



Government of Kerala

***Report On
Cost of Cultivation of
Important Crops in Kerala
2014-15***

**Department of Economics & Statistics
KERALA
2016**

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. In connection with this, department conducts annual survey on Cost of Cultivation of Important Crops in Kerala.

This report is based on the field survey on Cost of Cultivation of Important Crops conducted during the year 2014-15. The crops covered are Paddy (3 seasons), Coconut, Arecanut, Pepper, Banana, Tapioca, Ginger, Turmeric, Bitter Gourd (3 seasons), Cowpea (3 seasons), Pineapple and Cardamom.

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

The field work of the survey was carried out by the Statistical Investigator/ Enumerators posted in the concerned Taluk Statistical Offices. 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 and other data users.

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

Thiruvananthapuram.
24/03/2017

Sd /
V.Ramachandran
Director General

CONTENTS

			Page No.
Chapter – 1	1	General	1
Chapter – 2	2	Results of the Survey	9
	2.1.1	Paddy-Autumn	9
	2.1.2	Paddy-Winter	15
	2.1.3	Paddy-Summer	21
	2.2	Coconut	26
	2.3	Arecanut	29
	2.4	Tapioca	32
	2.5	Banana	36
	2.6	Pepper	39
	2.7	Ginger	42
	2.8	Turmeric	45
	2.9	Pineapple	48
	2.10.1	Bitter gourd-Autumn	51
	2.10.2	Bitter gourd-Winter	53
	2.10.3	Bitter gourd-Summer	56
	2.11.1	Cowpea-Autumn	59
	2.11.2	Cowpea-Winter	62
	2.11.3	Cowpea-Summer	65
	2.12	Cardamom	68
Appendix	A1	District wise Area and Number of holdings	72
	A2	District wise cost of Cultivation	90
	A3	Percentage of Hired Humen Labour hour to Total Humen Labour hour	142
	A4	District wise Value of Product and by Product	151

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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 35th round of survey conducted during the agricultural year 2014-15.

The crops covered under the round are given below:-

1.	Paddy (3 seasons)
2.	Coconut
3.	Arecanut
4.	Tapioca
5.	Banana
6.	Pepper
7.	Ginger
8.	Turmeric
9.	Pineapple
10.	Bitter gourd (3 seasons)
11.	Cowpea (3 Seasons)
12.	Cardamom

Objectives

The main objective of this survey is 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) 2014-15

1.4. Design of the Survey

The survey covered all the districts in the state by considering taluk as a stratum. From each Taluk, required number of investigator zones were selected using circular systematic sampling method. Crop wise details and number of zones are given below.

Sl. No	Name of crop	Number of Zones
1	Coconut, Arecanut	4
2	Paddy, Tapioca, Banana, Pepper, Ginger, Turmeric Pineapple, Cardamom.	3
3	Cowpea, Bitter gourd	2

Selection of cultivators

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

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

If sufficient numbers of suitable plots of other crops are not available with in 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 during the previous 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.

Number of holdings selected for each crops in a Taluk:

1	Paddy	Autumn	15 (5 holdings each from one Investigator zone)
		Winter	15 (5 holdings each from one Investigator zone)
		Summer	15 (5 holdings each from one Investigator zone)
2	Coconut		20 (5 holdings each from one Investigator zone)
3	Arecanut		20 (5 holdings each from one Investigator zone)
4	Pepper		15 (Minimum 2 holdings in one Investigator zone)
5	Banana		15 (Minimum 2 holdings in one Investigator zone)
6	Tapioca		15 (Minimum 2 holdings in one Investigator zone)
7	Ginger		15 (Minimum 2 holdings in one Investigator zone)
8	Turmeric		15 (Minimum 2 holdings in one Investigator zone)
9	Pineapple		15 (5 holdings each from one Investigator zone)
10	Bitter gourd	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)
11	Cowpea	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)
12	Cardamom		15 (5 holdings each from one Investigator zone)

A holding is to be considered for the study only if the crop coverage is at least 25 cents in the case of Paddy and Cardamom, 10 cents for tapioca, banana and Pineapple and 5 cents for Ginger, Turmeric, Cowpea and Bitter gourd. 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 in the selected holding.

The holdings are grouped under three size classes (small, medium and large) for each crop on the basis of the area under the crops in the holding as:

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

Schedules used 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	Recorded cost incurred for growing the selected crop in each fortnight.

1.6 Field work

Fieldwork was done in 61 Taluks. One Investigator /enumerators is posted in each Taluk for this purpose. The investigators visited the selected holdings/cultivators every fortnight/three weeks/one month/two month and recorded fortnightly details of agricultural operations in schedule 5. Periodicity of visit will be vary according to the type of crop. Periodicity of visit are given below

Sl. No	Name of crop	Periodicity
1	Cowpea, Bittergaurd	Fortnight
2	Paddy	Three weeks
3	Cardamom	One month
4	Coconut, Arecanut, Pepper, Tapioca, Banana, Ginger, Turmeric, Pineapple.	Two months

The fieldwork was supervised by Taluk Statistical Officer/Statistical Inspector at the Taluk level and Deputy Director/ District officer /other district level supervisory officer at the District level.

1.7 Processing and Analysis of Data

The compilation and tabulation were done at the district and consolidation of data, the report writing and analysis were done at the Directorate.

1.8 Method of Estimation

(a) Concepts of Cost.

Cost incurred for growing the selected crops are classified under, cost 'A' cost 'B1', Cost 'B' and Cost 'C' and the analysis of the data is made as: **Cost 'A'**

Cost 'A' All kind of expenses (paid out costs) actually incurred by the cultivators. includes:

- i. Hired human labour
- ii. Animal labour
- iii. Machine labour
- iv. Seed/ seedlings
- 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, the value of input used out of home stock are inputted. The procedures used for the imputation of values of such home stock inputs are:

- | | | |
|-----|---|--|
| 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 in 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 costs to different crops

Some of the inputs used for the cultivation of one crop are common for 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) | prices prevailing in the locality |
| II | Implements and other machinery | prevalent market prices |
| III | Livestock (only draught animals) | 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 of agricultural land.

CHAPTER 2

RESULTS OF THE SURVEY

The crops selected for this round of study are Paddy, Cowpea and Bitter gourd (autumn, winter and summer) seasons and the remaining crops Coconut, Tapioca, Banana, Pepper, Arecanut, Ginger, Turmeric, Pineapple and Cardamom for the whole year. The cost of cultivation of crops are calculated under three different cost concepts viz Cost 'A', Cost 'B', and Cost 'C' respectively.

2.1.1 Paddy- Autumn during 2014-15

For this study details of holding selected and area coverage are given below. The data collected from 747 holding according to the size class by covering 596.40 hectares of land. It is observed that the average area per holding is 0.80 hectares in all classes while area per holding in large size class, ie more than two hectares is 4.01 hectares per holdings. But in small size class, ie, less than 0.40 hectare which comprises 16.48% holdings, the average area per holding is only 0.23 hectare.

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	422	98.30	16.48	0.23
Medium	258	229.40	38.46	0.89
Large	67	268.70	45.05	4.01
Total	747	596.40	100	0.80

Cost of cultivation

Under the Cost A ie; paid out cost actually incurred by the cultivators 56.02 percent of cost incurred against hired human labour is the highest. Machine labour cost shares 15.77% and farmyard manure and chemical fertilizers accounts to 10.08 % respectively. In holdings size class less than 0.40 hectare, cost under hired human labour is more, ie, 69.99% against total cost under Cost A while in size class above two hectares, the cost percentage under hired human labour is coming down to 56.74 percent. Similarly per hectare cost difference between large and small size class is Rs 39636.

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	56577	27994	18610	28511
2	Animal labour	147	79	0	55
3	Machine labour	7286	7638	8626	8024
4	Seed / seedlings	1894	1977	2348	2130
5	Farmyard manure and chemical fertilizers	6277	5567	4338	5132
6	Plant protection	483	389	307	368
7	Land tax and irrigation cess	227	134	99	133
8	Repair and maintenance charges of implements, machinery and building	751	251	103	267
9	Interest on working capital	3803	2331	1952	2405
10	Other expenses	3389	2971	4815	3870
11	Total cost 'A' (1-10)	80834	49331	41198	50895
12	Interest on fixed capital	904	347	240	391
13	Cost 'B1' (11+12)	81738	49678	41438	51286
14	Interest on land value	125037	65819	27328	58321
15	Cost 'B' (13+14)	206775	115497	68766	109607
16	Imputed value of household labour	9975	4756	2866	4771
17	Cost 'C' (15+16)	216750	120253	71632	114378

Percentage Distribution of “COST A” per hectare of Autumn paddy during 2014-15

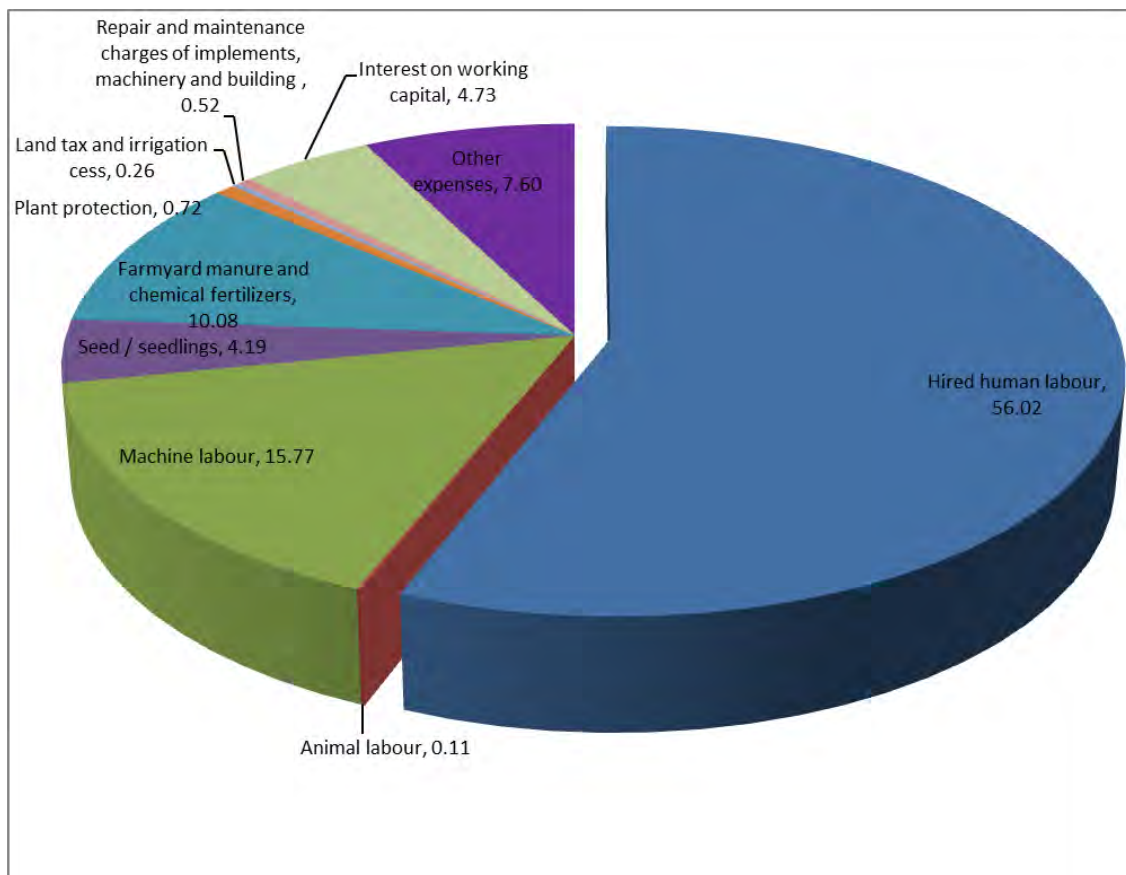


Table 3: Percentage of hired human labour hours to total human labour hours

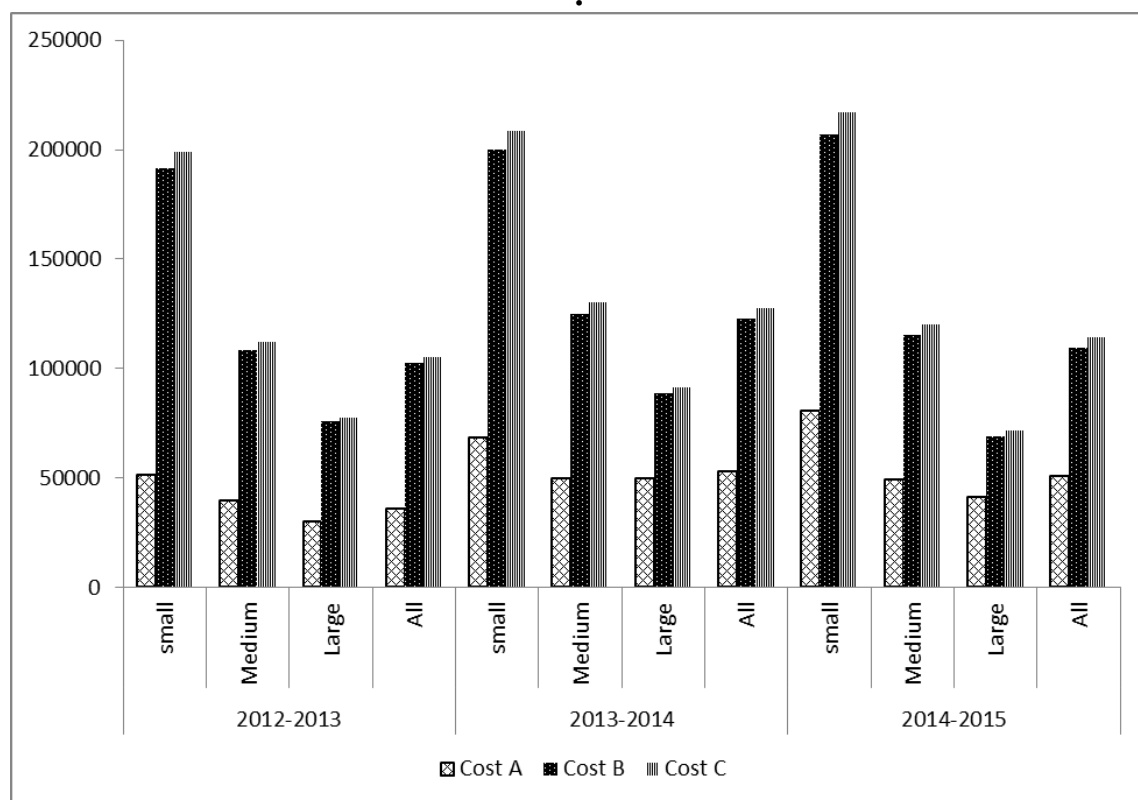
Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	15.82	30.39	26.83	24.34
Female	24.83	51.64	52.23	43.69
Total	40.65	82.03	79.06	68.03

In Autumn paddy cultivation 43.69 % of total labour hours shares to female participation.

Table 4: Cost of cultivation of Autumn paddy per hectare (in Rs.) during 2012-13, 2013-2014 and 2014-15

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2012-13	51551	39812	29846	35968
	2013-14	68502	49906	49543	53142
	2014-15	80834	49331	41198	50895
Cost 'B'	2012-13	191557	108306	76028	102303
	2013-14	200046	124667	88569	122882
	2014-15	206775	115497	68766	109607
Cost 'C'	2012-13	198950	112064	77249	105174
	2013-14	208371	129939	91384	127653
	2014-15	216750	120253	71632	114378

Cost of cultivation of Autumn paddy per hectare (in Rs.) - during 2012-13, 2013-2014 and 2014-15



The last three years data shows substantial increase in cost of paddy cultivation in the state. Cost A per hectre of Autumn paddy in 2014-15 is increased by Rs. 14927 as compared to cost in 2012-13.

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 2014-15 for producing one quintal of paddy Rs.1630/- 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 2012-13, 2013-14 and 2014-15

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2012-13	2005	1679	958	1277
	2013-14	2083	1461	1401	1543
	2014-15	2110	1822	1283	1630
Cost 'B'	2012-13	7451	4568	2437	3634
	2013-14	6084	3650	2505	3569
	2014-15	5398	4265	2142	3511
Cost 'C'	2012-13	7739	4727	2476	3736
	2013-14	6337	3804	2585	3708
	2014-15	5658	4441	2231	3664

Out put

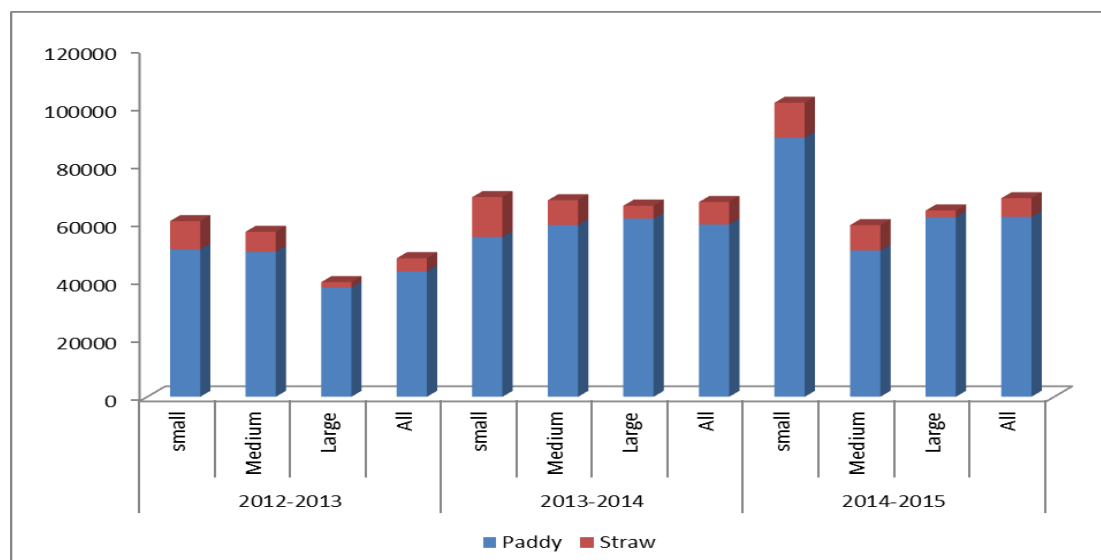
Details of product and by-product per hectare in Autumn Paddy during the last three years

Table 6: Value of product and by-product per hectare (in Rs.) of Autumn paddy during 2012-13, 2013-14 and 2014-15

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2012-13	Paddy	50852	50065	37697	43290
	Straw	9798	6898	1883	4535
	Total	60650	56963	39580	47825
2013-14	Paddy	55177	59280	61473	59475
	Straw	13728	8550	4480	7743
	Total	68905	67830	65953	67218
2014-15	Paddy	89394	50481	61966	62099
	Straw	12079	8765	2315	6413
	Total	101473	59246	64281	68512

Per hectare value of product and by product in Autumn season increased considerably during 2014-15 compared to last two years. Percentage change in value of product and by product between the year 2012-13 and 2014-15 is 43.26%, but in the same period cost increased by 41.50% only for Cost A.

VALUE PRODUCT AND BY PRODUCT PER HECTARE OF AUTUMN PADDY DURING 2012-2013, 2013-2014 & 2014-2015



2.1.2 Paddy-Winter during 2014-15

During 2014-15 cost of cultivation study on winter paddy was conducted in 835 holdings according the size class by covering 663.90 hectare of land. The average area per holding during the season under study is 0.80 hectare. In winter season area per holding in large size class is 2.86 hectare and in small size class it is only 0.22 hectare, area per holding is decreased from autumn season

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	384	86.10	12.97	0.22
Medium	354	300.00	45.19	0.85
Large	97	277.80	41.84	2.86
Total	835	663.90	100.00	0.80

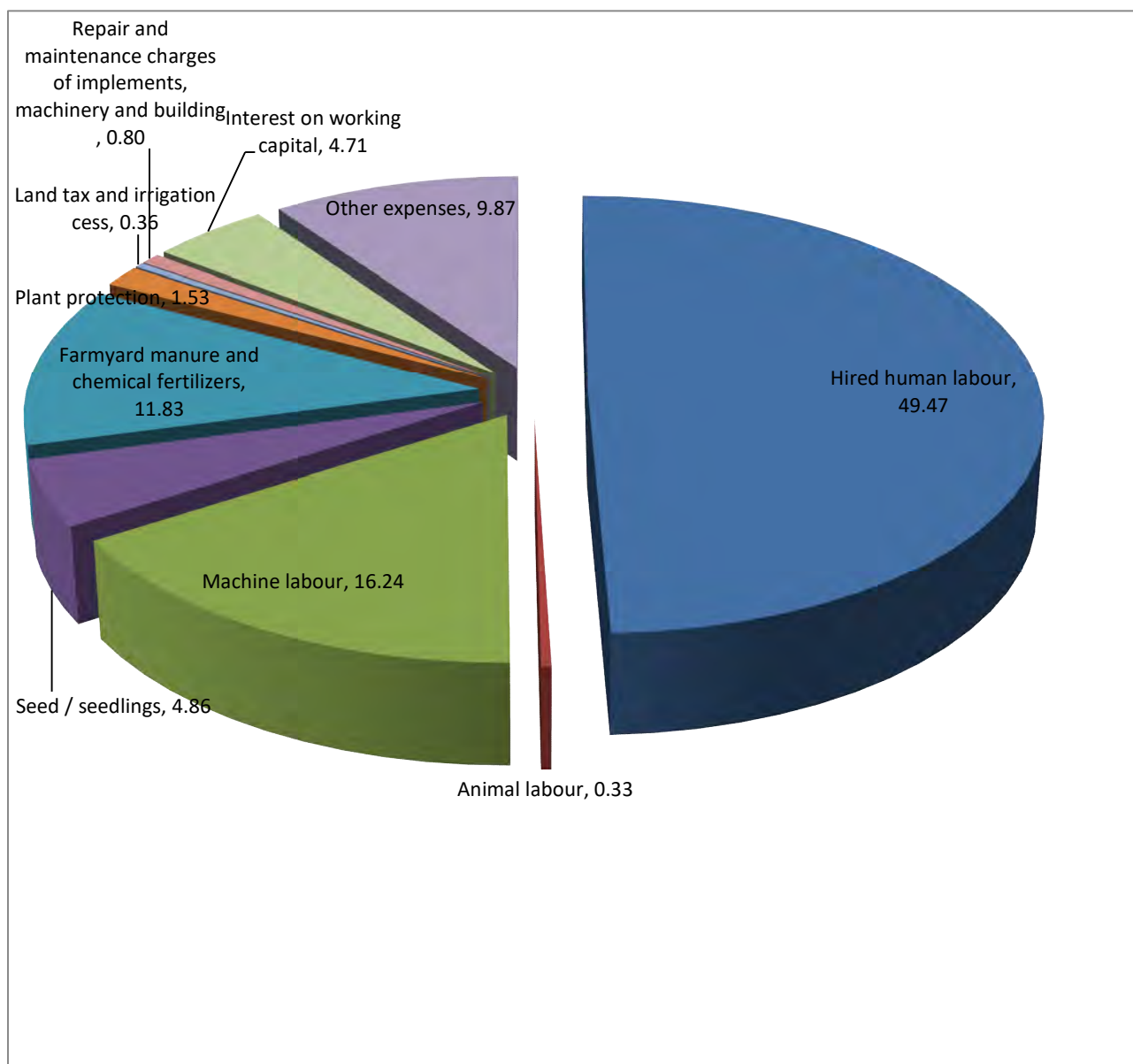
Cost of Cultivation

In Cost A, the paid out cost actually incurred by the cultivator, the major share of the cost component was hired human labour. It constitutes 49.47% per cent. Another two major contributing factor in cost are machine labour and farmyard-manure and chemical fertilizers which constitutes 16.24 % and 11.83 % respectively. Interest on working capital accounts was 4.71%. By considering the various cost component of winter- paddy cultivation of total Cost A it can be seen that per hectare cost calculated as Rs.51851/- which is greater than the cost of autumn season in the tune of Rs 956 per hectare. Considerable reduction in hired human labour component is reported in winter season during 2014-15. Cost difference in human hired labour between small and large size class is Rs 18891.

Table 8: Cost of cultivation per hectare (in Rs.) of Paddy (winter)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	41069	24422	22178	25652
2	Animal labour	153	184	165	172
3	Machine labour	8369	7918	8978	8420
4	Seed / seedlings	2405	2067	3042	2518
5	Farmyard manure and chemical fertilizers	8522	6287	5219	6132
6	Plant protection	819	696	893	795
7	Land tax and irrigation Cess	139	196	196	189
8	Repair and maintenance charges of implements, machinery and building	1262	373	191	413
9	Interest on working capital	3250	2294	2346	2440
10	Other expenses	3670	4313	6444	5120
11	Total Cost 'A' (1-10)	69658	48750	49652	51851
12	Interest on fixed capital	2444	836	280	813
13	Cost 'B1' (11+12)	72102	49586	49932	52664
14	Interest on land value	118189	48522	32383	50850
15	Cost 'B' (13+14)	190291	98108	82315	103514
16	Imputed value of household labour	12756	4255	2759	4737
17	Cost 'C' (15+16)	203047	102363	85074	108251

Percentage Distribution of “COST A” per hectare of winter Paddy during 2014-2015



Sex wise work participation in hired human labours for winter paddy cultivation reveals that 42.91% of work shared by Female whereas 32.59% shared by male workers.

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

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

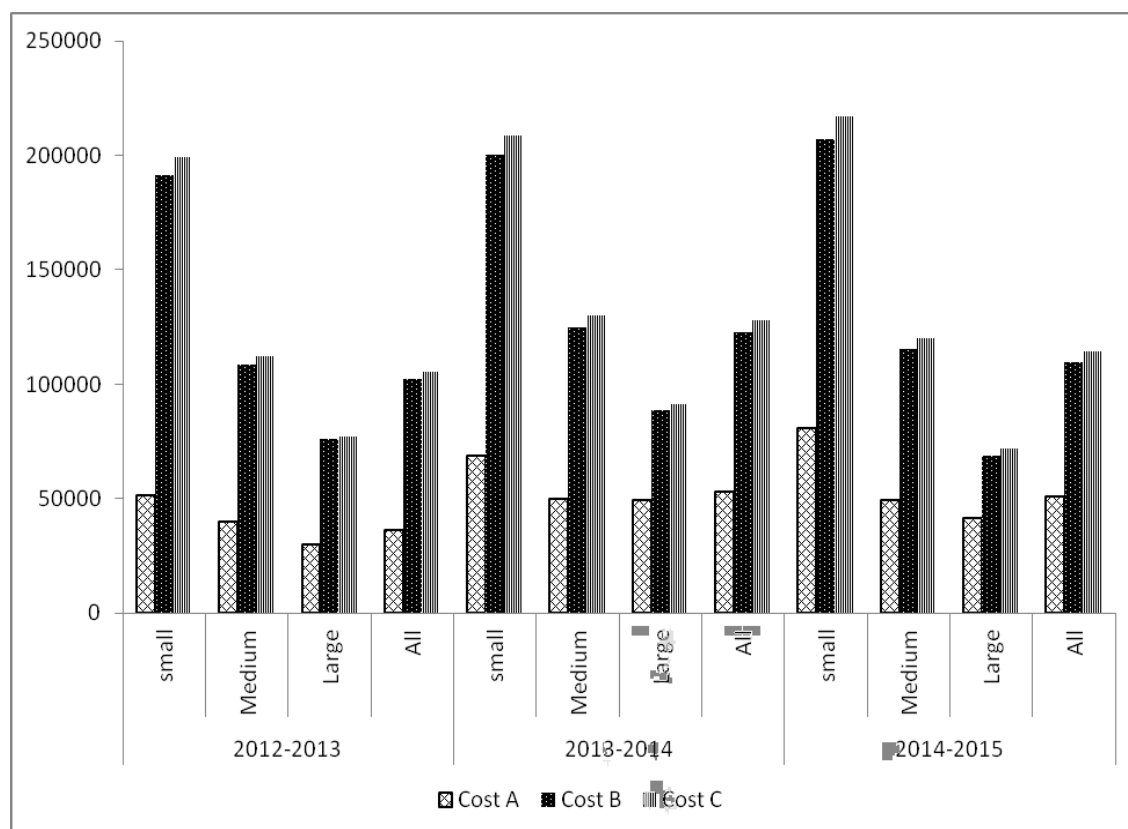
Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	32.64	28.06	39.48	32.59
Female	49.35	34.65	46.64	42.91
Total	81.99	62.72	86.12	75.50

Table 10: Cost of cultivation of Winter paddy per hectare (in Rs) during 2012-13, 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	60407	44064	40142	43955
	2013-14	64190	51101	45399	50166
	2014-15	69658	48750	49652	51851
Cost 'B'	2012-13	185309	129666	89778	115022
	2013-14	190148	141943	97756	127343
	2014-15	190291	98108	82319	103514
Cost 'C'	2012-13	193533	134219	92104	118826
	2013-14	199504	147507	100419	132035
	2014-15	203047	102363	85074	108251

The result of the survey shows an increase of 17.96 percentage of cost during 2014-15 from the year 2012-13. In the bottom size class (small) the cost increased by 15.31 percentage during the same period.

