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Report on The Agricultural Census 1990-91

Vol. I

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Department of Economics and Statistics
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Thiruvananthapuram

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Preface

Agricultural Census was first launched in the Country with a view to study the operational holding wise characteristics especially of marginal and small farmers. This is the 5th Agricultural Census conducted in the State in 1992-93 with reference period 1990-91 as a centrally sponsored scheme.

This Census has two parts. The first one is the Main Census in which number and area of operational holdings, tenancy pattern irrigation status, cropping pattern etc. were collected. In the second part under Input Survey details regarding area treated with organic manure and fertilizers and implements used etc. are collected separately.

Although it is a Census only 20% of the total Urban and Rural wards are selected for main census and out of which 7% sample Panchayat and Municipal Corporation wards are selected for input studies.

The fieldwork of the Input survey and supervision of the main census was done by the field staff of this department. Computerization was done by the data entry operators recruited provisionally. The tabulation programme was developed by Sri Sajith Kumar of the Computer division under the supervision of Sri C.C. Cheriyan Kunju, Deputy Director. The entire supervision and control of the survey was with the nucleus staff headed by the Joint Director Smt. S. Indira with the assistance of Sri P. Surendran Pillai, Deputy Director under the supervision of the Additional Director in charge of Agricultural Census.

I hope this publication will be of great use to those who are actively involved in the development of Agricultural Sector in the State.

U. Thomas Sreeba
Director

Thiruvananthapuram
2nd January, 2000

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Agricultural Census 1990-91

Introduction

Agricultural Census, a comprehensive fieldwork was carried out in India, for the collection and derivation of quantitative information about the structure of the agricultural sector. It is conducted as part of the world Agricultural Census. Though India was not able to participate in the world Agricultural Census from its very inception due to various reasons, moderate attempts were made from 1950 onwards for collecting Agricultural data on a sample survey basis. However, these surveys, with small sample size, were of limited value for micro level planning. Consequently India started participating in the world Agricultural Census programme during the last three decades.

The distinct feature that makes Agricultural Census different from that of the other agricultural studies is that in the former, operational holdings and not the ownership holding is the fundamental unit for collecting basic data on all important aspects of Agricultural economy. This is because, in agriculture, operational holding still continues to be the basic unit of decision making. Hence the information regarding the structure and characteristics of operational holdings particularly in respect of marginal and smallholdings is an essential pre-requisite for any well thought out policy formulation and establishment of national priorities.

An operational holding is defined as 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 its title, legal form, size or location. The technical unit has been defined as that unit which is under the same management and has the same means of production such as labour force, machinery and animals. This implies that the holding might be either fully owned or fully rented or partly owned and partly rented or cultivated under any other arrangement. Again the land of holding might all be located in one single compact block or spread over as scattered fragments. The entire area of the holding might be in a single territorial jurisdiction or might spread over to more than one such jurisdiction. The common factor was that it was under single management having its own set of facilities and resources.

The holder or the operator for purpose of Agricultural Census was the person who assumed responsibility for the management of the holding. He had to take decisions on all major agricultural operations. It was the extent of responsibility of decision taking that determined the categorization as an operational holder. He might do the work of one or more operations himself and may direct and supervise the work done by others under his instructions. The operator might thus be an owner, a member of the owner's household, tenant, share cropper, etc.

Organization

Agricultural Census is a Centrally sponsored scheme organised and administered by the Ministry of Agriculture, Government of India. Department of Economics & Statistics is responsible for

the organisation and conduct of the Census in Kerala State. In order to assist the Director who is also the Assistant Commissioner of Agricultural Census, (The commissioner being Secretary to Government, Planning and Economic Affairs Department) the following technical and Administrative personnel were appointed.

Joint Director	1
Assistant/Deputy Director	1
Administrative Assistant	1
Research Assistants	2
Confidential Assistant	1
Typist	1
L. D. Compiler	2
Peon	1

Kerala Economy and Agricultural Census

Kerala, an evergreen State located in the south west corner of India, is rich with a wide variety of crops. The three geographically significant divisions – the coastal region, the midland plane, and the ghat region – harbours of unique biological diversity of the State. The density of population of the State is 747 persons per sq. KM, second only to west Bengal. Consequently per capita availability of land in Kerala is only 0.13 hectares compared to All India average of 0.39 hectares leading to high intensity of cropping ie. 135 as against 127 at All India level. All these have contributed to unique land utilisation and cropping pattern. Predominance of small holdings and multiple cropping system is the dominant feature of the agricultural sector.

However a comprehensive system of collection and maintenance of Agricultural Statistics through land records by the revenue machinery do not exist in Kerala as is prevalent in majority of the States. Thus Kerala is a non land record State. Consequently the data generated by Agricultural Census on the structure and characteristic of the operational holdings particularly in respect of marginal and small holding has great importance.

The Agricultural Census started in Kerala during 1970-71 along with the rest of country. Since then Kerala participated in the entire census. The present (fifth) Agricultural Census was conducted in the State during the period July 1992 to June 1993, with 1990-91 as reference period. The conduct of the survey was delayed due to certain technical and administrative problems.

Kerala being a non-land record state, the Census was conducted not on a complete enumeration basis, but on a sample survey basis by adopting enquiry method. The field data was collected, by utilising the service of the field staff of the Department of Economics & Statistics, working in various schemes. They were supervised by the Taluk Statistical Officer /Research Assistant /Additional District Officers and Price Supervisors. The Deputy Directors of the districts provided the necessary leadership at the district under the technical guidance from the Head Office. The collection of Agricultural Census data, they did in addition to their normal duties.

The tabulation work of the Agricultural Census data was undertaken by the Computer division of the Economics & Statistics Department. The work was done by engaging data entry operators on daily wages.

2. The Objectives & other details of Agricultural Census

The main objectives of the Agricultural Census are –

1. To describe agricultural structure and related characteristic of agriculture by providing statistical data on operational holdings, including land utilisation, livestock, agricultural machinery and implements, use of fertilizers etc.
2. To provide benchmark data needed for formulating new agricultural development programmes and for evaluating their progress.
3. To provide basic frame of households and operational holdings for camping out future agricultural surveys and,
4. To lay a basis for developing an integrated programme for current agricultural statistics.

In order to fulfil the above objectives, the survey was carried out in two phases (1) Main survey and (2) input survey. In the main survey the following principal characteristics were collected.

1. Number and area of operational holdings according to prescribed size classes for different social groups,
2. Land utilisation
3. Tenancy status
4. Irrigation status and source wise area irrigated
5. Cropping pattern
6. Dispersal of holdings.

The above information were collected separately for scheduled castes and Scheduled Tribes and for all social groups as well.

In part II ie. Input survey information was collected in respect of the following items.

1. Number of parcels
2. Multiple cropping
3. Application of chemical fertilisers, organic manure and pesticides
4. Livestock
5. Agricultural machinery and implements
6. Rural credit

Sampling design

A stratified two stage sampling design was recommended for Kerala, along with other non-land record states. The 1st stage stratum is block. In view of the increasing demand for Agricultural Census data at block level, it is suggested that the community development block should be the stratum. The first stage unit with in that was Panchayat wards in the rural area and Municipal/ Corporation/ Township wards in the urban area. The second Stage was operational Holding From

each stratum 20 per cent of the wards were selected by simple random sampling method. Accordingly, 1998 Panchayat wards and 304 Municipal/Corporation wards were selected. In each selected wards all the operational holders are listed and they are grouped into following eleven categories viz. Those operating

- | | |
|-------------------------|--------------------------|
| (i) below 0.02 hectare | (ii) 0.02 – 0.5 hectare |
| (iii) 0.5 – 1.0 hectare | (iv) 1.0 – 2.0 hectare |
| (v) 2.0 – 3.0 hectare | (vi) 3.0 – 4.0 hectare |
| (vii) 4.0 – 5.0 hectare | (viii) 5.0 – 7.5 hectare |
| (ix) 7.5 – 10 hectare | (x) 10.0 – 20.0 hectare |
| (xi) 20.0 and above | |

Twenty five percent of the individual and joint operational holders were selected from each of the first four categories on the basis of circular systematic sampling method by grouping the holdings according to order of size and social group and all the holdings from the last category. The holding of size class less than 0.02 hectares (5 cents) were omitted for detailed enquiry.

All the institutional holdings except less than 0.02 ha were covered for collection of detailed information.

Informations were collected separately for Scheduled Caste, Scheduled Tribe and other categories.

Limitation of the study

Though the survey cover adequate sample to have a reliable estimate it is found that in certain special categories with limited number, the estimates are affected by sampling fluctuations to a greater extend. The survey was done by household enquiry method and hence the coverage is only for resident cultivators. The cultivators may be having land outside the Panchayat/Block/District boundaries especially in the boarder wards. The Block/District level estimates are affected by these factors. Another limitation of number of operational holdings having area of a particular crop is that the holder is having land in that particular size class but the area under that crop need not be in that size class. That is it is total land of the cultivator that is grouped in the size class and not the area under that crop.

Concepts and definitions

The concepts and definitions adopted for the Agricultural Census 1990-91 do not vary much from the previous census. The conformity with the concepts of earlier census facilitate comparative study of the data received from the survey.

Since the concept of operational holding and technical unit etc. have already been explained in detail in the introductory chapter they are not elaborated here.

Agricultural production

Agricultural production includes growing of field crops, fruits, grapes, seeds, tree nurseries (except those of forest trees), vegetables and flowers, production of coffee, tea, cocoa, rubber, jute, oil seeds, fodder, grass, etc.

Grass would be treated as a crop if special efforts are made to raise it.

Operated area

Operated area would include both cultivated and uncultivated area provided part of it is put to agricultural production during the reference period. If, for instance an operational holding consists of four survey numbers out of which one survey number is put to non-agricultural uses, the total area of the operational holding will be equal to the total geographical area of all the four survey numbers.

It would also cover the land occupied by the farm buildings including the house of the holder, provided such building are with in the cultivated area. The farm building located outside the cultivated area and covered under abadi area (Residential area) would not be included.

Operated area would exclude Government forestland, Government waste land, Village common grazing land, abadi area, etc. If Government waste land is allotted to an individual then it will be included in the holding.

If the entire area of the holding (area of all the survey numbers of an operational holding) is put to non-agricultural use and/or it is under old fallow, it will not be considered as operated area. If, however the entire area of operational holding is under current fallow during the reference year, this would still be considered as operational holding.

In some cases land is divided amongst all the members of the family where it is divided between the husband, wife and minor children and the cultivation is being done by the husband as the head of the family, the land may be appropriately treated as one operational holding ie. Operated by the husband.

There might be cases where in the record, a holding is shown jointly in the name of more than one co-sharer while in fact the land may have been privately divided and the co-sharers are independently cultivating. In such cases where there is not disputes, they should be treated as many operational holdings as the number of independent cultivators.

In some states, in the jamabandi register against a khata, name of three or more persons are shown. While from the records it would appear that there is only one holding, in practice, all the three or four brothers are actually cultivating the land independently of each other although there is no legal partition of land. From the Census point of view this would constitute three or four operational holdings as the case may be.

