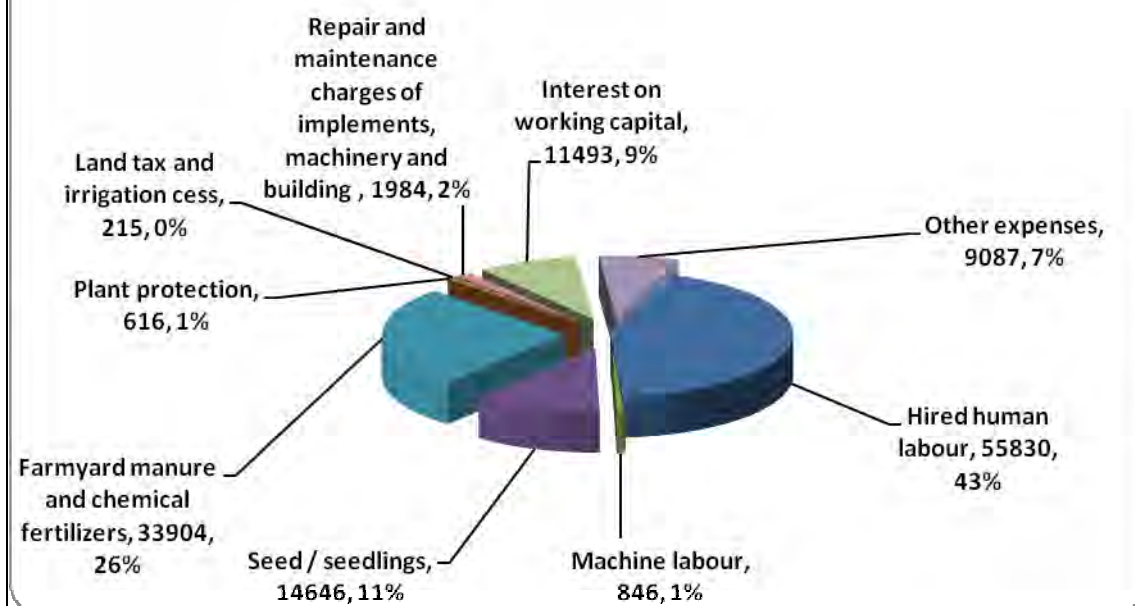
Cost of Cultivation

As in the case of other crops, cost of cultivation of banana is also calculated at different cost, concepts such as cost 'A', Cost 'B1', 'Cost 'B' and Cost 'C'. When Cost A is considered, cost of cultivation is Rs.128621/-

Table 35: The Cost of cultivation per hectare (in Rs.) of Banana

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	77734	47436	55878	55830
2	Animal labour	0	0	0	0
3	Machine labour	1021	969	602	846
4	Seed / seedlings	17695	14750	13022	14646
5	Farmyard manure and chemical fertilizers	41910	34820	28814	33904
6	Plant protection	1167	545	438	616
7	Land tax and irrigation Cess	588	163	100	215
8	Repair and maintenance charges of implements, machinery and building	5891	1638	516	1984
9	Interest on working capital	15361	10728	10581	11493
10	Other expenses	14081	8764	7058	9087
11	Total Cost 'A' (1-10)	175448	119813	117009	128621
12	Interest on fixed capital	5822	2055	618	2201
13	Cost 'B1' (11+12)	181270	121868	117627	130822
14	Interest on land value	685869	481376	199001	415556
15	Cost 'B' (13+14)	867139	603244	316628	546378
16	Imputed value of household labour	48701	20994	26056	27711
17	Cost 'C' (15+16)	915840	624238	342684	574089

Percentage Distribution of "COST A" per hectare of Banana during 2012-13



In this hired human labour cost accounted as 43 percent where as farmyard manure and chemical fertilizers cost as 26 percent respectively of the total Cost 'A'. Seed/seedling cost constitutes to 11% of the total cost 'A'.

In Banana cultivation male participation rate is higher than that of female. The percentage distribution of these facts are as follows:

Table: 36 Percentage of hired human labour hours to the total human labour hours

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	46.67	27.40	52.28	36.56
Female	22.41	13.42	20.45	16.59
Total	69.08	40.82	72.73	53.15

Table 37: Cost of production of Banana per hectare(In Rs.) during 2010-11, 2011-12 & 2012-13

A comparative statement for 2010-11, 2011-12 and 2012-13 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	133384	103088	94877	104903
	2011-12	133683	133298	126369	130342
	2012-13	175448	119813	117009	128621
Cost 'B'	2010-11	596492	475692	317586	443736
	2011-12	578811	395319	338793	410808
	2012-13	867139	603244	316628	546378
Cost 'C'	2010-11	625895	523942	328664	461227
	2011-12	609642	420667	351704	431904
	2012-13	915840	624238	342684	574089

Value of out put

Table 38: Value of Output per hectare(In Rs.) of Banana

Holding Size Class			
Small	Medium	Large	All Sizes
489710	430811	308477	397055

During 2012-13 per hectare value of output from banana cultivation is estimated out as **Rs. 397055/-**

2.6 Pepper during 2012-13

The monopoly of the state still continues in area and production of pepper. Details of the holdings selected for the study is given below:

Table 39 - Area and number of holdings under Pepper cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	227	14.40	27.48	0.06
Medium	59	21	40.08	0.36
Large	15	17	32.44	1.13
Total	301	52.40	100.00	0.17

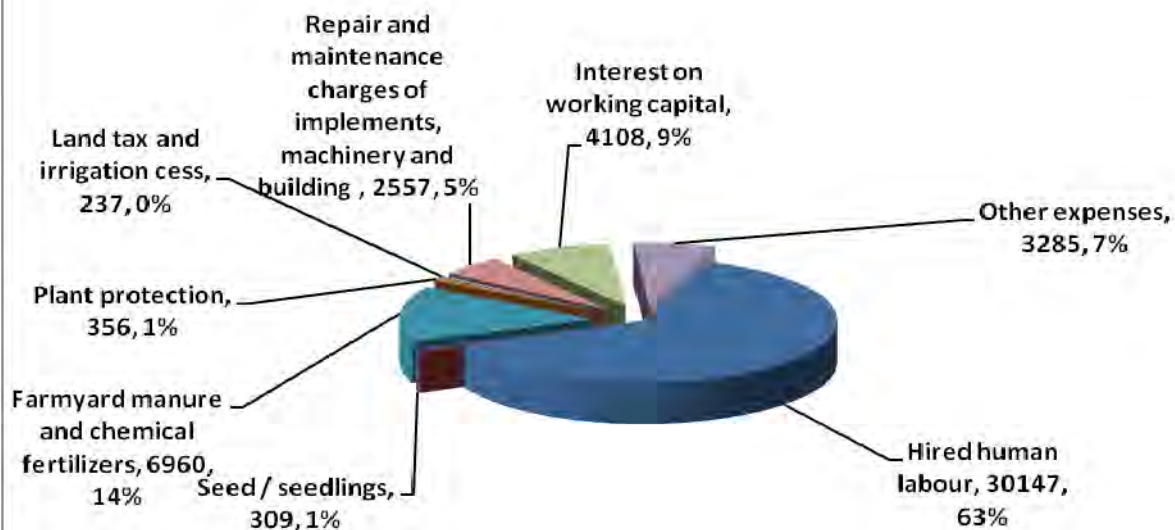
Cost of cultivation

The cultivation cost incurred for pepper is entirely different when compared to the cost of paddy and other seasonal crops. Labour cost and fertilizer cost are the two major items of expenses for pepper cultivation. Item wise expenses incurred under pepper cultivation is as follows:

Table 40: Cost of cultivation per hectare (in Rs.) of Pepper

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	35918	26853	29114	30147
2	Animal labour	0	0	0	0
3	Machine labour	0	56	0	22
4	Seed / seedlings	239	422	231	309
5	Farmyard manure and chemical fertilizers	9467	6238	5626	6960
6	Plant protection	523	338	228	356
7	Land tax and irrigation Cess	385	154	208	237
8	Repair and maintenance charges of implements, machinery and building	6242	1324	807	2557
9	Interest on working capital	4989	3750	3770	4108
10	Other expenses (Including soil condition)	3738	3591	2498	3285
11	Total Cost 'A' (1 to 10)	61501	42726	42482	47981
12	Interest on fixed capital	19346	4378	2964	8177
13	Cost 'B1' (11+12)	80847	47104	45446	56158
14	Interest on land value	780445	427560	282562	481575
15	Cost 'B' (13+14)	861292	474664	328008	537733
16	Imputed value of household labour	15704	9227	6947	10340
17	Cost 'C' (15+16)	876996	483891	334955	548073

Percentage Distribution of "COST A" per hectare of Pepper during 2012-13



The survey results reveal that out of the total hired human labour hours engaged in pepper cultivation 63% is shared by hired human labour. Details are given below:

Table 41: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	45.69	31.09	49.90	39.55
Female	24.59	16.96	25.54	21.10
Total	70.28	48.05	75.44	60.65

Table 42: Cost of cultivation of Pepper per hectare(In Rs.) during 2010-11, 2011-2012 & 2012-13.

A comparative statement for 2010-11 ,2011-12 & 2012-13 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	43040	34372	38647	38052
	2011-12	49470	44576	49378	48121
	2012-13	61501	42726	42482	47981
Cost 'B'	2010-11	592417	363083	343525	429123
	2011-12	474743	510178	359886	448649
	2012-13	861292	474664	328008	537733
Cost 'C'	2010-11	603943	341481	348499	437676
	2011-12	484770	520301	367436	457933
	2012-13	876996	483891	334955	548073

Value of out put

Table 43: Value of Output per Hectare (In Rs.) of Pepper

Holding Size Class			
Small	Medium	Large	All Sizes
192329	150024	126325	154488

During 2010-2011 value of output per hectare of pepper cultivation is estimated as Rs 72206/-

During 2011-12 value of output per hectare of pepper cultivation is estimated as Rs.144219/-

During 2012-13 it is estimated that Rs.154488 has been received as value of output from per hectare pepper cultivation.