**COST OF CULTIVATION PER HECTARE OF WINTER PADDY DURING
2012-13, 2013-14 & 2014-15**



Cost of production of Winter paddy

**Table 11: Per Quintal Cost (in Rs.) of production of winter paddy during
2012-13, 2013-14 & 2014-15**

Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2012-13	2114	1506	1080	1314
	2013-14	1934	1428	1312	1440
	2014-15	2017	1637	1223	1486
Cost 'B'	2012-13	6469	4433	2414	3439
	2013-14	5734	3968	2825	3655
	2014-15	5511	3296	2027	2965
Cost 'C'	2012-13	6757	4589	2477	3553
	2013-14	6016	4124	2902	3790
	2014-15	5880	3439	2095	3101

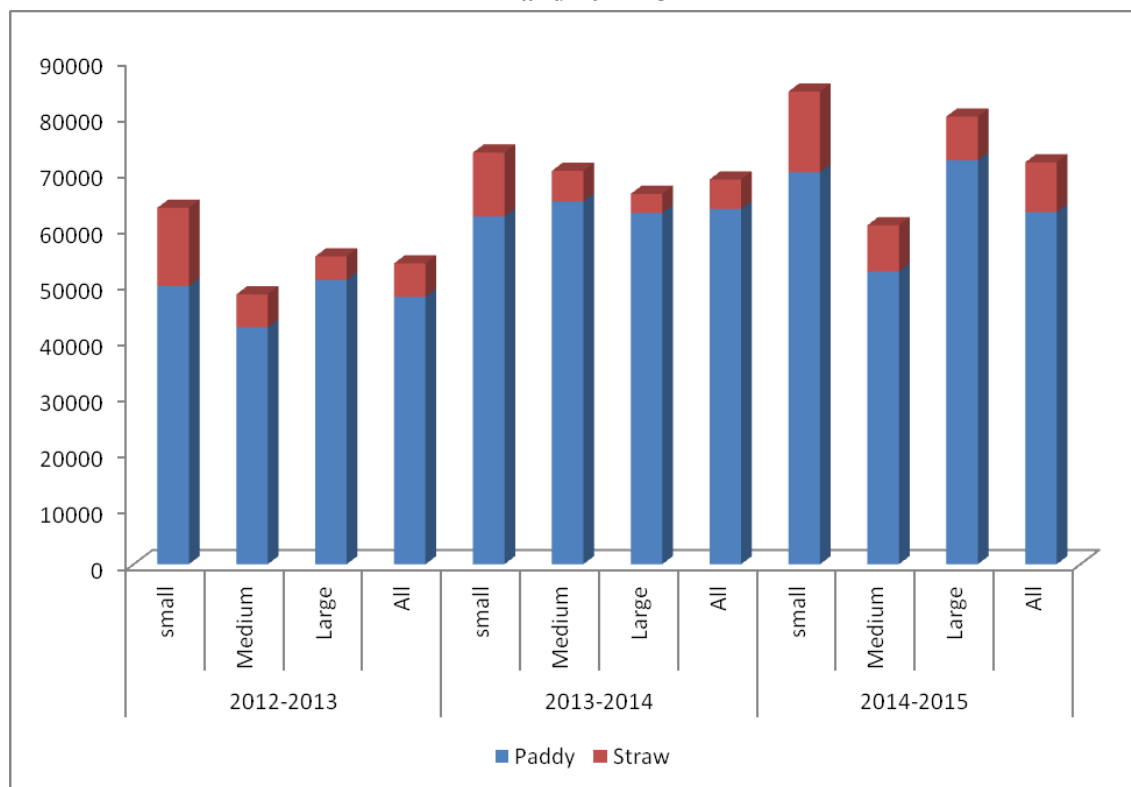
Output

Table 12: Value of Product and Byproduct per hectare (in Rs) of Winter paddy during 2012-13, 2013-14 and 2014-15

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2012-13	Paddy	49635	42245	50724	47709
	Straw	13951	5885	4175	5952
	Total	63586	48130	54899	53661
2013-14	Paddy	62022	64747	62648	63361
	Straw	11415	5419	3414	5282
	Total	73437	70166	66062	68643
2014-15	Paddy	69948	52204	72038	62808
	Straw	14386	8269	7823	8879
	Total	84334	60473	79862	71687

Compared to autumn 2014-15 value of product and by product per hectre increased marginally during the winter season. Similarly per hectare value of product and by product increased by 33.59 percentage in 2014-15 winter season against the value of 2012-13 in the same season.

Value of Product and Byproduct per hectare (in Rs) of Winter paddy during 2012-13, 2013-14 and 2014-15



2.1.3 Paddy - Summer (Punja) during 2014-15

For the cost of cultivation study on summer paddy during 2014-15 the total number of holdings selected was 661. Number of holdings selected in large holding size is 62. The details of these holdings are presented below:

Table 13: Area and number of holdings under Summer Paddy

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	357	73.30	11.95	0.21
Medium	242	202.70	33.04	0.84
Large	62	337.50	55.01	5.44
All Size	661	613.50	100.00	0.93

The above table reveals that the total area under cultivation in the selected sample holdings covers to 613.50 hectares and the average size of a holding is 0.93 hectare. In the large

size class the average area per holding is 5.44 hectare where as in small size class area per holding is 0.21 hectare only.

Cost of Cultivation

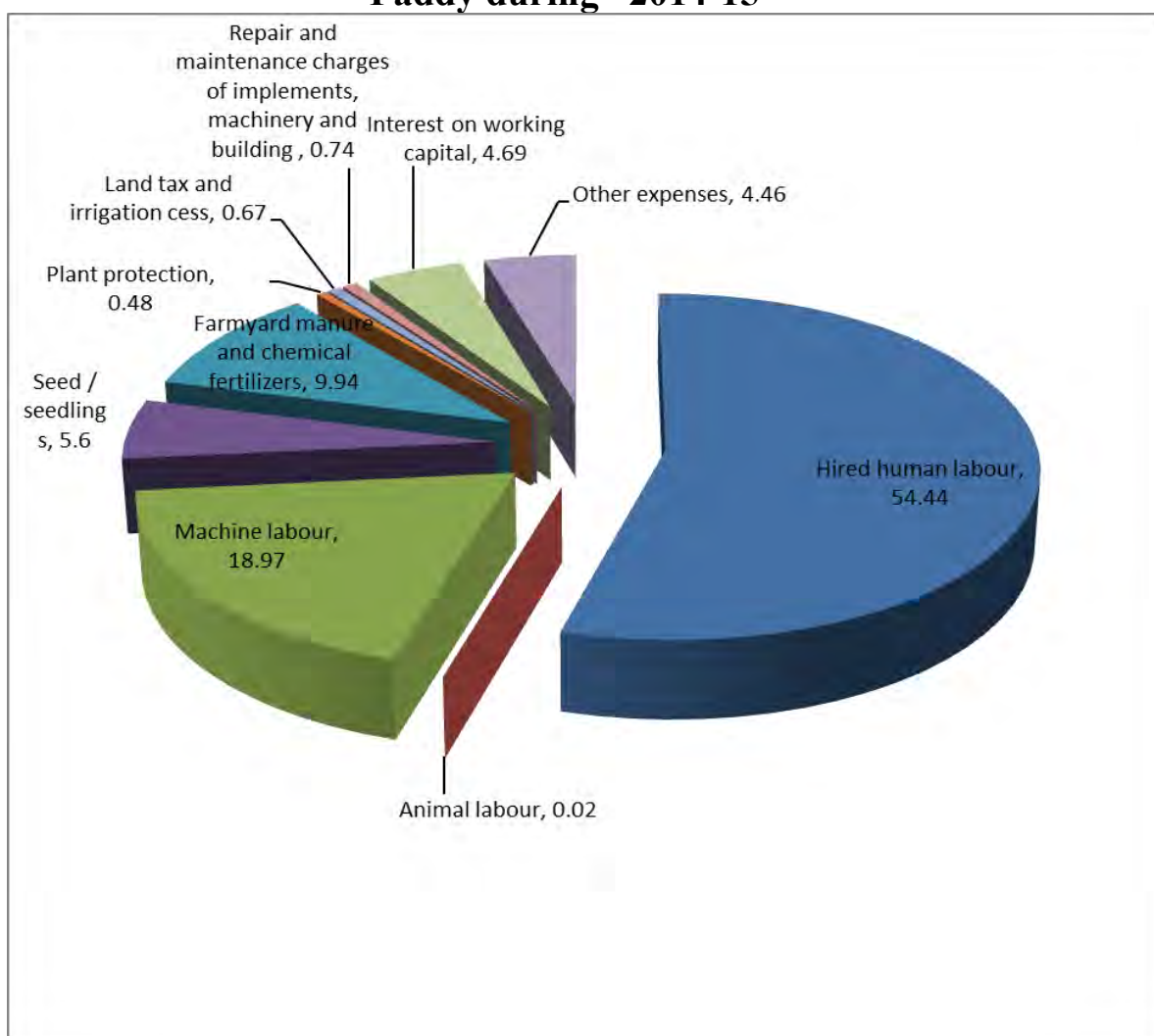
Cost of cultivation of summer paddy per hectare is estimated as Rs. **52312/-** when cost 'A' is considered. Component wise holding size class details are presented below:

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	68775	22878	23026	28477
2	Animal labour	0	30	0	10
3	Machine labour	7655	9762	10517	9924
4	Seed / seedlings	2279	2277	3461	2928
5	Farmyard manure and chemical fertilizers	6855	5178	4849	5199
6	Plant protection	628	351	108	251
7	Land tax and irrigation Cess	453	669	133	349
8	Repair and maintenance charges of implements, machinery and building	1356	555	71	386
9	Interest on working capital	4528	2163	2179	2456
10	Other expenses	4375	2782	1614	2332
11	Total Cost 'A' (1-10)	96904	46645	45958	52312
12	Interest on fixed capital	987	325	176	323
13	Cost 'B1' (11+12)	97891	46970	46134	52635
14	Interest on land value	120451	64012	46968	61435
15	Cost 'B' (13+14)	218342	110982	93102	114070
16	Imputed value of household labour	12035	5990	3157	5160
17	Cost 'C' (15+16)	230377	116972	96259	119230

Out of the total cost incurred for crop husbandry more than 54.44 percent cost goes to human labour component. Similarly compare to last two seasons a slight increase in total cost during the summer season is reported.

Percentage Distribution of “COST A” per hectare of summer Paddy during 2014-15



In summer paddy cultivation hired female labour participation accounted as 44.33 % and that of male labour participation is 35.57% to the total labour hours. Details are given below:

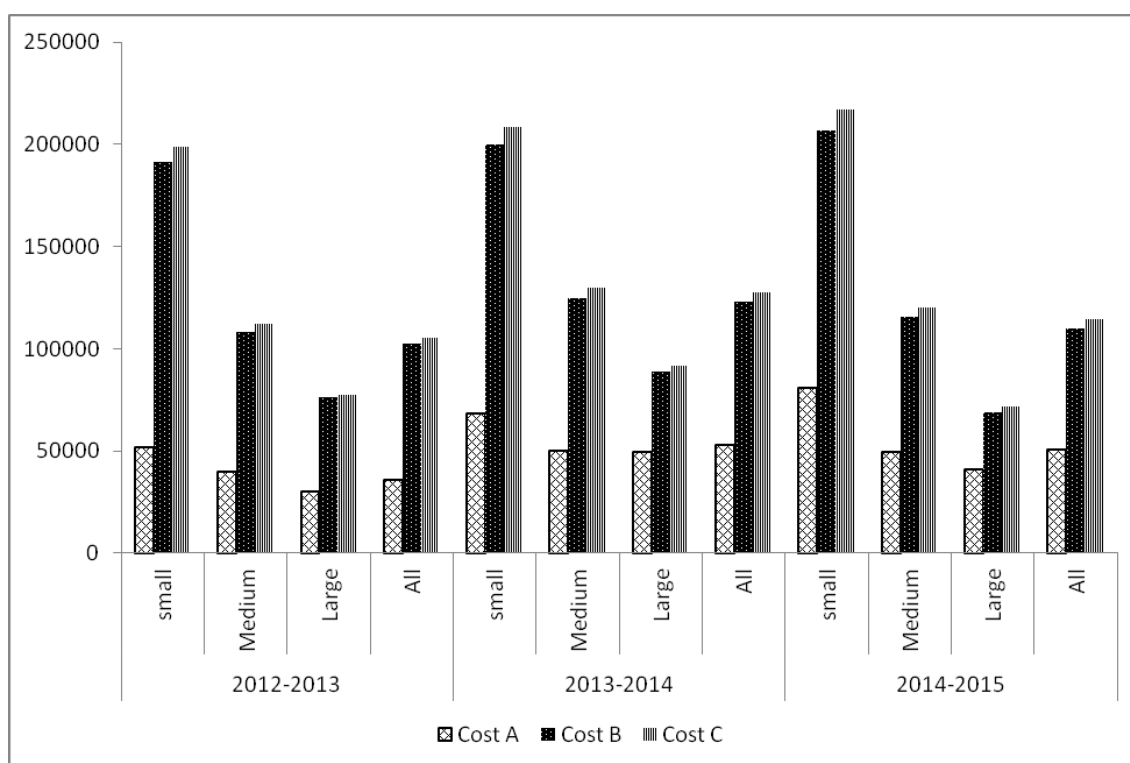
Table 15: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	26.89	28.57	47.87	35.57
Female	42.35	48.68	41.35	44.33
Total	69.24	77.25	89.22	79.90

Table 16: Cost of Cultivation of Summer Paddy per hectare (in Rs) during 2012-13, 2013-14 and 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	62363	44679	35977	41862
	2013-14	61080	52445	47498	50674
	2014-15	96904	46645	45958	52312
Cost 'B'	2012-13	197460	134114	74137	107345
	2013-14	219580	164854	107209	138314
	2014-15	218342	110982	93102	114070
Cost 'C'	2012-13	204883	138206	76168	110663
	2013-14	240302	171710	109611	144355
	2014-15	230377	116972	96259	119230

**COST OF CULTIVATION PER HECTARE OF SUMMER PADDY DURING
2012-13, 2013-14 & 2014-15**



Output

Table 17: Per Quintal Cost (in Rs.) of production of Summer Paddy during 2012-13, 2013-14 & 2014-15

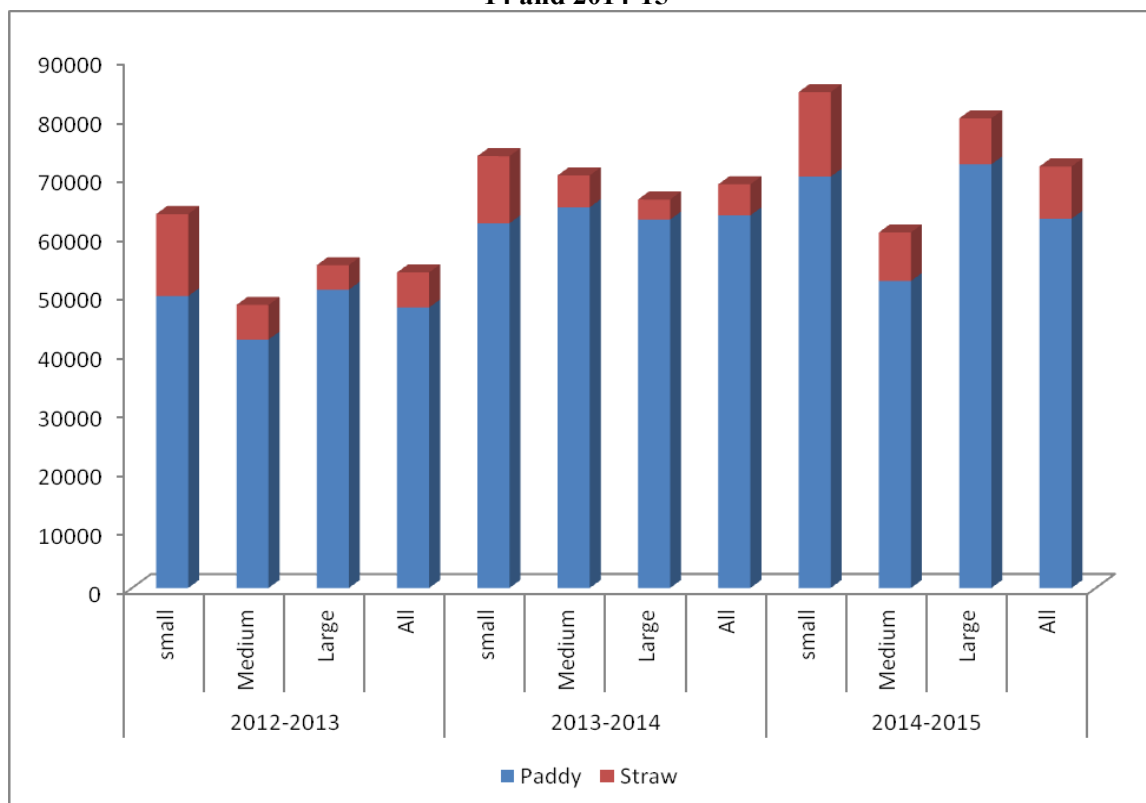
Concept of cost	Year	Holding size class			
		Small	Medium	Large	All Sizes
Cost 'A'	2012-13	2071	1294	946	1164
	2013-14	2123	1442	1167	1395
	2014-15	2098	1592	1594	1681
Cost 'B'	2012-13	6557	3886	1951	2984
	2013-14	5923	4771	2981	3954
	2014-15	4724	3787	3228	3667
Cost 'C'	2012-13	6803	4005	2004	3076
	2013-14	6423	4974	3054	4130
	2014-15	4984	3991	3337	3833

Above table reveals that for producing one quintal of paddy in summer season an amount of Rs 1681/- is required when cost 'A' is considered. Per hectare value of paddy produced during the season is calculated as **Rs.67296/-** and the value of by-product viz. straw is estimated as **Rs.5857/-**

Table 18: Value of Product and by product per hectare (in Rs) of summer paddy during 2012-13, 2013-14 and 2014-15

Year	Product/ By product	Holding size class			
		Small	Medium	Large	All size
2012-13	Paddy	54268	44737	49923	48938
	Straw	15444	6673	5077	6851
	Total	69712	51410	55000	55789
2013-14	Paddy	78658	64315	62492	65094
	Straw	10586	5995	4058	5456
	Total	89244	70310	66550	70550
2014-15	Paddy	100589	61570	63455	67296
	Straw	16882	6944	2789	5857
	Total	117471	68514	66245	73153

Value of Product and Byproduct per hectare (in Rs) of summer paddy during 2012-13, 2013-14 and 2014-15



2.2 Coconut during 2014-15

The area as well as production of coconut in the state has been declining. The data regarding the cost of cultivation of Coconut is significant. As there is a general feeling among the cultivators that the profitability of the crop is decreasing due to the prevalence of high cost involved to the cultivation. To conduct the study 1220 sample holdings selected in the state from the different holdings size classes, the average area per holding was 0.44 hectare. Details of the study conducted during 2014-15 are presented below.

Table 19: Area and number of holdings under Coconut cultivation

Holding size class	No of selected holdings	Area under the coconut in the sample (ha)	Percentage	Area per holding (ha)
Small	441	59.90	11.21	0.13
Medium	591	215.30	40.55	0.36
Large	188	256.10	48.24	1.36
Total	1220	530.90	100.00	0.44

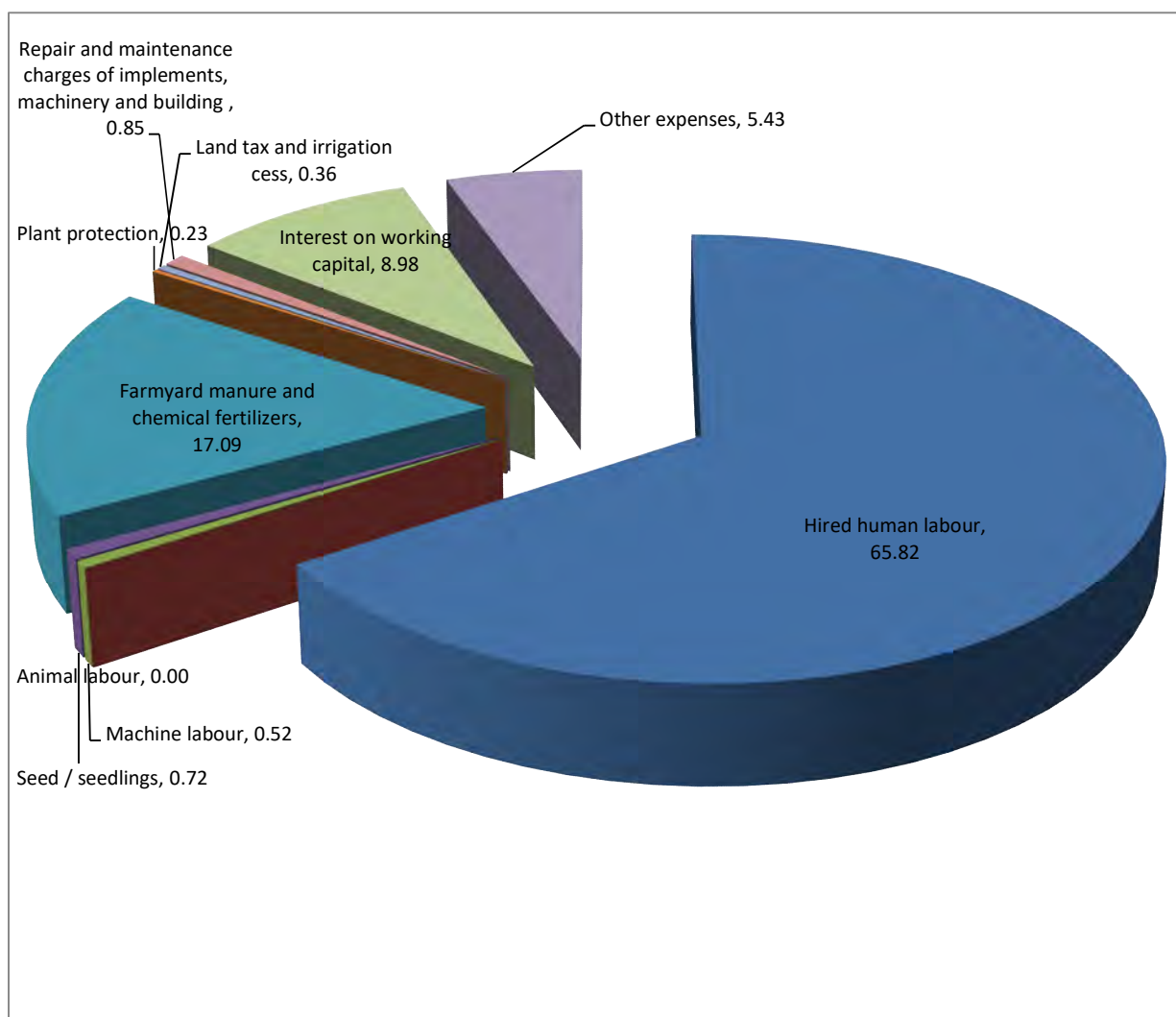
Cost of Cultivation

Cost per hectare for cultivating coconut during 2014-15 was Rs 52588 excluding interest on fixed capital, land value and value of household labour. Out of this 65.82% of total cost is for the component of hired human labour and 17.09% for farmyard manure and chemical fertilizer.

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	35891	34849	34115	34613
2	Animal labour	0	0	0	0
3	Machine labour	58	134	445	275
4	Seed / seedlings	691	303	372	380
5	Farmyard manure and chemical fertilizers	12592	9247	7919	8985
6	Plant protection	250	157	56	119
7	Land tax and irrigation Cess	240	230	143	189
8	Repair and maintenance charges of implements, machinery and building	1361	465	222	449
9	Interest on working capital	5290	4766	4553	4723
10	Other expenses	3419	2972	2624	2855
11	Total Cost 'A' (1-10)	59792	53123	50449	52588
12	Interest on fixed capital	5029	2516	1520	2320
13	Cost 'B1' (11+12)	64821	55639	51969	54908
14	Interest on land value	944539	770068	399829	611734
15	Cost 'B' (13+14)	1009360	825707	451798	666642
16	Imputed value of household labour	14614	8148	4429	7087
17	Cost 'C' (15+16)	1023974	833855	456227	673729

Percentage Distribution of “COST A” per hectare of Coconut during 2014-15



The following table reveals the percentage distribution of hired human labour hours to the total human labour hours. The percentage share of female participation in total human labour hours are 25.14 percentage.

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

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	49.34	61.00	52.36	55.57
Female	17.38	15.85	35.74	25.14
Total	66.72	76.86	88.10	80.71

Table 22: Cost of cultivation of Coconut per hectare (in Rs.) during 2012-13, 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	63856	38173	41277	42390
	2013-14	67346	48801	45511	49277
	2014-15	59792	53123	50449	52588
Cost 'B'	2012-13	1129387	648597	438442	596541
	2013-14	1138762	783297	417487	672434
	2014-15	1009360	825707	451798	666642
Cost 'C'	2012-13	1136687	654413	441487	601160
	2013-14	1151024	790388	422344	679039
	2014-15	1023974	833855	456227	673729

Value of output

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

Product/By-product	Holding Size Class			
	Small	Medium	Large	All Sizes
Product	176774	82481	81738	92768
By-Product	5936	3217	3457	3640
Total	182710	85698	85195	96408

The study reveals that the value of output is Rs.96408 /- per hectare were as the cost of cultivation per hectare is Rs 52588/-.

2.3 Arecanut during 2014-15

Arecanut is one among the cash crops cultivating in the state. Similar to some other crops the area of this crop is shrinking on varied reason especially the cost of cultivation. For this study 1194 sample holding were selected under three holdings size classes namely small, medium and large. The average area per holding was 0.18 hectare and the total area under the crop is the sample was 216.70 hectare.

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	901	57.80	26.67	0.06
Medium	220	74.70	34.47	0.34
Large	73	84.20	38.86	1.15
All size	1194	216.70	100.00	0.18

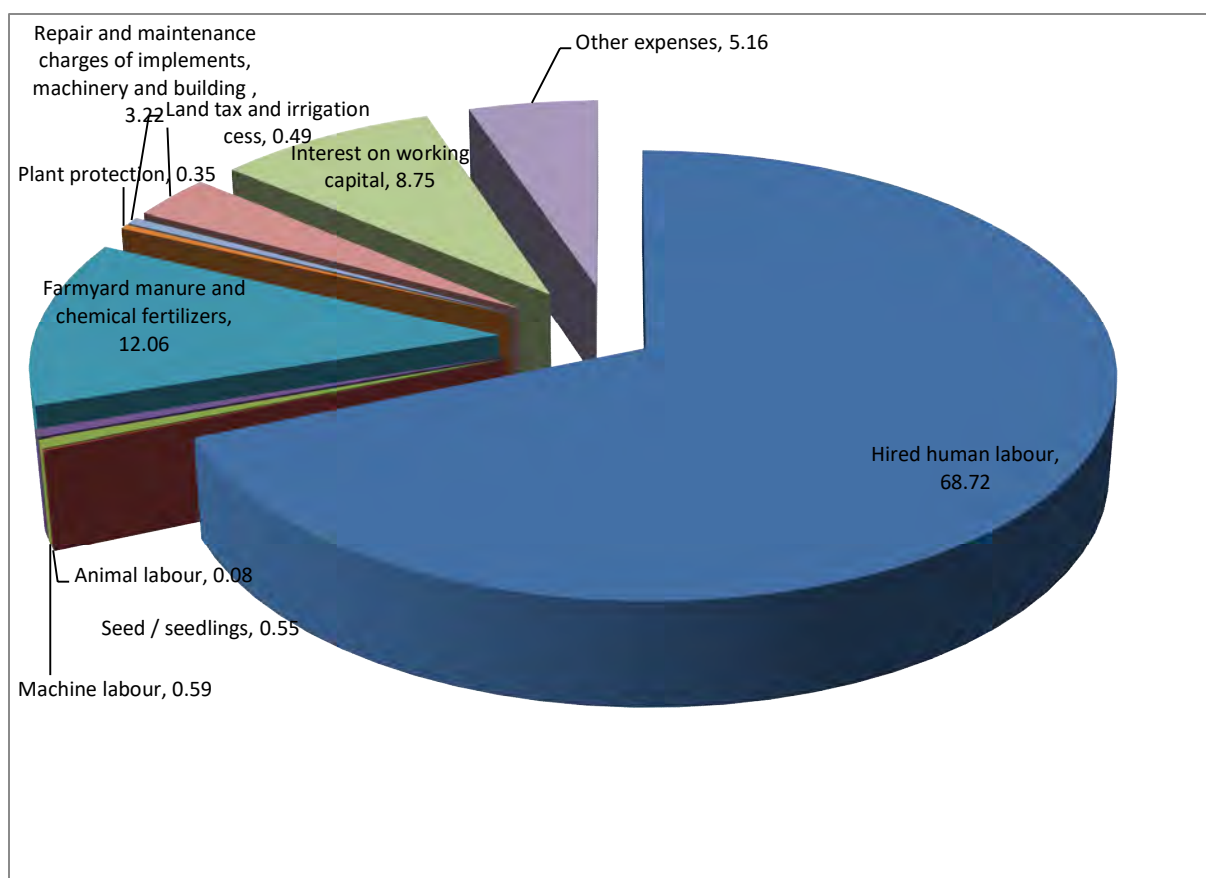
Cost of Cultivation

The different cost components of Arecanut cultivation is given below: Per hectare cost expenses is worked out as Rs. 53665/- excluding interest on fixed capital, interest on land value and household labour components. Out of this 68.72% cost is for hired human labour and 12.06% for farmyard manure and chemical fertilizers.