For cultivated areas in the State forests, no detailed land records are prepared. In the absence of revenue records and agency such areas are excluded for census purposes.

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The operated area may comprise of

- a) Land owned and self operated
- b) Land leased in
- c) Land otherwise operated.

Land owned and self operated

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

- i. Land held from Government or others under grant or lease or assigned with right of permanent heritable possession with or without right of transfer.
- ii. Land operated under perpetual lease.

Self-operated land would include:

1. Self cultivation
2. Land cultivated through members of the family
3. Land cultivated with the help of hired labour.

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

b) Land 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:

1. Fixed money
2. Fixed produce
3. Share of produce
4. Usufructuary mortgage

Ownership of the property is with the mortgager but the possession is with the mortgagee (ie. 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 realised.

5. Other items to be specified.

c) Area otherwise operated

This would include encroachment, land forcibly occupied unauthorised or land in dispute, etc. which cannot be treated as owned or leased in, as per the definitions given above.

5. 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 may share it with others. The operational holder may be Individual/Joint/Institutional.

- a) Individual: If the holding is being operated either by one person alone or by a group of persons who are the members of the same household, it will be considered as an individual holding.
- b) Joint: If two or more persons belonging to different households have jointly act as partners in the economic and technical responsibility for the operation of an agricultural holding, such holding would be considered as joint.

- c) Institutional: Holdings such as government farms, sugarcane factories farms co-operative farms, lands managed by trust would be treated as institutional.

Resident and non resident operational holder:

All the cultivators residing in a particular village cultivating some land are resident cultivators of that village irrespective of the fact whether they are cultivating land within that village or outside. A resident cultivator may have

- (1) entire area of the holding located in the village of his residence;
- (2) partly within the villages of residence and partly outside and
- (3) entirely outside the village of residence but within the State.

Complete/part Holding: A holding is said to be complete holding if the entire operated area of that holding is located in one village. If the operated area is spread over more than one village, it should be considered as part-holding.

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.

6. Land Utilization: Operated area would be classified into six broad categories;

1. Net area sown
2. Current fallow
3. Fallow land other than current fallow
4. Other uncultivated land excluding fallow
5. Cultivable waste and
6. Not available for cultivation

1. Net area sown

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

2. Current fallow

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

3. Fallow land other than current fallow:

All land which have taken up for cultivation but are 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:

1. Poverty of the cultivator
 2. Inadequate supply of water
 3. Malarial climate
 4. Salinity of canals and rivers and
 5. Uneconomic nature of farming.
4. Other uncultivated land excluding fallow:

This will include

- a) Permanent pastures and other grazing lands: All grazing lands, whether they are permanent pastures and meadows or not. Village common grazing lands would however, be excluded.
- 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 casuarina trees, thatching, grasses, bamboo bushes and other groves for fuel which are not included under 'orchards' would be covered under this category.

5. Culturable waste

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

6. Not available for cultivation

This would include forest area under non-agricultural use, barren and uncultivable land, etc.

- a) Forest: All lands classed as 'Forests' under any legal enactment dealing with forests or administered as forests whether state owned or private and whether wooded or maintained as potential forest land.
The area of crops raised in the forest and grazing land or areas open for grazing within the forests would be included under the forest area. Only private forest would be covered for the purpose of Agricultural Census.
- b) Area under non-agricultural use: All lands occupied by buildings and other lands put to use other than agriculture. Such lands within the cultivated holding should be covered in the Census (Roads, Buildings & Courtyard, etc.).
- c) Barren and uncultivable land: All barren and uncultivable land within the cultivated holding is classified in this category.

3. Results of the Census

Salient features of the operational holdings

According to Agricultural Census 1990-91, the total number of holding in Kerala has been estimated as 54.18 lakhs covering an area of 17-96 lakh hectares. Compared to 1985-86, the number of holdings has increased by 5.21 lakhs ie. An increase of 10.65% during the span of 5 years, but the operated area increased marginally by 23,000 hectares or 1.29 percent only. One remarkable feature of

this variation in the number of operational holding is that major changes occurred in the lowest and in the highest size groups. In the group below 0.02 hectares the percentage increase is 30.08, where as there is a decline by 21.59 percent in the highest size group ie. holdings having 10.00 hectares and above. (table 1)

Individual operational holdings

Individual operational holdings accounted for about 53.64 lakhs, which comprise 98.99 percent of the total number of holdings. In 1985-86 they accounted for about 98.92 per cent of the total holdings. The area covered by these individual holdings is 16.48 lakh ha accounting for about 91.78 percent of the total area covered by the operational holdings. This is about 0.38 percent less compared to 1985-86 census. (table 1)

Size class wise distribution shows that more than 92 percent of the holdings were found to be small holdings ie. in the size group below 1 hectare. Of this 11.75 percent comes under 0.02 hectares. The highest size class ie. 10.0 hectares and above occupy only 0.04 percent of the total number of holdings which decreased by 28.82 percent in comparison to the previous census period. The area occupied by this size group shows a decrease of about 31.23 percent during the period under reference. Only the small size group ie. below 0.02 ha showed an increase in area by 33.03 percent) over 1985-86 Census.

Joint holdings

The number of joint holdings reported during the 90-91 survey is 1608. This accounts for only 0.03 percent of the total holdings. During 1985-86, the joint holdings accounted for about 0.15% of the total holdings, thus accounting for about 78.33 percent decrease over a period of 5 years.

The decreasing trend is evident not only in the number of holdings, but also in the area occupied by this group. The area decreased from 11476 ha to 1239 ha showing a decrease of 89.20%.

Size group wise analysis shows that though in the case of both number and area of Joint holding there is a decrease in all size classes, the decrease is more pronounced in the case of large holdings followed by medium holdings. In 1985-86, there were 87 joint holdings to the large size group which has come down to 5 in 1990-91 accounting for about a decrease of 94.25 percent. The area decreased from 6950 hectares to 61 hectares showing a decrease of 99.12 percentage during the period. The maximum number of joint holdings is seen in the size group 'below 1 ha'.

Institutional

According to Agricultural Census 1990-91, there were 53123 numbers of institutional holdings in Kerala covering an area of 1,46,412 ha., accounting for about 0.98% of the total holdings. A comparison with 1985-86 census reveals that both number and area have gone up during the period under reference. There is an increase of 16.62 percent in the number of holdings where as area increased by 36.61 percent. The area under these holdings is accounted for about 8.15 percent of the

total operated area in the state thus showing an average size of 2.76 hectares. This is comparatively very high when compared to the average size of individual and joint holdings. Sampling fluctuations may be one of the reason for this increase.

Size class wise distribution shows that about 86 percent of the total holdings are in the size group below 1 hectare with an area of 46% of the total area. Institutional holdings are classified as others in respect of social group.

Average size

The average size of holding taking all the size groups together, is only 0.33 hectares. This is 0.03 hectares less than the 1985-86 census. Size class wise analysis shows that the variation between two census period is marginal in almost all size groups except the highest size group where there is an increase of 13.51 hectares, ie. from 42.40 hectares in 1985-86 to 55.91 hectares in 1990-91. District wise are given in table 3 (c)

Scheduled Caste

The total operational holdings under the social group Scheduled Caste is about 5.22 lakhs, which is 9.64 percent of the total operational holdings in the entire State. They occupy only about 50988 hectares of area, which are merely 2.84 percent of the area under total holdings.

Compared to the previous census period, there is an increase of 7.27 percent in the number of holdings, but there is only about 2.97 percent increase in the area occupied by this group. An analysis of the size class wise distribution is given in. (table 1 (a))

The size class wise distribution shows that majority of the Scheduled Caste operational holding ie.99.32 percent is in the size class below 1 hectare. Only a negligible number (about 0.68 percentage) of the operational holding is distributed in all other size classes.

More or less same pattern is noticed during the period of the previous census also. However one noticeable feature is that increase in the number of operational holding is concentrated either in the lowest size class or in the highest size class. In all other size classes ie. between 1 hectare and 9.99 hectare there is a decrease in the number of holdings in the current census.

Scheduled Tribe

The Scheduled Tribe of Kerala occupies about 1.22 per cent of the total number of holdings. These holdings accounted for an area of 33233 hectare, which was 1.85 percent of the total area under operational holdings in the state. Compared to 1985-86, there is an increase of 32.72 percent in number and 12.95 percent in area, which is much about the overall percentage increase in the entire state for all social groups, and also for Scheduled Castes. In the case of average size of holding also, the position of Scheduled Tribes is better than that of Scheduled Castes separately and also of all social groups. (table 1 b)

District wise analysis

While analysing the district wise details, the number and area of operational holdings in the size class below 0.02 hectares is not taken into account.

The analysis shows that in the smallest size group between 0.02 to 0.99 hectares, Thiruvananthapuram account for the longest number of operational holdings i.e. 4,95,024 followed by Thrissur and Malappuram districts. Wayanad accounts for the lowest number of (91053) small holdings followed by Kasaragod.

In the case of large size holdings, Idukki has the highest concentration. About 20 percent of the total number of holdings under the size group '10 hectares and above' is situated in Idukki district while Kollam has the lowest number of such operational holdings. (table 2)

District wise distribution of operational holdings under the social group Scheduled Caste shows that Palakkad has the highest number of operational holdings 53810 numbers i.e. 14 percent of the total. Four districts Palakkad, Thrissur, Thiruvananthapuram and Kollam account for the 50 percent of the total number of holdings. The lowest number of Scheduled Caste concentration is seen in Wayanad where it is only 0.56 percent of the total. (Table 2 a)

In the case of Scheduled Tribes, the highest concentration is in Wayanad with 16734 number (29%) of operational holdings followed by Idukki. These two districts hold together 48.72 percent of the total number Scheduled Tribe holdings in the State. All other districts are having comparatively less number of operational holdings. Ernakulam with 321 holdings is having the lowest number of operational holdings operated by Scheduled Tribes in the State. (refer table 2 b)

Tenure and tenancy status of operational holdings

For the purpose of studying the tenure and tenancy status of Agricultural sector in Kerala the holdings have been classified into various categories.

Details of classification of holdings according to tenure and tenancy status have been given in tables 6 to 8

The findings of the survey reveals that, the dominant feature of the tenural practice followed in the agricultural sector of Kerala is that majority of the holdings are owned and self operated. Out of 47.83 lakhs operational holdings 98.82 percent is accounted for by this category. In the remaining holdings, majority of the operational holdings come under the category 'partly owned, partly leased in and partly otherwise operated' holdings. It is to be noted that leased in holdings in Kerala is only a negligible proportion (0.05%) of the total holdings in the State "wholly otherwise operated holdings" accounts for 0.52%.

Share of area under each group is more or less proportional to the number of total holdings.

