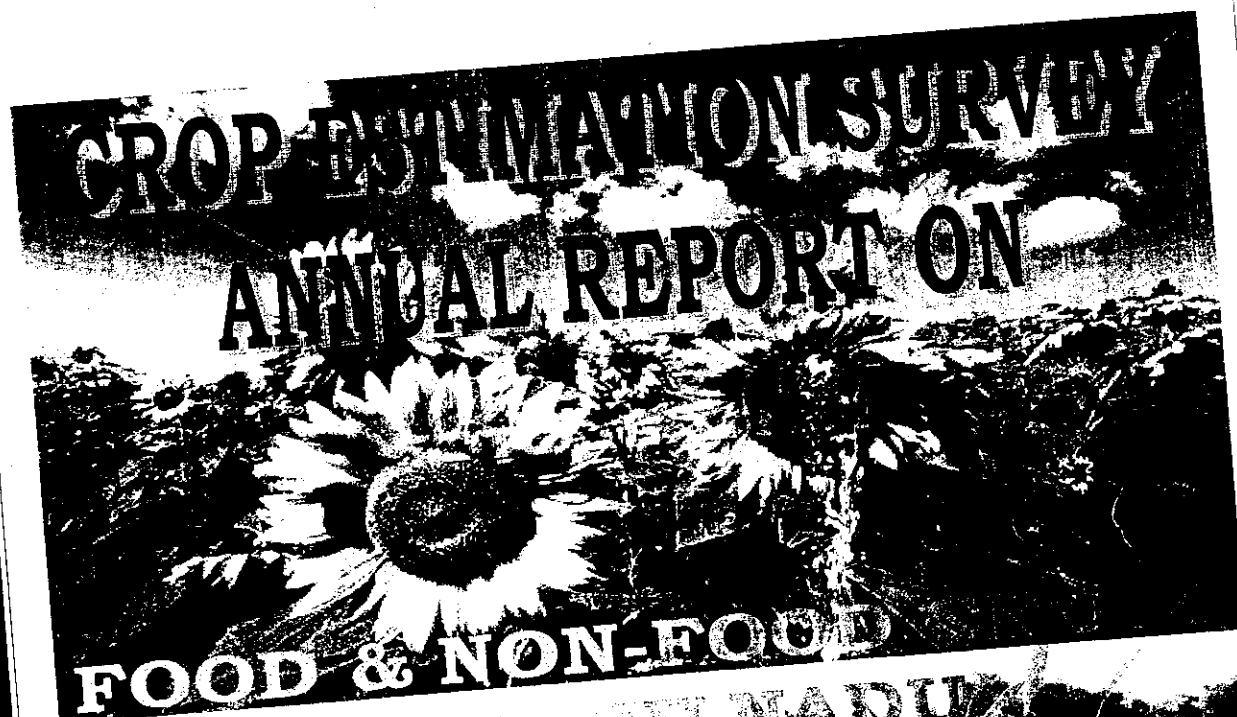


Report No.1 /2014



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PRINCIPAL SECRETARY/COMMISSIONER
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PREFACE

Continuous improvements in agricultural productivity and output are a pre requisite for sustained growth, which would contribute substantially to the overall economy's development. The instrumental values of agriculture are factor contribution, product contribution, market contribution and foreign exchange contribution. Dynamic factors such as growing population, rising real per capita income and the income elasticity of demand for food do have a direct bearing on steady and sustainable food production. They exert heavy pressure on demand for wage goods. In the above backdrop variables such as area, production and yield rates for food and non food crops are seen through the prism of results of Crop Estimation Survey 2012-13. These data form the basis for estimating State Income originating in the agricultural sector.

The Annual Report on "General Crop Estimation Survey" contains the results of crop cutting experiments on important food and non-food crops conducted during 2012-13. The food crops covered are paddy, millets and pulses and non-food crops include cotton, sugarcane, gingelly, groundnut and sunflower.

Part-I of this report sets out the objectives, planning and organization, sampling design, coverage, sample size and selection of villages. Part-II deals with the Estimation procedure for arriving at yield rates and sampling error. Part -III and IV highlight the results of the survey on food and non-food crops including crop wise estimated average yield and production. Vital information on the application of modern farm technology besides cotton ginning ratio and cane gur ratio is also provided.

The information presented in this report would be useful to planners, administrative departments, research Scholars and other users. The time-series data provided in this document are obviously the richest grazing land for researchers. The scholars can track the progress of the agricultural development over a period and see the problems confronting the agricultural sector in right prospective.

Chennai - 6
07.2014

Principal Secretary/Commissioner

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General Survey

CHAPTER-I
SURVEY PROFILE

1. INTRODUCTION

Agriculture continues to be the kingpin of the State economy on account of its sizable contribution made to the State Income. Timely and reliable statistics on crop production is of vital importance for estimating ~~at~~ the State Income. Crop production estimates are arrived at on the basis of yield rates obtained from scientifically planned crop cutting experiments, conducted under General Crop Estimation Survey. Under the General series of Crop Estimation Survey (GCES), as many as sixteen important food and non-food crops are covered. The list of food and non-food crops covered, the year of initiation, the year of adoption of results and plot size for each experimental crop are furnished. (Table-1)

1.2. OBJECTIVE OF THE SURVEY

Objective is to estimate crop production.

The main objective of the General Crop Estimation Survey is to estimate the average yield per hectare based on crop cutting experiments and to gauge at the total production of important crops covered under the survey both at district and state level on the basis of crop cutting experiments conducted by adopting stratified random sampling techniques. The survey also provides the basis for the collection of additional information such as improved agricultural practices and yield rates of various varieties of seeds under irrigated and unirrigated conditions.

1.3. PLANNING AND ORGANIZATION

The work relating to selection of sample villages, collection, of forms, scrutiny, tabulation and analysis of data are undertaken at the Headquarters of the Department of Economics and Statistics. The Deputy Directors of Statistics in the Districts are entrusted with the task of organisation on and supervision of field work at the District level. The field work is executed to by the Agricultural Officers / Deputy Agricultural Officers of the Department of Agriculture. The Block Statistical Inspectors and Divisional Assistant Directors provide necessary technical guidelines for the proper and successful conduct of the crop cutting experiments at the block level.

1.4. SAMPLING DESIGN

The stratified multi-stage random sampling technique is adopted with Block as strata and revenue village within the blocks forms I stage unit of sampling unit. Survey / Sub-division number / Field within each selected Village is the sampling unit of the II stage and experimental plot of a specified shape and size makes up the ultimate and III unit of sampling.

1.5. COVERAGE AND SAMPLE SIZE

(The scale of experimentation was distributed among the various districts and blocks in proportion to the corresponding area of each crop.) The number of experiments planned and analysed for each of the principal food and non-food crops during the year 2012-13 are presented (Tables 2 & 3.)

1.6. SELECTION OF SAMPLE VILLAGES

The required number of villages were selected randomly at the State Headquarters, from the list of 2012-13. Timely Reporting Scheme villages. The list of randomly selected villages along with a set of 4 digit random numbers each for selection of survey numbers in the selected village is sent to the Deputy Directors of Statistics in the districts and Department of Agriculture, Chennai. On receipt of the village list, Deputy Directors of the respective district allocate the village list to the field functionaries of different blocks (i.e. Agricultural Officers/Deputy Agricultural Officers). The Village Administrative Officer of the selected village renders assistance to the field workers and to enlist the Survey and Subdivisions locating the fields, ensure the co-operation of the cultivators and procuring the required labour at the time of harvest.

(The selection of survey numbers, location of plot, substitution of villages in the case of non-availability of required crop in the selected village and other field operations are carried out by following suitable randomization procedure.)

Cereals/pulses - 2013

1.7. REFRESHER TRAINING TO THE FIELD STAFF

An intensive training covering the theoretical and practical aspects of the survey is being imparted to all the Field Officers (viz. Agricultural Officers/Deputy Agricultural Officers) as well as the supervisors at the commencement of the Fasli year, ^{1st July} so that they could equip themselves fully with the conduct of crop cutting experiments.

1.8. FIELD LEVEL SUPERVISION

In order to improve the quality and reliability of the data flowing through General Crop Estimation Survey, the field work carried out by the Agricultural Officers / Deputy Agricultural Officers is being supervised by the Assistant Directors of Agriculture Department, Regional Joint Directors, Deputy Directors, Divisional Assistant Directors, Statistical Officers and Block Statistical Inspectors of the Department of Economics and Statistics and NSSO by pre-assigning certain number of villages.

The crop-wise number of experiments planned and number of experiments pre-assigned for inspection for both State (Statistical & Agricultural) and Central Agency (NSSO) and percentage to the total number of experiments planned and inspected for the year 2012-13 are furnished in Table 4

The number of experiments pre-assigned for supervision both for the Statistical and Agricultural agencies of the State Government and Central agency in 2012-13 is furnished in Table 5.

The programme of inspection was so arranged as to cover the various stages of fieldwork in order to ensure accuracy in the selection of fields, location of plots and recording of yield data .

The quantum of inspections carried out by the officials is furnished in Table 6 to Table 8. It is observed that the overall successful conduct of experiments for all Food and Non Food crops were 99.82 percent .

Chapter –II

ESTIMATION PROCEDURE METHODOLOGY

2.1. BLOCK LEVEL AVERAGE YIELD

The Average yield of paddy, pulses, groundnut, sugarcane and millets at Block level is calculated as a simple mean of the individual plot yield. The simple mean thus arrived and is then converted to per hectare average yield.

2.2. DISTRICT LEVEL AVERAGE YIELD

The district level yield rates are arrived at by the following steps.

- For each block, the block wise average yield rate (plot yield) is multiplied by corresponding area under the crop in the block.
- The resultant product is added over to all the blocks with the specified crop in the district.
- The total is then divided by the area under crops in the district resulting in the district average Plot yield.
- Then the district average Plot yield is multiplied by 400 or 200 and drriage ratio/ grain conversion ratio as the case may be to get district level yield rate per ha.(Kg/ha) as follows:

| Crop | Calculation of Yield | Drriage Ratio |
|---------------------------------------|--|--|
| Paddy – Seasonwise | Simple mean yield x 400 x 0.67x District drriage ratio | Total wt. of Dry Paddy is divided by Total wt. of Wet Paddy |
| Pulses / Cotton / Gingelly /Sunflower | Simple mean yield x 200 | --- Nil --- |
| Groundnut / Millets | Simple mean yield x 400 x District drriage ratio | Total wt. of Dry (G.Nut /Millets) is divided by Total wt. of Wet (G.Nut/Millets) |
| Sugarcane | Simple mean yield x 400 | --- Nil --- |

2.3 STATE LEVEL AVERAGE YIELD

The State level average yield is arrived at by dividing the cumulative total of district average yield of the crop multiplied by corresponding area under the

district divided by the total area of under the crop in the State (Area as per Season and Crop Report).

2.4. PLOT SIZE

| Crop | Plot Size |
|--|--|
| Paddy, Groundnut, Millet crops & Sugarcane | 5m x 5m (1/400 th of one hectare) |
| Pulses, Cotton, Gingelly & Sunflower | 10m x 5m (1/200 th of one hectare) |

2.5. ESTIMATION PROCEDURE

The average yield of grains at block level is calculated as a simple mean of the individual plot yields.

$$Y_i = \frac{\sum_{r=1}^{m_i} \sum_{s=1}^2 Y_{rs}}{n_i}$$

Where Y_i the average yield for the block
 Y_{rs} is the yield of s^{th} experiment in r^{th} village.
 n_i is the number of experiments in i^{th} Block
 m_i is the number of selected villages in i^{th} Block.

The average yield for the district is calculated by combining the stratum means using the area under the respective crops in the stratum as weights.

$$\bar{Y}(d) = \frac{\sum_{i=1}^t \bar{Y}_i a_i}{\sum_{i=1}^t a_i}$$

" a_i " is the area in the i^{th} block &
" t " is the number of blocks in the district.

The estimates of average yield for each category of crop are then pooled to arrive at the estimated average yield for combined, for crop at state level by using the area under the respective category as weights.

