

**Government of Kerala**

***Report On  
Cost of Cultivation of  
Important Crops in Kerala  
2011-12***

**Department of Economics & Statistics  
KERALA**



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2013**

## **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 2011-12. 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.

04-11-2013,  
Thiruvananthapuram,

**V.Ramachandran**  
**Director**

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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 32<sup>nd</sup> round of survey conducted during the agricultural year 2011-12. 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) 2011-12

### 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
Ii	Interest on fixed capital (excluding land)	In proportion to the area under the crop
Iii	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

For this study details of holding selected and area coverage are given below. The data collected from 486 holding by covering 335.90 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	264	63.50	18.90	0.24
Medium	183	138.00	41.08	0.75
Large	39	134.40	40.01	3.45
<b>Total</b>	<b>486</b>	<b>335.90</b>	<b>100.00</b>	<b>0.69</b>

From the above table it can be seen that average area per holding was 0.69 hectare

#### **Cost of cultivation**

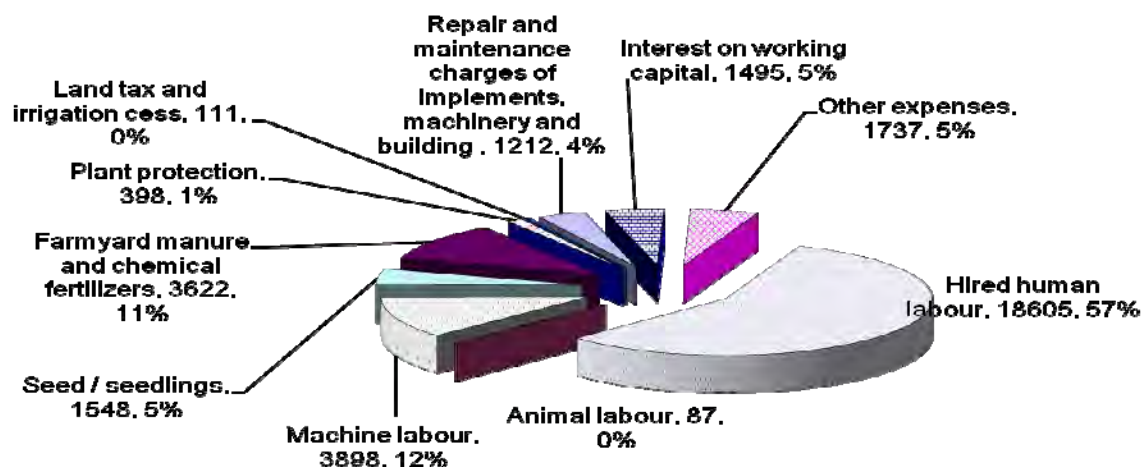
When Cost A is considered about 57 percent of cost constitutes to hired human labour, Machine labour cost shares 12% and farmyard manure and chemical fertilizers accounts to 11% .

**Table 2- Cost of Cultivation per hectare of paddy (autumn)**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	25708	21712	12033	18605
2	Animal labour	178	75	56	87
3	Machine labour	3032	4206	3993	3898
4	Seed / seedlings	1607	1645	1420	1548
5	Farmyard manure and chemical fertilizers	4639	4229	2514	3622
6	Plant protection	382	398	406	398
7	Land tax and irrigation cess	96	113	115	111
8	Repair and maintenance charges of implements, machinery and building	2588	1381	384	1212
9	Interest on working capital	1893	1708	1086	1495
10	Other expenses	2317	1888	1306	1737
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>42440</b>	<b>37355</b>	<b>23313</b>	<b>32713</b>
12	Interest on fixed capital	1734	1253	411	1008
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>44174</b>	<b>38608</b>	<b>23724</b>	<b>33721</b>
14	Interest on land value	105155	65699	41777	63637
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>149329</b>	<b>104307</b>	<b>65501</b>	<b>97358</b>
16	Imputed value of household labour	7024	4083	1688	3685
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>156353</b>	<b>108390</b>	<b>67189</b>	<b>101043</b>

### Percentage Distribution of "COST A" per hectare of Autumn Paddy during 2011-12



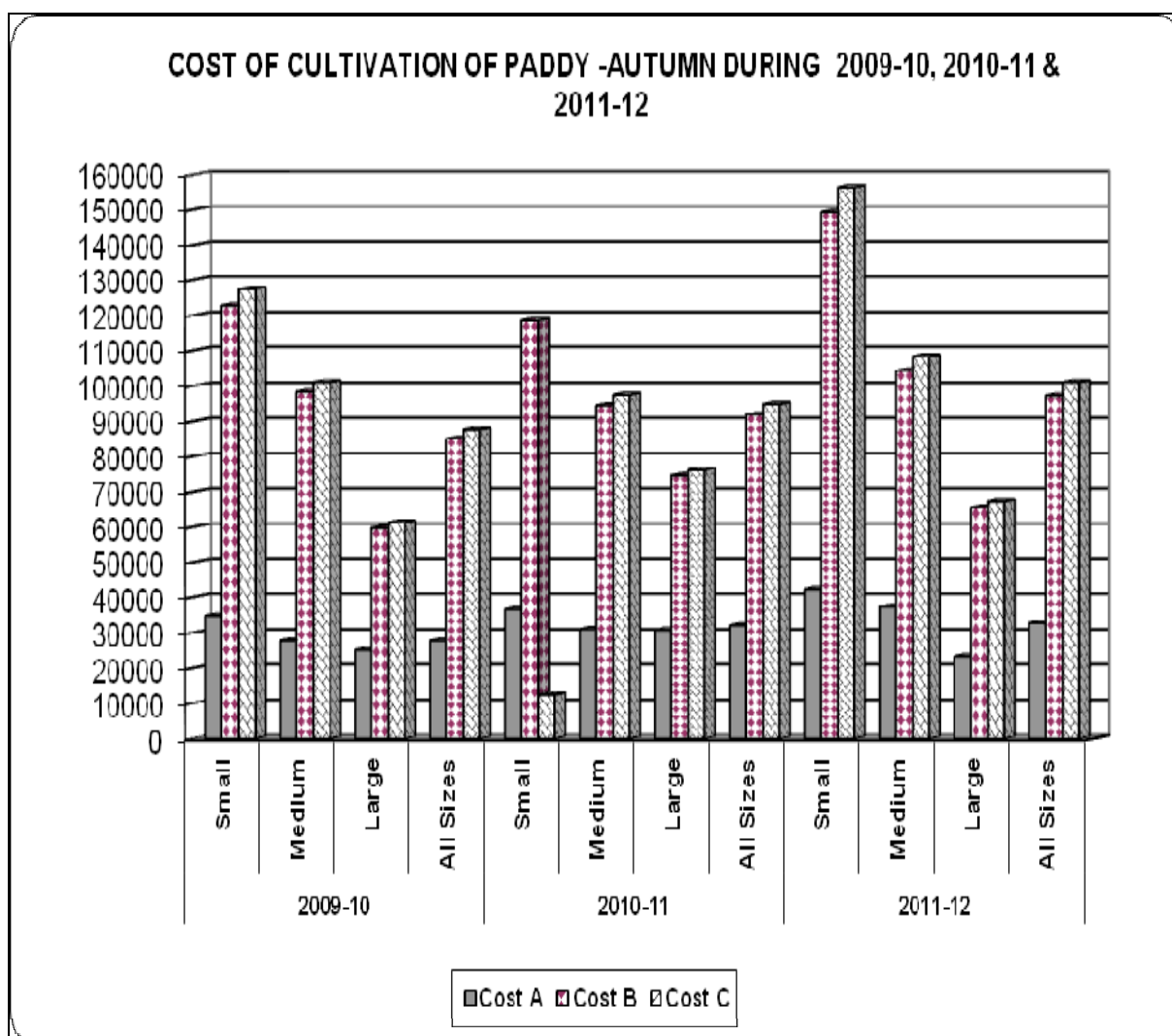
**Table 3: Percentage of Hired human labour hours to total human labour hours**

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	22.10	35.25	25.59	30.21
Female	56.65	49.84	61.28	53.90
<b>Total</b>	<b>78.75</b>	<b>85.09</b>	<b>86.87</b>	<b>84.11</b>

In Autumn paddy cultivation 53.90% of total labour hours shares to female participation.

**Table: 4 Cost of production of Autumn paddy per hectare(in Rs.) 2009-10, 2010-2011 and 2011-12**

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2009-10	34866	27791	25062	27747
	2010-11	36609	30990	30767	32019
	<b>2011-12</b>	<b>42440</b>	<b>37355</b>	<b>23313</b>	<b>32713</b>
Cost 'B'	2009-10	122654	98418	59745	84957
	2010-11	118587	94396	74668	91877
	<b>2011-12</b>	<b>149329</b>	<b>104307</b>	<b>65501</b>	<b>97358</b>
Cost 'C'	2009-10	127472	101092	61299	87485
	2010-11	123290	97581	76168	94738
	<b>2011-12</b>	<b>156353</b>	<b>108390</b>	<b>67189</b>	<b>101043</b>



### 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 2011-12 for producing one quintal of paddy Rs.942/- 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 2009-10, 2010-11 & 2011-12**

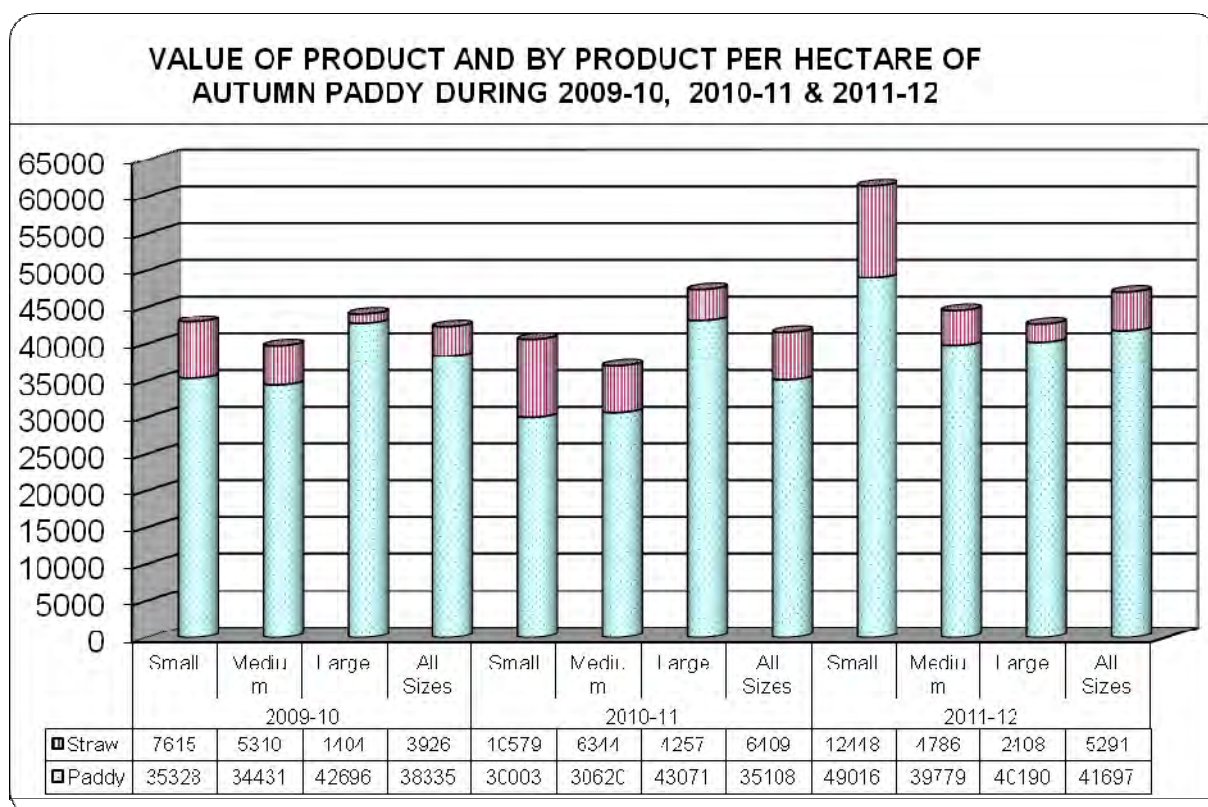
Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2009-10	987	887	660	796
	2010-11	1053	1091	819	970
	2011-12	<b>1436</b>	<b>1165</b>	<b>582</b>	<b>942</b>
Cost 'B'	2009-10	3477	3145	1574	2432
	2010-11	3413	3327	1987	2782
	2011-12	<b>5048</b>	<b>3256</b>	<b>1635</b>	<b>2802</b>
Cost 'C'	2009-10	3614	3230	1615	2504
	2010-11	3548	3439	2027	2869
	2011-12	<b>5286</b>	<b>3384</b>	<b>1677</b>	<b>2908</b>

## 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 of Autumn paddy during 2009-10, 2010-11 & 2011-12**

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2009-10	Paddy	35328	34431	42696	38335
	Straw	7615	5310	1404	3926
	<b>Total</b>	<b>42943</b>	<b>39741</b>	<b>44100</b>	<b>42262</b>
2010-11	Paddy	30003	30620	43071	35108
	Straw	10579	6344	4257	6409
	<b>Total</b>	<b>40582</b>	<b>36964</b>	<b>47328</b>	<b>41517</b>
2011-12	Paddy	49016	39779	40190	41697
	Straw	12448	4786	2408	5291
	<b>Total</b>	<b>61464</b>	<b>44564</b>	<b>42598</b>	<b>46988</b>



### 2.1.2 Paddy-Winter

During 2011-12 Cost of cultivation study on winter paddy was conducted in 582 holdings by covering 462.30 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	294	69.90	15.12	0.24
Medium	223	174.60	37.77	0.78
Large	65	217.80	47.11	3.35
<b>Total</b>	<b>582</b>	<b>462.30</b>	<b>100.00</b>	<b>0.79</b>

For the study on winter paddy cultivation during 2011-12, an area of 462.30 hectares was included. The average size of the holding was .79 hectares.

## Cost of Cultivation

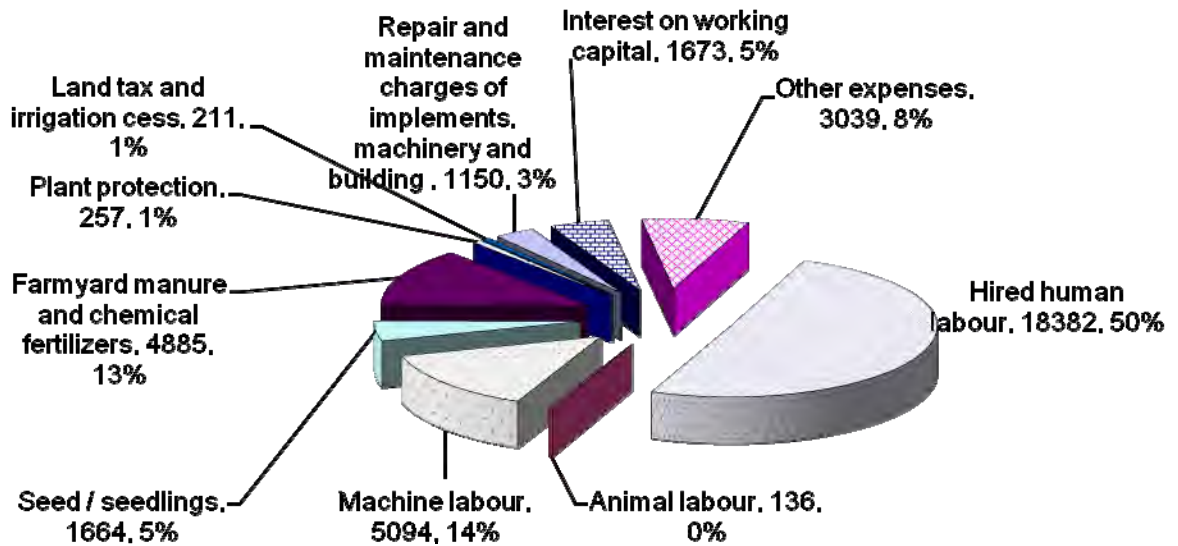
In Cost A, the major share of the cost component was hired human labour. It constitutes 50% per cent. Another two major items were machine labour and farmyard manure and chemical fertilizers. It shows to 14% and 13% respectively. Interest on working capital accounts was 5%. By considering the various cost component of winter paddy cultivation it can be seen that per hectare cost calculated as Rs.36491/-

**Table 8 – Cost of cultivation per hectare of winter paddy**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	21515	19885	16171	18382
2	Animal labour	368	50	131	136
3	Machine labour	3793	5007	5583	5094
4	Seed / seedlings	1571	1643	1711	1664
5	Farmyard manure and chemical fertilizers	4670	4479	5278	4885
6	Plant protection	294	204	288	257
7	Land tax and irrigation Cess	388	211	153	211
8	Repair and maintenance charges of implements, machinery and building	2002	1112	903	1150
9	Interest on working capital	1730	1672	1655	1673
10	Other expenses	2382	2168	3946	3039
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>38713</b>	<b>36431</b>	<b>35819</b>	<b>36491</b>
12	Interest on fixed capital	3046	2039	1259	1825
13	Cost 'B1' (11+12)	<b>41759</b>	<b>38470</b>	<b>38316</b>	<b>38187</b>
14	Interest on land value	88372	81038	39179	62422
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>130131</b>	<b>119508</b>	<b>76257</b>	<b>100738</b>
16	Imputed value of household labour	6426	3585	3146	3811
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>136557</b>	<b>123093</b>	<b>79403</b>	<b>104549</b>

## Percentage Distribution of "COST A" per hectare of Winter Paddy during 2011-12



Sex wise work participation in hired human labours for winter paddy cultivation reveals that 54.10% of work shared by Female whereas 37.60% shared by male workers.

