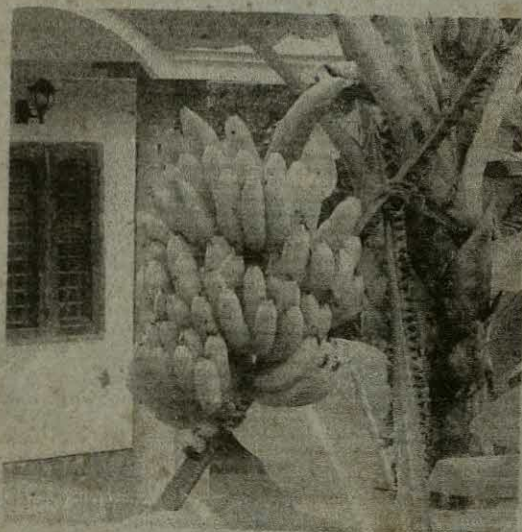
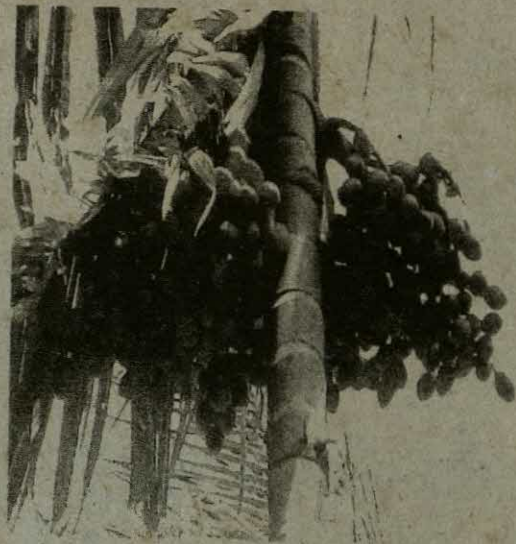
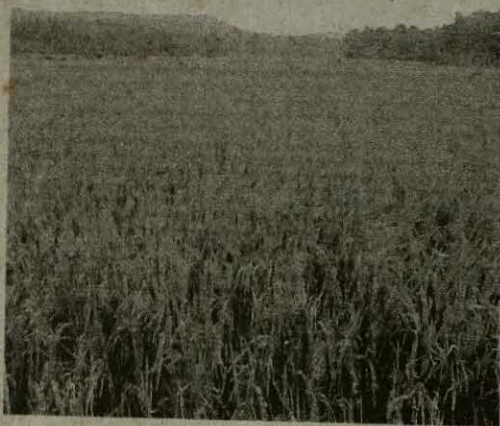


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Government of Kerala



**REPORT ON
7TH AGRICULTURAL CENSUS**

Department of Economics & Statistics

Thiruvananthapuram

2007

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Government of Kerala

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2007**

PREFACE

The Government of India has been conducting the quinquennial Agricultural Census since 1970-71. The Census provides crucial information of the structural aspects of Indian agriculture, which continues to be the main stay of the Indian Economy. The concepts and definitions used in the Indian Agricultural Census are broadly in conformity with those adopted in the World Census of Agriculture. The Agricultural Census in India relies heavily on the system of land records as prevalent in a large part of the country. However, the variations in the system of land records from state to state pose technical difficulties in the process of data collection.

The Agricultural Census conducted with reference year 2000-01 is the 7th in the series. Enumerators recruited from Employment Exchange and supervised by the department staff did the fieldwork of the census. The processing of data was done in the computer division of the Directorate.

I appreciate the efforts put in by the Agricultural Census Division for bringing out such a worthy publication. Sri M. Manoj, Deputy Director had taken the responsibility of preparing the same with the help of Sri M. Mohanan and D. Ajayakumar, Research Assistants and Sri V. Sadasivan Nair, U.D. Compiler of Agricultural Census Division under the supervision of State Technical Officer Smt. V.J. Lathika. Necessary technical assistance was rendered by Sri K. Vimalan, Deputy Director, Computer Division of the Directorate.

I hope that this publication would be a great help to the departmental officials and researches involved in this field.

Suggestions, if any, are most welcome.

Sd/-
M.R. Balakrishnan
Director

Thiruvananthapuram,

03/05/2007

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CHAPTER – I

INTRODUCTION

Agricultural Census forms part of a broader system of collection of Agricultural Statistics. It is a large scale statistical operation for the collection and derivation of quantitative information about the structure of agriculture in the country. An agricultural operational holding is the ultimate unit for taking decision for development of agriculture at micro level. It is for this reason that an operation holding is taken as the statistical unit of data collection for describing the structure of agriculture.

The whole project of Agricultural Census in the country is implemented in three distinct phases, which are statistically linked together but focus on different aspects of Agricultural Statistics. In phase 1, a list of holdings with their area and social characteristics of the holders is prepared. In phase 2, detailed data on Agricultural characteristics of holdings are collected from selected wards. In phase 3, data on input use pattern are collected from selected holdings in selected wards. Thus the whole operations of Agricultural Census in India is not really a complete Census. In fact it is a combination of Census and Sample Survey. In the non-landed record states where the Census data are collected through sample survey, the estimates are first prepared at Block/Municipality/Corporation level. The estimates are then aggregated at various levels of administration using appropriate multipliers.

Agricultural Census in India is conducted following broad guidelines for the decennial World Census of Agriculture conducted by Food and Agricultural Organization of the U.N. India has been participating the World Agricultural Census Programme for over three decades. The first country wide comprehensive Agricultural Census was organized in India by the Ministry of Agriculture with the Agriculture year 1970-71 as the reference period, which was followed by the Agricultural Census with reference years 1976-77, 1980-81, 1985-86, 1990-91 and 1995-96. This is the 7th Agricultural Census in the country.

Objectives

The main objectives of the Agricultural Census are:

- i) To describe agricultural structure and related characteristics of agriculture by providing statistical data on operational holdings, including land utilization, live-stock, agricultural machinery and implements, use of fertilizers etc.
- ii) To provide benchmark data needed for formulating new agricultural development programmes and for evaluating their progress.

- iii) To provide basic frames of households and operational holdings for carrying out future agricultural surveys and,
- iv) To lay a basis for developing an integrated programme for current agricultural statistics.

Approach for data collection

The basic unit for collecting data in Agricultural Statistics is *operational holding*. The holding of the actual cultivator who need not be the owner is the unit for *collection of data*. As comprehensive land records are not available in the non-land record states the required data would be collected through sample surveys by adopting enquiry method. The data would be collected from the *operational holders in the selected wards* as per the prescribed sampling design in the standardized schedules.

Schedules

The following schedules are used for the conduct of Agricultural Census

Schedule L1: List of Households and operational holdings in the sample ward.

Schedule L2: List of Institutional holdings in the sample ward

Schedule L3: Ward summary.

Schedule L4: List of operational holdings in the sample ward and sample selection of holdings

Schedule T1: Abstract of Number and Area of operational holdings by different size classes classified according to sex wise, social group wise and Individual/Joint/Institutional wise.

Schedule SS: Sample Selection Summary

Schedule H: Particulars of Operational Holdings

Item coverage

Data on the following eight main aspects would be collected during this Agricultural Census with the agriculture year 2000-01 (July 2000 to June 2001) as the reference year. During phase 1, viz., the listing phase, data on number and area of operational holdings according to prescribed size classes for different social group and sex will be collected. During this phase of census, data on basic agricultural infrastructure available in the sample wards is also to be collected. In phase 2, which is the main census operation, though only for selected holdings in the selected ward the data on following five aspects will be collected.

- i) Dispersal of holdings
- ii) Tenancy

- iii) Land utilization
- iv) Irrigation status and Source wise area irrigated
- v) Cropping pattern.

All the data will be compiled separately for the operational holdings of four groups, viz., Scheduled Caste, Scheduled Tribes, Others and Institutional, and also for the total of this group. The Priority Table - 1, which relates to Number and Area of holdings by various size classes will be prepared sex wise also.

Sampling Design

A stratified two stage sampling design is recommended for Agricultural Census in the non-land record states. In view of the increasing demand for Agricultural Census data at Block level, it has been decided that the community Development Block or some other similar homogeneous administrative units (Municipality and Corporation) should be taken as stratum. The first stage unit within the stratum will be the ward and the second stage unit will be the operational holding.

For the 2000-01 census a stratified two stage sampling design was recommended in the non-land record states. The stratum was block. The first stage unit within that was the Panchayat wards and the second stage was the operational holdings. In view of the increasing demand for Agricultural Census data at Block level, it was suggested that the community Development Block should be the stratum in the rural area and Municipalities/Corporations in Urban area. From each stratum 20% of the wards in each block and 20% of the wards divisions from each Municipality/Corporation area were selected using circular systematic random sampling method. In total 2644 Panchayat wards and 375 Municipal wards/Corporation divisions were selected. In each selected ward all the operational holders were listed in Schedule L1. A separate list of institutional holdings is also prepared for each sample ward during the time of listing in Schedule L2. During the time of listing some basic agricultural information for the sample ward is also collected in Schedule L3.

For detailed survey 20% of the holdings are selected from the size class 0 - 247 Cents i.e., below 1 ha and 50% from above 2 ha and below 10 ha and 100% from 10 ha and above. Schedule L4 is used to prepare the sampling frame for the selection of the required number of holdings for collecting detailed information in Schedule H. All the Institutional holdings in the selected wards were included in the sample for filling Schedule H, i.e., no sampling has done for Institutional holdings.

Primary field work

The primary field work consists of collecting information in respect of resident cultivators in the sampled wards. Non-resident cultivators will not be covered in the survey as it may be difficult to approach them. A separate list of institutional holdings will also have to be prepared for each sample ward.

Concepts, Definitions and Methodology

In Agricultural Census data is to be collected on the basis of *de- facto* (by fact) position rather than *de-jure* (by right) position.

1. *Operational Holding*

All land which is used wholly or partly for agricultural production and is operated as one *technical unit* by one person alone or with others without regard to title, legal form, size or location.

2. *Technical Unit*

A technical unit has been defined as that unit which is under the same management and has the same means of production such a labour force, machinery and animals.

3. *Operated Area*

Operated area would include both cultivated and uncultivated area, provided part of it is put to agricultural production during the reference period.

The operated area may comprise of

- (a) Land owned and self operated
- (b) Land Leased in
- (c) Land otherwise operated

a) *Land owned and self operated*

Land for whom the cultivator has the right to permanent heritable possession would be considered as owned. This would include,

Land held from Government or others under grant or lease or assignment with right of permanent heritable possession with or without right of transfer

Land operated under perpetual lease.

Self-Operated land would include,

Self cultivation

Land cultivated through members of the family

Land cultivated with the help of hired labour

Note: Land owned and self-operated should not include land leased out to others.

b) Leased in

Area leased in is defined as land taken on lease from others without any permanent right of possession for the lessee. Land may be leased in for:

- I Fixed money
- II Fixed produce
- III Share of produce
- IV Usufructuary mortgage

Under (iv), the ownership of the property is with the mortgager but the possession is with the mortgagee (i.e. The person to whom the mortgage is made or given). Income from the property accrues to the Mortgagee and the mortgage is terminated as soon as the full amount is released.

Other terms to be specified

c) Area otherwise operated

An operational Holder is the person who has the responsibility for the operation of the agricultural holding and who exercises the technical initiative and is responsible for its operation. He may have full economic responsibility or may share it with others.

4. Operational Holder

An operational holder is the person who has the responsibility for the operation of the agricultural holding and who exercises the technical initiative and is responsible for its operation. He may have full economic responsibility or it may share with others. The operational holder may be Individual /Joint/Institutional.

- i) **Individual:** If the holding is being operated either by one person alone or by group of persons who are the members of the same households, it will be considered as an Individual holding.
- ii) **Joint:** If two or more persons belonging to different households, share jointly as partners in the economic and technical responsibility for the operation of an agricultural holding, such holding would be considered as Joint.
- iii) **Institutional:** Holding such as government farms, sugarcane factories farms, co-operative farms, lands managed by trust would be treated as Institutional.

5. *Agricultural Production*

Agricultural production includes growing of field crops, fruits, grapes, seeds, tree nurseries (except those of forest trees) bulbs, vegetables and flowers, production of coffee, tea, cocoa, rubber, jute oil seeds, fodder grass, etc. If efforts is made for raising grass, it will be treated as agricultural operation.

6. *Resident and Non-resident operational holder*

All the cultivators residing in a particular Panchayat, Municipality / Corporation ward cultivating some land are resident cultivators of that sample ward irrespective of fact whether they are cultivating land within that village or outside. A resident cultivator may have (i) entire area of the holding located in the sample ward of his residence, (ii) partly within the sample ward of residence and partly outside; and (iii) entirely outside the ward of residence.

7. *Complete/Part Holding*

A holding is said to be complete holding if the entire operated area of that holding is located in the same ward. If the operated area spread over in more than one ward, it would be considered as part holding.

8. *Wholly irrigated, Partly irrigated and wholly unirrigated holdings*

If the entire net area sown in an operational holding is equal to net area irrigated, such holding is considered as wholly irrigated holding. In case part of the net sown area is irrigated, it will be partly irrigated; and if the entire sown area has not received any irrigation during the year of reference, such holding would be wholly unirrigated.