The sampling error which gives an indication of the limits within which the estimated average yield is likely to vary, is worked out by using formula

$$SE = \sqrt{V(Y_d)} = \frac{\frac{F \sum_{i=1}^t (a_i^2/n_i) + (E - F) \sum_{i=1}^t [(a_i^2 \sum_{j=1}^{m_i} n_{ij}^2) / n_i^2]}{[\sum_{i=1}^t a_i]^2}}{t}$$

Where Y_d is the estimated district mean yield

n_{ij} is the number of fields in j^{th} village of the i^{th} block

n_i is the number of experiments conducted in the i^{th} block

t is the number of blocks in the district

a_i is the area of the crop in the i^{th} block

$E = SSBV / DF$ Estimate of the mean square between villages

$F = SSWV / DF$ Estimate of the mean square between fields within villages

The district average yield is worked out separately for each category viz., season-wise crops, irrigated and unirrigated categories of crops by making use of the above formula. The district average yield for the combined crop is arrived at by pooling the estimate for each category on the basis of the area reported under the respective category. The estimates for the state (i.e for all the districts covered by the survey) are obtained as a weighted average of the district estimates with the district-wise area figures under the crop as weights.

In case of mixed crop the field having more than 10 percent of a particular crop alone be considered for selection and the plot yield is estimated in proportion to the percentage of the crop in the experimental field.

CHAPTER-III

A BIRD'S – EYE VIEW OF RESULTS OF THE SURVEY

FOOD CROPS

Agriculture is very much weather dependent and as said is a gamble of monsoon. In the event of quantum of rainfall, there will be normal area coverage, production and yield rates if the rainfall is ideal. Rainfall having been deficient, the agricultural sector will be on the knife-edge. In view of this, what the agricultural sector needs is an ideal spatio-temporal distribution of rainfall and judicious use of water resources. Information on area, yield and production for 22 crops during 2012-13 are tabulated in Table 9.

Under General Crop Estimation Survey, some additional information like usage of local and high yield varieties hybrid seeds, application of chemical fertilizers and other manures and treatment of crops with pesticides/insecticides are also collected and presented in the relevant tables.

I) CEREALS

3.1. PADDY

Green revolution, which marks a landmark in agricultural sector, has made a tangible dent in both extensive and intensive cultivation in the State. The System of Rice Intensification ^(SRI) has been producing salutary impact in productivity of paddy. Adoption of a package of inputs and improved technology is a causative factor. ^{net / 2013}

Paddy is the staple crop, extensively cultivated in all the districts of the State. It accounted for ^{29.3} (29.06) per cent of the gross cropped area during ²⁰¹²⁻¹³ (2012-13). It is being raised in 3 seasons viz., Kar / Kuruvai / Sornavari, Samba / Thaladi / Pishanam and Navarai / Kodai.

Season wise Sowing / Planting and Harvesting periods

| Season | Sowing/Planting | Harvesting |
|----------------------------|--------------------|-------------------------------|
| Kar / Kuruvai / Sornavari | April to July | Before Nov 15 th |
| Samba / Thaladi / Pishanam | August to November | Before April 15 th |
| Navarai / Kodai | December to March | Before June 15 th |

Of the 1988 experiments planned during 2012-13, 1976 (100 per cent) experiments were conducted.

The estimated average yield and production of rice increased by 28.92 per cent and 28.77 per cent respectively even though the estimated area decreased by 0.20 per cent compared to previous year. (Table 10)

Adoption of modern Farm Technology :

Technological diffusion is pervasive in cultivation of paddy. Crop yield is a function of many factors-use high yielding seeds, timely irrigation, application of organic and inorganic fertilizers, use of pesticides, adoption of SRI, etc. That is productivity is determined by physical capital, human capital and technological knowledge and application. The high yielding variety seeds were used by all the 1976 sample farmers during all seasons and there was a considerable usage of chemical fertilizers (58 per cent) and pesticides (76 per cent) which is shown in Table 11.

3.2. CHOLAM (JOWAR)

Jowar is an important food crop among millets covering 3.36 per cent of the total gross area sown in the State. Out of 468 experiments planned under Kharif and rabi Jowar during 2011-12, 468 (100 per cent) were conducted successfully.

Sowing and Harvesting periods

| Crop | Sowing | Harvesting |
|------------|--------------------|-------------------|
| Jowar – Kh | April to September | Before March 15th |
| Jowar - R | October to March | Before July 15th |

The area of jowar crop dipped by 18.80 per cent whereas average yield and production of jowar rose by 25.94 per cent and 2.24 per cent respectively compared to the previous year is shown in Table 12.

3.3. CUMBU (BAJRA)

Bajra is another food crop among the millets covering 0.84 per cent of the total cropped area in the State.

Sowing and harvesting periods

| Crop | Sowing | Harvesting |
|------------|--------------------|-------------------|
| Cumbu (Kh) | April to September | Before March 15th |
| Cumbu (R) | October to March | Before July 15th |

Totally, 390 experiments were planned under Kharif and Rabi Cumbu crop for 2012-13, and 100 per cent of the experiments were conducted successfully.

The area, average yield and production of bajra have decreased 2012-13, 14. The area, average yield and production of bajra came down by 8.01, 46.35 and 50.63 per cent respectively may be observed in Table 15 when compared with the previous year.

Adoption of Modern Farm Technology

Out of 390 sample farmers 284 farmers (73 per cent) use high yielding varieties seeds, 165 sample farmers (42 per cent) applied chemical fertilizers and 12 farmers (3 per cent) treated crop with pesticides. The application of only modern farm technology is significant from Table 16.

3.4. RAGI

Ragi is another important food crop among millets, which covered 1.37 per cent of the gross cropped area in Tamil Nadu in 2012-13.

Sowing and harvesting periods

| Crop | Sowing | Harvesting |
|-----------|--------------------|-------------------------------|
| Ragi (Kh) | April to September | Before March 15 th |
| Ragi (R) | October to March | Before July 15 th |

Ragi is cultivated mostly as an unirrigated crop. A total of 360 experiments were planned for both Kharif and Rabi season during 2012-13 and all the experiments were conducted successfully.

The area, average yield and production of ragi witnessed a decrease by 15.10, 27.72 and 38.62 per cent respectively over the previous year. (Table 17)

Adoption of Modern Farm Technology

Out of 360 fields under crop cutting experiments conducted high yielding varieties seeds were used by 348 sample farmers (97%). 169 sample farmers used chemical fertilizers (47%) and only in 26 cases (7%) the crops were treated with pesticides. (Table 18)

3.5. MAIZE

Maize is another important food crop among millets covering 5.66 per cent of the gross cropped area in Tamil Nadu.

Sowing and Harvesting periods

| Crop | Sowing | Harvesting |
|-----------|--------------------|-------------------------------|
| Maize (K) | April to September | Before March 15 th |
| Maize (R) | October to March | Before July 15 th |

Maize is cultivated mostly as an unirrigated crop. Of total 428 experiments planned during 2012-13, 428 experiments (100%) were conducted successfully.

The area of maize increased by 3.71 per cent, the average yield and production decreased by 46.18 and 44.18 per cent respectively when compared with the previous year. (Table 19)

Adoption of Modern Farm Technology

Of the 428 experiments conducted, high yielding varieties seeds were fully used by all 428 sample farmers covered. In 239 cases (56%) chemical fertilizers were applied and in 70 cases (16%) crops were treated with pesticides. (Table 20)

3.6. SAMAI

Samai is a small millet crop grown in the State as an unirrigated crop only. Out of 100 experiments planned, 100 experiments were analysed successfully.

There was an overall decrease in area, average yield and production of samai by 14.5 per cent, 10.96 per cent and 23.90 per cent respectively compared to the previous year. (Table 21)

Sowing and Harvesting Period for Samai

| Crop | Sowing | Harvesting |
|-----------|--------------------|-------------------|
| Samai (K) | April to September | Before March 15th |

3.7. VARAGU

Varagu is yet another small millet crop grown in Tamil Nadu as an un-irrigated crop only. All the planned 112 experiments were conducted successfully and considered for analysis.

When compared with previous year there was a decrease in area, average yield and production of varagu by 19.63%, 32.85% and 46.05% respectively, as shown in Table 22.

Sowing and Harvesting Period for Varagu

| Crop | Sowing | Harvesting |
|-------------|--------------------|-------------------------------|
| Varagu (KH) | April to September | Before March 15 th |

(ii) PULSES

Redgram, Blackgram, Greengram and Horsegram are the four important pulses crops grown in the State. They are mainly grown as an unirrigated crop. The sowing and harvesting seasons of these crops are given below:

Sowing and Harvesting periods

| Crop | Sowing | Harvesting |
|----------------|--------------------|-------------------------------|
| Redgram (KH) | April to September | Before March 15 th |
| Blackgram (KH) | April to September | Before March 15 th |
| Blackgram (R) | October to March | Before July 15 th |
| Greengram (KH) | April to September | Before March 15 th |
| Greengram (R) | October to March | Before July 15 th |
| Horsegram (R) | October to March | Before July 15 th |

3.8. REDGRAM

Redgram is an important pulses crop grown as an unirrigated crop. All the 336 experiments planned were conducted successfully and considered for analysis.

The area, production of redgram crop increased by 16.94%, 5.79% respectively and the average yield rate has decreased by 9.54% when compared to the previous year as shown in Table 23.

Adoption of Modern Farm Technology

As shown in table 24, of the 333 cases, high yielding varieties seeds were used in 336 samples i.e, 99 percent of the cases. In 32 percent of the case, chemical fertilizers were used and in 55 percent of the samples were treated with pesticides.

3.9 BLACK GRAM

Blackgram is another important pulses crop grown largely as an unirrigated crop. All the 356 experiments planned under this crop were conducted successfully and considered for analysis.

The area, production and average yield rate under blackgram decreased by 32.32, 26.72 and 50.39 per cent over the previous year as shown in Table 25.

Adoption of Modern Farm Technology

In all the 356 sample, farmers using high yielding varieties seeds were 328, chemical fertilizers were applied by 214 sample (60 percent) and 41 percent of the crops were treated with pesticides. (Table 26)

3.10 GREENGRAM

Greengram is yet another important pulses crop grown largely as an unirrigated crop. Out of 364 experiments planned 364 experiments were conducted successfully and considered for analysis.

The area, average yield rate and production of greengram crop decreased by 27.70, 45.28 and 60.44 per cent respectively when compared to the previous year. (Table 27)

Adoption of Modern Farm Technology

Out of 364 experiments conducted in 86 percent of the cases high yielding varieties seeds were used. In 40 percent of the cases chemical fertilizers were used and in 33 percent of cases crops were treated with pesticides (Table 28)

3.11 HORSEGRAM

Horsegram is yet another important pulses crop grown as an unirrigated crop. All the 188 experiments planned were conducted successfully and considered for analysis.

The Area, Average yield and Production of horsegram decreased by 7.92 percent, 25.60 percent and 31.54 percent respectively when compared to the previous year. (Table 29)

3.12 COTTON

Cotton is an important commercial crop among the nonfood crops cultivated in the State. It accounted for 2.59 per cent of the gross cropped area in the State during 2012 -13.

Sowing and Harvesting

| Crop | Sowing | Harvesting |
|-------------|--------------------|-------------------------------|
| Cotton (KH) | April to September | Before March 15 th |
| Cotton (R) | October to March | Before July 15 th |

Out of 810 experiments planned under kharif and rabi cotton 802 experiments were successfully conducted.

The area, average yield and production of cotton had a marginal fall by 1.91, 32.22 and 33.08 per cent respectively when compared to the previous year. (Table 32)

Adoption of Modern Farm Technology

The high yielding varieties were predominantly used by 100 per cent of 802 samples in both irrigated and unirrigated conditions. Application of chemical fertilizer and pesticides is 51% and 76% respectively. (Table 33)

3.13 SUGARCANE

Sugarcane is an important cash crop which is extensively cultivated in the State. It accounted for 6.78 per cent of the gross cropped area in the State.

Planting / Ratoon

| Season | Planting | Harvesting |
|---------------|-----------------|-------------------|
| Annual | July to June | July to June |

Out of 468 experiments planned, 468 were conducted successfully and considered for analysis.