Yet another notable feature is that there is not much variation in the tenural pattern as the size class varies. The same pattern is repeated in almost all size classes. (Table 6)

The pattern of tenancy practice among Scheduled Caste and Scheduled Tribe also goes along with the general practice in the state is about 98 to 100 percent ranging from marginal to large size class are wholly owned and self operated holdings. "Partly owned, partly leased in and partly otherwise operated" holdings follow the suit. The number of wholly leased in holdings is negligible in the case of Scheduled Caste and 'nil' in the case of Scheduled Tribe groups. Wholly otherwise operated holdings is about 2 percent in the case of Scheduled Tribe groups. (refer table 6 a & 6 b)

Leased in area by terms of leasing

The leased in area obtained from 'wholly leased' in holdings and partly owned and partly leased in' holdings was further classified according to terms of leasing. The terms of leasing were (i) for fixed money, (ii) fixed produce, (iii) share of produce, (iv) under usufructuary mortgage and (v) other terms. Leased in area is very limited as far as the state is concerned and mainly for fixed money. (4928 hectare leased in out of which 2134 hectare is for fixed money). The practice of bearing out area is diminishing in the State.

Land Utilisation

Analysing the details collected, regarding the purpose for which the land is put to use by the operational holders, reveal that the pattern of land utilisation followed by them has been more or less same as was in the previous years. According to 1990-91 Census, out of 17.87 lakh hectares of total land under operational holdings (about 15.56 lakh hectares), which accounts for 87.08 percent of the total area of operational holdings comes under the category 'net area sown'. Current fallow is 19928 hectares accounting for 1.11 percent of the total area. Thus the net cultivated area comes to 15.56 lakh hectares accounting for about 88.19 percent of the total area. Land not available for cultivation is 8.05 percent and 'cultivable waste land' accounted for 1.54 percent of the total area. "Other uncultivated land" excluding fallow land is only 1.07 percent of the total area (Table 9) leaving 1.15% as fallow other than current fallow.

A comparison with the previous years shows that there is a steady decline in the 'net cultivated area'. During 1980-81 about 90.1 percent of the total area of the holdings were under cultivation. This has reduced to 88.19 percent with in a span of 10 years. At the same time 'land not available for cultivation' shows a steady increase from 6.53 percent to 8.05 percent. This is a clear indication that the area under cultivation has been gradually converting for other purpose even now. All other categories of land utilization shows a declining trend during the reference period also. Details are given in table 9.

Size class wise distribution

Size class wise distribution shows that middle three size classes i.e. 1 hectare to 9.99 hectares have put their land to maximum utilization. They have brought about 90 percent of their land under cultivation. About 5 to 6 percent of their area is under the category 'land not available for cultivation'.

In the case of marginal holdings about 11 percent of the area is under land 'not available for cultivation' and the area under cultivation is only 86.18 percent. This is because in the small size holdings, after constructing a house, the area left for cultivation is proportionally less.

Irrigation status

Details collected regarding the irrigation status of the holdings of the operational holders is analysed below. For the purpose, only the net area sown has been taken into account. Accordingly, holdings having only current fallow are also omitted. These holdings have been classified into wholly irrigated, partially irrigated and unirrigated holdings. Out of 48 lakh holdings only about 11.5 lakhs holdings did receive any kind of irrigation facility. Compared to previous years, there is a slight improvement in the availability of irrigation facility to the operational holders. During 1985-86 only about 22.48 percent of the total holdings did receive any kind of irrigation facility. This has increased to 24.05 percent in 1990-91.

The total net area sown in the State is 15.56 lakhs hectares. The net irrigated area found to be 2.95 lakh hectares, which accounts for about 18.95 percent of the total net area sown. The remaining 81.05 percent of the net area sown is completely unirrigated.

Details regards irrigation are furnished in tables 16 a to h and 17.

District wise distribution

Analysis of the district wise distribution of the availability of irrigation facility shows that in the table. Thrissur with 2,32,498 holdings has the maximum number of operational holdings under irrigation. This account for about 20.21 percent of the total holdings in the State. This is followed by Alappuzha (17.05%) and Ernakulam (11.59%).

Coming to the area under irrigation we can see that Palakkad though accounts for only about 10.61 percent of the total holdings in the State occupy the highest position with 64035 hectares accounting for about 21.71 percent of the total net area sown. The main reason being that average size of holdings in the district is comparatively high. About 13.32 percent of the total unirrigated area is concentrated in Idukki.

Size class wise distribution

Considering the size class wise distribution of the irrigated area of the state as a whole, it is found that there exists an inverse relationship between the two, higher the size classes lower the percentage of irrigated area. About 48.98 percent of the total area irrigated in the State is in the lower size class. It is 23.93 in the small, 16.95 percent in the semi medium size class. In the medium and

large size classes it is only 7.71 and 2.43 percent respectively. The same trend is repeated when the wholly irrigated and partly irrigated area are separately analysed.

Regarding the irrigated area as a percentage of the net area sown somewhat a different picture is emerged.

In the marginal and small size classes of the holdings only about 19 percent of the net area sown is under irrigation where as it is 21.65 and 22.32 percent in the semi-medium and medium holdings respectively.

In the case of large size holdings only about 14 percent of the total area is under irrigation. The fact that the large size holdings are mainly plantations contributes to such a position.

Source of Irrigation

The survey also covered details regarding the area and holdings covered under different source of irrigation. The major sources of irrigation in Kerala as obtained from the survey are canals, tanks, wells, etc. Since in many case holdings depend on more than one source of irrigation, their number is included in each source from which they receive irrigation facility. The number of holdings and area under different source of irrigation is as follows.

About 6,09,371 holdings were irrigated by wells which covers about 42.24 percent of the total number of holdings irrigated by one or other means of irrigation. Net area covered by them is 90,602 hectares which is 30.71 percent of the total area irrigated. 19.73 percent of the holdings is irrigated by tanks and about 14.34 percent by canals

Use of tube wells for irrigation purpose is not a common feature so far as Kerala Agricultural economy is concerned.

Size class wise distribution of irrigated area shows that in the marginal holdings 34.48 percent of the total area is irrigated with the help of wells. Next in importance comes canals. Tube wells are not of much importance.

On the other hand in the case of other three size groups, canals occupy an important place. 31 to 38 percent of the total area is irrigated by canals. Next in importance comes wells. 26 to 29 percent of the area is irrigated in these size groups by wells.

Contrary to this in the highest size class wells and tanks occupy an important place. In this case tube wells irrigate about 11 percent of the total area. However in this size group canals do not occupy much importance.

Another noticeable feature is that other source of irrigation occupies about 20 to 28 percent in all the size groups.

District wise distribution of total area irrigated according to source of irrigation reveal that canal irrigation is more common in Palakkad than in any other district. About 66.04 percent of the total

irrigated area receive water through canal system. Wells with 16.18 percent comes next in importance as a source of irrigation.

Alappuzha and Kannur depend more on tanks for irrigating their crops. About 56.03 and 57.13 percent of the irrigated area in the respective districts receive water through the means of tanks.

Well has an important place as a source of irrigation in almost all the districts of the state except Alappuzha and Kannur. In these districts area ranging from 42 to 65 percent is irrigated through wells – viz. Kasaragod 65, Kozhikode 49, Thrissur 42, Kollam 48, etc. On the other hand tube wells as a source of irrigation is of negligible importance.

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. It is 135.37 when all size classes are taken together. Size class wise analysis shows that intensity is highest in the marginal holdings. It is the lowest in semi medium and medium holdings, the major reason may be that in majority of these holdings agriculture may be a secondary occupation.

Intensity of irrigation in 1990-91 shows a decreasing trend when we compare with 1985-86. It decreased about 7.85 percent during the period under reference.

Cropping pattern

During the survey on Agricultural Census information were collected regarding the number of holdings growing important crops and also the gross area under each crop.

The major food crops cultivated in the State are paddy coconut, tapioca, banana, Mango, etc. Besides this a number of cash crops like Rubber, Cashew, Coffee, Tea, Pepper, Arecanut, etc. are also cultivated extensively. However more than 65 per cent of the gross cropped area are under food crops.

The total area sown during three main crop seasons – Khariff, rabi and punja – in the state taken together ie. Gross cropped area during the period of the survey came out to be 23.32 lakh hectares. Out of this 12 percent is accounted for by Idukki followed by Palakkad and Kannur. Palakkad accounted for about 9.87 percent of the gross cropped area where as kannur has 9.30 percent. Alappuzha accounted for only 4.49 percent of the total cropped area of the State.

Percentage distribution of gross cropped area among various crops gives more or less same trend in 1990-91 census period also as was the case in 1985-86. Coconut accounted for the highest share of the gross cropped area followed by rubber and paddy. Coconut increased from 23.4 percent to 27.19 percent in 1990-91, where as rubber showed an increase of 2.48 percent. It may be noted that area under paddy is showing a steady decrease from 1980-81 onwards. More than 10 percent of the total area had decreased during the span of last 10 years.

An analysis of size class wise distribution of area under principal crops shows that except for plantations like tea and coffee, there is heavy concentration of area in the small size of holdings. For all

the traditional crops of the State as well as for rubber, more than half of the area under each crop is in small holdings having an area of less than 2 hectares. As such about 68.8 percent of the area under paddy, 85.56 percent of coconut and 90.01 percent of the area under tapioca are in the small and marginal size of holdings. Contrary to this, in the case of tea, the entire area is concentrated in holdings having 10 and above hectares. The distribution of area under coffee is more or less uniform in all the size classes.

A comparison with 1985-86 census shows that, there is no radical change in the cropping pattern except certain minor variations.

In 1985-86 about 20 percent of the area was under paddy. This has decreased to 16 percent in 1990-91. Minor increase, seen in almost all other crops is compensated by the decrease in the category 'other crops'.

Similarly the structural pattern of the land under the crop also remain more or less same.

The details are given in tables 12 to 15.

