



Government of Kerala



**REPORT ON
INPUT SURVEY
2006-07**

**Economics & Statistics
Thiruvananthapuram
2012**

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Preface

The Ministry of Agriculture carried out the first Input survey as a part of the Agricultural Census Scheme in 1976-77 as the reference period. The present report brings out the consolidated State results of the Input Survey 2006-07 which is the seventh one in the series. The basic unit of survey is "Operational Holdings" as distinct from ownership holding, because Operational Holding is the basic unit for decision making for micro level planning.

The survey provides crucial information on use of variety of seeds, chemical fertilizers, organic manures, pesticides and IPM for irrigated and un irrigated areas separately. The survey also covers live stock held, use of agricultural machinery and implements and agricultural credit availed.

The data on Input Survey have been collected by Taluk Statistical Officers/Statistical Inspectors and supervised by District level officers of this department.

The State level supervision has been done by the State Technical Officer of the Scheme. Scrutiny and other related works have been done by the nuclear staff working in this scheme. Data processing, tabulation and estimation have been done by the computer division of this department.

I would like to appreciate the efforts put in by the Agriculture Division for bringing out this publication. Sri.M.Narayanan, Assistant Director, Smt.S.C Soni and Sri.P.K John Research Assistants, Sri.B.Nadirsha, Statistical Assistant Grade-II and Smt.Sreelatha K.V Confidential Assistant of Agriculture Census Division had taken the responsibility of preparing the report under the guidance and Supervision of Sri.T.Gorkey Jose Additional Director and Sri.A.Rajan Joint Director and State Technical officer of Agriculture Census Division.

I hope that this report will be highly useful to planners, researchers and those who are interested in the field of Agricultural Statistics.

Sri. V.Ramachandran
DIRECTOR

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CHAPTER –I

Introduction

From the commencement of first Five Year Plan, various schemes were taken up to improve the contents and coverage of Agricultural Statistics and their accuracy. The planning and execution of Agricultural programmes are often handicapped for want of comprehensive and reliable data. Due to planned development and expansion of economy, new problems of formulation and execution of projects for more intensified and diversified development have become essential. This has necessitated further improvement of their quality and content of Agricultural Statistics. During the successive five year plans, a number of measures were taken up with a view to filling up gaps in the existing agricultural statistics and devise base and means of extending its scope.

Starting with the II Agriculture Census 1976-77, Input Survey has been conducted as a follow up survey of the Agriculture Census. Seven input surveys with reference year 1976-77, 81-82, 86-87, 91-92, 96-97, 2001-02 and 2006-07 have been completed so far. The present report on input survey 2006-07 is the seventh in the series.

In the past, approach to agricultural planning in India was mainly restricted to setting out targets of production for different crops and other agricultural commodities at the national and state levels. In the absence of detailed data on existing and potential resources for various agro-climatic reasons at the farm levels the task of planning from the grass root becomes difficult. At the farm level, it is the farmer who decides what to produce, when to produce and how much to produce. The programme and incentives which are given to the farmers

should take into account the basic characteristics of the farmers holdings such as the size distribution, the pattern of land use, availability of water and the resources in human, animal and mechanical power on the farm. It is in this context that agricultural census / Input survey becomes important. Thus the main objective of the input survey is to generate data on consumption of various agricultural inputs according to major size groups of operational holdings i.e., marginal (1 ha.) small (1-1.99 ha.), semi medium (2.00 – 3.99 ha.), medium (4-9.99 ha.) and large (10 ha. and above). This information is vital for planning, production, imports and distribution of fertilizers. The inputs covered are chemical fertilizer HYV seeds, pesticides, farm yard manures/compost, bio-fertilizers, agriculture implements, machinery, livestock and agricultural credit.

The detailed analysis of data on different parameters of the Input Survey may be seen in the reports. It is expected that different data users, particularly policy makers, administrators, researchers and various institutions concerned with Agricultural Statistics will find this report useful.

CHAPTER –II

Concepts and definitions

Operational Holding

‘All land used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others, without regard to the 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’. It is clear from this definition that the actual cultivator and not the owner is the unit for collection of data.

If, during the reference year, the entire area of the operational holdings is under current fallow, this will still be considered as an operational holding for Agricultural Census, but no information can be gathered in Input Survey from

such holding. These holdings will not be included in the sampling frame for Input Survey.

Parcel

A parcel is all land entirely surrounded by land of other holdings or by land not forming part of any holding. It may consist of one or more cadastral units, plots or fields.

Operational holder

The holder, for census purposes, is the person who has the responsibility for the operation of the agricultural holding. He exercises the technical initiative and responsibility for the operation of the holding and may have full economic responsibility.

Individual/ Joint Holding

- i. If the holding is operated either by a person alone or group of persons who are members of the same household, it will be considered as individual operational holding.
- ii. 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 holdings such holdings are considered as joint holdings.

Total area of holding

The total area of the holding should include the total of all land forming part of a unit which is under the same technical responsibility and management. It should also comprise the land occupied by the farm buildings, including the house of the holder, provided such buildings are within the cultivated area. If the farm buildings are located outside cultivated area, then such buildings will not be included in the area of the holding.

Agriculture production

Agricultural Production would mean the growing of field crops, fruits, grapes, nuts, seeds, trees' nurseries (except those of forest trees), bulbs, vegetables and flowers, production of coffee, tea, cocoa, rubber, jute, oilseeds, grasses, etc.

If special efforts are made to raise grass, it would be treated as a crop for the purpose of the survey.

Net Area Sown

This would represent the total cultivated area during the reference year. Areas cultivated more than once during the same year will be counted only once. Both field crops and orchards will form part of the net sown area.

Gross cropped area

This includes the total area under all crops during the year. Total gross cropped area is greater than or equal to net area sown.

Area under Current fallow

This would include all the areas which are usually cropped but have not been cultivated during the reference year. For an area to be classified as current fallow, it should be fallow during the current year and should have been cultivated during the previous year. If an area is not being cultivated for more than one year, it will be categorized as old fallow or culturable waste.

Area not available for cultivation

This would include the following seven categories:-

- a) Fallow land other than current fallow: This should include all lands which were 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.
- ii) Culturable waste: This should include lands available for cultivation, whether or not taken up for cultivation at any time. These are lands which were 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 fallow or covered with

shrubs and jungles which are not put to any use. Land once cultivated but not cultivated afterwards for five years in succession should also be included in this category at the end of the five years. Culturable waste land within the holdings would alone be covered for the Input Survey.

iii) Permanent pastures and other grazing land: This should include all grazing lands, whether they are permanent pastures and meadows or not. Village common grazing land shall be excluded for the purpose of our Census.

iv) Land under miscellaneous tree crops: This would include cultivable land, which is not included in the net area sown but are put to some Agricultural use. Lands under Casuarine trees, thatching grasses, bamboo bushes and 'Orchards' should be classed under this category. Lands of this type outside the holdings will not be included.

v) Forests: Only private forests would be covered for the purpose of Agricultural Census and Input Survey.

vi) Area under non-agricultural use: This should include all lands occupied by buildings, tanks and ponds put to uses other than agricultural purpose within the holdings.

vii) Barren and uncultivated land: This should include all barren and within cultivated holding.

Short Term Loan:

Short term Loan are those which are given for seasonal agricultural operations and their repayment period is usually less than 18 months.

Medium Term Loan:

Medium term loans are advances for specific purposes. The repayment period is more than 18 months but less than five years.

Long Term Loan

These loans are provided in three or more installments for the development of land on project area basis and are capital intensive in nature. The period of long term loan exceeds five years.

Integrated Pest Management

Traditionally there have been a number of practices adopted by farmers as plant protection measures. These practices could be categorized in four groups, viz., agronomic and cultural control, mechanical control, biological control and chemical control.

Agronomic and cultural practices

This is a preventive method and is based upon knowledge of life history and habits of pest. The practices covered in this category include: deep ploughing after harvesting a crop to expose the hiding or resting insects, weeding, removing and destroying of stubbles and other trash, adjusting the time of sowing to avoid peak incidence period of pests. Clean cultivation, the removal of alternative wild hosts, crop rotations and choosing of insect and disease varieties.

Physical and Mechanical Control

This is one of the oldest methods and includes measures, such as collection of eggs and caterpillars (in active stages if pests): removal and destruction of infested part of the plant, beating of drums, laying of night traps and yellow traps. These methods are found effective at initial state of the pest incidence when practiced by a large number of farmers in a particular area.

Biological Control

Most of the crops have their natural enemies in the form of parasites and predators and disease causing organism. Large scale multiplication and liberation

of such other agents, which naturally occur in environment but are enemies of enemies of crops (friends of crops) results in effective control of the harmful organisms. These methods are often applied by specialized agencies in conjunction with chemical methods so that harmful effects of insecticide do not interfere with the activities of nature based enemies of pests.

Chemical control

This methods relates to use of insecticides, pesticides and weedicides, which are used as dusts, sprays and granules on the crops. Because of their nature of producing immediate results such chemicals are most popular among the farmers. Serious limitations, particularly those relating to residues on crops and destruction of useful insects, have been noted in recent years in usage of these chemicals.