9. *Land Utilization*

Operated area would be classified in to six broad categories:

- i) Net area sown
- ii) Current fallow
- iii) Fallow land other than current fallow
- iv) Other uncultivated land excluding fallow
- v) Cultivable waste; and
- vi) Not available for cultivation

i) Net area sown

Total area sown with crops and orchards, counting area sown more than once in the same year only once.

ii) Current fallow

Cropped areas, which are kept fallow during the current year. For example, if any seedling area is not cropped in the same year, it may be treated as current fallow.

iii) Fallow other than current fallow

All lands which are taken up for cultivation but area temporarily out of cultivation for a period of not less than one year and not more than five years. The reasons for keeping such lands fallow may be one or more of the following:

- i) Poverty of the cultivator;
- ii) Inadequate supply of water;
- iii) Malarial climate;
- iv) Silting of canals and river and
- v) Un-remunerative nature of farming.

iv) Other uncultivated land excluding fallow

This will include

- a) All grazing lands, whether they are permanent pastures and meadows or not. Village common grazing lands would, however, be exclude.
- b) Land under miscellaneous tree crops

Cultivable land which is not included in the net area sown but is put to some agricultural use. Land under casuarinas trees, thatching, grasses, mambo bushes and other groves for fuel which are not included under 'orchards' would be covered under this category.

v) Cultivable Waste

All lands available for cultivation, whether or not taken up for cultivation once but not cultivated during the current year and last five years or more in succession for one reason or the other. Such lands may be either wholly or partly covered with shrubs and jungles, which are not put to any use. Land once cultivated but not cultivated for five years in succession, would also be included.

vi) Not available for cultivation

This would include Forest, area under non agricultural use, barren and uncultivable land.

a) Forest

All lands classed as 'Forests' under any legal enactment dealing with forests or administered as forests, whether State owned private and whether wooded or maintained as potential forest. The area of crops raised in the forest and grazing lands or areas open for grazing within the forests would be included under the forest area. Only private forest would be covered for the purposes of Agricultural Census.

b) Area non-agricultural use

All lands occupied by buildings and other lands put to uses other than agriculture, such lands within the cultivated holdings should be covered in the Census.

c) Barren and uncultivable land

All barren and uncultivable land within the cultivated holding.

Methodology

The data of the Agricultural Census were collected through field enquiries from the selected operational holders of the sampled wards. The basic unit for the collection of data in Agricultural Census is the operational holding. The holding of the actual cultivator, not the owner is the unit for collection of data. The data for the entire land operated by the cultivator were collected and no outer limit was fixed for pooling all the parcels of an operational holding. As there are no comprehensive land records in the non-land record states, the required data were collected through sample survey by adopting enquiry method.

Limitations

The main problem encountered during the analysis of data was under reporting. This was visible in the area reported under the operational holdings as well as the various crops. This is mainly due to the enquiry method adopted for the survey. The cultivators, the majority of them not keeping any account, were furnishing information from their memory. This resulted in incorrect information especially in the case of fertilizers and pesticides, crops for different seasons of the year, etc. The ceiling provisions of an individual family under the Kerala Land Reforms Act was another reason for under reporting by the holder of the land. In the case of mixed cropping pattern area under cultivation of different crops can be written only by counting the number of trees and then converting the same in to area using standard conversion factors. This trend of under reporting is a common feature in a census of this type since it is the only method of collection of data at micro level at lesser cost Data

can be made use of after giving proper allowance to the estimates knowing the limitation and deficiencies of the census data.

CHAPTER – II

7th AGRICULTURAL CENSUS

The Seventh Agricultural Census (2000-01) was conducted in Kerala during the period December 2002 – June 2003. The field work of the 7th census was carried out by enumerators recruited through Employment Exchange under the direct supervision of departmental field staff. The whole census operations were supervised by the nucleus staff at headquarters at Thiruvananthapuram consisting of

Joint Director	-	1
Deputy Director	-	1
Administrative Assistant/ Assistant Director	-	1
Research Assistant	-	2
Confidential Assistant	-	1
Typist	-	1
L.D. Compilers	-	2
Peon	-	1

Government of Kerala vide their G.O. (Rt) No.284/2002/Plg. Dated: 7/10/02 had issued, Sanction for the implementation of this Centrally Sponsored Scheme with 100% Central Assistance. The field work was supervised by Taluk and District Level Officers of this department under the direct control of Deputy Directors in the districts with the technical guidance from the Head office. This work was done by them in addition to their normal duties.

The field work of the Census was completed by 2003. The tabulation and processing of data was done in the computer division of the department. The preliminary report was forwarded to Government of India by October 2003. The detailed survey schedules after verification and assigning codes were handed over to computer division for data entry. The personnel from the Agricultural Census division had rendered all assistance during data entry work especially during concurrent clarification of doubts regarding filled in schedules. The first set of tables were forwarded to Government of India by 2003. The final tables were forwarded to the Director of Agricultural Census, Government of India by 2003-04. After a series of queries and clarification on the data by the Directorate of Agriculture census, Government of India, the final tables were approved by the GOI by 2005. The CD containing final tables of 2000-01 agriculture census was handed over to the state during the end of 2005 from the Director of Agriculture Census, GOI. The final tables are generated block wise, taluk wise, district wise and for the state for all the social groups and scheduled caste, scheduled tribes and other categories separately.

Field Organization at State Level

The fieldwork was done by the Enumerates recruited from Employment Exchange. Statistical Inspectors/Taluk Statistical Officers/Additional District Officers/Price Supervisory Officers and Deputy Directors of the districts provided the leadership at the district under the technical guidance from the Head Office.

Before the commencement of the 2000-01 census, intensive training was given to all personnel involved in the field work. Wide publicity through media was also given for dispelling the fear of the farmers that they can furnish correct information to the enumerators. It was also made clear that individual information about operational holding would not be released. For the accuracy of the data intensive periodical inspections were conducted by the supervisors. Senior officers from headquarters also conducted intensive inspection.

The tabulation of the census data was done in the computer division of the department. The Senior Officers of the scheme provided necessary technical guidance in this regard. The concept and definitions adopted for the conduct of the census with detailed explanation have been included in instructions to the enumerators prepared in Malayalam. Analysis of data has been made separately for scheduled caste/scheduled tribes and other categories.

CHAPTER – III

RESULTS OF THE CENSUS

According to the Agricultural Census 2000-01, the total number of operational holdings in Kerala has been estimated as 66.57 lakhs out of which individual holdings accounted for 65.68 lakhs. This accounted for 98.61%. The remaining 1.39% are institutional and joint holdings. There are 7589 joint holdings reported during 2000-01 census.

Table I

Type of Operational Holdings	No. of Operational Holdings	Area operated (Ha)
Individual	6568383	1456543
Joint	7589	4110
Institutional	80660	108835
Total	6656632	1569488

The 66.57 lakhs operational holdings accounted for an operated area of 15.69 lakh hectares out of which 14.57 lakh hectares were the operational area of individual holdings. Institutional holdings, account for 1.21% of the total number of holdings, have accounted for an area of 6.93% of the total operated area in the state, showing a comparatively very high average size of the holding for them. With regard to joint holdings, 0.18% of the total number of holdings, have accounted for an area of 0.26% of the total operated area in Kerala.

Comparison with 1990-91, 1995-96 Census

Table II

Number and Area of Operational holdings during 1990-91, 1995-96 and 2000-01

Type	No. of Operational Holdings			Area in Hectares		
	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01
Individual	5363697	6230685	6568383	1647939	1628430	1456543
Joint	1608	2674	7589	1239	3358	4110
Institutional	53123	64955	80660	146412	80435	108835
Total	5418428	6298314	6656632	1795590	1712223	1569488

A comparative analysis of 1990-91, 1995-96 and 2000-01 census figures show that the total number of holdings under all categories together has increased from 54.18 lakhs in 1990-91 to 62.98 lakhs in 1995-96 to 66.56 lakhs in 2000-01 recording a percentage increase of 16.24 in 1995-96 and 5.68 in 2000-01.

As far as the number of individual holdings are concerned, the percentage increase was of the order of 16.23% in 1995-96, 5.29% in 2000-01. Institutional holdings are also increased by 22.27% in 1995-96 and 24.17% in 2000-01. There is diminishing trend is seen in area from 1990-91 to 1995-96 and from 1995-96 to 2000-01 for Individual holdings.

Table III

Social group	No. of Operational Holdings	Area operated (Ha)
Institutional	80660	108835
Scheduled Caste	601428	45149
Scheduled Tribe	90628	34263
Others	5883916	1381241
Total	6656632	1569488

Table III reveals the fact that out of the total of 6656632 holdings 5883916 holdings are belonging to 'Others' category ie., 88.39% of the total. Only 9.04% for Scheduled Caste, 1.36% for Scheduled Tribe and 1.21% for Institutional holdings. The corresponding percentages of area are Others – 88.01%, Scheduled Caste – 2.88%, Scheduled Tribe – 2.18% and Institutional – 6.93%.

Table IV

Number and Area of Operational Holdings during 1990-91, 1995-96 and 2000-01

Sl.No.	Year	No. of Operational Holdings	Area (Ha)
1	1990-91	5418428	1795590
2	1995-96	6298314	1712223
3	2000-01	6656632	1569488

On examining the above table it is seen that an increasing trend is visible in the number of operational holdings from 1990-91 to 2000-01, whereas a diminishing trend is observed in the corresponding area operated.

For generating state wise tables the holdings were classified in to 10 size classes according to size and detailed tables in respect of the estimated number and area of operational holdings have been prepared. But for detailed discussion, comparison and analysis of the census results, these 10 size classes have been grouped up to five size groups.

1. Below 1 hectare (marginal)
2. 1 to 2 hectares (small)
3. 2 to 4 hectares (semi-medium)
4. 4 to 10 hectares (Medium)
5. 10 hectares and above (large)

Type of holding

Table IV 1 in the Appendix gives the distribution pattern of operational holdings under individual, institutional and joint. Out of the total holdings of 66.57 lakhs, the size group below 1 ha. account for 63.35 lakhs which is 95.12% of the total number of holdings. The total area operated by these holdings is 882502 hectares which works out to 56.23% of the total area. The average size of this group is 0.14 hectares. Next to marginal holders, the holders in the group of small numbering to 226810 and operated area of 299767 hectares with an average size class of 1.30 hectares. As in the case of past censuses, the larger size class constitute the lower number of operational holder and larger area of operational holding with average size of operational holding 37.31 Hectare.

Average size.

Table IV 1
Average Size of Holders (2000-01)

Size class hectare	No. of operational holders (in lakhs)	Area of operation (hectares)	Average size of the holder (hectares)
Below 1 hectare	63.35	882502	0.14
1 to 2 hectares	2.27	299767	1.32
2 to 4 hectares	0.76	190527	2.51
4 to 10 hectares	0.16	84759	5.30
10 hectares and above	0.03	111933	37.31
All	66.57	1569488	0.24

The average size of an operational holding was 0.24 hectare in 2000-01. This was against 0.27 hectare in 1995-96 and to 0.37 hectare in 1990-91.

Table IV 2

Average size of individual and joint holdings during 1990-91,95-96 and 2000-01.

Sl. No	Size class	1990-91	1995-96	2000-01
1	2	3	4	5
1	0.02-0.99	0.20	0.15	0.14
2	1.00-1.99	1.37	1.33	1.32
3	2.00 - 3.99	2.61	2.55	2.51
4	4.00 - 9.99	5.32	5.26	5.30
5	10.00 & above	55.91	35.41	37.31
Total		0.37	0.27	0.24

The average size of the holdings shows a diminishing trend from 1990-91 Census to 2000-01.

Scheduled caste

Table IV.1 (a) in the Appendix reveals the number and area operated by operational holders belonging to Scheduled Caste. The details gathered reveal that the total number of holdings in this category for all size classes increased from 579160 in 1995-96 to 601428 in 2000-01 recording increase of 22268 i.e. 3.84%.

Regarding area of the operational holders of this social group, the same has decreased from 47827 hectares to 45149 hectares, which shows a percentage decrease of 5.60%. The average size of holdings decreased in this social group also.

Scheduled Tribe

Table IV.1 (b) in the Appendix shows the number and area operated by operational holders belonging to Scheduled Tribe. The figures shows that the total number of holdings in this social group for all size classes increased from 72773 in 1995-96 to 90628 in 2000-01 recording an increase of 24.54%.. Correspondingly operated area increased from 32402 hectares in 1995-96 to 34263 hectares in 2000-01. The average size of holdings decreased in this social group also.

Distribution of holdings according to social groups

Table IV 3 below gives the number and area of operational holdings according to major social groups i.e. Scheduled Castes, Scheduled Tribes and others under different size classes. The inters percentages are given in brackets.