Average yield and production of Sugarcane decreased by 13.27 per cent and 12.73 per cent respectively and the area increased by 0.59 per cent compared to the previous year. (Table 34)

Adoption of Modern Farm Technology

With regard to 468 sample farmers, the cent percent usage of high yielding varieties led to intensive application of chemical fertilizers and widespread usage of pesticides / insecticides in cultivation of sugarcane. (Table 35)

3.14 GINGELLY

Gingelly is one of the important non-food crops among oil seeds covering 0.65 per cent of the total area sown in the State. Gingelly is sown both under Irrigated and Unirrigated conditions in the State.

Sowing and Harvesting

| Crop | Sowing Period | Harvest Season |
|---------------|----------------------|-------------------------------|
| Gingelly (KH) | April to September | Before March 15 th |
| Gingelly (R) | October to March | Before July 15 th |

Out of 416 experiments planned, 382 experiments were successfully conducted and considered for analysis.

Area, average yield and production of gingelly came down by 23.15 per cent, 15.50 per cent and 35.04 per cent respectively, compared to the previous year. (Table 36)

Adoption of Modern Farm Technology

382 sample farmers used high yielding variety seeds, and the application of chemical fertilizers was 39% and pesticides application was 24%. (Table 37). The high yielding varieties were predominantly used in the cultivation of Gingelly in irrigated and unirrigated conditions.

3.15 GROUNDNUT

Groundnut is the most important crop among oil seeds grown in the State. It accounted for 6.50 per cent of gross cropped area in the state during 2012-13. Groundnut is grown mostly as an unirrigated crop during the kharif season and as an irrigated crop during Rabi.

Sowing and Harvesting

| Crop | Sowing | Harvesting |
|----------------|--------------------|-------------------------------|
| Groundnut (KH) | April to September | Before March 15 th |
| Groundnut (R) | October to March | Before July 15 th |

A total of 1160 experiments were planned under the groundnut crop and 1158 experiments were successfully conducted and considered for analysis.

The area, yield rate and production of groundnut crop had a decrease by 11.99, 15.89 and 25.96 per cent respectively when compared to the previous year. (Table 38)

Adoption of Modern Farm Technology

With respect to 1158 sample farmers, high yielding varieties were predominantly used in the cultivation of groundnut in irrigated and unirrigated conditions whereas the application of chemical fertilizers and pesticides was not encouraging. (Table 39)

3.16 SUNFLOWER

Sunflower is another important crop among oil seeds. Out of 224 planned 206 experiments were conducted successfully during the year 2012 -13.

Sowing and Harvesting period

| Crop | Sowing | Harvesting |
|----------------|--------------------|-------------------------------|
| Sunflower (KH) | April to September | Before March 15 th |
| Sunflower (R) | October to March | Before July 15 th |

The area, average yield and production of sunflower decreased by 20.78 per cent, 41.68 per cent and 53.81 per cent respectively as compared to the previous year. (Table 41)

Adoption of Modern Farm Technology

It can be seen that the cent percent usage of high yielding varieties in the cultivation of Sunflower had resulted in the increase in yield and production. (Table 42)

Chapter IV – Driage of results food crops

4.1. The crop-wise driage ratios (percent) for paddy and other millets based on the experiments conducted during 2012-13. (Table 43)

4.2. Among non – food crops covered under General Series of Crop Estimation Survey, driage operations are conducted for groundnut crop only. (Table 40)

More details about crops i.e. crop wise percentage of Area under different agricultural practices for Food and Non food crops, Ginning Ratio of Cotton, Cane to Gur ratio Estimates are furnished in relevant tables.

ANNEXURE - I

LIST OF TABLES

Table – 1

Year of commencement, Yield Data Considered for Estimation and Plot Size

| Crop | | Commencement of the Survey | Result considered for | Plot Size (m X m) |
|-----------------------------------|-------------------------|----------------------------|-----------------------|-------------------|
| I. Food Crops- (a) Cereals | | | | |
| 1. | Paddy K/K/S | 1944-45 | 1955-56 | 5 X 5 |
| | Paddy S/T/P | 1944-45 | 1955-56 | 5 X 5 |
| | Paddy N/K | 1985-86 | 1985-86 | 5 X 5 |
| 2. | Cholam(I&UI) (Jowar) | 1950-51 | 1955-56 | 5 X 5 |
| 3. | Cumbu (I&UI) (Bajra) | 1950-51 | 1955-56 | 5 X 5 |
| 4. | Ragi (I&UI) | 1950-51 | 1955-56 | 5 X 5 |
| 5. | Maize (I&UI) | 2006-07 | 2006-07 | 5 X 5 |
| 6. | Samai | 1986-87 | 1986-87 | 5 X 5 |
| 7. | Varagu | 1986-87 | 1986-87 | 5 X 5 |
| | (b) Pulses | | | |
| 8. | Redgram | 1976-77 | 1976-77 | 10 X 5 |
| 9. | Blackgram | 1976-77 | 1976-77 | 10 X 5 |
| 10. | Greengram | 1977-78 | 1977-78 | 10 X 5 |
| 11. | Horsegram | 1986-87 | 1986-87 | 10 X 5 |

| | | | | |
|---|-----------------------------|---------|---------|--------|
| II. Non-Food Crops-(a) Oil Seeds | | | | |
| 12. | Groundnut (I& UI) | 1959-60 | 1973-74 | 5 X 5 |
| 13. | Gingelly (I & UI) | 1973-74 | 1973-74 | 10 X 5 |
| 14. | Sunflower | 1983-84 | 1983-84 | 10 X 5 |
| | (b) Commercial Crops | | | |
| 15. | Sugarcane | 1954-55 | 1964-65 | 5 X 5 |
| 16. | Cotton (I&UI) | 1959-60 | 1964-65 | 10 X 5 |

Table – 2

Number of Experiments Planned and Analyzed under Food Crops-2012-13

| Crop | | No. of Experiments | | |
|-----------------------------------|-----------------|--------------------|-------------|--------------|
| | | Planned | Analyzed | % Analyzed |
| I. Food Crops- (a) Cereals | | | | |
| 1. | Paddy K/K/S | 428 | 424 | 99.07 |
| | Paddy S/T/P | 1260 | 1248 | 99.05 |
| | Paddy N/K | 300 | 300 | 100 |
| 2. | Cholam (Kh) | 300 | 300 | 100 |
| | Cholam (R) | 300 | 300 | 100 |
| 3. | Cumbu (Kh) | 240 | 238 | 99.17 |
| | Cumbu (R) | 150 | 150 | 100 |
| 4. | Ragi (Kh) | 160 | 160 | 100 |
| | Ragi (R) | 200 | 200 | 100 |
| 5. | Maize (Kh) | 256 | 256 | 100 |
| | Maize (R) | 172 | 172 | 100 |
| 6. | Samai | 100 | 100 | 100 |
| 7. | Varagu | 112 | 112 | 100 |
| (b) Pulses | | | | |
| 8. | Redgram | 336 | 336 | 100 |
| 9. | Blackgram (Kh) | 44 | 44 | 100 |
| | Blackgram (R) | 312 | 312 | 100 |
| 10. | Greengram (Kh) | 56 | 56 | 100 |
| | Greengram (R) | 308 | 308 | 100 |
| 11. | Horsegram (R) | 188 | 188 | 100 |
| FOOD CROPS | | 5222 | 5204 | 99.66 |

Table – 3

Number of Experiments Planned and Analyzed under Non-Food Crops-2012-13

| Crop | | No. of Experiments | | |
|-----------------------------|-----------------|--------------------|-------------|--------------|
| | | Planned | Analyzed | % Analyzed |
| II. Non-Food Crops | | | | |
| 12. | Groundnut (Kh) | 700 | 698 | 99.71 |
| | Groundnut (R) | 460 | 460 | 100.00 |
| 13. | Gingelly (Kh) | 196 | 162 | 82.65 |
| | Gingelly (R) | 220 | 220 | 100.00 |
| 14. | Sunflower (Kh) | 60 | 50 | 83.33 |
| | Sunflower (R) | 164 | 156 | 95.12 |
| 15. | Sugarcane | 468 | 468 | 100.00 |
| 16. | Cotton (Kh) | 564 | 564 | 100.00 |
| | Cotton (R) | 246 | 238 | 96.75 |
| NON-FOOD CROPS TOTAL | | 3078 | 3016 | 97.99 |

Table 4**Cropwise Experiments Planned and Pre-assigned**

| Crop | | Experiments Planned | Experiments pre-assigned | per cent of pre-assigned |
|-----------------------|------------------|------------------------|-----------------------------|-----------------------------|
| Food Crops | | | | |
| 1. | Paddy K/K/S | 428 | 428 | 100.00 |
| | Paddy S/T/P | 1260 | 1260 | 100.00 |
| | Paddy N/K | 300 | 300 | 100.00 |
| 2. | Cholam (Kh) | 300 | 300 | 100.00 |
| | Cholam (R) | 300 | 300 | 100.00 |
| 3. | Cumbu (Kh) | 240 | 240 | 100.00 |
| | Cumbu (R) | 150 | 150 | 100.00 |
| 4. | Ragi (Kh) | 160 | 160 | 100.00 |
| | Ragi (R) | 200 | 200 | 100.00 |
| 5. | Maize (Kh) | 256 | 256 | 100.00 |
| | Maize (R) | 172 | 172 | 100.00 |
| 6. | Samai | 100 | 100 | 100.00 |
| 7. | Varagu | 112 | 112 | 100.00 |
| 8. | Redgram | 336 | 336 | 100.00 |
| 9. | Blackgram (Kh) | 44 | 44 | 100.00 |
| 10. | Blackgram (R) | 312 | 312 | 100.00 |
| 11. | Greengram(Kh) | 56 | 56 | 100.00 |
| 12. | Greengram (R) | 308 | 308 | 100.00 |
| 13. | Horsegram (R) | 188 | 188 | 100.00 |
| | Sub Total | 5222 | 5222 | 100.00 |
| Non-Food Crops | | | | |
| 12. | Groundnut (Kh) | 700 | 700 | 100.00 |
| | Groundnut (R) | 460 | 460 | 100.00 |
| 13. | Gingelly (Kh) | 196 | 196 | 100.00 |
| | Gingelly (R) | 220 | 220 | 100.00 |
| 14. | Sunflower (Kh) | 60 | 60 | 100.00 |
| | Sunflower (R) | 164 | 164 | 100.00 |
| 15. | Sugarcane | 468 | 468 | 100.00 |
| 16. | Cotton (Kh) | 564 | 564 | 100.00 |
| | Cotton (R) | 246 | 246 | 100.00 |
| | Sub Total | 3078 | 3078 | 100.00 |
| All Crops | | 8300 | 8300 | 100.00 |

Table – 5**Number of Experiments Pre-assigned for Inspection**

| Sl. No | CROP | STATISTICAL AGENCY | CANE OFFICERS | AGRICULTURAL AGENCY | NSSO |
|----------------------|------------------|--------------------|---------------|---------------------|------------|
| FOOD CROPS | | | | | |
| 1 | Paddy K/K/S | 330 | | 38 | 60 |
| | Paddy S/T/P | 1022 | | 98 | 140 |
| | Paddy N/K | 202 | | 58 | 40 |
| 2 | Cholam (Kh) | 244 | | 26 | 30 |
| | Cholam (R) | 236 | | 34 | 30 |
| 3 | Cumbu (Kh) | 190 | | 26 | 24 |
| | Cumbu (R) | 118 | | 16 | 16 |
| 4 | Ragi (Kh) | 132 | | 10 | 18 |
| | Ragi (R) | 160 | | 18 | 22 |
| 5 | Maize (Kh) | 204 | | 28 | 24 |
| | Maize (R) | 134 | | 22 | 16 |
| 6 | Samai | 88 | | 12 | |
| 7 | Varagu | 100 | | 12 | |
| 8 | Redgram | 310 | | 26 | |
| 9 | Blackgram (Kh) | 40 | | 4 | |
| 10 | Blackgram (R) | 272 | | 40 | |
| 11 | Greengram(Kh) | 46 | | 10 | |
| 12 | Greengram (R) | 278 | | 30 | |
| 13 | Horsegram (R) | 174 | | 14 | |
| | Sub-Total | 4280 | | 522 | 420 |
| NON FOODCROPS | | | | | |
| 12 | Groundnut (Kh) | 544 | | 72 | 84 |
| | Groundnut (R) | 358 | | 46 | 56 |
| 13 | Gingelly (Kh) | 154 | | 18 | 24 |
| | Gingelly (R) | 176 | | 18 | 26 |
| 14 | Sunflower (Kh) | 50 | | 10 | |
| | Sunflower (R) | 152 | | 12 | |
| 15 | Sugarcane | 312 | 82 | 24 | 50 |
| 16 | Cotton (Kh) | 444 | | 36 | 84 |
| | Cotton (R) | 192 | | 18 | 36 |
| | Sub-Total | 2382 | 82 | 254 | 360 |
| | TOTAL | 6662 | 82 | 776 | 780 |