2.7 Ginger during 2012-13

For the cost of cultivation study during 2012-13, 270 holdings were selected. Details are given below:

Table 44: Area and number of holdings under Ginger cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to total Area	Average area per holding (ha)
Small	221	17.50	40.32	0.08
Medium	42	16.80	38.71	0.40
Large	7	9.10	20.97	1.30
All sizes	270	43.40	100.00	0.16

Cost of cultivation

Among the various inputs of ginger cultivation labour cost, seed/seedling, fertilizer, etc. are the most important. Details of these various inputs are presented below:

Table 45 Cost of Cultivation per hectare (in Rs.) of Ginger

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	41213	28500	43632	36816
2	Animal labour	0	0	0	0
3	Machine labour	720	2255	2089	1596
4	Seed / seedlings	21465	22389	29674	23528
5	Farmyard manure and chemical fertilizers	12544	9177	19686	12732
6	Plant protection	363	364	488	389
7	Land tax and irrigation cess	271	185	106	204
8	Repair and maintenance charges of implements, machinery and building	5156	1765	1202	3028
9	Interest on working capital	8135	6894	10510	8150
10	Other expenses	5043	6253	9529	6442
11	Total Cost 'A' (1-10)	94910	77782	116916	92885

12	Interest on fixed capital	4094	1021	412	2144
13	Cost 'B1' (11+12)	99004	78803	117328	95029
14	Interest on land value	600940	221479	105085	351600
15	Cost 'B' (13+14)	699944	300282	222413	446629
16	Imputed value of household labour	13524	10021	3729	10138
17	Cost 'C' (15+16)	713468	310303	226142	456767

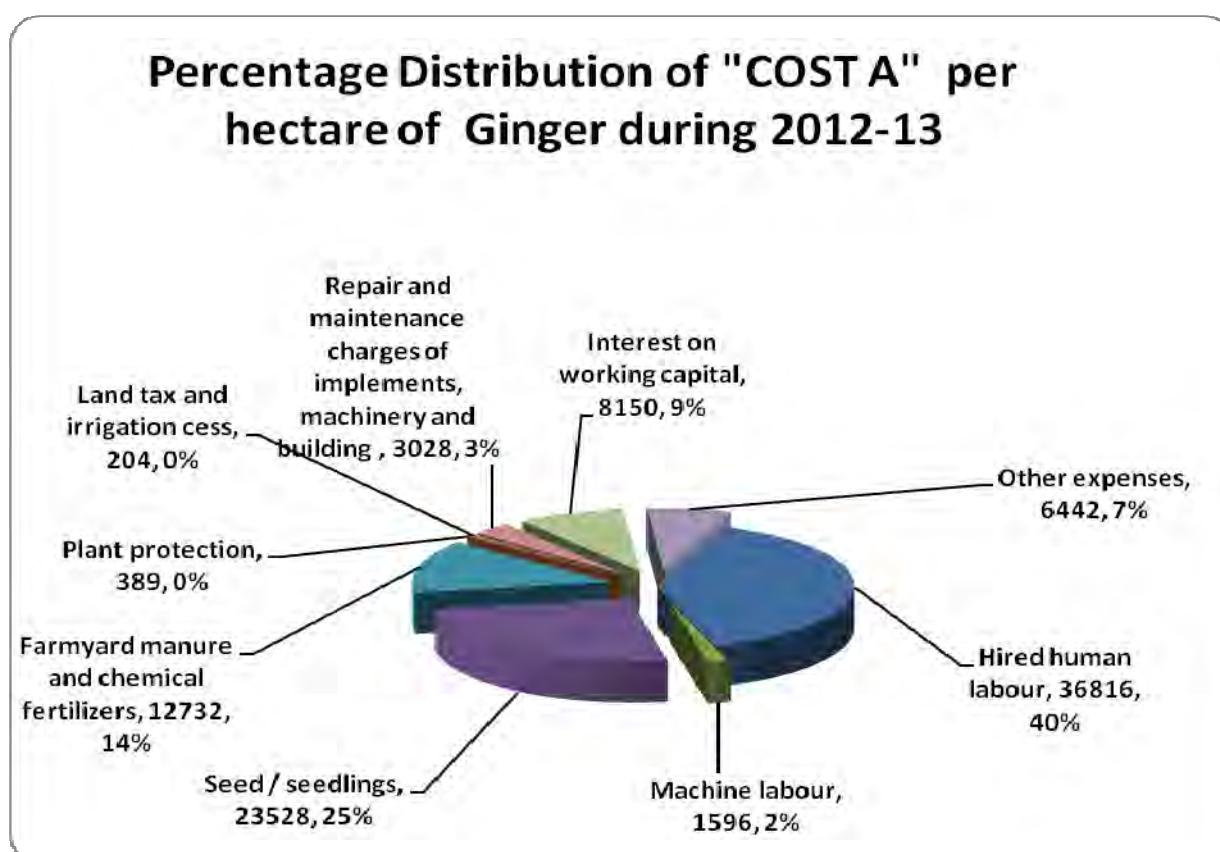


Table 46: Percentage distribution of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	42.81	47.71	68.06	50.62
Female	23.39	24.31	26.98	24.58
Total	66.20	72.02	95.04	75.20

Table 47: Cost of cultivation of Ginger per hectare(In Rs.) during 2010-11 , 2011-12 & 2012-13

A comparative statement for 2010-11 , 2011-12 & 2012-13 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	122231	104574	110869	112123
	2011-12	99111	92676	85948	91914
	2012-13	94910	77782	116916	92885
Cost 'B'	2010-11	570249	385929	361887	430826
	2011-12	618296	419936	259925	414900
	2012-13	699944	300282	222413	446629
Cost 'C'	2010-11	589744	398025	369451	443377
	2011-12	628031	431378	266480	423966
	2012-13	713468	310303	226142	456767

Value of Out put

Table 48: Value of Out put per hectare (In Rs.) of Ginger

Holding Size Class			
Small	Medium	Large	All Sizes
167080	127966	108950	139919

The per hectare value of output received from Ginger cultivation is seen as Rs.139919 during 2012-13

2.8 Turmeric during 2012-13

Details of the holdings selected for the cost of cultivation study during 2012-13 are given below:

Table 49: Area and Number of holdings under Turmeric cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to total area	Average area per holding (ha)
Small	216	16.90	48.56	0.08
Medium	31	15.10	43.39	0.49
Large	2	2.80	8.05	1.40
All size	249	34.80	100.00	0.14

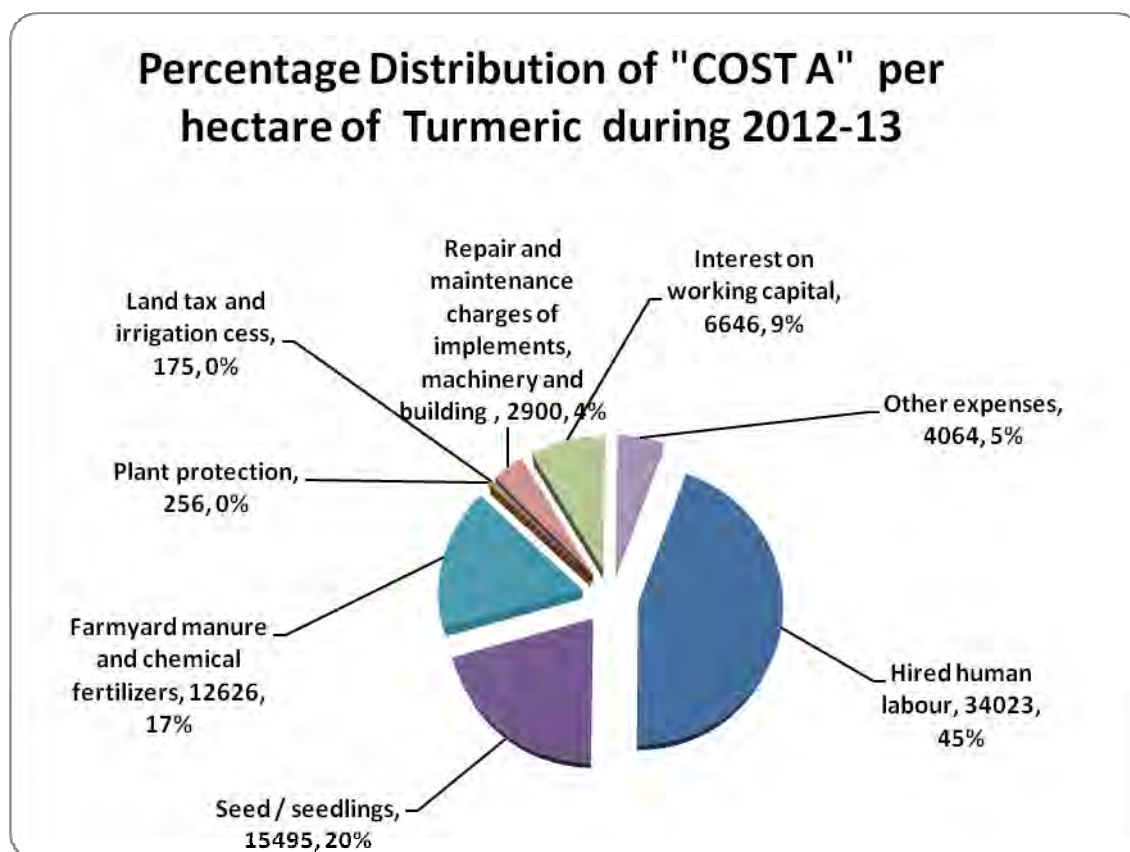
Cost of cultivation

The cash and other kind expenses incurred under Turmeric cultivation is estimated as Rs.76825/-per hectare. Details of these items are given below:

Table 50: Cost of Cultivation per hectare (in Rs.) of Turmeric

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	35301	30532	45087	34023
2	Animal labour	0	0	0	0
3	Machine labour	393	901	0	581
4	Seed / seedlings	16080	11870	31594	15495
5	Farmyard manure and chemical fertilizers	13911	12895	3177	12626
6	Plant protection	320	229	0	256
7	Land tax and irrigation Cess	226	149	0	175
8	Repair and maintenance charges of implements, machinery and building	3595	2627	74	2900
9	Interest on working capital	7028	6100	7986	6705
10	Other expenses	4274	4570	0	4064
11	Total Cost 'A' (1-10)	81128	69873	87918	76825
12	Interest on fixed capital	4527	3107	1100	3646

13	Cost 'B1' (11+12)	85655	72980	89018	80471
14	Interest on land value	401425	224445	102370	301683
15	Cost 'B' (13+14)	487080	297425	191388	382154
16	Imputed value of household labour	9667	7491	18522	9430
17	Cost 'C' (15+16)	496747	304916	209910	391584



The following table illustrates the percentage distribution of hired human labour hours to the total human labour hours engaged in turmeric cultivation.

Table 51: Percentage of Hired human labour hours to the total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	49.84	43.17	58.93	47.84
Female	22.11	23.02	22.50	22.44
Total	71.95	66.19	81.43	70.28

Table 52: Cost of cultivation of Turmeric per hectare (In Rs.) during 2010-11 , 2011-12 & 2012-13

A comparative statement for 2010-11 ,2011-12 & 2012-13 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2010-11	56937	66056	59629	59707
	2011-12	79922	59243	74219	75384
	2012-13	81128	69873	87918	76825
Cost 'B'	2010-11	515208	428360	348652	462861
	2011-12	358830	265884	248599	323040
	2012-13	487080	297425	191388	382154
Cost 'C'	2010-11	540561	439130	360639	482113
	2011-12	366139	272676	253339	329794
	2012-13	496747	304916	209910	391584

Output

The per hectare value of output received from turmeric cultivation is estimated as Rs 89069/- during the year 2012-13.

Table 53: Value of Out put per hectare(In Rs.) of Turmeric

Holding Size Class			
Small	Medium	Large	All Sizes
87351	79964	149319	89069

A1.1 District wise Area and number of holding under Autumn Paddy during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	40.00	15.30	3.83	0.38
2	Kollam	47.00	9.80	2.45	0.21
3	Pathanamthitta	15.00	9.20	2.30	0.61
4	Alappuzha	42.00	106.50	26.63	2.54
5	Kottayam	30.00	52.30	13.08	1.74
6	Ernakulam	70.00	42.30	10.58	0.60
7	Idukki	12.00	6.70	1.68	0.56
8	Thrissur	49.00	51.20	12.8	1.04
9	Palakkad	42.00	62.00	15.5	1.48
10	Wayanad	0.00	0.00	0.00	0.00
11	Malappuram	40.00	15.70	3.93	0.39
12	Kozhikkode	30.00	8.70	2.18	0.29
13	Kannur	20.00	13.20	3.40	0.66
14	Kasaragod	20.00	7.00	1.75	0.35
	State	457.00	399.90	100.00	0.88

A1.2 District wise Area and number of holding under Winter Paddy during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	40	21.20	4.19	0.53
2	Kollam	50	24.60	4.86	0.49
3	Pathanamthitta	40	29.80	5.88	0.75
4	Alappuzha	60	67.00	13.23	1.12
5	Kottayam	40	53.70	10.6	1.34
6	Eranakulam	60	59.50	11.75	0.99
7	Idukki	24	14.10	2.78	0.59
8	Thrissur	50	68.20	13.46	1.36
9	Palakkad	50	57.20	11.29	1.14
10	Wayanad	30	33.80	6.67	1.13
11	Malappuram	40	47.1	9.30	1.18
12	Kozhikkode	30	11.10	2.19	0.37
13	Kannur	30	9.10	1.80	0.30
14	Kasaragod	20	10.10	1.99	0.51
	State	564.00	506.50	100.00	0.90

A1.3 District wise Area and number of holding under SummerPaddy during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	33	7.80	2.03	0.24
2	Kollam	12	25.50	6.63	2.13
3	Pathanamthitta	40	3.20	0.83	0.76
4	Alappuzha	50	78.30	20.35	1.57
5	Kottayam	40	38.40	9.98	0.96
6	Eranakulam	60	35.30	9.18	0.59
7	Idukki	15	4.00	1.04	0.27
8	Thrissur	46	63.70	16.56	1.38
9	Palakkad	41	43.40	11.28	1.06
10	Wayanad	30	11.60	3.02	0.39
11	Malappuram	30	52.30	13.6	1.74
12	Kozhikkode	30	13.70	3.56	0.46
13	Kannur	10	1.80	0.47	0.18
14	Kasaragod	20	5.70	1.48	0.29
	State	457.00	411.70	100.00	0.90

A1.4 District wise Area and number of holding under Coconut during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	40	20.00	6.63	0.50
2	Kollam	50	16.90	5.60	0.34
3	Pathanamthitta	50	13.70	4.54	0.27
4	Alappuzha	60	32.00	10.61	0.53
5	Kottayam	50	17.6	5.84	0.35
6	Eranakulam	67	29.60	9.81	0.44
7	Idukki	40	38.80	12.86	0.97
8	Thrissur	50	27.80	9.22	0.56
9	Palakkad	32	46.80	15.52	1.46
10	Wayanad	30	14.30	4.74	0.48
11	Malappuram	40	4.00	1.33	0.10
12	Kozhikkode	30	24.70	8.19	0.82
13	Kannur	30	4.60	1.53	0.15
14	Kasaragod	26	10.80	3.58	0.42
	State	595.00	301.60	100.00	0.51

A1.5 District wise Area and number of holding under Arecanut during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	40	3.00	2.72	0.08
2	Kollam	50	2.20	1.99	0.04
3	Pathanamthitta	50	2.50	2.26	0.05
4	Alappuzha	60	3.60	3.26	0.06
5	Kottayam	50	6.60	5.98	0.13
6	Eranakulam	70	8.30	7.52	0.12
7	Idukki	40	19.40	17.57	0.49
8	Thrissur	48	12.90	11.68	0.27
9	Palakkad	49	17.80	16.12	0.36
10	Wayanad	30	14.00	12.68	0.47
11	Malappuram	40	4.10	3.71	0.10
12	Kozhikkode	30	3.90	3.53	0.13
13	Kannur	30	4.30	3.89	0.14
14	Kasaragod	20	7.80	7.07	0.39
	State	607.00	110.40	100.00	0.81

A1.6 District wise Area and number of holding under Tapioca during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	20	2.10	2.86	0.11
2	Kollam	25	3.70	5.03	0.15
3	Pathanamthitta	25	3.60	4.90	0.14
4	Alappuzha	29	3.80	5.17	0.13
5	Kottayam	25	4.90	6.67	0.20
6	Ernakulam	29	13.40	18.23	0.46
7	Idukki	20	11.30	15.37	0.57
8	Thrissur	24	5.70	7.76	0.24
9	Palakkad	25	10.60	14.42	0.42
10	Wayanad	15	2.70	3.67	0.18
11	Malappuram	20	1.80	2.45	0.09
12	Kozhikkode	15	4.10	5.58	0.27
13	Kannur	15	2.90	3.95	0.19
14	Kasaragod	10	2.90	3.95	0.29
	State	297.00	73.50	100.00	0.25

A1.7 District wise Area and number of holding under Banana during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	20	3.60	4.31	0.18
2	Kollam	25	3.70	4.43	0.15
3	Pathanamthitta	25	4.60	5.51	0.18
4	Alappuzha	24	3.60	4.31	0.15
5	Kottayam	25	6.00	7.19	0.24
6	Eranakulam	29	16.30	19.52	0.56
7	Idukki	20	10.20	12.22	0.51
8	Thrissur	25	8.20	9.82	0.33
9	Palakkad	25	10.70	12.81	0.43
10	Wayanad	15	4.20	5.03	0.28
11	Malappuram	20	3.20	3.83	0.16
12	Kozhikkode	15	4.80	5.75	0.32
13	Kannur	15	2.80	3.35	0.19
14	Kasaragod	10	1.60	1.92	0.16
	State	293.00	83.50	100.00	0.28

A1.8 District wise Area and number of holding under Pepper during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	20	1.50	2.86	0.08
2	Kollam	25	1.30	2.48	0.05
3	Pathanamthitta	25	4.0	7.63	0.16
4	Alappuzha	30	1.20	2.29	0.04
5	Kottayam	23	4.00	7.63	0.17
6	Eranakulam	33	5.40	10.31	0.16
7	Idukki	20	13.40	25.57	0.67
8	Thrissur	25	3.70	7.06	0.15
9	Palakkad	25	5.40	10.31	0.22
10	Wayanad	15	7.70	14.69	0.51
11	Malappuram	20	1.30	2.48	0.07
12	Kozhikkode	15	0.50	0.95	0.03
13	Kannur	15	1.30	2.48	0.09
14	Kasaragod	10	1.70	3.24	0.17
	State	301.00	52.40	100.00	0.17