Table IV 3**Number and area of operational holdings according to major social groups**

Sl. No	Size class (Ha)	Number of operational holdings				Area operated (Hectares)			
		All	SC	ST	Others	All	SC	ST	Others
1	Below 1.0	6335428 (95.17)	597629 (99.37)	80933 (89.30)	5656866 (94.84)	882502 (56.23)	38813 (85.97)	17681 (51.60)	826008 (55.43)
2	1.00 - 1.99	226810 (3.41)	3254 (0.54)	7174 (7.92)	216382 (3.63)	299767 (19.10)	4252 (9.42)	9339 (27.26)	286176 (19.21)
3	2.00 - 3.99	75651 (1.14)	430 (0.07)	2099 (2.32)	73122 (1.23)	190527 (12.14)	1064 (2.36)	4961 (14.48)	184502 (12.38)
4	4.00 - 9.99	16008 (0.24)	95 (0.02)	417 (0.45)	15496 (0.26)	84759 (5.40)	453 (1.00)	2180 (6.36)	82126 (5.51)
5	10.00 & above	2735 (0.04)	20 (0)	5 (0.01)	2710 (0.05)	111933 (7.13)	567 (1.25)	102 (0.30)	111264 (7.47)
	All sizes	6656632 (100)	601428 (100)	90628 (100)	5964576 (100)	1569488 (100)	45149 (100)	34263 (100)	1490076 (100)

It is seen from the above Table that 99.37% of the Scheduled caste operational holders (below 1 hectares) operated 85.97% of the total area of that category, 0.54% of the holders (1.00 to 1.99 hectares) operated 9.42% of the operated area, 0.07% (2 to 3.99 hectares) operate 2.36% of the operated area, etc. With regard to scheduled tribe 89.30 % operational holders of this social group, belongs to below 1 hectare operate 51.60% of the operated area 7.92% of (in the size class 1 to 1.99 hectares) of the operational holders operate 27.26% of the area operated by them.

The concentration is higher in the marginal operators of other social group i.e. (94.84%) in number and operated area 55.43%. The other concentration is in small (1.00-1.99 hectare) operators 3.63% and semi medium (2.00 to 3.99 hectare) 1.23% operating an area of 19.21% and 12.38% respectively.

A social group wise comparison of the result shows that out of the total operational holders, scheduled caste operational holders constitute only 9.04% and scheduled tribe operational holders constitute 1.36%. 89.60% of operational holders are in other social group. Similar in the case of operational holders in the case of operated area also, i.e. scheduled caste 2.88% and scheduled tribe 2.18% operational holders of general category constitute 94.95%.

Table IV (4) shows district-wise distribution of operational holding and area according to social group. Scheduled caste operational holders are largest in Palakkad district and it is lowest in Wayanad district. Operated area is largest in Idukki. ST operators are highest in Wayanad and 2nd Idukki. The operated area operated by Scheduled Tribe, operational holders are highest in Idukki. Operators from other categories are highest in Thiruvananthapuram district, whereas the operated area is highest in Palakkad districts. Table IV I (4) gives the district-wise distribution of number of operational holdings and operated area.

Table IV 4

District wise Number and area of operational holdings according to major social groups

Sl. No	District	Number of operational holdings				Area operated (Hectares)			
		SC	ST	Others	Total	SC	ST	Others	Total
1	Thiruvananthapuram	73589	10282	708245	792116	3384	4520	79612	87516
2	Kollam	65835	1863	519732	587430	3700	268	83500	87468
3	Pathanamthitta	35285	2218	264018	301521	2498	193	68699	71390
4	Alappuzha	39752	1070	429028	469850	2643	47	68821	71511
5	Kottayam	29088	4869	392620	426577	2021	2139	124951	129111
6	Idukki	31904	17712	236155	285771	4758	9565	145876	160199
7	Ernakulam	58402	1052	585975	645429	2913	63	114302	117278
8	Thrissur	64046	1029	558388	623463	3282	78	111458	114818
9	Palakkad	75390	10617	429816	515823	4996	6286	146747	158029
10	Malappuram	51368	2927	549891	604186	4585	612	129891	135088
11	Kozhikode	34463	1554	533017	569034	2635	218	103361	106214
12	Wayanad	6504	25505	126914	158923	1426	5776	85723	92925
13	Kannur	18673	3644	436895	459212	2851	1192	142587	146630
14	Kasaragod	17129	6286	193882	217297	3457	3306	84548	91311
	State	601428	90628	5964576	6656632	45149	34263	1490076	1569488

Tenancy Status.

Table IV 2A gives the distribution of number of holdings and area operated according to tenancy status.

Distribution of Number of holdings and area operated according to tenancy status**Table IV 2 A**

Sl. No	Category of holdings and size group (Ha)	Number of holdings				Area operated (in hectars)			
		Wholly owned and self operated.	Wholly leased in	Wholly other wise operated	Partly owned, partly leased in and partly other wise operated	Wholly owned and self operated	Wholly leased in	Wholly otherwise operated	Partly owned, partly leased in and partly other wise operated
1	2	3	4	5	6	7	8	9	10
1	Marginal 0.02-0.99	6287518	1679	23643	22588	871199	428	2579	8294
2	Small 1.00-1.99	221853	223	721	4013	293108	273	982	5406
3	Semi-medium 2.00-3.99	73682	84	206	1679	185610	183	496	4239
4	Medium 4.00-9.99	15464	17	26	501	81713	111	143	2790
5	Large 10 & above	2630	15	3	87	109091	231	48	2562
6	All categories	6601147	2018	24599	28868	1540721	1226	4248	23291

Regarding the tenancy status of operational holding out of the total (6656632) operational holding 6601147 (99.17%) are wholly owned and self-operated holding. The percentage of area is 98.17%. Wholly leased in, wholly otherwise operated and partly owned and partly leased in and partly otherwise operated area is only 55485 hectare. The percentage of area is 0.83. The size class wise composition of the number of operational holding wholly owned and self operated is in marginal 95.00%, small 3.36%, semi medium 1.12%, Medium 0.23% larger and above 0.04%. 56.54% of wholly owned operated area is in the size class below 1 hectare, 19.02% area is in the size class of 1.00

to 2.00 hectare, 12.01% is semi-medium (2.00-3.99), 5.30% comes under Medium size class and 7.30% is in larger and above size class. The leased in operational holding is only 2018 numbers which is only 0.03% of the total operational holding of the state. However, there is a small increase in the percentage, as it was 0.01% in the previous census.

Distribution of leased area by terms of leasing

Table IV 2 B

Sl. No	Category of holdings	Area leased in for (in hectares)					Total
		Fixed money	Fixed produce	Share of produce	Usufructuary mortgage	Other terms	
1	2	3	4	5	6	7	8
1	Marginal	320	7	44	0	56	427
2	Small	268	4	0	0	0	272
3	Semi-medium	114	0	0	69	0	183
4	Medium	111	0	0	0	0	111
5	Large 10 & above	231	0	0	0	0	231
6	All categories	1044	11	44	69	56	1224

Regarding the terms of leasing, leased cultivation of area on "fixed money" constitute the majority 85.29%. Fixed produce and share of produce comes only 4.49% of the total. Under usufructuary mortgage 69 hectares of operated area are in the group, i.e., 5.64%. Area under other terms of leasing is 56 hectares i.e. 4.58%. Higher is the concentration of area under marginal and above group who operate as fixed money (320 hector).

Land utilization and Comparison with previous census

Table IV 3 below gives the statement of land utilization with comparisons with the previous censuses. The land utilization of the Agricultural Census 2000-01 reveals that 83.57% of the area used for cultivation during the census period. Which is about 1% lower than the last census (84.48%). Land not available for cultivation has decreased by 1.55% than the last census. This shows a positive sign in the recent scenario of Agriculture.

Table IV 5

Land utilization pattern (Operational holding Approach)
(Area in Hectares)

Sl. No.	Land use pattern in Operational Holding	1990-91		1995-96		2000-01	
		Area	Percentage	Area	Percentage	Area	Percentage
1	2	3	4	5	6	7	8
1	Net area sown	1556284	87.08	1446571	84.48	1311566	83.57
2	Area under current fallow	19928	1.11	22308	1.30	26561	1.69
3	Other uncultivated land excluding fallow land	19165	1.07	24195	1.41	47919	3.05
4	Fallow land other than current fallow	20625	1:15	15729	0.93	16307	1.04
5	Cultivable waste land	27500	1.54	22146	1.29	25249	1.61
6	Land not available for cultivation	143788	8.05	181274	10.59	141886	9.04
Total area of holdings		1787290	100	1712223	100	1569488	100

The Census results reveals that out of the total area of 1569488 hectare, net cultivated area (net area sown + current fallow) is 1338127 hectares, which is 85.25% of the total operated area. Land not available for cultivation is only 9.04%. Compared with the results of last censuses of 1990-91 and 1995-96, the net area sown has decreased from 87.08% in 1990-91 to 84.48% in 1995-96 and it is only 83.57% in 2000-01 of the total operated area in these census periods. No substantial increase or decrease is noticed in the land utilization of current fallow land, other uncultivated land excluding fallow land, fallow other than current fallow and cultivable waste. Land not available for cultivation have increased from 8.05% in 1990-91 to 10.59% in 1995-96 of the total operated area in these census periods. But the same has decreased from 10.59% to 9.04% when it reached in 2000-01.

Analyzing the structure of land utilization against the total operated area in each district (table IV 9(a)) it is observed that out of the total operated area, net area sown is highest (89.46%) in Idukki, while it is lowest in Alappuzha district (76%). Land not available for cultivation is highest in Kannur.

Table IV 6

District wise distribution of Land Utilization (O.H. Approach)

(Area in Hectares)

All social groups

Sl. No.	District	Net area sown	Current fallow	Other uncultivated land	Fallow land other than current fallow	Cultivable waste	Land not available for cultivation	Total
1	2	3	4	5	6	7	8	9
1	Thiruvananthapuram	72846	894	9600	413	493	3270	87516
2	Kollam	73125	1306	2622	355	783	9277	87468
3	Pathanamthitta	59700	1254	3281	933	610	5612	71390
4	Alappuzha	54415	2701	2052	1903	1761	8679	71511
5	Kottayam	111389	1912	1199	1080	1490	12041	129111
6	Idukki	143318	1692	2856	934	1124	10275	160199
7	Ernakulam	97597	1262	4403	932	1309	11775	117278
8	Thrissur	93049	1145	6223	1891	2761	9749	114818
9	Palakkad	127191	6700	4354	2671	4316	12797	158029
10	Malappuram	110346	2965	3883	1712	2465	13717	135088
11	Kozhikode	90812	526	481	564	495	13336	106214
12	Wayanad	82465	610	590	571	1257	7432	92925
13	Kannur	123516	2502	1865	1194	2354	15199	146630
14	Kasaragod	71797	1092	4510	1154	4031	8727	91311
	State	1311566	26561	47919	16307	25249	141886	1569488

A comparative analysis of district wise percentage distribution of land utilization Table 3(c) of appendix with the data of previous census shows that no abnormal variation is noticed in net area sown during 1990-91, 1995-96 and 2000-01. It is almost same in all the districts during the previous censuses. Some variation is noticed between districts in the case current fallow in the result of 1990-91, 1995-96 and 2000-01 censuses. Current fallow is highest in Palakkad in all the censuses. It is least in Kozhikode. Thiruvananthapuram district is having highest percentage in other uncultivated land. Fallow land and land not available for cultivation is highest in Palakkad.

Table 10 in the appendix reveals the percentage of area under main land use to total operated area by district 1990-91, 1995-96 and 2000-01. Out of the total operated area in the state 88.19% of land is cultivated in 1990-91, 85.79% in 1995-96 and 85.26% during 2000-01 respectively.

Uncultivated land is 3.76%, 3.63% and 5.70% in the state during 1990-91, 1995-96 and 2000-01. Land not available for cultivation is 8.05% , 10.59% and 9.04% in the State during these census periods respectively.

Size class

Table IV 7

**Percentage of area under main land use to the total operated area by the State
1990-91, 1995-96 and 2000-01**

Sl. No	Size class (Hectares)	Percentage of area under											
		Net cultivated area			Uncultivated land			Land not available for cultivation			Total		
		1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Marginal (0.02-0.99)	86.18	82.69	82.44	2.82	3.12	6.24	11.00	14.19	11.32	100.00	100.00	100.00
2	Small (1.00-1.99)	91.57	89.89	90.21	3.38	3.52	4.80	5.05	6.59	4.98	100.00	100.00	100.00
3	Semi medium (2.00 - 3.99)	91.38	89.47	90.06	3.95	4.06	4.96	4.67	6.47	4.98	100.00	100.00	100.00
4	Medium (4.00 - 9.99)	89.26	89.37	89.46	5.04	4.51	5.36	5.70	6.12	5.18	100.00	100.00	100.00
5	Large (10.00 & above)	85.31	87.02	82.85	8.02	6.53	5.35	6.63	6.45	11.81	100.00	100.00	100.00
	All sizes	88.19	85.79	85.26	3.76	3.62	5.70	8.05	10.59	9.04	100.00	100.00	100.00

The size class wise analysis (Table IV 7) of land utilization with the comparison of data of earlier census reveals that the percentage composition of net cultivated area, uncultivated land, land not available for cultivation, it is seen that net cultivated area is higher (80 to 90%) in all the size classes. Higher is the percentage in small, semi medium and medium size class during the 5th, 6th and 7th census as is in the case of district wise distribution. The percentage distribution is almost uniform in all the censuses in all size classes except large in the case of uncultivated land. Land not available for cultivation decreased from 10.59% (in 1995-96) to 9.04% (in 2000-01).

