

68वां अंक
68th Issue

मुख्य फसलों
पर
फसल प्राक्कलन सर्वेक्षण
के
समेकित परिणाम

Consolidated Results
Of
Crop Estimation Survey
On
Principal Crops

2015-16

संदेश

कृषि और इसके सहयोगी क्षेत्र भारत में, मुख्य रूप से बहुत ग्रामीण क्षेत्रों में, सबसे बड़ा आजीविका प्रदाता हैं। सकल धरेलू उत्पाद में इसका महत्वपूर्ण योगदान है। अतः कृषि सांख्यिकी की उपयोगिता को कमतर नहीं आँका जा सकता है।

2. कृषि सांख्यिकी अन्तर्गत 'बोया गया क्षेत्र' एवं 'औसत उपज', के आँकड़ों के संग्रहण की प्राथमिक ज़िम्मेदारी राज्य/संघ शासित प्रदेशों की होती है। देश में मुख्य फसलों की उपज दर मुख्यतः वैज्ञानिक रूप से डिज़ाइन किए गये फसल प्राक्कलन सर्वेक्षण के अंतर्गत संपन्न फसल कटाई प्रयोगों के विश्लेषण द्वारा प्राप्त किए जाते हैं। वर्तमान में, 71 फसलों (55 खाद्य एवं 16 गैर- खाद्य) के प्रति हेक्टेयर उपज का अनुमान वैज्ञानिक रूप से योजनाबद्ध फसल कटाई प्रयोगों द्वारा लिया जाता है। इस प्रकार प्राप्त उपज दर अनुमानों का उपयोग एवं किसान कल्याण मंत्रालय द्वारा उत्पादन के आधिकारिक अनुमान निर्धारण के लिए किया जाता है।

3. सामान्य फसल प्राक्कलन सर्वेक्षण 20 भू-अभिलेख राज्यों, 3 ईरास (EARAS) राज्यों एवं 6 अन्य राज्यों/संघ शासित प्रदेशों में नियमित रूप से आयोजित किए जाते हैं। सामान्य फसल अनुमान सर्वेक्षण (जी.सी.ई.एस.) की अभिकल्पना स्तरीकृत बहुस्तरीय यादृच्छित नमूना पर आधारित है तथा क्षेत्र कार्य राज्य सरकार के अधिकारियों को सौंपा जाता है। राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय की समग्र ज़िम्मेदारी राज्यों को तकनीकी दिशा-निर्देश प्रदान कर सहायता करने की है। राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय का क्षेत्र संकार्य प्रभाग विभिन्न राज्य सरकार/ संघ शासित प्रदेशों से प्राप्त जानकारी के आधार पर प्रति वर्ष फसल अनुमान सर्वेक्षण के तहत फसल कटाई प्रयोगों के निष्कर्षों को समेकित करता है। इन निष्कर्षों का विश्लेषण, "मुख्य फसलों पर फसल अनुमान सर्वेक्षण के समेकित परिणाम" के रूप में प्रकाशित किया जाता है। यह प्रतिवेदन मुख्य खाद्य एवं गैर खाद्य फसलों के समेकित परिणाम प्राप्त करने की दिशा में एक प्रयास है। वर्तमान प्रतिवेदन श्रृंखला का 68वां अंक है तथा यह कृषि वर्ष 2015-16 से संबंधित है। मैं इस रिपोर्ट को तैयार करने में श्री एस०आर०जोशी, उप महानिदेशक, रा०प्र०स०का०(क्षे०सं०प्र०), कृषि सांख्यिकी मुख्यालय फरीदाबाद व उनकी टीम के अधिकारियों के प्रयासों की सराहना करता हूँ जिनके प्रयासों से यह रिपोर्ट जारी की गयी है।

4. मुझे विश्वास है कि यह रिपोर्ट प्रतिभागी राज्यों में कृषि के समग्र विकास के लिए नीति निर्माताओं, कृषिविदों, शोधकर्ताओं, सांख्यिकीविदों व योजनाकारों के लिए बहुत उपयोगी सावित होगी।

नई दिल्ली
जुलाई, 2018



डी०पी०मंडल

D.P.Mondal
Director General

Message

Agriculture with its allied activities is the largest livelihood provider in India, especially in rural areas. It contributes a significant amount to Gross Domestic Product of the country. As such utility of Agricultural Statistics is immense.