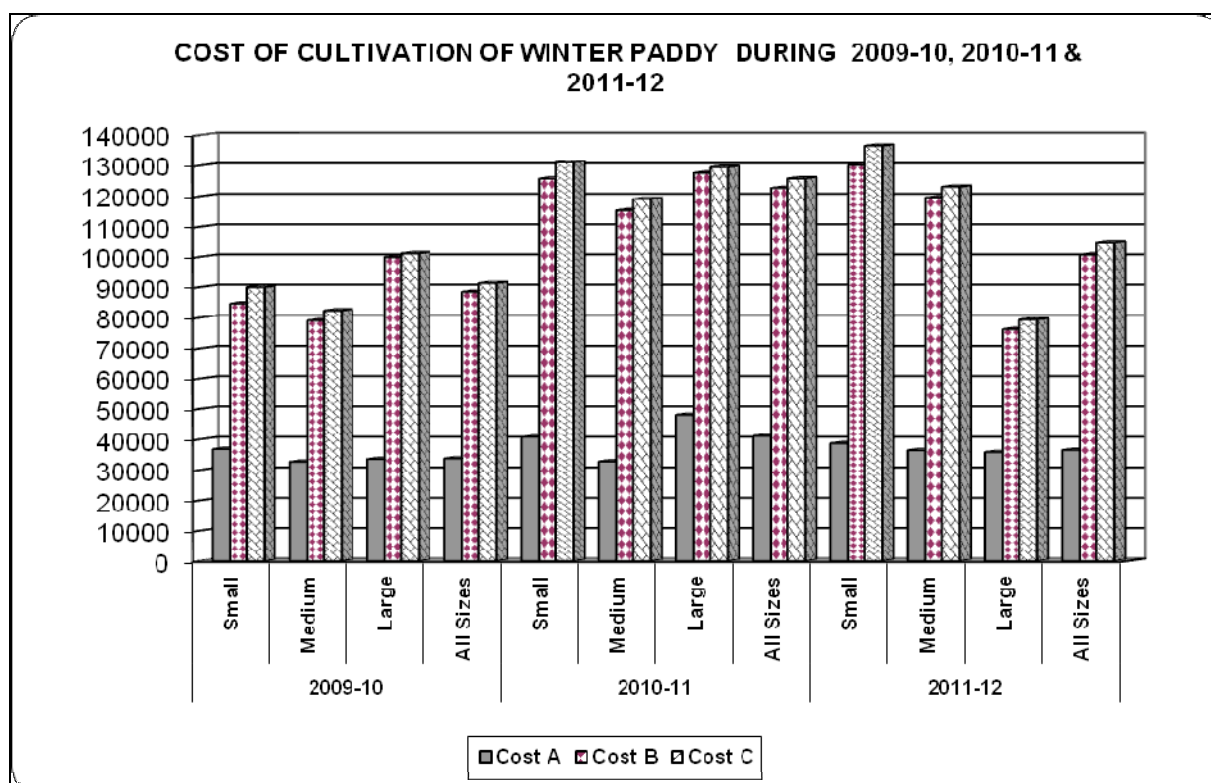
The following table reveals the percentage of hired human labours hours to total human labour hours.

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

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	24.41	39.80	38.09	37.60
Female	52.63	51.07	55.83	54.10
<b>Total</b>	<b>77.04</b>	<b>90.87</b>	<b>93.92</b>	<b>91.70</b>

**Table: 10 Cost of Cultivation per hectare (in Rs) of winter paddy during 2009-10, 2010-11 & 2011-12**

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	36802	32670	33550	33778
	2010-11	40774	32780	48053	41133
	2011-12	<b>38713</b>	<b>36431</b>	<b>35819</b>	<b>36491</b>
Cost 'B'	2009-10	84656	79112	99927	88468
	2010-11	125777	115320	127661	122697
	2011-12	<b>130131</b>	<b>119508</b>	<b>76257</b>	<b>100738</b>
Cost 'C'	2009-10	89985	82380	101146	91291
	2010-11	131099	119071	129535	125822
	2011-12	<b>136557</b>	<b>123093</b>	<b>79403</b>	<b>104549</b>



## Cost of production of winter paddy

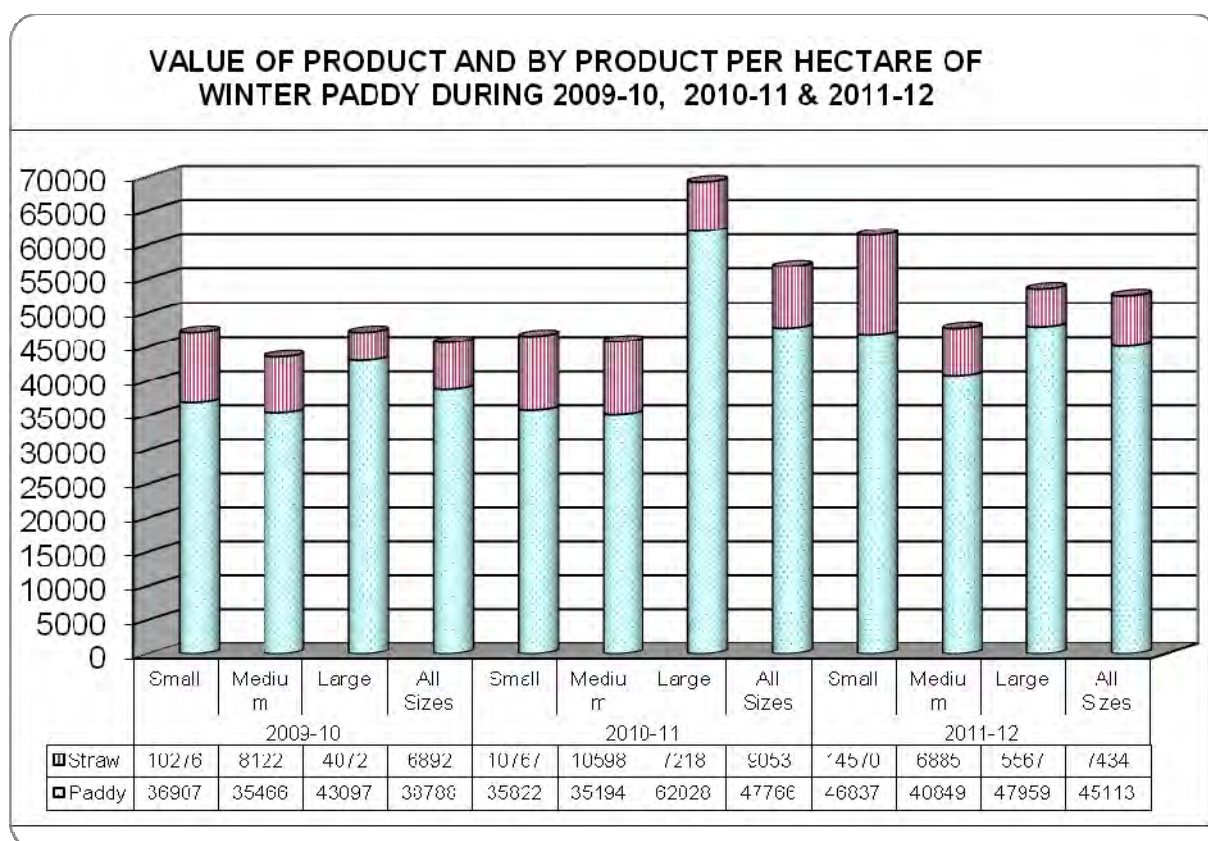
**Table: 11 Per Quintal Cost(in Rs.) of production of winter paddy during 2009-10,2010-11&2011-12**

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2009-10	1072	997	886	962
	2010-11	1287	1040	1048	1077
	2011-12	<b>1039</b>	<b>1206</b>	<b>963</b>	<b>1054</b>
Cost 'B'	2009-10	2465	2415	2639	2520
	2010-11	3968	3660	2785	3212
	2011-12	<b>3493</b>	<b>3956</b>	<b>2051</b>	<b>2913</b>
Cost 'C'	2009-10	2620	2515	2671	2600
	2010-11	4136	3779	2826	3294
	2011-12	<b>3666</b>	<b>4075</b>	<b>2136</b>	<b>3023</b>

## Output

**Table: 12 - Value of output (Rs/ha)**

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2009-10	Paddy	36907	35466	43097	38788
	Straw	10276	8122	4072	6892
	<b>Total</b>	<b>47183</b>	<b>43588</b>	<b>47169</b>	<b>45680</b>
2010-11	Paddy	35822	35194	62028	47766
	Straw	10767	10598	7218	9053
	<b>Total</b>	<b>46589</b>	<b>45792</b>	<b>69246</b>	<b>56819</b>
2011-12	Paddy	46837	40849	47959	45113
	Straw	14570	6885	5567	7434
	<b>Total</b>	<b>61407</b>	<b>47734</b>	<b>53525</b>	<b>52547</b>



### 2.1.3 Paddy - Summer (Punja)

For the cost of cultivation study on summer paddy during 2011-12 the total number of holdings selected was 505. Number of holdings selected in large holding size is 51. The details of these holdings are presented below:

**Table 13 : Area under Summer Paddy during 2011-12**

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	265	51.00	12.17	0.19
Medium	189	153.80	36.72	0.81
Large	51	214.10	51.11	4.20
<b>All Size</b>	<b>505</b>	<b>418.90</b>	<b>100.00</b>	<b>0.83</b>

The above table reveals that the total area under cultivation in the selected sample holdings covers to 418.90 hectares and the average size of a holding is 0.83 hectare.

## Cost of Cultivation

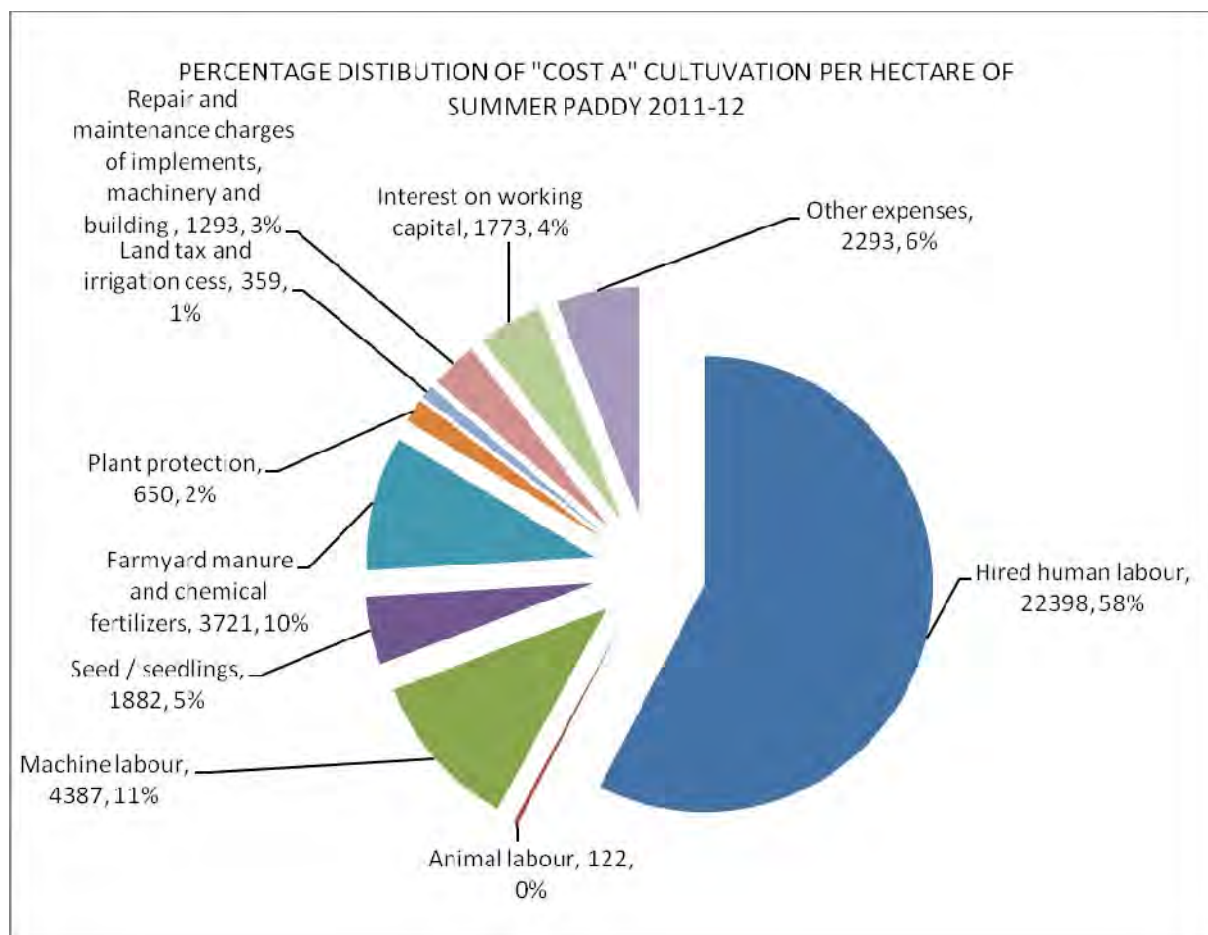
Cost of cultivation of summer paddy per hectare is estimated as Rs. **38878/-** when cost 'A' is considered. Component wise holding size class details are presented below:

**Table 14: Cost of Cultivation per hectare of summer paddy**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	26070	20170	23111	22398
2	Animal labour	218	117	103	122
3	Machine labour	3384	3639	5169	4387
4	Seed / seedlings	1947	1731	1974	1882
5	Farmyard manure and chemical fertilizers	5465	4208	2947	3721
6	Plant protection	665	538	727	650
7	Land tax and irrigation Cess	150	303	449	359
8	Repair and maintenance charges of implements, machinery and building	2662	1690	677	1293
9	Interest on working capital	2041	1666	1785	1773
10	Other expenses	3077	2907	1662	2293
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>45679</b>	<b>36969</b>	<b>38604</b>	<b>38878</b>
12	Interest on fixed capital	3501	1128	541	1122
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>49180</b>	<b>38097</b>	<b>39145</b>	<b>40000</b>
14	Interest on land value	96204	65106	47286	59861
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>145384</b>	<b>103203</b>	<b>86431</b>	<b>99861</b>
16	Imputed value of household labour	8798	3979	1256	3185
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>154182</b>	<b>107182</b>	<b>87687</b>	<b>103046</b>





In summer paddy cultivation female labour participation accounted as 47.74% of the total labour hours. Details are given below:

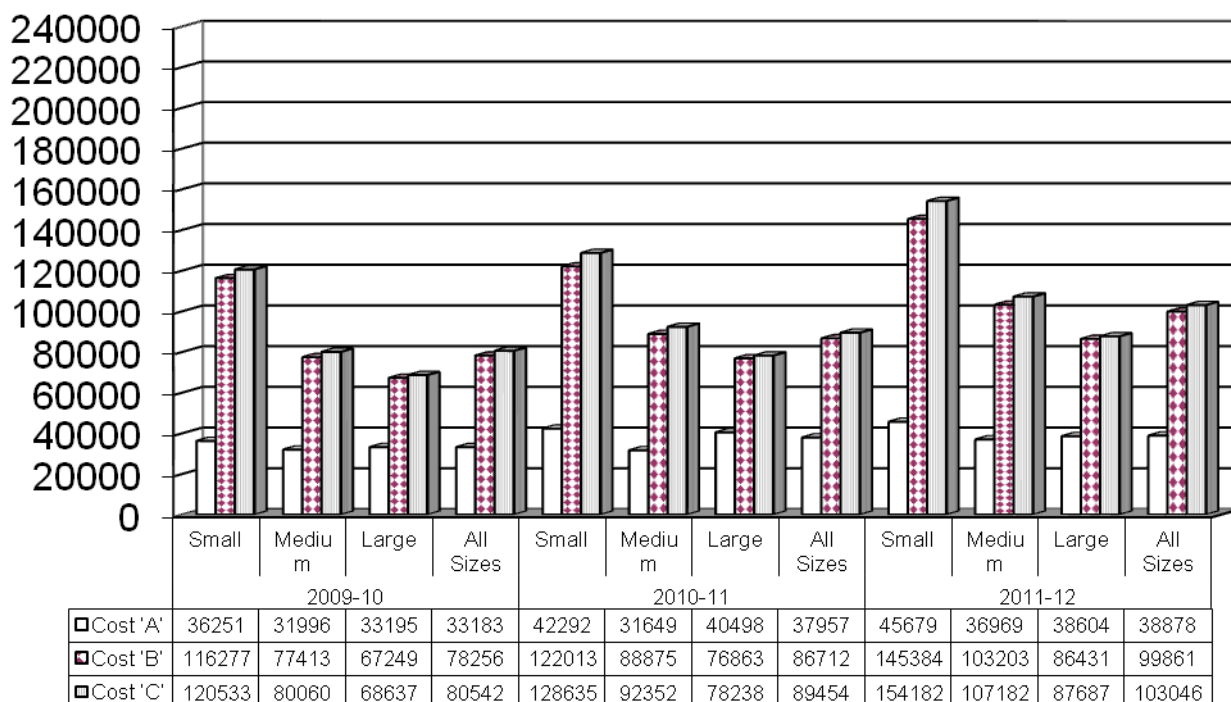
**Table 15: Percentage of hired human labour hours engaged in summer paddy**

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	26.95	33.61	35.04	33.98
Female	47.87	48.43	47.54	47.74
<b>Total</b>	<b>74.82</b>	<b>82.04</b>	<b>82.58</b>	<b>81.72</b>