Table – 6

Number of Experiments Inspected by Agricultural Agency

| Crop | | Pre-assigned | Inspected | % Inspected |
|-----------------------|-----------|---------------------|------------------|--------------------|
| 1 | Paddy | 194 | 194 | 100.00 |
| 2 | Jowar | 60 | 60 | 100.00 |
| 3 | Bajra | 42 | 42 | 100.00 |
| 4 | Ragi | 28 | 28 | 100.00 |
| 5 | Maize | 50 | 50 | 100.00 |
| 6 | Redgram | 26 | 26 | 100.00 |
| 7 | Blackgram | 44 | 44 | 100.00 |
| 8 | Greengram | 40 | 40 | 100.00 |
| 9 | Horsegram | 14 | 14 | 100.00 |
| 10 | Samai | 12 | 12 | 100.00 |
| 11 | Varagu | 12 | 12 | 100.00 |
| Food crops | | 522 | 522 | 100.00 |
| 12 | Cotton | 54 | 54 | 100.00 |
| 13 | Sugarcane | 24 | 24 | 100.00 |
| 14 | Gingelly | 36 | 30 | 83.33 |
| 15 | Groundnut | 118 | 118 | 100.00 |
| 16 | Sunflower | 22 | 20 | 90.91 |
| Non-Food crops | | 254 | 246 | 96.85 |
| All Crops | | 776 | 768 | 98.97 |

Table - 7

Number of Experiments Inspected by Statistical Agency

| Sl No | Crop | Pre assigned | Inspected | % Inspected |
|-----------------------|-------------|---------------------|------------------|--------------------|
| 1 | Paddy | 1554 | 1522 | 97.94 |
| 2 | Jowar | 480 | 478 | 99.58 |
| 3 | Cumbu | 308 | 308 | 100.00 |
| 4 | Ragi | 292 | 292 | 100.00 |
| 5 | Maize | 338 | 336 | 99.41 |
| 6 | Redgram | 310 | 300 | 96.77 |
| 7 | Blackgram | 312 | 306 | 98.08 |
| 8 | Greengram | 324 | 324 | 100.00 |
| 9 | Horsegram | 174 | 174 | 100.00 |
| 10 | Samai | 88 | 88 | 100.00 |
| 11 | Varagu | 100 | 100 | 100.00 |
| Food crops | | 4280 | 4228 | 98.79 |
| 12 | Cotton | 636 | 636 | 100.00 |
| 13 | Sugarcane | 312 | 312 | 100.00 |
| 14 | Gingelly | 330 | 320 | 96.97 |
| 15 | Groundnut | 902 | 902 | 100.00 |
| 16 | Sunflower | 202 | 184 | 91.09 |
| Non-food crops | | 2382 | 2354 | 98.82 |
| All Crops | | 6662 | 6582 | 98.80 |

Table - 8

Number of Experiments Inspected by N.S.S.O

| Crop | | Pre-assigned | Inspected | Per cent Inspected |
|-------------------------|-----------|---------------------|------------------|---------------------------|
| 1 | Paddy | 240 | 240 | 100.00 |
| 2 | Jowar | 60 | 60 | 100.00 |
| 3 | Bajra | 40 | 38 | 95.00 |
| 4 | Ragi | 40 | 40 | 100.00 |
| Food crops | | 420 | 418 | 99.52 |
| 5 | Cotton | 120 | 120 | 100.00 |
| 6 | Sugarcane | 50 | 50 | 100.00 |
| 7 | Groundnut | 140 | 140 | 100.00 |
| 8 | Gingelly | 50 | 42 | 84.00 |
| Non - food crops | | 360 | 352 | 97.78 |
| All Crops | | 780 | 770 | 98.72 |

Table – 9

Number of Experiments Inspected by Cane Officers

| Crop | Pre-assigned | Inspected | % Inspected |
|-------------|---------------------|------------------|--------------------|
| SUGARCANE | 82 | 82 | 100.00 |

Table - 10
Cropwise Area, Average yield and Production

| Sl. No. | Crop | 2012-13 | | | 2011-12 | | |
|---------|----------------|----------------|----------------------|------------------------|----------------|-----------------------|------------------------|
| | | Area (ha) | Average Yield Kg/ha. | Production (in Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (in Tonnes) |
| 1 | Paddy K/K/S | 209758 | 3972 | 833149 | 335715 | 4125 | 1384666 |
| 2 | Paddy S/T/P | 1187466 | 2406 | 2856617 | 1444271 | 3872 | 5592375 |
| 3 | Paddy N/K | 96052 | 3754 | 360568 | 123786 | 3891 | 481616 |
| 4 | Paddy (C) | 1493276 | 2712 | 4050334 | 1903772 | 3918 | 7458657 |
| 5 | Cholam (Kh) | 128579 | 726 | 93357 | 134231 | 1096 | 147052 |
| 6 | Cholam (R) | 82314 | 991 | 81609 | 63465 | 1662 | 105471 |
| 7 | Cholam (C) | 210893 | 830 | 174966 | 197696 | 1277 | 252522 |
| 8 | Cumbu (Kh) | 23545 | 1561 | 36757 | 30837 | 2211 | 68165 |
| 9 | Cumbu (R) | 19383 | 1019 | 19748 | 15827 | 2924 | 46282 |
| 10 | Cumbu (C) | 42928 | 1316 | 56505 | 46664 | 2453 | 114447 |
| 11 | Ragi (Kh) | 60073 | 1843 | 110723 | 68835 | 2637 | 181491 |
| 12 | Ragi (R) | 10221 | 2670 | 27288 | 13970 | 3105 | 43371 |
| 13 | Ragi (C) | 70294 | 1963 | 138011 | 82805 | 2716 | 224862 |
| 14 | Maize (Kh) | 171249 | 3554 | 608660 | 176287 | 5682 | 1001667 |
| 15 | Maize (R) | 119803 | 2819 | 337703 | 104342 | 6649 | 693800 |
| 16 | Maize (C) | 291052 | 3252 | 946363 | 280629 | 6042 | 1695467 |
| 17 | Samai | 17423 | 1095 | 19071 | 20378 | 1230 | 25060 |
| 18 | Varagu | 3340 | 1351 | 4511 | 4156 | 2012 | 8362 |
| 19 | Redgram | 42065 | 787 | 33105 | 35968 | 870 | 31292 |
| 20 | Blackgram (Kh) | 208625 | 425 | 88706 | 308263 | 580 | 178816 |
| 21 | Greengram | 118615 | 284 | 33674 | 164069 | 519 | 85118 |
| 22 | Horsegram | 63505 | 401 | 25455 | 68968 | 539 | 37181 |

Note:

K/K/S - Kar / Kuruvai / Samba
S/T/P - Samba / Thaladi / Pishanam
N/K - Navarai / Kodai.

Kh - Kharif
R - Rabi
C - Combined

Table-11**Season wise Area, Average Yield and Production of Paddy**

| Season | 2012-13 | | | 2011-12 | | |
|---|----------------|-----------------------|---------------------|----------------|-----------------------|---------------------|
| | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) |
| K/K/S | 209758 | 3972 | 833149 | 335715 | 4125 | 1384666 |
| S/T/P | 1187466 | 2406 | 2856617 | 1444271 | 3872 | 5592375 |
| Navarai /Kodai | 96052 | 3754 | 360568 | 123786 | 3891 | 481616 |
| All Seasons | 1493276 | 2712 | 4050334 | 1903772 | 3918 | 7458657 |
| % Variation Over the previous year | 21.56 | -30.78 | 45.70 | | | |

Table-12**Extent of Application of High Yielding Variety Seeds, Fertilisers and Pesticides**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|---------------|------------|----------|----------------------|----------------|-----------|---------------------------------------|-------------|-------------|
| | Local seed | HYV seed | Chemical fertilizers | Other Manu-red | Unmanured | Treated with pesticides/ insecticides | Not treated | |
| K/K/S | ** | 428 | 90 | 38 | 300 | 94 | 334 | 428 |
| S/T/P | ** | 1248 | 724 | 474 | 50 | 811 | 437 | 1248 |
| Navarai/Kodai | ** | 300 | 156 | 99 | 45 | 201 | 99 | 300 |
| Total | ** | 1976 | 970 | 611 | 395 | 1106 | 870 | 1976 |
| Percent | ** | 100 | 49 | 31 | 20 | 56 | 44 | 100 |

Table-13**Area Average Yield and Production – CHOLAM (JOWAR)**

| Crop | 2012-13 | | | 2011-12 | | |
|---|---------------|-----------------------|--------------------|---------------|-----------------------|---------------------|
| | Area (ha) | Average Yield (Kg/ha) | Production Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) |
| Jowar (Kh) | 128597 | 726 | 93357 | 134232 | 1096 | 147052 |
| Jowar (R) | 82314 | 991 | 81609 | 63464 | 1662 | 105471 |
| Combined | 210893 | 830 | 174966 | 197696 | 1277 | 252522 |
| % Variation Over the previous year | 6.68 | -35.00 | -30.71 | | | |

Table-14**Extent of application of High Yielding Varieties of Seeds, Fertilizers and Pesticides.**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|--------------|------------|------------|---------------------|---------------|-----------|---------------------------------------|-------------|-------------|
| | Local Seed | HYV Seed | Chemical Fertilizer | Other Manures | Unmanured | Treated With Pesticides/ Insecticides | Not Treated | |
| Jowar (Kh) | 51 | 249 | 93 | 177 | 30 | 12 | 288 | 300 |
| Jowar (R) | 60 | 240 | 138 | 135 | 27 | 12 | 288 | 300 |
| Total | 111 | 489 | 231 | 312 | 57 | 24 | 576 | 600 |
| Per cent | 18 | 82 | 39 | 52 | 9 | 4 | 96 | 100 |

Table-15**Area Average Yield and Production - BAJRA**

| Crop | 2012-13 | | | 2011-12 | | |
|---------------------------|--------------|-----------------------|---------------------|--------------|-----------------------|---------------------|
| | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) |
| Bajra (Kh) - | 23545 | 1561 | 36757 | 30837 | 2211 | 68165 |
| Bajra (R) | 19383 | 1019 | 19748 | 15827 | 2924 | 46282 |
| Combined | 42928 | 1316 | 56505 | 46664 | 2453 | 114447 |
| per cent Variation | -8.01 | -46.35 | -50.63 | | | |

Table -16**Extent of Application of High Yielding Varieties Seeds, Fertilizers and Pesticides**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|--------------|------------|------------|---------------------|---------------|-----------|---------------------------------------|-------------|-------------|
| | Local Seed | HYV Seed | Chemical Fertilizer | Other Manures | Unmanured | Treated With Pesticides/ Insecticides | Not Treated | |
| Bajra (Kh) | 106 | 134 | 60 | 106 | 74 | 2 | 238 | 240 |
| Bajra (R) | 0 | 150 | 105 | 42 | 3 | 10 | 140 | 150 |
| Total | 106 | 284 | 165 | 148 | 77 | 12 | 378 | 390 |
| Per cent | 27 | 73 | 42 | 38 | 20 | 3 | 97 | 100 |