A1.9 District wise Area and number of holding under Ginger during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	20	1.30	3.00	0.07
2	Kollam	25	1.20	2.76	0.05
3	Pathanamthitta	25	2.00	4.61	0.08
4	Alappuzha	15	0.60	1.38	0.04
5	Kottayam	25	2.90	6.68	0.12
6	Eranakulam	29	5.10	11.75	0.18
7	Idukki	20	9.90	22.81	0.50
8	Thrissur	22	1.60	3.69	0.07
9	Palakkad	25	10.10	23.27	0.40
10	Wayanad	15	3.80	8.76	0.25
11	Malappuram	14	0.70	1.61	0.05
12	Kozhikkode	15	0.60	1.38	0.04
13	Kannur	10	1.50	3.46	0.15
14	Kasaragod	10	2.10	4.84	0.21
	State	270.00	43.40	100.00	0.16

A1.10 District wise Area and number of holding under Turmeric during 2012-13

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	15	0.70	2.01	0.05
2	Kollam	25	1.20	3.45	0.05
3	Pathanamthitta	12	0.60	1.72	0.05
4	Alappuzha	10	0.40	1.15	0.04
5	Kottayam	25	2.10	6.03	0.08
6	Eranakulam	29	3.80	10.92	0.13
7	Idukki	20	13.50	38.79	0.68
8	Thrissur	25	2.70	7.76	0.11
9	Palakkad	25	4.80	13.79	0.19
10	Wayanad	15	1.00	2.87	0.07
11	Malappuram	12	0.70	2.01	0.06
12	Kozhikkode	15	1.20	3.45	0.08
13	Kannur	11	1.30	3.74	0.12
14	Kasaragod	10	0.80	2.30	0.08
	State	249.00	34.80	100.00	0.14

A2.1 District wise Cost of Cultivation per hectare(in Rs) of Autumn paddy during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	25448	21218	17744	17163	21929
2	Animal labour	679	405	0	117	0
3	Machine labour	6641	8436	7401	5079	9756
4	Seed / seedlings	1536	1881	2423	3220	2326
5	Farmyard manure and chemical fertilizers	5043	5592	5520	3837	3533
6	Plant protection	380	320	449	128	166
7	Land tax and irrigation cess	68	76	219	179	76
8	Repair and maintenance charges of implements, machinery and building	1334	2908	810	731	254
9	Interest on working capital	2123	2178	1938	1552	2012
10	Other expenses	2733	5702	5217	1494	2520
11	Total cost 'A' (1-10)	45985	48716	41721	33500	42572
12	Interest on fixed capital	1933	909	1153	869	864
13	Cost 'B1' (11+12)	47918	49625	42874	34369	43436
14	Interest on land value	60872	75362	66513	60256	55136
15	Cost 'B' (13+14)	108790	124987	109387	94625	98572
16	Imputed value of household labour	7898	6594	3194	1126	1375
17	Cost 'C' (15+16)	116688	131581	112581	95751	99947

A2.1 District wise Cost of Cultivation per hectare (in Rs.) of Autumn paddy during 2012-13

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	17610	22169	15005	15946	0
2	Animal labour	0	0	212	0	0
3	Machine labour	5264	0	8720	3059	0
4	Seed / seedlings	918	1903	1857	1573	0
5	Farmyard manure and chemical fertilizers	3108	5806	4735	2534	0
6	Plant protection	41	33	634	0	0
7	Land tax and irrigation cess	119	44	111	85	0
8	Repair and maintenance charges of implements, machinery and building	925	790	662	778	0
9	Interest on working capital	1458	1724	1783	1267	0
10	Other expenses	2209	4566	4493	2222	0
11	Total cost 'A' (1-10)	31652	37035	38212	27464	0
12	Interest on fixed capital	835	914	1137	1127	0
13	Cost 'B1' (11+12)	32487	37949	39349	28591	0
14	Interest on land value	88232	65099	62617	63929	0
15	Cost 'B' (13+14)	120719	103048	101966	92520	0
16	Imputed value of household labour	4073	2896	3189	3018	0
17	Cost 'C' (15+16)	124792	105944	105155	95538	0

A2.1 District wise Cost of Cultivation per hectare (in Rs.) of Autumn paddy during 2012-13

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	21319	15869	22030	25739	18336
2	Animal labour	589	457	769	0	153
3	Machine labour	5016	6069	3541	4640	5934
4	Seed / seedlings	1842	1776	1321	1906	2120
5	Farmyard manure and chemical fertilizers	3743	6658	4381	9530	3973
6	Plant protection	207	119	50	137	190
7	Land tax and irrigation cess	27	205	217	349	127
8	Repair and maintenance charges of implements, machinery and building	399	251	2533	2737	839
9	Interest on working capital	1750	1707	1735	2268	1667
10	Other expenses	2287	3188	2598	3408	2629
11	Total cost 'A' (1-10)	37179	36299	39175	50714	35968
12	Interest on fixed capital	1228	895	2424	2982	1092
13	Cost 'B1' (11+12)	38407	37194	41599	53696	37060
14	Interest on land value	86035	76373	62078	47924	65243
15	Cost 'B' (13+14)	124442	113567	103667	101620	102303
16	Imputed value of household labour	4434	5964	3291	4744	2871
17	Cost 'C' (15+16)	128876	119531	106968	106364	105174

A2.2 District wise Cost of Cultivation per hectare (in Rs.) of Winter paddy during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	22217	26805	20834	18417	25465
2	Animal labour	0	0	0	473	0
3	Machine labour	5624	6565	5200	6221	8547
4	Seed / seedlings	1587	1591	2704	2995	2111
5	Farmyard manure and chemical fertilizers	5153	6925	6383	8030	6373
6	Plant protection	247	212	375	119	362
7	Land tax and irrigation cess	104	138	134	119	197
8	Repair and maintenance charges of implements, machinery and building	2334	1166	2768	1196	1491
9	Interest on working capital	1958	2264	2028	1953	2374
10	Other expenses	4339	3174	5073	2809	4628
11	Total cost 'A' (1-10)	43563	48840	45499	42332	51548
12	Interest on fixed capital	540	1274	858	638	606
13	Cost 'B1' (11+12)	44103	50114	46357	42970	52154
14	Interest on land value	98101	64594	59984	66264	59260
15	Cost 'B' (13+14)	142204	114708	106341	109234	111414
16	Imputed value of household labour	4759	4905	3550	2743	2353
17	Cost 'C' (15+16)	146963	119613	109891	111977	113767

A2.2 District wise Cost of Cultivation per hectare (in Rs.) of Winter paddy during 2012-13

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	17580	15170	15602	19811	24449
2	Animal labour	0	0	0	207	0
3	Machine labour	9837	4867	3073	6506	5978
4	Seed / seedlings	958	1435	1828	1604	2714
5	Farmyard manure and chemical fertilizers	4097	2103	6972	7342	5440
6	Plant protection	246	199	101	361	278
7	Land tax and irrigation cess	100	255	125	173	133
8	Repair and maintenance charges of implements, machinery and building	2902	1334	2697	621	2918
9	Interest on working capital	1881	1423	1697	1900	2151
10	Other expenses	4910	4685	6356	2164	4167
11	Total cost 'A' (1-10)	42511	31471	38451	40689	48228
12	Interest on fixed capital	924	1021	486	2281	1539
13	Cost 'B1' (11+12)	43435	32492	38937	42970	49767
14	Interest on land value	82722	57523	51450	74398	52577
15	Cost 'B' (13+14)	126157	90015	90387	117368	102344
16	Imputed value of household labour	3571	7651	3548	4159	5785
17	Cost 'C' (15+16)	129728	97666	93935	121527	108129

A2.2 District wise Cost of Cultivation per hectare (in Rs.) of Winter paddy during 2012-13

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	25649	17011	23070	23757	20700
2	Animal labour	0	624	0	0	100
3	Machine labour	7246	7734	4285	5991	6467
4	Seed / seedlings	1540	1801	987	1465	1913
5	Farmyard manure and chemical fertilizers	4681	8362	7906	6423	6226
6	Plant protection	768	438	257	262	295
7	Land tax and irrigation cess	137	285	277	225	148
8	Repair and maintenance charges of implements, machinery and building	1299	3995	2632	1629	1928
9	Interest on working capital	2217	1914	1958	2122	1994
10	Other expenses	4450	2305	2660	4543	4184
11	Total cost 'A' (1-10)	47987	44469	44032	46417	43955
12	Interest on fixed capital	539	1616	824	4265	1033
13	Cost 'B1' (11+12)	48526	46085	44856	50682	44998
14	Interest on land value	81479	86217	70994	54862	70034
15	Cost 'B' (13+14)	130005	132302	115850	105544	115022
16	Imputed value of household labour	3056	5821	5051	3781	3804
17	Cost 'C' (15+16)	133061	138123	120901	109325	118826

A2.3 District wise Cost of Cultivation per hectare (in Rs.) of Summer paddy during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	26765	27879	20220	19739	23701
2	Animal labour	0	205	0	111	49
3	Machine labour	6071	5527	7251	6191	9556
4	Seed / seedlings	1216	1943	2810	3605	2021
5	Farmyard manure and chemical fertilizers	5866	5269	6105	8518	3581
6	Plant protection	281	141	607	150	196
7	Land tax and irrigation cess	83	99	83	99	136
8	Repair and maintenance charges of implements, machinery and building	1367	1773	1366	1118	1918
9	Interest on working capital	2221	2128	2237	2039	2028
10	Other expenses	4222	1592	7741	2469	1458
11	Total cost 'A' (1-10)	48092	46556	48420	44039	44644
12	Interest on fixed capital	882	1191	725	831	693
13	Cost 'B1' (11+12)	48974	47747	49145	44870	45337
14	Interest on land value	82073	53347	81397	50885	80442
15	Cost 'B' (13+14)	131047	101094	130542	95755	125779
16	Imputed value of household labour	3723	5336	4074	2396	1709
17	Cost 'C' (15+16)	134770	106430	134616	98151	127488