Chemical Fertilizers, Organic Manure, Green Manure and Bio-Fertilizers

Package of practices followed for replenishing the nutrient losses from the soil as a result of cultivation to maintain the fertility of the soil involves use of organic manure, green manure, chemical fertilizers and bio-fertilizers. These are explained below:

Chemical Fertilizers

The chemical fertilizers refers to chemical compounds which are manufactured in factories and are used as soil nutrients. These are further classified as “macronutrients” which supply nitrogen (N), phosphate (P) and Potash (K) and “micronutrient” fertilizers which supply Zinc, Manganese, Copper, Iron, Aluminum etc. The popular macro nutrient fertilizers are Urea, DAP, MOP, CAN and a number of complex fertilizers and the physical mixtures of these.

Organic Manure

The Organic Manure is usually not manufactured in chemical factories and is produced by the farmers in their fields using various types of agricultural

wastes. Sometimes these are also prepared using the sewage silt or municipal waste in urban areas. The organic manure is usually bulky material and is transported in trolleys. The types of manures covered in this would be Farm Yard Manure (FYM), which is prepared by putting agricultural wastes in a pit for decomposition and composting. This would also include the Vermi Compost. The various forms of oil cakes which are used as fertilizers would also fall in this category.

Bio-fertilizers

Bio-fertilizers are sold in small packets and require storage at specified temperature. These carry some living bacteria on organic base. The examples of bio-fertilizers are Rhizobium, Azabactor, Blue-green Algae and Phosphate Solubilising Bacteria (PSB). When bio-fertilizers are put in the soil, the bacteria contained in the fertilizer packet are spread in the soil and start their activity, e.g., fixing the nitrogen from air to soil. Hence bio-fertilizers are not soil nutrients in themselves, rather they act as catalysts/direct agents for making the soil nutrients available. These type of fertilizers are not very common among farmers and only some progressive farmers use them. Also because of their storage requirements these are not available everywhere.

Green Manure

Green manure refers to cultivation of a specific type of vegetation with the intention of ploughing it back in the soil when the leaves are tender and easily decomposable. The popular types of green manure used by the farmers include Sesbania (Dhencia), Sunhemp (Sanai), Indigo, Urd and Cowpea. There is also a practice of ploughing back the leafy portion of leguminous crops in the field after first or second picking for the purpose of green manuring. All such cases will be counted for the purpose of obtaining area under green manure.

Chapter -III

Sampling Design and Estimation Procedure

Objective

The main objective of the survey is to generate data on various agricultural inputs according to major size group of operational holdings viz. marginal (below 1 hectore), small (1 to 2 hectore), semi-medium (2-4 hectore) medium (4 to 10 hectores) and large (10 hectore and above), for getting an insight into the consumption pattern of inputs by various categories of farmers. This information is vital for planning their production, inputs and distribution. The inputs covered in the survey include seeds, fertilizers, pesticides, farm yard manures, bio fertilizers, agricultural implements and machinery, live stock and agricultural credits.

Scope and Coverage:

All the individual and joint holdings operated by resident cultivators constitute the population of the survey. The survey covers all type of agricultural holdings except institutional holdings. Boundary of the survey was district.

Reference Period:

The reference period of the survey was July 2006-June, 2007.

Items covered in the Survey

Under the Input Survey 2006-2007 information was collected according to size class of operational holding for the following items.

- (1) Number of parcels
- (2) Multiple cropping, separately for irrigated and unirrigated areas.
- (3) Use of fertilizers, organic manures and pesticides, separately for irrigated and unirrigated areas under major crops. (Area covered and quantity used)
- (4) Live stock held (numbers)

- (5) Use of Agricultural machinery and Implements
- (6) Agricultural credit availed.
- (7) Type of seeds used and quality problems if any
- (8) Integrated Pest Management (IPM) practices.

Unit of collection of data

The basic unit for which data for various parameters of the input survey were collected was "operational holding".

Sample size and Methodology

A two stage stratified sampling was adopted for the input survey 2006-07. Blocks/Municipalities/Corporations constitute the strata, wards within a stratum form first stage unit (FSU) and operational holdings in the selected wards constitute the second stage unit (SSU). The sample size of the 'FSU' was 7% of the total number of wards. From each Stratum i.e. 35% of the wards selected randomly out of the 20% wards already selected for phase I and II of Agricultural Census 2000-01. In a selected ward all the operational holdings was categorized into the following size groups.

Sl.No.	Size Groups
1.	Below 1 hecter
2.	1 to 1.99 hecter
3.	2.00 to 3.99 hecters
4.	4.00 to 9.99 hecters
5.	10 hecters and above.

A simple random sample of four operational holdings was selected from each of the above size groups. The data were collected through household enquiries from the selected operational holders.

Schedules used:

The following schedules were used in input survey 2006-07.

1. Schedule -0 = Information on number of wards selected in Blocks /Municipalities/Corporations
2. Schedule -1 = List of operational holdings and record of selection in the selected wards.
3. Schedule 2.0 = Information on holdings in the selected ward in the Blocks/Municipalities/Corporations
4. Schedule 2.1 = Parcel wise details of area under multiple cropping according to irrigated and unirrigated conditions during the agricultural year 2006-2007
5. Schedule 2.2 = Area under irrigated / un-irrigated crops and use of fertilizers, pesticides etc. during the agricultural year 2006-07
6. Schedule 2.3 = Inventory of Livestock as on 15.10.2007
7. Schedule 2.4 = Agricultural machinery and implements used during 2006-07
8. Schedule 2.5 = Agricultural credit
9. Schedule 2.6 = Seeds and Integrated Pest Management (IPM) practices.

Estimation Procedure

For estimating the population totals of various characteristics in the input survey 2006-07, “simple unbiased estimates” method was adopted which is described below.

Notations and Terminology

1. $Y_{ijp}(k)$ = value of characteristic in the p^{th} holding of j^{th} ward of i^{th} Block/Municipality/Corporation (Stratum) in the k^{th} size class
2. $N_{ij}(k)$ = Total number of holdings in the k^{th} size class in the j^{th} sample ward of the i^{th} Block/Municipality/Corporation
3. $n_{ij}(k)$ = Number of holdings sampled in the k^{th} class in the j^{th} selected ward of the i^{th} Block/Municipality/ Corporation
4. N_i = Total number of wards in the i^{th} Block/Municipality/Corporation
5. n_i = Number of wards selected in the i^{th} Block/Municipality/Corporation
6. $\hat{Y}_T(k)$ = Estimate of characteristic under study for the i^{th} Block/Municipality / Corporation in the k^{th} size class.
7. $\hat{Y}_D(k)$ = Estimate of characteristic under study for the district in the k^{th} size class
8. M = Number of Blocks / Municipalities / Corporation in the district

Then the estimate of the characteristic under study for the i^{th} Block/ Municipality/ Corporation (ie. Stratum) in the k^{th} size class is given by the formula

$$\hat{Y}_T(k) = \frac{N_i}{n_i} \sum_{j=1}^{n_i} \frac{N_{ij}(k)}{n_{ij}(k)} \sum_{p=1}^{n_{ij}(k)} Y_{ijp}(k) \quad (1)$$

And for the district, it becomes

$$\hat{Y}_D(k) = \sum_{i=1}^M \frac{N_i}{n_i} \sum_{j=1}^{n_i} \frac{N_{ij}(k)}{n_{ij}(k)} \sum_{p=1}^{n_{ij}(k)} Y_{ijp}(k) \quad (2)$$

$$= \sum_{i=1}^M \hat{Y}_T(k)$$

Chapter-IV

Analysis of Input Survey Data

Distribution of Operational Holdings and Operated Area

According to Input Survey 2006-07 the total number of operational holdings was 68.38 lakhs against the operated area of 15.12 lakhs ha (excluding institutional holdings). The corresponding figures as per Agricultural Census 2005-06 were 69.04 lakhs against the operated area of 15.55 lakhs.

Thus both the surveys were very close in estimating the total number of holdings and operated area in the state. Since the Input Survey, institutional holdings and other type of holdings are excluded, it is normally expected that the number and area of holdings as per the input survey should be less than the corresponding data of Agricultural Census, although Input Survey is carried out after one year of the Agricultural Census.

Dispersal of Operational Holdings

A parcel has been defined as “all land entirely surrounded by land of other holdings or land not forming part of any holding”. It may consist of one or more cadastral units or fields and may not be synonymous with survey number. Three or four adjoining survey numbers could make one parcel but two survey numbers of the same Panchayath ward not adjacent to each other, would make two parcels.

An Operational holding may consist of one or more than one parcel. The more the number of parcels, the more scattered will be the operational holding.

All the parcels comprising an operational holding may lie within the ward of residence of the holder or might even be spread over one or more other wards.

The data on number of parcels was collected by interviewing the selected operational holder with a view to have information about the dispersal of operational holdings in different parts of the country. However, the outer limit for collecting the information in Input Survey was restricted to the district. Since an Operational Holding will have at least one parcel, the average number of parcels per Operational Holding cannot be less than one. The distribution of average number of parcels, average area per parcel and average area per holding in different size groups as per input survey 2001-02 may be seen in Table I.