Table -17**Area, Average Yield and Production – RAGI**

| Crop | 2012-13 | | | 2011-12 | | |
|-----------------------|----------------------|--------------------------------------|------------------------------------|----------------------|--------------------------------------|------------------------------------|
| | Area (ha) | Average Yield (Kg/ha) | Production (in Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (in Tonnes) |
| Ragi (Kh) | 60073 | 1843 | 110723 | 68835 | 2637 | 181491 |
| Ragi (R) | 10221 | 2670 | 27288 | 13970 | 3105 | 43371 |
| Combined | 70294 | 1963 | 138011 | 82805 | 2716 | 224862 |
| per cent Variation | -15.10 | -27.72 | -38.62 | | | |

Table -18**Extent of Application of High Yielding Varieties Seeds, Fertilizers and
Pesticides**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|--------------|-------------------|-----------------|--------------------------------|--------------------------|------------------|--|------------------------|------------------------|
| | Local Seed | HYV Seed | Chemical Fertilizer | Other manures | Unmanured | Treated With Pesticides/ Insecticides | Not Treated | |
| Ragi (Kh) | 0 | 160 | 75 | 80 | 5 | 6 | 154 | 160 |
| Ragi (R) | 12 | 188 | 94 | 100 | 6 | 20 | 180 | 200 |
| Total | 12 | 348 | 169 | 180 | 11 | 26 | 334 | 360 |
| Per cent | 3 | 97 | 47 | 50 | 3 | 7 | 93 | 100 |

Table -19**Area, Average Yield and Production – MAIZE**

| Crop | 2012-13 | | | 2011-12 | | |
|-------------------------------|----------------------|--------------------------------------|--------------------------------|----------------------|--------------------------------------|--------------------------------|
| | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (Tonnes) |
| Maize (Kh) | 171249 | 3554 | 608660 | 176287 | 5682 | 1001667 |
| Maize (R) | 119803 | 2819 | 337703 | 104342 | 6649 | 693800 |
| Combined | 291052 | 3252 | 946363 | 280629 | 6042 | 1695467 |
| per cent Variation | 3.71 | -46.18 | -44.18 | | | |

Table -20**Extent of Application of High Yielding Varieties Seeds, Fertilizers and
Pesticides**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|-----------------|-----------------------|---------------------|--------------------------------|--------------------------|------------------|--|------------------------|--------------------|
| | Local Seed | HYV Seed | Chemical Fertilizer | Other manures | Unmanured | Treated With Pesticides/ Insecticides | Not Treated | |
| Maize (Kh) | 0 | 256 | 141 | 110 | 5 | 49 | 207 | 256 |
| Maize (R) | 0 | 172 | 98 | 62 | 12 | 21 | 151 | 172 |
| Total | 0 | 428 | 239 | 172 | 17 | 70 | 358 | 428 |
| Per cent | 0 | 100 | 56 | 40 | 4 | 16 | 84 | 100 |

Table - 21

Area, Average Yield and Production - SAMAI

| Year | Area (ha) | Yield rate (Kg/ha) | Production (tonnes) |
|---------------------------|----------------------|-------------------------------|--------------------------------|
| 2012-13 | 17423 | 1095 | 19071 |
| 2011-12 | 20378 | 1230 | 25060 |
| Per Cent Variation | -14.50 | -10.96 | -23.90 |

Table – 22

Area, Average Yield and Production - VARAGU

| Year | Area (ha) | Yield rate (Kg/ha) | Production (Tonnes) |
|---------------------------|-----------------------|-------------------------------|--------------------------------|
| 2012-13 | 3340 | 1351 | 4511 |
| 2011-12 | 4156 | 2012 | 8362 |
| Per Cent Variation | -19.63 | -32.85 | -46.05 |

Table - 23

Area, Average Yield and Production - REDGRAM

| Year | Area (ha) | Yield rate (Kg/ha) | Production (in Tonnes) |
|--------------------|-----------|--------------------|------------------------|
| 2012-13 | 42065 | 787 | 33105 |
| 2011-12 | 35968 | 870 | 31292 |
| per cent Variation | 16.94 | -9.54 | 5.79 |

Table -24 – REDGRAM (KHARIF ONLY)

Extent of Application of High Yielding Varieties Seeds, Fertilizers and Pesticides

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|--------------|------------|----------|---------------------|---------------|-----------|---------------------------------------|-------------|-------------|
| | Local Seed | HYV Seed | Chemical Fertilizer | Other manures | Unmanured | Treated With Pesticides/ Insecticides | Not Treated | |
| Redgram (KH) | 3 | 333 | 108 | 202 | 26 | 185 | 151 | 336 |
| Per cent | 1 | 99 | 32 | 60 | 8 | 55 | 45 | 100 |

Table -25

Area, Average Yield and Production - BLACKGRAM

| Year | Area (ha) | Yield rate (Kg/ha) | Production (in Tonnes) |
|-----------------------|--------------|-----------------------|---------------------------|
| 2012-13 | 208625 | 425 | 88706 |
| 2011-12 | 308263 | 580 | 178816 |
| per cent Variation | -32.32 | -26.72 | -50.39 |

Table -26

**Extent of Application of High Yielding Varieties, Seeds, Fertilizers and
Pesticides.**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|----------------|------------|----------|-------------------------|----------------|-----------|---|-------------|----------------|
| | Local seed | HYV seed | Chemical fertilizers | Other Manu-red | Unmanured | Treated with pesticides/ insecticides | Not treated | |
| Blackgram (KH) | 0 | 44 | 23 | 11 | 10 | 26 | 18 | 44 |
| Blackgram (R) | 28 | 284 | 191 | 31 | 90 | 119 | 193 | 312 |
| COMBINED | 28 | 328 | 214 | 42 | 100 | 145 | 211 | 356 |
| Per cent | 8 | 92 | 60 | 12 | 28 | 41 | 59 | 100 |

Table-27

Area, Average Yield and Production - GREEN GRAM

| Year | Area (ha) | Yield rate (Kg/ha) | Production (in Tonnes) |
|-----------------------|--------------|-----------------------|---------------------------|
| 2012-13 | 118615 | 284 | 33674 |
| 2011-12 | 164069 | 519 | 85118 |
| per cent Variation | -27.70 | -45.28 | -60.44 |

Table-28

**Extent of Application of High Yielding Varieties, Seeds, Fertilizers and
Pesticides.**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|-------------------|------------|----------|-------------------------|----------------|-----------|---|-------------|----------------|
| | Local seed | HYV seed | Chemical fertilizers | Other Manu-red | Unmanured | Treated with pesticides/ insecticides | Not treated | |
| Greengram (KH) | 0 | 56 | 5 | 11 | 40 | 17 | 39 | 56 |
| Greengram (R) | 52 | 256 | 142 | 43 | 123 | 102 | 206 | 308 |
| COMBINED | 52 | 312 | 147 | 54 | 163 | 119 | 245 | 364 |
| Percent | 14 | 86 | 40 | 15 | 45 | 33 | 67 | 100 |

Table-29

Area, Average Yield and Production - HORSE GRAM

| Year | Area (ha) | Yield rate (Kg/ha) | Production (in Tonnes) |
|-----------------------|--------------|-----------------------|----------------------------|
| 2012-13 | 63505 | 401 | 25455 |
| 2011-12 | 68968 | 539 | 37181 |
| per cent Variation | -7.92 | -25.60 | -31.54 |

Table-30

**Extent of Application of High Yielding Varieties, Seeds, Fertilizers and
Pesticides**

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|-----------|------------|----------|-------------------------|----------------|-----------|---|-------------|----------------|
| | Local seed | HYV seed | Chemical fertilizers | Other Manu-red | Unmanured | Treated with pesticides/ insecticides | Not treated | |
| Horsegram | 51 | 137 | 4 | 113 | 71 | 0 | 188 | 188 |
| Percent | 27 | 73 | 2 | 60 | 38 | 0 | 100 | 100 |

Table – 31

Area, Average Yield and Production for Non food crops – At a Glance

| Crop | | 2012-13 | | | 2011-12 | | |
|------|----------------------|----------------|-----------------------------|-----------------------------------|---------------|-----------------------------|-----------------------------------|
| | | Area In ha. | Average Yield (Kg/ha) | Production (in 000 Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (in 000 Tonnes) |
| 1 | Cotton (K) | 104824 | 334 | 206104 | 107036 | 485 | 302611 |
| 2 | Cotton (R) | 28391 | 296 | 49366 | 28769 | 468 | 79158 |
| 3 | Cotton (C) * | 133215 | 326 | 255470 | 135805 | 481 | 381769 |
| 4 | Sugarcane * | 348379 | 98 | 34014097 | 346350 | 113 | 38974842 |
| 5 | Gingelly (K) | 13796 | 511 | 7051 | 19513 | 706 | 13784 |
| 6 | Gingelly (R) | 19385 | 522 | 10128 | 23662 | 535 | 12663 |
| 7 | Gingelly (C) | 33181 | 518 | 17179 | 43175 | 613 | 26447 |
| 8 | Groundnut (K) | 224912 | 1891 | 425228 | 249079 | 2202 | 548503 |
| 9 | Groundnut (R) | 114449 | 3147 | 360133 | 136533 | 3751 | 512151 |
| 10 | Groundnut (C) | 339361 | 2314 | 785361 | 385612 | 2751 | 1060654 |
| 11 | Sunflower | 10782 | 1055 | 11374 | 13610 | 1809 | 24622 |

Note:

For cotton the production is given in bales of 170 kgs. lint each.

Sugarcane – Average yield furnished in tonnes per hect.

Table – 32

Area, Average Yield and Production - COTTON

| Crop | 2012-13 | | | 2011-12 | | |
|--------------------|---------------|------------------------------|---|---------------|------------------------|---|
| | Area (Ha) | Average yield Kg/ ha. (Lint) | Production (bales of 170 kg. lint each) | Area (Ha) | Average yield (Kg/ ha) | Production (bales of 170 kg. of lint each) |
| Cotton (K) | 104824 | 334 | 206104 | 107036 | 485 | 302611 |
| Cotton (R) | 28391 | 296 | 49366 | 28769 | 468 | 79158 |
| COMBINED | 133215 | 326 | 255470 | 135805 | 481 | 381769 |
| per cent Variation | -1.91 | -32.22 | -33.08 | | | |

Table - 33

Extent of Application of High Yielding Varieties Seeds, Fertilizers and Pesticides

| Crop | Seed | | Fertilizer | | | Pesticides | | Sample size |
|-----------------|------------|------------|----------------------|----------------|-----------|---------------------------------------|-------------|-------------|
| | Local seed | HYV seed | Chemical fertilizers | Other Manu-red | Unmanured | Treated with pesticides/ insecticides | Not treated | |
| Cotton (K) | 0 | 564 | 282 | 237 | 45 | 434 | 130 | 564 |
| Cotton (R) | 0 | 238 | 131 | 83 | 24 | 179 | 59 | 238 |
| COMBINED | 0 | 802 | 413 | 320 | 69 | 613 | 189 | 802 |
| Percent | 0 | 100 | 51 | 40 | 9 | 76 | 24 | 100 |

Table – 34

Area, Average Yield and Production – SUGARCANE

| Crop | 2012-13 | | | 2011-12 | | |
|-------------|------------|--------------------------|------------------------|------------|---------------|------------------------|
| | Area in ha | Average yield in TON/HEC | Production (in Tonnes) | Area in ha | Average yield | Production (in Tonnes) |
| Sugarcane | 348379 | 98 | 34014097 | 346350 | 113 | 38974842 |
| % Variation | 0.59 | -13.27 | -12.73 | | | |

Table – 35

Extent of Application of High Yielding Varieties Seeds, Fertilizers and Pesticides

| Crop | Seed | | Fertilizers | | | Pesticides | | Sample size |
|-----------|------------|----------|-----------------------|---------|-----------|--|-------------|-------------|
| | Local seed | HYV seed | Chemical fertili-zers | Manured | Unmanured | Treated with pesticides / Insecticides | Not treated | |
| Sugarcane | 0 | 468 | 248 | 164 | 56 | 159 | 309 | 468 |
| Percent | 0 | 100 | 53 | 35 | 12 | 34 | 66 | 100 |