A2.3 District wise Cost of Cultivation per hectare (in Rs.) of Summer paddy during 2012-13

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	21515	26251	16719	16418	18871
2	Animal labour	606	0	133	0	0
3	Machine labour	6418	0	4215	4186	4068
4	Seed / seedlings	1237	2198	1870	1761	3019
5	Farmyard manure and chemical fertilizers	3262	5069	4331	7310	6654
6	Plant protection	351	188	199	485	495
7	Land tax and irrigation cess	156	22	129	171	246
8	Repair and maintenance charges of implements, machinery and building	1646	1761	1191	1297	1472
9	Interest on working capital	1802	1892	1774	1665	1781
10	Other expenses	2652	4143	8005	3135	2507
11	Total cost 'A' (1-10)	39645	41524	38566	36428	39113
12	Interest on fixed capital	1061	1051	850	4104	3421
13	Cost 'B1' (11+12)	40706	42575	39416	40532	42534
14	Interest on land value	86541	62569	57674	76003	52809
15	Cost 'B' (13+14)	127247	105144	97090	116535	95343
16	Imputed value of household labour	3132	3201	3289	3015	4680
17	Cost 'C' (15+16)	130379	108345	100379	119550	100023

A2.3 District wise Cost of Cultivation per hectare (in Rs.) of Summer paddy during 2012-13

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	24365	19210	27063	17864	20738
2	Animal labour	168	769	0	0	158
3	Machine labour	2118	5994	2968	6160	5383
4	Seed / seedlings	2149	1816	1523	1405	2269
5	Farmyard manure and chemical fertilizers	6234	7100	6145	6545	5941
6	Plant protection	315	228	267	208	285
7	Land tax and irrigation cess	168	47	183	228	131
8	Repair and maintenance charges of implements, machinery and building	1078	1459	973	1956	1365
9	Interest on working capital	1866	1902	2001	1810	1922
10	Other expenses	1966	2927	2051	4024	3670
11	Total cost 'A' (1-10)	40427	41452	43174	40200	41862
12	Interest on fixed capital	1362	1130	1402	2691	1381
13	Cost 'B1' (11+12)	41789	42582	44576	42891	43243
14	Interest on land value	47309	77917	68327	51995	64102
15	Cost 'B' (13+14)	89098	120499	112903	94886	107345
16	Imputed value of household labour	4414	3293	3182	4299	3318
17	Cost 'C' (15+16)	93512	123792	116085	99185	110663

A2.4 District wise Cost of Cultivation per hectare (in Rs.) of Coconut during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	33368	33241	23217	30916	27461
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	0	0	1151	0	1300
5	Farmyard manure and chemical fertilizers	4584	5306	7306	7139	5536
6	Plant protection	136	132	227	126	223
7	Land tax and irrigation cess	129	177	124	112	153
8	Repair and maintenance charges of implements, machinery and building	1689	1974	2177	1187	1379
9	Interest on working capital	4193	4131	3379	3947	3709
10	Other expenses	3841	2626	1890	1285	2570
11	Total cost 'A' (1-10)	47940	47587	39471	44712	42331
12	Interest on fixed capital	1097	3904	2915	1262	2032
13	Cost 'B1' (11+12)	49037	51491	42386	45974	44363
14	Interest on land value	638860	566293	543904	535734	555712
15	Cost 'B' (13+14)	687897	617784	586290	581708	600075
16	Imputed value of household labour	5727	3561	4555	4204	6918
17	Cost 'C' (15+16)	693624	621345	590845	585912	606993

A2.4 District wise Cost of Cultivation per hectare (in Rs.) of Coconut during 2012-13

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	30043	23964	31195	24561	25531
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	703	0
4	Seed / seedlings	943	0	0	0	0
5	Farmyard manure and chemical fertilizers	6226	8809	5979	8994	6618
6	Plant protection	141	152	217	128	382
7	Land tax and irrigation cess	119	78	179	85	178
8	Repair and maintenance charges of implements, machinery and building	1326	1082	1251	1074	1165
9	Interest on working capital	3856	3576	3946	3569	3529
10	Other expenses	1205	2839	2073	1300	4756
11	Total cost 'A' (1-10)	43859	40500	44840	40414	40159
12	Interest on fixed capital	1568	1684	1780	1764	2834
13	Cost 'B1' (11+12)	45427	42184	46620	42178	42993
14	Interest on land value	586684	575213	529533	492431	544940
15	Cost 'B' (13+14)	632111	617397	576153	534609	587933
16	Imputed value of household labour	3835	2999	3419	5108	5184
17	Cost 'C' (15+16)	635946	620396	579572	539717	593117

A2.4 District wise Cost of Cultivation per hectare (in Rs.) of Coconut during 2012-13

Sl No	Components	Malappur am	Kozhikko de	Kannur	Kasaragod	State
1	Hired human labour	25654	22899	30294	28840	27561
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	2045	183
4	Seed / seedlings	0	0	0	0	221
5	Farmyard manure and chemical fertilizers	7722	6530	5583	3978	6879
6	Plant protection	365	221	225	186	178
7	Land tax and irrigation cess	3340	101	257	250	131
8	Repair and maintenance charges of implements, machinery and building	1978	1438	1709	1343	1353
9	Interest on working capital	3868	3093	3824	3740	3719
10	Other expenses	4942	1278	2136	2352	2165
11	Total cost 'A' (1-10)	44863	35560	44028	42734	42390
12	Interest on fixed capital	3252	1152	2274	3803	1929
13	Cost 'B1' (11+12)	48115	36712	46302	46537	44319
14	Interest on land value	569377	539206	576955	584673	552222
15	Cost 'B' (13+14)	617492	575918	623257	631210	596541
16	Imputed value of household labour	6255	5972	5150	5987	4619
17	Cost 'C' (15+16)	623747	581890	628407	637197	601160

A2.5 District wise Cost of Cultivation per hectare (in Rs.) of Arecanut during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	26382	38026	24578	27757	29737
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	0	0	2555	0	2474
5	Farmyard manure and chemical fertilizers	5894	7425	6929	5997	7174
6	Plant protection	456	533	594	390	223
7	Land tax and irrigation cess	391	204	124	100	224
8	Repair and maintenance charges of implements, machinery and building	5558	2713	3433	4388	3014
9	Interest on working capital	3420	4714	3703	3539	4118
10	Other expenses	1470	1156	2370	1241	1570
11	Total cost 'A' (1-10)	43571	54771	44286	43412	48534
12	Interest on fixed capital	2841	3120	3192	2350	2369
13	Cost 'B1' (11+12)	46412	57891	47478	45762	50903
14	Interest on land value	415262	475139	385639	372623	454254
15	Cost 'B' (13+14)	461674	533030	433117	418385	505157
16	Imputed value of household labour	2968	4794	5350	5008	5386
17	Cost 'C' (15+16)	464642	537824	438467	423393	510543

A2.5 District wise Cost of Cultivation per hectare (in Rs.) of Arecanut during 2012-13

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	27271	16179	26792	24035	25692
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	380	0
4	Seed / seedlings	2098	0	0	0	0
5	Farmyard manure and chemical fertilizers	5173	8539	7393	5750	6924
6	Plant protection	175	182	396	260	249
7	Land tax and irrigation cess	212	179	207	127	232
8	Repair and maintenance charges of implements, machinery and building	2364	2858	2662	2224	2475
9	Interest on working capital	3690	2648	3725	3176	3599
10	Other expenses	2183	1578	2671	1337	3120
11	Total cost 'A' (1-10)	43166	32163	43846	37289	42291
12	Interest on fixed capital	5492	3134	3811	2072	5347
13	Cost 'B1' (11+12)	48658	35297	47657	39361	47638
14	Interest on land value	447671	334141	444774	401801	386152
15	Cost 'B' (13+14)	496329	369438	492431	441162	433790
16	Imputed value of household labour	5307	5450	6325	3555	4372
17	Cost 'C' (15+16)	501636	374888	498756	444717	438162

A2.5 District wise Cost of Cultivation per hectare (in Rs.) of Arecanut during 2012-13

Sl No	Components	Malappur am	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	29469	26301	22094	27004	24687
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	1636	178
4	Seed / seedlings	0	0	0	0	364
5	Farmyard manure and chemical fertilizers	6331	7369	7386	7227	6939
6	Plant protection	556	485	466	216	299
7	Land tax and irrigation cess	353	313	273	382	218
8	Repair and maintenance charges of implements, machinery and building	3817	2738	2407	2216	2760
9	Interest on working capital	3922	3486	3399	3904	3467
10	Other expenses	2866	3204	4040	2954	2202
11	Total cost 'A' (1-10)	47314	44146	40065	45539	41114
12	Interest on fixed capital	5634	4695	4222	3848	3661
13	Cost 'B1' (11+12)	52948	48841	44287	49387	44775
14	Interest on land value	331637	340213	329865	370412	390308
15	Cost 'B' (13+14)	384585	389054	374152	419799	435083
16	Imputed value of household labour	6424	4946	4824	5810	5019
-17	Cost 'C' (15+16)	391009	394000	378976	425609	440102