Table -I

Sl. No.	Size Group (Ha)	Total holdings		Total No. of parcels	Average No. of parcels per holding	Average area per parcel (ha)	Average area per holding (ha)
		No.	Area				
1	< 1.0	6543990	960722	7537490	1.15	.13	0.15
2	1.0-1.99	210981	282471	441281	2.09	0.64	1.34
3	2.0-3.99	67683	171931	163483	2.42	1.05	2.54
4	4.0-9.99	13898	72582	36998	2.66	1.96	5.22
5	>10	1551	24278	3133	2.02	7.75	15.65
	All groups	6837903	1511984	8182385	1.20	0.18	0.22

From the above table it can be observed that the number of parcels per holding for all size groups was 1.2 in 2006-07 against 1.16 in 2001-02. This shows that the number of parcels per holding had increased. The trend in the number of parcels per holding over the period of times in each type of holdings is increasing.

The average area per parcel for all groups at state level was 0.18 ha during 2006-07 against 0.21 ha in 2001-02. This shows a marginal decrease.

The average operated area per holding for all size groups was 0.22 ha in 2006-2007 against 0.24 ha in 2001-02, which showed a decline. This is due to the inverse relationship between number and area of operational holdings.

Table -II

Sl. No.	Size (Ha)	Gross Cropped Area			Current fallow Land	Other Un cultivated land
		Irrigated area	Unirrigated Area	Total Area		
1	< 1.0	166155	647013	813168	19269	154492
2	1.0-1.99	72340	193525	265865	5127	27449
3	2.0-3.99	46056	119913	165969	2164	14588
4	4.0-9.99	21460	48650	70110	417	6637
5	> 10	7322	15649	22971	43	1612
	All groups	313333	1024750	1338083	27020	204778

The gross cropped area is 1338083 ha. Of which 313333 ha is irrigated and 1024750 ha is unirrigated i.e., 23.42% is irrigated and 76.58% is unirrigated.

Table- III

Sl. No.	Size (Ha)	Irrigated Area		Unirrigated Area	
		Gross area	Net Area	Gross Area	Net Area
1	< 1.0	166155	160066	647013	626894
2	1.0-1.99	72340	69743	193525	18051
3	2.0-3.99	46056	44537	119913	110644
4	4.0-9.99	21460	20851	48650	44682
5	>10	7322	7322	15649	15305
	All groups	313333	302519	1024750	977676

From the above table, it can be observed that the irrigated and unirrigated area (both gross and net) shows a diminishing trend when compared to the previous survey.

The method of multiple cropping is used as an indicator of the intensity of land utilization. The percentage of area cropped once is 84 in irrigated area where as that in unirrigated area is 99.12. The percentage of area cropped twice and more than twice in irrigated area are 15.69 and 0.31 respectively. But the percentage of area cropped more than twice in unirrigated area is 0.88 only. The result shows an increase in irrigated area from 2001-02 to 2006-2007 i.e from 77.81% to 84%, and a decrease in irrigated area cropped twice and cropped more than twice i.e from 21.39% to 15.69% and from 0.8% to 0.31% respectively. Similarly there is an increase in unirrigated area from 2001-02 to 2006-07, i.e. from 96.82 to 99.12, but a decrease in unirrigated area cropped more than twice, i.e. from 3.18% to 0.88%. This means that the cultivators show least interest in multiple cropping.

Table C₃ shows a slight increase in the percentage of gross cropped area by irrigation status during 2006-07 from 2001-02. The percentage of gross cropped area in 2006-07 is 23.42 and that in 2001-02 is 23.23. The percentage of gross cropped area shows lack of irrigation facilities or under utilization of available irrigation potentials.

Table C₄ indicates that the average gross cropped area per operational holding decreased from 0.22 hectares in 2001-02 to 0.20 hectares in 2006-07.

The intensity of cropping is the ratio of gross cropped area to net cropped area. From table C₅ it is seen as 1.05 in the survey period 2006-07. The intensity ratio was 1.48 in 1986-87, 1.45 in 1991-92 and 1.14 in 1996-97 and 1.08 in 2001-02. This shows that there is a decreasing trend in gross cropped area. Gross cropped area under irrigated crop was 313333 hectares and unirrigated crop was 1024750 hectares. Net area under irrigated crop was 302519 hectares and for unirrigated crop, it was 977676 hectare.

From table C₆, it can be observed that 7.27% was occupied by paddy and 92.67% of irrigated area under paddy covers high yielding varieties. 4.93% of gross area under unirrigated crop is paddy where as 80.60% of this area is used for high yielding varieties of paddy. Again it can be seen that even though there was huge short fall in the percentage of irrigated area under paddy, percentage area under high yielding variety is increasing.

From table C₇, it is seen that the percentage of gross cropped area of paddy during the year 2006-07 was 5.48 while that during the year 2001-02 was 7.85. Here a decrease of 30% is seen. For coconut, the percentage of variation compared to that of the year 2001-02 is 17% (decrease). In short coconut was the most dominant crop having a share of about 28.06% of gross cropped area followed by rubber (24.7%), Paddy (5.48%) etc. See table C₈ and C₉.

Crop wise use of Inputs

Application of Chemical fertilizers.

Chemical fertilizers is used to increase agricultural production and pesticides and IPM to protect the crop from insects and pests. Besides chemical fertilizers, organic manure is also used to enhance the soil fertility. The most commonly used chemical fertilizers are urea, potash, factomphos super sulphate and Ammonium phosphate. On the other hand Farm yard Manure (FYM) / compost and oil cake are the most common organic manures used by the cultivators. The input survey data were collected separately for area under high yielding and others and quantity of fertilizers used. Normally the first dose of fertilizer is given at the sowing stage and subsequently one or more applications are given to the crop. Thus the same area may receive one or more application of fertilizers but for the purpose of estimation of area fertilized, only net area under the crop in a particular season has been taken in to account.

It may be seen from the table C10 that the number of holdings irrigated are 2223778 in an area of 313332 hectare. Out of 2223778 holdings growing one or more irrigated crops, 765145 holdings are treated with one or more chemical fertilizers (34.41%) in an area of 197375 hectares (62.99%). Also 95.1% of irrigated area cultivating High Yield Varieties was treated with chemical fertilizers. In the case of other varieties in irrigated area, 46.11% area are treated with one or more chemical fertilizers (see table C11)

The average consumption of NPK in irrigated area according to the quality of fertilizers treated per hectare were 25.63, 20.34 and 35.14 kg. respectively. (See table C12).

Application of Straight Fertilizers (Irrigated area)

The result of table C13 and C14 show that urea is the most commonly used chemical fertilizer i.e. 18.04% of the holdings comprising of 40.84% of area were treated with urea. The usage of potash stands in the second place i.e. 16.55%, of holdings and the area is 39.01% of irrigated area. It is seen that Ammonium Phosphate is the least used fertilizer.

Consumption of mixed fertilizers in irrigated area

The main fertilizers commonly used are 20:20:0 factomphos and N.P.K Mixture Vijay 17:17:17. The percentage of usage is 24.83% and 9.5% respectively in irrigated area under all crops. (See Table C15, C16)

Crop wise Consumption of chemical Fertilizers (Irrigated)

The application of chemical fertilizers for paddy in High Yielding variety was 97.62% while 74.10% of area under traditional varieties was treated with chemical fertilizers.

Average consumption of N, P, K under irrigated paddy were 27.74, 20.11 and 53.00 kg./hectare respectively (See table C 19).

The percentage of number of holdings growing Tapioca treated with chemical fertilizer were 32.69 where as chemical fertilizer were used in 52.73% of area growing Tapioca in irrigated area (Table C20).

37.81% of irrigated area growing coconut was treated with chemical fertilizers. Average quantity of NPK consumed per hectare was 68, 63 & 55 Kg./hectare respectively (Table C21)

97% of irrigated area under rubber was treated with chemical fertilizer. The quantity of NPK consumed was calculated as 23, 19 and 18 kg / hectare respectively (Table C 22)

Considering other food crops, 44.3% of area was treated with chemical fertilizer. The estimated quantity of N,P,K nutrients being 5.42, 1.75, 1.29kg./hectare respectively [Table C 23]

Chemical Fertilizers in Unirrigated Area

There are 63,08953 unirrigated holdings and the corresponding area is 1024743 hectares. 22.88% of unirrigated holdings growing one or more crops was treated with chemical fertilizers. In respect of unirrigated area under High Yielding Variety, 84.6% of area was treated with chemical fertilizers where as for traditional varieties, it was only 25.2 % [Table C 24,].

Average consumption of N,P,K were estimated as 40.7, 32.4 & 55.8 kg/hectare in irrigated area and 37.3, 34.0 and 36.5 kg/hac unirrigated area respectively. Potash is seen as the main straight fertilizer i.e 12.80 % of area was treated with potash. Urea stands in the second place and 10.25% of area was treated with urea.

Factomphos was the most important complex / mixed fertilizer used in unirrigated area (15.26%) followed by Vijay 17:17:17(10.11%) [Table C27 to C29]

91.51 % of unirrigated area under paddy were treated with chemical fertilizers. For high yielding varieties of paddy in unirrigated area 98.16 % of area were used with chemical fertilizer whereas for other varieties it was only 63.88%. Average use of N, P, K for paddy in unirrigated area were 14.11, 9.50 and 44.75 kg./hectares respectively.