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1. Number and area of operational holdings

All social groups

Sl. No	Size class (Hectares)	Individual holdings						Joint holdings					
		Number			Area			Number			Area		
		1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation
		3	4	5	6	7	8	9	10	11	12	13	14
1	Below 1.00	4969156	4436630	12.00 (+)	855336	806573	6.05 (+)	1274	5939	78.55 (-)	421	1358	69.00 (-)
2	1.00 - 1.99	275779	278200	0.87 (-)	377962	376742	0.32 (+)	185	702	73.65 (-)	253	830	69.52 (-)
3	2.00 - 3.99	95831	102123	6.16 (-)	249970	266005	6.03 (-)	98	459	78.65 (-)	247	1120	77.95 (-)
4	4.00 - 9.99	20520	23414	12.36 (-)	108801	123598	11.97 (-)	46	234	80.34 (-)	257	1218	78.90 (-)
5	10.00 & above	2411	3387	28.82 (-)	55870	81240	31.23 (-)	5	87	94.25 (-)	61	6950	99.12 (-)
6	All sizes	5363697	4843754	10.73 (+)	1647939	1654158	0.38 (-)	1608	7421	78.33	1239	11476	89.20
7	Below 0.02	630145	485293	29.85 (+)	8233	6189	33.03 (+)	0	153	0	0	2	-

Sl No	Institutional holdings												Grand Total		Average size of holdings	
	Number			Area			Number			Area			Number		Area	
	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	90-91
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
1	45839	38913	17.80 (+)	8986	8127	10.57 (+)	5016269	4481482	11.93 (+)	864743	816058	5.97 (+)	0.17	0.18		
2	3774	3435	9.87 (+)	5230	4671	11.97 (+)	279738	282337	0.92 (-)	383445	382243	0.31 (+)	1.37	1.35		
3	1821	1645	10.70 (+)	4783	4387	9.03 (+)	97750	104227	6.21 (-)	255000	271512	6.08 (-)	2.61	2.61		
4	920	972	5.35 (-)	5263	5939	11.38 (-)	21486	24620	12.73 (-)	114321	130755	12.57 (-)	5.32	5.31		
5	769	588	30.78 (+)	122150	84049	45.33 (+)	3185	4062	21.59 (-)	178081	172239	3.39 (+)	55.91	42.40		
6	53123	45553	16.62 (+)	146412	107173	36.61 (+)	5418428	4896728	10.65 (+)	1795590	1772807	1.29 (+)	0.33	0.36		
7	4979	2797	78.01 (+)	67	21	219.05 (+)	635124	488243	30.08 (+)	8300	6212	33.61 (+)	0.01	0.01		

1 (a). Number and area of operational holdings

Sl. No	Size class (Hectares)	Individual holdings						Joint holdings						Scheduled Caste
		Number			Area			Number			Area			
		1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	
1	Below 1.00	3	4	5	6	7	8	9	10	11	12	13	14	
		518442	481383	7.70(+)	45416	41953	8.25(+)	148	478	69.04(-)	27	100	73.00(-)	
2	1.00 - 1.99	2956	4071	27.39(+)	3782	5241	27.84(-)	-	15	-	-	18	-	
		550	733	24.97(+)	1482	1787	17.07(+)	5	25	80.00(-)	12	53	77.36(-)	
4	4.00 - 9.99	40	70	42.86(+)	208	327	36.39(+)	-	-	-	-	-	-	
		5	4	25.00(+)	61	40	52.50(+)	-	-	-	-	-	-	
6	All sizes	521993	486261	7.35(+)	50949	49348	3.24(+)	153	518	70.46(-)	39	171	77.19(-)	
		126785	94383	34.33(+)	1674	1217	37.55(+)	20	10	100.00(+)	0	0	-	

Sl No	Institutional holdings						Grand Total						Average size of holdings	
	Number			Area			Number			Area			90-91	85-86
	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	90-91	85-86
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
		-	-	-	-	-	518590	481861	7.62(+)	45443	42053	8.06(+)	0.09	0.09
2	-	-	-	-	-	-	2956	4086	27.66(-)	3782	5259	28.09(-)	1.28	1.29
		-	-	-	-	-	555	758	26.78(-)	1494	1840	18.80(-)	2.69	2.43
4	-	-	-	-	-	-	40	70	42.86(-)	208	327	36.39(-)	5.20	4.67
		-	-	-	-	-	5	4	25.00(+)	61	40	52.50(+)	12.20	10.00
6	-	-	-	-	-	-	522146	486779	7.27(+)	50988	49519	2.97(+)	0.10	0.10
		-	-	-	-	-	126805	94393	7.27(+)	1674	1217	37.55(+)	0.01	0.01

1 (b) Number and area of operational holdings

Scheduled Tribe

Sl. No	Size class (Hectares)	Individual holdings						Joint holdings					
		Number			Area			Number			Area		
		1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation
		3	4	5	6	7	8	9	10	11	12	13	14
1	Below 1.00	54945	38150	44.02 (+)	15036	10248	46.72 (+)	30	78	61.54(-)	6	19	68.42(-)
2	1.00 - 1.99	8533	8758	2.57(-)	11398	11441	0.38(-)	10	10	-	13	12	8.33 (+)
3	2.00 - 3.99	2094	2287	8.44(-)	5089	5465	6.88(-)	-	15	-	-	46	-
4	4.00 - 9.99	285	327	12.84(-)	1555	1591	2.26(-)	0	10	0	0	6.1	0
5	10.00 & above	10	25	6.00(-)	136	539	74.77(-)	-	-	-	-	-	-
6	All sizes	65867	49547	32.94 (+)	33214	29284	13.42 (+)	40	113	64.60(-)	19	138	86.23(-)
7	Below 0.02	8213	5738	43.13 (+)	90	65	38.46 (+)	-	-	-	-	-	-

Sl. No	Institutional holdings						Grand Total						Average size of holdings	
	Number			Area			Number			Area			90-91	85-86
	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	1990-91	1985-86	Percent-age variation	90-91	85-86
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	-	-	-	-	-	-	54975	38228	43.81 (+)	15042	10267	46.51 (+)	0.27	0.27
2	-	-	-	-	-	-	8543	8768	2.57(-)	11411	11453	0.37(-)	1.34	1.31
3	-	-	-	-	-	-	2094	2302	9.04(-)	5089	5511	7.66(-)	2.43	2.39
4	-	-	-	-	-	-	285	337	15.43(-)	1555	1652	5.87(-)	5.46	4.90
5	-	-	-	-	-	-	10	25	60.00(-)	136	539	74.77(-)	13.60	21.56
6	-	-	-	-	-	-	65907	49660	32.72 (+)	33233	29422	12.95 (+)	0.50	0.59
7	-	-	-	-	-	-	8213	5738	43.13 (+)	90	65	38.46 (+)	0.01	0.01

2. Distribution of District wise number of operational holdings by size class (excluding holdings less than 0.02 hectare)

Total

Sl No	Category/ Size class (Ha)	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	Marginal 0.02-0.99	495024	401912	209802	344132	270052	158116	397060	428740	333897	405520	396737	91053	308620	140480	4381145
2	Small 1.00-1.99	11103	12020	14380	10389	25693	34315	20501	19168	30515	21040	18096	16171	28341	18008	279738
3	Semi-medium 2.00-3.99	2627	2177	3278	3079	10553	8638	6898	5162	15698	8467	5360	7435	11565	6813	97750
4	Medium 4.00-9.99	541	296	572	734	2354	1760	1342	688	4329	1987	1040	1947	2559	1337	21486
5	Large 10 & above	164	40	188	120	427	647	170	132	259	271	148	275	205	139	3185
6	All categories	509459	416445	228220	358454	309079	203476	425971	453890	384696	437285	421381	116881	351290	166777	4783304

2(a) Distribution of District wise number of operational holdings by size class (excluding holdings less than 0.02 hectare)

Scheduled Caste

Sl No	Category/ Size class (Ha)	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	Marginal 0.02-0.99	46266	40368	22842	28014	17036	19706	34297	44762	53186	33538	24658	2178	13643	11291	391785
2	Small 1.00-1.99	60	25	111	108	109	817	96	79	504	161	104	40	325	417	2956
3	Semi-medium 2.00-3.99	15	10	20	20	10	111	15	15	110	66	15	5	60	83	555
4	Medium 4.00-9.99	-	-	-	-	-	15	-	10	10	-	-	-	-	5	40
5	Large 10 & above	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5
6	All categories	46341	40403	22973	28142	17155	20649	34408	44866	53810	33765	24777	2223	14033	11796	395341

2(b) Distribution of District wise number of operational holdings by size class (excluding holdings less than 0.02 hectare)

Sl No	Category/ Size class (Ha)	Scheduled Tribe														
		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	Marginal 0.02-0.99	3831	1125	887	495	2629	8143	306	366	4672	1109	1442	14821	2600	4336	46762
2	Small 1.00-1.99	809	61	94	-	329	2726	-	5	1190	74	69	1428	703	1055	8543
3	Semimedium 2.00-3.99	194	5	30	-	76	449	10	-	420	252	5	380	40	233	2094
4	Medium 4.00-9.99	5	-	-	-	10	50	5	-	50	30	-	105	15	15	285
5	Large 10 & above	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10
6	All categories	4839	1191	1011	495	3044	11378	321	371	6332	1465	1516	16734	3358	5639	57694

3. District wise distribution of area of operational holdings by size class (excluding holdings less than 0.02 hectare)

All social groups

Sl no	Category/ Size class (Ha)	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thirissur	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	Marginal 0.02-0.99	72963	70493	49909	54641	60011	51974	63772	77107	67455	75534	71568	29733	72654	38629	856443
2	Small 1.00-1.99	14400	15889	19102	13824	36303	44171	28185	25888	42994	28683	24376	24164	41353	24113	383445
3	Semi-medium 2.00-3.99	6466	5564	8388	7900	27689	21355	17765	13201	41690	22291	13948	21060	30038	17645	255000
4	Medium 4.00-9.99	2850	1573	3100	3968	13222	9663	7093	3454	22876	10473	5475	10403	13142	7029	114321
5	Large 10 & above	8782	3274	8734	2186	8747	75637	8022	3306	10973	6064	7302	15379	4619	15056	178081
6	All categories	105461	96793	89233	82519	145972	202800	124837	122956	185988	143045	122669	100739	161806	102472	1787290

3 (a). District wise distribution of area of operational holdings by size class (excluding holdings less than 0.02 hectare)

Sl No	Category/ 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	Marginal 0.02-0.99	3932	4066	2352	2444	1867	4109	2932	3481	6634	3486	2779	838	2293	2556	43769
2	Small 1.00- 1.99	78	29	127	128	140	1020	127	100	667	200	144	56	410	556	3782
3	Semi- medium 2.00-3.99	37	31	61	66	23	274	44	38	257	240	33	14	152	224	1494
4	Medium 4.00-9.99	-	-	-	-	-	87	-	49	46	-	-	-	-	26	208
5	Large 10 & above	-	-	-	-	-	-	-	-	-	-	-	-	61	-	61
6	All categories	4047	4126	2540	2638	2030	5490	3103	3668	7604	3926	2956	908	2916	3362	49314

3 (b) District wise distribution of area of operational holdings by size class (excluding holdings less than 0.02 hectare)

Sl No	Category/ Size class (Ha)	Scheduled Tribe														
		Thiruva nantha- puram	Kollam	Pathana mthitta	Alappu -zha	Kotta- yam	Idukki	Erana- kulam	Thri- ssur	Pala- kkad	Malapu -ram	Kozhi- kode	Way- nad	Kannur	Kasara- god	State
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Marginal 0.02-0.99	2101	242	190	25	649	3426	31	54	2100	138	360	3104	750	1782	14952
2	Small 1.00- 1.99	1327	86	119	-	425	3279	-	5	1564	105	87	1844	1066	1504	11411
3	Semi-medium 2.00-3.99	435	10	60	-	183	1079	24	-	973	567	10	1001	98	649	5089
4	Medium 4.00- 9.99	48	-	-	-	47	268	24	-	258	147	-	637	53	73	1555
5	Large 10 & above	-	-	-	-	-	136	-	-	-	-	-	-	-	-	136
6	All categories	3911	338	369	25	1304	8188	79	59	4895	957	457	6586	1967	4008	33143

3 (c) District wise average size of holdings (excluding holdings less than 0.02 hectare)