A2.6 District wise Cost of Cultivation per hectare (in Rs.) of Tapioca during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	40264	38232	35760	37532	40903
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	508	0
4	Seed / seedlings	1233	1894	2617	4773	3740
5	Farmyard manure and chemical fertilizers	15354	12702	17325	13413	11529
6	Plant protection	124	676	568	169	137
7	Land tax and irrigation cess	76	187	141	63	197
8	Repair and maintenance charges of implements, machinery and building	758	696	616	802	614
9	Interest on working capital	6145	6061	6228	5864	5740
10	Other expenses	4479	7106	6008	2246	1088
11	Total cost 'A' (1-10)	68433	67554	69263	65370	63948
12	Interest on fixed capital	1023	330	447	461	367
13	Cost 'B1' (11+12)	69456	67884	69710	65831	64315
14	Interest on land value	300849	246900	243379	198974	208615
15	Cost 'B' (13+14)	370305	314784	313089	264805	272930
16	Imputed value of household labour	16932	13323	20385	18831	20601
17	Cost 'C' (15+16)	387237	328107	333474	283636	293531

A2.6 District wise Cost of Cultivation per hectare (in Rs.) of Tapioca during 2012-13

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	27094	27892	30168	32261	30301
2	Animal labour	0	0	0	0	0
3	Machine labour	194	0	776	1697	0
4	Seed / seedlings	1081	1179	4438	4520	2355
5	Farmyard manure and chemical fertilizers	18348	14416	11128	10715	12714
6	Plant protection	98	166	300	412	729
7	Land tax and irrigation cess	80	209	73	138	254
8	Repair and maintenance charges of implements, machinery and building	263	313	115	154	645
9	Interest on working capital	5061	5066	5112	5859	5186
10	Other expenses	3796	7005	4211	8987	5760
11	Total cost 'A' (1-10)	56015	56246	56421	64743	57944
12	Interest on fixed capital	609	318	529	797	572
13	Cost 'B1' (11+12)	56624	56564	56950	65540	58516
14	Interest on land value	305643	255872	207793	247460	270921
15	Cost 'B' (13+14)	362267	312436	264743	313000	329437
16	Imputed value of household labour	18531	10238	11527	12805	12284
17	Cost 'C' (15+16)	380798	322674	276270	325805	341721

A2.6 District wise Cost of Cultivation per hectare (in Rs.) of Tapioca during 2012-13

Sl No	Components	Malappur am	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	31392	29916	28079	23569	31325
2	Animal labour	0	0	0	0	0
3	Machine labour	2050	0	0	0	415
4	Seed / seedlings	3252	3785	2031	2915	2704
5	Farmyard manure and chemical fertilizers	14991	13149	11810	13239	13911
6	Plant protection	573	217	667	538	312
7	Land tax and irrigation cess	484	318	119	451	169
8	Repair and maintenance charges of implements, machinery and building	595	685	984	146	420
9	Interest on working capital	5991	4966	4446	4445	5380
10	Other expenses	7655	2590	1870	4192	5134
11	Total cost 'A' (1-10)	66983	55626	50006	49495	59770
12	Interest on fixed capital	671	443	1104	804	570
13	Cost 'B1' (11+12)	67654	56069	51110	50299	60340
14	Interest on land value	248625	329067	222774	235670	256382
15	Cost 'B' (13+14)	316279	385136	273884	285969	316722
16	Imputed value of household labour	16668	11372	11518	12422	14634
17	Cost 'C' (15+16)	332947	396508	285402	298391	331356

A2.7 District wise Cost of Cultivation per hectare (in Rs.) of Banana during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	59104	61345	55304	57169	55254
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	175	0
4	Seed / seedlings	15560	15922	18081	15533	11240
5	Farmyard manure and chemical fertilizers	43368	43770	37986	37255	32642
6	Plant protection	271	665	892	847	673
7	Land tax and irrigation cess	55	252	112	197	174
8	Repair and maintenance charges of implements, machinery and building	1550	2223	1902	4101	2766
9	Interest on working capital	12620	13086	12089	12174	10669
10	Other expenses	7898	9154	8624	10763	6879
11	Total cost 'A' (1-10)	140426	146417	134990	138214	120297
12	Interest on fixed capital	4248	2670	3921	1480	1135
13	Cost 'B1' (11+12)	144674	149087	138911	139694	121432
14	Interest on land value	533758	481901	458277	435900	444861
15	Cost 'B' (13+14)	678432	630888	597188	575594	566293
16	Imputed value of household labour	35526	35455	23096	32319	33699
17	Cost 'C' (15+16)	713958	666443	620284	607913	599992

A 2.7 District wise Cost of Cultivation per hectare (in Rs.) of Banana during 2012-13

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	59258	47346	62037	53851	51075
2	Animal labour	0	0	0	0	0
3	Machine labour	806	0	2903	917	0
4	Seed / seedlings	14903	10467	17135	14800	11607
5	Farmyard manure and chemical fertilizers	30315	31856	39033	31226	30237
6	Plant protection	796	353	588	540	253
7	Land tax and irrigation cess	58	225	293	254	235
8	Repair and maintenance charges of implements, machinery and building	1117	2384	2658	1354	1579
9	Interest on working capital	11510	9913	13117	10984	10217
10	Other expenses	9018	9110	9478	8504	8993
11	Total cost 'A' (1-10)	127781	111654	147242	122430	114196
12	Interest on fixed capital	1731	2204	2152	1923	2694
13	Cost 'B1' (11+12)	129512	113858	149394	124353	116890
14	Interest on land value	433424	374932	454637	394899	357178
15	Cost 'B' (13+14)	562936	488790	604031	519252	474068
16	Imputed value of household labour	27775	26742	25704	23382	25997
17	Cost 'C' (15+16)	590711	515532	629735	542634	500065

A 2.7 District wise Cost of Cultivation per hectare (in Rs.) of Banana during 2012-13

Sl No	Components	Malappur am	Kozhikko de	Kannur	Kasaragod	State
1	Hired human labour	62944	49551	58995	49029	55830
2	Animal labour	0	0	0	0	0
3	Machine labour	4357	0	0	5581	846
4	Seed / seedlings	16275	16503	16592	16434	14646
5	Farmyard manure and chemical fertilizers	28697	34442	34742	33259	33904
6	Plant protection	972	427	780	767	616
7	Land tax and irrigation cess	128	523	553	429	215
8	Repair and maintenance charges of implements, machinery and building	2004	2246	2008	2091	1984
9	Interest on working capital	12318	11272	12026	11522	11493
10	Other expenses	9930	11797	9146	10154	9087
11	Total cost 'A' (1-10)	137625	126761	314842	129266	128621
12	Interest on fixed capital	2251	2083	2331	2728	2201
13	Cost 'B1' (11+12)	139876	128844	137173	131994	130822
14	Interest on land value	424341	322476	303813	351620	415556
15	Cost 'B' (13+14)	564217	451320	440986	483614	546378
16	Imputed value of household labour	26844	28366	25585	24971	27711
17	Cost 'C' (15+16)	591061	479686	466571	508585	574089

A 2.8 District wise Cost of Cultivation per hectare (in Rs.) of Pepper during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	32796	29142	26890	37169	29651
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	412	0	362	0	0
5	Farmyard manure and chemical fertilizers	6234	6786	6109	7209	7694
6	Plant protection	723	824	178	464	169
7	Land tax and irrigation cess	438	213	115	154	180
8	Repair and maintenance charges of implements, machinery and building	3301	2478	3452	2560	2597
9	Interest on working capital	4362	3920	3783	3994	4016
10	Other expenses	3458	2443	4291	2516	2641
11	Total cost 'A' (1-10)	51724	45806	45180	46645	46948
12	Interest on fixed capital	10571	8672	9138	9552	8808
13	Cost 'B1' (11+12)	62295	54478	54318	56197	55756
14	Interest on land value	682952	656141	402800	442769	480108
15	Cost 'B' (13+14)	745247	710619	457118	498966	535864
16	Imputed value of household labour	9815	9423	9548	11346	10138
17	Cost 'C' (15+16)	755062	720042	466666	510312	546002

A 2.8 District wise Cost of Cultivation per hectare (in Rs.) of Pepper during 2012-13

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	28124	28703	33019	37954	29759
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	216	0
4	Seed / seedlings	495	74	0	0	1358
5	Farmyard manure and chemical fertilizers	9861	5584	9002	7742	5251
6	Plant protection	232	217	273	530	508
7	Land tax and irrigation cess	142	125	178	143	411
8	Repair and maintenance charges of implements, machinery and building	2065	2093	3726	2159	2241
9	Interest on working capital	4383	3741	4453	4962	3937
10	Other expenses	5122	2827	2237	3174	2495
11	Total cost 'A' (1-10)	50424	43364	52888	56880	45960
12	Interest on fixed capital	8328	7509	5040	6266	10323
13	Cost 'B1' (11+12)	58752	50873	57928	63146	56283
14	Interest on land value	591336	482543	426677	486897	480391
15	Cost 'B' (13+14)	650088	533416	484605	550043	536674
16	Imputed value of household labour	11531	10520	10025	11155	9979
17	Cost 'C' (15+16)	661619	543936	494630	561198	546653

A 2.8 District wise Cost of Cultivation per hectare (in Rs.) of Pepper during 2012-13

Sl No	Components	Malappur am	Kozhikko de	Kannur	Kasaragod	State
1	Hired human labour	27616	28512	31700	27584	30147
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	22
4	Seed / seedlings	0	0	166	0	309
5	Farmyard manure and chemical fertilizers	8435	8735	5969	8783	6960
6	Plant protection	745	134	437	500	356
7	Land tax and irrigation cess	633	766	729	497	237
8	Repair and maintenance charges of implements, machinery and building	2495	1044	4118	4189	2557
9	Interest on working capital	4111	4256	4281	4172	4108
10	Other expenses	4316	5181	4534	4857	3285
11	Total cost 'A' (1-10)	48351	48628	51934	50582	47981
12	Interest on fixed capital	10469	8726	7046	7714	8177
13	Cost 'B1' (11+12)	58820	57354	58980	58296	56158
14	Interest on land value	382545	456656	373757	329282	481575
15	Cost 'B' (13+14)	411665	514010	432737	387578	537733
16	Imputed value of household labour	10174	8936	8005	10037	10340
17	Cost 'C' (15+16)	421839	522946	440742	397615	548073