**Table: 16 Cost of Cultivation per hectare(in Rs.) of Summer paddy during, 2009-10 , 2010-11 & 2011-12**

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	36251	31996	33195	33183
	2010-11	42292	31649	40498	37957
	<b>2011-12</b>	<b>45679</b>	<b>36969</b>	<b>38604</b>	<b>38878</b>
Cost 'B'	2009-10	116277	77413	67249	78256
	2010-11	122013	88875	76863	86712
	<b>2011-12</b>	<b>145384</b>	<b>103203</b>	<b>86431</b>	<b>99861</b>
Cost 'C'	2009-10	120533	80060	68637	80542
	2010-11	128635	92352	78238	89454
	<b>2011-12</b>	<b>154182</b>	<b>107182</b>	<b>87687</b>	<b>103046</b>

**COST OF CULTIVATION OF PADDY -SUMMER DURING 2009-10 , 2010-11 & 2011-12**



□ Cost 'A'    ■ Cost 'B'    ▒ Cost 'C'

## Output

**Table: 17 Per Quintal Cost of production of paddy-Summer during 2009-10  
2010-11& 2011-12**

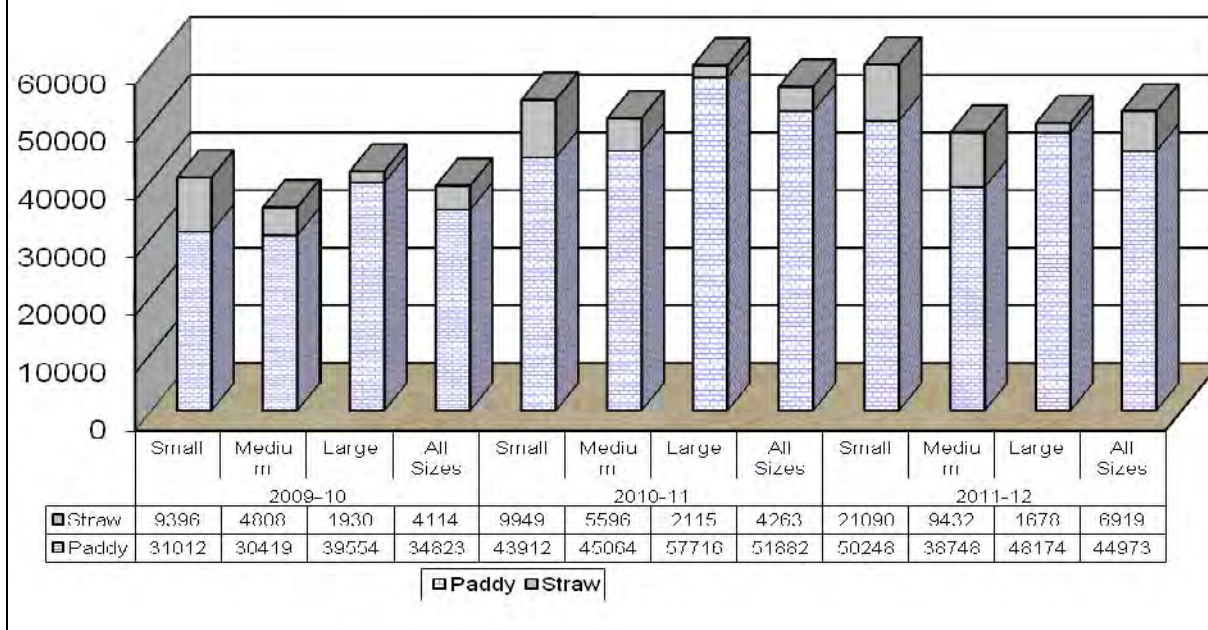
Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2009-10	1103	931	816	892
	2010-11	1124	923	985	986
	<b>2011-12</b>	<b>1271</b>	<b>1063</b>	<b>1010</b>	<b>1058</b>
Cost 'B'	2009-10	3537	2253	1652	2105
	2010-11	3244	2593	1870	2254
	<b>2011-12</b>	<b>4041</b>	<b>2966</b>	<b>2260</b>	<b>2720</b>
Cost 'C'	2009-10	3666	2330	1686	2167
	2010-11	3420	2694	1903	2325
	<b>2011-12</b>	<b>4286</b>	<b>3080</b>	<b>2293</b>	<b>2807</b>

Above tables reveal that for producing one quintal of paddy in summer season an amount of Rs 1058/- is required when cost 'A' is considered. Per hectare value of product paddy is calculated as **Rs.44973/-** and the value of by-product viz. straw is estimated as **Rs.6919/-**

**Table 18: Value of Out put (Rs./ha)**

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2009-10	Paddy	31012	30419	39554	34823
	Straw	9396	4808	1930	4114
	<b>Total</b>	<b>40408</b>	<b>35227</b>	<b>41484</b>	<b>38937</b>
2010-11	Paddy	43912	45064	57716	51882
	Straw	9949	5596	2115	4263
	<b>Total</b>	<b>53861</b>	<b>50660</b>	<b>59831</b>	<b>56145</b>
2011-12	Paddy	50248	38748	48174	44973
	Straw	21090	9432	1678	6919
	<b>Total</b>	<b>71338</b>	<b>48180</b>	<b>49852</b>	<b>51892</b>

**VALUE OF PRODUCT AND BY PRODUCT PER HECTARE OF SUMMER PADDY DURING 2009-10, 2010-11 & 2011-12**



## 2.2 Coconut

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 2011-12 are presented below.

**Table 19: Number of Holdings and Area under Coconut**

Holding size class	No of selected holdings	Area under the coconut in the sample (ha)	Percentage	Area per holding (ha)
Small	244	25.40	8.72	0.10
Medium	225	112.00	38.46	0.50
Large	121	153.80	52.82	1.27
<b>Total</b>	<b>590</b>	<b>291.20</b>	<b>100.00</b>	<b>0.49</b>

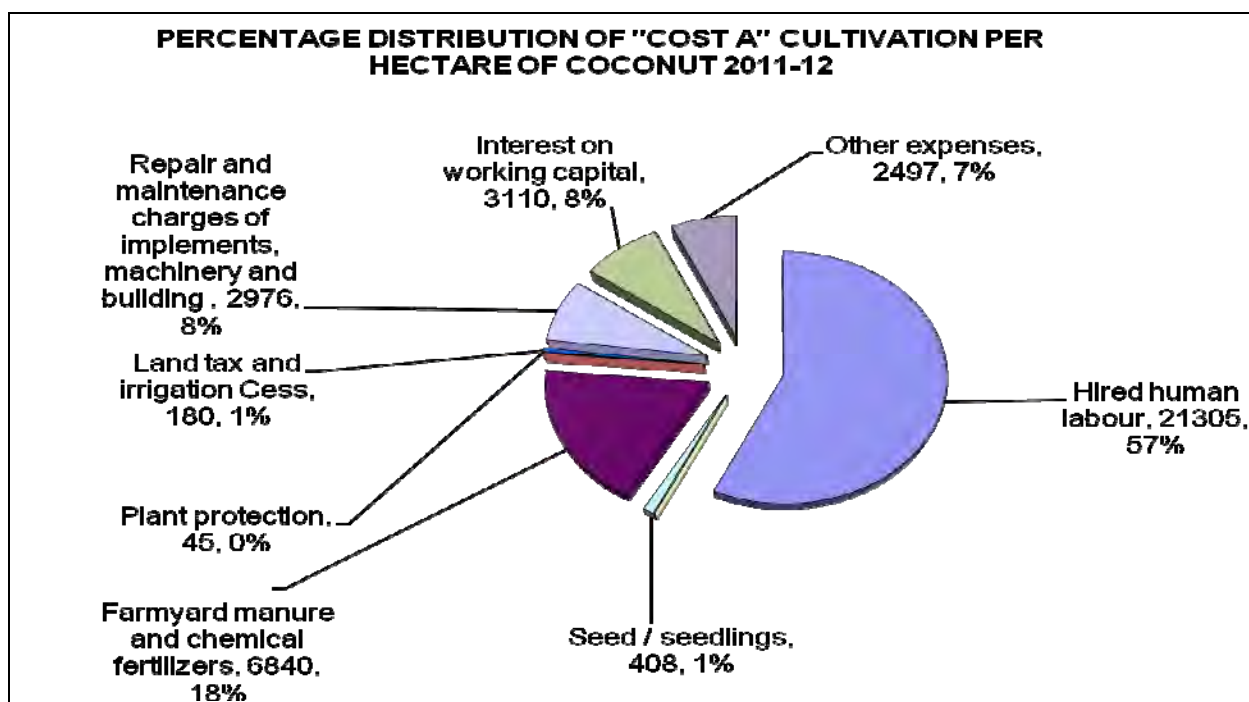
## Cost of Cultivation

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 of Coconut**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	19225	21561	21470	21305
2	Animal labour	0	0	0	0
3	Machine labour	0	0	0	0
4	Seed / seedlings	1494	674	30	408
5	Farmyard manure and chemical fertilizers	8779	6801	6541	6840
6	Plant protection	234	49	10	45
7	Land tax and irrigation Cess	347	279	79	180
8	Repair and maintenance charges of implements, machinery and building	4056	3151	2666	2976
9	Interest on working capital	3463	3181	2998	3110
10	Other expenses	4895	2723	1925	2497
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>42493</b>	<b>38419</b>	<b>35719</b>	<b>37361</b>
12	Interest on fixed capital	7513	5382	1435	3493
13	Cost 'B1' (11+12)	<b>50006</b>	<b>43801</b>	<b>37154</b>	<b>40854</b>
14	Interest on land value	641588	373611	292643	354841
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>691594</b>	<b>417412</b>	<b>329797</b>	<b>395695</b>
16	Imputed value of household labour	7621	4918	2387	3826
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>699215</b>	<b>422330</b>	<b>332184</b>	<b>399521</b>



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 57% and 18% respectively.

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

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

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	37.32	42.78	66.98	48.39
Female	27.59	31.79	18.06	26.55
<b>Total</b>	<b>64.91</b>	<b>74.57</b>	<b>85.04</b>	<b>74.94</b>

**Table 22: Cost of Cultivation per hectare(in Rs.) of Coconut during 2009-10,  
2010-11 & 2011-12**

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	31124	33302	28080	30406
	2010-11	35540	36576	30754	33343
	2011-12	<b>42493</b>	<b>38419</b>	<b>35719</b>	<b>37361</b>
Cost 'B'	2009-10	698566	552707	414247	493230
	2010-11	752937	627483	440969	538739
	2011-12	<b>691594</b>	<b>417412</b>	<b>329797</b>	<b>395695</b>
Cost 'C'	2009-10	704973	556905	416002	496348
	2010-11	760209	631874	443272	542275
	2011-12	<b>699215</b>	<b>422330</b>	<b>332184</b>	<b>399521</b>

### Value of output

**Table 23: Value of Out put / Hectare(in Rs.)**

Product/By-product	Holding Size Class			
	Small	Medium	Large	All Sizes
Product	104144	49307	49399	54240
By-Product	6949	4553	3490	4207
<b>Total</b>	<b>111093</b>	<b>53860</b>	<b>52889</b>	<b>58447</b>

The table shows the value of output is Rs.**58447** /- per hectare.

### 2.3 Arecanut

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	436	43.20	27.62	0.10
Medium	112	55.80	35.68	0.50
Large	47	57.40	36.70	1.22
<b>All size</b>	<b>595</b>	<b>156.40</b>	<b>100.00</b>	<b>0.26</b>

For this study 595 holdings were selected. It had an operational area of 156.40 hectare. The average size per holding was 0.26 hectare.

### Cost of Cultivation

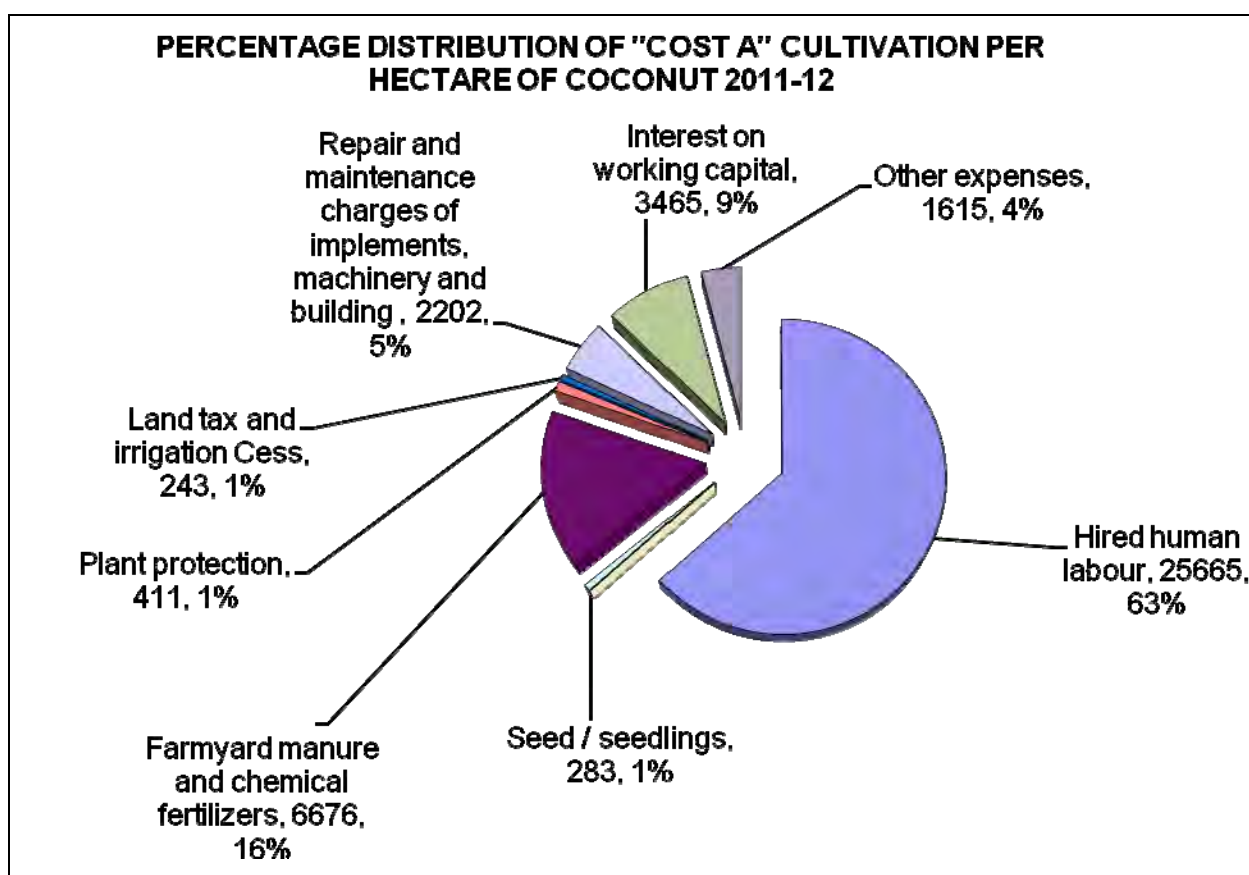
The different cost components of Arecanut cultivation is given below: Per hectare cost C expenses is worked out as Rs. 377754/-

**Table 25: Cost of Cultivation per hectare of Arecanut**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	25755	27266	24034	25665
2	Animal labour	0	0	0	0
3	Machine labour	0	0	0	0
4	Seed / seedlings	462	230	199	283
5	Farmyard manure and chemical fertilizers	7508	6263	6445	6676
6	Plant protection	230	562	402	411
7	Land tax and irrigation Cess	195	289	235	243
8	Repair and maintenance charges of implements, machinery and building	3106	1653	2046	2202
9	Interest on working capital	3570	3593	3260	3465
10	Other expenses	1743	1607	1524	1615
11	<b>Total Cost 'A' (1-10)</b>	<b>42569</b>	<b>41463</b>	<b>38145</b>	<b>40560</b>
12	Interest on fixed capital	5368	5426	6190	5689
13	<b>Cost 'B1' (11+12)</b>	<b>47937</b>	<b>46889</b>	<b>44335</b>	<b>46249</b>
14	Interest on land value	435890	270772	294984	325566
15	<b>Cost 'B' (13+14)</b>	<b>483827</b>	<b>317661</b>	<b>339319</b>	<b>371815</b>
16	Imputed value of household labour	8687	5875	3908	5939
17	<b>Cost 'C' (15+16)</b>	<b>492514</b>	<b>323536</b>	<b>343227</b>	<b>377754</b>





When Cost A is considering, 63% comes under hired human labour and followed by 16% in Farmyard manure and chemical fertilizers.

The following table illustrates the work participation of arecanut cultivation. It shows that 69.22 per cent of the total labour hours has been shared by human labour.

**Table 26: Percentage distribution of hired human labour hours to total human Labour hours**

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	47.83	51.76	57.16	52.45
Female	12.90	16.12	20.77	16.77
<b>Total</b>	<b>60.73</b>	<b>67.88</b>	<b>77.93</b>	<b>69.22</b>

**Table 27: Cost of Cultivation per hectare(in Rs.) of Arecanut during 2009-10 , 2010-11 & 2011-12**

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	34655	38396	35063	36019
	2010-11	44424	45481	46210	45534
	2011-12	<b>42569</b>	<b>41463</b>	<b>38145</b>	<b>40560</b>
Cost 'B'	2009-10	637147	421330	354153	436137
	2010-11	667614	519397	462889	532218
	2011-12	<b>483827</b>	<b>317661</b>	<b>339319</b>	<b>371815</b>
Cost 'C'	2009-10	644948	426911	355287	440100
	2010-11	675707	524595	464308	536497
	2011-12	<b>492514</b>	<b>323536</b>	<b>343227</b>	<b>377754</b>

### Value of Out put

**Table 28: Value of Out put / Hectare(in Rs.)**

The estimated value of output per hectare is Rs.68520/-

Holding Size Class			
Small	Medium	Large	All Sizes
74487	60045	72241	68520

### 2.4 Tapioca

Area under the crop in this study was 77 hectare which covers 299 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 Selected under Tapioca**

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	22.70	29.48	0.13
Medium	95	32.50	42.21	0.34
Large	24	21.80	28.31	0.91
<b>All Size</b>	<b>299</b>	<b>77.00</b>	<b>100.00</b>	<b>0.26</b>

The average size of a selected holding is 0.26 hectare and number of holding selected for the survey is 299.