Sl No	District	0.02 - 0.99			1.00 - 1.99			2.00 - 3.99			4.00 - 9.99			10.0 & above				All sizes		
		80-81	85-86	90-91	80-81	85-86	90-91	80-81	85-86	90-91	80-81	85-86	90-91	80-81	85-86	90-91	80-81	85-86	90-91	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	Thiruvananthapuram	0.17	0.16	0.15	1.34	1.30	1.30	2.60	2.55	2.46	5.17	5.55	5.27	17.51	42.26	53.55	0.23	0.22	0.21	
2	Kollam	0.21	0.19	0.18	1.34	1.31	1.32	2.52	2.55	2.56	5.04	6.01	5.31	21.69	77.50	81.85	0.29	0.26	0.23	
3	Pathanamthitta	-	0.24	0.24	-	1.36	1.33	-	2.55	2.56	-	5.52	5.42	-	16.35	46.46	-	0.36	0.39	
4	Alappuzha	0.18	0.17	0.16	1.31	1.35	1.33	2.57	2.69	2.57	5.00	5.31	5.41	14.68	14.88	18.22	0.29	0.26	0.23	
5	Kottayam	0.24	0.22	0.22	1.40	1.38	1.41	2.67	2.62	2.62	5.58	5.41	5.62	15.46	23.59	20.48	0.57	0.52	0.47	
6	Idukki	0.35	0.32	0.33	1.38	1.31	1.29	2.70	2.49	2.47	5.70	5.45	5.49	59.30	36.46	116.90	1.46	0.94	1.00	
7	Ernakulam	0.19	0.18	0.16	1.37	1.35	1.37	2.69	2.59	2.58	5.53	5.12	5.29	35.00	24.70	47.19	0.40	0.30	0.29	
8	Thrissur	0.21	0.19	0.18	1.38	1.34	1.35	2.65	2.60	2.56	5.49	5.35	5.02	28.91	66.35	25.05	0.34	0.32	0.27	
9	Palakkad	0.24	0.20	0.20	1.41	1.39	1.41	2.73	2.66	2.66	5.41	5.19	5.28	14.70	47.31	42.37	0.64	0.54	0.48	
10	Malappuram	0.24	0.20	0.19	1.36	1.36	1.36	2.68	2.62	2.63	5.43	5.32	5.27	29.56	16.88	22.38	0.52	0.35	0.33	
11	Kozhikode	0.22	0.18	0.18	1.36	1.34	1.35	2.58	2.59	2.60	5.38	5.26	5.26	59.18	49.55	49.34	0.46	0.31	0.29	
12	Wayanad	0.37	0.29	0.33	1.45	1.40	1.49	2.75	2.64	2.83	5.43	5.58	5.34	16.66	55.49	55.92	1.23	1.02	0.86	
13	Kannur	0.29	0.26	0.24	1.38	1.37	1.46	2.74	2.63	2.60	5.43	5.13	5.14	19.88	22.33	22.53	0.63	0.52	0.46	
14	Kasaragod	-	0.30	0.27	-	1.34	1.34	-	2.54	2.59	-	5.17	5.26	-	142.56	108.32	-	0.68	0.61	
	State	0.22	0.20	0.20	1.37	1.35	1.37	2.68	2.61	2.61	5.45	5.31	5.32	35.59	42.40	55.91	0.47	0.40	0.37	

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	5016269 (92.58)	518590 (99.32)	54975 (83.41)	4442704 (91.97)	864743 (48.16)	45443 (89.12)	15050 (45.27)	804230 (46.99)
2	1.00 - 1.99	279738 (5.16)	2956 (0.57)	8543 (12.96)	268239 (5.55)	383445 (21.35)	3782 (7.42)	11411 (34.33)	368252 (21.52)
3	2.00 - 3.99	97750 (1.80)	555 (0.10)	2094 (3.18)	95101 (1.97)	255000 (14.20)	1494 (2.93)	5089 (15.31)	248417 (14.52)
4	4.00 - 9.99	21486 (0.40)	40 (0.01)	285 (0.43)	21161 (0.44)	114321 (6.37)	208 (0.41)	1555 (4.68)	112558 (6.58)
5	10.00 & above	3185 (0.06)	5 (0.00)	10 (0.02)	3170 (0.07)	178081 (9.92)	61 (0.12)	136 (0.41)	177884 (10.39)
6	All sizes	5418428 (100.00)	522146 (100.00)	65907 (100.00)	4830375 (100.00)	1795590 (100.00)	50988 (100.00)	33241 (100.00)	1711361 (100.00)

Figures in brackets are the percentage to the all sizes * This includes area having below 0.02 hectares

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	69013	5026	534636	628675	4314	3913	98590	106817
2	Kollam	54457	1393	426377	482227	4315	340	92992	97647
3	Pathanamthitta	29523	1155	219295	249973	2629	370	86542	89541
4	Alappuzha	35704	758	367616	404078	2750	28	80367	83145
5	Kottayam	23149	3688	321207	348044	2111	1314	143072	146497
6	Idukki	32090	11797	249793	293680	5654	8192	190190	204036
7	Eranakulam	48489	641	436902	486032	3302	82	122281	125665
8	Thrissur	57437	596	445382	503415	3843	62	119719	123624
9	Palakkad	58361	6702	343479	408542	7665	4899	173746	186310
10	Malappuram	38913	1698	437813	478424	3997	960	138662	143619
11	Kozhikode	25824	1575	408828	436227	2968	457	119441	122866
12	Wayanad	4581	21258	109217	135056	942	6640	93418	101000
13	Kannur	14554	3915	337461	355930	2923	1975	156972	161870
14	Kasaragod	30051	5705	172369	208125	3575	4009	95369	102953
	State	522146	65907	4830375	5418428	50988	33241	1711361	1795590

6. Number and area of operational holdings according to tenure and tenancy status (excluding holdings less than 0.02 hectare)

Sl No	Category wise size class (Ha)	All social groups													
		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	Marginal 0.02-0.99	4381145	856443	4329271 (98.82)	843838 (98.53)	2301 (0.05)	402 (0.05)	24606 (0.56)	4669 (0.54)	24967 (0.57)	4947	1480	1107	7534 (0.88)	
2	Small 100-1.99	279738	383445	276511 (98.85)	379305 (98.92)	89 (0.03)	147 (0.04)	279 (0.10)	352 (0.09)	2859 (1.02)	2337	752	552	3641 (0.95)	
3	Semi-medium 2.00-3.99	97750	255000	96745 (98.97)	252349 (98.96)	59 (0.06)	163 (0.07)	140 (0.14)	341 (0.13)	806 (0.83)	1390	314	443	2147 (0.84)	
4	Medium 4.00-9.99	21486	114321	21212 (98.73)	112843 (98.71)	11 (0.05)	71 (0.06)	9 (0.04)	52 (0.05)	254 (1.18)	530	322	503	1355 (1.18)	
5	Large 10 & above	3185	178081	3158 (99.15)	176404 (99.06)	12 (0.38)	1265 (0.71)	-	-	15 (0.47)	273	112	27	412 (0.23)	
6	All categories	4783304	1787290	4726897 (98.82)	1764739 (98.74)	2472 (0.05)	2048 (0.12)	25034 (0.52)	5414 (0.30)	28901 (0.61)	9477	2980	2632	15089 (0.84)	

The figures in brackets are the percentage to the total area

6 (a) Number and area of operational holdings according to tenure and tenancy status

Sl No	Category wise size class (Ha)	Scheduled Caste												
		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	Marginal 0.02-0.99	391785	43769	385979 (98.52)	42486 (97.07)	270 (0.07)	18 (0.04)	2272 (0.58)	419 (0.96)	3264 (0.83)	607	157	82	846 (1.93)
2	Small 1.00-1.99	2956	3782	2769 (93.68)	3538 (93.55)	-	-	19 (0.64)	23 (0.61)	168 (5.68)	192	23	6	221 (5.84)
3	Semi-medium 2.00-3.99	555	1494	528 (95.14)	1432 (95.85)	5 (0.90)	10 (0.67)	-	-	22 (3.96)	48	4	-	52 (3.48)
4	Medium 4.00-9.99	40	208	40 (100.00)	208 (100.00)	-	-	-	-	-	-	-	-	-
5	Large 10 & above	5	61	5 (100.00)	61 (100.00)	-	-	-	-	-	-	-	-	-
6	* All categories	395341	49314	389321 (98.48)	47725 (97.78)	275 (0.07)	28 (0.06)	2291 (0.58)	442 (0.89)	3454 (0.87)	847	184	88	1119 (2.27)

The figures in brackets are the percentage to the total area
* excluding holdings less than 0.02 hectare

6 (b). Number and area of operational holdings according to tenure and tenancy status

Scheduled Tribe

Sl No	Category wise size class (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	Marginal 0.02-0.99	46762	14952	45218 (96.70)	14466 (96.75)	-	-	1447 (3.09)	446 (2.98)	97 (0.21)	14	12	14	40 (0.27)
2	Small 1.00-1.99	8543	11411	8375 (98.03)	11181 (97.98)	-	-	150 (1.76)	204 (1.79)	18 (0.21)	11	15	-	26 (0.23)
3	Semi-medium 2.00-3.99	2094	5089	2065 (98.61)	5015 (98.55)	-	-	24 (1.15)	58 (1.14)	5 (0.24)	8	8	-	16 (0.31)
4	Medium 4.00-9.99	285	1555	285 (100.0)	1555 (100.0)	-	-	-	-	-	-	-	-	-
5	Large 10 & above	10	136	10 (100.0)	136 (100.0)	-	-	-	-	-	-	-	-	-
6	*All categories	57694	33143	55953 (96.98)	32353 (97.62)	-	-	1621 (2.81)	708 (2.13)	120 (0.21)	33	35	14	82 (0.25)

The figures in brackets are the percentage to the total area

* excluding holdings less than 0.02 hectare

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

Sl. No	Category of holdings and size groups (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	Marginal 0.02-0.99	4329271 (91.59)	2301 (93.08)	24606 (98.20)	24967 (86.39)	843838 (47.82)	402 (19.63)	4669 (86.24)	7534 (49.93)
2	Small 1.00-1.99	276511 (5.85)	89 (3.60)	279 (1.11)	2859 (9.89)	379305 (21.49)	147 (7.18)	352 (6.50)	3641 (24.13)
3	Semi-medium 2.00-3.99	96745 (2.04)	59 (2.39)	140 (0.56)	806 (2.79)	252349 (14.30)	163 (7.96)	341 (6.30)	2147 (14.23)
4	Medium 4.00-9.99	21212 (0.45)	11 (0.44)	9 (0.04)	254 (0.88)	112843 (6.39)	71 (3.46)	52 (0.96)	1355 (8.98)
5	Large 10 & above	3158 (0.07)	12 (0.49)	-	15 (0.05)	176404 (10.00)	1265 (61.77)	-	412 (2.73)
6	* All categories	4726897 (100.0)	2472 (100.0)	25034 (100.0)	28901 (100.0)	1764739 (100.0)	2048 (100.0)	5414 (100.0)	15089 (100.0)