2. The primary responsibility for collection of agriculture statistics on Area Sown and Average Yield rests with State/UT Governments. The yield rates of major crops are obtained in the country based on the Crop Cutting Experiments conducted under scientifically designed General Crop Estimation Surveys (GCES). At present, estimates of average yield (per hectare) of 71 crops (55 food and 16 non food) are derived from scientifically planned Crop Cutting Experiments. The estimates of yield rates thus arrived are used for determining official estimates of crop production by Ministry of Agriculture & Farmers Welfare.

3. GCES are conducted on regular basis in 20 land record States/ UTs, 3 EARAS States and 6 other States/UTs. The sampling design of GCES is a stratified multistage random sampling and the field work is entrusted to the State Government Officials. NSSO has the overall responsibility of assisting States in providing technical guidance. Field Operations Division (FOD) of National Sample Survey Office (NSSO) continues to consolidate the results of crop cutting experiments under Crop Estimation Survey every year on the basis of information received from various State Government/UTS. The results of Crop Estimation Surveys are analysed & an annual publication entitled "**Consolidated Results of Crop Estimation Surveys on Principal Crops**" is brought out. The report attempts to bring out the consolidated results on principal food and non food crops. The present report is 68th in the existing series and relates to the Agriculture year 2015-16. I take this opportunity to convey my appreciation to Sh. S.R.Joshi, DDG and his team of officers of Agriculture Statistics Headquarters of NSSO (FOD), whose efforts have led to the compilation of this publication.

4. I am sure that this publication will be of immense use to policy makers, agriculturalists, researchers, statisticians and planners for overall development of agriculture in participating States.



D.P.Mondal

New Delhi
July, 2018

प्रस्तावना

भारत में प्रमुख खाद्यान्जन तथा गैर-खाद्यान्जन फसलों पर उपज दरों का आंकलन “फसल प्राक्कलन सर्वेक्षण” नामक राष्ट्रीय कार्यक्रम के अन्तर्गत अधिकांश राज्यों/संघ-राज्यों में फसल कटाई प्रयोगों के संचालन के आधार पर किया जाता है। वर्तमान में खाद्यान्जनों के उत्पादन का अनुमान मुख्य रूप से 29 राज्यों/संघ-राज्यों में वैज्ञानिक आधार पर संचालित फसल कटाई प्रयोगों से प्राप्त उपज दरों के आधार पर किया जाता है।

2. राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय (रा.प्र.स.का.) का क्षेत्र संकार्य प्रभाग (क्षे.सं.प्र.) प्रमुख फसलों की उपज दरों के आंकलन हेतु सर्वेक्षणों (फ.प्र.स.) के आयोजन तथा संचालन में राज्यों/संघ-राज्यों को तकनीकी मार्गदर्शन प्रदान करता है। अपनी समन्वयी भूमिका का उत्तरदायित्व निभाने अंतर्गत रा.प्र.स.का. (क्षे. सं. प्र.) यह सुनिश्चित करने में विशेष ध्यान रखता है कि विभिन्न राज्यों/संघ-राज्यों द्वारा एक जैसी मानकं तकनीक, कार्यविधि एवं प्रक्रिया अपनायी जाए। इसके अतिरिक्त रा.प्र.स.का., राज्यों/संघ-राज्यों के सहयोग से फसल सांख्यिकी सुधार (फ. सं. सु.) योजना के अन्तर्गत क्षेत्रफल परिगणना, क्षेत्रफल समुच्चयन एवं फसल कटाई प्रयोगों के प्रतिदर्श जांच कार्यक्रम को भी कार्यान्वित करता है। यह कार्यालय फसल कटाई प्रयोगों पर प्रतिदर्श जांच के कार्यक्रम का कार्यान्वयन करते समय, प्रतिदर्श ग्रामों के चयन, क्षेत्र कर्मचारियों के प्रशिक्षण तथा क्षेत्र कार्य के पर्यवेक्षण आदि में भी सहयोग देता है। इस प्रक्रिया में फसल उपज आंकलन हेतु फसल कटाई प्रयोग के संचालन सम्बन्धी कुछ महत्वपूर्ण सूक्ष्म स्तरीय जानकारी एकत्र करता है।
3. इन विश्लेषित फसल प्राक्कलन सर्वेक्षण के समेकित निष्कर्षों को रा.प्र.स.का. (क्षे. सं. प्र.) द्वारा “प्रमुख फसलों पर फसल प्राक्कलन सर्वेक्षण के समेकित परिणाम” नामक शीर्षक के अन्तर्गत इस वार्षिक प्रकाशन के रूप में निकाला जाता है। वर्तमान प्रकाशन इस श्रृंखला का 68वां अंक है। प्रतिवेदन का उद्देश्य विभिन्न राज्यों/संघ राज्यों में सर्वेक्षण के बहुमुखी पक्षों/पहलुओं जैसे कार्य-क्षेत्र, विस्तारण, सर्वेक्षण-अभिकल्प तथा प्रतिदर्श आकार इत्यादि की संक्षिप्त समीक्षा करना तथा वर्ष 2015-16 के दौरान मानक-त्रुटि के साथ फसल उपज दर आंकलित कर सर्वेक्षण के परिणामों पर ध्यान केन्द्रित करना है।
4. वर्ष 2015-16 के दौरान फ. प्रा. स. के अंतर्गत विभिन्न राज्यों तथा संघ-राज्यों में 55 खाद्यान्जन तथा 16 गैर-खाद्यान्जन फसलों को शामिल करते हुए 12,52,113 फसल कटाई प्रयोगों को नियोजित किया गया है। इस प्रतिवेदन में किये गये विश्लेषण तथा प्राप्त किए गये निष्कर्ष मुख्य रूप से सम्बन्धित राज्यों/संघ-राज्यों के राज्य कृषि सांख्यिकी प्राधिकारों द्वारा प्रदत्त आंकड़ों तथा जानकारी पर आधारित है। यहां यह उल्लेख करना आवश्यित है कि कर्नाटक एवं जम्मू एवं कश्मीर राज्य के राज्य प्राधिकारों द्वारा फसल प्राक्कलन सर्वेक्षण से सम्बन्धित पूर्ण सूचना उपलब्ध ना करवाए जाने के फलस्वरूप संबन्धित आँकड़े प्रस्तुत प्रतिवेदन में शामिल नहीं किए जा सके हैं। इस प्रतिवेदन के प्रस्तुतीकरण में विभिन्न राज्यों के राज्य कृषि सांख्यिकी प्राधिकारों एवं उच्च स्तरीय समन्वय समिति के अध्यक्षों एवं सदस्यों द्वारा दिये गये समर्थन एवं सहयोग के लिए आभार व्यक्त किया जाता है।
5. प्रतिवेदन की विषय वस्तु एवं प्रस्तुतीकरण में सुधार हेतु सुझावों का स्वागत है।

जुलाई, 2018

(राकेश कुमार)
अपर महानिदेशक

PREFACE

In India, estimates of yield rates of principal food and non-food crops are obtained on the basis of crop cutting experiments conducted in majority of States/UTs under the National Programme of Crop Estimation Surveys (CES). At present, the production of food grains is predominantly estimated on the basis of yield rates obtained from the crop cutting experiments, conducted on scientific basis, spread over 29 States/UTs.