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	34169	35235	40223	36880
2	Animal labour	0	0	115	45
3	Machine labour	36	295	536	319
4	Seed / seedlings	542	372	60	297
5	Farmyard manure and chemical fertilizers	8466	6942	4678	6474
6	Plant protection	175	230	162	189
7	Land tax and irrigation Cess	233	160	381	265
8	Repair and maintenance charges of implements, machinery and building	3267	1827	571	1727
9	Interest on working capital	4631	4595	4835	4698
10	Other expenses	2922	2878	2571	2771
11	Total Cost 'A' (1-10)	54441	52534	54132	53665
12	Interest on fixed capital	5814	3512	3355	4069
13	Cost 'B1' (11+12)	60255	56046	57487	57734
14	Interest on land value	601803	402796	363087	440851
15	Cost 'B' (13+14)	662058	458842	420574	498585
16	Imputed value of household labour	12221	9070	3984	7946
17	Cost 'C' (15+16)	674279	467912	424558	506531

Percentage Distribution of “COST A” per hectare of arecanut during 2014-15



The following table illustrates the work participation of arecanut cultivation. It shows that out of 64.33 per cent of the total labour hours 17.6% has been shared by females and 46.73% has been shared by males.

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

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	42.97	53.20	44.83	46.73
Female	18.07	19.72	16.00	17.60
Total	61.04	72.92	60.83	64.33

Table 27: Cost of Cultivation of Arecanut per hectare (in Rs) during 2012-13, 2013-14 and 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	44868	37978	41341	41114
	2013-14	52681	47424	45344	47912
	2014-15	54441	52534	54132	53665
Cost 'B'	2012-13	693255	369494	177459	435083
	2013-14	752025	488110	329434	490936
	2014-15	662058	458842	420574	498585
Cost 'C'	2012-13	699482	374293	181114	440102
	2013-14	761684	494898	335224	498045
	2014-15	674279	467912	424558	506531

Value of Out put

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

The estimated value of output per hectare is Rs.107163/- against the per hectare cost A of cultivation is Rs 53665.

Holding Size Class			
Small	Medium	Large	All Sizes
139032	112413	80406	107163

2.4 Tapioca during 2014-15

Area under the crop in this study was 179.30 hectare from 959 holdings.

Table 29: Area and Number of Holdings under Tapioca cultivation

Size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to total area of Selected holdings	Area per holding (ha)
Small	563	47.60	26.55	0.08
Medium	333	85.80	47.85	0.26
Large	63	45.90	25.60	0.73
All Size	959	179.30	100.00	0.19

The average size of a selected holding is 0.19 hectare and number of holding selected for the survey is 959.

Cost of Cultivation

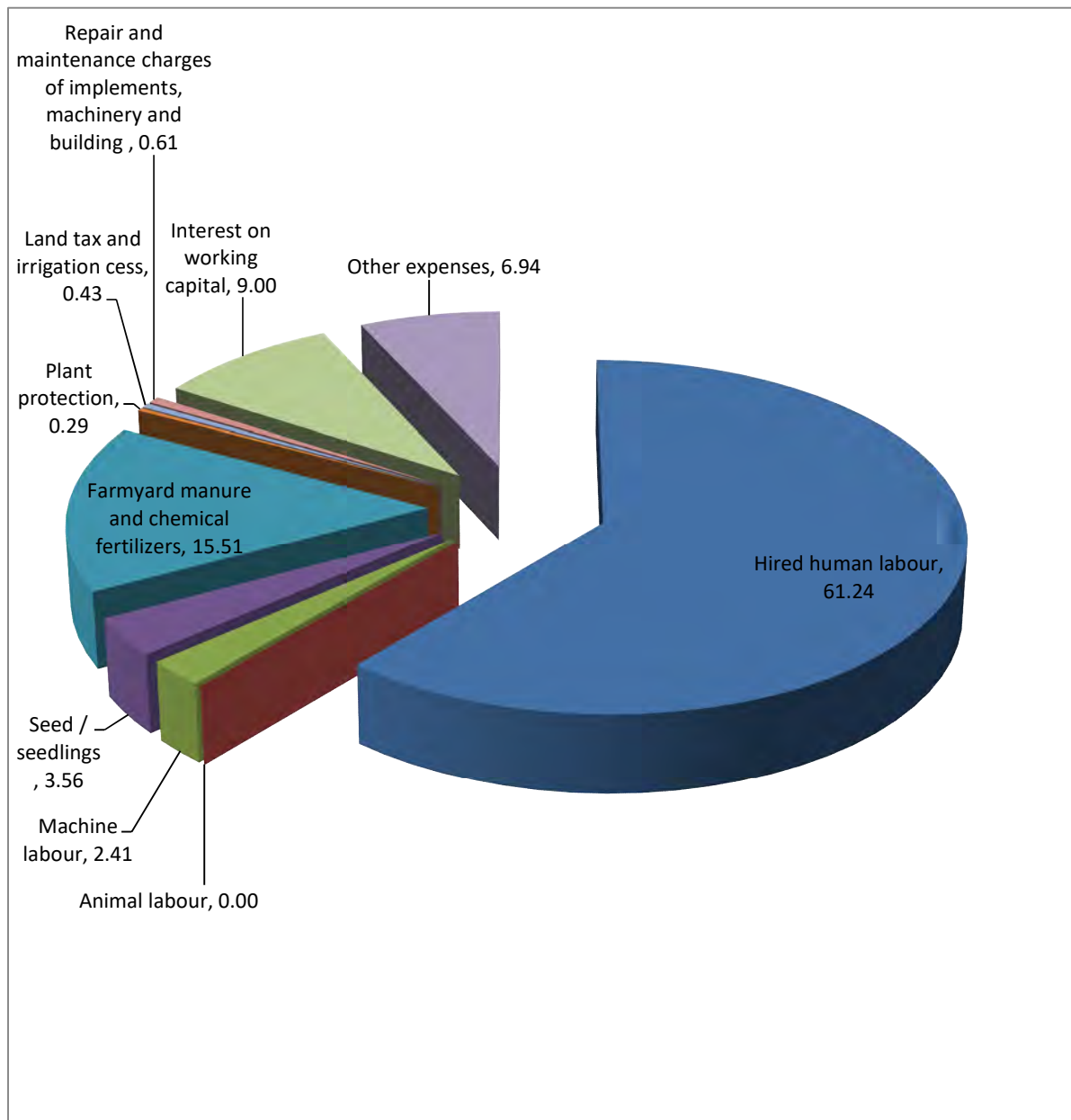
When Cost A is considered, per hectare cost of cultivation of tapioca is worked out as Rs. **69925/-**. In this cost A, hired human labour cost constituted 61.24 % where as farmyard manure and chemical fertilizers shares **15.51%**

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

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	45844	40492	44035	42824
2	Animal labour	0	0	0	0
3	Machine labour	466	1650	3024	1685
4	Seed / seedlings	3364	2312	1913	2491
5	Farmyard manure and chemical fertilizers	13787	10162	9054	10846
6	Plant protection	211	197	215	205
7	Land tax and irrigation Cess	377	289	256	304
8	Repair and maintenance charges of implements, machinery abuilding	794	319	251	428
9	Interest on working capital	6940	5897	6347	6290
10	Other expenses	5731	4161	5227	4852
11	Total Cost 'A' (1-10)	77514	65479	70322	69925
12	Interest on fixed capital	1502	650	486	835
13	Cost 'B1' (11+12)	79016	66129	70808	70760
14	Interest on land value	612535	386916	213525	402813
15	Cost 'B' (13+14)	691551	453045	284333	473573
16	Imputed value of household labour	18932	14567	5676	13460
17	Cost 'C' (15+16)	710483	467612	290009	487033

Percentage Distribution of “COST A” per hectare of Tapioca during 2014-15



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

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

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	20.33	49.64	22.17	28.30
Female	15.12	33.10	18.63	20.81
Total	35.45	82.74	40.80	49.11

In tapioca cultivation 49.11% of the total human labour hours have been shared by hired human labour.

Table 32: Cost of cultivation of tapioca per hectare (In Rs.) during 2012-13, 2013-14 and 2014-15

A comparative statement for 2012-13, 2013-14 and 2014-15 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	67492	53917	62546	59770
	2013-14	69681	56871	66210	62703
	2014-15	77514	65479	70322	69925
Cost 'B'	2012-13	531383	288167	195975	316722
	2013-14	736862	375717	324687	457328
	2014-15	691551	453045	284333	473573
Cost 'C'	2012-13	555070	297352	207202	331356
	2013-14	762144	390753	336248	474145
	2014-15	710483	467612	290009	487033

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

Holding Size Class			
Small	Medium	Large	All Sizes
258149	197848	209686	216957

The value of output for all holding size class do not have much variation. The value of the out put per hectre of Tapioca is estimated as Rs.2,16,957 where as the cost of cultivation per hectre the paid out cost actually increased by the cultivators is only Rs. 69,925.

2.5 Banana during 2014-15

To study the cost of cultivation on banana 860 sample holdings were selected by covering an area of 211.6 hectares under three different holding size classes with an average area per holding of 0.25 hectare.

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

Size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to Total area	Area per holding (ha)
Small	499	41.70	19.71	0.08
Medium	299	98.80	46.69	0.33
Large	62	71.10	33.60	1.15
All Size	860	211.6	100.00	0.25

Cost of Cultivation

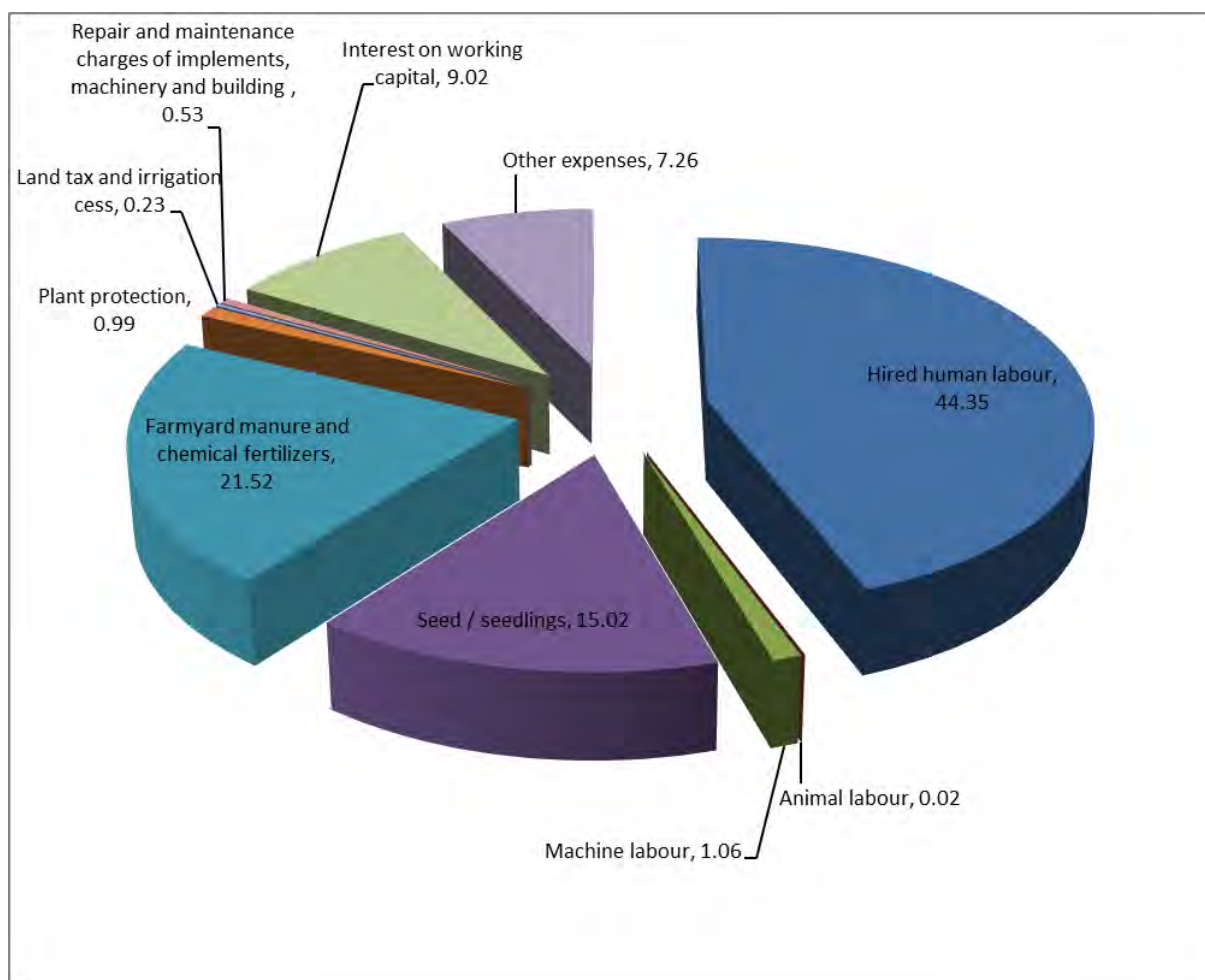
As in the case of other crops, cost of cultivation of banana is also calculated at different cost concepts such as cost 'A', Cost 'B1', 'Cost 'B' and Cost 'C'. When Cost A is considered, cost of cultivation per hectare is Rs.131933/-. Out of this 44.35% cost involved in hired human labour component, 21.52% cost for farmyard manure and chemical fertilizers and Seed/Seedlings constitute 15.02%.

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	65315	54338	60269	58509
2	Animal labour	0	69	0	32
3	Machine labour	314	837	2822	1398
4	Seed / seedlings	23517	19145	18551	19816
5	Farmyard manure and chemical	37897	24475	28209	28397
6	Plant protection	1521	1195	1322	1302
7	Land tax and irrigation Cess	613	249	191	302
8	Repair and maintenance charges of implements, machinery and building	1452	575	411	695
9	Interest on working capital	14096	10847	12071	11903

10	Other expenses	12391	8407	9538	9579
11	Total Cost 'A' (1-10)	157116	120137	133384	131933
12	Interest on fixed capital	3098	1317	734	1476
13	Cost 'B1' (11+12)	160214	121454	134118	133409
14	Interest on land value	772080	457994	246964	449831
15	Cost 'B' (13+14)	932294	579448	381082	583240
16	Imputed value of household labour	43292	24366	14880	24956
17	Cost 'C' (15+16)	975586	603814	395962	608196

Percentage Distribution of "COST A" per hectare of Banana during 2014-15



In Banana cultivation male participation rate is higher than that of female. The percentage distributions are as follows.

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

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	46.08	52.30	29.49	40.52
Female	23.10	20.11	12.11	16.99
Total	69.18	72.41	41.60	57.51

Table 37: Cost of Cultivation per hectare of Banana (In Rs.) during 2012-13, 2013-14 & 2014-15

A comparative statement for 2012-13, 2013-14 and 2014-15 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	175448	119813	117009	128621
	2013-14	143269	117624	138402	129956
	2014-15	157116	120137	133384	131933
Cost 'B'	2013-14	867139	603244	316628	546378
	2012-13	898049	660241	518808	663645
	2014-15	932294	579448	381082	583240
Cost 'C'	2012-13	915840	624238	342684	574089
	2013-14	931542	685049	538039	688441
	2014-15	975586	603814	395962	608196

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

Holding Size Class			
Small	Medium	Large	All Sizes
524966	376075	358625	399863

During 2014-15 per hectare value of output from banana cultivation is estimated out as **Rs. 399863/-** whereas the cost A per hectre is Rs 131933.

2.6 Pepper during 2014-15

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

Table 39: Area and number of holdings under Pepper cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	734	43.40	37.19	0.06
Medium	142	42.60	36.50	0.30
Large	24	30.70	26.31	1.28
Total	900	116.70	100.00	0.13

Cost of cultivation

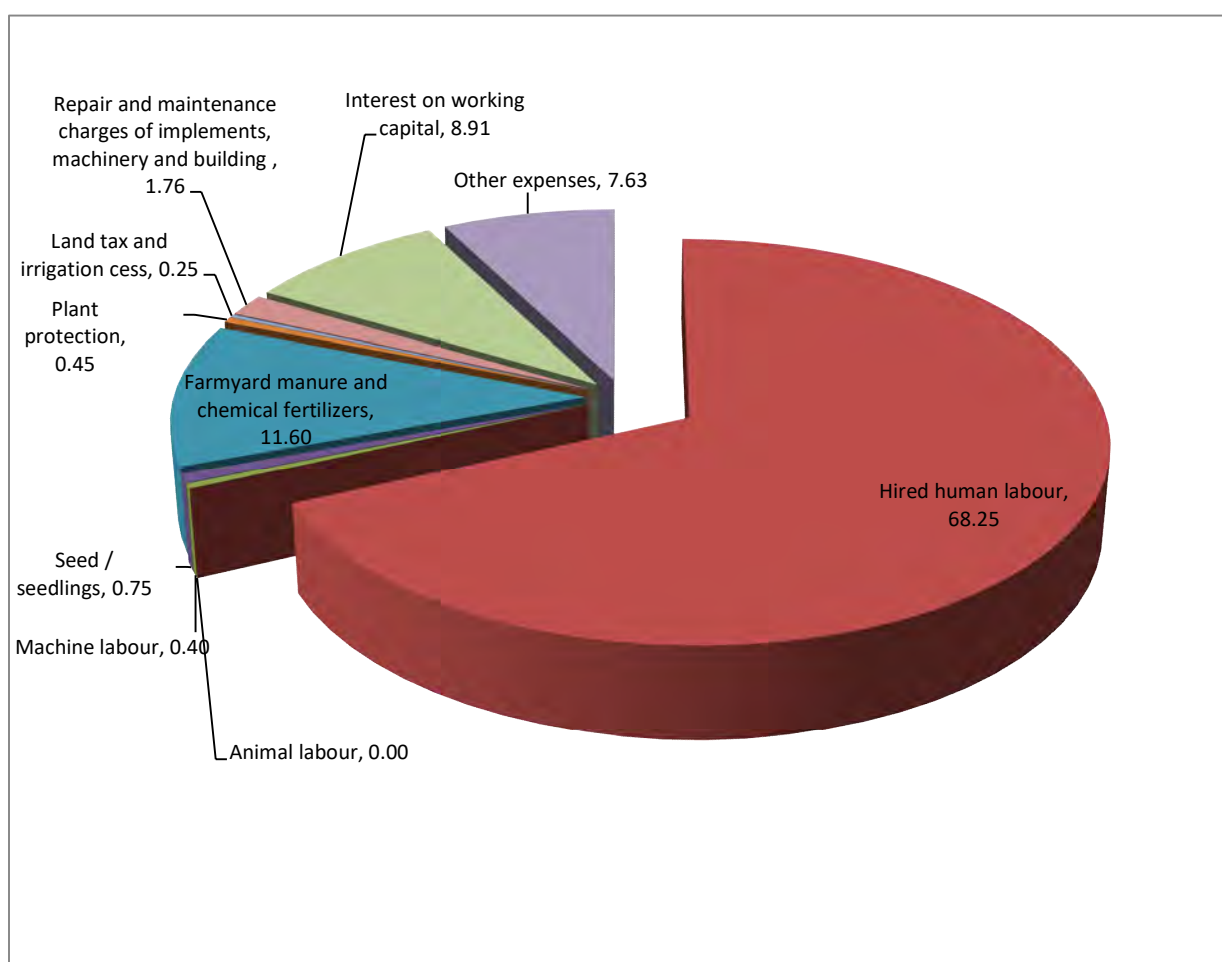
The cultivation cost incurred for pepper is entirely different when compared to the cost of paddy and other seasonal crops. Labour cost and fertilizer cost are the two major items of expenses for pepper cultivation. Item wise expenses incurred under pepper cultivation are as follows:

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	42343	42459	29872	39107
2	Animal labour	0	0	0	0
3	Machine labour	14	196	589	232
4	Seed / seedlings	360	497	433	429
5	Farmyard manure and chemical fertilizers	7762	6220	5656	6646
6	Plant protection	223	211	362	255
7	Land tax and irrigation Cess	220	121	67	144
8	Repair and maintenance charges of implements, machinery and building	1527	737	660	1011
9	Interest on working capital	5558	5321	4161	5104
10	Other expenses	4875	3627	4696	4372

11	Total Cost 'A' (1 to 10)	62882	59389	46496	57300
12	Interest on fixed capital	3184	1683	1271	2133
13	Cost 'B1' (11+12)	66066	61072	47767	59433
14	Interest on land value	729398	461394	114343	469893
15	Cost 'B' (13+14)	795464	522466	162110	529326
16	Imputed value of household labour	18773	14252	7974	14284
17	Cost 'C' (15+16)	814237	536718	170084	543610

Percentage Distribution of "COST A" per hectare of Pepper during 2014-15



The survey results reveal that out of the total cost involved in pepper cultivation 68.25% is for hired human labour component and cost for farmyard manure and chemical fertilizer and interest on working capital are 11.60 and 8.90 percentage respectively. Details are given below:

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

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	43.22	52.07	57.32	49.34
Female	19.69	22.56	22.86	21.39
Total	62.91	74.63	80.18	70.73

Table 42: Cost of cultivation of Pepper per hectare (In Rs.) during 2012-13, 2013-2014 & 2014-15.

A comparative statement for 2012-13, 2013-14 & 2014-15 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	61501	42726	42482	47981
	2013-14	61094	56176	54737	57947
	2014-15	62882	59389	46496	57300
Cost 'B'	2012-13	861292	474664	328008	537733
	2013-14	878407	523468	324855	629578
	2014-15	795464	522466	162110	529326
Cost 'C'	2012-13	876996	483891	334955	548073
	2013-14	901108	542293	329165	646725
	2014-15	814237	536718	170084	543610

Value of out put

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

Holding Size Class			
Small	Medium	Large	All Sizes
203158	182790	171548	187414

During 2014-15 it is estimated that Rs 187414/ has been received as value of output from per hectare pepper cultivation whereas cost A Cultivation is 57300.

2.7 Ginger during 2014-15

For the cost of cultivation study during 2014-15, 722 sample holdings were selected for the crop ginger and total area covered for study is 94.90 hectare.

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	627	28.30	29.82	0.05
Medium	71	19.30	20.34	0.27
Large	24	47.30	49.84	1.97
All sizes	722	94.90	100.00	0.13

Cost of cultivation

Among the various components of cost of ginger cultivation, hired human labour, Seed/seedling, fertilizer etc. are the top three components. Hired human labour alone accorded 37.50% of the total cost. Seed/seedling and farmyard manure and fertilizer share is 25.07% and 19.83% of total cost of cultivation per hectre.

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	55410	55513	26508	41185
2	Animal labour	0	0	0	0
3	Machine labour	1118	1875	1455	1440
4	Seed / seedlings	33361	41823	17994	27529
5	Farmyard manure and chemical fertilizers	22548	21051	21604	21774
6	Plant protection	453	450	163	309

7	Land tax and irrigation cess	502	364	114	282
8	Repair and maintenance charges of implements, machinery and building	2410	2537	785	1635
9	Interest on working capital	11883	13281	7092	9809
10	Other expenses	5939	12093	3185	5853
11	Total Cost 'A' (1-10)	133624	148987	78910	109816
12	Interest on fixed capital	2233	1959	1273	1704
13	Cost 'B1' (11+12)	135857	150946	80183	111520
14	Interest on land value	652886	268491	238469	369463
15	Cost 'B' (13+14)	788743	419437	318652	480983
16	Imputed value of household labour	17344	22148	6763	13118
17	Cost 'C' (15+16)	806087	441585	325415	494101

Percentage Distribution of "COST A" per hectare of Ginger during 2014-15

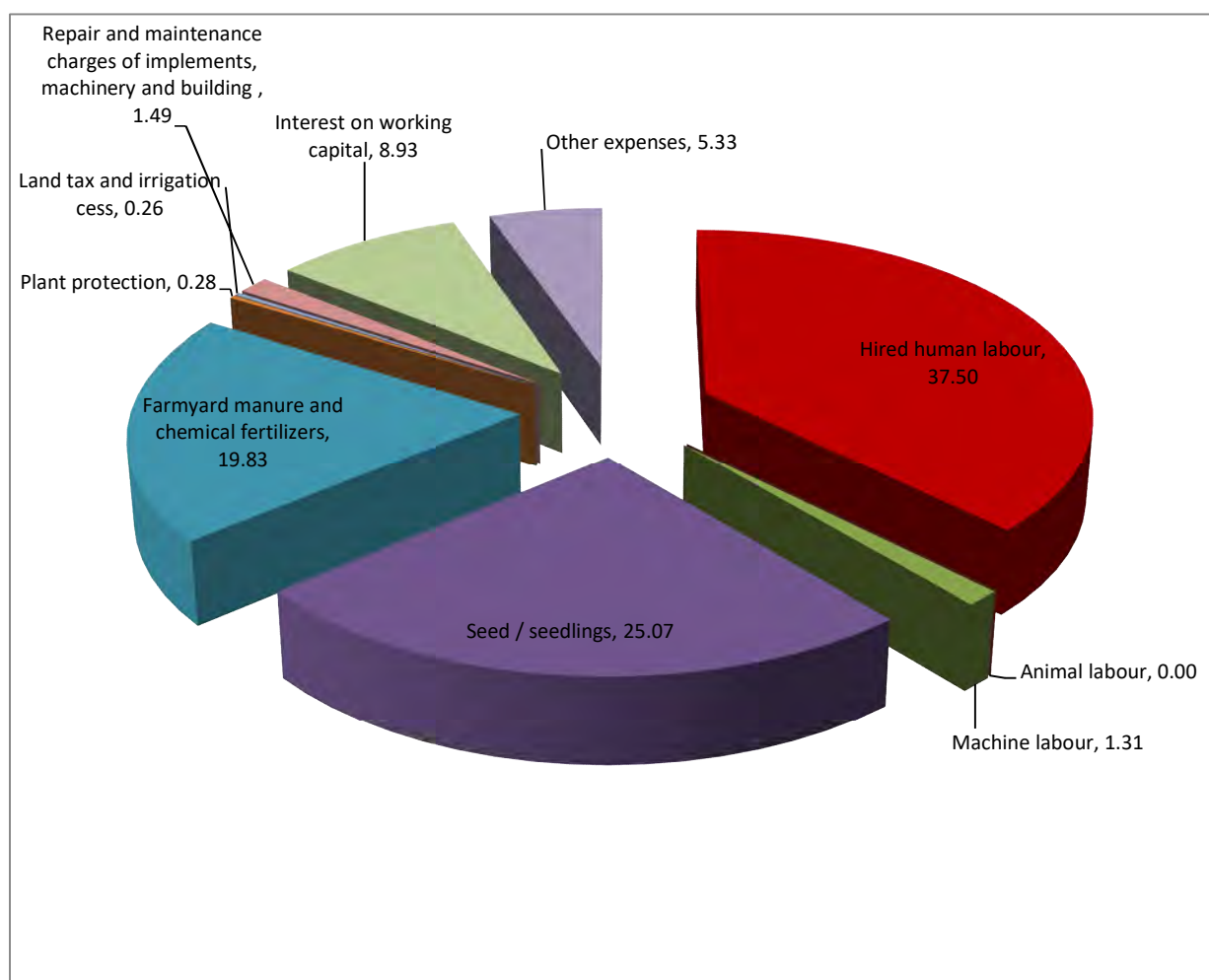


Table 46: Percentage distribution of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	38.50	56.34	63.68	56.64
Female	21.66	24.39	32.47	28.42
Total	60.16	80.73	96.15	85.06

Table 47: Cost of cultivation of Ginger per hectare (In Rs.) during 2012-13, 2013-14 and 2014-15

A comparative statement for 2012-13, 2013-14 & 2014-15 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	94910	77782	116916	92885
	2013-14	118624	89266	91544	99827
	2014-15	133624	148987	78910	109816
Cost 'B'	2012-13	699944	300282	222413	446629
	2013-14	755753	382809	387222	508386
	2014-15	788743	419437	318652	480983
Cost 'C'	2012-13	713468	310303	226142	456767
	2013-14	771550	394156	392876	519218
	2014-15	806087	441585	325415	494101

Value of Out put

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

Holding Size Class			
Small	Medium	Large	All Sizes
196352	264345	139496	182328

The per hectare value of output estimated from Ginger cultivation is Rs.1,82,328/- and the cost of cultivation per hectre is Rs 1,09,816 excluding interest on fixed capital,land value and household labour.

2.8 Turmeric during 2014-15

Sample holdings selected for the cost of cultivation study of turmeric is 705 which distributed among the three holding size classes and total area within the sample holding was 44.00 hectares.