The percentage of net cultivated area of all size classes during 1990-91 and 88.19%, 85.79% during 1995-96 and 85.26% during 2000-01. The percentage of uncultivated land was 3.76%, 3.62% and 5.70% during 1990-91, 1995-96 and 2000-01 respectively. Land not available for cultivation was 8.05%, 10.59% and 9.04% during 1990-91, 1995-96 and 2000-01 respectively.

Table IV 8

Percentage of net cultivated area, total uncultivated area and land available for cultivation in 1990-91, 1995-96 and 2000-01

Sl. No	Size class (Hectares)	Net cultivated area			Uncultivated land			Land not available for cultivation		
		1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01
1	2	3	4	5	6	7	8	9	10	11
1	Marginal (0.02-0.99)	46.83	51.36	54.37	35.88	45.86	61.57	46.38	71.44	70.38
2	Small (1.00-1.99)	22.28	21.39	20.21	19.25	19.85	16.10	22.15	12.70	10.52
3	Semi medium (2.00 - 3.99)	14.78	14.86	12.82	14.99	15.97	10.57	14.79	8.71	6.68
4	Medium (4.00 - 9.99)	6.47	6.32	5.67	8.55	7.55	5.08	6.56	3.50	3.10
5	Large (10.00 & above)	9.64	6.07	6.93	21.33	10.77	6.69	10.12	3.65	9.32
All sizes		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table IV 8 is percentage of net cultivated area, total uncultivated area and land available for cultivation in 1990-91, 1995-96 and 2000-01. The percentage of contribution of net cultivated area uncultivated land and land not available for cultivation among various size class group shows that 'marginal' constitute the largest group. It was increasing during every census, i.e. it was 46.83% during 1990-91, 51.36% during 1995-96 and 54.37% during 2000-01, which means that sub division and fragmentation of operational holding is higher in the State. Net cultivated area is decreased in small, semi-medium and Medium Size classes. A little increase is noticed in Large Size class, i.e., from 6.07% (in 1995-96) to 6.93% (in 2000-01).

Cropping Pattern

Gross cropped area enumerated during the 7th Agricultural Census were 1569303 hectares. The cropping pattern is entirely different in the state compared to other Indian States. Food crops are cultivated mainly along with commercial crops are also cultivated in the same land. Multiplicity of crops and intensity of cropping exists in the state. In the same plot both seasonal, annual and perennial crops are cultivated. Totally there are 88 crops covered in the census. However data on the selected crops are collected for analyzing crops wise percentage distribution of gross cropped area during 1990-91, 1995-96 and 2000-01. Paddy cultivated area decreased from 16.08% in 1990-91 to 12.06% in

1995-96 to 11.21% in 2000-01. The percentage of coconut cultivated area increased from 27.10% in 1990-91 to 31.36% in 1995-96 again it is decreased to 25.10% in 2000-01. Percentage of Rubber cultivated area also shows an increase.

While looking into percentage distribution of area under principal crops in different size classes during the 2000-01 census (table IV 13) it is seen that marginal operators contributes larger percentage of area under paddy (44.15%), Coconut (71.01%) Tapioca (71.46%), Rubber (42.54%) Cashew (48.60%) Pepper (55.52%) Coffee (36.92%) Areca nut (53.96%) Mango (79.05%) and Banana (79.05%). The percentage of small, semi medium cultivators cultivating the above crops are almost same. Whereas tea is a plantation crops contributing 81.32% of area under larger size class.

Cropping Intensity

Intensity of cropping refers to the ratio of gross cropped area and net area sown multiplied by 100 (it is expressed in percentage). The state intensity of cropping is 120%. Intensity of cropping is highest in Wayanad whereas it is lowest in Kasaragod and Malappuram. The percentage of Gross cropped area in the State to each district varies from 4.03% to 10.84% in various districts. Percentage of Gross cropped area is lowest in Alappuzha but it is highest in Idukki.

An analysis of gross area under selected crops in the state in size class wise distribution shows coconut occupies 1st position among selected crops followed by rubber and paddy. Though tea is a plantation crop, the percentage of gross cropped area of tea under all size class is less than 2%. However the percentage under larger group is 18.92%.

Irrigation Status

In the Agricultural Census 2000-01 details of irrigation was also collected. Of the total holdings 594750 are fully irrigated. Partly irrigated holdings comes to 1977591. The net area sown during 2000-01 is 1311566 hectare and the area fully irrigated comes to 74341 hectare and partly irrigated area comes to 283455 hectare. Hence the total net area irrigated fully and partially comes to 357796 hectare. Inter cropping and multiple cropping is the special feature of cropping pattern in Kerala. On the same agricultural holding certain crops are irrigated where as some other crops are not irrigated. The gross cropped irrigated area comes to 390904 hectares, unirrigated cropped area as revealed in the 7th Agricultural Census was 1178399 hectare.

The comparison of district wise distribution of wholly irrigated holdings, partly irrigated holdings and wholly unirrigated holdings through census i.e. 5th, 6th & 7th censuses is given under table 16. The table reveals that percentage number of wholly irrigated holdings are increasing in the state after each census; i.e. 2.16% in 1990-91, 4.90% in 1995-96 and 5.67% in 2000-01. Partly irrigated holdings were 36.51% , 37.73% and 49.44% respectively. The partly irrigated area comes

to 16.80% , 18.66% and 21.16% respectively in each census. In the state, out of the total net area sown from net irrigated area was 18.96% in 1990-91, 23.56% in 1995-96 and 27.28% in 2000-01. Wholly unirrigated holdings were 61.33% in 1990-91, 57.37% in 1995-96 and 44.88% in 2000-01.

Analyzing the sources of irrigation to different size classes compared with the result of previous census the percentage of irrigated area is higher in marginal followed by small, semi medium, medium and large from all sources, viz. Canal, Tank, Well, Tube well and other sources. This characteristic is same during the earlier census results also. Among the various sources, well and tube well is highest in marginal size class, i.e. 55.02%, 55.10% and 63.42% and 53.26%, 54.54% and 54.79% during 1990-91, 1995-96 and 2000-01 respectively. Table 16(a) in the appendix given various percentages of source wise and size class wise irrigation during 5th, 6th & 7th census.

Table 16 (b) shows the percentage distribution of irrigation from different source, to various size classes. Canal irrigation is the largest source of irrigation. The census result reveals that tube well irrigation percentage is least in the State in all the periods of census. It is only 1.49% during 1990-91, 5.39% during 1995-96 and 5.27% during 2000-01. The details of percentage distribution from different sources of irrigation to different size classes are appended table 16(b).

Table 16(c) shows the district wise distribution of holdings receiving irrigation by different sources. The different sources listed are canal tank, well, tube wells and other sources. Out of the 2773311 irrigated holdings canal irrigated holdings are 188439, tank irrigated holdings are 129552 well irrigated holdings are 1664612 tube well irrigated holdings are 176374 and irrigation from other sources comes to 614334. Percentage distribution of the above sources to each district is in table 16(c).

There are different sources of irrigation, viz. canal, tank, well, tube well and other sources. The distribution of district wise area irrigated by different sources revealed from 2000-01 is given under table 16(d). The percentage of canal irrigated area is largest in Palakkad (52.66%) district and lowest in Pathanamthitta (0.31%) district. Tank irrigated area is largest in Idukki (26.64%). Among the districts used for wells for irrigation purposes, Thrissur stands first 20.31%. In Pathanamthitta district 0.76% of cultivated area is irrigated from wells. Tube wells irrigated area is highest in Alappuzha 26.13%. It is below 1% in Thiruvananthapuram (0.76%), Kollam (0.35%) and Pathanamthitta (0.26%) districts. Irrigation from other sources is prominent in Alappuzha (15.98%) where as it is also below 2% in Thiruvananthapuram (1.95%) and is below 3% in Kollam (2.20%) and Pathanamthitta (2.40%) districts. The distribution of district wise area irrigated by different sources is given in table 16 (d) in appendix.

A comparative analysis of percentage of area irrigated from different sources in each district during 1990-91, 1995-96 and 2000-01 are given in table 16 (f). The census reveals that in the State the

percentage of canal irrigated area is decreasing. The percentage of well-irrigated area shows an increase of 30.70% in 1991 to 42.29% in 1995-96 and then decreased to 41.88% in 2000-01. Tube well irrigation is not prominent in all the Census periods. The district wise percentage of area irrigated from different sources are given in table 16 (f).

Irrigation Source

Table 16 (g) gives the number of wells and tube wells used for irrigation. There are 1098019 wells and 171134 tube wells with pump set and 714229 wells without pump set used for irrigation in the state as revealed in the census during 2000-01. Out of the total number of wells used for irrigation 1052187 are electric connected and 45832 are diesel connected. Tube wells connected with electricity are 166201 and diesel tube wells are 4933. There are 978417 wells connected with pump set 688987 wells without pump set and 158976 tube wells used for irrigation in marginal size class. The total number of holdings in this size class is 6335428 out of which 1983382 of holdings are irrigated. Under large size class (10.00 hectare and above) there are 2050 wells and tube wells used for irrigation.

Distribution of district wise number of wells and tube wells are given in table 16 (h). The largest number of wells with pump set are in Thrissur (223621) district and lowest in Wayanad (1603) district. Wells without pump set are higher in Kollam (122916). Majority of wells with pump set is electric connected. Wells with diesel pump set are 45832 in the State. Tube wells are largest in Alappuzha (90704) district. Electric connected tube wells are highest in Alappuzha (89806) and diesel connected tube wells are highest in Kasaragod (664) district. The district wise distribution of wells and tube wells with pump set and without pump set are given in table 16 (h).

Intensity of irrigation

Table 17 reveals the intensity of irrigation. The intensity of irrigation is measured as a ratio of gross irrigated area to net irrigated area and is expressed as a percentage. The census reveals that the percentage of intensity of irrigation is 109.25. The intensity of irrigation during 1995-96 census was 113.97%. The distribution among various size classes are almost same. It is 111.05 percent in marginal size class. The intensity of irrigation shows a diminishing trend when compared with the result of earlier censuses.

The district wise percentage distribution of gross cropped area according to irrigation status (table 17(a)) shows that percentage of irrigated area in the State is only 24.91. The unirrigated area is 75.09% out of the gross cropped area. The area is highest in Thrissur (61.17%) and lowest in Kollam (10.02%).

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**IV 1. Number and area of operational holdings
(Area in Hectares)**

All social groups

Sl.No	Size class (Hectares)	Individual holdings						Joint holdings					
		Number			Area			Number			Area		
		2000-01	1995-96	Percent- age variation	2000-01	1995-96	Percent- age variation	2000-01	1995-96	Percent- age variation	2000-01	1995-96	Percent- age variation
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Below 1.00	6257419	5859182	6.80	868681	900796	-3.57	6653	1671	298.14	1498	938	59.70
2	1.00 - 1.99	221372	257676	-14.09	292609	343372	-14.78	635	558	13.80	836	797	4.89
3	2.00 - 3.99	72939	93039	-21.60	183386	237286	-22.72	231	330	-30.00	621	859	-27.71
4	4.00 - 9.99	14874	18614	-20.09	78205	97287	-19.61	65	105	-38.10	351	644	-45.50
5	10.00 & above	1779	2174	-18.17	33662	49689	-32.25	5	10	-50.00	804	120	570.00
6	All sizes	6568383	6230685	5.42	1456543	1628430	-10.56	7589	2674	183.81	4110	3358	22.39

Sl No	Institutional holdings						Grand Total						Average size of holdings	
	Number			Area			Number			Area			2000-01	1995-96
	2000-01	1995-96	Percent- age variation	2000-01	1995-96	Percent- age variation	2000-01	1995-96	Percent- age variation	2000-01	1995-96	Percent- age variation	2000-01	1995-96
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	71356	56997	25.19	12323	10528	17.05	6335428	5917850	7.06	882302	912262	-3.26	0.14	0.15
2	4803	4057	18.39	6322	5508	14.78	226810	262291	-13.53	299767	349677	-14.27	1.32	1.33
3	2481	2163	14.70	6520	5537	17.75	75651	95532	-20.81	190527	243682	-21.81	2.52	2.55
4	1069	1019	4.91	6203	5881	5.48	16008	19738	-18.90	84759	103812	-18.35	5.29	5.26
5	951	719	32.27	77467	52981	46.22	2735	2903	-5.79	111933	102790	8.89	40.93	35.41
6	80660	64955	24.18	108835	80435	35.31	6656632	6298314	5.69	1569488	1712223	-8.34	0.24	0.27

IV 1 (a). Number and area of operational holdings
(Area in Hectares)

Sl.No	Size class (Hectares)	Individual holdings						Joint holdings						Scheduled Caste
		Number			Area			Number			Area			
		2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	
1	2	3	4	5	6	4	5	6	6	10	11	12	13	14
1	Below 1.00	597338	575583	3.78	38760	42610	-9.04	291	115	153.04	53	19	178.95	
2	1.00 - 1.99	3249	2846	14.16	4245	3528	20.32	5	0	-	7	0	-	
3	2.00 - 3.99	430	551	-21.96	1064	1326	-19.76	0	0	-	0	0	-	
4	4.00 - 9.99	95	65	46.15	453	344	31.69	0	0	-	0	0	-	
5	10.00 & above	20	0	-	567	0	-	0	0	-	0	0	-	
6	All sizes	601132	579045	3.81	45089	47808	-5.69	296	115	157.39	60	19	215.79	