A 2.9 District wise Cost of Cultivation per hectare (in Rs.) of Ginger during 2012-13

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	44267	38684	37124	39413	28475
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	28138	29285	24961	25609	19490
5	Farmyard manure and chemical fertilizers	9825	8140	12552	12565	13233
6	Plant protection	85	285	280	228	270
7	Land tax and irrigation cess	65	210	158	216	167
8	Repair and maintenance charges of implements, machinery and building	1351	3083	3883	2654	1574
9	Interest on working capital	8778	8447	8454	8455	7077
10	Other expenses	5461	8074	9621	6739	9298
11	Total cost 'A' (1-10)	97970	96208	97033	95879	79584
12	Interest on fixed capital	3016	2542	3842	1187	2264
13	Cost 'B1' (11+12)	100986	98750	100875	97066	81848
14	Interest on land value	433167	352020	353432	477427	356568
15	Cost 'B' (13+14)	534153	450770	454307	574493	438416
16	Imputed value of household labour	9031	9228	10169	9584	12812
17	Cost 'C' (15+16)	543184	459998	464476	584077	451228

A 2.9 District wise Cost of Cultivation per hectare (in Rs.) of Ginger during 2012-13

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	30463	28415	34302	49418	41503
2	Animal labour	0	0	0	0	0
3	Machine labour	3409	0	0	3160	3026
4	Seed / seedlings	23344	18471	24378	30378	21077
5	Farmyard manure and chemical fertilizers	15770	10856	13020	12610	15996
6	Plant protection	330	193	332	739	504
7	Land tax and irrigation cess	161	188	236	185	250
8	Repair and maintenance charges of implements, machinery and building	2262	2274	1559	3319	2924
9	Interest on working capital	7722	6208	7535	10427	9091
10	Other expenses	3899	4140	3313	7967	8800
11	Total cost 'A' (1-10)	87360	70745	84675	118203	103171
12	Interest on fixed capital	2369	2219	3707	1744	1122
13	Cost 'B1' (11+12)	89729	72964	88382	119947	104293
14	Interest on land value	492662	288537	321713	391751	202219
15	Cost 'B' (13+14)	582391	361501	410095	511698	306512
16	Imputed value of household labour	8844	8607	10226	12751	9109
17	Cost 'C' (15+16)	591235	370108	420321	524449	315621

A 2.9 District wise Cost of Cultivation per hectare (in Rs.) of Ginger during 2012-13

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	39919	32027	34810	30737	36816
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	4180	1596
4	Seed / seedlings	28627	20567	17746	19309	23528
5	Farmyard manure and chemical fertilizers	13010	11130	12786	12699	12732
6	Plant protection	432	370	331	207	389
7	Land tax and irrigation cess	680	222	361	232	204
8	Repair and maintenance charges of implements, machinery and building	1625	2515	3036	1575	3028
9	Interest on working capital	8899	7271	7155	7332	8150
10	Other expenses	7005	8612	5880	6185	6442
11	Total cost 'A' (1-10)	100197	82714	82105	82456	92885
12	Interest on fixed capital	1255	3013	1681	2017	2144
13	Cost 'B1' (11+12)	101452	85727	83786	84473	95029
14	Interest on land value	378063	399947	326633	301227	351600
15	Cost 'B' (13+14)	479515	485674	410419	385700	446629
16	Imputed value of household labour	9802	9233	8135	9244	10138
17	Cost 'C' (15+16)	489317	494907	418554	394944	456767

A 2.10 District wise Cost of Cultivation per hectare (in Rs.) of Turmeric during 2012-13

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Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	43204	40399	42803	32524	43298
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	17496	16788	15755	18374	13533
5	Farmyard manure and chemical fertilizers	10592	10701	11604	15512	14527
6	Plant protection	208	431	299	475	502
7	Land tax and irrigation cess	113	429	168	564	270
8	Repair and maintenance charges of implements, machinery and building	4518	3005	2975	3210	2788
9	Interest on working capital	7736	7232	7652	7042	7724
10	Other expenses	5856	4001	6059	3538	5379
11	Total cost 'A' (1-10)	89723	82986	87315	81239	88021
12	Interest on fixed capital	3741	2507	2905	4266	2904
13	Cost 'B1' (11+12)	93464	85493	90200	85505	90925
14	Interest on land value	357664	305219	207674	200320	377898
15	Cost 'B' (13+14)	451128	390712	297894	285825	468823
16	Imputed value of household labour	6454	9429	8955	11381	11037
17	Cost 'C' (15+16)	457582	400141	306849	297206	479860

A 2.10 District wise Cost of Cultivation per hectare (in Rs.) of Turmeric during 2012-13

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	41931	30327	36458	34722	28999
2	Animal labour	0	0	0	0	0
3	Machine labour	844	0	0	3541	0
4	Seed / seedlings	12687	14808	16915	19118	13987
5	Farmyard manure and chemical fertilizers	19661	10778	12441	10320	14518
6	Plant protection	137	115	564	194	466
7	Land tax and irrigation cess	115	71	163	170	395
8	Repair and maintenance charges of implements, machinery and building	2509	2745	3438	2618	4401
9	Interest on working capital	7992	6028	6935	7027	6175
10	Other expenses	4659	4249	2971	2374	3776
11	Total cost 'A' (1-10)	90535	69121	79885	80084	72717
12	Interest on fixed capital	6269	4096	3203	2580	2926
13	Cost 'B1' (11+12)	96804	73217	83088	82664	75643
14	Interest on land value	402172	265689	271295	344398	294655
15	Cost 'B' (13+14)	498976	338906	354383	427062	370298
16	Imputed value of household labour	10551	9159	8415	9890	9650
17	Cost 'C' (15+16)	509527	348065	362798	436952	379948

A 2.10 District wise Cost of Cultivation per hectare (in Rs.) of Turmeric during 2012-13

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	43203	26193	24847	21519	34023
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	581
4	Seed / seedlings	14940	16867	17127	10914	15495
5	Farmyard manure and chemical fertilizers	16617	15442	13835	11703	12626
6	Plant protection	380	496	333	565	256
7	Land tax and irrigation cess	501	434	164	469	175
8	Repair and maintenance charges of implements, machinery and building	3041	2521	4069	2177	2900
9	Interest on working capital	7950	6305	6095	4920	6705
10	Other expenses	4359	4054	4809	4495	4064
11	Total cost 'A' (1-10)	90991	72312	71279	56762	76825
12	Interest on fixed capital	1246	2820	1588	3622	3646
13	Cost 'B1' (11+12)	92237	75132	72867	60384	80471
14	Interest on land value	307418	222307	302402	261750	301683
15	Cost 'B' (13+14)	399655	297439	375269	322134	382154
16	Imputed value of household labour	12795	8235	6510	10031	9430
17	Cost 'C' (15+16)	412450	305674	381779	332165	391584

A 3.1 Percentage of Hired human labour hours to total human labour hours under Autumn paddy

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	31.65	49.84	81.49
2	Kollam	32.88	55.38	88.26
3	Pathanamthitta	41.83	49.34	91.17
4	Alappuzha	29.64	64.71	94.35
5	Kottayam	28.71	65.65	94.36
6	Eranakulam	23.36	36.60	59.96
7	Idukki	45.18	41.28	86.46
8	Thrissur	35.86	42.81	78.67
9	Palakkad	27.59	51.55	79.14
10	Wayanad	0	0	0
11	Malappuram	34.67	52.15	86.82
12	Kozhikkode	31.95	39.54	71.49
13	Kannur	33.18	61.77	94.95
14	Kasaragod	30.61	37.50	68.11
	State	30.23	51.11	81.34

A 3.2 Percentage of Hired human labour hours to total human labour hours under Winter paddy

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	34.54	53.25	87.79
2	Kollam	30.94	58.50	89.44
3	Pathanamthitta	24.32	62.69	87.01
4	Alappuzha	46.98	51.73	98.71
5	Kottayam	28.35	63.9	92.25
6	Eranakulam	33.5	44.67	78.17
7	Idukki	51.84	23.20	75.04
8	Thrissur	34.32	50.75	85.07
9	Palakkad	30.6	58.40	89.00
10	Wayanad	35.14	46.85	81.99
11	Malappuram	30.73	58.49	89.22
12	Kozhikkode	39.97	38.92	76.89
13	Kannur	29.33	67.40	96.73
14	Kasaragod	23.76	49.70	73.46
	State	38.43	52.93	91.36

A 3.3 Percentage of Hired human labour hours to total human labour hours under Summer paddy

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	35.02	49.04	84.06
2	Kollam	33.33	61.08	94.41
3	Pathanamthitta	27.57	58.16	85.73
4	Alappuzha	30.82	57.59	88.41
5	Kottayam	31.02	62.75	93.77
6	Eranakulam	28.93	37.09	66.02
7	Idukki	37.96	26.45	64.41
8	Thrissur	37.8	46.89	84.69
9	Palakkad	41.32	47.50	88.82
10	Wayanad	31.11	42.45	73.56
11	Malappuram	45.33	37.26	82.59
12	Kozhikkode	22.45	46.58	69.03
13	Kannur	26.91	67.79	94.70
14	Kasaragod	24.36	33.99	58.35
	State	24.87	37.08	61.95

A3.4 Percentage of Hired human labour hours to total human labour hours under Coconut