Table – 36

Area, Average Yield and Production – GINGELLY

| Crop | 2012-13 | | | 2011-12 | | |
|---------------------------|---------------|-----------------------|-----------------------------|--------------|------------------------|-------------------------|
| | Area (ha) | Average yield (Kg/ha) | Production (in 000 Tonnes) | Area (ha) | Average yield (Kg/ha) | Production (in Tonnes) |
| Gingelly (K) | 13796 | 511 | 7051 | 19513 | 706 | 13784 |
| Gingelly (R) | 19385 | 522 | 10128 | 23662 | 535 | 12663 |
| Combined | 33181 | 518 | 17179 | 43175 | 613 | 26447 |
| per cent Variation | -23.15 | -15.50 | -35.04 | | | |

Table – 37

Extent of Application of High Yielding Varieties Seeds, Fertilizers and Pesticides

| Crop | Seed | | Fertilizers | | | Pesticides | | Sample size |
|--------------|------------|------------|----------------------|------------|-----------|---------------------------------------|-------------|-------------|
| | Local seed | HYV Seed | Chemical fertilizers | Manured | Unmanured | Treated with Pesticides/ insecticides | Not treated | |
| Gingelly (K) | 0 | 162 | 58 | 83 | 21 | 45 | 117 | 162 |
| Gingelly (R) | 2 | 218 | 90 | 55 | 75 | 46 | 174 | 220 |
| Total | 2 | 380 | 148 | 138 | 96 | 91 | 291 | 382 |
| Percent | 1 | 99 | 39 | 36 | 25 | 24 | 76 | 100 |

Table - 38**Area, Average Yield and Production**

| CROP | 2012-13 | | | 2011-12 | | |
|-------------------------------|----------------------|--------------------------------------|--|----------------------|--------------------------------------|------------------------------------|
| | Area (ha) | Average Yield (Kg/ha) | Production (in 000 Tonnes) | Area (ha) | Average Yield (Kg/ha) | Production (in Tonnes) |
| Groundnut (K) | 224912 | 1891 | 425228 | 249079 | 2202 | 548503 |
| Groundnut (R) | 114449 | 3147 | 360133 | 136533 | 3751 | 512151 |
| COMBINED | 339361 | 2314 | 785361 | 385612 | 2751 | 1060654 |
| per cent Variation | -11.99 | -15.89 | -25.96 | | | |

Table – 39

**Extent of Application of High Yielding Varieties Seeds, Fertilizers and
Pesticides**

| Crop | Seed | | Fertilizers | | | Pesticides | | Sample size |
|---------------|-----------------------|---------------------|---------------------------------|----------------|------------------|--|--------------------|------------------------|
| | Local seed | HYV Seed | Chemical fertilizers | Manured | Unmanured | Treated with Pesticides/ insecticides | Not treated | |
| Groundnut (K) | 12 | 686 | 273 | 357 | 68 | 252 | 446 | 698 |
| Groundnut (R) | 14 | 446 | 267 | 166 | 27 | 313 | 147 | 460 |
| Total | 26 | 1132 | 540 | 523 | 95 | 565 | 593 | 1158 |
| Percent | 2 | 98 | 47 | 45 | 8 | 49 | 51 | 100 |

Table-40**Driage ratio for Groundnut based on Crop Estimation Survey 2012-13**

| Crop | No. of experiments planned for diriage | No. of experiments Considered | Driage Ratio (per cent) (from to dry pods) |
|------------------|--|-------------------------------|--|
| 1. Groundnut (K) | 349 | 349 | 0.7296 |
| 2. Groundnut (R) | 230 | 230 | 0.7498 |

Table-41**Area, Average Yield and Production**

| Crop | Year | Area Sown (ha) | Yield rate (Kg/ha) | Production (Tonnes) |
|--------------------|---------|----------------|--------------------|---------------------|
| Sun Flower | 2012-13 | 10782 | 1055 | 11374 |
| | 2011-12 | 13610 | 1809 | 24622 |
| per cent Variation | | -20.78 | -41.68 | -53.81 |

Table – 42 - SUNFLOWER**Extent of Application of High Yielding Varieties Seeds, Fertilizers and Pesticides**

| Year | Seed | | Fertilizers | | | Pesticides | | Sample size |
|----------------|------------|------------|----------------------|-----------|-----------|---------------------------------------|-------------|-------------|
| | Local seed | HYV Seed | Chemical fertilizers | Manured | Unmanured | Treated with pesticides/ Insecticides | Not treated | |
| Sunflower (Kh) | 0 | 50 | 27 | 23 | 0 | 7 | 43 | 50 |
| Sunflower (R) | 0 | 156 | 95 | 58 | 3 | 17 | 139 | 156 |
| Total | 0 | 206 | 122 | 81 | 3 | 24 | 182 | 206 |
| Per cent | 0 | 100 | 60 | 39 | 1 | 12 | 88 | 100 |

Table – 43

Crop-wise Driage Ratio - 2012-13

| Crop | | No. of experiments Planned for Driage | No. of experiments Considered | Driage Ratio (from wet cobs/grains to dry grains) |
|------|-------------|---|-------------------------------------|--|
| 1 | Paddy K/K/S | 214 | 214 | 0.9009 |
| 2 | Paddy S/T/P | 606 | 606 | 0.8936 |
| 3 | Paddy N/K | 147 | 147 | 0.8898 |
| 4 | Jowar (K) | 150 | 150 | 0.4805 |
| 5 | Jowar (R) | 150 | 150 | 0.5216 |
| 6 | Bajra (K) | 120 | 118 | 0.4933 |
| 7 | Bajra (R) | 75 | 75 | 0.5820 |
| 8 | Ragi (K) | 80 | 80 | 0.4766 |
| 9 | Ragi (R) | 100 | 100 | 0.5178 |
| 10 | Maize (K) | 128 | 128 | 0.6394 |
| 11 | Maize (R) | 86 | 86 | 0.6042 |
| 12 | Samai | 50 | 50 | 0.8489 |
| 13 | Varagu | 56 | 56 | 0.8741 |

Note: K/K/S - Kar/ Kuruvai/ Sornawari
S/T/P - Samba/ Thaladi/ Pishanam
N/K - Navarai/ Kodai

K - Kharif
R - Rabi

Table – 44**CROP ESTIMATION SURVEY****Training Imparted to Primary Workers**

| District | | No. of centers chosen for imparting training | No. of Officers who imparted training State/Central Govt | Details of Field Staff (A.O/H.O) | | |
|--------------|-----------------|--|--|----------------------------------|------------------|-----------------|
| | | | | Total | Total called for | Number attended |
| 1 | Kancheepuram | 1 | 6 | 68 | 68 | 58 |
| 2 | Thiruvallur | 2 | 3 | 21 | 21 | 21 |
| 3 | Cuddalore | 2 | 2 | 88 | 88 | 88 |
| 4 | Villupuram | 3 | 6 | 78 | 78 | 78 |
| 5 | Vellore | 4 | 4 | 45 | 45 | 45 |
| 6 | Thiruvannamalai | 3 | 3 | 26 | 26 | 22 |
| 7 | Salem | 2 | 2 | 63 | 63 | 53 |
| 8 | Namakkal | 2 | 6 | 47 | 47 | 47 |
| 9 | Dharmapuri | 8 | 8 | 21 | 21 | 21 |
| 10 | Coimbatore | 3 | 3 | 24 | 24 | 24 |
| 11 | Erode | 2 | 2 | 28 | 28 | 28 |
| 12 | Tiruchirapalli | 3 | 3 | 32 | 32 | 32 |
| 13 | Karur | 2 | 2 | 18 | 18 | 18 |
| 14 | Perambalur | 1 | 2 | 44 | 44 | 44 |
| 15 | Thanjavur | 3 | 5 | 95 | 95 | 95 |
| 16 | Thiruvavur | 2 | 2 | 18 | 16 | 16 |
| 17 | Nagapatinam | 2 | 2 | 53 | 53 | 53 |
| 18 | Pudukkottai | 2 | 3 | 43 | 43 | 43 |
| 19 | Madurai | 2 | 3 | 18 | 18 | 18 |
| 20 | Theni | 4 | 4 | 44 | 44 | 44 |
| 21 | Dindigul | 5 | 1 | 35 | 35 | 35 |
| 22 | Ramanathapuram | 2 | 5 | 90 | 88 | 88 |
| 23 | Virudhunagar | 3 | 3 | 42 | 42 | 42 |
| 24 | Sivagangai | 2 | 2 | 27 | 27 | 27 |
| 25 | Thirunelveli | 3 | 3 | 38 | 36 | 36 |
| 26 | Thoothukudi | 3 | 3 | 87 | 65 | 65 |
| 27 | Kanniyakumari | 2 | 3 | 19 | 19 | 19 |
| 28 | The Nilgiris | 4 | 4 | 27 | 27 | 25 |
| 29 | Krishnagiri | 2 | 2 | 66 | 66 | 65 |
| 30 | Ariyalur | 1 | 1 | 81 | 81 | 66 |
| 31 | Tiruppur | 3 | 3 | 30 | 30 | 30 |
| TOTAL | | 83 | 101 | 1416 | 1388 | 1346 |

Table – 45**GENERAL CROP ESTIMATION SURVEY****Cropwise Percentage of Area under different Agricultural Practices – 2012-13**

| Crop | Local Seeds | High Yielding Seeds | Chemical Fertilizers | Other Manures | Un- Manured | Treatment of Pesticides/ Insecticides | Not treated with Pesticides/ Insecticides |
|----------------|-------------|---------------------|----------------------|---------------|-------------|---------------------------------------|---|
| Paddy K/K/S | 0 | 100 | 21 | 9 | 70 | 22 | 78 |
| Paddy S/T/P | 0 | 100 | 58 | 38 | 4 | 65 | 35 |
| Paddy N/K | 0 | 100 | 52 | 33 | 15 | 67 | 33 |
| Cholam (KH) | 17 | 83 | 31 | 59 | 10 | 4 | 96 |
| Cholam (R) | 20 | 80 | 46 | 45 | 9 | 4 | 96 |
| Cumbu (KH) | 44 | 56 | 25 | 44 | 31 | 1 | 99 |
| Cumbu (R) | 0 | 100 | 70 | 28 | 2 | 7 | 93 |
| Ragi (KH) | 0 | 100 | 47 | 50 | 3 | 4 | 96 |
| Ragi (R) | 6 | 94 | 47 | 50 | 3 | 10 | 90 |
| Redgram | 1 | 99 | 32 | 60 | 8 | 55 | 45 |
| Blackgram (KH) | 0 | 100 | 53 | 25 | 22 | 58 | 42 |
| Blackgram (R) | 9 | 91 | 61 | 10 | 29 | 38 | 62 |
| Greengram (KH) | 0 | 100 | 9 | 19 | 72 | 31 | 69 |
| Greengram (R) | 17 | 83 | 46 | 14 | 40 | 33 | 67 |
| Horsegram | 27 | 73 | 2 | 60 | 38 | 0 | 100 |
| Samai | 44 | 56 | 33 | 57 | 11 | 0 | 100 |
| Varagu | 54 | 46 | 28 | 40 | 32 | 5 | 95 |
| Maize (KH) | 0 | 100 | 55 | 43 | 2 | 19 | 81 |
| Maize (R) | 0 | 99 | 57 | 36 | 7 | 12 | 88 |