Sl.No	Institutional holdings						Grand Total						Average size of holdings	
	Number			Area			Number			Area			2000-01	1995-96
	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	-	-	-	-	-	-	597629	575698	3.81	38813	42629	-8.95	0.06	0.08-
2	-	-	-	-	-	-	3254	2846	14.34	4252	3528	20.52	1.31	1.19-
3	-	-	-	-	-	-	430	551	-21.96	1064	1326	-19.76	2.47	2.39-
4	-	-	-	-	-	-	95	65	46.15	453	344	31.69	4.77	8.60-
5	-	-	-	-	-	-	20	0	-	567	0	-	28.35	0.00-
6	-	-	-	-	-	-	601428	579160	3.84	45149	47827	-5.60	0.08	0.09-

**IV 1 (b) Number and area of operational holdings
(Area in Hectares)**

Scheduled Tribe

Sl.No	Size class (Hectares)	Individual holdings						Joint holdings					
		Number			Area			Number			Area		
		2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation
1	2	3	4	5	7	8	9	10	11	12	13	14	
1	Below 1.00	80655	61981	30.13	17530	14094	24.38	278	90	208.89	43	251.16	
2	1.00 - 1.99	7117	7472	-4.75	9271	10158	-8.73	57	5	1040.00	6	1033.33	
3	2.00 - 3.99	2094	2980	-29.73	4949	6954	-28.83	5	35	-85.71	94	-87.23	
4	4.00 - 9.99	417	200	108.50	2180	943	131.18	0	5	0.00	30	0.00	
5	10.00 & above	5	5	0.00	102	80	27.50	0	0	-	0	-	
6	All sizes	90288	72638	24.30	34032	32229	5.59	340	135	151.85	231	33.53	

Sl No	Institutional holdings						Grand Total						Average size of holdings	
	Number			Area			Number			Area			2000-01	1995-96
	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96	Percent-age variation	2000-01	1995-96
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	-	-	-	-	-	-	80933	62071	30.39	17681	14137	25.07	0.22	0.23-
2	-	-	-	-	-	-	7174	7477	-4.05	9339	10164	-8.12	1.30	1.36-
3	-	-	-	-	-	-	2099	3015	-30.38	4961	7048	-29.61	2.36	2.34-
4	-	-	-	-	-	-	417	205	103.41	2180	973	124.05	5.23	4.75-
5	-	-	-	-	-	-	5	5	0.00	102	80	27.50	20.40	16.00-
6	-	-	-	-	-	-	90628	72773	24.54	34263	32402	5.74	0.38	0.45-

**IV 2. Distribution of District wise number of operational holdings by size class
(Area in Hectares)**

Sl No	Size class (Ha)	Total														
		Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.00	783953	578391	289593	459757	394173	248090	621415	604085	473953	578263	551582	137038	422865	192270	6335428
2	Small 1.00-1.99	6538	7276	9692	7311	22155	27623	16975	15040	26008	18437	13495	14068	25534	16658	226810
3	Semi-medium 2.00-3.99	1285	1518	1959	2217	8180	7508	5837	3586	12334	6230	3380	5864	9114	6639	75651
4	Medium 4.00-9.99	240	205	210	460	1793	2011	1007	662	3262	1071	497	1446	1544	1600	16008
5	Large 10 & above	100	40	67	105	276	539	195	90	266	185	80	507	155	130	2735
6	All categories	792116	587430	301521	469850	426577	285771	645429	623463	515823	604186	569034	158923	459212	217297	6656632

IV 2(a) Distribution of District wise number of operational holdings by size class

Sl No	Size class (Ha)	Scheduled Caste														
		Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.00	73529	65790	35217	39647	28963	30997	58377	63946	75068	50539	34317	6250	18358	16631	597629
2	Small 1.00-1.99	50	40	68	95	85	642	25	95	247	799	131	229	300	448	3254
3	Semi-medium 2.00-3.99	0	5	0	10	35	180	0	5	65	30	15	25	10	50	430
4	Medium 4.00-9.99	0	0	0	0	5	80	0	0	10	0	0	0	0	0	95
5	Large 10 & above	10	0	0	0	0	5	0	0	0	0	0	0	5	0	20
6	All categories	74639	57545	32733	36155	24142	38222	53724	67571	75612	51019	29183	3208	16126	19281	579160

IV 2(b) Distribution of District wise number of operational holdings by size class

Sl No	Size class (Ha)	Scheduled Tribe													State	
		Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikode	Wayanad	Kannur		Kasaragod
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.00	9166	1858	2218	1070	4179	14549	1047	1024	8712	2748	1519	24208	3307	5328	80933
2	Small 1.00-1.99	916	5	0	0	540	2360	5	5	1114	129	35	970	237	858	7174
3	Semi-medium 2.00-3.99	180	0	0	0	130	598	0	0	669	45	0	287	100	90	2099
4	Medium 4.00-9.99	15	0	0	0	20	205	0	0	122	5	0	40	0	10	417
5	Large 10 & above	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6	All categories	10282	1863	2218	1070	4869	17712	1052	1029	10617	2927	1554	25505	3644	6286	90628

IV 3. District wise distribution of area of operational holdings by size class
(Area in Hectares)

Sl no	Size class (Ha)	All social groups													State	
		Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikode	Wayanad	Kannur		Kasaragod
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.00	72102	69424	49892	52058	61595	57472	68199	79534	69232	80957	72883	29418	78275	41461	882502
2	Small 1.00-1.99	8330	9319	12465	9619	29250	35661	22562	19927	35231	24386	17877	18925	33920	22295	299767
3	Semi-medium 2.00-3.99	3128	3689	4743	5699	20755	18251	14500	9056	31862	15774	8399	14946	22941	16784	190527
4	Medium 4.00-9.99	1245	1106	1170	2581	9848	10866	5473	3445	16749	5923	2543	7710	7975	8125	84759
5	Large 10 & above	2711	3930	3120	1554	7663	37949	6544	2856	4955	8048	4512	21926	3519	2646	111933
6	All categories	87516	87468	71390	71511	129111	160199	117278	114818	158029	135088	106214	92925	146630	91311	1569488

IV 3 (a). District wise distribution of area of operational holdings by size class (Area in Hectares)

Sl No	Size class (Ha)	Scheduled Caste														
		Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malapuram	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.00	3051	3641	2415	2502	1800	3075	2884	3142	4449	3307	2454	1065	2258	2770	38813
2	Small 1.00-1.99	57	49	83	113	115	788	29	130	326	1196	144	289	369	564	4252
3	Semi-medium 2.00-3.99	0	10	0	28	84	436	0	10	160	82	37	72	22	123	1064
4	Medium 4.00-9.99	0	0	0	0	22	370	0	0	61	0		0	0	0	453
5	Large 10 & above	276	0	0	0	0	89	0	0	0	0	0	0	202	0	567
6	All categories	3384	3700	2498	2643	2021	4758	2913	3282	4996	4585	2635	1426	2851	3457	45149

IV 3 (b) District wise distribution of area of operational holdings by size class (Area in Hectares)

Sl No	Size class (Ha)	Scheduled Tribe														
		Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malapuram	Kozhikode	Wayanad	Kannur	Kasaragod	State
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.00	2745	263	193	47	1012	4062	58	70	2719	310	180	3471	615	1936	17681
2	Small 1.00-1.99	1184	5	0	0	711	3007	5	8	1459	180	38	1305	328	1109	9339
3	Semi-medium 2.00-3.99	428	0	0	0	314	1374	0	0	1521	102	0	756	249	217	4961
4	Medium 4.00-9.99	61	0	0	0	102	1122	0	0	587	20	0	244	0	44	2180
5	Large 10 & above	102	0	0	0	0	0	0	0	0	0	0	0	0	0	102
6	All categories	4520	268	193	47	2139	9565	63	78	6286	612	218	5776	1192	3306	34263

IV 3 (c) District wise average size of holdings

Sl No	District	Below 1.00			1.00 - 1.99			2.00 - 3.99			4.00 - 9.99			10.0 & above			All sizes		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Thiruvananthapuram	0.15	0.10	0.09	1.30	1.27	1.27	2.46	2.46	2.43	5.27	5.33	5.19	53.55	18.16	27.11	0.21	0.12	0.11
2	Kollam	0.18	0.13	0.12	1.32	1.28	1.28	2.56	2.48	2.43	5.31	5.24	5.40	81.85	18.08	98.25	0.23	0.17	0.15
3	Pathanamthitta	0.24	0.18	0.17	1.33	1.31	1.29	2.56	2.52	2.42	5.42	5.52	5.57	46.46	192.04	46.57	0.39	0.31	0.24
4	Alappuzha	0.16	0.13	0.11	1.33	1.34	1.32	2.57	2.62	2.57	5.41	5.40	5.61	18.22	14.23	14.80	0.23	0.19	0.15
5	Kottayam	0.22	0.17	0.16	1.41	1.34	1.32	2.62	2.56	2.54	5.62	5.26	5.49	20.48	16.38	27.76	0.47	0.36	0.30
6	Idukki	0.33	0.22	0.23	1.29	1.31	1.29	2.47	2.42	2.43	5.49	5.40	5.40	116.90	27.79	70.41	1.00	0.48	0.56
7	Ernakulam	0.16	0.12	0.11	1.37	1.32	1.33	2.58	2.54	2.48	5.29	5.06	5.43	47.19	61.87	33.56	0.29	0.22	0.18
8	Thrissur	0.18	0.15	0.13	1.35	1.32	1.32	2.56	2.82	2.53	5.02	5.33	5.20	25.05	33.06	31.73	0.27	0.23	0.18
9	Palakkad	0.20	0.16	0.15	1.41	1.37	1.35	2.66	2.61	2.58	5.28	5.24	5.13	42.37	30.63	18.63	0.48	0.40	0.31
10	Malappuram	0.19	0.16	0.14	1.36	1.33	1.32	2.63	2.53	2.53	5.27	5.32	5.53	22.38	32.88	43.50	0.33	0.26	0.22
11	Kozhikode	0.18	0.15	0.13	1.35	1.32	1.32	2.60	2.49	2.48	5.26	5.25	5.12	49.34	29.38	56.40	0.29	0.21	0.19
12	Wayanad	0.33	0.25	0.21	1.49	1.34	1.35	2.83	2.54	2.55	5.34	5.45	5.33	55.92	44.55	43.25	0.86	0.61	0.58
13	Kannur	0.24	0.21	0.19	1.46	1.35	1.33	2.60	2.54	2.52	5.14	5.09	5.17	22.53	42.48	22.70	0.46	0.38	0.32
14	Kasaragod	0.20	0.25	0.22	1.34	1.35	1.34	2.59	2.48	2.53	5.26	5.11	5.08	108.32	54.90	20.35	0.61	0.49	0.42
	State	0.20	0.15	0.14	1.37	1.33	1.32	2.61	2.55	2.52	5.32	5.26	5.29	55.91	35.29	40.93	0.37	0.27	0.24

IV 4. Size class wise distribution of number, area and percentage of operational holdings according to major social groups

Sl. No	Size class (Ha)	Number of operational holdings				Area operated (Hectares)			
		All*	Sch. Caste	Sch. Tribe	Others	All	Sch. Caste	Sch. Tribe	Others
1	Below 1.0	6335428 (95.17)	597629 (99.37)	80933 (89.30)	5656866 (94.84)	882502 (56.23)	38813 (85.97)	17681 (51.60)	826008 (55.43)
2	1.00 - 1.99	226810 (3.41)	3254 (0.54)	7174 (7.92)	216382 (3.63)	299767 (19.10)	4252 (9.42)	9339 (27.26)	286176 (19.21)
3	2.00 - 3.99	75651 (1.14)	430 (0.07)	2099 (2.32)	73122 (1.23)	190527 (12.14)	1064 (2.36)	4961 (14.48)	184502 (12.38)
4	4.00 - 9.99	16008 (0.24)	95 (0.02)	417 (0.45)	15496 (0.26)	84759 (5.40)	453 (1.00)	2180 (6.36)	82126 (5.51)
5	10.00 & above	2735 (0.04)	20 (0.00)	5 (0.01)	2710 (0.05)	111933 (7.13)	567 (1.25)	102 (0.30)	111264 (7.47)
6	All sizes	6656632 (100)	601428 (100)	90628 (100)	5964576 (100)	1569488 (100)	45149 (100)	34263 (100)	1490076 (100)

Figures in brackets are the percentage to the all sizes

IV 5. District wise number and area of operational holdings according to major social groups