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	71.78	13.17	84.95
2	Kollam	22.32	10.10	32.42
3	Pathanamthitta	52.55	30.96	83.51
4	Alappuzha	68.62	13.10	81.72
5	Kottayam	58.19	24.10	82.29
6	Eranakulam	52.85	13.90	66.75
7	Idukki	58.98	23.80	82.78
8	Thrissur	65.48	20.63	86.11
9	Palakkad	53.07	25.77	78.84
10	Wayanad	52.34	23.87	76.21
11	Malappuram	45.52	21.50	67.02
12	Kozhikkode	51.5	15.60	67.10
13	Kannur	32.84	16.72	49.56
14	Kasaragod	39.22	26.01	65.23
	State	39.57	15.23	54.80

A 3.5 Percentage of Hired human labour hours to total human labour hours under Arecanut

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	49.94	30.64	80.58
2	Kollam	52.63	26.64	79.27
3	Pathanamthitta	43.14	29.27	72.41
4	Alappuzha	44.65	23.39	68.04
5	Kottayam	52.41	22.53	74.94
6	Eranakulam	36.94	14.65	51.59
7	Idukki	47.06	21.69	68.75
8	Thrissur	55.27	25.12	80.39
9	Palakkad	53.95	18.49	72.44
10	Wayanad	57.12	28.17	85.29
11	Malappuram	61.36	16.22	77.58
12	Kozhikkode	38.53	20.81	59.34
13	Kannur	55.3	26.31	81.61
14	Kasaragod	26.19	21.25	47.44
	State	49.06	21.57	70.63

A 3.6 Percentage of Hired human labour hours to total human labour hours under Tapioca

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	57.49	18.3	75.79
2	Kollam	58.82	21.09	79.91
3	Pathanamthitta	46.87	23.83	71.70
4	Alappuzha	49.98	22.66	72.64
5	Kottayam	59.61	19.85	79.46
6	Eranakulam	39.24	22.94	62.18
7	Idukki	52.31	12.37	64.68
8	Thrissur	58.61	17.74	76.35
9	Palakkad	46.94	30.46	77.40
10	Wayanad	59.29	10.92	70.21
11	Malappuram	48.16	22.38	70.54
12	Kozhikkode	51.37	25.39	76.76
13	Kannur	79.07	17.03	96.10
14	Kasaragod	27.87	27.61	55.48
	State	50.27	22.43	72.70

A 3.7 Percentage of Hired human labour hours to total human labour hours under Banana

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	46.72	23.82	70.54
2	Kollam	48.16	24.01	72.17
3	Pathanamthitta	53.41	25.72	79.13
4	Alappuzha	54.18	30.53	84.71
5	Kottayam	35.81	22.57	58.38
6	Eranakulam	51.42	18.02	69.44
7	Idukki	53.71	19.65	73.36
8	Thrissur	41.87	32.31	74.18
9	Palakkad	53.65	21.98	75.63
10	Wayanad	63.51	23.36	86.87
11	Malappuram	48.55	22.52	71.07
12	Kozhikkode	44.51	21.94	66.45
13	Kannur	75.15	20.96	96.11
14	Kasaragod	26.58	16.08	42.66
	State	36.56	16.59	53.15

A 3.8 Percentage of Hired human labour hours to total human labour hours under Pepper

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	60.41	29.74	90.15
2	Kollam	55.03	32.18	87.21
3	Pathanamthitta	55.46	31.29	86.75
4	Alappuzha	52.13	28.29	80.42
5	Kottayam	53.69	25.41	79.10
6	Eranakulam	38.54	18.81	57.35
7	Idukki	33.02	19.68	52.70
8	Thrissur	55.19	15.26	70.45
9	Palakkad	51.84	27.54	79.38
10	Wayanad	19.97	10.84	30.81
11	Malappuram	44.53	27.81	72.34
12	Kozhikkode	49.38	34.92	84.30
13	Kannur	33.25	15.67	48.92
14	Kasaragod	31.22	31.87	63.09
	State	39.55	21.10	60.65

A 3.9 Percentage of Hired human labour hours to total human labour hours under Ginger

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	41.47	18.73	60.20
2	Kollam	55.34	28.10	83.44
3	Pathanamthitta	50.06	29.75	79.81
4	Alappuzha	48.1	36.09	84.19
5	Kottayam	34.82	14.90	49.72
6	Eranakulam	42.36	23.75	66.11
7	Idukki	39.21	26.02	65.23
8	Thrissur	41.51	31.9	73.41
9	Palakkad	54.98	24.10	79.08
10	Wayanad	61.79	27.47	89.26
11	Malappuram	47.21	20.64	67.85
12	Kozhikkode	32.89	14.23	47.12
13	Kannur	68.1	30.18	98.28
14	Kasaragod	49.73	14.95	64.68
	State	50.62	24.58	75.20

A 3.10 Percentage of Hired human labour hours to total human labour hours under Turmeric

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	54.07	25.17	79.24
2	Kollam	61.07	27.58	88.65
3	Pathanamthitta	61.96	26.21	88.17
4	Alappuzha	61.41	26.93	88.34
5	Kottayam	36.5	17.69	54.19
6	Eranakulam	40.94	13.93	54.87
7	Idukki	50.19	19.36	69.55
8	Thrissur	53.88	27.90	81.78
9	Palakkad	22.07	12.38	34.45
10	Wayanad	37.65	31.78	69.43
11	Malappuram	46.9	24.01	70.91
12	Kozhikkode	29.47	10.68	40.15
13	Kannur	61.11	15.41	76.52
14	Kasaragod	51.68	17.79	69.47
	State	47.84	22.44	70.28

A4.1 District wise Value of product and by-product per hectare (in Rs.) of Autumn Paddy

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	49538	16718	66256
2	Kollam	46525	13721	60246
3	Pathanamthitta	44925	6124	51049
4	Alappuzha	37624	2586	40210
5	Kottayam	44270	1276	45546
6	Eranakulam	44827	6330	51157
7	Idukki	50311	4546	54857
8	Thrissur	47295	4661	51956
9	Palakkad	49589	1647	51236
10	Wayanad	0	0	0
11	Malappuram	36575	7489	44064
12	Kozhikkode	39893	15053	54946
13	Kannur	27964	5919	33883
14	Kasaragod	48682	7918	56600
	State	43290	4535	47825

A4.2 District wise Value of product and by-product per hectare (in Rs.) of Winter Paddy

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	49131	12532	61663
2	Kollam	41692	10461	52153
3	Pathanamthitta	55658	4117	59775
4	Alappuzha	39125	1460	40585
5	Kottayam	54816	2079	56895
6	Eranakulam	50357	10225	60582
7	Idukki	29630	5076	34706
8	Thrissur	45508	3711	49219
9	Palakkad	53684	6824	60508
10	Wayanad	48664	11431	60095
11	Malappuram	51703	3255	54958
12	Kozhikkode	46728	11149	57877
13	Kannur	29267	5843	35110
14	Kasaragod	41912	11637	53549
	State	47709	5952	53661

A4.3 District wise Value of product and by-product per hectare (in Rs.) of Summer Paddy

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	53057	14090	67147
2	Kollam	36479	16138	52617
3	Pathanamthitta	55957	13899	69856
4	Alappuzha	45319	1067	46386
5	Kottayam	55549	1755	57304
6	Eranakulam	29523	7484	37007
7	Idukki	48324	8858	57182
8	Thrissur	53406	4371	57777
9	Palakkad	55381	6572	61953
10	Wayanad	51549	8627	60176
11	Malappuram	52839	9639	62478
12	Kozhikkode	45057	14080	59137
13	Kannur	56074	11553	67627
14	Kasaragod	54870	7607	62477
	State	48938	6851	55789

A4.4 District wise Value of product and by-product per hectare (in Rs.) of Coconut

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	64411	2957	67368
2	Kollam	63255	1618	64873
3	Pathanamthitta	47398	1863	49261
4	Alappuzha	61558	3320	64878
5	Kottayam	54747	4662	59409
6	Eranakulam	63683	3510	67193
7	Idukki	40048	1164	41212
8	Thrissur	63359	5154	68513
9	Palakkad	58206	1220	59426
10	Wayanad	47671	2049	49720
11	Malappuram	60864	2629	63493
12	Kozhikkode	44708	1434	46142
13	Kannur	60379	3919	64298
14	Kasaragod	53370	1216	54586
	State	55535	2507	58042

A4.5 District wise Value of product and by-product per hectare (in Rs.) of Arecanut ,Tapioca and Banana.

Sl No	District	Arecanut	Tapioca	Banana
1	Thiruvananthapuram	79967	172915	443844
2	Kollam	81774	153889	392330
3	Pathanamthitta	98856	190697	354833
4	Alappuzha	69284	136287	405888
5	Kottayam	62549	208711	564311
6	Eranakulam	64000	176122	458753
7	Idukki	49752	150648	124356
8	Thrissur	67089	203086	594488
9	Palakkad	96685	123499	350854
10	Wayanad	59584	162980	308987
11	Malappuram	72307	224128	321600
12	Kozhikkode	69100	138699	397318
13	Kannur	86795	199597	509419
14	Kasaragod	52380	133082	363379
	State	68755	164342	397055

A4.6 District wise Value of product and by-product per hectare(in Rs.) of Pepper,Ginger&Turmeric.

Sl No	District	Pepper	Ginger	Turmeric
1	Thiruvananthapuram	134812	122901	159455
2	Kollam	246382	203709	162579
3	Pathanamthitta	121671	145165	161569
4	Alappuzha	163290	182975	130837
5	Kottayam	144080	193219	104449
6	Eranakulam	159773	115067	68554
7	Idukki	111737	105752	48685
8	Thrissur	171569	156727	85603
9	Palakkad	118119	127920	126754
10	Wayanad	214087	174083	94179
11	Malappuram	285850	168864	149809
12	Kozhikkode	101036	186073	116671
13	Kannur	105531	204995	144162
14	Kasaragod	260554	146943	139654
	State	154488	139919	89069