### Cost of Cultivation

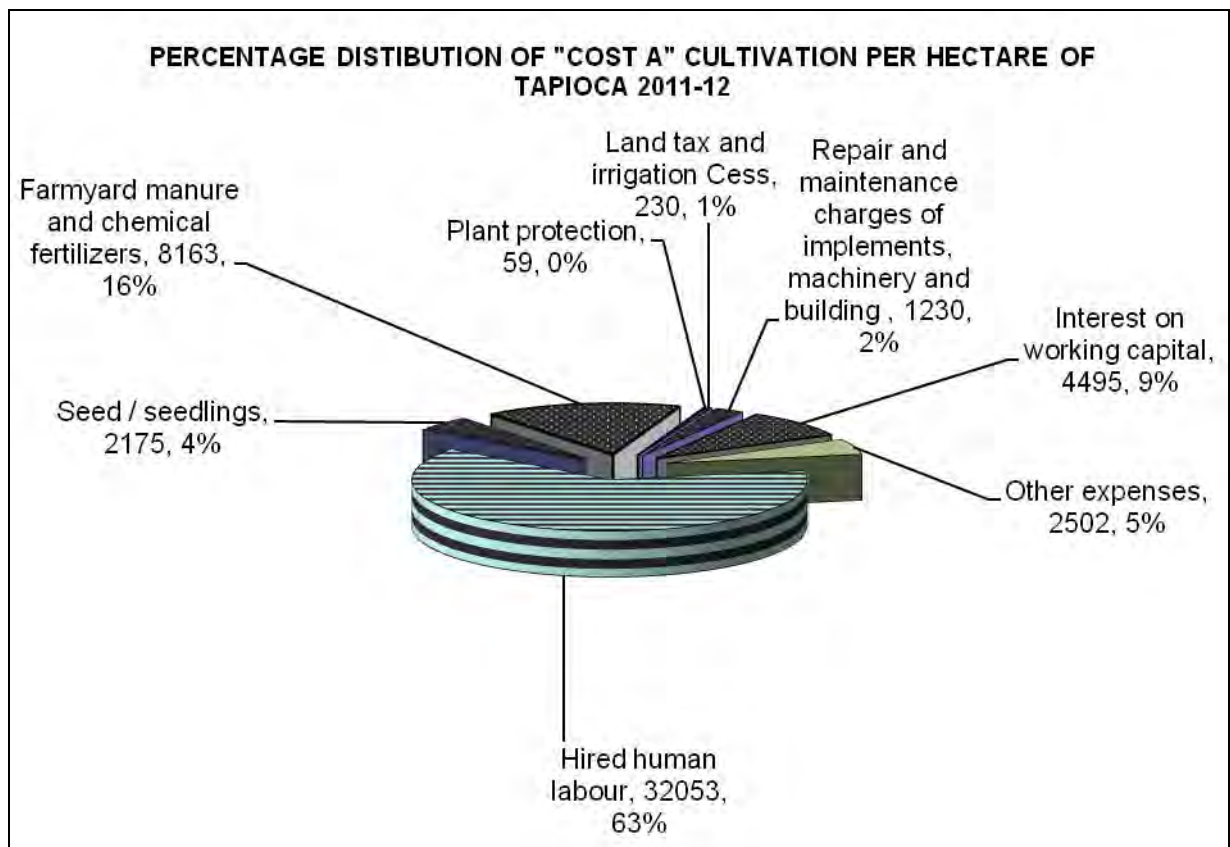
When Cost A is considered per hectare cost of cultivation of tapioca is worked out Rs. **50907/-** . In this hired labour cost constituted **63%** where as farmyard manure and chemical fertilizers shares **16%** of the Cost A.

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

**Table 30: The Cost of cultivation per hectare of tapioca**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	28910	33171	33719	32053
2	Animal labour	0	0	0	0
3	Machine labour	0	0	0	0
4	Seed / seedlings	2445	2373	1595	2175
5	Farmyard manure and chemical fertilizers	9501	7948	7065	8163
6	Plant protection	117	23	51	59
7	Land tax and irrigation Cess	208	199	301	230
8	Repair and maintenance charges of implements, machinery and building	2017	910	871	1230
9	Interest on working capital	4365	4629	4434	4495
10	Other expenses	2679	2771	1912	2502
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>50242</b>	<b>52024</b>	<b>49948</b>	<b>50907</b>
12	Interest on fixed capital	5911	1694	4341	3698
13	Cost 'B1' (11+12)	<b>56153</b>	<b>53718</b>	<b>54289</b>	<b>54605</b>
14	Interest on land value	333576	298417	111754	256348
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>389729</b>	<b>352135</b>	<b>166043</b>	<b>310953</b>
16	Imputed value of household labour	12332	12199	7396	10886
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>402061</b>	<b>364334</b>	<b>173439</b>	<b>321839</b>



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

**Table 31: Percentage distribution of hired human labour hours**

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	36.78	39.52	49.56	40.67
Female	24.16	39.43	29.18	33.93
<b>Total</b>	<b>60.94</b>	<b>78.95</b>	<b>78.74</b>	<b>74.61</b>

In tapioca cultivation 75% of the total human labour hours has been shared by hired human labour.

**Table 32: Cost of Cultivation per hectare (In Rs.) of Tapioca during 2009-10, 2010-11 & 2011-12**

A comparative statement for 2009-10 ,2010-11 and 2011-12 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	48984	45062	36377	43087
	2010-11	56494	48982	42340	48474
	2011-12	<b>50242</b>	<b>52024</b>	<b>49948</b>	<b>50907</b>
Cost 'B'	2009-10	531611	497556	390174	469308
	2010-11	601371	506643	230527	434258
	2011-12	<b>389729</b>	<b>352135</b>	<b>166043</b>	<b>310953</b>
Cost 'C'	2009-10	544439	503461	395505	476851
	2010-11	620129	516325	235191	444359
	2011-12	<b>402061</b>	<b>364334</b>	<b>173439</b>	<b>321839</b>

### Value of Out put

**Table 33: Value of Out put / Hectare(In Rs.)**

Holding Size Class			
Small	Medium	Large	All Sizes
153015	158542	162816	158096

The value of output for all holding size is comparable. Value of output from tapioca is estimated Rs.158096/- per hectare.

### 2.5 Banana

In the cost of cultivation study on banana 283 holdings were selected by covering an area 71 hectares. Details of these holdings are given below.

**Table 34: Area and Number of holdings selected**

Size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to Total area	Area per holding (ha)
Small	183	15.20	21.50	0.08
Medium	76	24.20	34.23	0.32
Large	24	31.30	44.27	1.30
<b>All Size</b>	<b>283</b>	<b>70.70</b>	<b>100.00</b>	<b>0.25</b>

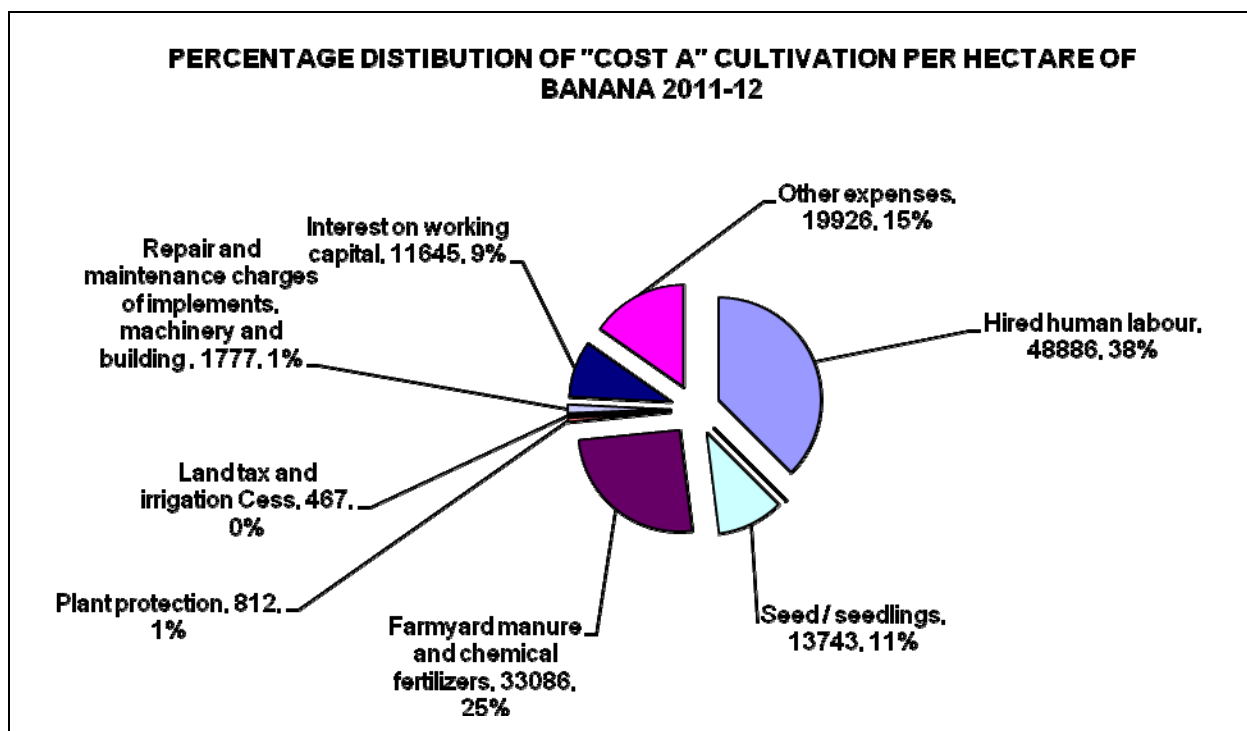
## Cost of Cultivation

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.130342/-

**Table 35: The Cost of cultivation per hectare of Banana**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	48227	48292	49679	48886
2	Animal labour	0	0	0	0
3	Machine labour	0	0	0	0
4	Seed / seedlings	15524	15143	11762	13743
5	Farmyard manure and chemical fertilizers	33464	35914	30693	33086
6	Plant protection	1248	762	633	812
7	Land tax and irrigation Cess	697	451	365	467
8	Repair and maintenance charges of implements, machinery and building	1763	1726	1823	1777
9	Interest on working capital	11929	11920	11289	11645
10	Other expenses	20831	19090	20125	19926
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>133683</b>	<b>133298</b>	<b>126369</b>	<b>130342</b>
12	Interest on fixed capital	9437	8489	6408	7784
13	Cost 'B1' (11+12)	<b>143120</b>	<b>141787</b>	<b>132777</b>	<b>138126</b>
14	Interest on land value	435691	253532	206016	272682
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>578811</b>	<b>395319</b>	<b>338793</b>	<b>410808</b>
16	Imputed value of household labour	30831	25348	12911	21096
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>609642</b>	<b>420667</b>	<b>351704</b>	<b>431904</b>



In this hired human labour cost accounted as 38 percent where as farmyard manure and chemical fertilizers cost as 25 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 distributions of hired human labour hours to the total human labour hours**

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	39.46	50.74	59.70	50.32
Female	28.41	18.65	23.53	23.17
<b>Total</b>	<b>67.88</b>	<b>69.40</b>	<b>83.22</b>	<b>73.49</b>

**Table 37: Cost of Cultivation per hectare(In Rs.) of Banana during 2009-10, 2010-11 & 2011-12**

A comparative statement for 2009-10, 2010-11 and 2011-12 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	118841	104755	99430	106032
	2010-11	133384	103088	94877	104903
	2011-12	<b>133683</b>	<b>133298</b>	<b>126369</b>	<b>130342</b>
Cost 'B'	2009-10	413605	393309	438473	410948
	2010-11	596492	475692	317586	443736
	2011-12	<b>578811</b>	<b>395319</b>	<b>338793</b>	<b>410808</b>
Cost 'C'	2009-10	436806	407145	449228	425771
	2010-11	625895	523942	328664	461227
	2011-12	<b>609642</b>	<b>420667</b>	<b>351704</b>	<b>431904</b>

### Value of out put

**Table 38: Value of Out put / Hectare(In Rs.)**

Holding Size Class			
Small	Medium	Large	All Sizes
353947	344408	311079	328464

During 2011-12 per hectare value of output from banana cultivation is estimated out as **Rs. 328464/-**

### 2.6 Pepper

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 selected**

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	226	25.80	40.57	0.11
Medium	55	17.20	27.04	0.31
Large	20	20.60	32.39	1.03
<b>Total</b>	<b>301</b>	<b>63.60</b>	<b>100.00</b>	<b>0.21</b>



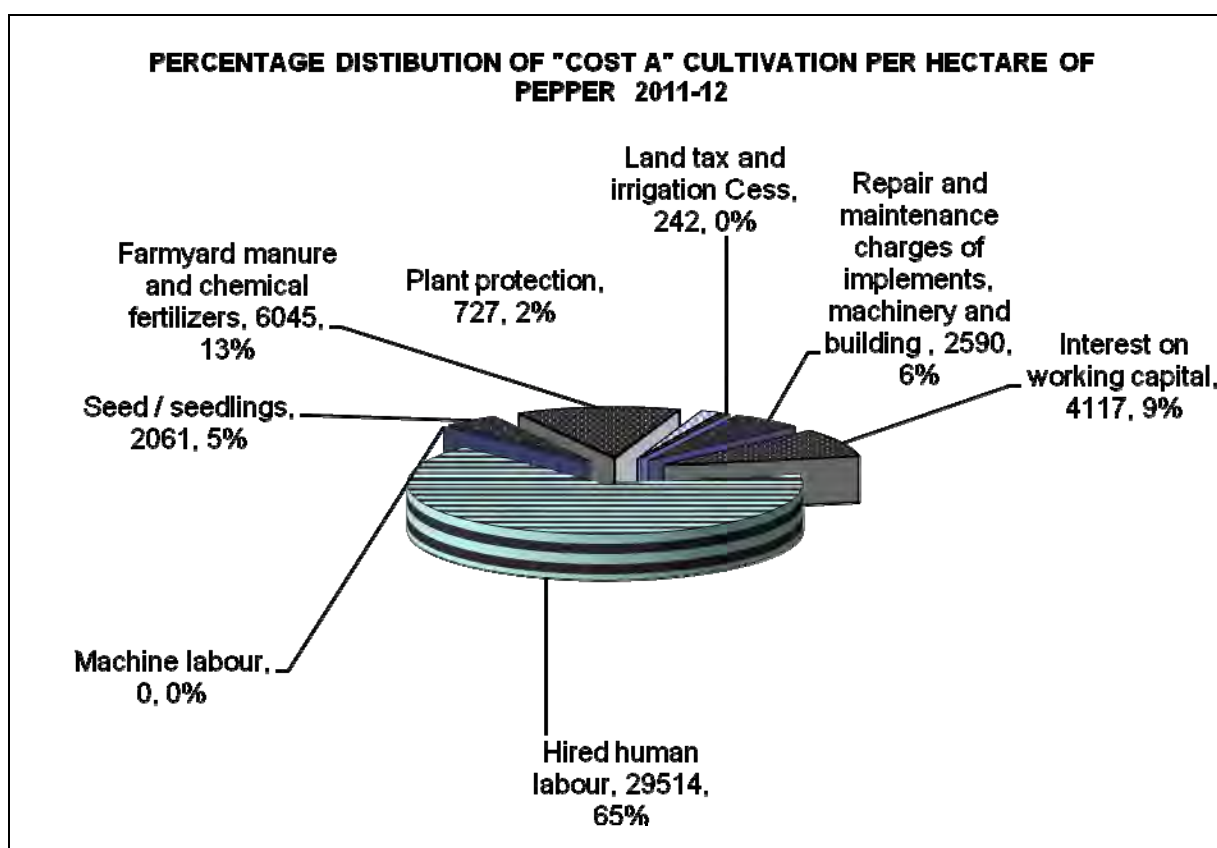
### Cost of cultivation

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 of Pepper during the year 2011-12**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	29181	24429	34382	29514
2	Animal labour	0	0	0	0
3	Machine labour	0	0	0	0
4	Seed / seedlings	2195	3086	990	2061
5	Farmyard manure and chemical fertilizers	6588	5518	5770	6045
6	Plant protection	756	838	592	727
7	Land tax and irrigation Cess	217	326	202	242
8	Repair and maintenance charges of implements, machinery and building	3035	3339	1337	2590
9	Interest on working capital	4202	3719	4349	4117
10	Other expenses (Including soil condition)	3296	3321	1756	2825
<b>11</b>	<b>Total Cost 'A' (1 to 10)</b>	<b>49470</b>	<b>44576</b>	<b>49378</b>	<b>48121</b>
12	Interest on fixed capital	10311	10351	7925	9581
13	Cost 'B1' (11+12)	<b>59781</b>	<b>54927</b>	<b>57303</b>	<b>57702</b>
14	Interest on land value	414962	455251	302583	390947
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>474743</b>	<b>510178</b>	<b>359886</b>	<b>448649</b>
16	Imputed value of household labour	10027	10123	7550	9284
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>484770</b>	<b>520301</b>	<b>367436</b>	<b>457933</b>



\The survey results reveal that out of the total hired human labour hours engaged in pepper cultivation 65% is shared by hired human labour. Details are given below:

**Table 41: Percentage of hired human labour hours engaged in pepper cultivation**

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	39.73	53.77	44.37	44.62
Female	29.36	21.81	41.13	33.69
<b>Total</b>	<b>69.09</b>	<b>75.58</b>	<b>85.50</b>	<b>78.31</b>

**Table 42: Cost of Cultivation per hectare(In Rs.) of Pepper during  
2009-10 , 2010-2011 & 2011-12**

A comparative statement for 2009-10 ,2010-11 & 2011-12 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	35514	26010	36813	31861
	2010-11	43040	34372	38647	38052
	2011-12	<b>49470</b>	<b>44576</b>	<b>49378</b>	<b>48121</b>
Cost 'B'	2009-10	574668	326768	213966	397245
	2010-11	592417	363083	343525	429123
	2011-12	<b>474743</b>	<b>510178</b>	<b>359886</b>	<b>448649</b>
Cost 'C'	2009-10	584395	332765	214920	403606
	2010-11	603943	341481	348499	437676
	2011-12	<b>484770</b>	<b>520301</b>	<b>367436</b>	<b>457933</b>

**Value of out put**

**Table 43: Value of Out put / Hectare(In Rs.)**

Holding Size Class			
Small	Medium	Large	All Sizes
118657	177687	149720	144219

During 2009-2010 value of output per hectare of pepper cultivation is estimated as Rs 71711

During 2010-11 value of output per hectare of pepper cultivation is estimated as Rs.72206

During 2011-12 it is estimated that Rs.144219 has been received as value of output from per hectare pepper cultivation.