Sl No	Districts	Number of operational holdings				Area operated (in hectares)			
		Sch. Caste	Sch. Tribe	Others	Total	Sch. Caste	Sch. Tribe	Others	Total
1	Thiruvananthapuram	73589	10282	708245	792116	3384	4520	79612	87516
2	Kollam	65835	1863	519732	587430	3700	268	83500	87468
3	Pathanamthitta	35285	2218	264018	301521	2498	193	68699	71390
4	Alappuzha	39752	1070	429028	469850	2643	47	68821	71511
5	Kottayam	29088	4869	392620	426577	2021	2139	124951	129111
6	Idukki	31904	17712	236155	285771	4758	9565	145876	160199
7	Ernakulam	58402	1052	585975	645429	2913	63	114302	117278
8	Thrissur	64046	1029	558388	623463	3282	78	111458	114818
9	Palakkad	75390	10617	429816	515823	4996	6286	146747	158029
10	Malappuram	51368	2927	549891	604186	4585	612	129891	135088
11	Kozhikode	34463	1554	533017	569034	2635	218	103361	106214
12	Wayanad	6504	25505	126914	158923	1426	5776	85723	92925
13	Kannur	18673	3644	436895	459212	2851	1192	142587	146630
14	Kasaragod	17129	6286	193882	217297	3457	3306	84548	91311
	State	601428	90628	5964576	6656632	45149	34263	1490076	1569488

IV 6. Number and area of operational holdings according to tenure and tenancy status
(Area in Hectares)

All social groups

Sl No	Size class of Operational Holdings (Ha)	Total holdings		Wholly owned and self operated holdings		Wholly leased in holdings		Wholly other wise operated holdings		Partly owned, partly leased in and partly otherwise operated holdings				
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Owne d area	Leased in area	Others wise operate d area	Total area (12+13+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Below 1.00	6335428	882502	6287518	871199	1679	428	23643	2579	22588	3484	3749	1061	8294
2	Small 100-1.99	226810	299767	221853	293108	223	273	721	982	4013	2688	2071	647	5406
3	Semi-medium 2.00-3.99	75651	190527	73682	185610	84	183	206	496	1679	1884	1804	551	4239
4	Medium 4.00-9.99	16008	84759	15464	81713	17	111	26	143	501	1010	1247	533	2790
5	Large 10 & above	2735	111933	2630	109091	15	231	3	48	87	1612	568	382	2562
6	All categories	6656632	1569488	6601147	1540721	2018	1226	24599	4248	28868	10678	9439	3174	23291

**IV 6 (a) Number and area of operational holdings according to tenure and tenancy status
(Area in Hectares)**

Sl No	Size class of Operational Holdings (Ha)	Total holdings		Wholly owned and self operated holdings		Wholly leased in holdings		Wholly other wise operated holdings		Partly owned, partly leased in and partly otherwise operated holdings				Total area (12+13+14)
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Owned area	Leased in area	Others wise operated area	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Below 1.00	597629	38813	586855	37553	161	41	7059	258	3554	312	568	81	961
2	Small 1.00-1.99	3254	4252	3114	4072	0	0	3	5	137	32	132	12	176
3	Semi-medium 2.00-3.99	430	1064	410	1018	5	10	0	0	15	10	10	17	37
4	Medium 4.00-9.99	95	453	90	431	0	0	0	0	5	17	5	0	22
5	Large 10 & above	20	567	20	567	0	0	0	0	0	0	0	0	0
6	*All categories	601428	45149	590489	43641	166	51	7062	263	3711	371	715	110	1196

* excluding holdings less than 0.02 hectare

**IV 6 (b). Number and area of operational holdings according to tenure and tenancy status
(Area in Hectares)**

Sl No	Size class of Operational Holdings (Ha)	Total holdings		Wholly owned and self operated holdings		Wholly leased in holdings		Wholly other wise operated holdings		Partly owned, partly leased in and partly otherwise operated holdings					Total area (12+13+14)
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Owned area	Leased in area	Others wise operated area	Total area (12+13+14)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Below 1.00	80933	17681	77948	16638	120	34	1896	503	969	255	154	95	504	
2	Small 1.00-1.99	7174	9339	6556	8525	10	11	320	430	288	215	117	41	373	
3	Semi-medium 2.00-3.99	2099	4961	1914	4511	0	0	103	253	82	62	79	56	197	
4	Medium 4.00-9.99	417	2180	404	2106	0	0	13	74	0	0	0	0	0	
5	Large 10 & above	5	102	5	102	0	0	0	0	0	0	0	0	0	
6	*All categories	90628	34263	86827	31882	130	45	2332	1260	1339	532	350	192	1074	

* excluding holdings less than 0.02 hectare

IV 7. Size class wise distribution of number of holdings and area operated according to tenancy status

Sl. No	Size class of Operational Holdings (Ha)	Number of holdings						Area operated (in hectares)			
		Wholly owned and self operated	Wholly leased in	Wholly other wise operated	Partly owned, partly leased in and partly other wise operated	Wholly owned and self operated	Wholly leased in	Wholly other wise operated	Partly owned, partly leased in and partly other wise operated		
1	2	3	4	5	6	7	8	9	10		
1	Below 1.00	6287518	1679	23643	22588	871199	428	2579	8294		
2	Small 1.00-1.99	221853	223	721	4013	293108	273	982	5406		
3	Semi-medium 2.00-3.99	73682	84	206	1679	185610	183	496	4239		
4	Medium 4.00-9.99	15464	17	26	501	81713	111	143	2790		
5	Large 10 & above	2630	15	3	87	109091	231	48	2562		
6	* All categories	6601147	2018	24599	28868	1540721	1226	4248	23291		

* excluding holdings less than 0.02 hectare

IV 8. Distribution of leased in area by terms of leasing

Sl. No	Size class of Operational Holdings (Ha)	Area leased in for (in hectares)						Total
		Fixed money	Fixed produce	Share of produce	Usufructuary mortgage	Other terms		
1	2	3	4	5	6	7	8	
1	Below 1.00	320	7	44	0	56	427	
2	Small 1.00-1.99	268	4	0	0	0	272	
3	Semi-medium 2.00-3.99	114	0	0	69	0	183	
4	Medium 4.00-9.99	111	0	0	0	0	111	
5	Large 10 & above	231	0	0	0	0	231	
6	* All categories	1044	11	44	69	56	1224	

* excluding holdings less than 0.02 hectare

IV 9. Land utilization pattern 1990-91, 1995-96 and 2000-01
(Area in Hectares)

Sl. No.	Land use pattern	1990-91		1995-96		2000-01	
		Area	Percentage	Area	Percentage	Area	Percentage
1	2	3	4	5	6	7	8
1	Net area sown	1556284	87.08	1446571	84.48	1311566	83.57
2	Area under current fallow	19928	1.11	22308	1.30	26561	1.69
3	Other uncultivated land excluding fallow land	19165	1.07	24195	1.41	47919	3.05
4	Fallow land other than current fallow	20625	1.15	15729	0.93	16307	1.04
5	Cultivable waste land	27500	1.54	22149	1.29	25249	1.61
6	Land not available for cultivation	143788	8.05	181274	10.59	141886	9.04
7	Total area of holdings	1787290	100.00	1712223	100.00	1569488	100.00

IV 9 (a) District wise distribution of Land Utilization

Sl. No.	District	Net area sown	Current fallow	Other uncultivated land	Fallow land other than current fallow	Cultivable waste	Land not available for cultivation	All social groups	
								4	5
1	Thiruvananthapuram	72846	894	9600	413	493	3270		87516
2	Kollam	73125	1306	2622	355	783	9277		87468
3	Pathanamthitta	59700	1254	3281	933	610	5612		71390
4	Alappuzha	54415	2701	2052	1903	1761	8679		71511
5	Kottayam	111389	1912	1199	1080	1490	12041		129111
6	Idukki	143318	1692	2856	934	1124	10275		160199
7	Ernakulam	97597	1262	4403	932	1309	11775		117278
8	Thrissur	93049	1145	6223	1891	2761	9749		114818
9	Palakkad	127191	6700	4354	2671	4316	12797		158029
10	Malappuram	110346	2965	3883	1712	2465	13717		135088
11	Kozhikode	90812	526	481	564	495	13336		106214
12	Wayanad	82465	610	590	571	1257	7432		92925
13	Kannur	123516	2502	1865	1194	2354	15199		146630
14	Kasaragod	71797	1092	4510	1154	4031	8727		91311
	State	1311566	26561	47919	16307	25249	141886		1569488

IV 9 (b) District wise percentage distribution of land utilization
(Area in Hectares)

District	Net area sown			Current fallow			Other uncultivated land			Fallow land other than current fallow			Cultivable waste			Land not available for cultivation		
	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Thiruvananthapuram	5.94	5.39	5.55	2.74	2.62	3.37	1.20	2.78	20.03	2.49	0.48	2.53	1.23	2.11	1.95	7.89	7.65	2.30
Kollam	5.57	5.32	5.58	1.38	1.61	4.92	1.37	3.32	5.47	4.68	3.34	2.18	0.93	1.92	3.10	6.21	6.59	6.54
Pathanamthitta	5.23	5.36	4.55	2.61	3.98	4.72	1.56	1.25	6.85	3.07	5.56	5.72	0.47	0.77	2.42	4.37	5.85	3.96
Alappuzha	4.48	4.77	4.15	4.79	5.57	10.17	2.99	5.13	4.28	1.46	5.08	11.67	5.10	4.26	6.97	6.60	5.61	6.12
Kottayam	8.41	8.52	8.49	5.98	4.62	7.20	7.14	1.33	2.50	2.91	2.46	6.62	2.03	2.17	5.90	7.96	7.52	8.49
Idukki	11.73	8.60	10.93	9.09	3.64	6.37	3.60	3.75	5.96	30.11	2.44	5.73	8.15	3.17	4.45	6.48	4.46	7.24
Eranakulam	6.90	7.61	7.44	5.23	5.80	4.75	4.01	4.73	9.19	4.26	6.55	5.72	4.30	7.52	5.18	9.44	9.86	8.30
Thrissur	6.92	7.94	7.09	5.13	4.34	4.31	5.84	9.98	12.99	2.39	11.22	11.60	5.02	6.16	10.94	7.81	10.28	6.87
Palakkad	10.08	10.79	9.70	21.76	21.11	25.22	22.20	25.11	9.09	6.77	28.27	16.38	17.78	25.06	17.09	9.88	9.15	9.02
Malappuram	7.49	8.19	8.41	19.56	17.79	11.16	17.51	14.61	8.10	11.07	12.10	10.50	15.10	13.59	9.76	8.85	9.72	9.67
Kozhikode	6.82	6.66	6.92	5.94	2.76	1.98	5.32	4.63	1.00	7.47	2.29	3.46	9.17	3.12	1.96	7.18	6.23	9.40
Wayanad	5.60	5.88	6.29	5.01	8.07	2.30	12.65	2.63	1.23	10.57	3.26	3.50	5.42	4.02	4.98	4.53	3.52	5.24
Kannur	9.20	9.44	9.42	4.79	10.39	9.42	6.45	6.09	3.89	6.55	10.59	7.32	12.48	13.05	9.32	8.14	7.98	10.71
Kasaragod	5.63	5.53	5.47	5.99	7.70	4.11	8.16	14.66	9.41	9.20	6.36	7.08	12.82	13.08	15.96	4.16	5.58	6.15
State	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Actual (in lakh Ha)	15.56	14.47	13.12	0.20	0.22	0.27	0.19	0.24	0.48	0.21	0.15	0.16	0.28	0.22	0.25	1.44	1.81	1.42

IV 10. Percentage of area under main land use to the total operated area by the districts 1990-91, 1995-96 & 2000-01

Sl. No	Districts	Net cultivated area			Uncultivated land			Land not available for cultivation			Total		
		1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01	1990-91	1995-96	2000-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	88.21	83.89	84.26	1.03	1.30	12.00	10.76	14.81	3.74	100.00	100.00	100.00
2	Kollam	89.88	84.94	85.10	0.89	1.93	4.30	9.23	13.13	10.61	100.00	100.00	100.00
3	Pathanamthitta	91.77	86.76	85.38	1.19	1.49	6.76	7.04	11.75	7.86	100.00	100.00	100.00
4	Alappuzha	85.75	84.23	79.87	2.76	3.58	7.99	11.49	12.19	12.14	100.00	100.00	100.00
5	Kottayam	90.43	89.34	87.76	1.73	0.86	2.92	7.84	9.80	9.33	100.00	100.00	100.00
6	Idukki	90.90	92.55	90.52	4.49	1.47	3.07	4.61	5.98	6.41	100.00	100.00	100.00
7	Ernakulam	86.86	83.68	84.29	2.27	2.89	5.67	10.87	13.43	10.04	100.00	100.00	100.00
8	Thrissur	88.43	82.73	82.04	2.44	3.96	9.47	9.13	13.31	8.49	100.00	100.00	100.00
9	Palakkad	84.25	83.12	84.73	5.67	8.31	7.18	7.64	8.57	8.10	100.00	100.00	100.00
10	Malappuram	87.45	82.45	83.88	6.85	5.69	5.97	8.90	11.86	10.15	100.00	100.00	100.00
11	Kozhikode	87.48	87.81	85.99	4.14	1.97	1.45	8.41	10.22	12.56	100.00	100.00	100.00
12	Wayanad	87.48	91.16	89.40	6.05	2.14	2.60	6.47	6.70	8.00	100.00	100.00	100.00
13	Kannur	89.04	87.14	85.94	3.72	3.78	3.69	7.24	9.08	10.37	100.00	100.00	100.00
14	Kasaragod	86.64	82.32	79.83	6.82	7.49	10.62	6.54	10.19	9.56	100.00	100.00	100.00
	State	88.19	85.79	85.26	3.76	3.63	5.70	8.05	10.59	9.04	100.00	100.00	100.00