42.51 % of area under Tapioca in unirrigated area was treated with chemical fertilizers and 21.65% of area under coconut also was treated with chemical fertilizer. The average consumption of N, P, K being 51.57, 45.44, 55.81 kg./hectare [Table 34, 35]

It is clear from table C 36 that 82.58 % of area under Rubber in unirrigated area were treated with chemical fertilizers. The average consumption of N, P, K was 36.92, 36.28 and 24.79 respectively. Only 3.84 % of area was treated with chemical fertilizer when other food crops are considered. The use of N, P, K was 2.76, 1.72 and 2.89 kg./ hectare respectively.

Organic Manure in irrigated and unirrigated areas

Nearly 52.14 % of holdings having an area of 158543 hectares (50.60%) used Farm Yard Manure/compost/Biogas manure in irrigated area. Green manures were used in 40.22 % of holdings, the area benefited being 112023 (35.75%). High Yielding Varieties of paddy were used in 25.16 % of area whereas other varieties were used in 67.51 % of area. Area covered by other organic manure was 2513 hectares (11.91%) for paddy (HIYV), whereas for others it was 91 (5.46%). The area of Coconut treated with farm yard manures was 61.05% whereas for Tapioca it was 42.44%.

Plant Protection Chemicals and Pesticides

The plant protection in respect of high yielding varieties of paddy was 63.79% and for other varieties it was 40.59%.

Agricultural Machinery & Implements

During 2006-07, the number of Agricultural machinery commonly used were

1. Hand operated Sprayers	-	253042
2. Wooden Plough	-	20084
3. Steel Plough	-	18285
4. Power Sprayers	-	22748
5. Diesel Engine Pump sets	-	34481
6. Electric Pump sets	-	633352
7. Power Tillers	-	41962
8. Tractors	-	93623

[Table C 44]

It is seen that the Agricultural machinery & implements except Hand operated sprayers, Electric Pump sets, Power Tillers used are less in number when compared with Input Survey 2001-02.

Agricultural Credit

The number of operational holdings taking institutional credit was reported as 5,61,373 which came to be 8.21% only. The average amount availed / holder increased from 8936 (2001-02) to 18369 (2006-07) [Table C45, C46].

During the survey period Rs.1031.21 crores were given as advance to 561373 holdings through various financial institutions. The details of the percentage distribution of holders availed loan through different types of Co-operative institutions are described in table C 47.

The details of estimated number of cattle reported by operational holdings by size groups are described in Table C 48.

AGRICULTURAL CENSUS - INPUT SURVEY 2006-07

STATE : KERALA

TABLE C1

AVERAGE NUMBER OF PARCELS PER HOLDING AND AVERAGE AREA OF PARCEL

Sl.No.	Holding size class (in Ha)	1991-92		1996-97		2001-02		2006-07	
		Average No. of parcels per holdings	Average area of parcels(Ha)	Average No. of parcels per holdings	Average area of parcels(Ha)	Average No. of parcels per holdings	Average area of parcels(Ha)	Average No. of parcels per holdings	Average area of parcels (Ha)
1	2	3	4	5	6	7	8	9	10
1	Below 1.0	1.88	0.11	2	0.13	1.07	0.15	1.15	0.13
2	1.00 - 1.99	2.88	0.48	3	39.00	2.04	0.65	2.09	0.64
3	2.00 - 3.99	3.29	0.79	4	68.00	4.10	0.62	2.42	1.05
4	4.00 - 9.99	3.89	1.36	5	1.12	8.19	0.65	2.66	1.96
5	10.00 & Above	4.39	5.20	4	4.79	10.40	1.67	2.02	7.75
	All sizes	1.98	0.18	2	0.19	1.16	0.21	1.20	0.18

TABLE C2

PERCENTAGE OF AREA CROPPED ONCE AND MORE THAN ONCE BY IRRIGATION STATUS 2006-07

Sl.No.	Holding size class (in Ha)	Irrigated area				Unirrigated area		
		Cropped once	Cropped twice	Cropped more than twice	Total	Cropped once	Cropped more than twice	Total
1	2	3	4	5	6	7	8	9
1	Below 1.0	87.77	11.8	0.35	100	99.03	0.97	100
2	1.00 - 1.99	79.62	20.06	0.32	100	99.15	0.85	100
3	2.00 - 3.99	77.56	22.19	0.25	100	99.38	0.62	100
4	4.00 - 9.99	79.36	20.48	0.15	100	99.46	0.54	100
5	10.00 & Above	95.60	4.40	0	100	99.86	0.14	100
	All sizes	84	15.69	0.31	100	99.12	0.88	100
	1991 - 92 all sizes	56.10	2.30	21.60	100	38	62	100
	1996 - 97 all sizes	70.52	27.18	2.30	100	92.43	7.57	100
	2001-02 all sizes	77.81	21.39	0.80	100	96.82	3.18	100
	2006-07 all sizes	84	15.69	0.31	100	99.12	0.88	100

TABLE C3
PERCENTAGE OF GROSS CROPPED AREA BY IRRIGATION STATUS -2006-07

Sl.No.	Holding size class (in Ha)	Irrigated	Unirrigated	Total
1	2	3	4	5
1	Below 1.0	20.43	79.57	100
2	1.00 - 1.99	27.21	72.79	100
3	2.00 - 3.99	27.75	72.25	100
4	4.00 - 9.99	30.61	69.39	100
5	10.00 & Above	31.87	68.13	100
	All sizes	23.42	76.58	100
	1991 - 92 all sizes	16.70	83.30	100
	1996 - 97 all sizes	24.77	75.23	100
	2001 - 02 all sizes	23.23	76.77	100
	2006-07 all sizes	23.42	76.58	100

TABLE C4
AVERAGE GROSS CROPPED AREA PER OPERATIONAL HOLDINGS 2006-07

Sl. No	Holding size class (in Ha)	Irrigated area			Unirrigated area			Total			
		Cropped once	Cropped twice	Cropped more than twice	Cropped once	Cropped more than twice	2006-07	2001-02	1996-97	1991-92	
1	2	3	4	5	6	7	8	9	10	11	
1	Below 1.0	0.02	0.0037	0.0002	0.09	0.003	0.12	0.14	0.31	0.19	
2	1.00 - 1.99	0.26	0.0775	0.0023	0.85	0.022	1.21	1.31	1.69	1.43	
3	2.00 - 3.99	0.51	0.1666	0.0035	1.62	0.030	2.33	2.57	3.16	2.80	
4	4.00 - 9.99	1.19	0.3484	0.0050	3.20	0.052	4.80	5.47	6.11	5.63	
5	10.00 & Above	4.51	0.2076	0	9.85	0.043	14.61	17.7	31.88	19.04	
	All sizes	0.04	0.0084	0.0003	0.14	0.004	0.19	0.22	0.53	0.32	

TABLE C5

INTENSITY OF CROPPING BY IRRIGATION STATUS 2006-07

Sl.No.	Holding size class (in Ha)	Irrigated crop	Unirrigated crop	Total
1	2	3	4	5
1	Below 1.0	1.04	1.03	1.03
2	1.00 - 1.99	1.04	1.07	1.06
3	2.00 - 3.99	1.03	1.08	1.06
4	4.00 - 9.99	1.03	1.09	1.07
5	10.00 & Above	1	1.02	1.02
6	All sizes	1.04	1.05	1.05

TABLE C6

PERCENTAGE DISTRIBUTION OF AREA UNDER PADDY TO GROSS CROPPED AREA AND AREA UNDER HYV OF PADDY TO TOTAL AREA UNDER PADDY ON IRRIGATION STATUS

Sl.No.	Holding size class (in Ha)	Irrigated		Unirrigated	
		% area under paddy to gross cropped area	% area under HYV to total area under paddy	% area under paddy to gross cropped area	% area under HYV to total area under paddy
1	2	3	4	5	6
1	Below 1.0	6.21	96	3.2	76.17
2	1.0 - 1.99	8.08	84.76	7.84	78.36
3	2.0 - 3.99	9.75	95.75	8.51	87.91
4	4.0 - 9.99	8.63	94.44	8.12	92.89
5	10 and Above	3.66	73.88	2.91	86.15
	All size	7.27	92.67	4.93	80.60
	1991 - 92 all sizes	49.80	33.60	10.40	33.50
	1996 - 97 all sizes	48.37	59.80	11.50	32.40
	2001 - 02 all sizes	17.5	84.29	4.92	63.61
	2006-07 all sizes	7.27	92.67	4.93	80.60

TABLE C7

PERCENTAGE DISTRIBUTION OF AREA UNDER DIFFERENT CROPS (GROSS CROPPED AREA)

Sl.No.	Crop	% of total gross cropped area					
		1991 - 92	1996 - 97	2001-02	2006-07		
		3	4	5	6	6	
1	Paddy	17.00	20.60	7.85	5.48		
2	Tapioca	5.70	2.80	2.81	2.36		
3	Coconut	29.80	28.30	33.91	28.06		
4	Areca nut	2.10	0.00	1.11	4.76		
5	Cashew	2.10	3.50	2.53	2.81		
6	Coffee	3.10	0.00	0.23	2.68		
7	Cardamom	1.30	1.40	2.09	1.25		
8	Rubber	14.80	19.80	19.61	24.70		
	Total	75.90	76.40	70.14	72.10		