* excluding holdings less than 0.02 hectare

8. Distribution of leased in area by terms of leasing

Sl. No	Category of holdings and size groups (Ha)	Area leased in for (in hectares)						Total
		Fixed money	Fixed produce	Share of produce	Usafractory mortgage	Other terms		
1	2	3	4	5	6	7	8	
1	Marginal 0.02-0.99	245 (60.95)	23 (5.72)	20 (4.97)	-	114 (28.36)	402 (100.00)	
2	Small 1.00-1.99	44 (29.93)	1 (0.68)	1 (0.68)	-	101 (68.71)	147 (100.00)	
3	Semi-medium 2.00-3.99	108 (66.26)	-	-	-	55 (33.74)	163 (100.00)	
4	Medium 4.00-9.99	71 (100.0)	-	-	-	-	71 (100.00)	
5	Large 10 & above	-	-	-	-	1265 (100.00)	1265 (100.00)	
6	* All categories	468 (22.85)	24 (1.17)	21 (1.03)	-	1535 (74.95)	100.00	

Figures in brackets are the percentage to the total

* excluding holdings less than 0.02 hectare

9. Land utilization pattern 1980-81, 1985-86 and 1990-91

Sl. No.	1980-81			1985-86			1990-91		
	Area	Percentage		Area	Percentage		Area	Percentage	
1	3	4	5	6	7	8			
1	1592436	88.43	1542783	87.33	1556284	87.08			
2	30094	1.67	26064	1.48	19928	1.11			
3	24426	1.36	21976	1.24	19165	1.07			
4	9585	0.53	23228	1.32	20625	1.15			
5	26661	1.48	31450	1.78	27500	1.54			
6	117541	6.53	121094	6.85	143788	8.05			
7	1800743	100.00	1766595	100.00	1787290	100.00			

9 (a) District wise distribution of Land Utilisation

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	92486	546	230	513	339	11347	105461
2	Kollam	86719	275	263	347	256	8933	96793
3	Pathanamthitta	81372	520	298	634	129	6280	89233
4	Alappuzha	69803	955	573	300	1402	9486	82519
5	Kottayam	130812	1191	1369	601	557	11442	145972
6	Idukki	182536	1812	689	6211	2242	9310	202800
7	Eranakulam	107391	1043	769	879	1182	13573	124837
8	Thrissur	107711	1022	1120	493	1381	11229	122956
9	Palakkad	156901	4336	4254	1396	4889	14212	185988
10	Malappuram	116622	3898	3356	2283	4154	12732	143045
11	Kozhikode	106084	1184	1019	1541	2520	10321	122669
12	Wayanad	87133	998	2424	2180	1491	6513	100739
13	Kannur	143124	955	1237	1350	3433	11707	161806
14	Kasaragod	87590	1193	1564	1897	3525	6703	102472
	State	1556284	19928	19165	20625	27500	143788	1787290

9 (b) District wise percentage distribution of land utilisation

District	Net area sown			Current fallow			Other uncultivated land			Fallow land other than current fallow			Cultivable waste			Land not available for cultivation		
	1980-81	1985-86	1990-91	1980-81	1985-86	1990-91	1980-81	1985-86	1990-91	1980-81	1985-86	1990-91	1980-81	1985-86	1990-91	1980-81	1985-86	1990-91
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Thiruvananthapuram	5.13	5.64	5.94	1.43	1.53	2.74	0.80	2.09	1.20	2.15	4.59	2.49	1.52	2.06	1.23	6.07	7.16	7.89
Kollam	7.64	5.93	5.57	2.10	1.27	1.38	1.42	3.47	1.37	5.77	4.81	1.68	1.28	0.90	0.93	9.07	6.40	6.21
Pathanamthitta	-	4.78	5.23	-	4.06	2.61	-	2.02	1.56	-	4.28	3.07	-	1.20	0.47	-	4.14	4.37
Alappuzha	6.16	4.86	4.48	9.19	3.16	4.79	0.97	3.79	2.99	2.86	1.94	1.46	4.61	3.90	5.10	8.92	6.76	6.60
Kottayam	8.21	8.75	8.41	10.98	7.79	5.98	1.75	4.99	7.14	4.02	9.01	2.91	1.70	1.25	2.03	7.04	6.90	7.96
Idukki	10.39	9.31	11.73	4.15	5.52	9.09	2.26	3.91	3.60	4.80	22.32	30.11	1.71	7.96	8.15	9.85	7.83	6.48
Eranakulam	7.96	6.98	6.90	4.23	3.05	5.23	3.31	4.27	4.01	6.85	5.25	4.26	3.70	4.06	4.30	11.58	8.45	9.44
Thrissur	7.00	7.55	6.92	6.10	7.40	5.13	7.65	12.34	5.84	7.10	3.80	2.39	3.24	4.56	5.02	4.31	8.85	7.81
Palakkad	9.79	10.29	10.08	13.43	21.32	21.76	8.71	20.00	22.20	9.89	12.65	6.77	21.09	19.75	17.78	7.76	10.94	9.88
Malappuram	9.77	7.48	7.49	12.62	18.33	19.56	7.14	13.84	17.51	20.86	19.85	11.07	18.83	15.91	15.10	11.10	8.41	8.85
Kozhikode	10.27	7.18	6.82	5.37	1.63	5.94	23.54	3.19	5.32	15.72	3.92	7.47	7.02	2.16	9.17	7.98	7.07	7.18
Wayanad	4.85	5.92	5.60	2.38	10.13	5.01	1.04	5.67	12.65	4.41	1.59	10.57	16.88	7.53	5.42	1.46	3.17	4.53
Kannur	12.83	9.69	9.20	28.02	9.50	4.79	41.41	8.61	6.45	15.62	7.51	6.55	18.50	10.12	12.48	14.86	9.45	8.14
Kasaragod	-	5.64	5.63	-	5.31	5.99	-	11.81	8.16	-	8.48	9.20	-	18.64	12.82	-	4.47	4.16
State	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
Actual	15.92	15.43	15.56	0.30	0.26	0.20	0.24	0.22	0.19	0.10	0.23	0.21	0.27	0.31	0.28	1.18	1.21	1.44

10. Percentage of area under main land use to the total operated area by the districts 1990-91, 1985-86 & 1980-81

Sl. No	Districts	Net cultivated area			Uncultivated land			Land not available for cultivation			Total		
		90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	88.21	88.97	91.18	1.03	2.21	0.90	10.76	8.82	7.92	100.00	100.00	100.00
2	Kollam	89.88	90.25	91.13	0.89	2.13	0.93	9.23	7.62	7.94	100.00	100.00	100.00
3	Pathanamthitta	91.77	91.64	-	1.19	2.22	-	7.04	6.14	-	100.00	100.00	-
4	Alappuzha	85.75	87.64	89.20	2.76	2.90	1.54	11.49	9.46	9.26	100.00	100.00	100.00
5	Kottayam	90.43	91.99	93.35	1.73	2.41	0.88	7.84	5.60	5.77	100.00	100.00	100.00
6	Idukki	90.90	88.95	92.74	4.49	5.24	0.82	4.61	5.81	6.44	100.00	100.00	100.00
7	Ernakulam	86.86	88.81	88.86	2.27	2.81	1.70	10.87	8.38	9.44	100.00	100.00	100.00
8	Thrissur	88.43	88.26	93.04	2.44	3.75	2.80	9.13	7.99	4.16	100.00	100.00	100.00
9	Palakkad	86.69	85.99	89.98	5.67	7.08	4.88	7.64	6.93	5.14	100.00	100.00	100.00
10	Malappuram	84.25	85.41	87.96	6.85	7.35	4.84	8.90	7.24	7.20	100.00	100.00	100.00
11	Kozhikode	87.45	91.10	89.93	4.14	1.88	4.96	8.41	7.02	5.11	100.00	100.00	100.00
12	Wayanad	87.48	92.32	91.87	6.05	3.91	6.11	6.47	3.77	2.02	100.00	100.00	100.00
13	Kannur	89.04	89.27	86.21	3.72	4.01	6.71	7.24	6.72	7.08	100.00	100.00	100.00
14	Kasaragod	86.64	84.79	-	6.82	10.01	-	6.54	5.20	-	100.00	100.00	-
	State	88.19	88.81	90.10	3.76	4.34	3.37	8.05	6.85	6.53	100.00	100.00	100.00

10 (a). Percentage of area under main land use to the total operated area by the State 1990-91, 1985-86 & 1980-81

Sl. No	Size class (Hectares)	Percentage of area under													
		Net cultivated area				Uncultivated land				Land not available for cultivation				Total	
		90-91	85-86	80-81		90-91	85-86	80-81		90-91	85-86	80-81		85-86	80-81
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1	Marginal (0.02-0.99)	86.18	86.65	88.92	2.82	3.79	2.32	11.00	9.56	8.76	100.00	100.00	100.00		
2	Small (1.00-1.99)	91.57	91.39	92.47	3.38	4.17	3.23	5.05	4.44	4.30	100.00	100.00	100.00		
3	Semi medium (2.00 - 3.99)	91.38	91.33	92.34	3.95	4.52	3.94	4.67	4.15	3.72	100.00	100.00	100.00		
4	Medium (4.00 - 9.99)	89.26	89.59	91.00	5.04	5.80	4.28	5.70	4.61	4.72	100.00	100.00	100.00		
5	Large (10.00 & above)	85.31	88.66	82.63	8.02	5.91	6.99	6.63	5.43	10.38	100.00	100.00	100.00		
6	All sizes	88.19	88.81	90.10	3.76	4.34	3.37	8.05	6.85	6.53	100.00	100.00	100.00		

11. Percentage of net cultivated area, total uncultivated area and land available for cultivation in 1990-91, 1985-86 & 1980-81

Sl. No.	Size class (Hectares)	Net cultivated area			Uncultivated land			Land not available for cultivation		
		1990-91	1985-86	1980-81	1990-91	1985-86	1980-81	1990-91	1985-86	1980-81
1	2	3	4	5	6	7	8	9	10	11
1	Marginal (0.02-0.99)	46.83	44.73	40.87	35.88	40.05	28.50	46.38	44.51	40.43
2	Small (1.00-1.99)	22.28	22.27	22.70	19.25	20.78	21.22	22.15	22.20	22.64
3	Semi medium (2.00 - 3.99)	14.78	15.80	18.86	14.99	16.01	21.53	14.79	15.81	18.96
4	Medium (4.00 - 9.99)	6.47	7.47	10.95	8.55	9.89	13.78	6.56	7.58	11.05
5	Large (10.00 & above)	9.64	9.73	6.62	21.33	13.27	14.97	10.12	9.90	6.92
6	All sizes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

**11 (a). Percentage of area under land available for cultivation, net cultivated area and land uncultivated by districts –
1990-91, 1985-86 & 1980-81**