Table 49: Area and Number of holdings under Turmeric cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to total area	Average area per holding (ha)
Small	644	25.30	57.50	0.04
Medium	58	16.30	37.05	0.28
Large	3	2.40	5.45	0.80
All size	705	44.00	100.00	0.06

Cost of cultivation

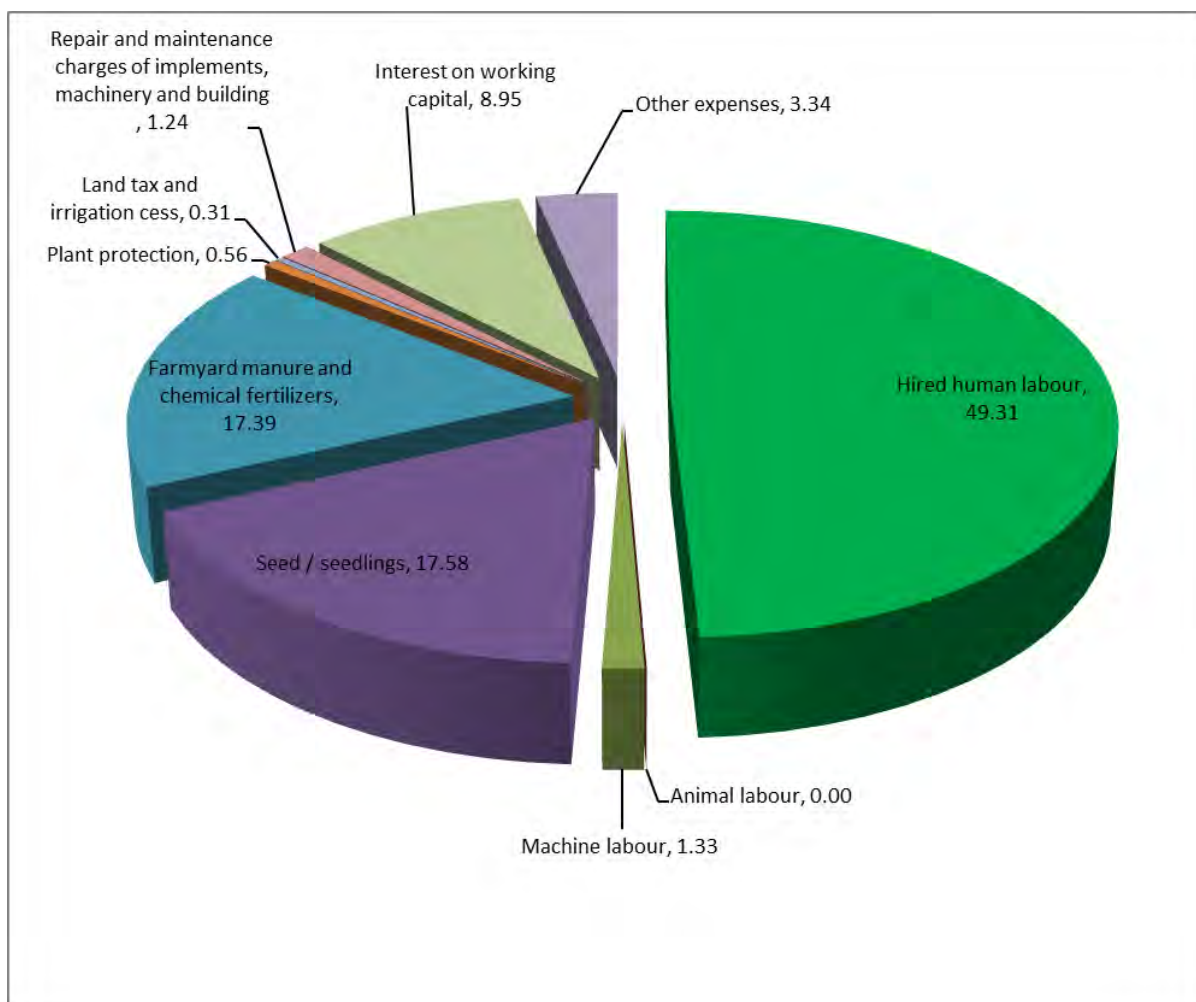
The cash and other kind expenses incurred under Turmeric cultivation is estimated as Rs.91467/-per hectare. Out of this, 49.31% is for hired human labour, 17.58% for seed/seedlings and 17.39% for farmyard manure and fertilizer cost respectively.

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

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	40582	47796	75283	45100
2	Animal labour	0	0	0	0
3	Machine labour	289	2319	3624	1215
4	Seed / seedlings	17673	13824	14332	16078
5	Farmyard manure and chemical fertilizers	14597	17749	17371	15906
6	Plant protection	547	467	371	508
7	Land tax and irrigation Cess	291	316	66	288
8	Repair and maintenance charges of implements, machinery and building	1335	889	577	1131
9	Interest on working capital	7645	8573	11358	8186

10	Other expenses	2766	3576	2595	3055
11	Total Cost 'A' (1-10)	85725	95509	125577	91467
12	Interest on fixed capital	1724	1149	5356	1708
13	Cost 'B1' (11+12)	87449	96658	130933	93175
14	Interest on land value	492389	239624	90603	377829
15	Cost 'B' (13+14)	579838	336282	221536	471004
16	Imputed value of household labour	18678	18198	3707	17697
17	Cost 'C' (15+16)	598516	354480	225243	488701

Percentage Distribution of "COST A" per hectare of Turmeric during 2014-15



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

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

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	36.25	51.30	56.76	42.35
Female	22.97	27.43	40.08	25.23
Total	59.21	78.73	96.84	67.58

Table 52: Cost of cultivation of Turmeric per hectare (In Rs.) during 2012-13, 2013-14 & 2014-15

A comparative statement for 2012-13, 2013-2014 & 2014-15 for cost of cultivation of different concept is given below.

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2012-13	81128	69873	87918	76825
	2013-14	77148	90270	125423	85016
	2014-15	85725	95509	125577	91467
Cost 'B'	2012-13	487080	297425	191388	382154
	2013-14	666975	372635	238260	530131
	2014-15	579838	336282	221536	471004
Cost 'C'	2012-13	676451	381667	261995	540304
	2013-14	496747	304916	209910	391584
	2014-15	598516	354480	225243	488701

Output

The per hectare value of output received from turmeric cultivation is estimated as Rs 152162/- during the year 2014-15 and cost of cultivation is estimated as Rs 91467 excluding Cost B and C

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

Holding Size Class			
Small	Medium	Large	All Sizes
152409	149654	166671	152162

2.9 Pineapple during 2014-15

In the cost of cultivation study on pineapple 330 sample holdings were selected by covering area 392.40 hectares. Details of these holdings are given below

Table 54: Area and Number of holdings selected under Pineapple cultivation

Size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage to Total area	Area per holding (ha)
Small	108	5.70	1.45	0.05
Medium	103	43.50	11.09	0.42
Large	119	343.20	87.46	2.88
All Size	330	392.40	100.00	1.19

Cost of Cultivation

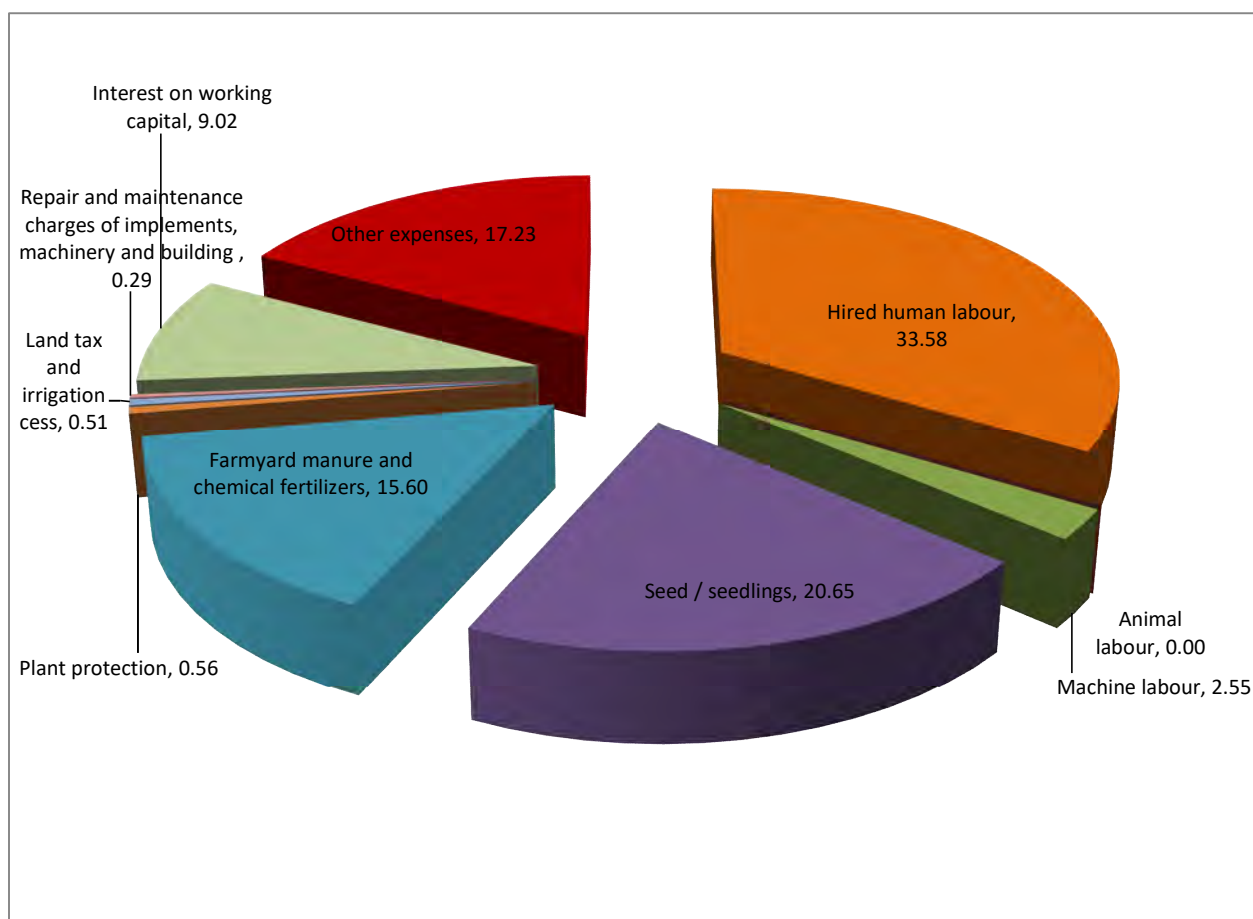
As in the case of other crops, cost of cultivation of pineapple is also calculated at different cost concepts such as cost 'A', Cost 'B1', 'Cost 'B' and Cost 'C'. When Cost A is considered, cost of cultivation per hectare of pineapple is Rs 108638

Table 55: The Cost of cultivation per hectare (in Rs.) of Pineapple

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	89835	51987	33518	36485
2	Animal labour	0	0	0	0
3	Machine labour	2167	4114	2612	2772
4	Seed / seedlings	80493	36168	19605	22435
5	Farmyard manure and chemical fertilizers	97819	40096	12492	16946
6	Plant protection	5208	1147	459	612

7	Land tax and irrigation Cess	6473	1677	298	552
8	Repair and maintenance charges of implements, machinery and building	3021	708	219	319
9	Interest on working capital	45280	16617	8268	9797
10	Other expenses	177279	32655	13998	18720
11	Total Cost 'A' (1-10)	507575	185169	91469	108638
12	Interest on fixed capital	4803	1147	349	510
13	Cost 'B1' (11+12)	512378	186316	91818	109148
14	Interest on land value	1478944	639438	302702	359231
15	Cost 'B' (13+14)	1991322	825754	394520	468379
16	Imputed value of household labour	93357	25639	7044	10544
17	Cost 'C' (15+16)	2084679	851393	401564	478923

Percentage Distribution of "COST A" per hectare of Pineapple during 2014-15



The hired human labour cost accounted as 33.58 percent where as farmyard manure and chemical fertilizers cost as 15.59 percent of the total Cost 'A'. Seed/seedling cost constitutes to 20.65% of the total cost 'A'.

In Pineapple cultivation, male participation rate is higher than that of female. The percentage distributions of these facts are as follows

Table: 56 Percentage of hired human labour hours to the total human labour hours

Sex	Holding Size Class			
	Small	Medium	Large	All Sizes
Male	53.35	31.27	53.46	49.04
Female	25.88	17.58	34.90	31.11
Total	79.23	48.85	88.36	80.15

Table: 57 Cost of cultivation of Pineapple per hectare (in Rs) during 2013-14 &2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	687513	156169	88751	114194
	2014-15	507575	185169	91469	108638
Cost 'B'	2013-14	2320963	1190164	293938	472787
	2014-15	1991322	825754	394520	468379
Cost 'C'	2013-14	2391406	1205668	298454	480599
	2014-15	2084679	851393	401564	478923

Value of out put

Table 58: Value of Output per hectare (In Rs.) of Pineapple

Holding Size Class			
Small	Medium	Large	All Sizes
264404	146982	144845	147020

During 2014-15 per hectare value of output from pineapple cultivation is estimated as **Rs.1,47,020** /- and the cost of cultivating per hectare of pineapple is Rs.1,08,638.

2.10.1 Bitter Gourd- Autumn during 2014-15

For this study details of holding selected and area coverage are given below. The data collected from 260 sample holdings by covering 34.30 hectares and the average area per holding is 0.13 hectare.

Table 59 - Area and number of holdings under Bitter gourd Autumn

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
Small	212	11.00	32.07	0.05
Medium	43	15.60	45.48	0.36
Large	5	7.70	22.45	1.54
Total	260	34.30	100.00	0.13

Cost of cultivation

When Cost A is considered about 44.87 percent of cost constitutes to hired human labour, Machine labour cost shares 0.09% and farmyard manure and chemical fertilizers accounts to 18.43%. Total cost for cultivating one hectare of Bittergourd in Autumn season is Rs.90,258.

Table 60- Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (autumn)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	51454	33499	38456	40502
2	Animal labour	0	0	0	0
3	Machine labour	121	101	0	85
4	Seed / seedlings	4433	4089	4045	4192
5	Farmyard manure and chemical fertilizers	24773	12334	13257	16632
6	Plant protection	1601	598	322	867
7	Land tax and irrigation cess	1053	833	816	901
8	Repair and maintenance charges of implements, machinery and building	3397	880	329	1586
9	Interest on working capital	10708	6401	7130	7979
10	Other expenses	24695	13990	15220	17514
11	Total cost 'A' (1-10)	122235	72125	79575	90258
12	Interest on fixed capital	3635	999	151	1680
13	Cost 'B1' (11+12)	125870	73124	79726	91938
14	Interest on land value	566864	426607	369014	460065

15	Cost 'B' (13+14)	692734	499731	448740	552003
16	Imputed value of household labour	24720	16824	16847	19428
17	Cost 'C' (15+16)	717454	516555	465587	571431

Percentage Distribution of "COST A" per hectare of Bittergourd (Autumn) during 2014-15

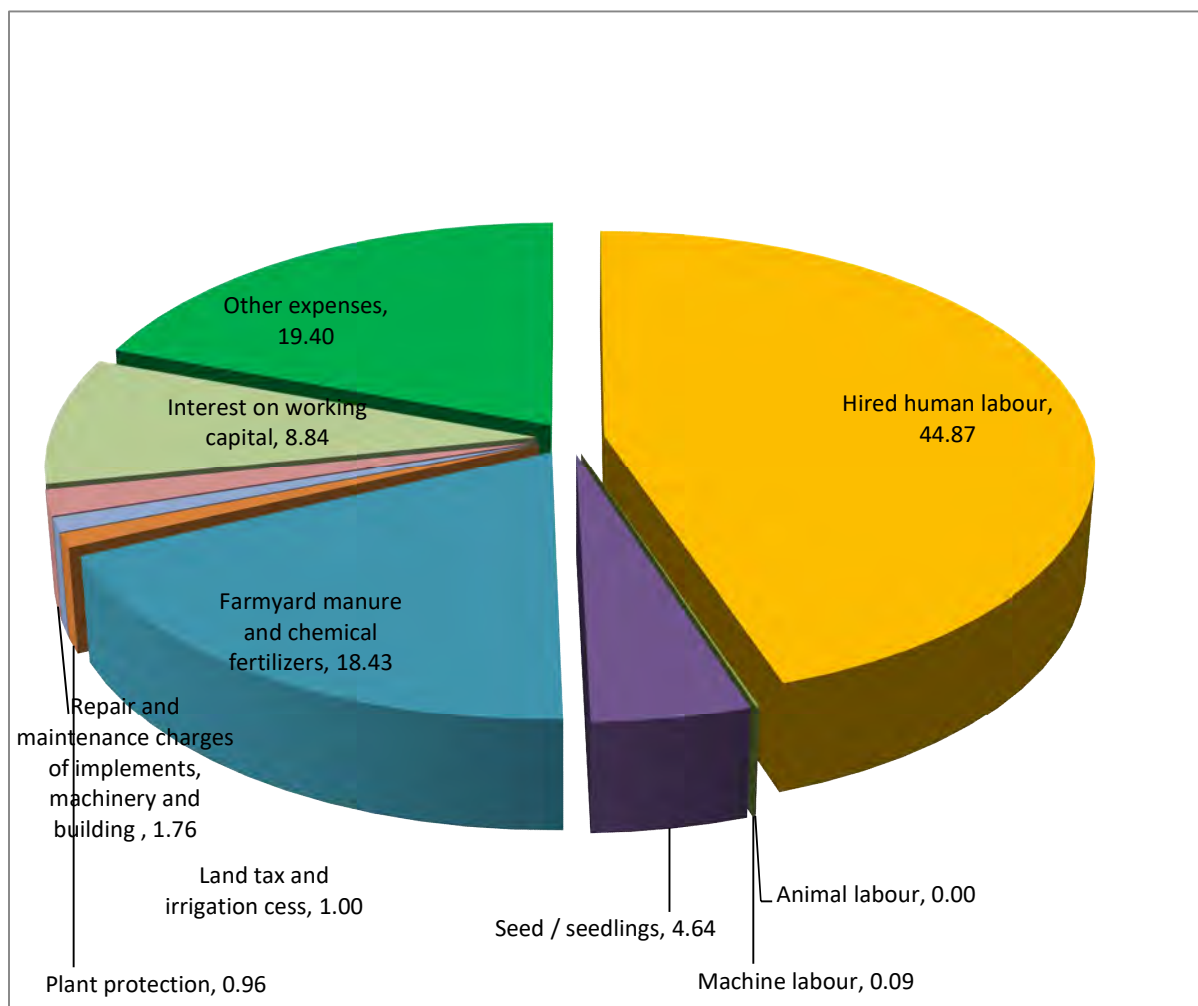


Table 61: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	37.01	44.11	41.13	39.45
Female	20.58	23.39	30.32	22.43
Total	57.59	67.50	71.45	61.88

In Bitter Gourd (autumn) cultivation 22.43% of total labour hours shares to female participation of hired human labour hours.

Table: 62 Cost of cultivation of Bitter Gourd -Autumn per hectare (in Rs) during 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	83398	85146	69912	81299
	2014-15	122235	72125	79575	90258
Cost 'B'	2013-14	508206	388590	277106	422667
	2014-15	692734	499731	448740	552003
Cost 'C'	2013-14	532882	411775	310211	448523
	2014-15	717454	516555	465587	571431

Table: 63 Value of product and by-product per hectare (in Rs.) of Bitter Gourd -Autumn 2014-15

Holding Size Class			
Small	Medium	Large	All Sizes
187214	194823	140285	180290

Value of product per hectare of Bitter gourd in Autumn season is estimated as Rs.1,80,290 where as the cost of cultivation per hectre is Rs.90258

2.10.2 Bitter Gourd -Winter during 2014-15

During 2014-15 Cost of cultivation study on Bitter gourd(winter) season, 395 sample holdings by covering 49.60 hectare selected and the average area per holding covers to 0.13 hectare

Table 64 – Area and number of holdings under Bitter Gourd (winter)

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Area per holding (ha)
Small	319	20.10	40.52	0.06
Medium	72	26.30	53.02	0.37
Large	4	3.20	6.45	0.80
Total	395	49.60	100.00	0.13

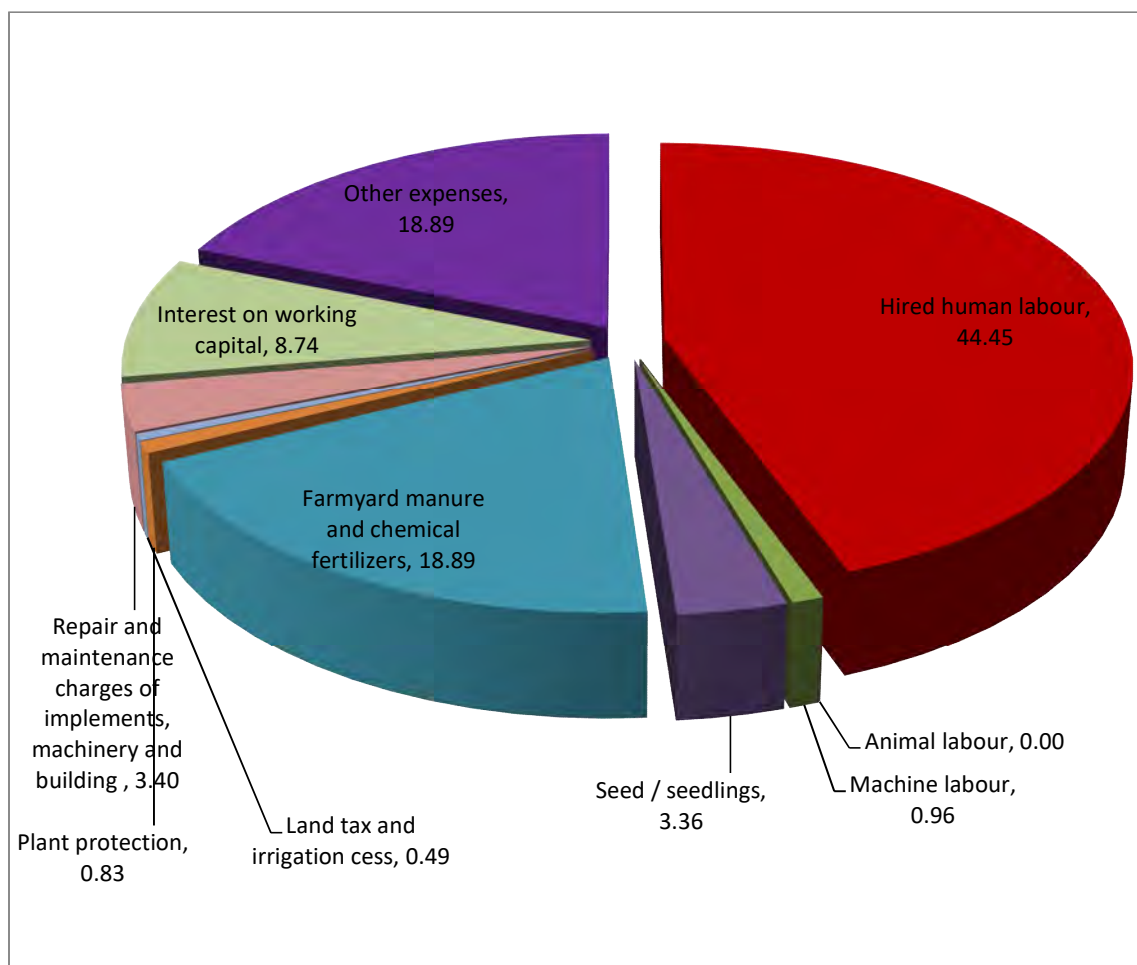
Cost of Cultivation

In Cost A, the major share of the cost component was hired human labour. It constitutes 44.45%. Also farmyard manure and chemical fertilizers account 18.89%. Interest on working capital accounts was 8.74%. By considering the various cost component of Bitter gourd (winter) cultivation, per hectare cost calculated as Rs.98392/-

Table 65 – Cost of cultivation per hectare (in Rs.) of Bitter Gourd (winter)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	47743	39094	56408	43737
2	Animal labour	0	0	0	0
3	Machine labour	815	1104	463	945
4	Seed / seedlings	4086	2302	6610	3307
5	Farmyard manure and chemical fertilizers	21410	16769	15509	18587
6	Plant protection	1227	443	1209	812
7	Land tax and irrigation Cess	609	382	425	478
8	Repair and maintenance charges of implements, machinery and building	4826	2337	2132	3343
9	Interest on working capital	9604	7686	9669	8597
10	Other expenses	20760	17152	16492	18586
11	Total Cost 'A' (1-10)	111080	87269	108917	98392
12	Interest on fixed capital	3447	1572	837	2292
13	Cost 'B1' (11+12)	114527	88841	109754	100684
14	Interest on land value	454659	257231	327408	342470
15	Cost 'B' (13+14)	569186	346072	437162	443154
16	Imputed value of household labour	23321	11871	15830	16808
17	Cost 'C' (15+16)	592507	357943	452992	459962

Percentage Distribution of “COST A” per hectare of Bettergourd (Winter) during 2014-15



Sex wise work participation percentage of hired human labours for Bitter gourd (winter) cultivation shown below reveals that 24.39% of work shared by Female whereas percentage share to male workers is 36.99.

Table 66 – Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	36.96	35.25	50.15	36.99
Female	23.20	24.66	33.26	24.39
Total	60.16	59.91	83.41	61.38

Table: 67 Cost of cultivation of Bitter Gourd -Winter per hectare (in Rs) during 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	108144	97482	295988	106427
	2014-15	111080	87269	108917	98392
Cost 'B'	2013-14	539804	394012	546560	459414
	2014-15	569186	346072	437162	443154
Cost 'C'	2013-14	562515	408708	557988	477446
	2014-15	592507	357943	452992	459962

Output

Table: 68 - Value of Product and Byproduct per hectare (in Rs) of Bitter Gourd (Winter) 2014-15

Holding Size Class			
Small	Medium	Large	All Sizes
186893	130414	180028	156685

2.10.3 Bitter Gourd - Summer during 2014-15

For the cost of cultivation study on Bitter gourd (summer) during 2014-15 the total number of sample holdings selected was 275. The details of these holdings are presented below:

Table 69: Area and number of holdings under Bitter Gourd-(Summer)

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	227	11.10	38.68	0.05
Medium	44	14.40	50.17	0.33
Large	4	3.20	11.15	0.80
All Size	275	28.70	100.00	0.10

The total area under cultivation in the selected sample holdings covers 28.70 hectares and the average size of a holding is 0.10 hectar

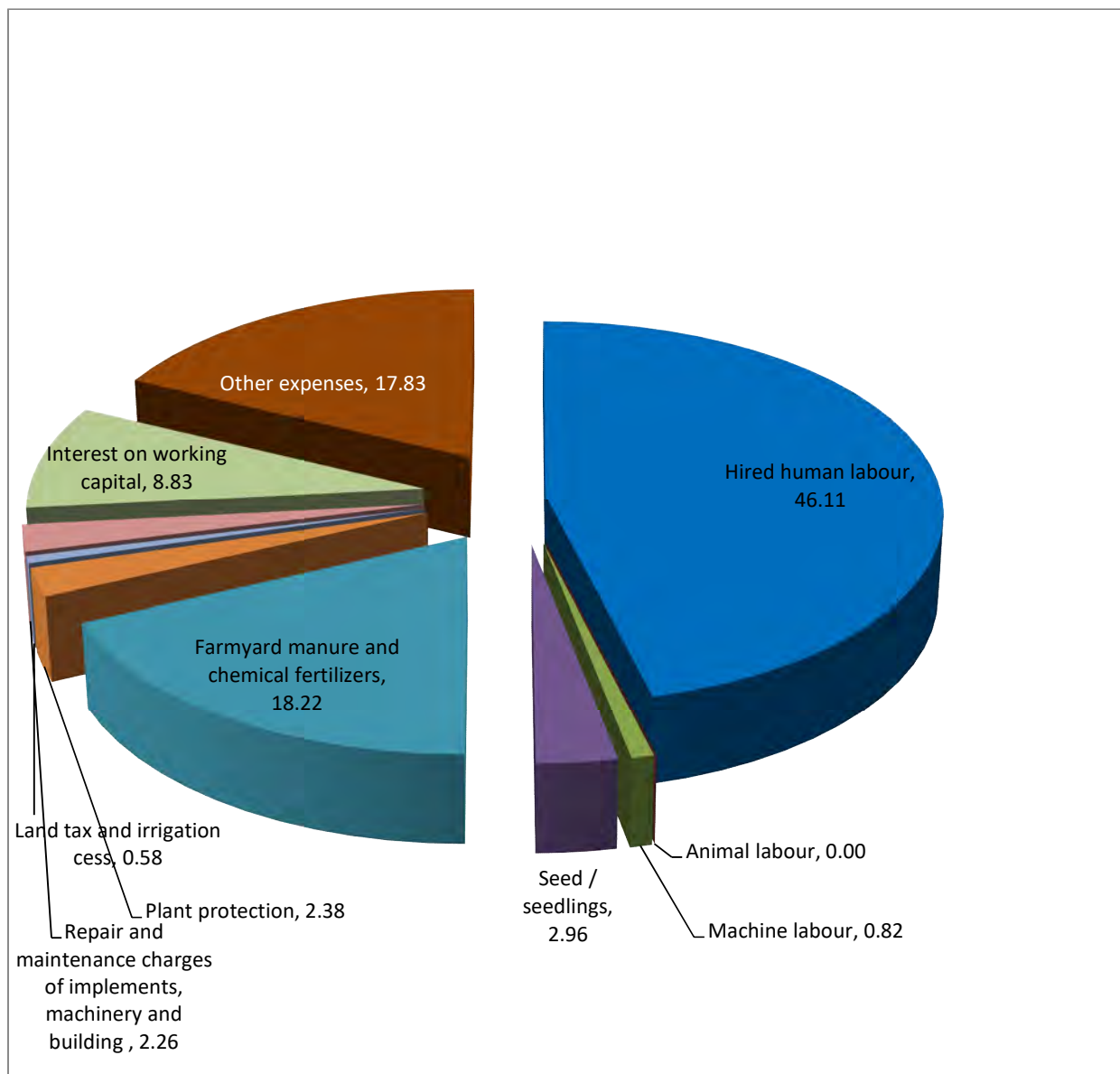
Cost of Cultivation

Cost of cultivation of Bitter gourd (summer) per hectare is estimated as Rs. **100382/-** when cost 'A' is considered. Component wise holding size class details are presented below:

Table 70: Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (summer)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	44750	50137	34426	46290
2	Animal labour	0	0	0	0
3	Machine labour	695	897	991	828
4	Seed / seedlings	3698	2264	3569	2971
5	Farmyard manure and chemical fertilizers	21036	17240	13246	18290
6	Plant protection	2045	2449	3310	2385
7	Land tax and irrigation Cess	762	542	163	587
8	Repair and maintenance charges of implements, machinery and building	3559	1044	3160	2265
9	Interest on working capital	9075	9082	7154	8866
10	Other expenses	18521	17833	15994	17900
11	Total Cost 'A' (1-10)	104141	101488	82013	100382
12	Interest on fixed capital	3550	2197	3130	2831
13	Cost 'B1' (11+12)	107691	103685	85143	103213
14	Interest on land value	476360	288340	189504	351258
15	Cost 'B' (13+14)	584051	392025	274647	454471
16	Imputed value of household labour	24472	17067	30904	21500
17	Cost 'C' (15+16)	608523	409092	305551	475971

Percentage Distribution of “COST A” per hectare of Bitter gourd (Summer) during 2014-15



In Bitter gourd (summer) cultivation male labour participation accounted as 47.97 % of the total labour hours. Details are given below:

Table 71: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	43.28	54.02	37.88	47.97
Female	31.75	26.29	24.41	28.92
Total	75.03	80.31	62.29	76.89

Table: 72 Cost of cultivation of Bitter Gourd -Summer per hectare (in Rs) during 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	97441	103775	0	99948
	2014-15	104141	101488	82013	100382
Cost 'B'	2013-14	504982	301787	0	431772
	2014-15	584051	392025	274647	454471
Cost 'C'	2013-14	529366	321057	0	454131
	2014-15	608523	409092	305551	475971

Table 73: Value of Product and by product per hectare (in Rs) of Bitter Gourd (Summer) during 2014-15

Holding Size Class			
Small	Medium	Large	All Sizes
154084	154602	174480	156590

2.11.1 Cowpea- Autumn during 2014-15

Sample of holding selected and area coverage for the study was 280 holdings by covering 35.80 hectares and the average area per holding was 0.13 hectare.