TABLE C8

CROP WISE PERCENTAGE DISTRIBUTION OF IRRIGATED AREA

Sl.No.	Size class	Paddy	Coconut	Arecanut	Tapioca	Rubber	Pepper	Coffee	Cashew	Other crops	All crops
1	2	3	4	5	6	7	8	9	10	11	12
1	Below 1.0	6.21	41.93	7.20	2.16	0.19	0.90	0.04	0.08	41.29	100
2	1.00 - 1.99	8.08	29.65	9.28	1.26	0.59	0.91	0.34	0.02	49.87	100
3	2.00 - 3.99	9.75	22.78	11.42	1.25	0.72	1.11	0.60	0.12	52.25	100
4	4.00 - 9.99	8.62	22.41	7.61	1.16	1.79	1.17	2.97	0.17	54.1	100
5	10.00 & Above	3.66	16.99	9.33	0.20	0	4.40	14.15	0.03	51.24	100
	All sizes	7.27	34.36	8.38	1.70	0.47	1.03	0.72	0.08	45.99	100
	1991 - 92 all sizes	49.8	32.8	3.2	1.40	0.01	2.00	0.1	0.3	10.35	100
	1996 - 97 all sizes	48.37	32.19	-	0.93	1.06	-	0.82	-	16.63	100
	2001-02 all sizes	17.5	31.97	1.59	1.10	0.38	0.01	0.70	0.01	46.74	100
	2006-07 all sizes	7.27	34.36	8.38	1.70	0.47	1.03	0.72	0.08	45.99	100

TABLE C9

CROP WISE PERCENTAGE DISTRIBUTION OF UNIRRIGATED AREA

Sl.No.	Size class	Paddy	Coconut	Arecanut	Tapioca	Rubber	Tea	Coffee	Cashew	Pepper	Cardamom	Other crops	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Below 1.0	3.20	31.46	3.73	3.24	26.24	0.09	2.77	2.98	4.62	0.62	21.05	100
2	1.00 - 1.99	7.84	20.58	3.62	1.59	37.19	0.49	3.88	4.58	4.35	1.04	14.84	100
3	2.00 - 3.99	8.51	15.41	3.68	1.28	43.88	0.24	4.37	5.44	3.44	0.75	13	100
4	4.00 - 9.99	8.12	11.12	3.62	1.39	48.99	0.19	4.79	5.13	2.98	1.14	12.53	100
5	10.00 & Above	2.91	3.65	0.78	0.48	69.78	0.30	3.19	1.21	2.58	2.96	12.16	100
	All sizes	4.93	26.13	3.65	2.56	32.11	0.19	3.27	3.65	4.32	0.78	18.41	100
	1991 - 92 all sizes	10.40	29.30	1.9	6.6	17.6	4.9	2.4	3.7	10.2	1.6	11.4	100
	1996 - 97 all sizes	11.49	26.96	-	3.47	25.96	0.43	4.42	-	-	1.69	25.58	100
	2001 - 02 all sizes	4.92	34.5	0.97	3.33	25.43	-	3.08	0.3	0.07	-	27.4	100
	2006-07 all sizes	4.93	26.3	3.65	2.56	32.11	0.19	3.27	3.65	4.32	0.78	18.41	100

TABLE C10

NUMBER AND AREA OF IRRIGATED HOLDINGS AND TREATED WITH CHEMICAL FERTILIZER 2006-07

Sl.No.	Size class (in Ha)	No. of holdings growing one or more irrigated crops			Area of holdings growing one or more irrigated crops		
		Total	No. treated with one or more chemical fertilizers	Percentage	Total	Area treated with one or more chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	2044214	634625	31.04	166153	87702	52.78
2	1.00 - 1.99	124228	87598	70.51	72343	51112	70.65
3	2.00 - 3.99	44173	34237	77.51	46051	35179	76.39
4	4.00 - 9.99	10051	757	77.18	21462	17693	82.44
5	10.00 & Above	1112	928	83.45	7323	5689	77.69
	All sizes	2223778	765145	34.41	313332	197375	62.99
	1991 - 92 all sizes	1452085	894259	61.60	335746	241641	72.00
	1996 - 97 all sizes	1267602	671734	52.99	394001	278781	70.76
	2001 - 02 all sizes	1419003	755047	53.21	340756	214385	62.91
	2006-07 all sizes	2223778	765145	34.41	313332	197375	62.99

TABLE C11

DISTRIBUTION OF IRRIGATED AREA UNDER HYV AND OTHER CROPS TREATED WITH CHEMICAL FERTILIZERS
2006-07

Sl.No.	Size class (in Ha)	High Yielding			Others		
		Total	Area treated with one or more chemical fertilizers	Percentage	Total	Area treated with one or more chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	47286	45035	95.24	118867	42667	35.89
2	1.00 - 1.99	28359	27062	95.43	43984	24050	54.79
3	2.00 - 3.99	20759	19495	93.91	25292	15684	62.01
4	4.00 - 9.99	9826	9529	96.98	11636	8164	70.16
5	10.00 & Above	1760	1577	89.6	5563	4112	73.92
	All sizes	107990	102698	95.1	205342	94677	46.11
	1991 - 92 all sizes	59869	58625	97.90	275877	183017	66.30
	1996 - 97 all sizes	121606	117675	96.77	272395	161106	59.14
	2001 - 02 all sizes	121511	107129	88.16	219245	107256	48.92
	2006-07 all sizes	107990	102698	95.1	205342	94677	46.11

TABLE C12

AVERAGE CONSUMPTION OF CHEMICAL FERTILIZERS IN TERMS OF NUTRIENTS IN IRRIGATED AREA (KG./HA)

Sl.No.	Size class (in Ha)	HYV			Others			Total		
		N	P	K	N	P	K	N	P	K
1	2	3	4	5	6	7	8	9	10	11
1	Below 1.0	32.26	20.75	58.62	31.14	25.86	23.87	31.46	24.41	33.76
2	1.00 - 1.99	21.36	16.06	52.72	21.39	18.03	33.96	21.38	17.26	41.32
3	2.00 - 3.99	18.21	15.01	53.10	19.07	16.68	33.30	18.68	15.93	37.16
4	4.00 - 9.99	15.79	13.87	28.23	14.25	12.39	26.56	14.95	13.06	27.32
5	10.00 & Above	9.30	8.66	22.23	10.67	10.40	13.45	10.34	91.98	15.56
	All sizes	24.83	17.59	50.49	26.05	21.87	27.07	25.63	20.34	35.14
	1996 - 97 all sizes	74.80	35.50	55.80	44.40	20.90	35.40	54.00	25.40	41.70
	2001 - 02 all sizes	64.90	27.54	53.19	42.15	56.74	46.55	40.98	46.33	42.27
	2006-07 all sizes	17.59	50.49	20.05	21.87	27.07	25.63	25.63	20.34	35.14

TABLE CI3

DISTRIBUTION OF HOLDINGS UNDER IRRIGATED CROPS TREATED WITH STRAIGHT FERTILIZERS

Sl.No.	Size class (in Ha)	Number of Holdings				
		Growing one or more irrigated crops	Treated with Urea	Treated with super phosphate (single)	Treated with potash	Treated with Ammonium phosphate
1	2	3	4	5	6	7
1	Below 1.0	2044214	319983	3413	290713	17440
2	1.00 - 1.99	124228	54293	1666	50775	4877
3	2.00 - 3.99	44173	21374	618	20853	2045
4	4.00 - 9.99	10051	4977	191	5051	655
5	10.00 & Above	1112	447	33	564	126
	All sizes	2223778	401074	5921	367956	25143
	1991 - 92 all sizes	1452085	329807	29573	283374	137
	1996 - 97 all sizes	1267602	394241	41906	328855	121
	2001 - 02 all sizes	1419003	513475	20570	469761	14241
	2006-07 all sizes	2223778	401074	5921	367956	25143

TABLE C14

DISTRIBUTION OF AREA UNDER IRRIGATED CROPS TREATED WITH STRAIGHT FERTILIZERS

Sl.No.	Size class (in Ha)	Area of Holdings				
		Irrigated area under all crops	Urea	Super phosphate	Potash	Ammonium phosphate
1	2	3	4	5	6	7
1	Below 1.0	166153	56657	294	51539	2839
2	1.00 - 1.99	72343	33375	727	32354	2583
3	2.00 - 3.99	46051	22888	553	22967	1836
4	4.00 - 9.99	21462	11891	386	12442	1439
5	10.00 & Above	7323	3160	154	2944	986
	All sizes	313332	127971	2114	122246	9683
	1991 - 92 all sizes	335746	155062	17690	148018	5
	1996 - 97 all sizes	394001	186665	17402	165567	128
	2001-02 all sizes	340756	214385	10787	145761	8164
	2006-07 all sizes	313332	127971	2114	122246	9683

TABLE C15

DISTRIBUTION OF HOLDINGS AND AREA UNDER IRRIGATED CROPS TREATED WITH IMPORTANT COMPLEX / MIXED FERTILIZERS 2006-07

Sl.No.	Size class (in Ha)	Growing one or more irrigated crops	Number of Holdings					Mono Ammonium Phosphate 0:52:0
			NP Mixture (Vijay) 17:17:17	Ammonium Sulphate (Factomphos) 20:20:0	Urea Ammonium Phosphate 20:20:0	NPK Mixture 10:26:26	8	
1	2	3	4	5	6	7	8	
1	Below 1.0	2044214	106376	189860	107147	25241	12191	
2	1.00 - 1.99	124228	15954	28883	14436	3255	2377	
3	2.00 - 3.99	44173	6558	13013	4735	1498	1215	
4	4.00 - 9.99	10051	1662	3409	1174	333	187	
5	10.00 & Above	1112	155	240	130	153	7	
	All sizes	2223778	130705	735405	127622	30480	15987	