2. Field Operations Division (FOD) of the National Sample Survey Office (NSSO) has been providing technical guidance to States/UTs for organizing and conducting CES for estimating yield rates of principal crops. The FOD also ensures adoption of uniform standard technique, methodology and procedures by different States/UTs. In addition, NSSO in collaboration with the States/UTs implements sample check programmes on Area Enumeration, Area Aggregation and conduct of Crop Cutting Experiments under the Scheme of Improvement of Crop Statistics (ICS). While executing the programme of sample checks on Crop Cutting Experiments, the operational aspects of the conduct of crop cutting experiments right from selection of sample villages, training of field staff and supervision of field work are duly taken into consideration. In the process, certain vital micro-level details relating to conduct of crop cutting experiments for estimation of crop yield are also captured.

3. The analysed results of CES are consolidated and brought out by NSSO (FOD) in this annual publication titled "**Consolidated Results of Crop Estimation Survey on Principal Crops**". The present publication is the **68th** issue of the series of these reports. The report purposed to review briefly the multifaceted aspects such as scope, coverage, survey design and sample size, etc. of the survey in various States/UTs and focuses attention on the results of the surveys in setting out the estimates of crop yields and associated standard errors during the year 2015-16.

4. **12,52,113** crop cutting experiments covering 55 food and 16 non-food crops were planned in different States/UTs during 2015-16 under CES. The analysis made and conclusions drawn in the report are primarily based on the data and information furnished by the State Agriculture Statistics Authorities (SASAs) of the concerned States/UTs. It is, however, pertinent to mention here that the information pertaining to States of Jammu & Kashmir and Karnataka could not be included for want of complete information on CES from the respective State Governments for the year under Report. The support and co-operation received from State Agriculture Statistics Authorities (SASA), the Chairpersons and members of High Level Coordination Committee (HLCC) of various States in the presentation of the report is gratefully acknowledged.

5. Suggestions for further improvement in the content and presentation of the Report are welcome.


(Rakesh Kumar)
Addl. Director General

July, 2018



प्रकाशन से जुड़े अधिकारीगण

1.	श्री एस.आर. जोशी	उप महानिदेशक
2.	श्रीमती नितिका गुप्ता	निदेशक
3.	श्री आलोक कुमार	उप निदेशक
4.	श्रीमती हिमानी बिसियर	वरिष्ठ सांख्यिकी अधिकारी
5.	राजेश कुमार	कनिष्ठ सांख्यिकी अधिकारी
6.	श्री प्रमेन्द्र	कनिष्ठ सांख्यिकी अधिकारी

OFFICERS ASSOCIATED WITH THE REPORT

1.	SHRI S. R. JOSHI	DEPUTY DIRECTOR GENERAL
2.	SMT. NITIKA GUPTA	DIRECTOR
3.	SHRI ALOK KUMAR	DEPUTY DIRECTOR
4.	SMT. HIMANI BISIYER	SENIOR STATISTICAL OFFICER
5.	SHRI RAJESH KUMAR	JUNIOR STATISTICAL OFFICER
6.	SHRI PRAMENDER	JUNIOR STATISTICAL OFFICER



CONTENTS

Sl. No.	SUBJECT	PAGE NO.
	AGRICULTURAL STATISTICS SCHEMES & NSSO	i
	CONCEPTS AND DEFINITIONS	ii-iv
	कार्य सारांश	v-vi
	EXECUTIVE SUMMARY	vii-viii
	LIST OF CHARTS	ix
	LIST OF TABLES	x
PART-I		
1.	INTRODUCTION	1
2.	OBJECTIVE	2
3.	COVERAGE	3
4.	DESIGN	7
5.	ORGANISATION	11
6.	CO-ORDINATION	13
7.	SAMPLE SIZE	14
8.	TRAINING	23
9.	SUPERVISION	24
10.	RESPONSE	31
11.	RESULTS	33
12.	ANCILLARY DATA	40
13.	DRIAGE EXPERIMENTS	43
PART-II		
1.	LIST OF ANNEXES & APPENDICES	1
2.	ABBREVIATIONS USED	2
3.	ANNEXES	3
4.	APPENDICES	118