## 2.7 Ginger

For the cost of cultivation study during 2011-12, 273 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	200	16.60	28.38	0.08
Medium	59	18.70	31.97	0.32
Large	14	23.20	39.65	1.66
<b>All sizes</b>	<b>273</b>	<b>58.50</b>	<b>100.00</b>	<b>0.21</b>

### 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:

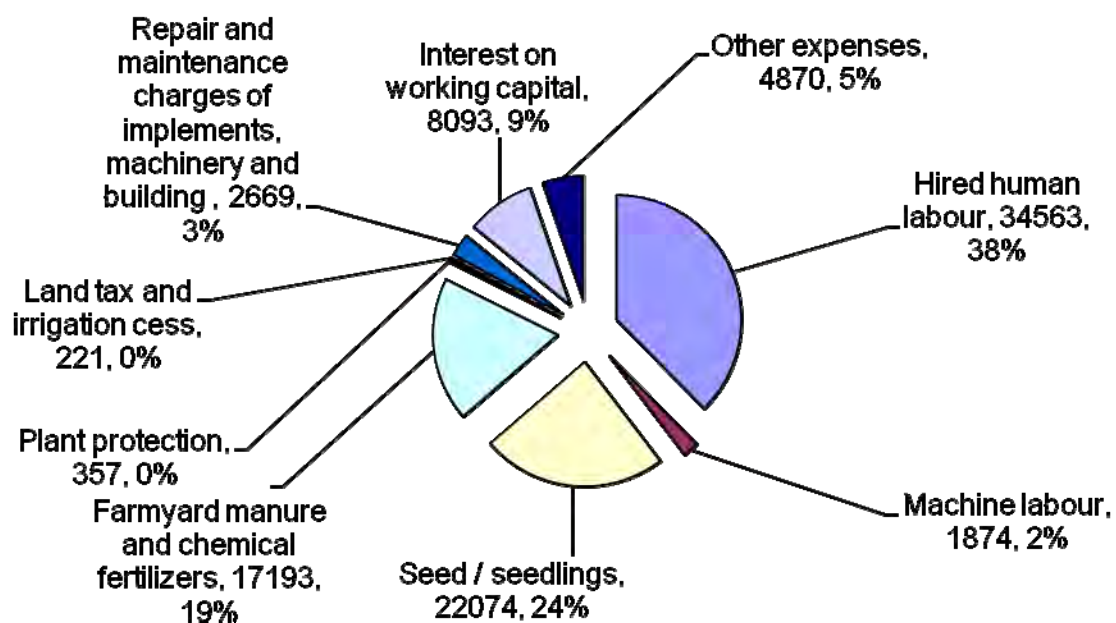
**Table 45 Cost of Cultivation per hectare of Ginger**

(Per Hectare in Rs)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	41324	34745	29399	34563
2	Animal labour	0	0	0	0
3	Machine labour	698	1485	3068	1874
4	Seed / seedlings	26883	23904	16996	22074
5	Farmyard manure and chemical fertilizers	13345	16292	20790	17193
6	Plant protection	320	454	305	357
7	Land tax and irrigation cess	311	263	119	221
8	Repair and maintenance charges of implements, machinery and building	3732	3453	1233	2669

9	Interest on working capital	8643	8087	7691	8093
10	Other expenses	3855	3993	6347	4870
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>99111</b>	<b>92676</b>	<b>85948</b>	<b>91914</b>
12	Interest on fixed capital	7419	6163	3189	5368
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>106530</b>	<b>98839</b>	<b>89137</b>	<b>97282</b>
14	Interest on land value	511766	321097	170788	317618
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>618296</b>	<b>419936</b>	<b>259925</b>	<b>414900</b>
16	Imputed value of household labour	9735	11442	6555	9046
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>628031</b>	<b>431378</b>	<b>266480</b>	<b>423966</b>

**PERCENTAGE DISTRIBUTION OF "COST A" PER HECTARE OF GINGER 2011-12**



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

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	34.47	34.48	57.29	41.40
Female	29.69	27.79	24.69	27.54
<b>Total</b>	<b>64.16</b>	<b>62.27</b>	<b>81.98</b>	<b>68.93</b>

**Table 47: Cost of Cultivation per hectare(In Rs.) of Ginger during 2009-10 , 2010-11 & 2011-12**

A comparative statement for 2009-10 , 2010-11 & 2011-12 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	110578	117564	125619	119547
	2010-11	122231	104574	110869	112123
	2011-12	<b>99111</b>	<b>92676</b>	<b>85948</b>	<b>91914</b>
Cost 'B'	2009-10	545546	422333	340404	416423
	2010-11	570249	385929	361887	430826
	2011-12	<b>618296</b>	<b>419936</b>	<b>259925</b>	<b>414900</b>
Cost 'C'	2009-10	564484	434713	345614	426530
	2010-11	589744	398025	369451	443377
	2011-12	<b>628031</b>	<b>431378</b>	<b>266480</b>	<b>423966</b>

## Value of Out put

**Table 48: Value of Out put / Hectare(In Rs.)**

Holding Size Class			
Small	Medium	Large	All Sizes
126247	147339	98416	122196

The per hectare value of output received from Ginger cultivation is seen as Rs.122196 during 2011-12

## 2.8 Turmeric

Details of the holdings selected for the cost of cultivation study during 2011-12 are given below:

**Table 49: Area and Number of holdings selected for 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	206	47.10	64.97	0.23
Medium	41	12.10	16.69	0.30
Large	6	13.30	18.34	2.22
<b>All size</b>	<b>253</b>	<b>72.50</b>	<b>100.00</b>	<b>0.29</b>

## Cost of cultivation

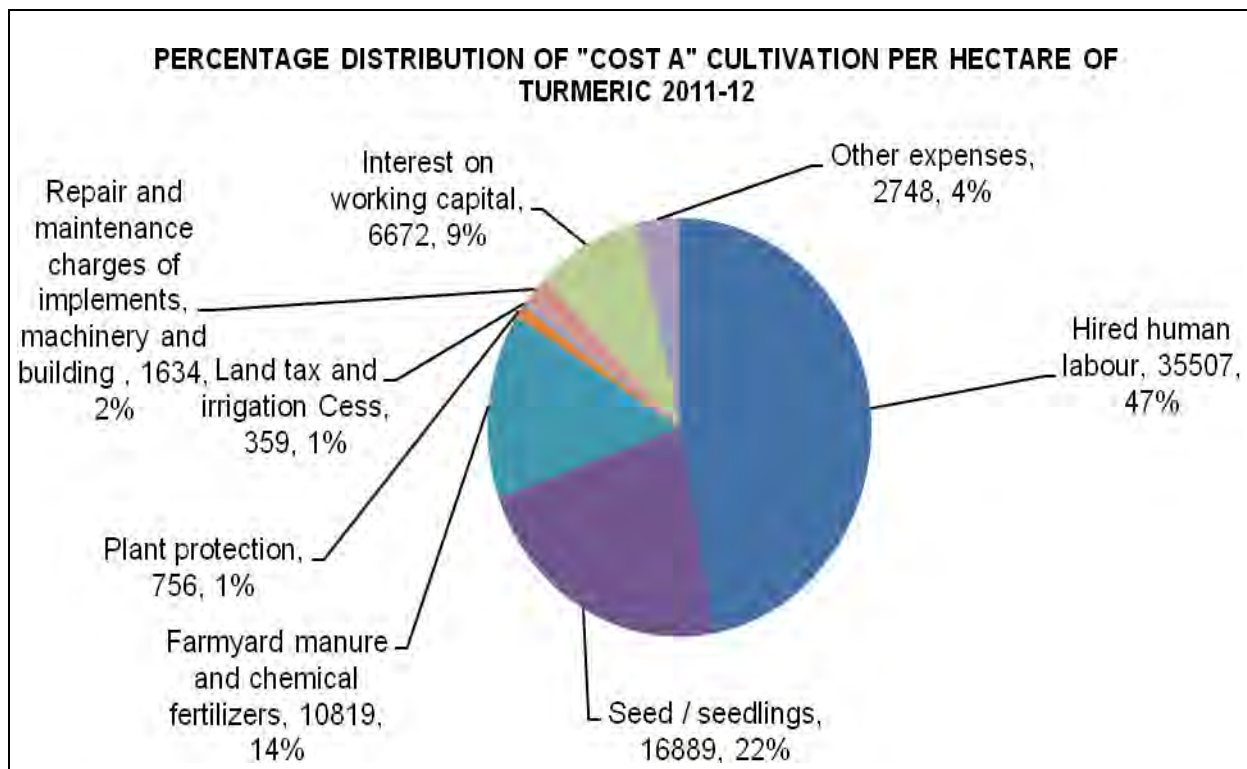
The cash and other kind expenses incurred under Turmeric cultivation is estimated as Rs.75384/-per hectare. Details of these items are given below:

**Table 50: Cost of Cultivation per hectare of Turmeric**

(Per Hectare in Rs.)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	35336	28093	43015	35507
2	Animal labour	0	0	0	0
3	Machine labour	0	0	0	0
4	Seed / seedlings	18677	12128	14944	16889
5	Farmyard manure and chemical fertilizers	12727	7695	6922	10819
6	Plant protection	802	632	711	756
7	Land tax and irrigation Cess	404	471	94	359
8	Repair and maintenance charges of implements, machinery and building	1601	3020	459	1634
9	Interest on working capital	7083	5068	6697	6672
10	Other expenses	3292	2136	1377	2748
<b>11</b>	<b>Total Cost 'A' (1-10)</b>	<b>79922</b>	<b>59243</b>	<b>74219</b>	<b>75384</b>
12	Interest on fixed capital	2824	1833	707	2271
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>82746</b>	<b>61076</b>	<b>74926</b>	<b>77655</b>
14	Interest on land value	276084	204808	173673	245385
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>358830</b>	<b>265884</b>	<b>248599</b>	<b>323040</b>
16	Imputed value of household labour	7309	6792	4740	6754
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>366139</b>	<b>272676</b>	<b>253339</b>	<b>329794</b>





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 distribution of Hired human labour hours to the total human hours**

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	32.51	39.19	33.11	33.58
Female	30.02	41.11	33.90	33.61
<b>Total</b>	<b>62.53</b>	<b>80.30</b>	<b>67.01</b>	<b>67.19</b>

**Table 52: Cost of Cultivation per hectare (In Rs.) of Turmeric during 2009-10 , 2010-11 & 2011-12**

A comparative statement for 2009-10 ,2010-11 & 2011-12 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2009-10	54292	66871	58971	60062
	2010-11	56937	66056	59629	59707
	2011-12	<b>79922</b>	<b>59243</b>	<b>74219</b>	<b>75384</b>
Cost 'B'	2009-10	543306	690397	133842	555786
	2010-11	515208	428360	348652	462861
	2011-12	<b>358830</b>	<b>265884</b>	<b>248599</b>	<b>323040</b>
Cost 'C'	2009-10	558412	695705	164730	568699
	2010-11	540561	439130	360639	482113
	2011-12	<b>366139</b>	<b>272676</b>	<b>253339</b>	<b>329794</b>

### Output

The per hectare value of output received from turmeric cultivation is estimated as Rs 78321/- during the year 2011-12.

**Table 53: Value of Out put / Hectare(In Rs.)**

Holding Size Class			
Small	Medium	Large	All Sizes
63637	116435	95218	78321

### A1.1 District wise Area and number of holding under Autumn Paddy

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	18.90	5.62	0.47
2	Kollam	50.00	17.50	5.20	0.35
3	Pathanamthitta	15.00	4.20	1.25	0.28
4	Alappuzha	48.00	58.50	17.38	1.22
5	Kottayam	33.00	32.50	9.66	0.98
6	Eranakulam	70.00	51.00	15.16	0.73
7	Idukki	20.00	16.10	4.78	0.81
8	Thrissur	50.00	43.00	12.80	0.87
9	Palakkad	40.00	42.60	12.66	1.07
10	Wayanad	0.00	0.00	0.00	0.00
11	Malappuram	40.00	18.10	5.38	0.45
12	Kozhikkode	30.00	9.50	2.82	0.32
13	Kannur	30.00	13.50	4.02	0.45
14	Kasaragod	20.00	10.50	3.12	0.53
	<b>State</b>	<b>486.00</b>	<b>335.90</b>	<b>100.00</b>	<b>0.69</b>

### A1.2 District wise Area and number of holding under Winter Paddy

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	4.33	0.50
2	Kollam	50	22.9	4.95	0.46
3	Pathanamthitta	40	20.6	4.46	0.52
4	Alappuzha	60	73.4	15.88	1.22
5	Kottayam	42	15.1	3.27	0.36
6	Eranakulam	60	39.7	8.58	0.66
7	Idukki	40	29.5	6.38	0.74
8	Thrissur	50	75.8	16.40	1.52
9	Palakkad	50	60.9	13.17	1.22
10	Wayanad	30	34.6	7.48	1.15
11	Malappuram	40	45.9	9.93	1.15
12	Kozhikkode	30	7.8	1.69	0.26
13	Kannur	30	5.6	1.21	0.19
14	Kasaragod	20	10.5	2.27	0.54
	<b>State</b>	<b>582</b>	<b>462.3</b>	<b>100.00</b>	<b>0.79</b>

### A1.3 District wise Area and number of holding under SummerPaddy

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	14.8	3.53	0.37
2	Kollam	28	16.5	3.94	0.59
3	Pathanamthitta	40	26.2	6.25	0.66
4	Alappuzha	50	103.7	24.76	2.07
5	Kottayam	40	40.4	9.64	1.01
6	Eranakulam	60	45.2	10.79	0.75
7	Idukki	26	5.3	1.27	0.20
8	Thrissur	47	42.9	10.24	0.91
9	Palakkad	44	51.4	12.27	1.17
10	Wayanad	30	12.3	2.94	0.41
11	Malappuram	30	38.2	9.12	1.27
12	Kozhikkode	30	11.2	2.67	0.37
13	Kannur	20	3.7	0.88	0.19
14	Kasaragod	20	7.1	1.69	0.36
	<b>State</b>	<b>505.00</b>	<b>418.90</b>	<b>100.00</b>	<b>0.83</b>

#### A1.4 District wise Area and number of holding under Coconut

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	23.5	8.07	0.59
2	Kollam	50	18.9	6.49	0.38
3	Pathanamthitta	40	17	5.84	0.43
4	Alappuzha	60	1.7	0.58	0.03
5	Kottayam	50	24.9	8.55	0.50
6	Eranakulam	70	27.3	9.38	0.39
7	Idukki	40	17.7	6.08	0.44
8	Thrissur	50	32.3	11.09	0.65
9	Palakkad	50	39.1	13.43	0.78
10	Wayanad	30	21.9	7.52	0.73
11	Malappuram	30	28	9.62	0.93
12	Kozhikkode	30	11.1	3.81	0.37
13	Kannur	30	18.9	6.49	0.63
14	Kasaragod	20	8.9	3.06	0.45
	<b>State</b>	<b>590.00</b>	<b>291.20</b>	<b>100.00</b>	<b>0.49</b>

**A1.5 District wise Area and number of holding under Arecanut**

SI No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	40	5.2	3.32	0.13
2	Kollam	50	2.4	1.53	0.05
3	Pathanamthitta	50	3.8	2.43	0.08
4	Alappuzha	60	8.3	5.31	0.14
5	Kottayam	50	8.6	5.50	0.17
6	Eranakulam	70	18.1	11.57	0.26
7	Idukki	40	17.2	11.00	0.43
8	Thrissur	50	10.1	6.46	0.20
9	Palakkad	45	18.9	12.08	0.42
10	Wayanad	30	22.1	14.13	0.74
11	Malappuram	30	18.3	11.70	0.61
12	Kozhikkode	30	1	0.64	0.03
13	Kannur	30	15.3	9.78	0.51
14	Kasaragod	20	7.1	4.54	0.36
	<b>State</b>	<b>595.00</b>	<b>156.40</b>	<b>100.00</b>	<b>0.26</b>