TABLE C16

DISTRIBUTION OF HOLDINGS AND AREA UNDER IRRIGATED CROPS TREATED WITH IMPORTANT COMPLEX / MIXED FERTILIZERS 2006-07

Sl.No.	Size class (in Ha)	Number of Holdings					
		Under all crops	NP Mixture (Vijay) 17:17:17	Ammonium Phosphorous Sulphate (Factomphos) 20:20:0	Urea Ammonium Phosphate 20:20:0	NPK Mixture 10:26:26	Mono Ammonium Phosphate 0:52:0
1	2	3	4	5	6	7	8
1	Below 1.0	166153	12423	32675	16595	2891	533
2	1.00 - 1.99	72343	8383	18849	8178	1189	1196
3	2.00 - 3.99	46051	5498	15913	4676	848	566
4	4.00 - 9.99	21462	2605	8297	2772	407	271
5	10.00 & Above	7323	883	2060	693	745	6
	All sizes	313332	29792	77794	32914	6080	2572

TABLE C17

DISTRIBUTION OF HOLDINGS AND AREA IRRIGATED UNDER PADDY TREATED WITH CHEMICAL FERTILIZERS

Sl.No.	Size class (in Ha)	No. of holdings growing the crop			Area under the crop		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	39626	37142	93.73	10315	10012	97.06
2	1.00 - 1.99	11173	10112	90.51	5847	5374	91.91
3	2.00 - 3.99	4352	4186	96.19	4490	4372	97.37
4	4.00 - 9.99	1024	966	94.34	1851	1810	97.78
5	10.00 & Above	58	58	100	268	268	100
	All sizes	56233	52464	93.30	22771	21836	95.89

TABLE C18

**DISTRIBUTION OF AREA IRRIGATED UNDER HYV AND OTHER VARIETIES OF PADDY TREATED WITH
CHEMICAL FERTILIZERS 2006-07**

Sl.No.	Size class (in Ha)	HYV			Others		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	9902	9631	97.26	413	381	92.25
2	1.00 - 1.99	4956	4756	95.96	891	618	69.36
3	2.00 - 3.99	4299	4267	99.26	191	105	54.97
4	4.00 - 9.99	1748	1748	100	103	62	60.19
5	10.00 & Above	198	198	100	70	70	100
	All sizes	21103	20600	97.62	1668	1236	74.10

TABLE C19

AVERAGE RATE OF APPLICATION OF FERTILISERS FOR PADDY IN DIFFERENT HOLDING SIZE CLASSES UNDER IRRIGATED CONDITION 2006-07

Sl.No.	Size class (in Ha)	Paddy area treated with chemical fertilizers	N		P		K	
			Qty. applied (MT)	Average (Kg/Ha)	Qty. applied (MT)	Average (Kg/Ha)	Qty. applied (MT)	Average (Kg/Ha)
1	2	3	4	5	6	7	8	9
1	Below 1.0	10012	340.76	34.04	226.29	22.60	685.42	68.46
2	1.00 - 1.99	5374	124.52	23.17	90.97	16.93	251.19	46.74
3	2.00 - 3.99	4372	96.06	21.97	81.00	18.53	168.91	38.63
4	4.00 - 9.99	1810	36.77	20.31	33.22	18.35	46.59	25.74
5	10.00 & Above	268	7.72	28.81	7.63	28.47	5.24	19.55
	All sizes	21836	605.82	27.74	439.11	20.11	1157.35	53.00

TABLE C20

DISTRIBUTION OF HOLDINGS AND AREA IRRIGATED UNDER TAPIOCA TREATED WITH CHEMICAL FERTILIZERS 2006-07

Sl.No.	Size class (in Ha)	No. of holdings growing the crop.			Irrigated area under the crop		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	131182	40897	31.18	3585	1542	43.01
2	1.00 - 1.99	8554	4108	48.02	914	615	67.29
3	2.00 - 3.99	2633	1288	48.92	575	416	72.35
4	4.00 - 9.99	506	381	75.30	250	227	90.80
5	10.00 & Above	41	39	95.12	804	587	73.01
	All sizes	142916	46713	32.69	5339	2815	52.73

TABLE C21

DISTRIBUTION OF HOLDINGS AND AREA IRRIGATED UNDER COCONUT TREATED WITH CHEMICAL FERTILIZERS & AVERAGE CONSUMPTION IN TERMS OF NPK NUTRIENTS

Sl.No.	Size class (in Ha)	No. of holdings growing the crop			Irrigated area under the crop			Average quantity applied(Kg/Ha)		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage	N	P	K
1	2	3	4	5	6	7	8	9	10	11
1	Below 1.0	1402748	270138	19.26	69665	21603	31.01	104.58	97.01	56.76
2	1.00 - 1.99	76466	33529	43.85	21448	9770	45.55	33.32	30.24	64.16
3	2.00 - 3.99	26585	13207	49.68	10489	5407	51.55	22.49	20.81	47.7
4	4.00 - 9.99	5976	3322	55.59	4810	3137	65.22	10.74	8.86	40.38
5	10.00 & Above	706	517	73.23	1244	786	63.18	15.95	15.78	26.48
	All sizes	1512481	320713	21.20	107656	40703	37.81	67.63	62.50	55.48

TABLE C22

**DISTRIBUTION OF HOLDINGS AND AREA IRRIGATED UNDER RUBBER TREATED WITH CHEMICAL FERTILIZERS
& AVERAGE CONSUMPTION IN TERMS OF NPK NUTRIENTS**

Sl.No.	Size class (in Ha)	No. of holdings growing the crop		Irrigated area under the crop		Average quantity applied(Kg/Ha)				
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage	N	P	K
1	2	3	4	5	6	7	8	9	10	11
1	Below 1.0	5395	4067	75.38	320	315	98.44	14.70	1.43	17.33
2	1.00 - 1.99	951	779	81.91	425	395	92.94	30.08	29.06	25.19
3	2.00 - 3.99	456	438	96.05	330	328	99.39	24.45	23.41	14.42
4	4.00 - 9.99	145	145	100	385	385	100	20.29	20.47	12.91
5	10.00 & Above	0	0	0	0	0	0	0	0	0
	All sizes	6947	5429	78.15	1460	1423	97.47	22.73	19.32	17.64

TABLE C23

DISTRIBUTION OF HOLDINGS AND AREA IRRIGATED UNDER OTHER FOOD CROPS TREATED WITH CHEMICAL FERTILIZERS & AVERAGE CONSUMPTION IN TERMS OF NPK NUTRIENTS

Sl.No.	Size class (in Ha)	Irrigated area under other food crops		Percentage	Average quantity applied(Kg/Ha)		
		Total	Treated with chemical fertilizers		N	P	K
1	2	3	4	5	6	7	8
1	Below 1.0	71	27	38.03	3.42	0.00	0.65
2	1.00 - 1.99	55	35	63.64	1.92	1.70	0.55
3	2.00 - 3.99	18	1	5.56	0.01	0.01	0.01
4	4.00 - 9.99	5	3	60	0.07	0.03	0.07
5	10.00 & Above	0	0	0	0	0	0
	All sizes	149	66	44.30	5.42	1.75	7.29

TABLE C24

DISTRIBUTION OF AREA UNIRRIGATED UNDER HIGH YIELDING VARIETIES AND OTHER CROPS TREATED WITH CHEMICAL FERTILIZERS

Sl.No.	Size class (in Ha)	High yield variety			Others		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	150738	126787	84.1	496272	102864	20.7
2	1.00 - 1.99	69096	60336	87.3	124426	42916	34.5
3	2.00 - 3.99	52263	45876	87.8	67648	23494	34.7
4	4.00 - 9.99	24776	21581	87.1	23874	8354	35
5	10.00 & Above	10078	5216	51.8	5572	3006	53.9
	All sizes	306951	259796	84.6	717792	180634	25.2

TABLE C25

**CROPS WISE, IRRIGATION STATUS WISE CONSUMPTION OF CHEMICAL FERTILIZERS IN TERMS OF NPK
NUTRIENTS 2006-07**

Sl.No.	Crops	Average Consumption (Kg/Ha)		
		N	P	K
1	2	3	4	5
1	Irrigated	40.7	32.4	55.8
	Unirrigated	37.3	34.0	36.5
2	Irrigated	27.7	20.1	53
	Unirrigated	14.1	6.2	44.8
3	Irrigated	67.6	62.5	55.5
	Unirrigated	51.6	45.4	55.8
4	Irrigated	40.7	35.5	40.1
	Unirrigated	51.8	41.6	86.1
5	Irrigated	22.7	19.3	17.6
	Unirrigated	36.9	36.3	24.8

TABLE C26

RATE OF CONSUMPTION OF CHEMICAL FERTILIZERS IN UNIRRIGATED AREA IN TERMS OF NPK 2006-07

Sl.No.	Size class (in Ha)	Unirrigated area		
		N	P	K
1	2	3	4	5
1	Below 1.0	48.3	43.3	41.8
2	1.00 - 1.99	29.8	27.5	36.8
3	2.00 - 3.99	23.4	22.1	27.5
4	4.00 - 9.99	16.6	15.9	21.7
5	10.00 & Above	18.2	18.1	16.6
	All sizes	37.3	34	36.5