A. Agricultural Statistics Schemes & NSSO

1. National Sample Survey Office (NSSO)

The Directorate of National Sample Survey (NSS), established in the year 1950, was reorganized into the present NSSO under the Government of India's Resolution of 5th March, 1970. The organisation now consists of four functional Divisions with a Director General (DG) at the apex level. Each of the Divisions viz. (i) Survey Design and Research Division, (ii) Data Processing Division (iii) Coordination and Publication Division and (iv) Field Operations Division is headed by an Additional Director General. The Field Operations Division (FOD) undertakes the field work relating to Socio - Economic Surveys, Industrial Surveys, Surveys for collection of retail prices in urban and rural areas, Urban Frame Survey for updation of area frame in urban areas for use in Socio-Economic Surveys & Methodological Surveys/Studies. Agriculture Statistics Headquarters of Field Operation Division is engaged with Agricultural Surveys under the scheme for Improvement of Crop Statistics (ICS).

2. Timely Reporting Scheme (TRS)

The Ministry of Agriculture initiated TRS in 1968-69 in land record states in order to reduce the time lag between completion of sowing and the availability of estimates of area sown and similarly between the completion of harvesting and availability of estimates of production in respect of important crops.

3. Establishment of an Agency for Reporting Agricultural Statistics (EARAS)

The Ministry of Agriculture sponsored a scheme in 1975-76 for Establishment of an Agency for Reporting Agricultural Statistics (EARAS) in three permanently settled States of Kerala, Odisha & West Bengal and later extended it to Arunachal Pradesh, Nagaland, Sikkim and Tripura.

4. General Crop Estimation Surveys (GCES)

Crop Estimation Surveys (CES) are conducted by States and Union Territories for obtaining sufficiently precise estimates of average yield of principal food and non food crops using the objective technique of Crop Cutting Experiments (CCE) by applying scientific sampling method.

5. Improvement of Crop Statistics (ICS)

The scheme of ICS which had a modest beginning in the year 1973-74 reached to the optimum coverage in subsequent years. The scheme is closely related to the schemes of TRS, EARAS and GCES and was initiated with the objective of pointing out deficiencies in the system of collection of area & yield statistics through the joint efforts of the NSSO (FOD) & State Agricultural Statistics Authority (SASA) and to suggest remedial measures. NSSO (FOD) is also entrusted with the responsibility of providing technical guidance and assistance to the states in developing suitable survey techniques for obtaining timely and reliable estimates of crop area & yield and imparting training to State Government field personnel. The scheme is operational in 21 states and 1 U.T at present covering about 44 crops.

B. Concepts & Definitions

1(a). Food crops

The food crops cover Cereals, Pulses & Beans, Small Millets, Condiments & Spices, Fruits & Vegetables and Sugar (Sugarcane & Cocoa).

1(b). Non-Food crops

The non-food crops include Oil-seeds, Fibres and Drugs & Narcotics.

2(a). Temporarily settled States

States and Union Territories which have been cadastrally surveyed and where area & land use statistics form a part of the land records maintained by the revenue agency are referred to as "Temporarily Settled States". This system is followed in 19 States namely, Andhra Pradesh, Assam (excluding hill districts), Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttarakhand and Uttar Pradesh, and the five Union Territories of Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Delhi and Puducherry, covering about 86% of area.

2(b). Permanently settled States

Kerala, Odisha and West Bengal are categorised as "Permanently Settled States", as there is no land revenue agency at the village level and crop area & land use statistics are collected through a scheme of sample surveys. These States cover about 9% of area.

2(c). Other States

Parts of Assam (hill districts), Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura and the two Union Territories of Andaman & Nicobar Islands and Lakshadweep, for which only "conventional" estimates are available, cover about 5% of area.

3. Seasons

Agricultural Year can be broadly divided into the following three major seasons based on the periods of sowing and harvesting:

Kharif	-	July to December
Rabi	-	January to March
Summer (or Zaid Rabi)	-	April to June

4. Reference period

The reference period for a survey is Agricultural Year (July to June) e.g. year 2015-16 is July 2015 to June 2016.