### A1.6 District wise Area and number of holding under Tapioca

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	4.1	5.32	0.21
2	Kollam	25	2.6	3.38	0.10
3	Pathanamthitta	25	4.1	5.32	0.16
4	Alappuzha	30	5.4	7.01	0.18
5	Kottayam	25	4.2	5.45	0.17
6	Eranakulam	30	12.3	15.97	0.41
7	Idukki	20	5.7	7.40	0.29
8	Thrissur	24	6.2	8.05	0.26
9	Palakkad	25	8.3	10.78	0.33
10	Wayanad	15	7.6	9.87	0.51
11	Malappuram	20	6.1	7.92	0.31
12	Kozhikkode	15	1.6	2.08	0.11
13	Kannur	15	7.2	9.35	0.48
14	Kasaragod	10	1.6	2.08	0.16
	<b>State</b>	<b>299.00</b>	<b>77.00</b>	<b>100.00</b>	<b>0.26</b>



### A1.7 District wise Area and number of holding under Banana

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	3.9	5.52	0.20
2	Kollam	25	0.5	0.71	0.02
3	Pathanamthitta	25	5.2	7.36	0.21
4	Alappuzha	18	2.9	4.10	0.16
5	Kottayam	25	6.3	8.91	0.25
6	Eranakulam	30	10.7	15.13	0.36
7	Idukki	20	4	5.66	0.20
8	Thrissur	25	5.3	7.50	0.21
9	Palakkad	25	11.6	16.41	0.46
10	Wayanad	15	8.8	12.45	0.59
11	Malappuram	15	7	9.90	0.47
12	Kozhikkode	15	1.9	2.69	0.13
13	Kannur	15	1.3	1.84	0.09
14	Kasaragod	10	1.3	1.84	0.13
	<b>State</b>	<b>283.00</b>	<b>70.70</b>	<b>100.00</b>	<b>0.25</b>

### A1.8 District wise Area and number of holding under Pepper

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	2.3	3.51	0.12
2	Kollam	30	1.9	2.90	0.06
3	Pathanamthitta	25	3	4.58	0.12
4	Alappuzha	30	1.7	2.60	0.06
5	Kottayam	25	4.7	7.18	0.19
6	Eranakulam	31	5.7	8.70	0.18
7	Idukki	20	12.1	18.47	0.61
8	Thrissur	25	3.2	4.89	0.13
9	Palakkad	25	6.6	10.08	0.26
10	Wayanad	15	3.8	5.80	0.25
11	Malappuram	15	5.9	9.01	0.39
12	Kozhikkode	15	0.5	0.76	0.03
13	Kannur	15	11.3	17.77	0.75
14	Kasaragod	10	0.9	142	0.09
	<b>State</b>	<b>301.00</b>	<b>63.60</b>	<b>100.00</b>	<b>0.21</b>

### A1.9 District wise Area and number of holding under Ginger`

SI No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	20	1.5	3.51	0.12
2	Kollam	25	1.6	2.90	0.06
3	Pathanamthitta	25	1.6	4.58	0.12
4	Alappuzha	15	0.7	2.60	0.06
5	Kottayam	25	3.3	7.18	0.19
6	Eranakulam	30	5.7	8.70	0.18
7	Idukki	20	2.6	18.47	0.61
8	Thrissur	23	2.7	4.89	0.13
9	Palakkad	25	12.9	10.08	0.26
10	Wayanad	15	7.3	5.80	0.25
11	Malappuram	15	4.3	9.01	0.39
12	Kozhikkode	15	3.1	0.76	0.03
13	Kannur	10	9.5	20.31	0.89
14	Kasaragod	10	1.7	1.22	0.08
	<b>State</b>	<b>273.00</b>	<b>58.50</b>	<b>100.00</b>	<b>0.21</b>

### A1.10 District wise Area and number of holding under Turmeric

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	2.2	3.03	0.11
2	Kollam	25	28	38.51	1.12
3	Pathanamthitta	9	0.5	0.69	0.06
4	Alappuzha	11	2	2.75	0.18
5	Kottayam	25	1.9	2.61	0.08
6	Eranakulam	30	4.3	5.91	0.14
7	Idukki	20	9.5	13.07	0.48
8	Thrissur	23	2.5	3.44	0.11
9	Palakkad	25	15.3	21.05	0.61
10	Wayanad	15	1.5	2.06	0.10
11	Malappuram	15	2.6	3.59	0.17
12	Kozhikkode	15	1.1	1.51	0.07
13	Kannur	10	0.5	0.69	0.05
14	Kasaragod	10	0.6	0.83	0.06
	<b>State</b>	<b>253</b>	<b>72.50</b>	<b>100.00</b>	<b>0.29</b>

**A2.1 District wise Cost of Cultivation per hectare of Autumn paddy**

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	32753	24327	17731	<b>16981</b>	<b>20276</b>
2	Animal labour	0	651	0	211	0
3	Machine labour	5699	<b>3363</b>	<b>0</b>	<b>4656</b>	<b>0</b>
4	Seed / seedlings	1421	1567	2286	1394	2130
5	Farmyard manure and chemical fertilizers	4120	5384	4438	3621	3137
6	Plant protection	288	246	540	252	510
7	Land tax and irrigation cess	44	45	58	81	229
8	Repair and maintenance charges of implements, machinery and building	2336	2257	349	698	832
9	Interest on working capital	2393	1831	1397	1438	1376
10	Other expenses	3571	1081	2941	1644	1463
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>52625</b>	<b>40752</b>	<b>29740</b>	<b>30976</b>	<b>29953</b>
12	Interest on fixed capital	2557	597	259	291	291
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>55182</b>	<b>41349</b>	<b>29999</b>	<b>31267</b>	<b>30244</b>
14	Interest on land value	89650	87156	31126	54085	45786
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>144832</b>	<b>128505</b>	<b>61125</b>	<b>85352</b>	<b>76030</b>
16	Imputed value of household labour	3646	4604	4438	1914	1712
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>148478</b>	<b>133109</b>	<b>65563</b>	<b>87266</b>	<b>77742</b>

## A2.1 District wise Cost of Cultivation per hectare of Autumn paddy

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	17473	13491	10786	16671	0
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2221	4310	9914	0
4	Seed / seedlings	1493	711	1668	1846	0
5	Farmyard manure and chemical fertilizers	1363	1221	3125	4759	0
6	Plant protection	125	272	862	837	0
7	Land tax and irrigation cess	69	190	59	133	0
8	Repair and maintenance charges of implements, machinery and building	1339	1415	1336	1708	0
9	Interest on working capital	1090	949	1183	1769	0
10	Other expenses	1353	1066	2905	1346	0
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>24305</b>	<b>21536</b>	<b>26234</b>	<b>38983</b>	<b>0</b>
12	Interest on fixed capital	1580	256	918	934	0
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>25885</b>	<b>21792</b>	<b>27152</b>	<b>39917</b>	<b>0</b>
14	Interest on land value	75614	72273	52244	65221	0
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>101499</b>	<b>94065</b>	<b>79396</b>	<b>105138</b>	<b>0</b>
16	Imputed value of household labour	4322	2369	2279	6684	0
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>105821</b>	<b>96434</b>	<b>81675</b>	<b>111822</b>	<b>0</b>

### A2.1 District wise Cost of Cultivation per hectare of Autumn paddy

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	19347	16015	29999	27307	18605
2	Animal labour	0	587	0	0	87
3	Machine labour	4590	3358	4760	4588	3898
4	Seed / seedlings	1224	1393	1293	1369	1548
5	Farmyard manure and chemical fertilizers	3132	5968	8195	5791	3622
6	Plant protection	293	56	0	80	398
7	Land tax and irrigation cess	354	58	102	110	111
8	Repair and maintenance charges of implements, machinery and building	173	967	395	1818	1212
9	Interest on working capital	1527	1420	2265	2019	1495
10	Other expenses	1945	1021	1053	1238	1737
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>32585</b>	<b>30843</b>	<b>48062</b>	<b>44210</b>	<b>32713</b>
12	Interest on fixed capital	436	4334	661	2852	1008
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>33021</b>	<b>35177</b>	<b>48723</b>	<b>47062</b>	<b>33721</b>
14	Interest on land value	65629	66970	85655	32954	63637
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>98650</b>	<b>102147</b>	<b>133928</b>	<b>80016</b>	<b>97358</b>
16	Imputed value of household labour	4631	6477	803	5194	3685
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>103281</b>	<b>108624</b>	<b>134731</b>	<b>85210</b>	<b>101043</b>

## A2.2 District wise Cost of Cultivation per hectare of Winter paddy

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	32388	24290	19566	14466	18462
2	Animal labour	174	204	0	450	0
3	Machine labour	4701	4735	0	6155	6261
4	Seed / seedlings	1476	1373	2017	2245	2253
5	Farmyard manure and chemical fertilizers	4902	6983	3803	6885	4200
6	Plant protection	195	147	385	137	695
7	Land tax and irrigation cess	147	48	46	203	30
8	Repair and maintenance charges of implements, machinery and building	1937	1514	2467	912	449
9	Interest on working capital	2243	1946	1530	1735	1660
10	Other expenses	1022	1189	4826	4361	1321
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>49185</b>	<b>42429</b>	<b>34640</b>	<b>37549</b>	<b>35331</b>
12	Interest on fixed capital	2978	1223	1057	948	1029
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>52163</b>	<b>43652</b>	<b>35697</b>	<b>38497</b>	<b>36360</b>
14	Interest on land value	90750	85478	17783	50629	99418
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>142913</b>	<b>129130</b>	<b>53480</b>	<b>89126</b>	<b>135778</b>
16	Imputed value of household labour	3100	6097	3032	3036	2350
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>146013</b>	<b>135227</b>	<b>56512</b>	<b>92162</b>	<b>138128</b>



## A2.2 District wise Cost of Cultivation per hectare of Winter paddy

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	13683	18163	12913	17278	24166
2	Animal labour	0	0	0	232	0
3	Machine labour	0	4827	6710	7890	4796
4	Seed / seedlings	1341	880	1666	1361	1254
5	Farmyard manure and chemical fertilizers	5234	3533	4851	4056	3280
6	Plant protection	414	0	0	462	647
7	Land tax and irrigation cess	344	378	295	100	254
8	Repair and maintenance charges of implements, machinery and building	585	1151	836	1471	1094
9	Interest on working capital	1202	1426	1492	1614	1947
10	Other expenses	3375	1124	3702	1010	4788
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>26178</b>	<b>31152</b>	<b>32465</b>	<b>35474</b>	<b>42226</b>
12	Interest on fixed capital	1048	999	1329	2202	1038
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>27226</b>	<b>32151</b>	<b>33794</b>	<b>37676</b>	<b>43264</b>
14	Interest on land value	70071	69770	38287	48078	24749
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>97297</b>	<b>101921</b>	<b>72081</b>	<b>85754</b>	<b>68013</b>
16	Imputed value of household labour	3630	6687	986	4378	6735
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>100927</b>	<b>108608</b>	<b>73067</b>	<b>90132</b>	<b>74748</b>

## A2.2 District wise Cost of Cultivation per hectare of Winter paddy

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	27226	22701	25071	16322	18382
2	Animal labour	479	115	0	0	136
3	Machine labour	3294	3736	4782	6494	5094
4	Seed / seedlings	2933	2087	1832	1424	1664
5	Farmyard manure and chemical fertilizers	5934	4475	4869	4112	4885
6	Plant protection	299	182	0	0	257
7	Land tax and irrigation cess	56	245	132	211	211
8	Repair and maintenance charges of implements, machinery and building	1058	1165	1741	1263	1150
9	Interest on working capital	2179	1854	1936	1499	1673
10	Other expenses	3406	3781	2173	1619	3039
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>46864</b>	<b>40341</b>	<b>42536</b>	<b>32944</b>	<b>36491</b>
12	Interest on fixed capital	4093	5547	5083	3828	1825
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>50957</b>	<b>45888</b>	<b>47619</b>	<b>36772</b>	<b>38316</b>
14	Interest on land value	58958	68066	77657	87125	62422
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>109915</b>	<b>113954</b>	<b>125276</b>	<b>123897</b>	<b>100738</b>
16	Imputed value of household labour	6735	3891	2128	3651	3811
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>116650</b>	<b>117845</b>	<b>127404</b>	<b>127548</b>	<b>104549</b>

### A2.3 District wise Cost of Cultivation per hectare of Summer paddy

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	30623	16361	22986	18777	19149
2	Animal labour	40	0	0	350	0
3	Machine labour	5371	3469	0	5349	0
4	Seed / seedlings	1255	1491	2161	2659	1739
5	Farmyard manure and chemical fertilizers	3975	5163	5016	3380	4190
6	Plant protection	219	95	503	40	1433
7	Land tax and irrigation cess	81	20	76	92	706
8	Repair and maintenance charges of implements, machinery and building	872	956	141	423	213
9	Interest on working capital	2240	1345	1734	1570	1458
10	Other expenses	3326	1318	4017	836	2646
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>48002</b>	<b>30218</b>	<b>36634</b>	<b>33476</b>	<b>31534</b>
12	Interest on fixed capital	1519	881	89	77	136
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>49521</b>	<b>31099</b>	<b>36723</b>	<b>33553</b>	<b>31670</b>
14	Interest on land value	79676	50060	27155	20576	55418
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>129197</b>	<b>81159</b>	<b>63878</b>	<b>54129</b>	<b>87088</b>
16	Imputed value of household labour	4681	4766	2585	866	1810
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>133878</b>	<b>85925</b>	<b>66463</b>	<b>54995</b>	<b>88898</b>

### A2.3 District wise Cost of Cultivation per hectare of Summer paddy

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	16682	23664	25780	27844	24141
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	9349	4249	6881
4	Seed / seedlings	1001	2441	2284	1379	2255
5	Farmyard manure and chemical fertilizers	1159	2737	1826	4816	6275
6	Plant protection	204	1663	2951	414	299
7	Land tax and irrigation cess	250	726	584	229	225
8	Repair and maintenance charges of implements, machinery and building	391	1171	1064	2633	3787
9	Interest on working capital	1008	1578	2450	1999	2118
10	Other expenses	1114	1053	6813	1298	2175
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>21809</b>	<b>35033</b>	<b>53107</b>	<b>44831</b>	<b>48499</b>
12	Interest on fixed capital	675	1769	1173	2662	1110
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>22484</b>	<b>36802</b>	<b>54280</b>	<b>47493</b>	<b>49609</b>
14	Interest on land value	112823	94403	112099	72939	43948
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>135307</b>	<b>131205</b>	<b>166379</b>	<b>120432</b>	<b>93557</b>
16	Imputed value of household labour	4363	7383	3213	2805	9011
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>139670</b>	<b>138588</b>	<b>169592</b>	<b>123237</b>	<b>102568</b>

### A2.3 District wise Cost of Cultivation per hectare of Summer paddy

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	30791	16466	32808	19822	22398
2	Animal labour	0	905	0	0	122
3	Machine labour	9374	6999	1840	0	4387
4	Seed / seedlings	1451	1605	1484	1467	1882
5	Farmyard manure and chemical fertilizers	4114	5174	8587	6450	3721
6	Plant protection	460	300	0	252	650
7	Land tax and irrigation cess	1596	666	234	55	359
8	Repair and maintenance charges of implements, machinery and building	5465	1990	1137	3940	1293
9	Interest on working capital	2491	1659	2287	1430	1773
10	Other expenses	3621	1736	1030	1610	2293
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>59363</b>	<b>37500</b>	<b>49407</b>	<b>35026</b>	<b>38878</b>
12	Interest on fixed capital	1294	2192	4577	4960	1122
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>60657</b>	<b>39692</b>	<b>53984</b>	<b>39986</b>	<b>40000</b>
14	Interest on land value	37846	72387	88153	97675	59861
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>98503</b>	<b>112079</b>	<b>142137</b>	<b>137661</b>	<b>99861</b>
16	Imputed value of household labour	4859	8719	1671	5468	3185
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>103362</b>	<b>120798</b>	<b>143808</b>	<b>143129</b>	<b>103046</b>

#### A2.4 District wise Cost of Cultivation per hectare of Coconut

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	27111	22214	18184	13284	25304
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	0	0	520	1923	117
5	Farmyard manure and chemical fertilizers	4314	9760	4788	2118	4829
6	Plant protection	16	0	0	0	86
7	Land tax and irrigation cess	44	54	145	320	158
8	Repair and maintenance charges of implements, machinery and building	630	1616	145	193	225
9	Interest on working capital	3245	3246	2780	1923	3128
10	Other expenses	1009	487	4303	1862	939
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>36369</b>	<b>37377</b>	<b>30865</b>	<b>21663</b>	<b>34786</b>
12	Interest on fixed capital	995	4583	168	1048	509
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>37364</b>	<b>41960</b>	<b>31033</b>	<b>22711</b>	<b>35295</b>
14	Interest on land value	659751	597686	417018	679473	641156
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>697115</b>	<b>639646</b>	<b>448051</b>	<b>702184</b>	<b>676451</b>
16	Imputed value of household labour	3471	4443	3967	4654	4438
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>700586</b>	<b>644089</b>	<b>452018</b>	<b>726838</b>	<b>680889</b>

#### A2.4 District wise Cost of Cultivation per hectare of Coconut

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	22617	12879	27867	12608	32880
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	166	5532	0	0	0
5	Farmyard manure and chemical fertilizers	9003	3175	6430	5207	5339
6	Plant protection	0	378	46	0	0
7	Land tax and irrigation cess	497	103	106	65	604
8	Repair and maintenance charges of implements, machinery and building	2107	1818	649	3582	802
9	Interest on working capital	3808	2808	3817	1887	5044
10	Other expenses	6293	6116	3826	1052	2419
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>44491</b>	<b>32809</b>	<b>42741</b>	<b>24401</b>	<b>47088</b>
12	Interest on fixed capital	3714	3034	3512	4612	1835
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>48205</b>	<b>35843</b>	<b>46253</b>	<b>29013</b>	<b>48923</b>
14	Interest on land value	335895	173320	188558	316081	208400
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>384100</b>	<b>209163</b>	<b>234811</b>	<b>345094</b>	<b>257323</b>
16	Imputed value of household labour	5484	5220	3122	2616	4485
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>389584</b>	<b>214383</b>	<b>237933</b>	<b>347710</b>	<b>261808</b>