TABLE C27

**DISTRIBUTION OF NUMBER OF HOLDINGS OF UNIRRIGATED CROPS TREATED WITH STRAIGHT FERTILIZERS
2006-07**

Sl.No.	Size class (in Ha)	Number of Holdings						
		Growing one or more unirrigated crops	Treated with urea (46:0:0)	Treated with calcium ammonium Nitrate (25:0:0)	Treated with nuriate of potash (0:0:60)	Treated with single super phosphate (0:16:0)	Treated with Diammonium phosphate (18:46:0)	Treated with rock phosphate (0:18:0)
1	2	3	4	5	6	7	8	9
1	Below 1.0	6021896	362565	5275	371350	13082	16000	2972
2	1.00 - 1.99	205466	45447	672	50777	2086	3229	1193
3	2.00 - 3.99	66462	17531	288	19846	864	1330	470
4	4.00 - 9.99	13671	4197	38	4721	148	374	208
5	10.00 & Above	1458	334	11	372	11	57	6
	All sizes	6308953	430074	6284	447066	16191	20990	4843

TABLE C28

DISTRIBUTION OF UNIRRIGATED AREA UNDER ALL CROPS TREATED WITH STRAIGHT FERTILIZERS 2006-07

Sl.No.	Size class (in Ha)	Area of Holdings							
		Growing one or more unirrigated crops	Treated with urea (46:0:0)	Treated with calcium ammonium Nitrate (25: 0: 0)	Treated with muriate of potash (0: 0 : 60)	Treated with super phosphate (0: 16 : 0)	Treated with ammonium phosphate (18:46: 0)	Treated with massorti phosphate (0: 18 : 0)	
1	2	3	4	5	6	7	8	9	
1	Below 1.0	647010	49491	1462	62660	3596	1684	1504	
2	1.00 - 1.99	193522	26749	261	32067	1195	1401	831	
3	2.00 - 3.99	119911	18147	143	23516	1162	988	422	
4	4.00 - 9.99	48650	8572	14	10127	280	701	620	
5	10.00 & Above	15650	2045	67	2793	139	157	0	
	All sizes	1024743	105004	1947	131163	6372	4931	3377	

TABLE C29

DISTRIBUTION OF HOLDINGS UNDER UNIRRIGATED CROPS TREATED WITH IMPORTANT COMPLEX / MIXED FERTILIZERS

Sl.No.	Size class (in Ha)	Growing one or more unirrigated crops	Number of Holdings				
			NPK Mixture (Vijay) 17:17:17	Ammonium Sulphate (Factomphos) 20:20:0	Urea Ammonium Phosphate 20:20:0	NPK Mixture 10:26:26	Mono Ammonium Phosphate 0:52:0
1	2	3	4	5	6	7	8
1	Below 1.0	6021896	295946	453879	172852	50820	31480
2	1.00 - 1.99	205466	37886	43290	17264	9277	5766
3	2.00 - 3.99	66462	11763	17007	6423	3144	2367
4	4.00 - 9.99	13671	2733	4395	1211	702	475
5	10.00 & Above	1458	328	240	150	186	0
	All sizes	6308953	348656	518811	197900	64129	40088

TABLE C30

DISTRIBUTION OF AREA UNDER UNIRRIGATED CROPS TREATED WITH IMPORTANT COMPLEX / MIXED FERTILIZERS 2006-07

Sl.No.	Size class (in Ha)	Unirrigated area treated with					
		Under all crops	NPK Mixture (Vijay) 17:17:17	Ammonium Sulphate (Factomphos) 20:20:0	Urea Ammonium Phosphate 20:20:0	NPK Mixture 10:26:26	Mono Ammonium Phosphate 0:52:0
1	2	3	4	5	6	7	8
1	Below 1.0	647010	54549	82653	30995	6273	8493
2	1.00 - 1.99	193522	25577	34939	11924	6196	3800
3	2.00 - 3.99	11911	14686	24723	8306	4179	2823
4	4.00 - 9.99	48650	6210	11996	2918	1905	1221
5	10.00 & Above	15650	2572	2032	1394	1422	0
	All sizes	102473	103594	156343	55537	19975	16337

TABLE C31

**DISTRIBUTION OF NUMBER AND AREA OF UNIRRIGATED PADDY TREATED WITH CHEMICAL FERTILIZERS
2006-07**

Sl.No.	Size class (in Ha)	Number of Holdings growing unirrigated crops paddy			Unirrigated area under crops paddy		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	89117	77616	87.09	20731	19292	93.06
2	1.00 - 1.99	22534	19144	84.96	15165	13216	87.15
3	2.00 - 3.99	9050	8400	92.82	10199	9485	93.00
4	4.00 - 9.99	1901	1806	95.00	3950	3801	96.23
5	10.00 & Above	125	95	76	455	419	92.09
	All sizes	122727	107061	87.24	50500	46213	91.51

TABLE C32

**DISTRIBUTION OF UNIRRIGATED AREA UNDER H.Y.V AND OTHER VARIETIES OF PADDY TREATED WITH
CHEMICAL FERTILIZERS 2006-07**

Unirrigated area under HYV		Other varieties			
Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6
40702	39954	98.16	9798	6259	63.88

TABLE C33

RATE OF APPLICATION NPK IN UNIRRIGATED AREA UNDER PADDY 2006-07

Sl.No.	Crops	Paddy		
		N	P	K
1	2	3	4	5
1	Below 1.0	22.95	9.41	17.08
2	1.00 - 1.99	10.13	5.21	51.64
3	2.00 - 3.99	6.02	2.68	38.95
4	4.00 - 9.99	4.48	2.66	26.76
5	10.00 & Above	2.79	1.98	14.70
	All sizes	14.11	9.50	44.75

TABLE C34

**DISTRIBUTION OF NUMBER AND AREA OF UNIRRIGATED TAPIOCA TREATED WITH CHEMICAL FERTILIZERS
2006-07**

Sl.No.	Size class (in Ha)	Number of Holdings growing unirrigated crops Tapioca			Area under Tapioca		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage
1	2	3	4	5	6	7	8
1	Below 1.0	766267	198915	25.96	20964	8322	39.70
2	1.00 - 1.99	36487	11853	32.49	3072	1574	51.24
3	2.00 - 3.99	12871	4378	34.01	1533	811	52.9
4	4.00 - 9.99	2837	1092	38.49	554	360	64.98
5	10.00 & Above	129	66	51.16	75	70	93.33
	All sizes	818591	216304	26.42	26198	11137	42.51

TABLE C35

DISTRIBUTION OF HOLDINGS AND AREA OF UNIRRIGATED UNDER COCONUT TREATED WITH CHEMICAL FERTILIZERS & AVERAGE CONSUMPTION IN TERMS OF NPK 2006-07

Sl No.	Size class (in Ha)	Number of Holdings growing unirrigated crops Coconut			Area under the crop			Rate of application (Kg/Ha)		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage	N	P	K
1	2	3	4	5	6	7	8	9	10	11
1	Below 1.0	4853855	657309	13.54	203530	37252	18.30	60.90	52.92	56.37
2	1.00 - 1.99	156953	53222	33.91	39822	13026	32.71	36.54	33.5	56.55
3	2.00 - 3.99	49614	16295	32.84	18483	5722	30.96	33.88	31.24	52.68
4	4.00 - 9.99	9459	3706	39.18	5409	1770	32.72	25.51	23.64	53.76
5	10.00 & Above	774	340	43.93	571	207	36.25	30.29	30.39	14.11
	All sizes	5070655	730872	14.41	267815	57977	21.65	51.57	45.44	55.81

TABLE C36

DISTRIBUTION OF HOLDINGS AND AREA OF UNIRRIGATED UNDER RUBBER TREATED WITH CHEMICAL FERTILIZERS & AVERAGE CONSUMPTION IN TERMS OF NPK 2006-07

Sl.No.	Size class (in Ha)	Number of Holdings growing unirrigated crop			Area under the crop			Rate of application (Kg/Ha)		
		Total	Treated with chemical fertilizers	Percentage	Total	Treated with chemical fertilizers	Percentage	N	P	K
1	2	3	4	5	6	7	8	9	10	11
1	Below 1.0	735215	563204	76.60	169747	139279	82.05	44.52	46.58	29.82
2	1.00 - 1.99	93214	77261	82.89	71967	61422	85.35	31.12	30.62	23.90
3	2.00 - 3.99	37134	30729	82.75	52621	45014	85.54	24.27	24.13	16.96
4	4.00 - 9.99	8143	6652	81.69	23836	19990	83.86	16.53	16.27	13.84
5	10.00 & Above	918	659	71.79	10920	6046	55.37	12.96	13.01	12.33
	All sizes	874624	678505	77.58	329091	271751	82.58	36.92	36.28	24.79

TABLE C37

**DISTRIBUTION OF AREA UNIRRIGATED UNDER OTHER FOOD CROPS TREATED WITH CHEMICAL FERTILIZERS
& RATE IN TERMS OF NPK 2006-07**