Sl. No	Districts	Land available for cultivation			Net cultivated area			Land uncultivated		
		1990-91	1985-86	1980-81	1990-91	1985-86	1980-81	1990-91	1985-86	1980-81
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	5.73	5.44	4.93	5.90	5.57	5.06	1.61	2.84	1.33
2	Kollam	5.35	5.71	7.34	5.52	5.85	7.54	1.29	2.82	2.05
3	Pathanamthitta	5.05	4.66	-	5.19	4.77	-	1.58	2.37	-
4	Alappuzha	4.44	4.76	6.10	4.49	4.83	6.22	3.38	3.28	2.87
5	Kottayam	8.18	8.55	8.04	8.37	8.74	8.26	3.75	4.67	2.09
6	Idukki	11.77	9.34	9.99	11.70	9.25	10.28	13.59	11.15	2.42
7	Ernakulam	6.77	6.80	7.75	6.88	6.91	7.89	4.20	4.48	4.04
8	Thrissur	6.80	7.50	6.94	6.90	7.55	6.99	4.45	6.56	5.62
9	Palakkad	10.45	10.81	10.01	10.23	10.48	9.85	15.66	17.67	14.30
10	Malappuram	7.93	7.93	9.99	7.65	7.66	9.82	14.55	13.48	14.44
11	Kozhikode	6.84	6.89	10.35	6.81	7.08	10.18	7.55	2.99	15.02
12	Wayanad	5.73	5.96	4.94	5.59	5.99	4.80	9.06	5.19	8.54
13	Kannur	9.13	9.65	13.62	9.14	9.69	13.11	8.95	8.90	27.28
14	Kasaragod	5.83	6.00	-	5.63	5.63	-	10.38	13.60	-
	State	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

12. Crop-wise percentage distribution of gross cropped area during 1990-91, 1985-86 and 1980-81

Sl.No.	Name of crop	1990-91	1985-86	1980-81
1	2	3	4	5
1	Paddy	16.08	18.24	26.2
2	Coconut	27.10	23.40	20.9
3	Tapioca	5.08	5.15	11.6
4	Rubber	16.22	13.74	10.2
5	Cashew	3.47	4.08	4.6
6	Tea	1.55	1.52	0.9
7	Pepper	8.10	7.43	3.4
8	Coffee	2.69	2.56	2.4
9	Arecanut	1.98	1.68	2.3
10	Mango	1.92	2.61	1.5
11	Banana	5.65	6.05	2.6
12	Others	10.16	12.94	13.4
	All crops	100.00	100.00	100.00

13. Percentage distribution of area under principal crops in different size classes 1990-91

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)	39.41	69.68	76.56	30.57	48.80	-	51.84	23.09	47.27	77.45	72.57
2	Small (1.00-1.99)	29.39	15.88	13.45	28.45	15.36	-	25.81	20.55	22.37	13.39	14.97
3	Semi medium (2.00 - 3.99)	19.67	9.14	7.69	19.79	9.94	-	14.73	20.78	16.34	6.03	8.50
4	Medium (4.00 - 9.99)	9.44	3.20	1.78	9.81	7.48	-	5.91	9.92	10.54	2.03	3.22
5	Large (10.00 & above)	2.09	2.10	0.52	11.38	18.42	100.00	1.71	25.66	3.48	1.10	0.74
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

14. District wise intensity of cropping 1990-91

Sl.No	Districts	Net area sown	Gross cropped area	Intensity of cropping
	2	3	4	5
1	Thiruvananthapuram	92486	147271	159.24
2	Kollam	86719	151668	174.90
3	Pathanamthitta	81372	116698	143.41
4	Alappuzha	69803	119293	170.90
5	Kottayam	130812	188300	143.95
6	Idukki	182536	262057	143.56
7	Eranakulam	107391	164966	153.61
8	Thrissur	107711	152576	141.65
9	Palakkad	156901	238468	151.99
10	Malappuram	116622	187086	160.42
11	Kozhikode	106084	152068	143.35
12	Wayanad	87133	130486	149.75
13	Kannur	143124	200275	139.93
14	Kasaragod	87590	120398	137.46
	State	1556284	2331610	149.82

15. Percentage of Gross cropped area under selected crops

Sl. No	Size of holding	Percentage of area under												
		Paddy	Pepper	Banana	Mango	Cashew	Tapioca	Coconut	Arecanut	Tea	Coffee	Rubber	Others	All crops
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Marginal (0.02-0.99)	12.33	8.16	7.97	2.89	3.29	6.82	36.87	1.82	-	1.21	9.64	9.00	100.00
2	Small (1.00-1.99)	22.41	9.91	4.01	1.22	2.52	3.14	20.40	2.10	-	2.63	21.87	9.79	100.00
3	Semimedium (2.0-3.99)	23.18	8.74	3.52	0.85	2.52	2.86	18.13	2.37	-	4.10	23.51	10.22	100.00
4	Medium (4.00 - 9.99)	24.94	7.85	2.99	0.64	4.26	1.49	14.26	3.43	-	4.39	26.13	9.62	100.00
5	Large (10.00 & above)	4.34	1.79	0.54	0.27	8.24	0.34	7.36	0.89	19.97	8.92	23.83	23.51	100.00
6	All sizes	16.08	8.10	5.65	1.92	3.47	4.68	27.17	1.98	1.55	2.69	16.22	10.49	100.00

16. District wise percentage distribution of area of holdings according to irrigation status 1990-91, 1985-86 and 1980-81

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	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Thiruvananthapuram	0.68	1.00	4.11	17.97	18.36	12.24	5.28	5.11	4.71	5.96	6.11	8.82	81.35	80.64	83.65	100.0	100.0	100.0
Kollam	0.08	0.04	0.09	27.79	14.29	6.15	4.54	2.95	1.87	4.62	2.99	1.96	72.13	85.67	93.76	100.0	100.0	100.0
Pathanamthitta	0.07	0.02	-	22.06	10.39	-	7.56	4.10	-	7.63	4.12	-	77.87	89.59	-	100.0	100.0	-
Alappuzha	0.50	0.85	11.87	53.12	56.73	28.44	26.14	23.94	14.37	26.64	24.79	26.24	46.38	42.42	59.69	100.0	100.0	100.0
Kottayam	0.13	0.18	0.71	21.40	15.77	11.70	5.07	3.41	2.56	5.20	3.59	3.27	78.47	84.05	87.59	100.0	100.0	100.0
Idukki	0.77	1.46	-	20.08	10.86	6.60	7.12	5.29	1.51	7.89	6.75	1.51	79.15	87.68	93.40	100.0	100.0	100.0
Eranakulam	5.73	5.71	9.65	61.24	54.56	44.98	28.00	23.45	21.02	33.73	29.16	30.67	33.03	39.73	45.37	100.0	100.0	100.0
Thrissur	15.30	5.98	37.89	59.58	68.91	33.20	40.33	42.48	16.67	55.63	48.46	54.56	25.12	25.11	28.91	100.0	100.0	100.0
Palakkad	1.47	2.55	13.48	59.14	57.11	46.09	39.24	34.75	27.40	40.71	37.30	40.88	39.39	40.34	40.43	100.0	100.0	100.0
Malappuram	0.78	1.39	2.71	40.80	38.55	36.48	18.44	16.45	15.02	19.22	17.84	17.73	58.42	60.06	60.81	100.0	100.0	100.0
Kozhikode	0.67	0.73	2.34	16.23	15.30	15.20	4.76	3.91	3.13	5.43	4.64	5.47	83.10	83.97	82.46	100.0	100.0	100.0
Wayanad	0.04	0.04	-	35.38	19.57	26.94	7.49	4.88	5.20	7.53	4.92	5.20	64.58	80.39	73.06	100.0	100.0	100.0
Kannur	0.24	0.18	0.60	26.30	32.82	26.05	12.75	7.24	14.45	12.99	7.42	15.05	73.46	67.00	73.35	100.0	100.0	100.0
Kasaragod	4.36	2.94	-	51.88	53.84	-	25.30	19.45	-	29.66	22.39	-	43.76	43.22	-	100.0	100.0	-
State	2.16	1.71	6.33	36.51	33.77	24.69	16.80	14.63	11.05	18.96	16.34	17.38	61.33	64.52	68.98	100.0	100.0	100.0

16 (a) Percentage of area irrigated from different sources by major size groups - 1990-91, 1985-86 and 1980-81

Category of holdings Size group	Canal			Tank			Well			Tube well			Other sources			All sources		
	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Marginal (0.02-0.99)	41.45	36.40	36.5	54.81	52.56	47.1	55.02	52.15	51.6	53.26	30.48	15.4	45.73	41.16	35.4	48.98	44.64	41.6
Small (1.00-1.99)	26.35	27.35	28.5	20.03	21.12	25.4	22.69	22.53	19.5	16.65	15.09	36.9	25.96	25.55	26.5	23.93	24.43	25.3
Semi medium (2.00 - 3.99)	21.00	21.97	21.4	14.12	15.09	17.7	14.47	15.64	18.7	7.09	14.92	27.2	17.89	18.49	22.0	16.95	18.15	20.4
Medium (4.00 - 9.99)	10.39	11.34	12.0	7.83	6.28	8.3	5.51	6.22	9.4	5.62	9.54	17.3	7.32	8.25	13.3	7.71	8.29	11.1
Large (10.00 & above)	0.81	2.94	1.6	3.21	4.95	1.5	2.31	3.46	0.8	17.98	29.97	3.2	3.10	6.55	2.8	2.43	4.49	1.6
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

16 (b) Percentage distribution of size class wise area irrigated by different sources -1990-91, 1985-86 and 1980-81

Category of holdings Size group	Canal			Tank			Well			Tube well			Other sources			All sources		
	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Marginal (0.02-0.99)	24.46	24.80	37.9	18.74	16.75	12.5	34.48	36.18	34.2	1.62	0.64	0.1	20.70	21.63	15.3	100.0	100.0	100.0
Small (1.00-1.99)	31.82	34.04	48.4	14.02	12.30	11.1	29.11	28.55	21.2	1.00	0.58	0.5	24.05	24.53	18.8	100.0	100.0	100.0
Semi medium (2.00 - 3.99)	35.81	36.81	45.2	13.96	11.83	9.6	26.21	26.69	25.3	0.62	0.77	0.5	23.40	23.90	19.4	100.0	100.0	100.0
Medium (4.00 - 9.99)	38.93	41.56	46.2	17.01	10.77	8.2	21.92	23.24	23.4	1.09	1.07	0.6	21.05	23.35	21.6	100.0	100.0	100.0
Large (10.00 & above)	9.56	19.94	43.6	22.10	15.72	10.6	29.11	23.90	13.8	11.00	6.23	0.7	28.23	34.21	31.3	100.0	100.0	100.0
All sizes	28.89	30.41	43.0	16.75	14.23	11.0	30.70	30.97	27.6	1.49	0.93	0.4	22.17	23.46	18.0	100.0	100.0	100.0

16 (c) Distribution of district wise holdings receiving irrigation by different sources - 1990-91