#### A2.4 District wise Cost of Cultivation per hectare of Coconut

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	16655	16690	16122	19312	21305
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	44	5	0	0	408
5	Farmyard manure and chemical fertilizers	8689	9014	5320	5647	6840
6	Plant protection	53	77	0	0	45
7	Land tax and irrigation cess	29	140	74	35	180
8	Repair and maintenance charges of implements, machinery and building	658	2422	778	8213	2976
9	Interest on working capital	2625	2833	2176	3205	3110
10	Other expenses	807	2546	320	1197	2497
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>29560</b>	<b>33727</b>	<b>24790</b>	<b>37609</b>	<b>37361</b>
12	Interest on fixed capital	1885	5956	3850	2428	3493
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>31445</b>	<b>39683</b>	<b>28640</b>	<b>40037</b>	<b>40854</b>
14	Interest on land value	544636	312903	380443	191902	354841
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>576081</b>	<b>352586</b>	<b>409083</b>	<b>231939</b>	<b>395695</b>
16	Imputed value of household labour	4163	2277	554	9514	3826
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>580244</b>	<b>354863</b>	<b>409637</b>	<b>241453</b>	<b>399521</b>



### A2.5 District wise Cost of Cultivation per hectare of Arecanut

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	26172	24378	18715	<b>8286</b>	<b>19978</b>
2	Animal labour	0	0	0	0	0
3	Machine labour	0	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
4	Seed / seedlings	0	0	380	0	306
5	Farmyard manure and chemical fertilizers	1501	8356	5864	2573	7575
6	Plant protection	0	0	208	47	1048
7	Land tax and irrigation cess	178	52	151	111	133
8	Repair and maintenance charges of implements, machinery and building	673	3669	716	136	223
9	Interest on working capital	2867	3302	3063	1131	3567
10	Other expenses	995	290	5460	402	877
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>32386</b>	<b>40047</b>	<b>34557</b>	<b>12686</b>	<b>39594</b>
12	Interest on fixed capital	2524	3298	697	588	268
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>34910</b>	<b>43345</b>	<b>35254</b>	<b>13274</b>	<b>39862</b>
14	Interest on land value	543099	216167	363029	568803	595285
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>578009</b>	<b>259512</b>	<b>398283</b>	<b>582077</b>	<b>635147</b>
16	Imputed value of household labour	6623	9819	9142	2465	9828
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>584632</b>	<b>269331</b>	<b>407425</b>	<b>584542</b>	<b>644975</b>

## A2.5 District wise Cost of Cultivation per hectare of Arecanut

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	14381	6676	44835	21614	44962
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	95	1010	0	0	0
5	Farmyard manure and chemical fertilizers	9628	3926	13094	5242	13035
6	Plant protection	16	231	0	1416	829
7	Land tax and irrigation cess	250	35	58	85	552
8	Repair and maintenance charges of implements, machinery and building	3024	1644	1396	6073	357
9	Interest on working capital	2713	1184	6111	3052	6007
10	Other expenses	3005	0	3179	2251	1240
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>33112</b>	<b>14706</b>	<b>68673</b>	<b>39733</b>	<b>66982</b>
12	Interest on fixed capital	6053	1352	11837	9814	3296
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>39165</b>	<b>16058</b>	<b>80510</b>	<b>49547</b>	<b>70278</b>
14	Interest on land value	252720	100084	211714	493383	400434
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>291885</b>	<b>116142</b>	<b>292224</b>	<b>542930</b>	<b>470712</b>
16	Imputed value of household labour	6463	11363	5987	5829	6235
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>298348</b>	<b>127505</b>	<b>298211</b>	<b>548759</b>	<b>476947</b>

## A2.5 District wise Cost of Cultivation per hectare of Arecanut

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	44962	54942	39758	38889	25665
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	0	0	0	2967	283
5	Farmyard manure and chemical fertilizers	13035	12947	453	6354	6676
6	Plant protection	829	101	0	1125	411
7	Land tax and irrigation cess	552	1641	178	846	243
8	Repair and maintenance charges of implements, machinery and building	357	1970	137	4983	2202
9	Interest on working capital	6007	6832	4021	4999	3465
10	Other expenses	1240	331	0	657	1615
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>66982</b>	<b>78764</b>	<b>44376</b>	<b>60820</b>	<b>40560</b>
12	Interest on fixed capital	3296	11807	5402	7554	5689
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>70278</b>	<b>90571</b>	<b>49778</b>	<b>68374</b>	<b>46289</b>
14	Interest on land value	400434	201676	261071	411272	325566
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>470712</b>	<b>292247</b>	<b>310849</b>	<b>479646</b>	<b>371815</b>
16	Imputed value of household labour	6235	3215	2071	7642	5939
<b>-17</b>	<b>Cost 'C' (15+16)</b>	<b>476947</b>	<b>295462</b>	<b>312920</b>	<b>487288</b>	<b>377754</b>

### A2.6 District wise Cost of Cultivation per hectare of Tapioca

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	46712	41566	33749	24893	44015
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	1125	7824	1864	5207	3672
5	Farmyard manure and chemical fertilizers	3927	8756	13652	13320	16525
6	Plant protection	59	258	0	48	0
7	Land tax and irrigation cess	1284	60	97	112	97
8	Repair and maintenance charges of implements, machinery and building	3168	6065	524	549	635
9	Interest on working capital	5197	6021	5860	4668	6741
10	Other expenses	143	1808	9424	3208	3202
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>61615</b>	<b>72358</b>	<b>65080</b>	<b>52005</b>	<b>74887</b>
12	Interest on fixed capital	5326	2087	335	612	406
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>66941</b>	<b>74445</b>	<b>65415</b>	<b>52617</b>	<b>75293</b>
14	Interest on land value	269836	229763	185084	351244	533407
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>336777</b>	<b>304208</b>	<b>250499</b>	<b>403861</b>	<b>608700</b>
16	Imputed value of household labour	11120	12590	14072	19376	8970
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>347897</b>	<b>316798</b>	<b>264571</b>	<b>423237</b>	<b>617670</b>

## A2.6 District wise Cost of Cultivation per hectare of Tapioca

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	27513	21158	29274	31640	26111
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	694	542	1880	3681	1949
5	Farmyard manure and chemical fertilizers	4886	12743	7922	6796	1570
6	Plant protection	40	49	169	71	0
7	Land tax and irrigation cess	562	64	35	52	32
8	Repair and maintenance charges of implements, machinery and building	333	638	127	2191	2772
9	Interest on working capital	3436	3510	4220	4456	3102
10	Other expenses	1230	607	2957	2370	1388
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>38694</b>	<b>39311</b>	<b>46584</b>	<b>51257</b>	<b>36924</b>
12	Interest on fixed capital	758	740	1803	8924	1248
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>39452</b>	<b>40051</b>	<b>48387</b>	<b>60181</b>	<b>38172</b>
14	Interest on land value	461480	194321	129411	182985	131325
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>500932</b>	<b>234372</b>	<b>177798</b>	<b>243166</b>	<b>169497</b>
16	Imputed value of household labour	10862	19931	12294	11523	2236
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>511794</b>	<b>254303</b>	<b>190092</b>	<b>254689</b>	<b>171733</b>

### A2.6 District wise Cost of Cultivation per hectare of Tapioca

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	49443	32959	27918	32165	32053
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	1261	5425	594	916	2175
5	Farmyard manure and chemical fertilizers	12423	7777	4162	14830	8163
6	Plant protection	153	0	0	0	59
7	Land tax and irrigation cess	202	415	97	82	230
8	Repair and maintenance charges of implements, machinery and building	285	2358	227	1778	1230
9	Interest on working capital	6905	5349	3318	4791	4495
10	Other expenses	5771	7283	503	0	2502
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>76443</b>	<b>61561</b>	<b>36819</b>	<b>54562</b>	<b>50907</b>
12	Interest on fixed capital	2610	7269	4913	3823	3698
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>76053</b>	<b>68830</b>	<b>41732</b>	<b>58385</b>	<b>54605</b>
14	Interest on land value	160627	474349	141941	157903	256348
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>236680</b>	<b>543179</b>	<b>183673</b>	<b>216288</b>	<b>310953</b>
16	Imputed value of household labour	11906	11919	1974	11083	10886
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>248586</b>	<b>555098</b>	<b>185647</b>	<b>227371</b>	<b>321839</b>

### A2.7 District wise Cost of Cultivation per hectare of Banana

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	53655	48447	56299	62872	51597
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	13676	15173	9472	11225	11657
5	Farmyard manure and chemical fertilizers	54964	43437	42554	30578	34907
6	Plant protection	151	762	1430	1323	749
7	Land tax and irrigation cess	347	102	118	146	199
8	Repair and maintenance charges of implements, machinery and building	1837	8513	532	469	485
9	Interest on working capital	13499	12737	12605	13316	11005
10	Other expenses	12544	19548	24899	27159	11140
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>150673</b>	<b>148719</b>	<b>139300</b>	<b>147088</b>	<b>121739</b>
12	Interest on fixed capital	4683	5028	464	1222	2153
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>155356</b>	<b>153747</b>	<b>139764</b>	<b>148310</b>	<b>123892</b>
14	Interest on land value	424139	454554	297258	464760	433197
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>579495</b>	<b>608301</b>	<b>437022</b>	<b>613079</b>	<b>557089</b>
16	Imputed value of household labour	41976	14818	15051	23299	22439
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>621471</b>	<b>623119</b>	<b>452073</b>	<b>636378</b>	<b>579528</b>

### A 2.7 District wise Cost of Cultivation per hectare of Banana

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	47718	44659	88340	48542	33393
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	17532	13299	25159	6983	15105
5	Farmyard manure and chemical fertilizers	32895	12595	52330	21094	39001
6	Plant protection	428	357	2345	613	327
7	Land tax and irrigation cess	849	114	1431	184	1031
8	Repair and maintenance charges of implements, machinery and building	3881	515	514	2046	308
9	Interest on working capital	11989	8154	19972	8371	12654
10	Other expenses	21314	10628	31542	6474	38711
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>136606</b>	<b>90321</b>	<b>221633</b>	<b>94307</b>	<b>140530</b>
12	Interest on fixed capital	8269	1730	7999	12464	2335
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>144875</b>	<b>92051</b>	<b>229632</b>	<b>106771</b>	<b>142865</b>
14	Interest on land value	408686	229827	143662	136570	120853
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>553561</b>	<b>321878</b>	<b>373294</b>	<b>243341</b>	<b>263718</b>
16	Imputed value of household labour	22706	8341	39504	13113	37052
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>576267</b>	<b>330219</b>	<b>412798</b>	<b>256454</b>	<b>300770</b>



### A 2.7 District wise Cost of Cultivation per hectare of Banana

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	43021	30500	53503	39459	48886
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	18877	11721	24548	18362	13723
5	Farmyard manure and chemical fertilizers	24959	24320	46508	41097	33086
6	Plant protection	503	1347	0	0	812
7	Land tax and irrigation cess	35	223	191	555	467
8	Repair and maintenance charges of implements, machinery and building	483	3188	1095	3409	1777
9	Interest on working capital	11077	8840	14900	12302	11645
10	Other expenses	23407	20510	24437	24102	19926
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>122362</b>	<b>100649</b>	<b>165182</b>	<b>139286</b>	<b>130342</b>
12	Interest on fixed capital	1994	15101	29440	29185	7784
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>124356</b>	<b>115750</b>	<b>194622</b>	<b>168471</b>	<b>138126</b>
14	Interest on land value	474472	113454	470965	160804	272682
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>598828</b>	<b>229204</b>	<b>665587</b>	<b>329275</b>	<b>410808</b>
16	Imputed value of household labour	18651	5982	21339	15210	21096
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>617479</b>	<b>235186</b>	<b>686926</b>	<b>344485</b>	<b>431904</b>

## A 2.8 District wise Cost of Cultivation per hectare of Pepper

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	44912	30856	34039	35346	40775
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	267	5454	266	0	3876
5	Farmyard manure and chemical fertilizers	4538	12309	10011	9746	9779
6	Plant protection	1094	815	349	1131	1945
7	Land tax and irrigation cess	716	61	109	320	300
8	Repair and maintenance charges of implements, machinery and building	2801	9426	617	193	359
9	Interest on working capital	5134	5025	5093	5084	5783
10	Other expenses	526	815	6265	4619	1455
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>59988</b>	<b>64761</b>	<b>56749</b>	<b>56439</b>	<b>64272</b>
12	Interest on fixed capital	5340	20623	700	1043	1795
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>65328</b>	<b>85384</b>	<b>57449</b>	<b>57482</b>	<b>66067</b>
14	Interest on land value	660477	448499	515897	735509	600304
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>725805</b>	<b>533883</b>	<b>573346</b>	<b>792991</b>	<b>666371</b>
16	Imputed value of household labour	13500	7293	14436	22061	15441
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>739305</b>	<b>541176</b>	<b>587782</b>	<b>815052</b>	<b>681812</b>

## A 2.8 District wise Cost of Cultivation per hectare of Pepper

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	34047	23539	24572	28231	40893
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	1451	1169	2878	725	4388
5	Farmyard manure and chemical fertilizers	3175	6099	6537	6126	11541
6	Plant protection	1018	350	1546	385	122
7	Land tax and irrigation cess	207	122	141	232	685
8	Repair and maintenance charges of implements, machinery and building	2459	2746	800	5922	3671
9	Interest on working capital	4556	3285	3822	3724	6324
10	Other expenses	5869	1692	2687	1777	6299
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>52782</b>	<b>39002</b>	<b>42983</b>	<b>47122</b>	<b>73923</b>
12	Interest on fixed capital	7557	11148	8240	33255	20242
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>60339</b>	<b>50150</b>	<b>51223</b>	<b>80377</b>	<b>94165</b>
14	Interest on land value	582300	411943	226738	371583	254549
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>642639</b>	<b>462093</b>	<b>277961</b>	<b>451960</b>	<b>348714</b>
16	Imputed value of household labour	13762	7858	8742	9002	6610
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>656401</b>	<b>469951</b>	<b>286703</b>	<b>460962</b>	<b>355324</b>

## A 2.8 District wise Cost of Cultivation per hectare of Pepper

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	24960	49163	21541	33318	29514
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	3617	2851	2072	1034	2061
5	Farmyard manure and chemical fertilizers	5869	7822	4132	8113	6045
6	Plant protection	2302	1787	116	1666	727
7	Land tax and irrigation cess	296	1853	168	1184	242
8	Repair and maintenance charges of implements, machinery and building	3598	2338	2401	4160	2590
9	Interest on working capital	4208	6755	3008	5154	4117
10	Other expenses	5327	5930	2219	7413	2825
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>50177</b>	<b>78499</b>	<b>35657</b>	<b>62042</b>	<b>48121</b>
12	Interest on fixed capital	5394	6982	10226	18004	9581
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>55571</b>	<b>85481</b>	<b>45883</b>	<b>80046</b>	<b>57702</b>
14	Interest on land value	564606	403723	294803	376971	390947
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>620177</b>	<b>489204</b>	<b>340686</b>	<b>457017</b>	<b>448649</b>
16	Imputed value of household labour	5857	13172	8260	9014	9284
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>626034</b>	<b>502376</b>	<b>348946</b>	<b>466031</b>	<b>457933</b>

### A 2.9 District wise Cost of Cultivation per hectare of Ginger

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	41764	44598	38406	43271	30297
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	39806	31666	22440	10817	24135
5	Farmyard manure and chemical fertilizers	11501	16278	12281	11950	12700
6	Plant protection	30	62	340	686	332
7	Land tax and irrigation cess	32	650	103	549	174
8	Repair and maintenance charges of implements, machinery and building	1519	3276	671	652	473
9	Interest on working capital	9435	9871	8133	7194	7331
10	Other expenses	1248	6101	7812	5217	5850
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>105335</b>	<b>112502</b>	<b>90236</b>	<b>80336</b>	<b>81292</b>
12	Interest on fixed capital	3471	2809	1902	1064	1247
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>108806</b>	<b>115311</b>	<b>92138</b>	<b>81400</b>	<b>82539</b>
14	Interest on land value	615599	622989	395759	289141	552274
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>724405</b>	<b>738300</b>	<b>487897</b>	<b>370541</b>	<b>634813</b>
16	Imputed value of household labour	9786	12077	9293	5730	3110
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>734191</b>	<b>750377</b>	<b>497190</b>	<b>376271</b>	<b>637923</b>

### A 2.9 District wise Cost of Cultivation per hectare of Ginger

Sl No	Components	Ernakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	25854	44186	28714	20938	40763
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	7632	1751
4	Seed / seedlings	25067	20864	18100	14918	21976
5	Farmyard manure and chemical fertilizers	27956	28958	11549	10278	27523
6	Plant protection	369	394	546	159	438
7	Land tax and irrigation cess	128	251	130	169	210
8	Repair and maintenance charges of implements, machinery and building	1012	3300	3164	2962	4866
9	Interest on working capital	8708	9721	6029	6040	9785
10	Other expenses	9353	2812	1377	6474	5392
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>96923</b>	<b>110486</b>	<b>69609</b>	<b>69570</b>	<b>112709</b>
12	Interest on fixed capital	1229	2875	3876	12817	5488
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>98152</b>	<b>113361</b>	<b>73485</b>	<b>82387</b>	<b>118197</b>
14	Interest on land value	405234	320560	326651	260022	281416
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>503386</b>	<b>433921</b>	<b>400136</b>	<b>342409</b>	<b>399613</b>
16	Imputed value of household labour	9607	8293	11994	9350	3528
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>512993</b>	<b>442214</b>	<b>412130</b>	<b>351759</b>	<b>403141</b>