5. Crop mixtures

Two or more crops of the same season grown in a patch with the constituent crops being sown intermixed or in different rows, will constitute a crop mixture.

6. Geographical Area

India has an area of 3,287,263 sq. km. It is the seventh largest country of the world after Russia, Canada, China, the U.S.A., Brazil and Australia. India accounts for about 2.4 per cent of the total surface area of the world.

7. Nine fold classification of Area

a. Forests

Area not available for cultivation

b. Area under non-agricultural uses

c. Barren and unculturable land whether in isolated blocks or within cultivated holding

Other uncultivated land excluding Current fallow

- d. Permanent pastures and other grazing lands
- e. Miscellaneous tree crops and groves not included in the net area sown
- f. Culturable waste

Fallow land

- g. Fallow land other than current fallow
- h. Current fallow: This represents cropped area which is kept fallow during the current year.
- i. Net area sown: This represents the total area sown with crops and orchards.
Area sown more than once in the same year is counted only once.

8. Gross Cropped Area

This represents the total area sown once and/or more than once in a particular year, i.e. the area is counted as many times as there are sowings in a year. This total area is also known as total cropped area or total area sown.

9. Area Sown more than once

This represents the areas on which crops are cultivated more than once during the agricultural year. This is obtained by deducting Net Area Sown from Gross Cropped Area.

10. Irrigated Area

The area is assumed to be irrigated for cultivation through sources such as canals (Govt. & Private), tanks, tube-wells, other wells and other sources.

11. Cropping Intensity

Cropping intensity refers to raising of a number of crops from the same field during one agricultural year; it can be expressed as

$$\text{Cropping Intensity} = (\text{Gross Cropped Area} / \text{Net Sown Area}) \times 100$$

12. Recovery ratio

The first weight of the produce taken out from the plants i.e. cobs in case of Jowar, Bajra, Maize, weight of grains in case of Paddy, Wheat, Barley, Gram etc, the ratio between the cobs to grain (wet), Paddy to rice (after taking away husk) are known as recovery ratio.

- i) **Driage ratio:** The ratio of weight between the wet grains or produce to dried and marketable produce is known as Driage ratio.
- ii) **Ginning ratio:** The weight of cotton to lint Cotton without seeds (i.e. cotton minus seeds) is known as ginning ratio. This ratio is obtained from ginning factories.
- iii) **Net weight:** In Agricultural Statistics, the net weight will always be more than gross weight. While reporting the weight of crop (produce) when sown in mixture, the percentage of the experimental crop sown in that mixture is also given. In this case, one has to work out the produce had it been sown pure.

13. Moisture meter

Moisture meter is an instrument to measure the moisture content in the grains from which the driage ratio can be calculated.

14. Improved Agricultural Practices

Agricultural practices include irrigation, crop rotation, application of fertilizers & pesticides, and the domestication of livestock. Improved agricultural practices could increase production, which

can allow the population to feed itself without imports, or it might allow excess production so that the surplus can be sold to have increased buying power for other goods and services. The improved practices can reduce the cost of fertilizer and use of fuel. Also, some practices preserve the land environmentally, such as reducing erosion, etc.

15. Conventional Method of Yield Estimation :-

(a) Annawari system

Under 'traditional method', the yield per hectare is obtained either in terms of a direct estimate in quintals per hectare by eye-appraisal or as the product of 'normal yield' and the 'condition factor'.

(b) Normal Yield

The normal yield is somewhat vaguely defined as the yield which is typical of the area. It is considered to be the yield on the average soil in a year of average character. The normal yield is the yield for which past experiences have shown to be most occurring crop yield. This is the typical crop yield of the local area, which a cultivator has a right to expect and with which he is content, while if he gets more, he has reason to rejoice and if he gets less he has reason to complain. Normal yields have been fixed usually for each district empirically on the basis of past experience.

Condition factor

The condition factor is an estimate of the crop yield in a given year in relation to normal yield and is usually fixed in terms of annas, with a specified number of annas representing normal yield.