IV 10 (a). Percentage of area under main land use to the total operated area by the State 1990-91, 1995-96 & 2000-01

Sl. No	Size class (Hectares)	Percentage of area under											
		Net cultivated area			Uncultivated land			Land not available for cultivation			Total		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Marginal (0.02-0.99)	86.18	82.69	82.44	2.82	3.12	6.24	11.00	14.19	11.32	100.00	100.00	100.00
2	Small (1.00-1.99)	91.57	89.89	90.21	3.38	3.52	4.80	5.05	6.59	4.98	100.00	100.00	100.00
3	Semi medium (2.00 - 3.99)	91.38	89.47	90.06	3.95	4.06	4.96	4.67	6.47	4.98	100.00	100.00	100.00
4	Medium (4.00 - 9.99)	89.26	89.37	89.46	5.04	4.51	5.36	5.70	6.12	5.18	100.00	100.00	100.00
5	Large (10.00 & above)	85.31	87.02	82.85	8.02	6.53	5.35	6.63	6.45	11.81	100.00	100.00	100.00
6	All sizes	88.19	85.79	85.26	3.76	3.62	5.70	8.05	10.59	9.04	100.00	100.00	100.00

IV 11. Percentage of net cultivated area, total uncultivated area and land available for cultivation in 1990-91, 1995-96 & 2000-01

Sl.No.	Size class (Hectares)	Net cultivated area						Uncultivated land			Land not available for cultivation		
		90-91		95-96		00-01		90-91		95-96		00-01	
		3	4	5	6	7	8	9	10	11			
1	Marginal (0.02-0.99)	46.83	51.36	54.37	35.88	45.86	61.57	46.38	71.44	70.38			
2	Small (1.00-1.99)	22.28	21.39	20.21	19.25	19.85	16.10	22.15	12.70	10.52			
3	Semi medium (2.00 - 3.99)	14.78	14.86	12.82	14.99	15.97	10.57	14.79	8.71	6.68			
4	Medium (4.00 - 9.99)	6.47	6.32	5.67	8.55	7.55	5.08	6.56	3.50	3.10			
5	Large (10.00 & above)	9.64	6.07	6.53	21.33	10.77	6.69	10.12	3.65	9.32			
6	All sizes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			

IV 11 (a). Percentage of area under land available for cultivation, net cultivated area and land uncultivated by districts – 1990-91, 1995-96 & 2000-01

Sl.No	Districts	Land available for cultivation			Net cultivated area			Land uncultivated		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	5.73	5.21	5.55	5.90	5.35	5.51	1.61	1.96	11.74
2	Kollam	5.35	5.16	5.58	5.52	5.26	5.56	1.29	2.83	4.20
3	Pathanamthitta	5.05	5.21	4.55	5.19	5.33	4.56	1.58	2.17	5.39
4	Alappuzha	4.44	4.78	4.15	4.49	4.78	4.27	3.38	4.81	6.39
5	Kottayam	8.18	8.19	8.49	8.37	8.46	8.47	3.75	1.92	4.21
6	Idukki	11.77	8.31	10.93	11.70	8.52	10.84	13.59	3.21	5.49
7	Eranakulam	6.77	7.52	7.44	6.88	7.58	7.39	4.20	6.18	7.43
8	Thrissur	6.80	7.93	7.09	6.90	7.89	7.04	4.45	8.93	12.15
9	Palakkad	10.45	11.56	9.70	10.23	10.95	10.01	15.66	25.89	12.68
10	Malappuram	7.93	8.55	8.41	7.65	8.34	8.47	14.55	13.61	9.01
11	Kozhikode	6.84	6.48	6.92	6.81	6.60	6.83	7.55	3.50	1.72
12	Wayanad	5.73	5.80	6.29	5.59	5.91	6.21	9.06	3.29	2.70
13	Kannur	9.13	9.47	9.42	9.14	9.46	9.42	8.95	9.71	6.05
14	Kasaragod	5.83	5.83	5.47	5.63	5.57	5.45	10.38	11.99	10.84
	State	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

IV 12. Crop-wise percentage distribution of gross cropped area during 1990-91, 1995-96 & 2000-01

Sl.No.	Name of crop	1990-91	1995-96	2000-01
1	2	3	4	5
1	Paddy	16.08	12.06	11.21
2	Coconut	27.10	31.36	25.70
3	Tapioca	5.08	2.34	2.43
4	Rubber	16.22	17.69	19.93
5	Cashew	3.47	3.55	3.43
6	Tea	1.55	0.65	1.42
7	Pepper	8.10	7.61	5.60
8	Coffee	2.69	3.84	3.59
9	Arecanut	1.98	3.57	5.49
10	Mango	1.92	1.65	1.93
11	Banana	5.65	5.59	1.25
12	Others	10.16	10.09	18.02
	All crops	100.00	100.00	100.00

IV 13. Percentage distribution of area under principal crops in different size classes 2000-01

Sl.No.	Size class (Hectares)	Paddy	Coconut	Tapioca	Rubber	Cashew	Tea	Pepper	Coffee	Arecanut	Mango	Banana
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Marginal (0.02-0.99)	44.16	71.01	71.46	42.54	48.61	6.30	55.52	36.92	53.96	79.05	56.30
2	Small (1.00-1.99)	26.49	15.35	16.62	26.27	22.73	5.71	22.85	19.92	23.08	10.63	21.50
3	Semi medium (2.00 - 3.99)	19.31	8.35	8.29	17.84	16.12	3.29	12.00	13.91	14.68	5.78	14.56
4	Medium (4.00 - 9.99)	8.26	3.13	2.52	7.42	6.61	3.39	5.17	8.72	6.17	2.63	5.76
5	Large (10.00 & above)	1.79	2.15	1.11	5.93	5.94	81.32	4.47	20.53	2.11	1.90	1.88
6	All sizes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

IV 14. District wise intensity of cropping 2000-01

Sl.No	Districts	Net area sown	Gross cropped area		Intensity of cropping	
			3	4	5	5
1	Thiruvananthapuram	72846	84881	1.17	1.17	1.17
2	Kollam	73125	87492	1.20	1.20	1.20
3	Pathanamthitta	59700	71866	1.20	1.20	1.20
4	Alappuzha	54415	63217	1.16	1.16	1.16
5	Kottayam	111389	127456*	1.14	1.14	1.14
6	Idukki	143318	170175	1.19	1.19	1.19
7	Eranakulam	97597	115765	1.19	1.19	1.19
8	Thrissur	93049	107243	1.15	1.15	1.15
9	Palakkad	127191	166015	1.31	1.31	1.31
10	Malappuram	110346	122577	1.11	1.11	1.11
11	Kozhikode	90812	116591	1.28	1.28	1.28
12	Wayanad	82465	113106	1.37	1.37	1.37
13	Kannur	123516	143237	1.16	1.16	1.16
14	Kasaragod	71797	79682	1.11	1.11	1.11
	State	1311566	1569303			1.20

IV 15. Percentage of Gross cropped area under selected crops

Sl. No	Size of holding	Percentage of area under											All crops	
		Paddy	Pepper	Banana	Mango	Cashew	Tapioca	Coconut	Areca nut	Tea	Coffee	Rubber		Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Below 1.00	8.88	5.57	1.26	2.73	2.99	3.11	32.71	5.31	0.16	2.37	15.20	19.70	100.00
2	Small (1.00-1.99)	14.84	6.39	1.34	1.02	3.90	2.02	19.71	6.34	0.40	3.57	26.16	14.29	100.00
3	Semi medium (2.0-3.99)	17.17	5.32	1.44	0.89	4.39	1.60	17.01	6.40	0.37	3.96	28.18	13.29	100.00
4	Medium (4.00 - 9.99)	16.86	5.27	1.31	0.93	4.13	1.11	14.65	6.17	0.87	5.70	26.93	16.07	100.00
5	Large (10.00 & above)	3.29	4.11	0.38	0.60	3.34	0.44	9.09	1.90	18.92	12.09	19.39	26.45	100.00
6	All sizes	11.21	5.60	1.25	1.93	3.43	2.43	25.70	5.49	1.42	3.59	19.93	18.02	100.00

IV 16. District wise percentage distribution of area of holdings according to irrigation status 1990-91, 1995-96 & 2000-01

Sl No	District	Wholly irrigated holdings			Partly irrigated holdings						Net irrigated area			Wholly unirrigated holdings			Net area sown		
		holdings			Total area			Irrigated area			Net irrigated area			holdings			Net area sown		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Thiruvananthapuram	0.68	0.75	2.17	17.97	9.80	29.12	5.28	3.41	8.20	5.96	4.16	10.38	81.35	89.45	68.68	100.0	100.0	100.0
2	Kollam	0.08	0.63	1.01	27.79	21.84	45.07	4.54	4.80	10.12	4.62	5.42	11.13	72.13	77.53	53.91	100.0	100.0	100.0
3	Pathanamthitta	0.07	0.10	0.25	22.06	18.31	26.61	7.56	5.42	5.77	7.63	5.52	6.02	77.87	81.59	73.13	100.0	100.0	100.0
4	Alappuzha	0.50	3.75	5.90	53.12	67.42	78.18	26.14	47.03	44.44	26.64	50.78	50.34	46.38	28.83	15.91	100.0	100.0	100.0
5	Kottayam	0.13	0.70	1.20	21.40	20.84	41.35	5.07	8.09	11.52	5.20	8.79	12.71	78.47	78.46	57.45	100.0	100.0	100.0
6	Idukki	0.77	2.73	5.26	20.08	24.04	39.48	7.12	10.16	13.87	7.89	12.89	19.13	79.15	73.23	55.26	100.0	100.0	100.0
7	Ernakulam	5.73	9.92	8.42	61.24	41.75	60.24	28.00	17.08	24.29	33.73	27.00	32.71	33.03	48.33	31.33	100.0	100.0	100.0
8	Thrissur	15.30	16.74	22.70	59.58	59.45	57.71	40.33	41.19	39.97	55.63	57.93	62.67	25.12	23.81	19.59	100.0	100.0	100.0
9	Palakkad	1.47	7.99	5.07	59.14	63.56	73.43	39.24	37.58	47.71	40.71	45.57	52.77	39.39	28.45	21.49	100.0	100.0	100.0
10	Malappuram	0.78	4.15	4.66	40.80	45.92	50.41	18.44	22.54	22.04	19.22	26.69	26.70	58.42	49.93	44.92	100.0	100.0	100.0
11	Kozhikode	0.67	2.90	2.55	16.23	22.71	30.80	4.76	8.36	9.79	5.43	11.26	12.34	83.10	74.39	66.64	100.0	100.0	100.0
12	Wayanad	0.04	2.27	7.29	35.38	21.45	39.58	7.49	6.76	13.50	7.53	9.03	20.79	64.58	76.28	53.12	100.0	100.0	100.0
13	Kannur	0.24	2.62	1.68	26.30	33.82	52.13	12.75	11.44	15.55	12.99	14.06	17.23	73.46	63.56	46.18	100.0	100.0	100.0
14	Kasaragod	4.36	8.86	11.79	51.88	63.45	65.02	25.30	29.15	34.30	29.66	38.01	46.09	43.76	27.69	23.18	100.0	100.0	100.0
	State	2.16	4.90	5.67	36.51	37.73	49.44	16.80	18.66	21.61	18.96	23.56	27.28	61.33	57.37	44.88	100.0	100.0	100.0

IV 16 (a) Percentage of area irrigated from different sources of irrigation by major size groups 1990-91, 1995-96 & 2000-01

Sl No	Category of holdings Size group	Canal			Tank			Well			Tube well			Other sources			All sources		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Marginal (0.02-0.99)	41.45	38.97	45.92	54.81	36.59	31.64	55.02	55.10	63.42	53.26	54.54	54.79	45.73	41.02	45.91	48.98	46.93	51.97
2	Small (1.00-1.99)	26.35	26.35	24.42	20.03	22.41	19.86	22.69	21.54	18.20	16.65	19.68	15.43	25.96	25.20	22.60	23.93	33.32	20.37
3	Semi medium (2.00 - 3.99)	21.00	22.87	19.48	14.12	20.01	15.77	14.47	13.62	10.59	7.09	15.56	12.61	17.89	18.41	15.79	16.95	17.19	14.11
4	Medium (4.00 - 9.99)	10.39	9.22	8.74	7.83	9.94	12.55	5.51	6.35	4.33	5.62	7.98	8.19	7.32	8.83	7.96	7.71	7.91	7.15
5	Large (10.00 & above)	0.81	2.59	1.45	3.21	11.05	20.18	2.31	3.39	3.46	17.98	2.25	8.98	3.10	6.54	7.73	2.43	4.65	6.39
	All sizes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

IV 16 (b) Percentage distribution of size class wise area irrigated by different sources -1990-91, 1995-96 & 2000-01