KH : KHARIF

R : RABI

Table – 46

GENERAL CROP ESTIMATION SURVEY**Crop wise Average Yield in Kg/Ha. for Local and High Yielding Varieties – 2012-13**

| Food Crops | | Local | | | | High Yielding | | | | Local Total | | High Yielding Total | |
|------------|-------------|------------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|
| | | Kharif | | Rabi | | Kharif | | Rabi | | Experiments analysed | Average Yield | Experiments analysed | Average Yield |
| | | Experiments analysed | Average Yield | Experiments analysed | Average Yield | Experiments analysed | Average Yield | Experiments analysed | Average Yield | | | | |
| 1 | Paddy-K/K/S | 0 | 0 | 0 | 0 | Expt =428 | | Avg Yield =3972 | | 0 | 0 | 428 | 3972 |
| 2 | Paddy-S/T/P | Expt = 0 Avg Yield = 0 | | | | Expt = 1248 | | Avg Yield = 2402 | | 0 | 0 | 1248 | 2402 |
| 3 | Paddy-N/K | 0 | 0 | 0 | 0 | Expt = 300 | | Avg Yield = 3565 | | 0 | 0 | 300 | 3565 |
| 4 | Cholam | 84 | 729 | 118 | 521 | 216 | 855 | 182 | 1212 | 202 | 1250 | 398 | 2067 |
| 5 | Cumbu | 84 | 1182 | 6 | 1841 | 152 | 1693 | 144 | 1220 | 90 | 3023 | 296 | 2913 |
| 6 | Ragi | 2 | 3501 | 14 | 2742 | 314 | 2405 | 30 | 1735 | 16 | 6243 | 344 | 4140 |
| 7 | Redgram | 4 | 607 | 0 | 0 | 332 | 722 | 0 | 0 | 4 | 607 | 332 | 722 |
| 8 | Blackgram | 0 | 0 | 16 | 323 | 44 | 643 | 296 | 384 | 16 | 323 | 340 | 1027 |
| 9 | Greengram | 0 | 0 | 42 | 312 | 56 | 347 | 266 | 293 | 42 | 312 | 322 | 640 |
| 10 | Horsegram | 0 | 0 | 77 | 330 | 0 | 0 | 111 | 367 | 77 | 330 | 111 | 367 |
| 11 | Samai | 42 | 1533 | 0 | 0 | 42 | 1533 | 70 | 1746 | 42 | 1533 | 112 | 3279 |
| 12 | Varagu | 62 | 1178 | 0 | 0 | 62 | 1178 | 38 | 1379 | 62 | 1178 | 100 | 2557 |
| 13 | Maize | 0 | 0 | 0 | 0 | 256 | 3777 | 172 | 3536 | 0 | 0 | 428 | 7313 |

Table – 47**GENERAL CROP ESTIMATION SURVEY**

Crop wise Average Yield in Kg / Ha. for Local and High Yielding Varieties – 2012 - 13

| Non-Food Crops | | Local | | | | High Yielding | | | | Local Total | | High Yielding | |
|----------------|-----------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|
| | | Kharif | | Rabi | | Kharif | | Rabi | | Experiments analysed | Average Yield | Experiments analysed | Average Yield |
| | | Experiments analysed | Average Yield | Experiments analysed | Average Yield | Experiments analysed | Average Yield | Experiments analysed | Average Yield | | | | |
| 1 | Cotton | 0 | 0 | 0 | 0 | 726 | 348 | 76 | 237 | 0 | 0 | 802 | 585 |
| 2 | Gingelly | 0 | 0 | 2 | 230 | 288 | 506 | 94 | 419 | 2 | 230 | 382 | 925 |
| 3 | Groundnut | 29 | 2351 | 0 | 0 | 1097 | 2347 | 32 | 2244 | 29 | 2351 | 1129 | 4591 |
| 4 | Sunflower | 0 | 0 | 0 | 0 | 146 | 1331 | 60 | 848 | 0 | 0 | 206 | 2179 |
| 5 | Sugarcane | 0 | 0 | 0 | 0 | 304 | 98 | 164 | 90 | 0 | 0 | 468 | 188 |

Table – 48

GENERAL CROP ESTIMATION SURVEY

**Cropwise Percentage of Area under different Agricultural Practices for
Non food crops**

| Crop | Local Seeds | High Yielding Seeds | Chemical Fertilizers | Other Manures | Un0Manured | Treatment of Pesticides/ Insecticides | Not treated with Pesticides/ |
|----------------|--------------------|--------------------------------|---------------------------------|----------------------|-------------------|--|---|
| Groundnut (KH) | 2 | 98 | 39 | 51 | 10 | 36 | 64 |
| Groundnut (R) | 3 | 97 | 58 | 36 | 6 | 68 | 32 |
| Sunflower (KH) | 0 | 100 | 53 | 47 | 0 | 15 | 85 |
| Sunflower (R) | 0 | 100 | 61 | 37 | 2 | 11 | 89 |
| Gingelly (KH) | 0 | 100 | 36 | 51 | 13 | 28 | 72 |
| Gingelly (R) | 1 | 99 | 41 | 25 | 34 | 21 | 79 |
| Sugarcane | 0 | 100 | 53 | 35 | 12 | 34 | 66 |
| Cotton (KH) | 0 | 100 | 50 | 42 | 8 | 77 | 23 |
| Cotton (R) | 0 | 100 | 55 | 35 | 10 | 75 | 25 |

KH : KHARIF

R : RABI

Table – 49

GENERAL CROP ESTIMATION SURVEY

Cotton Ginning Ratio – 2012 - 13

| Sl. No. | District | Ginning Ratio (per cent) |
|----------------|-----------------|---------------------------------------|
| 1 | Cuddalore | 31.67 |
| 2 | Villupuram | 33.83 |
| 3 | Salem | 33.33 |
| 4 | Krishnagiri | 32.18 |
| 5 | Dindigul | 34.10 |
| 6 | Thirunelveli | 35.00 |
| 7 | Virudhunagar | 31.82 |
| 8 | Coimbatore | 36.37 |
| 9 | Madurai | 32.73 |
| 10 | Erode | 32.03 |
| 11 | Tiruppur | 34.09 |
| 12 | Namakkal | 32.24 |
| 13 | Thoothukudi | 34.51 |
| STATE | | 32.65 |

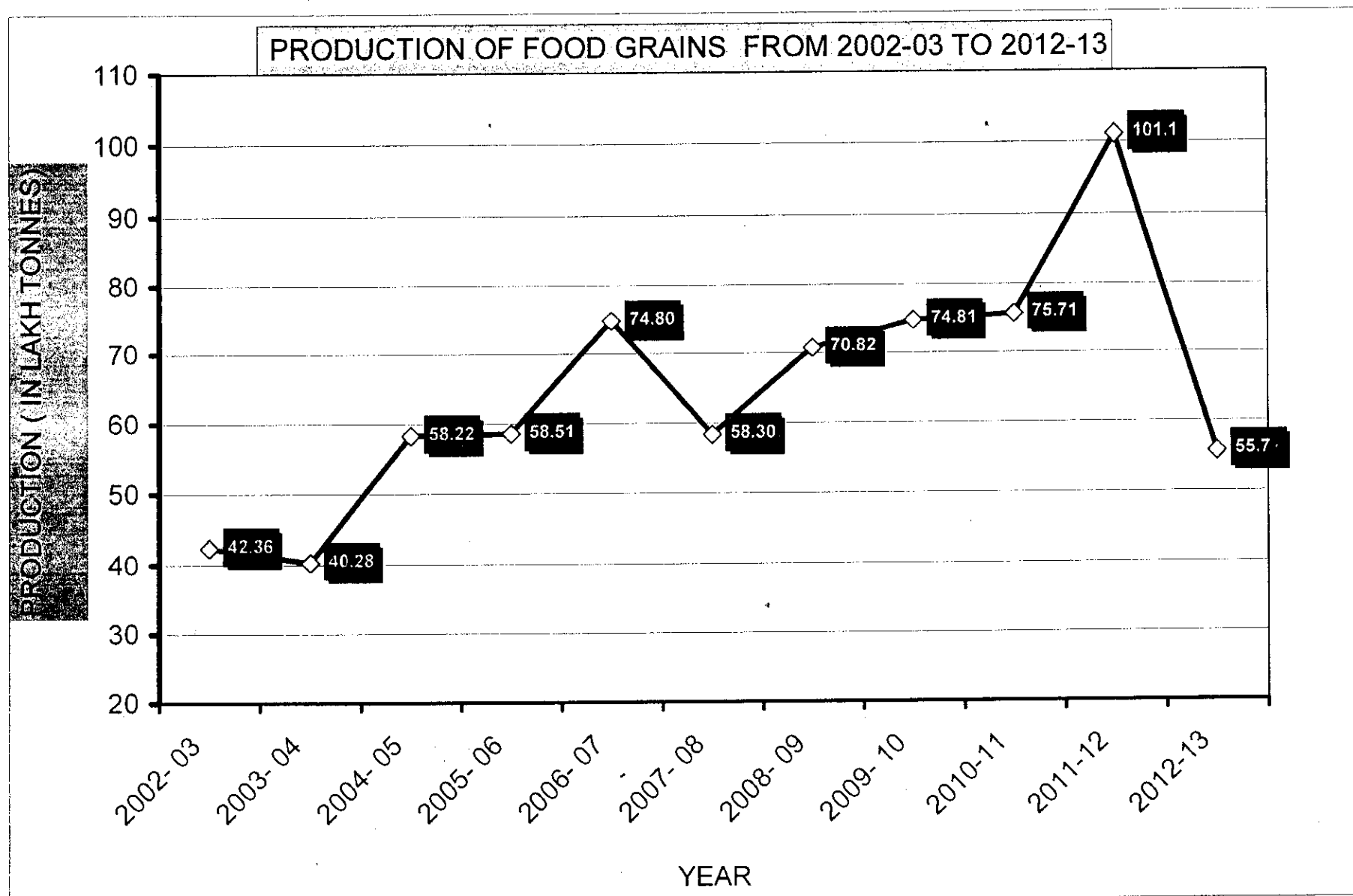
Table – 50

ESTIMATES OF CANE GUR RATIO FOR THE YEAR 2012-13

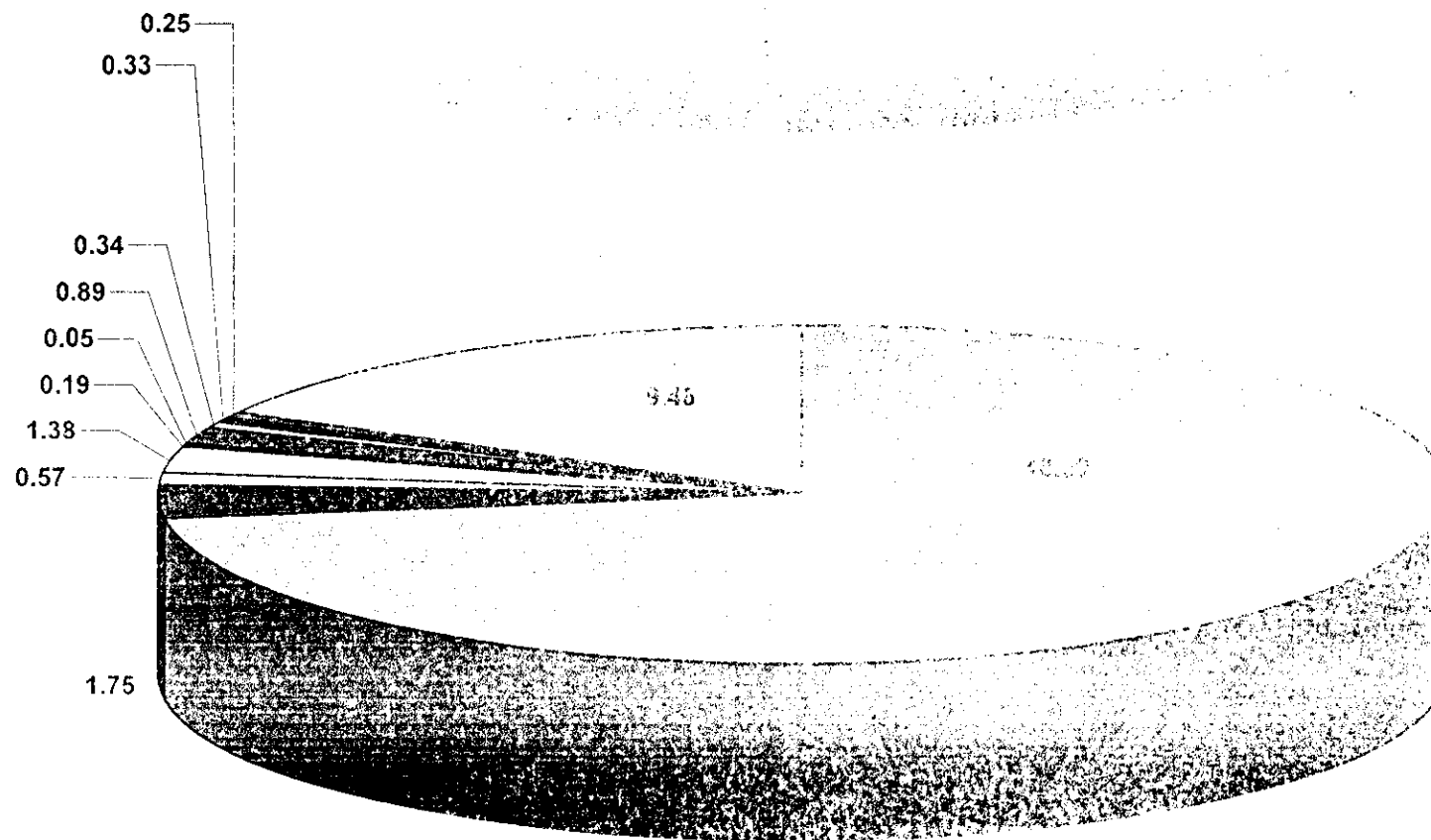
| Sl. No. | District | Cane Gur Ratio |
|----------------|-----------------|-----------------------|
| 1 | Vellore | 5.27 |
| 2 | Erode | 8.71 |
| 3 | Madurai | 17.82 |
| 4 | Theni | 8.45 |
| 5 | Dindugul | 4.91 |
| 6 | Dharmapuri | 10.78 |