Table 74 - Area and number of holdings under Cowpea Autumn

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
Small	234	13.10	36.59	0.06
Medium	43	13.00	36.31	0.30
Large	3	9.70	27.09	3.23
Total	280	35.80	100.00	0.13

Cost of cultivation

When Cost A is considered about 44 percent of cost constitutes to hired human labour, Machine labour cost shares .34% and farmyard manure and chemical fertilizers accounts to 20.65%.

Table 75- Cost of Cultivation per hectare (in Rs.) of Cowpea (autumn)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	50332	69413	27480	51221
2	Animal labour	952	0	0	356
3	Machine labour	206	892	0	400
4	Seed / seedlings	4349	3423	1532	3277
5	Farmyard manure and chemical fertilizers	27406	26408	15476	23895
6	Plant protection	1568	1943	463	1412
7	Land tax and irrigation cess	463	295	168	324
8	Repair and maintenance charges of implements, machinery and building	5768	3204	196	3367
9	Interest on working capital	11216	12462	5589	10183
10	Other expenses	27329	22536	10941	21265
11	Total cost 'A' (1-10)	129609	140576	61845	115700
12	Interest on fixed capital	4606	1907	29	2419
13	Cost 'B1' (11+12)	134215	142483	61874	118119
14	Interest on land value	786402	324534	162159	454122
15	Cost 'B' (13+14)	920617	467017	224033	572241
16	Imputed value of household labour	30599	31075	13941	26375
17	Cost 'C' (15+16)	951216	498092	237974	598616

Percentage Distribution of “COST A” per hectare of cowpea (Autumn) during 2014-15

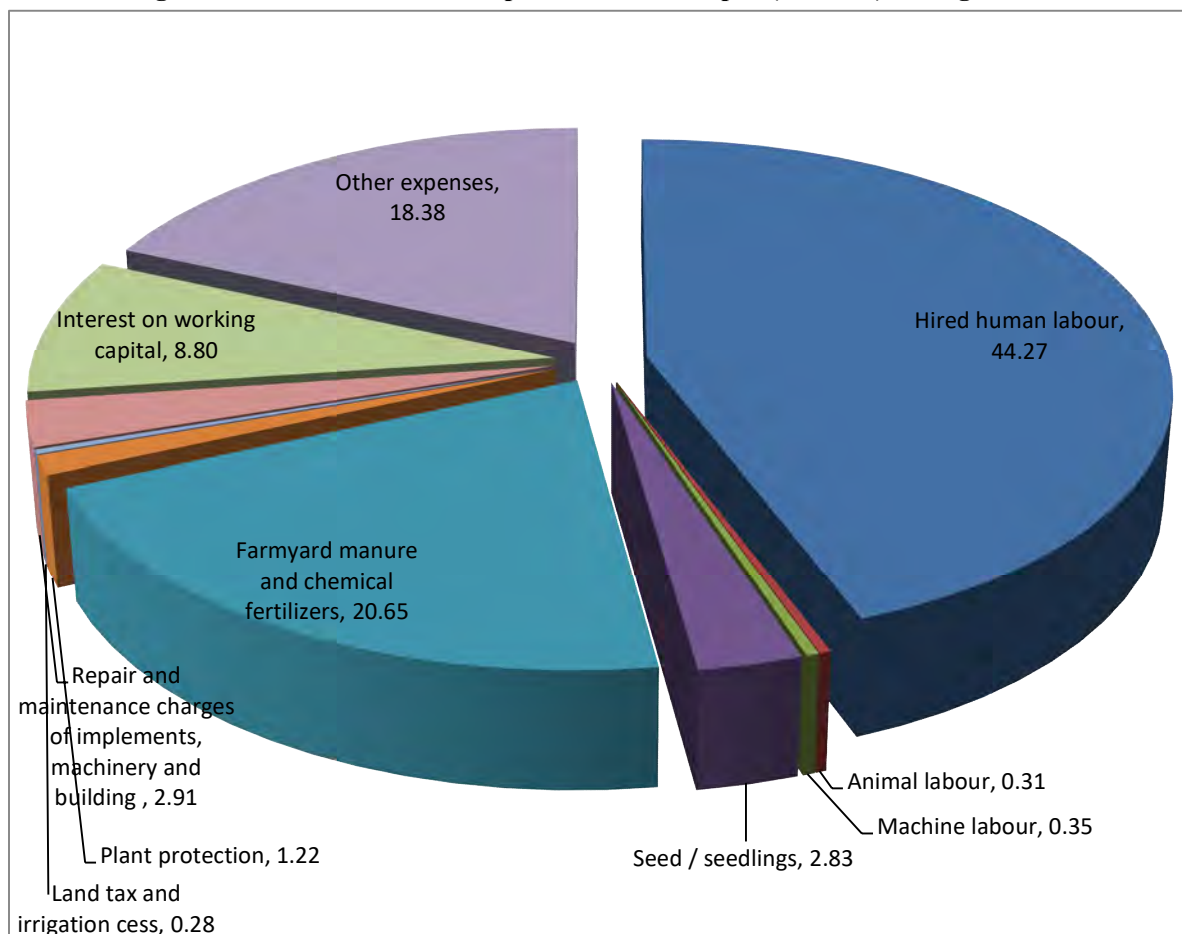


Table 76: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	42.05	41.72	50.31	42.58
Female	24.90	23.47	39.88	25.60
Total	66.95	65.19	90.19	68.18

In Cowpea (autumn) cultivation 42.58% of total labour hours goes to males.

Table: 77 Cost of cultivation of Cowpea -Autumn per hectare (in Rs) during 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	155501	104951	94017	124359
	2014-15	129609	140576	61845	115700
Cost 'B'	2013-14	688584	482840	193055	529124
	2014-15	920617	467017	224033	572241
Cost 'C'	2013-14	722779	506619	226814	558533
	2014-15	951216	408092	237974	598616

Table: 78 Value of product and by-product per hectare (in Rs.) of Cowpea-Autumn 2014-15

Holding Size Class			
Small	Medium	Large	All Sizes
176632	152957	119297	152912

2.11.2 Cowpea -Winter during 2014-15

During 2014-15 Cost of cultivation study on Cowpea (winter) was conducted in 467 holdings by covering 58.10 hectare of land. Details of these holdings are given below:

Table 79 – Area and number of holdings under Cowpea winter

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Area per holding (ha)
Small	362	23.4	40.28	0.06
Medium	102	30.30	52.15	0.30
Large	3.00	4.40	7.57	1.47
Total	467	58.10	100	0.12

Cost of Cultivation

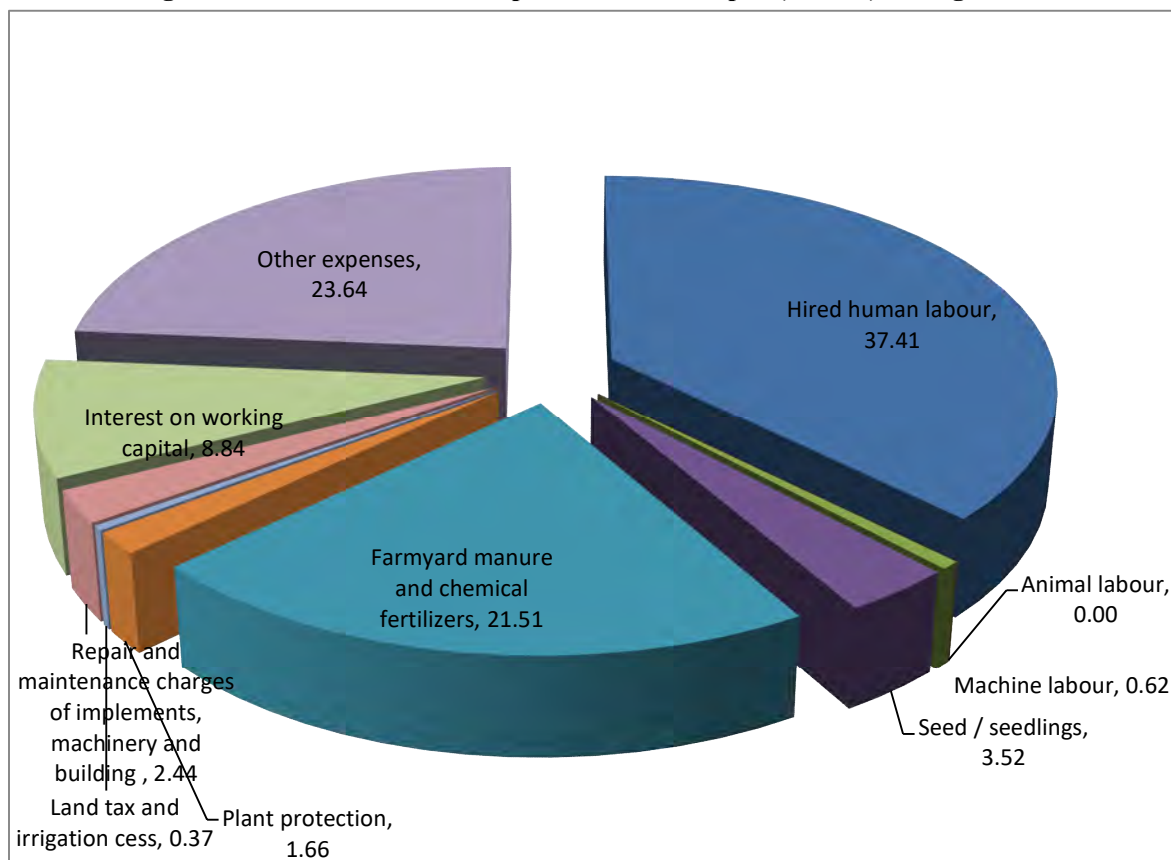
In Cost A, the major share of the cost component was hired human labour. It constitutes 37.41%. Another two major items were seed/seedlings and farmyard manure and chemical fertilizers which accounted 3.52% and 21.51% respectively. Interest on working capital was

8.84%. By considering the various cost component of Cowpea (winter) cultivation per hectare cost calculated as Rs.95899/-

Table 80– Cost of cultivation per hectare (in Rs.) of Cowpea (winter)

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	35397	33731	53385	35877
2	Animal labour	0	0	0	0
3	Machine labour	437	799	0	592
4	Seed / seedlings	3180	3704	2100	3371
5	Farmyard manure and chemical fertilizers	23356	17605	26742	20628
6	Plant protection	1401	1485	3425	1596
7	Land tax and irrigation Cess	468	267	362	356
8	Repair and maintenance charges of implements, machinery and building	3311	1798	777	2338
9	Interest on working capital	8405	8062	11697	8473
10	Other expenses	20279	23296	31320	22668
11	Total Cost 'A' (1-10)	96234	90747	129808	95899
12	Interest on fixed capital	3948	1606	1913	2582
13	Cost 'B1' (11+12)	100182	92353	131721	98481
14	Interest on land value	378777	258281	249346	306658
15	Cost 'B' (13+14)	478959	350634	381067	405139
16	Imputed value of household labour	32679	15010	30674	23372
17	Cost 'C' (15+16)	511638	365644	411741	428511

Percentage Distribution of “COST A” per hectare of cowpea (Winter) during 2014-15



Sex wise work participation in hired human labours for Cowpea (winter) cultivation reveals that 12.50% of work shared by Female whereas 25.89% shared by male workers.

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

Table 81 – Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	54.19	13.36	43.09	25.89
Female	25.41	6.60	27.21	12.50
Total	79.60	19.96	70.30	38.39

Table: 82 Cost of cultivation of Cowpea -Winter per hectare (in Rs) during 2013-14 & 2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	93686	96084	82663	94165
	2014-15	96234	90747	129808	95899
Cost 'B'	2013-14	492547	457245	192226	459588
	2014-15	478959	350634	381067	405139
Cost 'C'	2013-14	517816	481614	215300	484322
	2014-15	511638	365644	411741	428511

Output

Table: 83 - Value of Product and Byproduct per hectare (in Rs) of Cowpea -Winter 2014-15

Holding Size Class			
Small	Medium	Large	All Sizes
162638	146736	209937	157930

2.11.3 Cowpea - Summer (Punja) during 2014-15

For the cost of cultivation study on Cowpea (summer) during 2014-15 the total number of holdings selected was 374. The details of these holdings are presented below

Table 84: Area and number of holdings under Cowpea -Summer

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	298	18.40	42.01	0.06
Medium	73	22.90	52.28	0.31
Large	3	2.50	5.71	0.83
All Size	374	43.80	100.00	0.12

The total area under cultivation in the selected sample holdings covers to 43.80 hectares and the average size of a holding is 0.12 hectare.

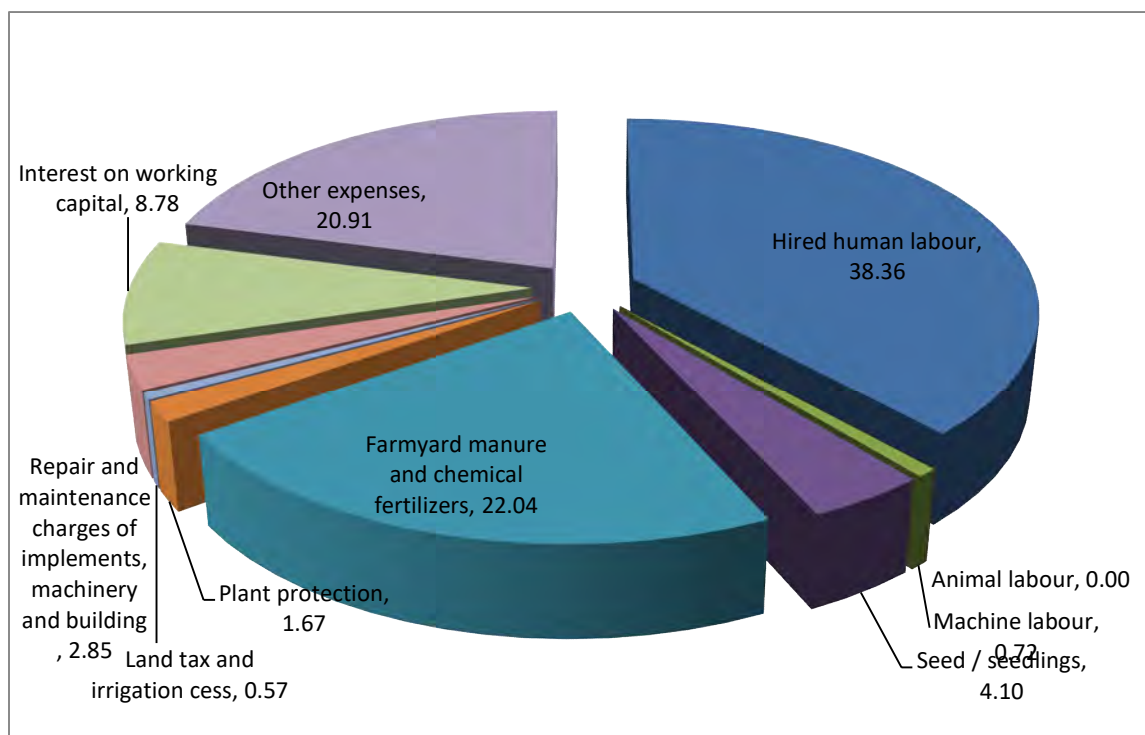
Cost of Cultivation

Cost of cultivation of Cowpea (summer) per hectare is estimated as Rs. **89,367/-** when cost 'A' is considered. Cost incurred for hired human labour is 38.36% of the total cost and farmyard manure and chemical fertilizer is 22.04% of the total cost.

Table 85: Cost of Cultivation per hectare (in Rs.) of Cowpea (summer) during 2014-2015

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	35869	31932	44027	34283
2	Animal labour	0	0	0	0
3	Machine labour	447	685	1693	642
4	Seed / seedlings	4199	3287	3133	3662
5	Farmyard manure and chemical fertilizers	20197	20556	8235	19699
6	Plant protection	1850	1311	456	1489
7	Land tax and irrigation Cess	643	418	428	513
8	Repair and maintenance charges of implements, machinery and building	3713	1864	195	2547
9	Interest on working capital	7904	7924	6712	7846
10	Other expenses	16477	21471	9573	18686
11	Total Cost 'A' (1-10)	91299	89448	74452	89367
12	Interest on fixed capital	3094	1723	1071	2263
13	Cost 'B1' (11+12)	94393	91171	75523	91630
14	Interest on land value	408209	322476	83975	344921
15	Cost 'B' (13+14)	502602	413647	159498	436551
16	Imputed value of household labour	24186	20293	24973	22201
17	Cost 'C' (15+16)	526788	433940	184471	458752

Percentage Distribution of “COST A” per hectare of cowpea (Summer) during 2014-15



In Cowpea summer cultivation hired female labour participation accounted as 20.22 % of the total labour hours. Details are given below:

Table 86: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	40.91	40.02	27.33	39.70
Female	18.34	23.90	12.06	20.22
Total	59.25	63.92	39.39	59.92

Table 87: Cost of cultivation of Cowpea -Summer per hectare (in Rs) during 2013-14 &2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	90335	91000	77447	89607
	2014-15	91299	89448	74452	89367
Cost 'B'	2013-14	522317	307979	242806	412376
	2014-15	502602	413647	159498	436551
Cost 'C'	2013-14	540367	322597	350713	428225
	2014-15	526788	433940	184471	458752

Table 88: Value of Product and by product per hectare (in Rs) of Cowpea Summer during 2014-15

Holding Size Class			
Small	Medium	Large	All Sizes
161000	165439	124533	161226

2.12 Cardamom during 2014-15

Cardamom is cultivated widely in Idukki, Palakkad and Wayanad districts of the state.

Table 89: Area and Number of holdings under Cardamom cultivation

Holding size class	No of selected holdings	Area under the crop in the sample (ha)	Percentage	Area per holding (ha)
Small	32	4.00	9.69	0.13
Medium	61	19.40	46.97	0.32
Large	18	17.90	43.34	0.99
All size	111	41.30	100.00	0.37

For the study 111 sample holdings were selected and the total area of crop in the selected area was 41.30 hectare. The average size per holding was 0.37 hectare.

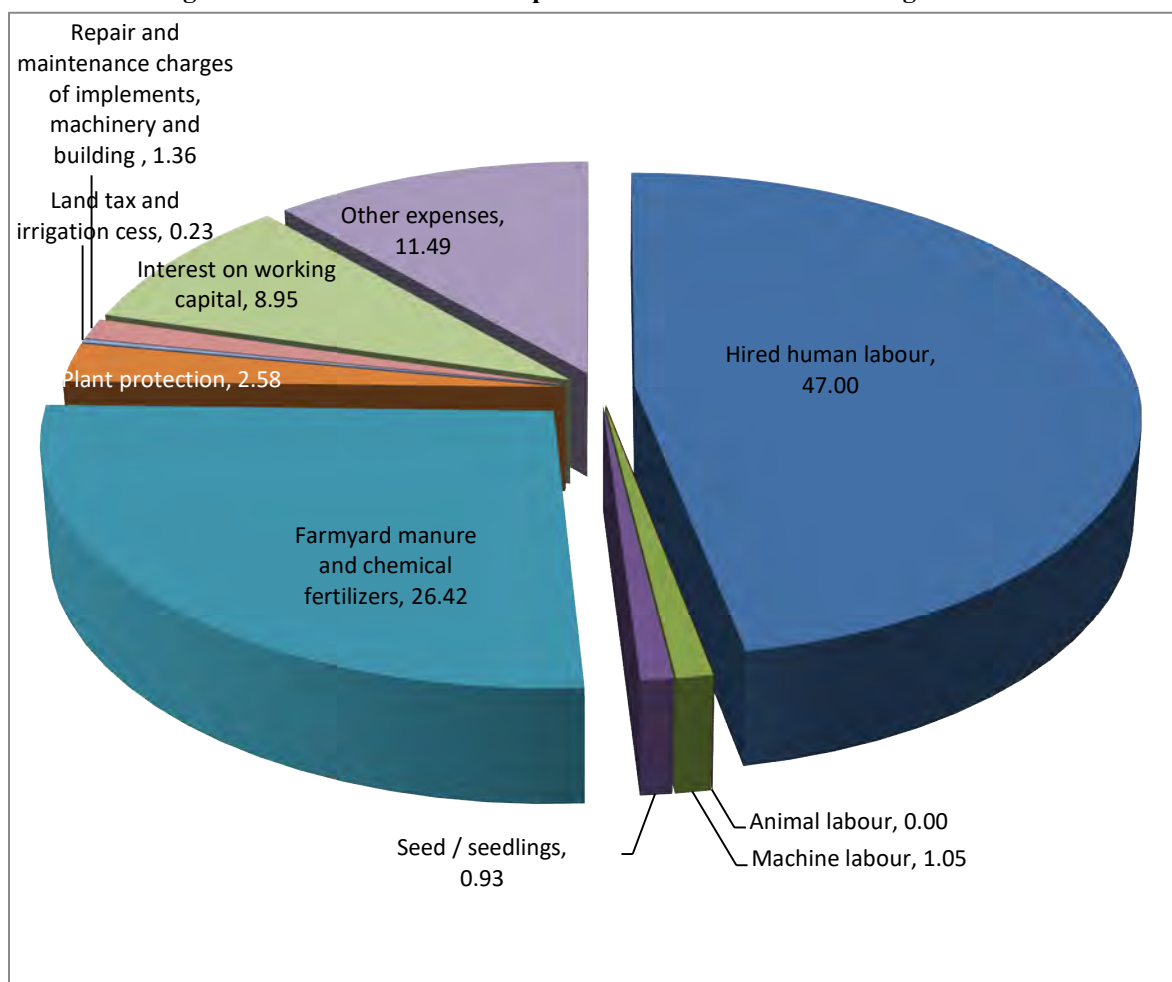
Cost of Cultivation

The different cost components of Cardamom cultivation is given below: Per hectare cost for cultivating cardamom is estimated as Rs 1,30,918/- excluding interest on fixed capital, interest on land value and inputed value of household labour.

Table 90: Cost of Cultivation per hectare (in Rs.) of Cardamom

Sl No	Components	Holding size Class			
		Small	Medium	Large	All Size
1	Hired human labour	47593	52580	74488	61534
2	Animal labour	0	0	0	0
3	Machine labour	2611	1037	1449	1371
4	Seed / seedlings	4964	1377	167	1211
5	Farmyard manure and chemical fertilizers	29248	32553	38042	34593
6	Plant protection	1078	3353	3919	3372
7	Land tax and irrigation Cess	832	250	232	300
8	Repair and maintenance charges of implements, machinery and building	3418	1161	2092	1786
9	Interest on working capital	9561	10322	13720	11712
10	Other expenses	10118	12317	19135	15039
11	Total Cost 'A' (1-10)	109423	114950	153244	130918
12	Interest on fixed capital	6106	1603	2495	2434
13	Cost 'B1' (11+12)	115529	116553	155739	133352
14	Interest on land value	500915	403877	217226	332998
15	Cost 'B' (13+14)	616444	520430	372965	466350
16	Imputed value of household labour	34564	15105	14924	16957
17	Cost 'C' (15+16)	651008	535535	387889	483307

Percentage Distribution of “COST A” per hectare of cardamom during 2014-2015



When Cost A is considering, 47% comes under hired human labour and 26.42% in Farmyard manure and chemical fertilizers.

The following table illustrates the work participation of cardamom cultivation. It shows that percentage of hired human labour hours of females are very high and it is accounted as 48.29%.

Table 91: Percentage of hired human labour hours to total human labour hours

Sex	Holding size class			
	Small	Medium	Large	All Sizes
Male	18.53	25.86	28.79	26.75
Female	41.14	47.21	50.33	48.29
Total	59.66	73.07	79.12	75.04

Table: 92 Cost of cultivation of Cardamom per hectare (in Rs) during 2013-14 &2014-15

Concept of cost	Year	Holding Size class			
		Small	Medium	Large	All size
Cost 'A'	2013-14	121948	125217	126333	125336
	2014-15	109423	114950	153244	130918
Cost 'B'	2013-14	552807	578004	310245	454067
	2014-15	616444	520430	372965	466350
Cost 'C'	2013-14	586429	592570	323856	470443
	2014-15	651008	535535	387889	483307

Value of Out put**Table 93: Value of Output per hectare (in Rs) of Cardamom**

The estimated value of output per hectare is Rs.322917 /-

Holding Size Class			
Small	Medium	Large	All Sizes
293287	310508	343239	322917

A1.1 District wise Area and number of holding under Autumn Paddy during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	60	18.8	3.15	0.31
2	Kollam	72	28.6	4.80	0.40
3	Pathanamthitta	22	16.0	2.68	0.73
4	Alappuzha	90	110	18.44	1.22
5	Kottayam	45	58.0	9.73	1.29
6	Idukki	30	9.5	1.60	0.32
7	Ernakulam	105	70.40	11.80	0.67
8	Thrissur	74	128.9	21.61	1.74
9	Palakkad	72	75.6	12.68	1.05
10	Malappuram	60	33.8	5.67	0.56
11	Kozhikkode	43	10.3	1.73	0.24
12	Wayanad	0	0	0	0
13	Kannur	45	24.1	4.04	0.54
14	Kasaragod	29	12.4	2.08	0.43
	State	747	596.4	100	0.80

A1.2 District wise Area and number of holding under Winter Paddy during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	60.00	23.50	3.54	0.39
2	Kollam	66.00	42.50	6.40	0.64
3	Pathanamthitta	52.00	36.40	5.48	0.70
4	Alappuzha	90.00	132.10	19.90	1.47
5	Kottayam	54.00	40.40	6.09	0.75
6	Idukki	45.00	16.00	2.41	0.36
7	Ernakulam	90.00	57.40	8.65	0.64
8	Thrissur	75.00	79.00	11.90	1.05
9	Palakkad	75.00	77.30	11.64	1.03
10	Malappuram	60.00	67.40	10.15	1.12
11	Kozhikkode	45.00	17.90	2.70	0.40
12	Wayanad	48.00	47.80	7.20	1.00
13	Kannur	45.00	15.20	2.29	0.34
14	Kasaragod	30.00	11.00	1.66	0.37
	State	835.00	663.90	100.00	0.80

A1.3 District wise Area and number of holding under Summer Paddy during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	53.00	15.90	2.59	0.30
2	Kollam	7.00	0.90	0.15	0.13
3	Pathanamthitta	39.00	69.50	11.33	1.78
4	Alappuzha	77.00	169.00	27.55	2.19
5	Kottayam	60.00	38.80	6.32	0.65
6	Idulkki	35.00	8.50	1.39	0.24
7	Eranakulam	80.00	34.60	5.64	0.43
8	Thrissur	62.00	111.20	18.13	1.79
9	Palakkad	62.00	39.80	6.49	0.64
10	Malappuram	45.00	78.10	12.73	1.74
11	Kozhikkode	45.00	18.40	3.00	0.41
12	Wayanad	45.00	16.90	2.75	0.38
13	Kannur	21.00	3.00	0.49	0.14
14	Kasaragod	30.00	8.90	1.45	0.30
	State	661.00	613.50	100.00	0.93

A1.4 District wise Area and number of holding under Coconut during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	80.00	31.20	5.88	0.39
2	Kollam	100.00	34.60	6.52	0.35
3	Pathanamthitta	100.00	24.50	4.61	0.25
4	Alappuzha	120.00	49.30	9.29	0.41
5	Kottayam	100.00	35.20	6.63	0.35
6	Idukki	80.00	17.80	3.35	0.22
7	Eranakulam	140.00	47.20	8.89	0.34
8	Thrissur	100.00	58.70	11.06	0.59
9	Palakkad	100.00	65.60	12.36	0.66
10	Malappuram	80.00	53.50	10.08	0.67
11	Kozhikkode	60.00	37.60	7.08	0.63
12	Wayanad	60.00	20.90	3.94	0.35
13	Kannur	60.00	23.30	4.39	0.39
14	Kasaragod	40.00	31.50	5.93	0.79
	State	1220.00	530.90	100.00	0.44

A1.5 District wise Area and number of holding under Arecanut during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	76.00	13.50	6.23	0.18
2	Kollam	95.00	4.00	1.85	0.04
3	Pathanamthitta	100.00	6.10	2.81	0.06
4	Alappuzha	115.00	3.80	1.75	0.03
5	Kottayam	100.00	7.30	3.37	0.07
6	Idukki	80.00	8.40	3.88	0.11
7	Eranakulam	140.00	12.50	5.77	0.09
8	Thrissur	96.00	21.10	9.74	0.22
9	Palakkad	97.00	32.50	15.00	0.34
10	Malappuram	80.00	36.70	16.94	0.46
11	Kozhikkode	55.00	9.60	4.43	0.17
12	Wayanad	60.00	32.50	15.00	0.54
13	Kannur	60.00	9.00	4.15	0.15
14	Kasaragod	40.00	19.80	9.14	0.50
	State	1194.00	216.70	100.00	0.18