Sl No	Category of holdings Size group	Canal			Tank			Well			Tube well			Other sources			All sources		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Marginal (0.02-0.99)	24.46	15.34	15.97	18.74	6.86	7.42	34.48	49.65	51.10	1.62	6.36	5.55	20.70	21.89	19.95	100.0	100.0	100.0
2	Small (1.00-1.99)	31.82	20.88	21.67	14.02	8.45	11.88	29.11	39.06	37.41	1.00	4.55	3.99	24.05	27.06	25.05	100.0	100.0	100.0
3	Semi medium (2.00 - 3.99)	35.81	24.58	24.96	13.96	10.23	13.63	26.21	33.49	31.43	0.62	4.87	4.71	23.40	26.82	25.27	100.0	100.0	100.0
4	Medium (4.00 - 9.99)	38.93	21.55	22.08	17.01	11.06	21.40	21.92	33.97	25.36	1.09	5.43	6.04	21.05	27.98	25.12	100.0	100.0	100.0
5	Large (10.00 & above)	9.56	10.33	4.10	22.10	20.92	38.50	29.11	30.88	22.69	11.00	2.61	7.40	28.23	35.26	27.31	100.0	100.0	100.0
	All sizes	28.89	18.48	18.08	16.75	8.79	12.19	30.70	42.29	41.88	1.49	5.39	5.27	22.17	25.05	22.58	100.0	100.0	100.0

IV 16 (c) Distribution of district wise holdings receiving irrigation by different sources – 2000-01

Sl No	District	Source of irrigation											
		Canal		Tank		Well		Tube wells		Other sources		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	9115	4.84	5244	4.05	103026	6.19	3061	1.74	34692	5.65	155138	5.59
2	Kollam	2278	1.21	5589	4.31	184522	11.08	2282	1.29	33753	5.49	228424	8.24
3	Pathanamthitta	1143	0.61	2246	1.73	32972	1.98	1229	0.70	11888	1.94	49478	1.78
4	Alappuzha	10373	5.50	31692	24.46	137345	8.25	87135	49.40	51067	8.31	317612	11.45
5	Kottayam	3005	1.59	4206	3.25	70878	4.26	721	0.41	39142	6.37	117952	4.25
6	Idukki	4564	2.42	9573	7.39	41279	2.48	1129	0.64	41296	6.72	97841	3.53
7	Eranakulam	57443	30.48	13798	10.65	198740	11.94	23426	13.28	65959	10.74	359366	12.96
8	Thrissur	31838	16.90	20779	16.04	246575	14.81	23606	13.38	62246	10.13	385044	13.88
9	Palakkad	51087	27.11	9819	7.58	126441	7.60	10102	5.73	150300	24.47	347749	12.54
10	Malappuram	4523	2.40	12946	9.99	153418	9.22	7101	4.03	29127	4.74	207115	7.47
11	Kozhikode	5392	2.86	4235	3.27	85389	5.13	3370	1.91	19010	3.09	117396	4.23
12	Wayanad	2029	1.08	1781	1.37	7645	0.46	700	0.40	22596	3.68	34751	1.25
13	Kannur	4435	2.35	6460	4.99	172943	10.39	2699	1.53	35726	5.82	222263	8.01
14	Kasaragod	1214	0.64	1184	0.91	103439	6.21	9813	5.56	17532	2.85	133182	4.80
	State	188439	100.00	129552	100.00	1664612	100.00	176374	100.00	614334	100.00	2773311	100.00

IV 16 (d) Distribution of district wise area irrigated by different sources in 2000-01

Sl No	District	Source of irrigation.											
		Canal		Tank		Well		Tube wells		Other sources		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	1040	1.61	465	1.07	4336	2.89	144	0.76	1573	1.95	7558	2.11
2	Kollam	204	0.32	352	0.81	5735	3.83	66	0.35	1778	2.20	8135	2.27
3	Pathanamthitta	202	0.31	266	0.61	1139	0.76	49	0.26	1937	2.40	3593	1.00
4	Alappuzha	3243	5.01	2179	4.99	4129	2.76	4928	26.13	12912	15.98	27391	7.65
5	Kottayam	1189	1.84	986	2.26	3543	2.36	163	0.86	8278	10.25	14159	3.96
6	Idukki	1363	2.11	11627	26.64	8005	5.34	870	4.61	5552	6.87	27417	7.66
7	Ernakulam	9346	14.45	2450	5.61	15299	10.21	838	4.44	3988	4.94	31921	8.92
8	Thrissur	9732	15.04	5494	12.59	30438	20.31	3360	17.82	9288	11.50	58312	16.30
9	Palakkad	34065	52.66	3595	8.24	16130	10.76	4154	22.03	9179	11.36	67123	18.76
10	Malappuram	1393	2.15	3394	7.78	17689	11.80	1125	5.97	5911	7.32	29512	8.25
11	Kozhikode	909	1.41	832	1.91	6860	4.58	228	1.21	2380	2.95	11209	3.13
12	Wayanad	681	1.05	3766	8.63	3855	2.57	255	1.35	8588	10.63	17145	4.79
13	Kannur	901	1.39	2537	5.81	12869	8.59	335	1.78	4637	5.74	21279	5.95
14	Kasaragod	424	0.66	5695	13.05	19842	13.24	2342	12.42	4790	5.93	33093	9.25
	State	64692	100.00	43638	100.00	149869	100.00	18857	100.00	80791	100.00	357847	100.00

IV 16 (e) Percentage of number of holdings irrigated by different sources in each district 2000-01

Sl No	District	Source of irrigation						Total
		Canal	Tank	Well	Tube wells	Other sources	7	
1	2	3	4	5	6	7	8	
1	Thiruvananthapuram	5.88	3.38	66.41	1.97	22.36	100.0	
2	Kollam	1.00	2.45	80.78	1.00	14.78	100.0	
3	Pathanamthitta	2.31	4.54	66.64	2.48	24.03	100.0	
4	Alappuzha	3.27	9.98	43.24	27.43	16.08	100.0	
5	Kottayam	2.55	3.57	60.09	0.61	33.18	100.0	
6	Idukki	4.66	9.78	42.19	1.15	42.21	100.0	
7	Ernakulam	15.98	3.84	55.30	6.52	18.35	100.0	
8	Thrissur	8.27	5.40	64.04	6.13	16.17	100.0	
9	Palakkad	14.69	2.82	36.36	2.90	43.22	100.0	
10	Malappuram	2.18	6.25	74.07	3.43	14.06	100.0	
11	Kozhikode	4.59	3.61	72.74	2.87	16.19	100.0	
12	Wayanad	5.84	5.13	22.00	2.01	65.02	100.0	
13	Kannur	2.00	2.91	77.81	1.21	16.07	100.0	
14	Kasaragod	0.91	0.89	77.67	7.37	13.16	100.0	
	State	6.79	4.67	60.02	6.36	22.15	100.0	

IV 16 (f) Percentage of area irrigated by different sources in each district - 1990-91, 1995-96 & 2000-01

Sl No	District	Source of irrigation																	
		Canal			Tank			Well			Tube wells			Other sources			Total		
		90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01	90-91	95-96	00-01
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Thiruvananthapuram	27.26	7.56	13.76	10.71	2.96	6.15	36.29	81.70	57.37	0.43	2.81	1.91	25.31	4.97	20.81	100.0	100.0	100.0
2	Kollam	10.46	3.21	2.51	4.50	2.21	4.33	47.94	75.26	70.50	0.25	3.36	0.81	36.85	15.96	21.86	100.0	100.0	100.0
3	Pathanamthitta	29.54	23.35	5.62	1.97	3.81	7.40	9.57	22.58	31.70	0.11	3.32	1.36	58.81	46.94	53.91	100.0	100.0	100.0
4	Alappuzha	10.96	9.03	11.84	56.03	7.87	7.96	8.88	21.81	15.07	3.74	10.66	17.99	20.39	50.63	47.14	100.0	100.0	100.0
5	Kottayam	16.35	9.28	8.40	15.25	7.03	6.96	18.48	24.51	25.02	1.02	3.32	1.15	48.90	55.86	58.46	100.0	100.0	100.0
6	Idukki	3.72	4.41	4.97	29.94	22.72	42.41	26.94	24.77	29.20	3.71	4.72	3.17	35.69	43.38	20.25	100.0	100.0	100.0
7	Eranakulam	31.21	20.91	29.28	7.39	7.19	7.68	29.95	49.65	47.93	0.51	5.99	2.63	30.90	16.26	12.49	100.0	100.0	100.0
8	Thrissur	24.50	14.66	16.69	14.20	8.72	9.42	42.06	56.05	52.20	0.43	6.55	5.76	18.81	14.02	15.93	100.0	100.0	100.0
9	Palakkad	66.04	50.24	50.75	6.00	3.63	5.36	16.18	27.32	24.03	1.11	2.87	6.19	10.67	15.94	13.67	100.0	100.0	100.0
10	Malappuram	8.69	3.26	4.72	11.32	8.10	11.50	49.32	47.99	59.94	1.20	5.56	3.81	29.47	35.09	20.03	100.0	100.0	100.0
11	Kozhikode	27.80	7.35	8.11	8.64	4.45	7.42	48.66	76.92	61.20	0.07	1.73	2.03	14.83	9.55	21.23	100.0	100.0	100.0
12	Wayanad	9.09	22.09	3.97	2.57	28.32	21.97	5.21	8.83	22.48	0.14	0.40	1.49	82.99	40.36	50.09	100.0	100.0	100.0
13	Kannur	11.11	1.85	4.23	57.13	4.65	11.92	7.84	59.05	60.48	5.71	2.64	1.57	18.21	31.81	21.79	100.0	100.0	100.0
14	Kasaragod	7.11	3.70	1.28	15.64	19.13	17.21	64.85	52.78	59.96	2.33	8.12	7.08	10.07	16.27	14.47	100.0	100.0	100.0
	State	28.89	18.48	18.08	16.75	8.79	12.19	30.70	42.29	41.88	1.49	5.39	5.27	22.17	25.05	22.58	100.0	100.0	100.0

IV 16 (g) Number of wells and tube wells used for irrigation in different size classes

Sl No	Size class	Number of wells in use					Number of tube wells		
		With pumpset			Without pumpset	Total (7+8)	Electric	Diesel	Total (7+8)
		Electric	Diesel	Total (3+4)					
1	2	3	4	5	6	7	8	9	
1	Below 1.00	947022	31395	978417	688987	154895	4081	158976	
2	Small (1.00-1.99)	70320	8399	78719	18176	6798	602	7400	
3	Semi medium (2.00 - 3.99)	26732	4324	31056	5622	2899	174	3073	
4	Medium (4.00 - 9.99)	7033	1226	8259	1200	1390	57	1447	
5	Large (10.00 & above)	1080	488	1568	244	219	19	238	
6	All sizes	1052187	45832	1098019	714229	166201	4933	171134	

IV 16 (h) Distribution of district wise number of wells and tube wells

Sl No	District	Number of wells in use					Number of tube wells		
		With pump set			Total (3+4)	Without pump set	Electric	Diesel	Total (7+8)
		Electric	Diesel	4					
1	2	3	4	5	6	7	8	9	
1	Thiruvananthapuram	45241	1505	46746	88612	2988	46	3034	
2	Kollam	92216	888	93104	122916	864	449	1313	
3	Pathanamthitta	18437	268	18705	26892	766	24	790	
4	Alappuzha	66962	3770	70732	88935	89806	898	90704	
5	Kottayam	42524	314	42838	36312	1226	24	1250	
6	Idukki	17735	1355	19090	19762	580	207	787	
7	Eranakulam	154134	1276	155410	49546	19715	203	19918	
8	Thrissur	220863	2758	223621	36248	22310	536	22846	
9	Palakkad	59172	2919	62091	42851	9389	522	9911	
10	Malappuram	121428	10517	131945	58980	6698	843	7541	
11	Kozhikode	53036	1300	54336	29516	2576	220	2796	
12	Wayanad	951	652	1603	2563	197	121	318	
13	Kannur	92905	3723	96628	79707	1870	176	2046	
14	Kasaragod	66583	14587	81170	31389	7216	664	7880	
	State	1052187	45832	1098019	714229	166201	4933	171134	

IV 17 Intensity of irrigation (Gross Area Concept)

Sl.No.	Size class (Hectares)	Intensity of Irrigation		
		1990-91	1995-96	2000-01
1	2	3	4	5
1	Below 1.00	144.75	114.91	111.05
2	Small (1.00-1.99)	128.03	113.34	108.53
3	Semi medium (2.00 - 3.99)	120.88	112.50	107.60
4	Medium (4.00 - 9.99)	133.92	113.76	107.17
5	Large (10.00 & above)	130.79	113.38	102.90
6	All sizes	135.37	113.97	109.25

IV 17 (a) District-wise percentage distribution of gross cropped area according to irrigation status 2000-01

Sl.No	Districts	Irrigation		Total
		Irrigated	Unirrigated	
1	2	3	4	5
1	Thiruvananthapuram	9.88	90.12	100.0
2	Kollam	10.02	89.98	100.0
3	Pathanamthitta	5.25	94.75	100.0
4	Alappuzha	45.84	54.16	100.0
5	Kottayam	11.54	88.46	100.0
6	Idukki	16.58	83.42	100.0
7	Eranakulam	31.45	68.55	100.0
8	Thrissur	61.17	38.83	100.0
9	Pattadak	42.95	57.05	100.0
10	Malappuram	26.40	73.60	100.0
11	Kozhikode	11.36	88.64	100.0
12	Wayanad	17.29	82.71	100.0
13	Kannur	16.46	83.54	100.0
14	Kasaragod	45.24	54.76	100.0
	State	24.91	75.09	100.0

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