ANNEXURE-II
PRODUCTION OF FOOD GRAINS FROM 2002- 03 TO 2012-13 (IN LAKH TONNES)

| Sl. No. | Crop | 2002- 03 | 2003- 04 | 2004- 05 | 2005- 06 | 2006- 07 | 2007- 08 | 2008- 09 | 2009- 10 | 2010-11 | 2011-12 | 2012-13 |
|--------------|-----------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 1 | Paddy | 35.77 | 32.22 | 50.6 | 52.08 | 66.09 | 50.39 | 51.83 | 56.65 | 57.92 | 74.58 | 40.50 |
| 2 | Cholam | 2.11 | 2.46 | 2.52 | 2.31 | 2.94 | 2.48 | 2.13 | 2.21 | 2.47 | 2.53 | 1.75 |
| 3 | Cumbu | 0.89 | 1.72 | 1.25 | 0.95 | 0.99 | 0.86 | 0.84 | 0.83 | 0.77 | 1.14 | 0.57 |
| 4 | Ragi | 1.40 | 1.76 | 1.53 | 1.31 | 1.48 | 1.76 | 1.70 | 1.61 | 1.71 | 2.25 | 1.38 |
| 5 | Samai | 0.31 | 0.28 | 0.28 | 0.20 | 0.26 | 0.24 | 0.16 | 0.19 | 0.10 | 0.25 | 0.19 |
| 6 | Varagu | 0.16 | 0.10 | 0.10 | 0.07 | 0.31 | 0.08 | 0.06 | 0.08 | 0.12 | 0.08 | 0.05 |
| 7 | Blackgram | 0.79 | 0.76 | 0.83 | 0.71 | 1.43 | 0.8 | 0.83 | 0.98 | 0.20 | 1.79 | 0.89 |
| 8 | Greengram | 0.48 | 0.53 | 0.62 | 0.46 | 0.77 | 0.46 | 0.31 | 0.47 | 0.58 | 0.85 | 0.33 |
| 9 | Redgram | 0.24 | 0.27 | 0.29 | 0.2 | 0.21 | 0.21 | 0.17 | 0.20 | 0.24 | 0.31 | 0.33 |
| 10 | Horsegram | 0.21 | 0.18 | 0.20 | 0.22 | 0.32 | 0.21 | 0.21 | 0.21 | 0.22 | 0.37 | 0.25 |
| 11 | Maize | | | | | | 0.81 | 12.58 | 11.38 | 11.38 | 16.95 | 9.46 |
| Total | | 42.36 | 40.28 | 58.22 | 58.51 | 74.8 | 58.3 | 70.82 | 74.81 | 75.71 | 101.1 | 55.70 |



PRODUCTION OF FOOD GRAINS IN ANDHRA PRADESH



Paddy

Cholan

Cumbu

Ragi

Karama

Varagu

Blackgram

Greengram

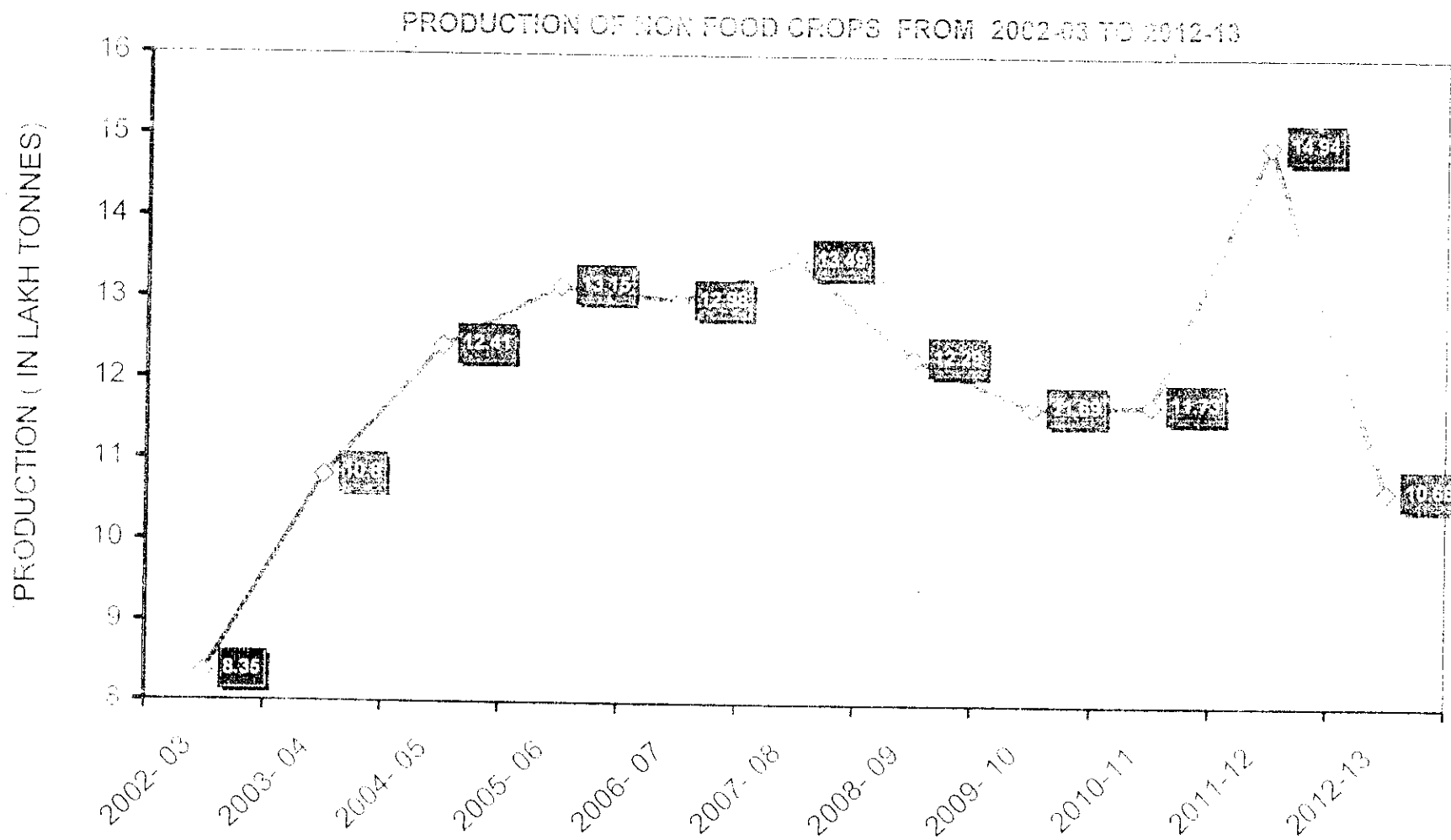
Redgram

Horsegram

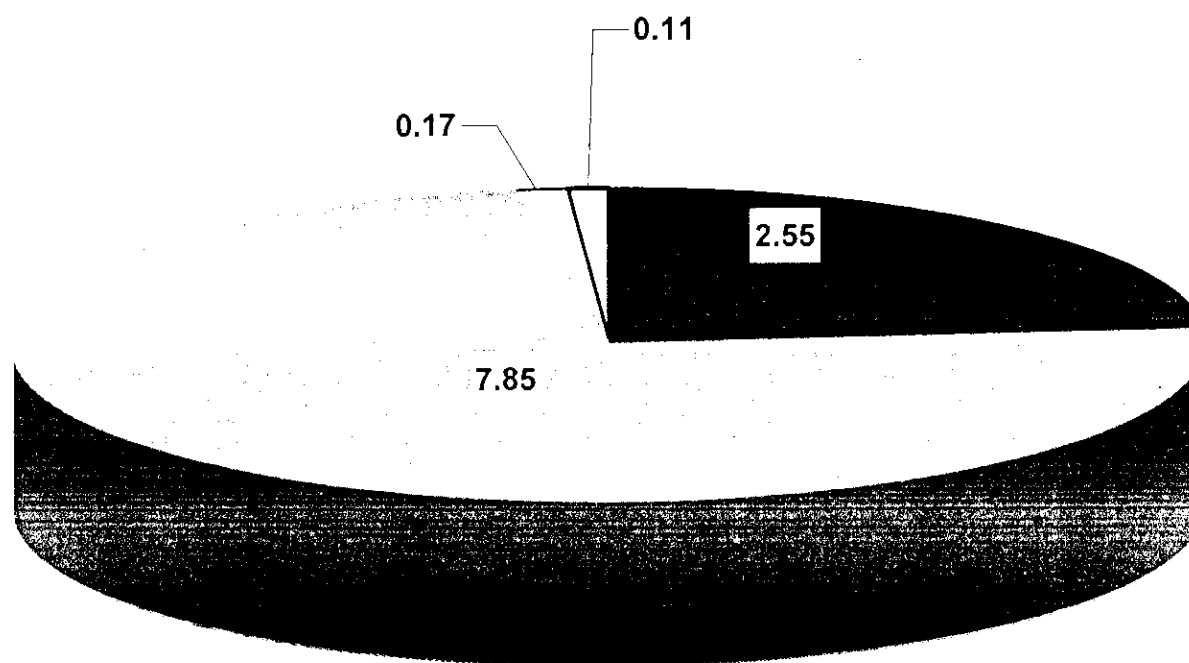
Maize

PRODUCTION OF NON-FOOD CROPS FROM 2002-03 TO 2012-13 (IN LAKH TONNES)

| Sl. No. | Crop | 2002- 03 | 2003- 04 | 2004- 05 | 2005- 06 | 2006- 07 | 2007- 08 | 2008- 09 | 2009- 10 | 2010-11 | 2011-12 | 2012-13 |
|---------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|
| 1 | Cotton | 0.83 | 1.22 | 1.85 | 1.67 | 2.19 | 2.00 | 1.88 | 2.25 | 2.45 | 3.82 | 2.55 |
| 2 | Groundnut | 7.17 | 9.17 | 10.04 | 10.97 | 10.05 | 10.47 | 9.75 | 8.96 | 8.93 | 10.61 | 7.85 |
| 3 | Gingelly | 0.27 | 0.28 | 0.33 | 0.3 | 0.27 | 0.32 | 0.32 | 0.29 | 0.25 | 0.26 | 0.17 |
| 4 | Sunflower | 0.08 | 0.13 | 0.19 | 0.21 | 0.47 | 0.7 | 0.34 | 0.19 | 0.10 | 0.25 | 0.11 |
| | Total | 8.35 | 10.80 | 12.41 | 13.15 | 12.98 | 13.49 | 12.29 | 11.69 | 11.73 | 14.94 | 10.68 |
| | Sugarcane | 277.71 | 195.29 | 244.57 | 351.13 | 480.37 | 380.71 | 327.99 | 297.58 | 342.52 | 389.75 | 340.14 |



PRODUCTION OF NON FOOD CROPS IN 2012-13



■ Cotton

■ Groundnut

□ Gingelly

□ Sunflower