A1.6 District wise Area and number of holding under Tapioca during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	60.00	12.20	6.80	0.20
2	Kollam	75.00	12.60	7.03	0.17
3	Pathanamthitta	75.00	13.10	7.31	0.17
4	Alappuzha	99.00	8.70	4.85	0.09
5	Kottayam	75.00	12.90	7.19	0.17
6	Idukki	57.00	14.30	7.98	0.25
7	Eranakulam	91.00	21.60	12.05	0.24
8	Thrissur	64.00	11.80	6.58	0.18
9	Palakkad	102.00	20.40	11.38	0.20
10	Malappuram	60.00	23.40	13.05	0.39
11	Kozhikkode	45.00	6.30	3.51	0.14
12	Wayanad	45.00	10.70	5.97	0.24
13	Kannur	81.00	5.90	3.29	0.07
14	Kasaragod	30.00	5.40	3.01	0.18
	State	959.00	179.30	100.00	0.19

A1.7 District wise Area and number of holding under Banana during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	60.00	11.80	5.58	0.20
2	Kollam	75.00	11.50	5.45	0.15
3	Pathanamthitta	75.00	13.30	6.29	0.18
4	Alappuzha	62.00	6.30	2.98	0.10
5	Kottayam	75.00	14.70	6.95	0.20
6	Idukki	60.00	15.20	7.18	0.25
7	Ernakulam	90.00	25.60	12.10	0.28
8	Thrissur	65.00	19.60	9.26	0.30
9	Palakkad	75.00	24.30	11.48	0.32
10	Malappuram	60.00	20.00	9.45	0.33
11	Kozhikkode	45.00	11.20	5.29	0.25
12	Wayanad	48.00	24.00	11.34	0.50
13	Kannur	40.00	6.00	2.84	0.15
14	Kasaragod	30.00	8.10	3.83	0.27
	State	860.00	211.60	100.00	0.25

A1.8 District wise Area and number of holding under Pepper during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	60.00	12.20	10.45	0.20
2	Kollam	73.00	3.50	3.00	0.05
3	Pathanamthitta	75.00	6.30	5.40	0.08
4	Alappuzha	90.00	2.50	2.14	0.03
5	Kottayam	75.00	9.90	8.48	0.13
6	Idukki	60.00	15.70	13.45	0.26
7	Eranakulam	97.00	8.90	7.63	0.09
8	Thrissur	67.00	4.40	3.77	0.07
9	Palakkad	77.00	13.50	11.57	0.18
10	Malappuram	60.00	8.10	6.94	0.14
11	Kozhikkode	45.00	2.50	2.14	0.06
12	Wayanad	46.00	17.90	15.34	0.39
13	Kannur	45.00	6.50	5.57	0.14
14	Kasaragod	30.00	4.80	4.11	0.16
	State	900.00	116.70	100.00	0.13

A1.9 District wise Area and number of holding under Ginger` during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	55.00	2.70	2.85	0.05
2	Kollam	75.00	2.80	2.95	0.04
3	Pathanamthitta	70.00	4.50	4.74	0.06
4	Alappuzha	36.00	0.80	0.84	0.02
5	Kottayam	75.00	3.50	3.69	0.05
6	Idukki	60.00	4.30	4.53	0.07
7	Eranakulam	55.00	6.80	7.17	0.12
8	Thrissur	47.00	2.40	2.53	0.05
9	Palakkad	70.00	43.00	45.31	0.61
10	Malappuram	48.00	3.00	3.16	0.06
11	Kozhikkode	32.00	2.40	2.53	0.08
12	Wayanad	45.00	12.50	13.17	0.28
13	Kannur	30.00	3.20	3.37	0.11
14	Kasaragod	24.00	3.00	3.16	0.13
	State	722.00	94.90	100.00	0.13

A1.10 District wise Area and number of holding under Turmeric during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	50	2.20	5.00	0.04
2	Kollam	75	2.80	6.36	0.04
3	Pathanamthitta	34	1.50	3.41	0.04
4	Alappuzha	20	0.80	1.82	0.04
5	Kottayam	75	3.20	7.27	0.04
6	Idukki	60	2.60	5.91	0.04
7	Eranakulam	75	6.10	13.86	0.08
8	Thrissur	57	3.90	8.86	0.07
9	Palakkad	70	9.7	22.05	0.14
10	Malappuram	54	5.00	11.36	0.05
11	Kozhikkode	44	1.90	4.32	0.09
12	Wayanad	45	2.40	5.45	0.04
13	Kannur	24	1.30	2.95	0.05
14	Kasaragod	22	0.60	1.36	0.03
	State	705	44.00	100	0.06

A1.11 District wise Area and number of holding under Pineapple during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	8	10.40	2.70	1.30
2	Kollam	25	14.30	3.67	0.57
3	Pathanamthitta	6	1.20	0.30	0.20
4	Alappuzha	16	4.30	1.10	0.27
5	Kottayam	75	92.50	23.60	1.23
6	Idukki	33	25.80	6.60	0.78
7	Eranakulam	69	85.30	21.70	1.24
8	Thrissur	26	79.90	20.40	3.07
9	Palakkad	11	37.80	9.60	3.44
10	Malappuram	7	0.30	0.07	0.04
11	Kozhikkode	6	5.70	1.45	0.95
12	Wayanad	14	6.00	1.53	0.43
13	Kannur	22	11.70	2.98	0.53
14	Kasaragod	12	17.20	4.38	1.43
	State	330	392.40	100	1.19

A1.12 District wise Area and number of holding under Bitter Gourd (Autumn) during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	34.00	2.10	6.12	0.06
2	Kollam	45.00	1.80	5.25	0.04
3	Pathanamthitta	6.00	0.10	0.29	0.02
4	Alappuzha	13.00	0.40	1.17	0.03
5	Kottayam	50.00	4.40	12.83	0.09
6	Idukki	0.00	0.00	0.00	0.00
7	Eranakulam	3.00	0.10	0.29	0.03
8	Thrissur	31.00	12.40	36.15	0.40
9	Palakkad	40.00	7.90	23.03	0.20
10	Malappuram	21.00	2.80	8.16	0.13
11	Kozhikode	0.00	0.00	0.00	0.00
12	Wayanad	0.00	0.00	0.00	0.00
13	Kannur	14.00	1.70	4.96	0.12
14	Kasaragod	3.00	0.60	1.75	0.20
	State	260.00	34.30	100.00	0.13

A1.13 District wise Area and number of holding under Bitter Gourd (Winter) during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	29.00	3.10	6.25	0.11
2	Kollam	51.00	3.60	7.26	0.07
3	Pathanamthitta	25.00	2.60	5.24	0.10
4	Alappuzha	28.00	1.30	2.62	0.05
5	Kottayam	40.00	2.00	4.03	0.85
6	Idukki	35.00	4.10	8.27	0.12
7	Eranakulam	24.00	3.20	6.45	0.13
8	Thrissur	30.00	3.70	7.46	0.12
9	Palakkad	45.00	7.50	15.12	0.17
10	Malappuram	20.00	3.90	7.86	0.20
11	Kozhikode	6.00	3.20	6.45	0.53
12	Wayanad	30.00	8.90	17.94	0.30
13	Kannur	15.00	1.70	3.43	0.11
14	Kasaragod	17.00	0.80	1.61	0.05
	State	395.00	49.60	100.00	0.13

**A1.14 District wise Area and number of holding under Bitter Gourd (Summer) during
2014-15**

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	28.00	2.50	8.71	0.09
2	Kollam	32.00	1.20	4.18	0.04
3	Pathanamthitta	34.00	1.90	6.62	0.06
4	Alappuzha	18.00	0.50	1.74	0.03
5	Kottayam	40.00	2.40	8.36	0.06
6	Idukki	0.00	0.00	0.00	0.00
7	Eranakulam	12.00	3.90	13.59	0.33
8	Thrissur	24.00	3.60	12.54	0.15
9	Palakkad	15.00	1.00	3.48	0.07
10	Malappuram	13.00	1.60	5.57	0.12
11	Kozhikkode	7.00	0.50	1.74	0.07
12	Wayanad	20	7.20	25.09	0.36
13	Kannur	17.00	1.10	3.83	0.06
14	Kasaragod	15.00	1.30	4.53	0.09
	State	275.00	28.70	100.00	0.10

A1.15 District wise Area and number of holding under Cowpea (Autumn) during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	35.00	3.70	10.34	0.11
2	Kollam	45.00	1.80	5.03	0.04
3	Pathanamthitta	10.00	0.20	0.56	0.02
4	Alappuzha	27.00	2.20	6.15	0.08
5	Kottayam	45.00	3.50	9.78	0.08
6	Idukki	0.00	0.00	0.00	0.00
7	Eranakulam	2.00	0.00	0.00	0.00
8	Thrissur	34.00	14.90	41.62	0.44
9	Palakkad	40.00	5.00	13.97	0.13
10	Malappuram	25.00	2.30	6.42	0.09
11	Kozhikkode	0.00	0.00	0.00	0.00
12	Wayanad	0.00	0.00	0.00	0.00
13	Kannur	12.00	2.10	5.87	0.18
14	Kasaragod	5.00	0.10	0.28	0.02
	State	280.00	35.80	100.00	0.13

A1.16 District wise Area and number of holding under Cowpea (Winter) during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	36	5.60	9.64	0.16
2	Kollam	41	2.20	3.79	0.05
3	Pathanamthitta	37	4.40	7.57	0.12
4	Alappuzha	50	3.20	5.51	0.06
5	Kottayam	50	5.90	10.15	0.12
6	Idukki	37	3.70	6.37	0.10
7	Eranakulam	24	3.50	6.02	0.15
8	Thrissur	41	6.10	10.50	0.15
9	Palakkad	45	5.8	9.98	0.13
10	Malappuram	27	5.30	9.12	0.20
11	Kozhikkode	5	0.30	0.52	0.06
12	Wayanad	29	6.70	11.53	0.23
13	Kannur	24	4	6.88	0.17
14	Kasaragod	21	1.4	2.41	0.07
	State	467	58.10	100	0.12

A1.17 District wise Area and number of holding under Cowpea (Summer) during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Thiruvananthapuram	38.00	5.20	11.87	0.14
2	Kollam	34.00	1.30	2.97	0.04
3	Pathanamthitta	50.00	5.60	12.79	0.11
4	Alappuzha	40.00	3.10	7.08	0.08
5	Kottayam	50.00	5.30	12.10	0.11
6	Idukki	0.00	0.00	0.00	0.00
7	Eranakulam	14.00	2.20	5.02	0.16
8	Thrissur	27.00	3.60	8.22	0.13
9	Palakkad	20.00	2.30	5.25	0.12
10	Malappuram	22.00	3.50	7.99	0.16
11	Kozhikkode	19.00	2.30	5.25	0.12
12	Wayanad	20.00	5.70	13.01	0.29
13	Kannur	20.00	1.00	2.28	0.05
14	Kasaragod	20.00	2.70	6.16	0.14
	State	374.00	43.80	100.00	0.12

A1.18 District wise Area and number of holding under Cardamom during 2014-15

Sl No	District	No of selected holdings	Area under the crop in the sample (ha)	Percentage Area	Average Area per holding (ha)
1	Idukki	60.00	25.60	61.99	0.43
2	Palakkad	5.00	2.20	5.33	0.44
3	Wayanad	46.00	13.50	32.69	0.29
	State	111.00	41.30	100.00	0.37

A2.1 District wise Cost of Cultivation per hectare (in Rs) of Autumn paddy during 2014-15

Sl No	Components	Thiruvann thapuram	Kollam	Pathanmth itta	Alappuzha	Kottayam
1	Hired human labour	45493	46565	28406	27857	27977
2	Animal labour	0	0	0	0	0
3	Machine labour	8403	10716	9716	10218	9841
4	Seed / seedlings	1936	2676	2419	3758	2236
5	Farmyard manure and chemical fertilizers	7326	5548	5827	6555	4511
6	Plant protection	452	434	413	267	322
7	Land tax and irrigation cess	168	186	166	101	135
8	Repair and maintenance charges of implements, machinery and building	624	845	202	255	155
9	Interest on working capital	3436	3508	2570	2625	2402
10	Other expenses	5100	4224	4624	3843	3136
11	Total cost 'A' (1-10)	72938	74702	54343	55479	50715
12	Interest on fixed capital	945	338	165	121	109
13	Cost 'B1' (11+12)	73883	75040	54508	55600	50824
14	Interest on land value	82707	93990	68152	43794	49691
15	Cost 'B' (13+14)	156590	169030	122660	99394	100515
16	Imputed value of household labour	7022	5274	5166	3364	8936
17	Cost 'C' (15+16)	163612	174304	127826	102758	109451

A2.1 District wise Cost of Cultivation per hectare (in Rs.) of Autumn paddy during 2014-15

Sl No	Components	Idukki	Eranakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	23219	30884	21842	24343	36970
2	Animal labour	2750	0	0	0	88
3	Machine labour	0	4734	6233	10631	6931
4	Seed / seedlings	1793	1174	1224	2431	1851
5	Farmyard manure and chemical fertilizers	3516	3140	3103	5887	5818
6	Plant protection	296	230	581	294	458
7	Land tax and irrigation cess	238	103	109	214	108
8	Repair and maintenance charges of implements, machinery and building	602	332	166	209	103
9	Interest on working capital	1703	2176	1904	2297	2861
10	Other expenses	2476	3353	5099	2358	5105
11	Total cost 'A' (1-10)	36593	46126	40261	48664	60293
12	Interest on fixed capital	407	611	216	995	128
13	Cost 'B1' (11+12)	37000	46737	40477	49659	60421
14	Interest on land value	54830	93722	43354	49441	67659
15	Cost 'B' (13+14)	91830	140459	83831	99100	128080
16	Imputed value of household labour	5935	5751	2111	5254	5364
17	Cost 'C' (15+16)	97765	146210	85942	104354	133444

A2.1 District wise Cost of Cultivation per hectare (in Rs.) of Autumn paddy during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	34383	0	24963	33337	28511
2	Animal labour	257	0	0	57	55
3	Machine labour	9489	0	4631	7058	8024
4	Seed / seedlings	2183	0	1122	1823	2130
5	Farmyard manure and chemical fertilizers	6972	0	9769	6804	5132
6	Plant protection	116	0	231	439	368
7	Land tax and irrigation cess	0	0	169	158	133
8	Repair and maintenance charges of implements, machinery and building	250	0	219	418	267
9	Interest on working capital	2881	0	2210	2548	2405
10	Other expenses	4221	0	3482	1446	3870
11	Total cost 'A' (1-10)	60752	0	46796	54088	50895
12	Interest on fixed capital	145	0	764	773	391
13	Cost 'B1' (11+12)	60897	0	47560	54861	51286
14	Interest on land value	54978	0	79376	42713	58321
15	Cost 'B' (13+14)	115875	0	126936	97574	109607
16	Imputed value of household labour	8523	0	3572	8426	4771
17	Cost 'C' (15+16)	124398	0	130508	106000	114378

A2.2 District wise Cost of Cultivation per hectare (in Rs.) of Winter Paddy during 2014-15

Sl No	Components	Thiruvann thapuram	Kollam	Pathanam hitta	Alappuzha	Kottayam
1	Hired human labour	40029	38085	28515	20205	27091
2	Animal labour	0	0	0	177	0
3	Machine labour	7057	9787	11956	7872	11122
4	Seed / seedlings	2176	2257	3862	4370	1401
5	Farmyard manure and chemical fertilizers	7240	10080	7316	4368	5356
6	Plant protection	563	294	707	1320	1032
7	Land tax and irrigation cess	40	49	198	502	86
8	Repair and maintenance charges of implements, machinery and building	672	494	274	362	242
9	Interest on working capital	3067	3138	2931	2341	2058
10	Other expenses	4271	2262	6258	8516	5010
11	Total cost 'A' (1-10)	65115	66446	62017	50033	53398
12	Interest on fixed capital	1622	1495	527	403	518
13	Cost 'B1' (11+12)	66737	67941	62544	50436	53916
14	Interest on land value	76649	63818	27217	44138	31969
15	Cost 'B' (13+14)	143386	131759	89761	94574	85885
16	Imputed value of household labour	7367	3763	6192	3684	5555
17	Cost 'C' (15+16)	150753	135522	95953	98258	91440

A2.2 District wise Cost of Cultivation per hectare (in Rs.) of Winter Paddy during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	24394	23520	22269	21390	26981
2	Animal labour	367	0	142	517	0
3	Machine labour	6283	9707	1359	9591	10835
4	Seed / seedlings	2141	1529	1888	1660	1964
5	Farmyard manure and chemical fertilizers	6362	4883	7837	6401	4760
6	Plant protection	479	214	1320	571	781
7	Land tax and irrigation cess	17	52	131	174	74
8	Repair and maintenance charges of implements, machinery and building	209	385	388	146	500
9	Interest on working capital	2155	2176	2032	2181	2550
10	Other expenses	3068	3672	5827	3490	5684
11	Total cost 'A' (1-10)	45475	46138	43193	46121	54129
12	Interest on fixed capital	492	1321	579	565	1161
13	Cost 'B1' (11+12)	45967	47459	43772	46686	55290
14	Interest on land value	66447	91694	23803	51849	60396
15	Cost 'B' (13+14)	112414	139153	67575	98535	115686
16	Imputed value of household labour	6187	4500	3956	4355	6851
17	Cost 'C' (15+16)	118601	143653	71531	102890	122537

A2.2 District wise Cost of Cultivation per hectare (in Rs.) of Winter Paddy during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	21640	30219	31411	35099	25652
2	Animal labour	0	673	118	0	172
3	Machine labour	8947	11640	4287	5875	8420
4	Seed / seedlings	2301	2650	1919	1985	2518
5	Farmyard manure and chemical fertilizers	6253	7390	4775	5264	6132
6	Plant protection	688	129	1005	498	795
7	Land tax and irrigation cess	41	211	112	66	189
8	Repair and maintenance charges of implements, machinery and building	114	836	1360	592	413
9	Interest on working capital	2129	2748	2412	2649	2440
10	Other expenses	2754	2250	4721	4260	5120
11	Total cost 'A' (1-10)	44867	58746	52120	56288	51851
12	Interest on fixed capital	1011	926	1385	895	813
13	Cost 'B1' (11+12)	45878	59672	53505	57183	52664
14	Interest on land value	65658	45706	59486	52429	50850
15	Cost 'B' (13+14)	111536	105378	112991	109612	103514
16	Imputed value of household labour	5834	4593	3103	3190	4737
17	Cost 'C' (15+16)	117370	109971	116094	112802	108251

A2.3 District wise Cost of Cultivation per hectare (in Rs.) of Summer Paddy during 2014-15

Sl No	Components	Thiruvannthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	48048	60385	25621	30881	24737
2	Animal labour	0	0	0	0	0
3	Machine labour	6562	9208	9732	10326	8721
4	Seed / seedlings	2145	2940	2421	5381	1995
5	Farmyard manure and chemical fertilizers	7144	5946	6582	2247	2459
6	Plant protection	654	160	128	133	462
7	Land tax and irrigation cess	316	331	282	101	271
8	Repair and maintenance charges of implements, machinery and building	428	1673	539	215	422
9	Interest on working capital	3386	4012	2370	2524	2129
10	Other expenses	3160	1598	2924	1509	4210
11	Total cost 'A' (1-10)	71843	86253	50599	53317	45406
12	Interest on fixed capital	303	424	172	106	118
13	Cost 'B1' (11+12)	72146	86677	50771	53423	45524
14	Interest on land value	70462	65911	54354	67087	76499
15	Cost 'B' (13+14)	142608	152588	105125	120510	122023
16	Imputed value of household labour	9767	8222	3330	4716	8319
17	Cost 'C' (15+16)	152375	160810	108455	125226	130342

A2.3 District wise Cost of Cultivation per hectare (in Rs.) of Summer Paddy during 2014-15

Sl No	Components	Idukki	Eranakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	34070	30371	27829	19045	26885
2	Animal labour	0	0	0	0	0
3	Machine labour	7187	7916	11389	8200	10849
4	Seed / seedlings	2195	1413	1875	1487	2008
5	Farmyard manure and chemical fertilizers	4109	5350	6980	6128	7033
6	Plant protection	175	455	137	482	224
7	Land tax and irrigation cess	495	2702	189	201	249
8	Repair and maintenance charges of implements, machinery and building	885	529	521	100	241
9	Interest on working capital	2462	2341	2533	1863	2489
10	Other expenses	1495	1313	2457	1918	2784
11	Total cost 'A' (1-10)	53073	52390	53910	39424	52762
12	Interest on fixed capital	186	825	261	983	361
13	Cost 'B1' (11+12)	53259	53215	54171	40407	53123
14	Interest on land value	62441	79878	43050	89550	50864
15	Cost 'B' (13+14)	115700	133093	97221	129957	103987
16	Imputed value of household labour	6835	9212	3739	6436	4337
17	Cost 'C' (15+16)	122535	142305	100960	136393	108324

A2.3 District wise Cost of Cultivation per hectare (in Rs.) of Summer Paddy during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	23410	33556	32273	33994	28477
2	Animal labour	324	0	0	0	10
3	Machine labour	8275	11373	7861	8315	9924
4	Seed / seedlings	1995	3235	1241	2018	2928
5	Farmyard manure and chemical fertilizers	7401	7716	7528	6632	5199
6	Plant protection	435	649	812	386	251
7	Land tax and irrigation cess	268	276	347	496	349
8	Repair and maintenance charges of implements, machinery and building	255	802	584	1256	386
9	Interest on working capital	2233	3014	2554	2639	2456
10	Other expenses	2821	3758	1364	1444	2332
11	Total cost 'A' (1-10)	47417	64379	54564	57180	52312
12	Interest on fixed capital	624	700	629	750	323
13	Cost 'B1' (11+12)	48041	65079	55193	57930	52635
14	Interest on land value	56941	49795	71508	78100	61435
15	Cost 'B' (13+14)	104982	114874	126701	136030	114070
16	Imputed value of household labour	6703	4507	6356	4955	5160
17	Cost 'C' (15+16)	111685	119381	133057	140985	119230

A2.4 District wise Cost of Cultivation per hectare (in Rs.) of Coconut during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	37396	43759	20956	42793	29406
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	184	0
4	Seed / seedlings	0	541	584	485	790
5	Farmyard manure and chemical fertilizers	5341	9603	7567	9102	11367
6	Plant protection	0	115	484	32	374
7	Land tax and irrigation cess	44	599	229	234	217
8	Repair and maintenance charges of implements, machinery and building	506	325	410	1057	518
9	Interest on working capital	4609	5742	3284	5549	4444
10	Other expenses	3350	3403	3251	2889	2507
11	Total cost 'A' (1-10)	51246	64087	36765	62325	49623
12	Interest on fixed capital	1602	2828	1498	1063	1280
13	Cost 'B1' (11+12)	52848	66915	38263	63388	50903
14	Interest on land value	758384	681266	570090	552254	603928
15	Cost 'B' (13+14)	811232	748181	608353	615642	654831
16	Imputed value of household labour	9703	8750	5327	8550	9604
17	Cost 'C' (15+16)	820935	756931	613680	624192	664435

A2.4 District wise Cost of Cultivation per hectare (in Rs.) of Coconut during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	33629	26936	34388	29657	51400
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	155	1751
4	Seed / seedlings	0	792	546	0	201
5	Farmyard manure and chemical fertilizers	9897	6204	9768	9994	8123
6	Plant protection	752	205	119	0	28
7	Land tax and irrigation cess	0	122	81	158	179
8	Repair and maintenance charges of implements, machinery and building	796	503	232	293	221
9	Interest on working capital	4698	3860	4685	4164	6469
10	Other expenses	2699	4463	2029	1834	3182
11	Total cost 'A' (1-10)	52471	43085	51848	46255	71554
12	Interest on fixed capital	2045	2654	3638	2972	2865
13	Cost 'B1' (11+12)	54516	45739	55486	49227	74419
14	Interest on land value	497305	826963	547505	719316	508166
15	Cost 'B' (13+14)	551821	872702	602991	768543	582585
16	Imputed value of household labour	6390	6915	4868	6924	8101
17	Cost 'C' (15+16)	558211	879617	607859	775467	590686

A2.4 District wise Cost of Cultivation per hectare (in Rs.) of Coconut during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	23570	35046	33312	33716	34613
2	Animal labour	0	0	0	0	0
3	Machine labour	0	794	544	120	275
4	Seed / seedlings	0	576	0	781	380
5	Farmyard manure and chemical fertilizers	10262	10891	10449	7833	8985
6	Plant protection	0	40	0	0	119
7	Land tax and irrigation cess	128	361	223	175	189
8	Repair and maintenance charges of implements, machinery and building	420	802	107	419	449
9	Interest on working capital	3512	5156	4641	4656	4723
10	Other expenses	1284	4215	2100	4105	2855
11	Total cost 'A' (1-10)	39176	57881	51376	51805	52588
12	Interest on fixed capital	1502	2665	2066	2108	2320
13	Cost 'B1' (11+12)	40678	60546	53442	53913	54908
14	Interest on land value	553692	505835	604672	479537	611734
15	Cost 'B' (13+14)	594370	566381	658114	533450	666642
16	Imputed value of household labour	7190	8047	2392	5061	7087
17	Cost 'C' (15+16)	601560	574428	660506	538511	673729

A2.5 District wise Cost of Cultivation per hectare (in Rs.) of Arecanut during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	23988	41273	27286	25950	25370
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	0	1176	191	353	1466
5	Farmyard manure and chemical fertilizers	3116	7900	5787	8805	7300
6	Plant protection	0	0	0	0	237
7	Land tax and irrigation cess	220	511	229	373	304
8	Repair and maintenance charges of implements, machinery and building	2167	2870	1129	1974	1156
9	Interest on working capital	2892	5170	3575	3988	3626
10	Other expenses	1816	1347	2490	4773	1903
11	Total cost 'A' (1-10)	34199	60247	40687	46216	41312
12	Interest on fixed capital	3815	2184	1189	1984	4070
13	Cost 'B1' (11+12)	38014	62431	41876	48200	45432
14	Interest on land value	552007	516015	421514	356607	417556
15	Cost 'B' (13+14)	590021	578446	463390	404807	462988
16	Imputed value of household labour	8313	6149	8258	8837	7579
17	Cost 'C' (15+16)	598334	584595	471648	413644	470567

A2.5 District wise Cost of Cultivation per hectare (in Rs.) of Arecanut during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	25242	25974	51474	27428	50872
2	Animal labour	0	0	0	299	0
3	Machine labour	0	0	0	60	1141
4	Seed / seedlings	0	674	198	639	0
5	Farmyard manure and chemical fertilizers	4331	9952	6862	8239	3402
6	Plant protection	505	301	429	241	231
7	Land tax and irrigation cess	211	115	115	161	171
8	Repair and maintenance charges of implements, machinery and building	1129	3620	1255	1141	1489
9	Interest on working capital	3246	4145	6149	3811	5809
10	Other expenses	2383	4545	2522	1201	2448
11	Total cost 'A' (1-10)	37047	49326	69004	43220	65563
12	Interest on fixed capital	1744	4832	1581	5490	3970
13	Cost 'B1' (11+12)	38791	54158	70585	48710	69533
14	Interest on land value	329534	584403	513659	414982	375399
15	Cost B' (13+14)	368325	638561	584244	463692	444932
16	Imputed value of household labour	7981	9033	8596	9553	9466
17	Cost 'C' (15+16)	376306	647594	592840	473245	454398

A2.5 District wise Cost of Cultivation per hectare (in Rs.) of Arecanut during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	46203	37276	28574	38721	36880
2	Animal labour	0	0	0	0	45
3	Machine labour	0	509	138	386	319
4	Seed / seedlings	0	0	0	659	297
5	Farmyard manure and chemical fertilizers	5060	7904	9821	5824	6474
6	Plant protection	0	182	0	0	189
7	Land tax and irrigation cess	104	289	102	955	265
8	Repair and maintenance charges of implements, machinery and building	2487	1685	1845	2152	1727
9	Interest on working capital	5295	5048	3975	5001	4698
10	Other expenses	1684	4604	1216	4422	2771
11	Total cost 'A' (1-10)	60833	57497	45671	58120	53665
12	Interest on fixed capital	2829	6960	1948	3750	4069
13	Cost 'B1' (11+12)	63662	64457	47619	61870	57734
14	Interest on land value	444790	402211	493254	460373	440851
15	Cost 'B' (13+14)	508452	466668	540873	522243	498585
16	Imputed value of household labour	7498	4929	6608	6867	7946
17	Cost 'C' (15+16)	515950	471597	547481	529110	506531

A2.6 District wise Cost of Cultivation per hectare (in Rs.) of Tapioca during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	54923	56013	40372	46715	46680
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	1460
4	Seed / seedlings	2125	2276	2119	3869	3607
5	Farmyard manure and chemical fertilizers	10660	10451	10421	8784	12411
6	Plant protection	100	157	129	105	209
7	Land tax and irrigation cess	227	901	155	158	287
8	Repair and maintenance charges of implements, machinery and building	201	969	584	329	389
9	Interest on working capital	7508	7367	5772	6625	6985
10	Other expenses	7276	4776	4682	6776	5487
11	Total cost 'A' (1-10)	83020	82910	64234	73361	77515
12	Interest on fixed capital	570	517	376	2012	329
13	Cost 'B1' (11+12)	83590	83427	64610	75373	77844
14	Interest on land value	489432	444160	344250	349656	421354
15	Cost 'B' (13+14)	573022	527587	408860	425029	499198
16	Imputed value of household labour	15186	12065	14028	12204	14060
17	Cost 'C' (15+16)	588208	539652	422888	437233	513258