Sl.No.	Size class (in Ha)	Area under the crop			Rate of application (Kg/Ha)		
		Total	Treated with chemical fertilizers	Percentage	N	P	K
1	2	3	4	5	6	7	8
1	Below 1.0	52200	2175	4.17	2.85	1.70	0.30
2	1.00 - 1.99	4964	0	0	0	0	0
3	2.00 - 3.99	1966	92	4.68	1.09	2.07	0.76
4	4.00 - 9.99	369	18	4.88	0.56	1.67	0.56
5	10.00 & Above	73	0	0	0	0	0
	All sizes	59572	2285	3.84	2.76	1.72	2.89

TABLE C38

NUMBER OF HOLDINGS AND AREA BENEFITED BY ORGANIC MANURE IN IRRIGATED AREA 2006-07

Sl.No.	Name of organic manure	No. of holdings benefited by the manure	% to the total holdings growing irrigated crops	Area benefited by the manure (Ha)	% to the total area under irrigated crops
1	2	3	4	5	6
1	Farm. yard manure/ Compost/ Biogas manure	1159500	52.14	158543	50.60
2	Oil-cake	205658	9.25	29515	9.42
3	Other organic manure	707753	31.83	63584	20.29
4	Green manure	894500	40.22	112023	35.75

TABLE C39
PERCENTAGE OF IRRIGATED AREA UNDER PADDY, TAPIOCA AND COCONUT TREATED WITH ORGANIC MANURE 2006-07

Sl. No.	Name of crops	Total irrigated area under the crop	Area covered by farm yard manure	Percentage to col. 3	Area covered by other organic manure	Percentage to col. 6
1	2	3	4	5	6	7
1	Paddy	21103	5310	25.16	2513	11.91
	Others	1668	1126	67.51	91	5.46
2	Tapioca	874	226	25.86	298	34.10
	Others	4465	2040	45.69	1358	30.41
3	Coconut	4588	3456	75.33	758	16.52
	Others	103068	62272	60.42	32350	31.39

TABLE C40 -

**PERCENTAGE OF AREA IRRIGATED, TREATED WITH DIFFERENT ORGANIC MANURE AND GREEN MANURE
2006-07**

Sl. No.	Size class (Ha)	Field yield manure / Compost / Bio-gas manure	Oil cake	Other organic manure	Green manure
1	2	3	4	5	6
1	Below 1.0	51.08	9.35	23.72	41.02
2	1.00 - 1.99	49.92	8.83	19.57	33.76
3	2.00 - 3.99	49.49	8.26	14.47	30.40
4	4.00 - 9.99	46.61	9.24	10.54	20.82
5	10.00 & Above	65.01	24.61	14.83	13.40
	All sizes	50.60	9.42	20.29	35.75

TABLE C41
PERCENTAGE OF UNIRRIGATED AREA UNDER PADDY, TAPIOCA AND COCONUT TREATED WITH ORGANIC MANURE 2006-07

Sl. No.	Name of crops	Total unirrigated area under the crop	Area covered by farm yard manure	Percentage to col. 3	Area covered by other organic manure	Percentage to col. 6
1	2	3	4	5	6	7
1	Paddy	40702	24110	59.24	2661	6.54
		9798	4347	44.37	930	9.49
2	Tapioca	1692	800	47.28	256	15.13
		24506	11504	46.94	4541	18.53
3	Coconut	7507	3630	48.35	318	4.24
		260308	132172	50.78	69548	26.72

TABLE C42

**PERCENTAGE OF AREA UNIRRIGATED, TREATED WITH DIFFERENT ORGANIC MANURE AND GREEN MANURE
2006-07**

Sl. No.	Size class (Ha)	Field yield manure / Compost / Bio-gas manure	Oil cake	Other organic manure	Green manure
1	2	3	4	5	6
1	Below 1.0	36.11	2.40	12.58	17.50
2	1.00 - 1.99	40.65	3.47	9.59	15.48
3	2.00 - 3.99	39.36	2.73	7.63	12.07
4	4.00 - 9.99	37.04	3.06	9.85	8.63
5	10.00 & Above	36.50	3.30	12.94	2.86
	All sizes	37.40	2.69	11.31	15.84

TABLE C43

PERCENTAGE OF AREA UNDER PADDY TREATED WITH PESTICIDES 2006-07

Sl.No.	Irrigated / Unirrigated	Area under paddy HYV (Ha)			Area under other varieties of paddy (Ha)		
		Total	Treated with pesticides	Percentage	Total	Treated with pesticides	Percentage
1	2	3	4	5	6	7	8
1	Irrigated	21103	16949	80.32	1668	686	41.13
2	Unirrigated	40702	22474	55.22	9798	3968	40.50
3	Total	61805	39423	63.79	11466	4654	40.59

TABLE C44

NUMBER OF AGRICULTURAL MACHINERY OWNED AND USED BY OPERATIONAL HOLDINGS DURING 2006-07

Sl. No.	Size class (in Ha)	Hand operated sprayer/ duster	Animal operated implements		Power operated implements/ equipments					
			Wooden Plough	Steel Plough	Sprayer	Diesel engine pump set	Electric pump set	Power tiller	Tractor used for agriculture purpose/wheel tractor	
1	2	3	4	5	6	7	8	9	10	
	Below 1.0	184161	13851	14037	16004	20656	548634	31406	61660	
	1.00 - 1.99	42760	3810	2116	3758	7968	57013	6567	19656	
	2.00 - 3.99	19968	1919	1512	1837	4018	22136	3153	9571	
	4.00 - 9.99	5401	504	609	978	1558	5075	792	2572	
	10.00 & Above	752	0	11	171	281	494	44	164	
	All sizes	253042	20084	18285	22748	34481	633352	41962	93623	

TABLE C45
DISTRIBUTION OF HOLDINGS AVAILED INSTITUTIONAL CREDIT FOR AGRICULTURAL PURPOSES 2006-07

Sl. No.	Size class (Ha)	Total No. of operational holdings	Estimated number of operational holdings who took institutional credit	Percentage
1	2	3	4	5
1	Below 1.0	6543990	484862	7.41
2	1.00 - 1.99	210781	52231	24.78
3	2.00 - 3.99	67683	19867	29.35
4	4.00 - 9.99	13898	4095	29.50
5	10.00 & Above	1551	315	20.25
	All sizes	6837903	561373	8.21

TABLE C46
DISTRIBUTION OF AMOUNT OF AGRICULTURAL CREDIT PER HOLDER 2006-07

Sl. No.	Size class (Ha)	No. of holders who took institutional credit	Amount of institutional credit taken (Rs)	Average amount per holder
1	2	3	4	5
1	Below 1.0	484862	8626012013	17791
2	1.00 - 1.99	52230	1151493975	22047
3	2.00 - 3.99	19867	447127144	22506
4	4.00 - 9.99	4100	86349296	21061
5	10.00 & Above	314	1125000	3583
	All sizes	561373	10312107428	18369

TABLE C47
PERCENTAGE OF DISTRIBUTION OF AGRICULTURAL CREDIT 2006-07

Sl. No.	Size class (Ha)	Total No. of operational holdings	Percentage of operational holdings took institutional credit	Percentage of operational holdings that took institutional credit				
				PACS	PLDB / SLDB	CBB	RRBA	
1	2	3	4	5	6	7	8	
1	Below 1.0	6543990	7.41	2.54	0.97	2.72	1.70	
2	1.00 - 1.99	210781	24.78	7.06	3.67	7.65	10.02	
3	2.00 - 3.99	67683	29.35	29.35	4.59	11.59	13.32	
4	4.00 - 9.99	13898	29.50	29.50	5.25	8.99	18.61	
5	10.00 & Above	1551	20.25	20.25	3.93	9.16	26.56	
	All sizes	6837903	8.21	8.21	1.10	2.97	2.12	

TABLE C48

Estimated No. of Cattle Reported (as on 15/10/2006) By Operational Holdings By Size Groups

Sl. No.	Size Groups (Ha)	Total No. of Operational Holdings	Adult Stock *							Young Stock Up to 2 1/2 Years **					Total No. of Holdings Reporting One or More Categories of Cattle	
			Males Over 2 1/2 Years			Females Over 2 1/2 Years				No. Reported			Total No. of Cattle			
			No. of Holdings Reporting Males	Working	Others	Total	No. of Holdings Reporting Females	In Milk	Others	Total	No. of Holdings Reporting Young Stock	Male		Female		Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Below 1.0	6543990	36027	33688	21756	55444	77955	700630	163134	863764	566632	158744	423708	582452	1501660	985868
2	1.0 - 1.99	210781	2167	2588	887	3475	65816	60649	14657	75306	59223	16744	48500	65244	144025	82017
3	2.0 - 3.99	67683	466	798	138	936	22778	21443	4862	26305	22645	6803	18803	25606	52847	29768
4	4.0 - 9.99	13898	180	185	88	273	4717	4443	1039	5482	5210	1815	4725	6540	12295	6207
5	10 and Above	1551	0	0	0	0	577	548	78	626	528	317	466	783	1409	716
	ALL GROUPS	6837903	38840	37259	22869	60128	873843	787713	183770	971483	654238	184423	496202	680625	1712236	1104576

* Cross Breed Over 2 1/2 Years + Native Breed Over 3 Years

** Cross Breed Over 2 1/2 Years + Native Breed Over 3 Years

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