### A 2.9 District wise Cost of Cultivation per hectare of Ginger

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	42314	35145	46031	35132	34563
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	1874
4	Seed / seedlings	24721	29558	22132	28082	22074
5	Farmyard manure and chemical fertilizers	24451	22827	10393	15668	17193
6	Plant protection	1183	230	197	616	357
7	Land tax and irrigation cess	396	368	174	454	221
8	Repair and maintenance charges of implements, machinery and building	4808	3107	1436	3209	2669
9	Interest on working capital	9468	9052	8113	8608	8093
10	Other expenses	2014	2764	2373	6582	4870
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>109355</b>	<b>103051</b>	<b>90849</b>	<b>98351</b>	<b>91914</b>
12	Interest on fixed capital	1848	1149	3577	13709	5368
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>111203</b>	<b>104200</b>	<b>94426</b>	<b>112060</b>	<b>97282</b>
14	Interest on land value	241723	263123	243466	205965	317618
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>352926</b>	<b>367323</b>	<b>337892</b>	<b>318025</b>	<b>414900</b>
16	Imputed value of household labour	14480	7265	11462	9797	9046
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>367406</b>	<b>374588</b>	<b>349354</b>	<b>327822</b>	<b>423946</b>

### A 2.10 District wise Cost of Cultivation per hectare of Turmeric

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	43573	31793	40610	27181	26831
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	19616	22716	12142	14266	17540
5	Farmyard manure and chemical fertilizers	12369	11923	12079	16192	14550
6	Plant protection	2813	529	1687	2471	1740
7	Land tax and irrigation cess	750	360	1875	547	620
8	Repair and maintenance charges of implements, machinery and building	741	833	1261	582	1008
9	Interest on working capital	8374	6922	6933	6307	6485
10	Other expenses	5369	2198	2812	2956	4192
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>93605</b>	<b>77334</b>	<b>79399</b>	<b>70502</b>	<b>72966</b>
12	Interest on fixed capital	2242	2974	2835	1197	1414
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>95847</b>	<b>80308</b>	<b>82234</b>	<b>71699</b>	<b>74380</b>
14	Interest on land value	253430.	211628	259881	231232	254400
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>349277</b>	<b>291936</b>	<b>342115</b>	<b>302931</b>	<b>328780</b>
16	Imputed value of household labour	8566	6245	6808	6699	5036
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>357843</b>	<b>298181</b>	<b>348923</b>	<b>309630</b>	<b>333816</b>



### A 2.10 District wise Cost of Cultivation per hectare of Turmeric

Sl No	Components	Eranakulam	Idukki	Thrissur	Palakkad	Wayanad
1	Hired human labour	36196	29456	28541	48334	36036
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	12329	13450	13163	11487	12785
5	Farmyard manure and chemical fertilizers	14593	10198	12138	6554	6847
6	Plant protection	0	0	2031	969	1305
7	Land tax and irrigation cess	485	176	120	72	642
8	Repair and maintenance charges of implements, machinery and building	1291	1488	2431	2865	3410
9	Interest on working capital	6715	5518	6138	7015	6004
10	Other expenses	4034	2074	5510	2808	3071
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>75643</b>	<b>62360</b>	<b>70072</b>	<b>80104</b>	<b>70100</b>
12	Interest on fixed capital	4636	1124	1374	1489	2157
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>80279</b>	<b>63484</b>	<b>71446</b>	<b>81593</b>	<b>72257</b>
14	Interest on land value	234768	292336	257792	285694	231696
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>305017</b>	<b>355820</b>	<b>329238</b>	<b>367287</b>	<b>303953</b>
16	Imputed value of household labour	5026	1445	6514	10044	5818
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>320073</b>	<b>357265</b>	<b>335752</b>	<b>377331</b>	<b>309771</b>

### A 2.10 District wise Cost of Cultivation per hectare of Turmeric

Sl No	Components	Malappuram	Kozhikkode	Kannur	Kasaragod	State
1	Hired human labour	33737	35360	37372	30929	35507
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	16091	12579	14209	14826	16889
5	Farmyard manure and chemical fertilizers	12451	11145	9288	11311	10819
6	Plant protection	0	1278	0	0	756
7	Land tax and irrigation cess	857	1136	1022	1028	359
8	Repair and maintenance charges of implements, machinery and building	2844	3814	3366	2026	1634
9	Interest on working capital	6458	6355	6244	6044	6672
10	Other expenses	2299	3216	1568	3377	2748
<b>11</b>	<b>Total cost 'A' (1-10)</b>	<b>74737</b>	<b>74853</b>	<b>73069</b>	<b>69541</b>	<b>75384</b>
12	Interest on fixed capital	1630	1833	3800	3185	2271
<b>13</b>	<b>Cost 'B1' (11+12)</b>	<b>76367</b>	<b>76686</b>	<b>76869</b>	<b>72726</b>	<b>77655</b>
14	Interest on land value	219486	238318	218982	233098	229946
<b>15</b>	<b>Cost 'B' (13+14)</b>	<b>295853</b>	<b>315004</b>	<b>295851</b>	<b>305824</b>	<b>307601</b>
16	Imputed value of household labour	11898	10732	12798	9016	6754
<b>17</b>	<b>Cost 'C' (15+16)</b>	<b>307751</b>	<b>325736</b>	<b>308649</b>	<b>314840</b>	<b>314355</b>

**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	34.7	50.93	85.63
2	Kollam	31.19	52.15	85.34
3	Pathanamthitta	46.54	46.78	93.32
4	Alappuzha	33.76	57.05	90.81
5	Kottayam	41.12	42.53	83.65
6	Eranakulam	25.15	57.94	83.09
7	Idukki	36.23	51.12	87.35
8	Thrissur	23.39	58.35	81.74
9	Palakkad	18.88	57.60	76.48
10	Wayanad	0	0	0
11	Malappuram	24.97	56.43	81.4
12	Kozhikkode	28.61	46.92	75.53
13	Kannur	26.7	70.59	97.28
14	Kasaragod	34.31	54.88	89.18
	<b>State</b>	<b>30.21</b>	<b>53.90</b>	<b>84.11</b>

**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	32.24	57.84	90.08
2	Kollam	26.25	62.21	88.46
3	Pathanamthitta	27.81	59.41	87.22
4	Alappuzha	41.54	53.65	95.19
5	Kottayam	23.47	53.78	81.24
6	Eranakulam	36.55	45.12	81.67
7	Idukki	37.4	57.49	94.89
8	Thrissur	20.05	69.72	89.76
9	Palakkad	16.38	67.29	83.67
10	Wayanad	28.45	56.02	84.47
11	Malappuram	40.46	42.79	83.25
12	Kozhikkode	24.93	54.28	79.29
13	Kannur	33.72	64.85	98.56
14	Kasaragod	16.52	43.07	59.59
	<b>State</b>	<b>37.60</b>	<b>54.10</b>	<b>91.70</b>

**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	29.0	51.76	80.76
2	Kollam	48.63	40.45	89.09
3	Pathanamthitta	32.65	56.43	89.07
4	Alappuzha	29.51	64.61	94.12
5	Kottayam	25.19	68.51	93.7
6	Eranakulam	21.56	41.48	63.04
7	Idukki	24.51	32.3	56.8
8	Thrissur	37.4	57.49	94.89
9	Palakkad	36.13	43.17	79.3
10	Wayanad	27.07	39.96	67.03
11	Malappuram	27.35	53.45	80.83
12	Kozhikkode	22.48	40.0	62.47
13	Kannur	36.93	61.86	98.79
14	Kasaragod	20.13	50.13	71.05
	<b>State</b>	<b>33.98</b>	<b>47.74</b>	<b>81.72</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	70.89	17.95	88.84
2	Kollam	78.53	2.29	80.82
3	Pathanamthitta	67.02	18.33	85.35
4	Alappuzha	44.13	26.92	71.05
5	Kottayam	63.78	12.38	76.16
6	Eranakulam	55.26	15.78	71.04
7	Idukki	15.37	47.76	63.13
8	Thrissur	41	25.45	66.45
9	Palakkad	50.7	25.67	76.37
10	Wayanad	75.97	7.51	83.48
11	Malappuram	46.17	34.72	80.89
12	Kozhikkode	52.86	24.59	77.45
13	Kannur	58.41	23.68	82.09
14	Kasaragod	44.41	15.94	60.35
	<b>State</b>	<b>48.39</b>	<b>26.55</b>	<b>74.94</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	71.85	4.68	76.53
2	Kollam	53.06	11.15	64.21
3	Pathanamthitta	37.05	30.54	67.59
4	Alappuzha	28.96	24.71	53.67
5	Kottayam	54.70	6.19	60.89
6	Eranakulam	46.84	15.42	62.27
7	Idukki	17.56	19.90	37.46
8	Thrissur	62.19	21.70	83.90
9	Palakkad	38.85	20.26	59.11
10	Wayanad	73.94	15.72	89.66
11	Malappuram	67.23	13.24	80.47
12	Kozhikkode	52.50	10.50	63.01
13	Kannur	71.49	23.53	95.02
14	Kasaragod	32.43	23.38	55.82
	<b>State</b>	<b>52.45</b>	<b>16.77</b>	<b>69.22</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	57.70	30.33	88.03
2	Kollam	53.52	37.67	91.18
3	Pathanamthitta	50.86	34.96	85.82
4	Alappuzha	33.16	6.69	39.85
5	Kottayam	57.11	22.2	79.31
6	Eranakulam	43.29	27.58	70.87
7	Idukki	21.65	17.17	38.82
8	Thrissur	52.04	32.64	84.68
9	Palakkad	31.23	27.31	58.54
10	Wayanad	38.7	44.42	83.12
11	Malappuram	50.05	21.49	71.54
12	Kozhikkode	41.7	40.67	82.37
13	Kannur	31.68	13.48	45.16
14	Kasaragod	31.68	13.48	45.16
	<b>State</b>	<b>40.67</b>	<b>33.93</b>	<b>74.60</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	77.49	0.81	78.3
2	Kollam	49.41	34.88	84.29
3	Pathanamthitta	60.04	28.12	88.16
4	Alappuzha	57.68	24.09	81.77
5	Kottayam	50.44	17.82	68.26
6	Eranakulam	52.47	24.22	76.69
7	Idukki	38.37	7.48	45.85
8	Thrissur	47.67	25.44	73.11
9	Palakkad	53.94	28.72	82.66
10	Wayanad	69.54	13.37	82.91
11	Malappuram	35.96	23.74	59.70
12	Kozhikkode	57.3	3.52	60.82
13	Kannur	34.27	57.92	92.19
14	Kasaragod	45.42	19.99	65.41
	<b>State</b>	<b>50.32</b>	<b>23.17</b>	<b>73.49</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	56.2	23.95	80.15
2	Kollam	67.85	21.95	89.8
3	Pathanamthitta	46.41	19.05	65.46
4	Alappuzha	33.48	33.96	67.44
5	Kottayam	62.91	16.43	79.34
6	Eranakulam	42.6	27.31	69.91
7	Idukki	47.95	27.26	75.21
8	Thrissur	45.2	34.39	79.59
9	Palakkad	36.07	38.39	74.46
10	Wayanad	40.77	38.55	79.32
11	Malappuram	50.86	34.67	85.53
12	Kozhikkode	47.44	40.85	88.29
13	Kannur	41.79	56.34	98.13
14	Kasaragod	19.55	22.76	42.31
	<b>State</b>	<b>44.62</b>	<b>33.69</b>	<b>78.31</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	30.46	32.31	62.77
2	Kollam	54.35	34.65	89.00
3	Pathanamthitta	56.20	29.63	85.83
4	Alappuzha	84.58	2.16	86.74
5	Kottayam	28.37	28.3	56.67
6	Eranakulam	27.38	37.93	65.31
7	Idukki	31.7	22.47	54.17
8	Thrissur	39.58	26.38	65.96
9	Palakkad	52.98	29.36	82.34
10	Wayanad	35.01	28.21	63.22
11	Malappuram	52.51	29.3	81.81
12	Kozhikkode	41.17	19.05	60.22
13	Kannur	85.68	11.32	97.0
14	Kasaragod	23.06	17.03	40.09
	<b>State</b>	<b>41.40</b>	<b>27.54</b>	<b>68.94</b>

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

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	57.24	20.58	77.82
2	Kollam	33.19	52.15	85.34
3	Pathanamthitta	55.50	33.09	88.59
4	Alappuzha	52.89	31.11	84.0
5	Kottayam	37.66	1.69	39.35
6	Eranakulam	26.74	30.8	57.54
7	Idukki	26.91	25.95	52.86
8	Thrissur	38.41	38.1	76.51
9	Palakkad	41.42	44.72	86.14
10	Wayanad	27.15	35.37	62.52
11	Malappuram	53.55	40.19	93.74
12	Kozhikkode	25.59	17.38	42.97
13	Kannur	57.32	23.15	80.47
14	Kasaragod	24.98	21.86	46.84
	<b>State</b>	<b>33.58</b>	<b>33.61</b>	<b>67.19</b>

**A4.1 District wise Value of product and by-product per hectare of Autumn Paddy**

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	46898	12037	58935
2	Kollam	38418	10592	49010
3	Pathanamthitta	41020	3135	44155
4	Alappuzha	58245	3135	61380
5	Kottayam	48095	2079	50174
6	Eranakulam	36799	5717	42516
7	Idukki	27584	2012	29596
8	Thrissur	35971	4608	40579
9	Palakkad	55611	4046	59657
10	Wayanad	0	0	0
11	Malappuram	48153	3394	51547
12	Kozhikkode	26698	17816	44514
13	Kannur	33807	3375	37183
14	Kasaragod	45764	10121	55885
	<b>State</b>	<b>41697</b>	<b>5291</b>	<b>46988</b>



**A4.2 District wise Value of product and by-product per hectare of Winter Paddy**

SI No	District	Product	By Product	Total
1	Thiruvananthapuram	48198	10757	58955
2	Kollam	48744	7297	56041
3	Pathanamthitta	48092	9685	57777
4	Alappuzha	62775	3373	66148
5	Kottayam	49063	8295	57358
6	Eranakulam	30615	5339	35954
7	Idukki	47647	3097	50744
8	Thrissur	40841	5887	46728
9	Palakkad	39345	6966	46311
10	Wayanad	41604	11615	53219
11	Malappuram	37572	14289	51861
12	Kozhikkode	46726	12160	58885
13	Kannur	54629	8020	62649
14	Kasaragod	42642	9573	52214
	<b>State</b>	<b>45113</b>	<b>7434</b>	<b>52547</b>

**A4.3 District wise Value of product and by-product per hectare of Summer Paddy**

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	42713	13809	56522
2	Kollam	23405	10677	34082
3	Pathanamthitta	42418	11512	53930
4	Alappuzha	38106	4553	42660
5	Kottayam	39756	3273	43029
6	Eranakulam	21738	5105	26843
7	Idukki	49379	11289	60668
8	Thrissur	68664	7234	75898
9	Palakkad	56017	6601	62618
10	Wayanad	64521	10781	75302
11	Malappuram	64182	6782	70964
12	Kozhikkode	34614	13649	48263
13	Kannur	45438	8954	54393
14	Kasaragod	40059	12752	52811
	<b>State</b>	<b>44973</b>	<b>6919</b>	<b>51891</b>

**A4.4 District wise Value of product and by-product per hectare of  
Coconut**

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	55955	3795	59750
2	Kollam	56809	2666	59475
3	Pathanamthitta	46318	2525	48844
4	Alappuzha	36119	5516	41635
5	Kottayam	55404	1871	57275
6	Eranakulam	63115	2045	65160
7	Idukki	53466	1509	54975
8	Thrissur	64435	2914	67349
9	Palakkad	33986	1081	35067
10	Wayanad	65414	1143	66557
11	Malappuram	88549	1062	89611
12	Kozhikkode	44007	3912	47919
13	Kannur	36306	1333	37639
14	Kasaragod	71987	1536	73523
	<b>State</b>	<b>54240</b>	<b>4207</b>	<b>58446</b>

**A4.5 District wise Value of product and by-product per hectare of  
Arecanut ,Tapioca and Banana.**

Sl No	District	Arecanut	Tapioca	Banana
1	Thiruvananthapuram	46857	176908	449807
2	Kollam	78209	186719	426518
3	Pathanamthitta	52371	187509	309400
4	Alappuzha	40593	170094	391312
5	Kottayam	58792	209456	293780
6	Eranakulam	57847	121337	348537
7	Idukki	40785	144982	223881
8	Thrissur	154633	152897	599124
9	Palakkad	56090	156266	228972
10	Wayanad	52087	97428	222916
11	Malappuram	108522	236537	402371
12	Kozhikkode	150751	301730	328136
13	Kannur	53687	129443	375981
14	Kasaragod	113254	134538	315286
	<b>State</b>	<b>68520</b>	<b>158096</b>	<b>328464</b>

**A4.6 District wise Value of product and by-product per hectare of  
Pepper,Ginger&Turmeric.**

Sl No	District	Pepper	Ginger	Turmeric
1	Thiruvananthapuram	166040	172314	94239
2	Kollam	195842	151124	68080
3	Pathanamthitta	195573	162042	107641
4	Alappuzha	231985	104309	91047
5	Kottayam	232636	111457	85577
6	Eranakulam	179340	134846	79896
7	Idukki	143634	163344	52689
8	Thrissur	113999	101545	88781
9	Palakkad	142643	109827	89845
10	Wayanad	277938	123686	109643
11	Malappuram	91538	121294	120754
12	Kozhikkode	393127	144976	97817
13	Kannur	28696	97226	114536
14	Kasaragod	400973	149148	108825
	<b>State</b>	<b>144219</b>	<b>122196</b>	<b>78321</b>