Sl No	District	Source of irrigation												Total	
		Canal		Tank		Well		Tube wells		Other sources		No.	%		
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1	Thiruvananthapuram	95988	4.64	4794	1.68	28820	4.73	340	1.20	17392	5.55	49298	4.28		
2	Kollam	2304	1.11	2868	1.01	49413	8.11	226	0.80	7965	2.54	59270	5.15		
3	Pathanamthitta	6708	3.24	1479	0.52	10080	1.65	60	0.21	12800	4.09	29420	2.56		
4	Alappuzha	9114	4.41	97827	34.37	57795	9.48	6714	23.168	37346	11.92	196175	17.05		
5	Kottayam	2729	1.32	2706	0.95	16496	2.71	296	1.05	9868	3.15	25278	2.20		
6	Idukki	1164	0.56	3122	1.10	7170	1.18	20	0.07	14215	4.54	20224	1.76		
7	Eranakulam	48141	23.28	15513	5.45	62339	10.23	914	3.22	29164	9.31	133295	11.59		
8	Thrissur	39557	19.13	60196	21.15	137291	22.53	2243	7.91	53593	17.11	232498	20.21		
9	Palakkad	54314	26.26	25766	9.05	50473	8.28	1115	3.93	32586	10.40	122063	10.61		
10	Malappuram	7525	3.64	21540	7.57	56348	9.25	1812	6.39	22332	7.13	87600	7.61		
11	Kozhikode	8814	4.26	9063	3.18	28134	4.62	337	1.19	14676	4.68	38242	3.32		
12	Wayanad	1290	0.62	1806	0.63	4914	0.81	29	0.10	12961	4.14	16629	1.45		
13	Kannur	8176	3.95	16103	5.66	25555	4.19	10714	37.79	27190	8.68	45175	3.93		
14	Kasaragod	73.93	3.58	21866	7.68	74543	12.23	3532	12.46	21192	6.76	95261	8.28		
	State	206817	100.00	284649	100.00	609371	100.00	28353	100.00	313280	100.00	1150428	100.00		

16 (d) Distribution of district wise area irrigated by different sources in 1990-91

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	1500	1.80	588	1.15	2010	2.22	36	0.70	1379	2.12	5513	1.87		
2	Kollam	437	0.53	194	0.38	1902	2.10	14	0.27	1458	2.24	4005	1.36		
3	Pathanamthitta	1851	2.23	128	0.25	609	0.67	12	0.23	3611	5.55	6211	2.10		
4	Alappuzha	2042	2.46	10408	20.38	1657	1.83	702	13.63	3786	5.82	18595	6.30		
5	Kottayam	1133	1.36	1039	2.04	1257	1.39	73	1.42	3300	5.07	6802	2.31		
6	Idukki	395	0.47	5884	11.52	3036	3.35	454	8.82	4628	7.11	14397	4.88		
7	Ernakulam	11451	13.78	2877	5.63	10967	12.10	241	4.68	10681	16.42	36217	12.28		
8	Thrissur	14417	17.35	8357	16.37	25831	28.51	272	5.28	11045	16.97	59922	20.31		
9	Palakkad	41951	50.47	3939	7.71	10393	11.47	816	15.84	6936	10.66	64035	21.71		
10	Malappuram	1961	2.35	2568	5.03	10996	12.14	303	5.88	6583	10.12	22411	7.60		
11	Kozhikode	1580	1.90	520	1.02	2816	3.11	8	0.16	834	1.28	5758	1.95		
12	Wayanad	533	0.64	142	0.28	934	1.03	22	0.43	4929	7.58	6560	2.22		
13	Kannur	2042	2.46	10407	20.38	1457	1.61	1370	26.60	3319	5.10	18595	6.30		
14	Kasaragod	1822	2.19	4015	7.86	16737	18.47	825	16.06	2578	3.96	25979	8.81		
	State	83115	100.0	51066	100.0	90602	100.0	5150	100.0	65067	100.0	295000	100.0		

16 (e) Percentage of number of holdings irrigated by different sources in each district 1990-91

Sl No	District	Source of irrigation								Total
		Canal	Tank	Well	Tube wells	Other sources	8			
1	2	3	4	5	6	7	8			
1	Thiruvananthapuram	15.68	7.91	47.23	0.45	28.73	100.00			
2	Kollam	3.63	4.43	78.93	0.29	12.72	100.00			
3	Pathanamthitta	21.61	4.27	32.49	0.14	41.49	100.00			
4	Alappuzha	4.20	47.02	27.71	3.14	17.93	100.00			
5	Kottayam	8.40	8.44	51.78	0.80	30.58	100.00			
6	Idukki	4.48	11.91	27.84	0.06	55.71	100.00			
7	Eranakulam	30.80	9.90	40.18	0.51	18.61	100.00			
8	Thrissur	13.48	20.61	46.96	0.74	18.21	100.00			
9	Palakkad	33.09	15.73	30.69	0.65	19.84	100.00			
10	Malappuram	6.87	19.71	51.46	1.57	20.39	100.00			
11	Kozhikode	14.48	14.87	46.10	0.49	24.06	100.00			
12	Wayanad	5.93	8.74	22.67	0.09	62.27	100.00			
13	Kannur	9.28	18.31	29.19	12.12	31.10	100.00			
14	Kasaragod	5.67	17.04	58.15	2.65	16.49	100.00			
	State	14.29	19.78	42.32	1.90	21.71	100.00			

16 (f) Percentage of area irrigated by different sources in each district - 1990-91, 1985-86 and 1980-81

District	Source of irrigation																																
	Canal						Tank						Well						Tube wells						Other sources						Total		
	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81	90-91	85-86	80-81			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19															
Thiruvananthapuram	27.26	17.55	32.3	10.71	8.39	7.2	36.29	25.20	26.5	0.43	0.56	0.4	25.31	48.30	33.6	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			
Kollam	10.46	1.77	-	4.50	3.54	1.0	47.94	56.94	27.9	0.25	0.33	-	36.85	37.42	71.0	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			
Pathanamthitta	29.54	16.67	-	1.97	5.35	-	9.57	4.59	-	0.11	0.06	-	58.81	73.33	-	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			
Alappuzha	10.96	7.71	35.0	56.03	57.13	36.0	8.88	11.75	12.3	3.74	1.88	0.3	20.39	21.53	16.4	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			
Kottayam	16.35	15.41	40.9	15.25	14.82	32.1	18.48	27.21	16.2	1.02	1.06	-	48.90	41.50	10.8	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			
Idukki	3.72	6.21	24.9	29.94	19.46	-	26.94	28.62	0.3	3.71	7.34	-	35.69	38.37	74.8	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			
Eranakulam	31.21	34.45	62.6	7.39	8.73	5.1	29.95	34.84	18.0	0.51	0.27	0.4	30.90	21.71	13.9	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		
Thrissur	24.50	23.97	44.4	14.20	15.44	8.3	42.06	38.11	35.8	0.43	0.40	1.1	18.81	22.08	10.4	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		
Palakkad	66.04	68.98	67.4	6.00	5.04	4.1	16.18	17.08	23.2	1.11	0.80	0.1	10.67	8.09	5.2	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		
Malappuram	8.69	9.53	-	11.32	11.70	9.6	49.32	45.17	38.1	1.20	0.44	-	29.47	33.16	52.3	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		
Kozhikode	27.80	35.81	29.4	8.64	6.53	1.7	48.66	43.67	43.6	0.07	0.94	-	14.83	13.05	25.3	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		
Wayanad	9.09	8.43	9.0	2.57	2.37	9.2	5.21	3.70	0.2	0.14	0.23	-	82.99	85.27	81.6	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		
Kannur	11.11	7.05	26.2	57.13	7.17	21.5	7.84	42.16	38.9	5.71	0.26	-	18.21	43.36	13.4	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		
Kasaragod	7.11	19.24	-	15.64	19.88	-	64.85	50.12	-	2.33	1.48	-	10.07	18.28	-	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		
State	28.89	30.41	43.0	16.75	14.23	11.0	30.70	30.97	27.6	1.49	0.93	0.4	22.17	23.46	18.0	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		

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

SI No	Size class	Number of wells in use					Number of tube wells			
		With pumpset		Total (3+4)	Without pumpset	Electric	Diesel	Electric	Diesel	Total (7+8)
		Electric	Diesel							
1	2	3	4	5	6	7	8	9		
1	Marginal (0.02-0.99)	193681	27315	220996	334187	14699	3535	18234		
2	Small (1.00-1.99)	37105	8402	45507	22564	1329	284	1613		
3	Semi medium (2.00 - 3.99)	16694	3712	20406	5778	584	134	718		
4	Medium (4.00 - 9.99)	5003	928	5931	679	78	30	108		
5	Large (10.00 & above)	572	134	706	49	15	5	20		
6	All sizes	253055	40491	293546	363257	16705	3988	20693		

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

SI No	District	Number of wells in use					Number of tube wells			
		With pumpset		Total (3+4)	Without pumpset	Electric	Diesel	Electric	Diesel	Total (7+8)
		Electric	Diesel							
1	2	3	4	5	6	7	8	9		
1	Thiruvananthapuram	7540	515	8055	21524	866	315	1180		
2	Kollam	16030	753	16783	28405	683	373	1056		
3	Pathanamthitta	3313	36	3349	9046	321	21	342		
4	Alappuzha	8510	326	8836	51087	5343	49	5392		
5	Kottayam	4966	366	5332	9407	1301	61	1362		
6	Idukki	1580	419	1999	1997	140	61	201		
7	Eranakulam	45737	421	46158	27021	1002	130	1132		
8	Thrissur	79243	8193	87436	50458	1416	755	2171		
9	Palakkad	16469	6506	22975	22913	1654	633	2287		
10	Malappuram	21746	9910	31656	29489	596	336	933		
11	Kozhikode	16469	2496	18965	18913	1164	774	1938		
12	Wayanad	460	562	1022	2231	148	20	168		
13	Kannur	12710	4160	16870	46997	1343	250	1593		
14	Kasaragod	18282	5828	24110	43768	727	211	938		
	State	253055	40491	293546	363257	16705	3988	20693		

17. Intensity of irrigation

Sl.No.	Size class (Hectares)	Intensity of Irrigation		
		1990-91	1985-86	1980-81
1	2	3	4	5
1	Marginal (0.02-0.99)	144.75	151.92	137.20
2	Small (1.00-1.99)	128.03	139.12	149.78
3	Semi medium (2.00 - 3.99)	120.88	138.68	140.28
4	Medium (4.00 - 9.99)	133.92	136.21	135.65
5	Large (10.00 & above)	130.79	115.44	157.14
6	All sizes	135.37	143.22	141.20

17 (a) District-wise percentage distribution of gross cropped area according to irrigation status 1990-91

Sl.No	Districts	Irrigated	Unirrigated	Total
1	2	3	4	5
1	Thiruvananthapuram	1.88	7.23	6.02
2	Kollam	1.37	7.57	5.67
3	Pathanamthitta	2.10	5.60	5.24
4	Alappuzha	6.32	4.87	4.49
5	Kottayam	2.31	9.27	8.54
6	Idukki	4.76	12.58	11.98
7	Eranakulam	12.44	5.97	6.79
8	Thrissur	20.52	3.65	6.70
9	Palakkad	21.75	7.84	9.87
10	Malappuram	7.60	8.11	7.35
11	Kozhikode	1.95	7.47	6.90
12	Wayanad	2.11	6.32	5.64
13	Kannur	6.25	9.07	9.30
14	Kasaragod	8.64	4.45	5.51
	State	100.00	100.00	100.00

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