A2.6 District wise Cost of Cultivation per hectare (in Rs.) of Tapioca during 2014-15

Sl No	Components	Idukki	Eranakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	35553	33082	47018	49596	30140
2	Animal labour	0	0	0	0	0
3	Machine labour	1585	3440	2453	4544	1439
4	Seed / seedlings	1867	993	3630	2429	2756
5	Farmyard manure and chemical fertilizers	10314	13122	12789	7620	10895
6	Plant protection	139	102	272	311	273
7	Land tax and irrigation cess	272	172	361	197	177
8	Repair and maintenance charges of implements, machinery and building	808	523	380	307	137
9	Interest on working capital	5334	5405	7504	7079	4799
10	Other expenses	3879	3313	8880	6287	2484
11	Total cost 'A' (1-10)	59751	60152	83287	78370	53100
12	Interest on fixed capital	605	1338	677	480	1319
13	Cost 'B1' (11+12)	60356	61490	83964	78850	54419
14	Interest on land value	347311	575737	376496	298148	483015
15	Cost 'B' (13+14)	407667	637227	460460	376998	537434
16	Imputed value of household labour	14271	16059	17269	10080	12508
17	Cost 'C' (15+16)	421938	653286	477729	387078	549942

A2.6 District wise Cost of Cultivation per hectare (in Rs.) of Tapioca during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	41611	48845	45211	40283	42824
2	Animal labour	0	0	0	0	0
3	Machine labour	0	1366	0	3037	1685
4	Seed / seedlings	2564	2542	3595	2661	2921
5	Farmyard manure and chemical fertilizers	15922	9390	10050	10637	10846
6	Plant protection	249	268	494	154	205
7	Land tax and irrigation cess	531	331	335	801	304
8	Repair and maintenance charges of implements, machinery and building	404	393	167	373	428
9	Interest on working capital	6572	6524	6045	6431	6290
10	Other expenses	5378	2828	1104	7535	4852
11	Total cost 'A' (1-10)	73231	72487	67001	71912	69925
12	Interest on fixed capital	1124	611	1179	566	835
13	Cost 'B1' (11+12)	74355	73098	68180	72468	70760
14	Interest on land value	391723	256096	252989	327676	402813
15	Cost 'B' (13+14)	466078	329194	321169	400144	473573
16	Imputed value of household labour	15541	11442	10786	12511	13460
17	Cost 'C' (15+16)	481619	340636	331955	412655	487033

A2.7 District wise Cost of Cultivation per hectare (in Rs.) of Banana during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	59068	61924	51554	63745	53591
2	Animal labour	167	0	0	0	0
3	Machine labour	0	0	0	0	971
4	Seed / seedlings	20534	20379	22945	18222	17422
5	Farmyard manure and chemical fertilizers	35279	31675	31459	33754	27910
6	Plant protection	1115	1183	1362	1084	1896
7	Land tax and irrigation cess	284	363	256	547	273
8	Repair and maintenance charges of implements, machinery and building	300	701	569	511	501
9	Interest on working capital	12849	12211	11727	12789	11183
10	Other expenses	12329	6947	9946	10482	10035
11	Total cost 'A' (1-10)	141925	135383	129818	141134	123782
12	Interest on fixed capital	1480	1017	962	1684	922
13	Cost 'B1' (11+12)	143405	136400	130780	142818	124704
14	Interest on land value	678593	551976	561921	449332	426729
15	Cost 'B' (13+14)	821998	688376	692701	592150	551433
16	Imputed value of household labour	32908	29486	32680	29083	26968
17	Cost 'C' (15+16)	854906	717862	725381	621233	578401

A 2.7 District wise Cost of Cultivation per hectare (in Rs.) of Banana during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	40665	62425	67609	62060	65645
2	Animal labour	0	0	0	200	0
3	Machine labour	0	0	2391	2634	5429
4	Seed / seedlings	17501	18572	19595	17841	23212
5	Farmyard manure and chemical fertilizers	23464	33468	26767	26007	24871
6	Plant protection	1037	1512	1265	1106	1683
7	Land tax and irrigation cess	648	203	286	284	119
8	Repair and maintenance charges of implements, machinery and building	882	813	936	436	334
9	Interest on working capital	9141	12338	12604	11743	13098
10	Other expenses	8746	7403	8416	7579	10141
11	Total cost 'A' (1-10)	102084	136734	139869	129890	144532
12	Interest on fixed capital	768	1652	1587	2627	1778
13	Cost 'B1' (11+12)	102852	138386	141456	132517	146310
14	Interest on land value	395877	576257	408606	313056	500779
15	Cost 'B' (13+14)	498729	714643	550062	445573	647089
16	Imputed value of household labour	25109	30279	18010	23275	21451
17	Cost 'C' (15+16)	523838	744922	568072	468848	668540

A 2.7 District wise Cost of Cultivation per hectare (in Rs.) of Banana during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	48481	63001	48617	48284	58509
2	Animal labour	0	0	0	0	32
3	Machine labour	1394	1150	0	2415	1398
4	Seed / seedlings	22893	18988	22439	20562	19816
5	Farmyard manure and chemical fertilizers	22585	28635	26947	26783	28397
6	Plant protection	1222	1339	0	1305	1302
7	Land tax and irrigation cess	480	306	334	107	302
8	Repair and maintenance charges of implements, machinery and building	633	983	847	1415	695
9	Interest on working capital	11075	12403	10996	11026	11903
10	Other expenses	14177	10917	11953	10913	9579
11	Total cost 'A' (1-10)	122940	137722	122133	122810	131933
12	Interest on fixed capital	1013	1159	1140	1959	1476
13	Cost 'B1' (11+12)	123953	138881	123273	124769	133409
14	Interest on land value	444638	334623	372263	322705	449831
15	Cost 'B' (13+14)	568591	473504	495536	447474	583240
16	Imputed value of household labour	23592	16774	23310	27923	24956
17	Cost 'C' (15+16)	592183	490278	518846	475397	608196

A 2.8 District wise Cost of Cultivation per hectare (in Rs.) of Pepper during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	48409	49024	44044	33471	50402
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	892	142	269	158	412
5	Farmyard manure and chemical fertilizers	5509	8071	7728	8045	6903
6	Plant protection	623	425	0	0	495
7	Land tax and irrigation cess	45	466	266	277	284
8	Repair and maintenance charges of implements, machinery and building	431	1553	1085	798	673
9	Interest on working capital	5978	6410	5437	4800	6189
10	Other expenses	4349	6433	2329	6325	3678
11	Total cost 'A' (1-10)	66236	72524	61158	53874	69036
12	Interest on fixed capital	2454	2036	1077	2632	1089
13	Cost 'B1' (11+12)	68690	74560	62235	56506	70125
14	Interest on land value	606303	401486	455986	494425	510972
15	Cost 'B' (13+14)	674993	476046	518221	550931	581097
16	Imputed value of household labour	14433	15535	17024	19518	14154
17	Cost 'C' (15+16)	689426	491581	535245	570449	595251

A 2.8 District wise Cost of Cultivation per hectare (in Rs.) of Pepper during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	30600	35530	47375	31943	39306
2	Animal labour	0	0	0	0	0
3	Machine labour	1244	0	0	0	0
4	Seed / seedlings	0	896	111	0	313
5	Farmyard manure and chemical fertilizers	8448	5346	9376	4258	7392
6	Plant protection	0	144	359	156	521
7	Land tax and irrigation cess	0	211	202	112	165
8	Repair and maintenance charges of implements, machinery and building	1014	1661	478	612	339
9	Interest on working capital	4418	4839	5944	4063	4964
10	Other expenses	3888	6475	2214	4275	2106
11	Total cost 'A' (1-10)	49612	55102	66059	45419	55106
12	Interest on fixed capital	1182	2419	3066	2717	2584
13	Cost 'B1' (11+12)	50794	57521	69125	48136	57690
14	Interest on land value	377957	702870	593651	410625	348540
15	Cost 'B' (13+14)	428751	760391	662776	458761	406230
16	Imputed value of household labour	14411	15751	11943	11378	19001
17	Cost 'C' (15+16)	443162	776142	674719	470139	425231

A 2.8 District wise Cost of Cultivation per hectare (in Rs.) of Pepper during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	29496	39268	35778	37290	39107
2	Animal labour	0	0	0	0	0
3	Machine labour	0	292	0	478	232
4	Seed / seedlings	0	1212	0	0	429
5	Farmyard manure and chemical fertilizers	9562	4188	8285	10550	6646
6	Plant protection	150	286	182	0	255
7	Land tax and irrigation cess	135	0	387	192	144
8	Repair and maintenance charges of implements, machinery and building	1158	1579	1214	1830	1011
9	Interest on working capital	4445	5143	4797	5182	5104
10	Other expenses	5244	6184	3720	3501	4372
11	Total cost 'A' (1-10)	50190	58152	54363	59023	57300
12	Interest on fixed capital	2100	1706	3458	3797	2133
13	Cost 'B1' (11+12)	52290	59858	57821	62820	59433
14	Interest on land value	415336	437783	400206	461826	469893
15	Cost 'B' (13+14)	467626	497641	458027	524646	529326
16	Imputed value of household labour	14749	10663	16409	16492	14284
17	Cost 'C' (15+16)	482375	508304	474436	541138	543610

A 2.9 District wise Cost of Cultivation per hectare (in Rs.) of Ginger during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	47738	34338	37940	47407	29086
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	4031
4	Seed / seedlings	31737	32358	33863	39064	32962
5	Farmyard manure and chemical fertilizers	21321	22329	18474	18479	20146
6	Plant protection	670	345	264	251	883
7	Land tax and irrigation cess	772	428	191	223	241
8	Repair and maintenance charges of implements, machinery and building	1429	2775	1287	1743	1676
9	Interest on working capital	10712	9770	9811	10998	9431
10	Other expenses	5650	8334	7569	4775	7206
11	Total cost 'A' (1-10)	120029	110677	109399	122940	105662
12	Interest on fixed capital	1990	2555	1197	3138	1848
13	Cost 'B1' (11+12)	122019	113232	110596	126078	107510
14	Interest on land value	522357	469839	493362	504478	303809
15	Cost 'B' (13+14)	644376	583071	603958	630556	411319
16	Imputed value of household labour	13020	13524	10089	11072	12432
17	Cost 'C' (15+16)	657396	596595	614047	641628	423751

A 2.9 District wise Cost of Cultivation per hectare (in Rs.) of Ginger during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	42900	43299	42751	35123	52507
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2008	0	1202	0
4	Seed / seedlings	34105	27813	23904	24076	32782
5	Farmyard manure and chemical fertilizers	21897	17082	18531	23118	23466
6	Plant protection	346	288	568	253	359
7	Land tax and irrigation cess	442	451	179	192	156
8	Repair and maintenance charges of implements, machinery and building	2029	1167	2049	1303	2247
9	Interest on working capital	10323	9592	9207	8995	11446
10	Other expenses	3979	5429	6313	6182	5349
11	Total cost 'A' (1-10)	116021	107129	103502	100444	128312
12	Interest on fixed capital	1796	1312	1423	1669	1300
13	Cost 'B1' (11+12)	117817	108441	104925	102113	129612
14	Interest on land value	374028	516245	439468	315366	382893
15	Cost 'B' (13+14)	491845	624686	544393	417479	512505
16	Imputed value of household labour	11987	12174	12993	13417	11760
17	Cost 'C' (15+16)	503832	636860	557386	430896	524265

A 2.9 District wise Cost of Cultivation per hectare (in Rs.) of Ginger during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	45363	59026	51918	36459	41185
2	Animal labour	0	0	0	0	0
3	Machine labour	0	3214	3017	2540	1440
4	Seed / seedlings	28928	27922	29396	31588	27529
5	Farmyard manure and chemical fertilizers	20982	20939	19988	27924	21774
6	Plant protection	119	397	0	0	309
7	Land tax and irrigation cess	694	282	563	152	282
8	Repair and maintenance charges of implements, machinery and building	2311	2122	2263	2174	1635
9	Interest on working capital	10362	11605	10789	10344	9809
10	Other expenses	8230	4550	3575	4924	5853
11	Total cost 'A' (1-10)	116989	130057	121509	116105	109816
12	Interest on fixed capital	1410	1864	1370	2663	1704
13	Cost 'B1' (11+12)	118399	131921	122879	118768	111520
14	Interest on land value	362153	364664	367633	370127	369463
15	Cost 'B' (13+14)	480552	496585	490512	488895	480983
16	Imputed value of household labour	15830	14308	12497	13373	13118
17	Cost 'C' (15+16)	496382	510893	503009	502268	494101

A 2.10 District wise Cost of Cultivation per hectare (in Rs.) of Turmeric during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	48018	49648	41826	43651	28580
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	2995
4	Seed / seedlings	17088	20905	17449	16049	16794
5	Farmyard manure and chemical fertilizers	11338	13711	11946	20331	11426
6	Plant protection	300	168	593	402	803
7	Land tax and irrigation cess	744	401	824	387	220
8	Repair and maintenance charges of implements, machinery and building	853	809	1509	1172	1378
9	Interest on working capital	8086	8657	7666	8187	6335
10	Other expenses	4115	2135	4843	1437	2756
11	Total cost 'A' (1-10)	90542	96434	86656	91616	71287
12	Interest on fixed capital	2151	1031	1624	1247	1754
13	Cost 'B1' (11+12)	92693	97465	88280	92863	73041
14	Interest on land value	480992	371598	356747	548390	306404
15	Cost 'B' (13+14)	573685	469063	445027	641253	379445
16	Imputed value of household labour	15428	16816	19224	15631	14131
17	Cost 'C' (15+16)	589113	485879	464251	656884	393576

A 2.10 District wise Cost of Cultivation per hectare (in Rs.) of Turmeric during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	31074	28589	54060	52665	58105
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	3595	919
4	Seed / seedlings	20004	18336	14167	13017	10848
5	Farmyard manure and chemical fertilizers	13262	12695	10678	18536	21451
6	Plant protection	840	224	615	764	209
7	Land tax and irrigation cess	549	111	170	244	158
8	Repair and maintenance charges of implements, machinery and building	865	1450	1008	844	1046
9	Interest on working capital	6794	6305	8385	9146	9451
10	Other expenses	2764	3205	4328	2881	2978
11	Total cost 'A' (1-10)	76152	70915	93411	101692	105165
12	Interest on fixed capital	2762	1105	1114	2297	1542
13	Cost 'B1' (11+12)	78914	72020	94525	103989	106707
14	Interest on land value	380157	519386	328834	287383	360083
15	Cost 'B' (13+14)	459071	591406	423359	391372	466790
16	Imputed value of household labour	18833	13145	20994	22864	15445
17	Cost 'C' (15+16)	477904	604551	444353	414236	482235

A 2.10 District wise Cost of Cultivation per hectare (in Rs.) of Turmeric during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	29942	57639	55358	32620	45100
2	Animal labour	0	0	0	0	0
3	Machine labour	0	1477	0	2088	1215
4	Seed / seedlings	17167	18293	20966	22306	16078
5	Farmyard manure and chemical fertilizers	22200	20371	17952	18315	15906
6	Plant protection	521	419	726	202	508
7	Land tax and irrigation cess	253	311	188	391	288
8	Repair and maintenance charges of implements, machinery and building	1704	1493	1123	1971	1131
9	Interest on working capital	7228	10086	9818	7694	8186
10	Other expenses	2453	2663	3182	1404	3055
11	Total cost 'A' (1-10)	81468	112752	109313	86991	91467
12	Interest on fixed capital	1587	1353	2224	2014	1708
13	Cost 'B1' (11+12)	83055	114105	111537	89005	93175
14	Interest on land value	490032	416318	312993	306295	377829
15	Cost 'B' (13+14)	573087	530423	424530	395300	471004
16	Imputed value of household labour	16845	16217	16398	16407	17697
17	Cost 'C' (15+16)	589932	546640	440928	411707	488701

A 2.11 District wise Cost of Cultivation per hectare (in Rs.) of Pineapple during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	40935	43382	29196	39481	34929
2	Animal labour	0	0	0	0	0
3	Machine labour	2585	0	0	0	3667
4	Seed / seedlings	25174	20396	18974	20090	14917
5	Farmyard manure and chemical fertilizers	16865	23362	16988	21219	14749
6	Plant protection	1536	668	1544	607	468
7	Land tax and irrigation cess	383	476	957	517	596
8	Repair and maintenance charges of implements, machinery and building	343	354	276	828	220
9	Interest on working capital	10787	10728	8705	10033	8850
10	Other expenses	20772	19475	20349	18937	19767
11	Total cost 'A' (1-10)	119380	118841	96989	111712	98163
12	Interest on fixed capital	820	347	349	489	192
13	Cost 'B1' (11+12)	120200	119188	97338	112201	98355
14	Interest on land value	472257	311619	210329	358671	226498
15	Cost 'B' (13+14)	592457	430807	307667	470872	324853
16	Imputed value of household labour	13669	9583	7943	8898	12339
17	Cost 'C' (15+16)	606126	440390	315610	479770	337192

A 2.11 District wise Cost of Cultivation per hectare (in Rs.) of Pineapple during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	26536	36564	44233	31278	36629
2	Animal labour	0	0	0	0	0
3	Machine labour	0	3785	2265	2624	0
4	Seed / seedlings	25128	27469	27045	17955	24419
5	Farmyard manure and chemical fertilizers	16300	14633	21000	14851	14811
6	Plant protection	0	531	1159	618	581
7	Land tax and irrigation cess	615	670	355	708	436
8	Repair and maintenance charges of implements, machinery and building	491	288	217	723	415
9	Interest on working capital	8727	10162	11291	8728	9475
10	Other expenses	19307	18635	17203	19950	18314
11	Total cost 'A' (1-10)	97104	112737	124768	97435	105080
12	Interest on fixed capital	989	556	814	289	785
13	Cost 'B1' (11+12)	98093	113293	125582	97724	105865
14	Interest on land value	356505	475761	476973	227641	339108
15	Cost 'B' (13+14)	454598	589054	602555	325365	444973
16	Imputed value of household labour	13776	10739	7979	11010	9085
17	Cost 'C' (15+16)	468374	599793	610534	336375	454058

A 2.11 District wise Cost of Cultivation per hectare (in Rs.) of Pineapple during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	40472	25889	34510	30106	36485
2	Animal labour	0	0	0	0	0
3	Machine labour	2168	3520	3182	2878	2772
4	Seed / seedlings	19499	24873	24861	21573	22435
5	Farmyard manure and chemical fertilizers	19308	18836	16849	19154	16946
16	Plant protection	426	543	0	0	612
7	Land tax and irrigation cess	260	445	213	724	552
8	Repair and maintenance charges of implements, machinery and building	292	223	246	240	319
9	Interest on working capital	9849	9610	9442	9057	9797
10	Other expenses	16621	22442	15017	16862	18720
11	Total cost 'A' (1-10)	108895	106381	104320	100594	108638
12	Interest on fixed capital	433	482	490	356	510
13	Cost 'B1' (11+12)	109328	106863	104810	100950	109148
14	Interest on land value	337617	246450	280499	327392	359231
15	Cost 'B' (13+14)	446945	353313	385309	428342	468379
16	Imputed value of household labour	8427	7608	8011	9035	10544
17	Cost 'C' (15+16)	455372	360921	393320	437377	478923

A2.12 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Autumn) during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	54792	42735	37792	48881	46406
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	4603	3387	7994	6750	4894
5	Farmyard manure and chemical fertilizers	17174	16042	19441	18106	18600
6	Plant protection	1075	0	872	1123	922
7	Land tax and irrigation cess	849	578	763	955	1097
8	Repair and maintenance charges of implements, machinery and building	1214	4277	3488	2258	1481
9	Interest on working capital	9799	8082	8361	9342	8521
10	Other expenses	20334	18651	17515	18555	14383
11	Total cost 'A' (1-10)	109840	93752	96226	105970	96304
12	Interest on fixed capital	1335	1100	2333	11159	2034
13	Cost 'B1' (11+12)	111175	94852	98559	117129	98338
14	Interest on land value	450836	397839	268540	1192819	317685
15	Cost 'B' (13+14)	562011	492691	367099	1309948	416023
16	Imputed value of household labour	22320	19881	24165	17342	16833
17	Cost 'C' (15+16)	584331	512572	391264	1327290	432856

**A 2.12 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Autumn)
during 2014-15**

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	0	43984	34745	45947	33073
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2471	0	0	0
4	Seed / seedlings	0	4108	4218	3907	2572
5	Farmyard manure and chemical fertilizers	0	20262	17184	13213	16370
6	Plant protection	0	1205	1592	0	945
7	Land tax and irrigation cess	0	803	521	1420	691
8	Repair and maintenance charges of implements, machinery and building	0	3089	1202	1426	2430
9	Interest on working capital	0	9072	7900	7480	7237
10	Other expenses	0	18687	21264	11736	19409
11	Total cost 'A' (1-10)	0	103681	88626	85129	82727
12	Interest on fixed capital	0	1966	1663	1521	1200
13	Cost 'B1' (11+12)	0	105647	90289	86650	83927
14	Interest on land value	0	248601	306670	484414	342907
15	Cost 'B' (13+14)	0	354248	396959	571064	426834
16	Imputed value of household labour	0	23166	18937	20281	22840
17	Cost 'C' (15+16)	0	377414	415896	591345	449314

**A 2.12 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Autumn)
during 2014-15**

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	0	0	32758	35995	40502
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	1123	957	85
4	Seed / seedlings	0	0	5116	5325	4192
5	Farmyard manure and chemical fertilizers	0	0	20961	20833	16632
6	Plant protection	0	0	0	558	867
7	Land tax and irrigation cess	0	0	1316	1467	901
8	Repair and maintenance charges of implements, machinery and building	0	0	1685	167	1586
9	Interest on working capital	0	0	7849	7578	7979
10	Other expenses	0	0	18533	12116	17514
11	Total cost 'A' (1-10)	0	0	89341	84996	90258
12	Interest on fixed capital	0	0	1165	1149	1680
13	Cost 'B1' (11+12)	0	0	90506	86145	91938
14	Interest on land value	0	0	210597	332389	460065
15	Cost 'B' (13+14)	0	0	301103	418534	552003
16	Imputed value of household labour	0	0	16554	18923	192428
17	Cost 'C' (15+16)	0	0	317647	437457	571431

A 2.13 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Winter) during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	55501	58351	38244	48282	54518
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	2471	0
4	Seed / seedlings	4113	2488	2913	4586	4692
5	Farmyard manure and chemical fertilizers	22044	18480	16517	23624	18035
6	Plant protection	1669	848	1345	834	1213
7	Land tax and irrigation cess	632	488	727	223	671
8	Repair and maintenance charges of implements, machinery and building	2711	3233	2000	2151	3199
9	Interest on working capital	10569	9733	7980	9857	9161
10	Other expenses	22361	17161	20781	18771	13147
11	Total cost 'A' (1-10)	119600	110782	90507	110799	104636
12	Interest on fixed capital	1244	1407	1828	2119	1310
13	Cost 'B1' (11+12)	120844	112189	92335	112918	105946
14	Interest on land value	445902	397521	372112	268684	331218
15	Cost 'B' (13+14)	566746	509710	464447	381602	437164
16	Imputed value of household labour	22189	19229	16860	13880	18297
17	Cost 'C' (15+16)	588935	528939	481307	395482	455461

A 2.13 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Winter) during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	33011	43573	39860	37835	39904
2	Animal labour	0	0	0	0	0
3	Machine labour	0	1853	1709	871	0
4	Seed / seedlings	1301	2904	3984	4495	3899
5	Farmyard manure and chemical fertilizers	23319	25565	19250	14762	15486
6	Plant protection	697	0	0	529	0
7	Land tax and irrigation cess	715	664	164	507	602
8	Repair and maintenance charges of implements, machinery and building	3917	2900	2249	2135	3652
9	Interest on working capital	7618	9718	8503	7827	7529
10	Other expenses	17855	23281	20224	19781	16001
11	Total cost 'A' (1-10)	88433	110458	95943	88742	87073
12	Interest on fixed capital	1900	1063	1015	2668	1152
13	Cost 'B1' (11+12)	90333	111521	96958	91410	88225
14	Interest on land value	340650	429421	370728	360581	341809
15	Cost 'B' (13+14)	430983	541012	467686	451991	430034
16	Imputed value of household labour	18963	18925	15937	14629	16174
17	Cost 'C' (15+16)	449946	559937	483623	466620	446208

A 2.13 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Winter) during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	33220	51134	37885	39743	43737
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2495	0	3375	945
4	Seed / seedlings	2764	2669	3465	3211	3307
5	Farmyard manure and chemical fertilizers	14886	13433	18179	69045	18587
6	Plant protection	1013	1632	0	713	812
7	Land tax and irrigation cess	301	206	755	663	478
8	Repair and maintenance charges of implements, machinery and building	3179	3669	2696	23453	3343
9	Interest on working capital	7284	8688	7966	13182	8597
10	Other expenses	20955	15521	20133	15728	18586
11	Total cost 'A' (1-10)	83602	99447	91079	169113	98392
12	Interest on fixed capital	1127	1038	1025	46779	2292
13	Cost 'B1' (11+12)	84729	100485	92104	215892	100684
14	Interest on land value	328462	239908	382443	218571	342470
15	Cost 'B' (13+14)	413191	340393	474547	434463	443154
16	Imputed value of household labour	21127	12798	16848	20151	16808
17	Cost 'C' (15+16)	434318	353191	491395	454614	459962

**A 2.14 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Summer)
during 2014-15**

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	53492	52791	37924	49561	44735
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	2686	0
4	Seed / seedlings	3267	3395	3825	3993	3536
5	Farmyard manure and chemical fertilizers	24551	26448	19720	22724	17544
6	Plant protection	1138	1200	1750	2808	2366
7	Land tax and irrigation cess	479	725	754	908	900
8	Repair and maintenance charges of implements, machinery and building	1205	2618	3118	1817	3777
9	Interest on working capital	10403	10179	7873	9968	8538
10	Other expenses	21578	17953	15513	17906	17198
11	Total cost 'A' (1-10)	116113	115309	90477	112371	98594
12	Interest on fixed capital	1712	1496	2167	2386	2024
13	Cost 'B1' (11+12)	117825	116805	92644	114757	100618
14	Interest on land value	426123	481029	272720	315948	366833
15	Cost 'B' (13+14)	543948	597834	365364	430705	467451
16	Imputed value of household labour	20140	24215	23725	18004	21823
17	Cost 'C' (15+16)	564088	622049	389089	448709	489274

**A 2.14 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Summer)
during 2014-15**

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	0	32529	52247	47246	39802
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	1291	0
4	Seed / seedlings	0	2555	3364	2853	2873
5	Farmyard manure and chemical fertilizers	0	16947	15677	20511	18193
6	Plant protection	0	1296	2942	1050	3813
7	Land tax and irrigation cess	0	434	407	460	1153
8	Repair and maintenance charges of implements, machinery and building	0	1913	1327	2196	1034
9	Interest on working capital	0	6842	9006	9004	8497
10	Other expenses	0	15089	15826	17090	20290
11	Total cost 'A' (1-10)	0	77605	100796	101701	95655
12	Interest on fixed capital	0	3718	3787	2179	2552
13	Cost 'B1' (11+12)	0	81323	104583	103880	98207
14	Interest on land value	0	451654	430907	365915	240139
15	Cost 'B' (13+14)	0	532977	535490	469795	338346
16	Imputed value of household labour	0	23713	24577	18595	18512
17	Cost 'C' (15+16)	0	556690	560067	488390	356858

**A 2.14 District wise Cost of Cultivation per hectare (in Rs.) of Bitter Gourd (Summer)
during 2014-15**

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	40439	53063	43982	37833	46290
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2247	1928	2250	828
4	Seed / seedlings	3389	2351	2781	2973	2971
5	Farmyard manure and chemical fertilizers	19998	15040	19549	21394	18290
6	Plant protection	3041	3737	1051	1177	2385
7	Land tax and irrigation cess	760	417	664	866	587
8	Repair and maintenance charges of implements, machinery and building	2861	2730	2891	2194	2265
9	Interest on working capital	8517	9617	8796	8212	8866
10	Other expenses	18304	19729	18664	16488	17900
11	Total cost 'A' (1-10)	97309	108931	100306	93387	100382
12	Interest on fixed capital	2801	3304	1782	2821	2831
13	Cost 'B1' (11+12)	100110	112235	102088	96208	103213
14	Interest on land value	298421	241761	389489	378812	351258
15	Cost 'B' (13+14)	398531	353996	491577	475020	454471
16	Imputed value of household labour	20984	19501	19715	22880	21500
17	Cost 'C' (15+16)	419515	373497	511292	497900	475971

A 2.15 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Autumn) during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	72017	63788	58686	53146	63409
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	0	0
4	Seed / seedlings	2795	3131	4344	7514	3584
5	Farmyard manure and chemical fertilizers	26218	25248	26640	20247	20568
6	Plant protection	1785	1170	2703	2053	0
7	Land tax and irrigation cess	417	483	579	389	398
8	Repair and maintenance charges of implements, machinery and building	4258	4257	4826	2356	2060
9	Interest on working capital	12733	12036	11554	10610	10607
10	Other expenses	24519	27027	23166	23135	18505
11	Total cost 'A' (1-10)	144742	137140	132498	119450	119131
12	Interest on fixed capital	2666	2328	3475	4091	3981
13	Cost 'B1' (11+12)	147408	139468	135973	123541	123112
14	Interest on land value	581612	442997	299995	392101	420938
15	Cost 'B' (13+14)	729020	582465	435968	515642	544050
16	Imputed value of household labour	29823	24008	24478	29416	27494
17	Cost 'C' (15+16)	758843	605473	460446	545058	571544

A 2.15 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Autumn) during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	0	37065	40363	45829	69385
2	Animal labour	0	0	869	0	0
3	Machine labour	0	0	551	768	0
4	Seed / seedlings	0	4942	2466	3494	3069
5	Farmyard manure and chemical fertilizers	0	21004	24316	23000	24085
6	Plant protection	0	0	1031	3413	1756
7	Land tax and irrigation cess	0	741	317	235	187
8	Repair and maintenance charges of implements, machinery and building	0	3707	3097	4255	3735
9	Interest on working capital	0	8130	8769	10216	12410
10	Other expenses	0	18285	18098	25653	25800
11	Total cost 'A' (1-10)	0	93874	99877	116863	140427
12	Interest on fixed capital	0	1856	2205	1716	1325
13	Cost 'B1' (11+12)	0	95730	102082	118579	141752
14	Interest on land value	0	543620	313200	386733	368591
15	Cost 'B' (13+14)	0	639350	415282	505312	510343
16	Imputed value of household labour	0	24710	22705	31500	32798
17	Cost 'C' (15+16)	0	664060	437987	536812	543141

A 2.15 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Autumn) during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	0	0	48392	44643	51221
2	Animal labour	0	0	0	0	356
3	Machine labour	0	0	1168	0	400
4	Seed / seedlings	0	0	4466	4118	3277
5	Farmyard manure and chemical fertilizers	0	0	26807	23664	23895
6	Plant protection	0	0	0	2265	1412
7	Land tax and irrigation cess	0	0	196	618	324
8	Repair and maintenance charges of implements, machinery and building	0	0	3433	4201	3367
9	Interest on working capital	0	0	10055	9281	10183
10	Other expenses	0	0	19721	18121	21265
11	Total cost 'A' (1-10)	0	0	114238	106911	115700
12	Interest on fixed capital	0	0	1909	3369	2419
13	Cost 'B1' (11+12)	0	0	116147	110280	118119
14	Interest on land value	0	0	327443	353353	454122
15	Cost 'B' (13+14)	0	0	443590	463633	572241
16	Imputed value of household labour	0	0	23636	23672	26375
17	Cost 'C' (15+16)	0	0	467226	487305	598616

A 2.16 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Winter) during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	47839	50835	37797	34480	29529
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	1487	0
4	Seed / seedlings	3844	3920	2427	2527	3527
5	Farmyard manure and chemical fertilizers	22614	20180	16016	20777	23638
6	Plant protection	2450	853	2011	1873	1929
7	Land tax and irrigation cess	232	597	363	222	345
8	Repair and maintenance charges of implements, machinery and building	2324	3496	1304	2773	1416
9	Interest on working capital	10152	10123	8369	8618	8025
10	Other expenses	24774	25439	25436	25036	21623
11	Total cost 'A' (1-10)	114229	115443	93723	97793	90032
12	Interest on fixed capital	3852	1918	1597	2967	2934
13	Cost 'B1' (11+12)	118081	117361	95320	100760	92966
14	Interest on land value	417450	335132	282981	288819	213321
15	Cost 'B' (13+14)	535531	452493	378301	389579	306287
16	Imputed value of household labour	23586	26023	25436	25965	24489
17	Cost 'C' (15+16)	559117	478516	403737	415544	330776

A 2.16 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Winter) during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	31474	41574	30538	30240	38696
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	483	659	0
4	Seed / seedlings	5301	2923	3314	3234	3169
5	Farmyard manure and chemical fertilizers	17392	23043	23343	21031	19897
6	Plant protection	1649	2413	0	1797	2291
7	Land tax and irrigation cess	366	479	365	274	451
8	Repair and maintenance charges of implements, machinery and building	2307	2760	1205	2363	3021
9	Interest on working capital	7484	9464	8161	8066	8347
10	Other expenses	19019	24682	23936	23694	19414
11	Total cost 'A' (1-10)	84992	107338	91345	91358	95286
12	Interest on fixed capital	3595	1476	1302	4527	1841
13	Cost 'B1' (11+12)	88587	108814	92647	95885	97127
14	Interest on land value	336229	446617	386528	249486	343523
15	Cost 'B' (13+14)	424816	555431	479175	345371	440650
16	Imputed value of household labour	20699	25343	20957	22383	28890
17	Cost 'C' (15+16)	445515	580774	500132	367754	469540

A 2.16 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Winter) during 2014-15

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	29021	33918	36011	33025	35877
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2559	822	1665	592
4	Seed / seedlings	3089	4107	2102	2654	3371
5	Farmyard manure and chemical fertilizers	20973	18715	19200	19767	20628
6	Plant protection	2663	1954	0	0	1596
7	Land tax and irrigation cess	412	294	463	378	356
8	Repair and maintenance charges of implements, machinery and building	2196	3051	3071	2463	2338
9	Interest on working capital	7532	8242	7908	7732	8473
10	Other expenses	19576	21162	20948	20210	22668
11	Total cost 'A' (1-10)	85462	94002	90525	87894	95899
12	Interest on fixed capital	2416	2682	1249	3026	2582
13	Cost 'B1' (11+12)	87878	96684	91774	90920	98481
14	Interest on land value	348686	208851	265959	230852	306658
15	Cost 'B' (13+14)	436564	305535	357733	321772	405139
16	Imputed value of household labour	26522	20455	21410	16231	23372
17	Cost 'C' (15+16)	463086	325990	379143	338003	428511

A 2.17 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Summer) during 2014-15

Sl No	Components	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam
1	Hired human labour	39649	36028	29545	37576	27142
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	1534	0
4	Seed / seedlings	3765	4149	3748	4736	3974
5	Farmyard manure and chemical fertilizers	23129	25146	16236	18575	16378
6	Plant protection	2056	1191	1459	1974	1339
7	Land tax and irrigation cess	671	811	422	457	316
8	Repair and maintenance charges of implements, machinery and building	3015	3362	2689	3189	2066
9	Interest on working capital	9054	8610	6594	8504	7086
10	Other expenses	21938	19581	14953	20664	21663
11	Total cost 'A' (1-10)	103277	98878	75646	97209	79964
12	Interest on fixed capital	2698	2397	1870	3434	1514
13	Cost 'B1' (11+12)	105975	101275	77516	100643	81478
14	Interest on land value	455022	440430	264202	259107	302034
15	Cost 'B' (13+14)	560997	541705	341718	359750	383512
16	Imputed value of household labour	23350	24261	21077	21749	20699
17	Cost 'C' (15+16)	584347	565966	362795	381499	404211

A 2.17 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Summer) during 2014-15

Sl No	Components	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram
1	Hired human labour	0	27181	45923	35006	34076
2	Animal labour	0	0	0	0	0
3	Machine labour	0	0	0	1471	0
4	Seed / seedlings	0	2312	4744	3127	3043
5	Farmyard manure and chemical fertilizers	0	22936	21588	22734	18725
6	Plant protection	0	1468	1231	1302	1062
7	Land tax and irrigation cess	0	662	570	829	383
8	Repair and maintenance charges of implements, machinery and building	0	2879	1896	2878	2489
9	Interest on working capital	0	7688	8768	8257	7763
10	Other expenses	0	22979	14194	18932	20723
11	Total cost 'A' (1-10)	0	88105	98914	94536	88264
12	Interest on fixed capital	0	2060	1978	3030	2742
13	Cost 'B1' (11+12)	0	90165	100892	97566	91006
14	Interest on land value	0	566709	348707	333669	393092
15	Cost 'B' (13+14)	0	656874	449599	431235	484098
16	Imputed value of household labour	0	24095	19941	26722	23759
17	Cost 'C' (15+16)	0	680969	469540	457957	507857

A 2.17 District wise Cost of Cultivation per hectare (in Rs.) of Cowpea (Summer) during 2013-14

Sl No	Components	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	Hired human labour	31081	36945	45002	26017	34283
2	Animal labour	0	0	0	0	0
3	Machine labour	0	2134	2942	1820	642
4	Seed / seedlings	3188	3020	2589	4310	3662
5	Farmyard manure and chemical fertilizers	18046	19963	19631	18909	19699
6	Plant protection	1677	1478	1471	1284	1489
7	Land tax and irrigation cess	598	408	315	630	513
8	Repair and maintenance charges of implements, machinery and building	1546	2699	2598	2040	2547
9	Interest on working capital	7100	8032	8737	6998	7846
10	Other expenses	17004	16777	15738	17639	18686
11	Total cost 'A' (1-10)	80240	91456	99023	79647	89367
12	Interest on fixed capital	2097	2123	2146	2022	2263
13	Cost 'B1' (11+12)	82337	93579	101169	81669	91630
14	Interest on land value	316819	303290	352019	299233	344921
15	Cost 'B' (13+14)	399156	396869	453188	380902	436551
16	Imputed value of household labour	22960	21597	20572	21465	22201
17	Cost 'C' (15+16)	422116	418466	473760	402367	458752

A 2.18 District wise Cost of Cultivation per hectare (in Rs.) of Cardamom during 2014-15

Sl No	Components	Idukki	Palakkad	Wayanad	State
1	Hired human labour	53953	67073	74893	61534
2	Animal labour	0	0	0	0
3	Machine labour	1008	2671	1840	1371
4	Seed / seedlings	1289	0	1262	1211
5	Farmyard manure and chemical fertilizers	39103	20774	28369	34593
6	Plant protection	4459	3548	1295	3372
7	Land tax and irrigation cess	271	712	287	300
8	Repair and maintenance charges of implements, machinery and building	1554	2253	2150	1786
9	Interest on working capital	11509	10788	12245	11712
10	Other expenses	15278	13811	14791	15039
11	Total cost 'A' (1-10)	128424	121630	137132	130918
12	Interest on fixed capital	1761	2124	3752	2434
13	Cost 'B1' (11+12)	130185	123754	140884	133352
14	Interest on land value	328315	428307	326197	332998
15	Cost 'B' (13+14)	458500	552061	467081	466350
16	Imputed value of household labour	17597	17030	15740	16957
17	Cost 'C' (15+16)	476097	569091	482821	483307

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	33.84	42.64	76.48
2	Kollam	37.12	55.58	92.70
3	Pathanamthitta	36.71	42.12	78.84
4	Alappuzha	34.49	50.29	84.78
5	Kottayam	20.07	71.35	91.42
6	Idukki	25.58	21.74	47.32
7	Eranakulam	34.60	50.94	85.55
8	Thrissur	30.70	44.24	74.94
9	Palakkad	31.40	50.68	82.08
10	Malappuram	16.67	21.53	38.20
11	Kozhikkode	22.38	48.07	70.45
12	Wayanad	0.00	0.00	0.00
13	Kannur	15.42	74.30	89.71
14	Kasaragod	12.41	16.51	28.92
	State	24.34	43.69	68.03

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	39.46	40.07	79.53
2	Kollam	36.75	58.14	94.89
3	Pathanamthitta	31.42	30.30	61.72
4	Alappuzha	43.12	45.48	88.60
5	Kottayam	31.21	33.03	64.23
6	Idukki	23.85	25.28	49.12
7	Eranakulam	27.44	39.58	67.02
8	Thrissur	30.88	57.85	88.73
9	Palakkad	16.38	68.81	85.19
10	Malappuram	32.49	54.24	86.72
11	Kozhikkode	11.72	85.37	97.09
12	Wayanad	28.86	34.60	63.46
13	Kannur	20.47	71.29	91.76
14	Kasaragod	19.99	52.73	72.72
	State	32.59	42.91	75.50

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	23.39	55.53	78.92
2	Kollam	37.19	52.13	89.33
3	Pathanamthitta	37.24	52.88	90.12
4	Alappuzha	33.91	48.55	82.46
5	Kottayam	37.17	39.23	76.40
6	Idukki	34.67	35.29	69.96
7	Eranakulam	23.10	36.63	59.72
8	Thrissur	53.64	35.39	89.03
9	Palakkad	20.52	58.22	78.74
10	Malappuram	55.65	28.29	83.94
11	Kozhikkode	17.81	46.78	64.60
12	Wayanad	30.01	43.58	73.59
13	Kannur	41.94	54.20	96.14
14	Kasaragod	12.68	46.14	58.82
	State	35.57	44.33	79.9

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	68.88	7.54	76.42
2	Kollam	70.90	14.76	85.67
3	Pathanamthitta	56.57	26.65	83.22
4	Alappuzha	62.63	17.95	80.58
5	Kottayam	20.89	67.34	88.23
6	Idukki	35.25	13.48	48.73
7	Eranakulam	62.12	17.39	79.51
8	Thrissur	65.33	21.12	86.45
9	Palakkad	60.52	18.79	79.30
10	Malappuram	69.91	14.03	83.94
11	Kozhikkode	49.00	17.02	66.02
12	Wayanad	66.73	18.98	85.71
13	Kannur	67.17	25.33	92.50
14	Kasaragod	48.75	21.59	70.34
	State	55.57	25.14	80.71

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	49.52	20.80	70.33
2	Kollam	64.86	19.90	84.76
3	Pathanamthitta	59.72	21.64	81.35
4	Alappuzha	20.57	7.87	28.44
5	Kottayam	40.03	16.61	56.64
6	Idukki	38.41	15.04	53.44
7	Eranakulam	38.41	15.04	53.44
8	Thrissur	59.40	26.80	86.20
9	Palakkad	54.99	15.51	70.51
10	Malappuram	61.32	21.12	82.44
11	Kozhikkode	49.88	11.59	61.46
12	Wayanad	54.99	15.51	70.51
13	Kannur	32.30	30.44	62.74
14	Kasaragod	41.74	16.70	58.44
	State	46.73	17.60	64.33

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	64.65	17.91	82.56
2	Kollam	20.32	16.83	37.15
3	Pathanamthitta	44.79	25.89	70.68
4	Alappuzha	41.46	21.21	62.68
5	Kottayam	46.85	21.95	68.81
6	Idukki	30.80	19.00	49.80
7	Eranakulam	39.19	18.13	57.32
8	Thrissur	49.51	29.01	78.52
9	Palakkad	21.06	21.93	42.99
10	Malappuram	51.22	24.11	75.33
11	Kozhikkode	45.36	25.96	71.31
12	Wayanad	53.41	33.98	87.38
13	Kannur	57.78	39.60	97.38
14	Kasaragod	41.99	22.38	64.36
	State	28.30	20.81	49.11

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	57.80	15.4	73.20
2	Kollam	80.04	0.00	80.04
3	Pathanamthitta	44.60	24.67	69.27
4	Alappuzha	51.16	21.78	72.94
5	Kottayam	50.30	22.37	72.70
6	Idukki	38.14	15.64	53.78
7	Eranakulam	53.61	10.73	64.34
8	Thrissur	59.17	19.21	78.38
9	Palakkad	54.48	23.73	78.22
10	Malappuram	21.69	14.99	36.68
11	Kozhikkode	46.99	22.30	69.29
12	Wayanad	53.92	24.67	78.59
13	Kannur	58.00	11.98	69.98
14	Kasaragod	16.14	11.09	27.23
	State	40.52	16.99	57.51

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	59.93	24.73	84.66
2	Kollam	53.88	27.43	81.31
3	Pathanamthitta	53.75	24.41	78.16
4	Alappuzha	30.01	24.75	54.77
5	Kottayam	50.12	16.33	66.44
6	Idukki	35.58	13.58	49.16
7	Eranakulam	36.83	12.69	49.51
8	Thrissur	46.88	20.24	67.12
9	Palakkad	41.75	16.88	58.63
10	Malappuram	54.41	11.68	66.10
11	Kozhikkode	44.72	36.73	81.44
12	Wayanad	63.25	27.85	91.10
13	Kannur	66.76	27.28	94.04
14	Kasaragod	23.13	16.35	39.48
	State	49.34	21.39	70.73

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	41.40	24.78	66.18
2	Kollam	55.07	23.97	79.04
3	Pathanamthitta	44.44	31.42	75.86
4	Alappuzha	44.88	25.74	70.62
5	Kottayam	34.49	23.99	58.48
6	Idukki	30.17	21.56	51.73
7	Eranakulam	41.70	21.87	63.57
8	Thrissur	37.51	30.15	67.66
9	Palakkad	62.77	29.42	92.20
10	Malappuram	45.74	10.39	56.13
11	Kozhikkode	31.09	14.90	45.99
12	Wayanad	56.38	32.99	89.37
13	Kannur	65.52	25.74	91.27
14	Kasaragod	58.86	28.96	87.82
	State	56.64	28.42	85.06

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

SI No	District	Male	Female	Total
1	Thiruvananthapuram	45.05	37.23	82.28
2	Kollam	45.77	29.34	75.12
3	Pathanamthitta	51.05	32.62	83.67
4	Alappuzha	57.61	31.98	89.58
5	Kottayam	32.83	19.92	52.75
6	Idukki	28.22	23.88	52.10
7	Eranakulam	20.38	15.59	35.97
8	Thrissur	45.80	31.25	77.05
9	Palakkad	49.77	25.09	74.86
10	Malappuram	44.79	17.63	62.42
11	Kozhikkode	46.71	28.12	74.83
12	Wayanad	35.17	19.56	54.73
13	Kannur	47.15	26.10	73.25
14	Kasaragod	42.49	24.28	66.77
	State	42.35	25.23	67.58

A 3.11 Percentage of Hired human labour hours to total human labour hours under Pineapple

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	58.56	31.28	89.84
2	Kollam	25.63	15.1	40.73
3	Pathanamthitta	57.36	39.12	96.48
4	Alappuzha	60.62	34.86	95.49
5	Kottayam	32.67	15.67	48.34
6	Idukki	35.94	24.89	60.83
7	Eranakulam	51.02	26.1	77.12
8	Thrissur	53.61	45.23	98.84
9	Palakkad	65.86	25.76	91.62
10	Malappuram	62.01	36.46	98.47
11	Kozhikkode	54.57	29.76	84.33
12	Wayanad	60.61	16.35	76.96
13	Kannur	61.01	33.96	94.98
14	Kasaragod	48.4	43.76	92.16
	State	49.04	31.11	80.15

A 3.12 Percentage of Hired human labour hours to total human labour hours under Bitter Gourd (Autumn)

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	31.09	17.02	48.11
2	Kollam	56.20	25.55	81.75
3	Pathanamthitta	55.74	40.44	96.18
4	Alappuzha	39.75	26.95	66.70
5	Kottayam	31.38	13.65	45.03
6	Idukki	0.00	0.00	0.00
7	Eranakulam	41.96	11.19	53.15
8	Thrissur	40.17	28.12	68.29
9	Palakkad	29.00	17.13	46.13
10	Malappuram	47.01	29.49	76.50
11	Kozhikkode	0.00	0.00	0.00
12	Wayanad	0.00	0.00	0.00
13	Kannur	59.02	18.35	77.37
14	Kasaragod	57.37	24.33	81.70
	State	39.45	22.43	61.88

**A 3.13 Percentage of Hired human labour hours to total human labour hours under
Bitter Gourd (Winter)**

SI No	District	Male	Female	Total
1	Thiruvananthapuram	28.37	20.65	49.02
2	Kollam	52.85	28.26	81.11
3	Pathanamthitta	44.71	31.78	76.49
4	Alappuzha	43.52	28.32	71.84
5	Kottayam	26.47	14.70	41.17
6	Idukki	25.62	10.10	35.72
7	Eranakulam	25.81	25.45	51.26
8	Thrissur	28.55	22.78	51.33
9	Palakkad	27.74	22.09	49.83
10	Malappuram	51.70	30.75	82.45
11	Kozhikkode	52.84	32.59	85.42
12	Wayanad	33.97	21.76	55.73
13	Kannur	57.93	19.68	77.61
14	Kasaragod	41.04	30.77	71.81
	State	36.99	24.39	61.38

**A 3.14 Percentage of Hired human labour hours to total human labour hours under
Bitter Gourd (Summer)**

SI No	District	Male	Female	Total
1	Thiruvananthapuram	24.84	21.05	45.89
2	Kollam	40.20	32.62	72.82
3	Pathanamthitta	46.85	31.69	78.54
4	Alappuzha	39.25	27.25	66.50
5	Kottayam	28.71	15.63	44.34
6	Idukki	0.00	0.00	0.00
7	Eranakulam	39.01	18.48	57.49
8	Thrissur	32.50	24.77	57.27
9	Palakkad	48.06	30.69	78.75
10	Malappuram	48.97	21.28	70.25
11	Kozhikkode	53.06	31.48	84.54
12	Wayanad	45.66	24.04	69.70
13	Kannur	53.85	26.33	80.18
14	Kasaragod	57.68	34.13	91.81
	State	47.97	28.92	76.89

A 3.15 Percentage of Hired human labour hours to total human labour hours under Cowpea (Autumn)

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	34.49	17.46	51.95
2	Kollam	55.37	26.11	81.48
3	Pathanamthitta	53.36	38.94	92.30
4	Alappuzha	48.63	19.81	68.44
5	Kottayam	31.33	23.09	54.42
6	Idukki	0.00	0.00	0.00
7	Eranakulam	42.44	50.15	92.59
8	Thrissur	47.39	29.05	76.44
9	Palakkad	32.54	21.72	54.26
10	Malappuram	43.65	36.34	79.99
11	Kozhikkode	0.00	0.00	0.00
12	Wayanad	0.00	0.00	0.00
13	Kannur	59.46	19.46	78.92
14	Kasaragod	51.24	38.05	89.29
	State	42.58	25.60	68.18

A3.16Percentage of Hired human labour hours to total human labour hours under Cowpea (Winter)

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	20.92	9.41	30.33
2	Kollam	48.9	33.52	82.41
3	Pathanamthitta	52.33	23.34	75.67
4	Alappuzha	29.66	16.45	46.1
5	Kottayam	36.34	20.48	56.82
6	Idukki	17.03	13.44	30.47
7	Eranakulam	33.47	19.45	52.92
8	Thrissur	37.86	24.92	62.78
9	Palakkad	34.75	18.14	52.89
10	Malappuram	44.14	28.09	72.23
11	Kozhikkode	55.2	40.77	95.97
12	Wayanad	46.17	14.31	60.48
13	Kannur	47.45	27.34	74.79
14	Kasaragod	50.71	23.67	74.38
	State	25.89	12.50	38.39

A 3.17 Percentage of Hired human labour hours to total human labour hours under Cowpea (Summer)

Sl No	District	Male	Female	Total
1	Thiruvananthapuram	53.55	14.78	68.33
2	Kollam	45.69	15.79	61.48
3	Pathanamthitta	35.07	17.58	52.65
4	Alappuzha	25.62	17.84	43.46
5	Kottayam	32.00	14.95	46.95
6	Idukki	0.00	0.00	0.00
7	Eranakulam	45.55	30.22	75.77
8	Thrissur	32.03	21.90	53.93
9	Palakkad	48.51	31.80	80.31
10	Malappuram	32.77	19.91	52.68
11	Kozhikkode	45.51	25.37	70.88
12	Wayanad	35.52	22.97	58.52
13	Kannur	58.52	29.85	88.37
14	Kasaragod	31.22	21.35	52.57
	State	39.70	20.22	59.92

A 3.18 Percentage of Hired human labour hours to total human labour hours under Cardamom

Sl No	District	Male	Female	Total
1	Idukki	23.96	44.44	68.40
2	Palakkad	31.48	54.22	85.70
3	Wayanad	30.90	54.13	85.03
	State	26.75	48.29	75.04

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

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	64190	23896	88086
2	Kollam	62435	25461	87896
3	Pathanamthitta	33825	3955	37780
4	Alappuzha	75513	1239	76752
5	Kottayam	83580	0	83580
6	Idukki	55844	12217	68061
7	Eranakulam	52018	8334	60352
8	Thrissur	52382	1756	54138
9	Palakkad	61155	5527	66682
10	Malappuram	64058	7995	72053
11	Kozhikkode	60361	5796	66157
12	Wayanad	0	0	0
13	Kannur	51840	18737	70577
14	Kasaragod	60047	25160	85207
	State	62099	6413	68512

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

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	58873	20035	78908
2	Kollam	63272	5954	69226
3	Pathanamthitta	74340	4419	78759
4	Alappuzha	62507	2988	65495
5	Kottayam	75613	6277	81890
6	Idukki	64695	19784	84479
7	Eranakulam	55131	10861	65992
8	Thrissur	53911	7150	61061
9	Palakkad	69563	6252	75815
10	Malappuram	58531	16797	75328
11	Kozhikkode	66072	1737	67809
12	Wayanad	62906	20067	82973
13	Kannur	57000	11024	68024
14	Kasaragod	69968	7417	77385
	State	62808	8879	71687

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

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	61362	10116	71478
2	Kollam	66760	11950	78710
3	Pathanamthitta	68100	5554	73654
4	Alappuzha	68929	2395	71324
5	Kottayam	63774	6481	70255
6	Idukki	65742	14216	79957
7	Eranakulam	63809	15624	79434
8	Thrissur	65372	2805	68177
9	Palakkad	70804	10088	80891
10	Malappuram	68462	5759	74221
11	Kozhikkode	72419	10551	82970
12	Wayanad	65210	11612	76822
13	Kannur	62765	16885	79650
14	Kasaragod	64254	12550	76504
	State	67296	5857	73153

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

Sl No	District	Product	By Product	Total
1	Thiruvananthapuram	94607	3160	97767
2	Kollam	95788	2615	98403
3	Pathanamthitta	87823	1108	88931
4	Alappuzha	105372	3746	109118
5	Kottayam	101602	2233	103836
6	Idukki	67202	0	67202
7	Eranakulam	99729	2606	102335
8	Thrissur	87059	6268	93327
9	Palakkad	93880	3206	97086
10	Malappuram	83706	3537	87243
11	Kozhikkode	86932	7072	94004
12	Wayanad	91092	1769	92861
13	Kannur	93064	5168	98232
14	Kasaragod	97525	4438	101963
	State	92768	3640	96408

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

Sl No	District	Arecanut	Tapioca	Banana
1	Thiruvananthapuram	107674	276468	439631
2	Kollam	103818	250005	437965
3	Pathanamthitta	109061	205766	337539
4	Alappuzha	102628	232518	365292
5	Kottayam	119868	244893	451123
6	Idukki	118697	222825	434336
7	Eranakulam	101702	194022	269415
8	Thrissur	88451	172069	589267
9	Palakkad	119103	208692	373852
10	Malappuram	107746	194909	325175
11	Kozhikkode	95533	218024	361794
12	Wayanad	112787	216328	465637
13	Kannur	95736	246438	468888
14	Kasaragod	102497	209492	280771
	State	107163	216957	399863

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

Sl No	District	Pepper	Ginger	Turmeric
1	Thiruvananthapuram	197911	147544	198803
2	Kollam	184984	134992	186077
3	Pathanamthitta	176978	148782	143933
4	Alappuzha	175291	127228	140265
5	Kottayam	188807	159756	178628
6	Idukki	198621	199537	121285
7	Eranakulam	233039	182460	131729
8	Thrissur	174174	129896	107732
9	Palakkad	156157	186638	162487
10	Malappuram	176742	187431	161987
11	Kozhikkode	165620	183857	127924
12	Wayanad	188826	214237	155566
13	Kannur	191891	175774	143730
14	Kasaragod	176799	177800	178311
	State	187414	182328	152162

A4.7 District wise Value of product and by-product per hectare of Pineapple

Sl No	District	Pineapple
1	Thiruvananthapuram	149532
2	Kollam	162580
3	Pathanamthitta	121757
4	Alappuzha	111572
5	Kottayam	138634
6	Idukki	104873
7	Eranakulam	133606
8	Thrissur	139138
9	Palakkad	152301
10	Malappuram	161987
11	Kozhikkode	125929
12	Wayanad	197339
13	Kannur	136883
14	Kasaragod	170823
	State	147020

A4.8 District wise Value of product and by-product per hectare Bitter gourd (Autumn, Winter and Summer)

Sl No	District	Bitter gourd (Autumn)	Bitter gourd (Winter)	Bitter gourd (Summer)
1	Thiruvananthapuram	202134	150389	176110
2	Kollam	203671	167319	163427
3	Pathanamthitta	184374	148567	142213
4	Alappuzha	170366	157222	186277
5	Kottayam	200881	146131	145324
6	Idukki	0	127427	0
7	Eranakulam	124668	182786	150657
8	Thrissur	177349	174697	140687
9	Palakkad	170048	166529	137821
10	Malappuram	215145	187531	132418
11	Kozhikkode	0	124269	140980
12	Wayanad	0	157666	181903
13	Kannur	102362	120007	111511
14	Kasaragod	154203	111923	157355
	State	180290	156685	156590

A4.9 District wise Value of product and by-product per hectare (in Rs.) of Cowpea (Autumn, Winter and Summer)

Sl No	District	Cowpea(Autumn)	Cowpea(Winter)	Cowpea(Summer)
1	Thiruvananthapuram	187763	169682	190771
2	Kollam	182279	164802	143850
3	Pathanamthitta	152510	144183	150311
4	Alappuzha	191525	141835	123869
5	Kottayam	152427	186393	186562
6	Idukki	0	141174	0
7	Ernakulam	173010	186108	139737
8	Thrissur	146652	156573	146704
9	Palakkad	143598	187768	162173
10	Malappuram	131137	117284	138554
11	Kozhikkode	0	147180	181847
12	Wayanad	0	148809	188645
13	Kannur	114877	152685	146686
14	Kasaragod	178402	130632	124353
	State	152912	157930	161226

A4.10 District wise Value of product and by-product per hectare of Cardamom

Sl No	District	Cardamom
1	Idukki	388992
2	Palakkad	138911
3	Wayanad	228730
	State	322917