(c) Calculation of yield

The lower officers of Revenue and Agriculture departments make a guess of the condition factor of the crop in their jurisdiction on the basis of their impression through personal observations and enquiries with local cultivators and pass on their estimates to their superiors, who may modify those in the light of their experience.

16. Statistical Methods of Yield Estimation:-

General Crop Estimation Surveys (GCES)

GCES consists of performing a specified number of crop cutting experiments in randomly selected fields. Crop cutting experiment conducted under well designed estimation survey is an effective technique for estimating the average yield by selecting the field, randomly locating a plot of a specified size, harvesting, threshing, weighing and recording the weight of the produce from the plot. The sampling design of GCES is that of stratified multistage random sampling, in which Taluks/CD Blocks/Anchals are taken as strata, villages within the stratum as FSUs, and plots of specified size within the field (survey numbers/sub-survey numbers) as ultimate units of sampling. In the land record states, villages selected under TRS in a stratum for the current year forms the sampling frame of FSUs for GCES.

17. Conversion factor

Converting the yield from Grams per plot to Kg. per hectare

Weight of produce in Gms.

----- X 10

Plot size in Sq. Mtrs.

18. Standard Error

The calculation of standard errors and their study is helpful in assessing the adequacy of the sample size, trend of changes in yield rates and in planning other allied studies. It is calculated as under:-

$$\% \text{ Standard Error} = \frac{\text{S.E. of the Estimate}}{\text{Estimate}} \times 100$$



कार्य सारांश

प्रत्येक राज्य/जिला/प्रभाग या ऐसे प्रशासनिक स्तरों के लिए, प्रमुख खाद्यान्न तथा गैर-खाद्यान्न फसल का प्रति हैक्टेयर औसत उपज आंकलन जो कि फसल उत्पादन आंकलन की दृष्टि से बहुत महत्वपूर्ण है, फसल आंकलन सर्वेक्षण कार्यक्रम के अन्तर्गत वैज्ञानिक रूप से नियोजित फसल कटाई प्रयोगों से प्राप्त किया जाता है। वर्ष 2015-16 के लिए फसल प्राक्कलन सर्वेक्षण की मुख्य विशेषताएँ निम्न हैं:

1. वर्ष 2015-16 के दौरान फसल प्राक्कलन सर्वेक्षण कार्यक्रम के अन्तर्गत 55 खाद्यान्न तथा 16 गैर- खाद्यान्न फसलों को शामिल किया गया। (पैरा-3.3)
2. आन्ध्र प्रदेश, बिहार, गुजरात, झारखंड, कर्नाटक, महाराष्ट्र, राजस्थान तथा तमिलनाडु में कुछ महत्वपूर्ण फसलों के लिए दो परतीय के साथ-साथ चार परतीय स्तरीकरण को अपनाया गया है। जबकि मध्य प्रदेश तथा छत्तीसगढ़ में धान तथा गेहूं के लिए तीन परतीय वर्गीकरण को अपनाया गया। (पैरा-4.4 और सारणी-4)
3. गत वर्ष के कुल 13,08,025 प्रयोगों की तुलना में वर्ष 2015-16 के लिए विभिन्न फसलों के कुल प्रयोग 12,52,113 नियोजित किये गए। प्रतिदर्श आकार में 55912 प्रयोगों की कमी खाद्यान्न फसलों में 55835 प्रयोगों तथा गैर- खाद्यान्न फसलों में 77 प्रयोगों की कमी के कारण हुई। (पैरा-7.1)
4. खाद्यान्न फसलों के लिए 10,67,775 प्रयोगों में से 49,355 (4.62%) प्रयोग 16 फल तथा सब्जी की फसलों पर 13 राज्यों में नियोजित किये गये। (पैरा-7.5 और परिशिष्ट-II)
5. फसल कटाई प्रयोगों के संचालन में लगे प्राथमिक कर्मियों के लिए नियमित प्रशिक्षण कार्यक्रमों को वर्ष 2015-16 के दौरान सभी राज्यों/संघ राज्यों में आयोजित किया गया। हिमाचल प्रदेश (खरीफ एवं रबी में कृषि), झारखंड (कृषि), महाराष्ट्र (खरीफ एवं रबी अंतर्गत सभी एजेंसी में), उत्तरप्रदेश (खरीफ में राजस्व) एवं उत्तराखण्ड (राजस्व) प्रशिक्षण केन्द्रों में विभिन्न एजेंसियों की उपस्थिति अखिल भारतीय औसत (85 प्रतिशत) से कम थी। अप्रशिक्षित कर्मचारियों द्वारा फसल कटाई प्रयोगों का क्षेत्र कार्य किये जाने से इसकी वस्तुनिष्ठता पर विपरीत प्रभाव पड़ता है। अनुपस्थित रहे प्राथमिक कर्मियों के लिए अलग से प्रशिक्षण कार्यक्रम आयोजित करने की सम्भावनाओं पर प्रयास किए जाने की आवश्यकता है। (पैरा-8.2)
6. फसल कटाई प्रयोग के संचालन में कार्यरत प्राथमिक कर्मियों को प्रशिक्षण देने के लिए आयोजित कुल 2383 प्रशिक्षण केन्द्रों में से 794 (33.31%) प्रशिक्षण केन्द्रों में रा.प्र.स.का. के कर्मचारियों ने पर्यवेक्षक के रूप में भाग लिया और 199 (8.35%) केन्द्रों में प्रशिक्षण अधिकारी के रूप में भाग लिया। (पैरा-8.3)
7. फसल प्राक्कलन सर्वेक्षण 2015-16 के अन्तर्गत नियोजित प्रयोगों में से लगभग 16 प्रतिशत प्रयोगों का ही पर्यवेक्षण किया गया। इसमें रा.प्र.स.का. द्वारा कार्यान्वित फसल सांख्यिकी सुधार योजना के अंतर्गत 1 प्रतिशत पर्यवेक्षण भी सम्मिलित है। आन्ध्र प्रदेश, बिहार, छत्तीसगढ़, हरियाणा, हिमाचल प्रदेश,

जम्मू एवं कश्मीर, झारखण्ड, मध्य प्रदेश, मेघालय, पंजाब, राजस्थान, तेलंगाना, उत्तराखण्ड तथा पश्चिम बंगाल में राज्य सांख्यिकी विभाग द्वारा कुल पर्यवेक्षण 10 प्रतिशत से कम था। (पैरा-9.2)

8. फसल सांख्यिकी सुधार योजना के अंतर्गत फसल कटाई प्रयोगों पर प्रतिदर्श जांच के निष्कर्ष यह दर्शाते हैं कि केवल 57% फसल कटाई प्रयोग निर्धारित कार्यप्रणाली के अनुसार सम्पन्न किए गए। इन निष्कर्षों को नियमित रूप से विभिन्न राज्य कृषि सांख्यिकी प्राधिकारों के ध्यान में लाया गया। समस्या वाले क्षेत्रों को उच्च स्तरीय समन्वय समिति की बैठकों में चर्चा के दौरान सामने लाने पर भी पर्याप्त ज़ोर दिया गया है। (पैरा-9.5)

9. वर्ष 2015-16 के दौरान फसल प्राक्कलन सर्वेक्षण के अंतर्गत फसल कटाई प्रयोगों का कुल प्रत्योत्तर 95 प्रतिशत था। असम, बिहार, छत्तीसगढ़, गोवा, हरियाणा, जम्मू एवं कश्मीर, हिमाचल प्रदेश, झारखण्ड, मध्य प्रदेश, पश्चिम बंगाल तथा दादर एवं नगर हवेली में प्रत्युत्तर 90 प्रतिशत से कम था। फसल अनुमानों की विश्वसनीयता को बढ़ाने हेतु इन सभी राज्यों के राज्य प्राधिकारों को प्रत्युत्तर बढ़ाने के लिए उचित उपचारी उपाय अपनाए जाने की आवश्यकता है। (पैरा-10.2)

10. अप्रत्युत्तरों को नियंत्रित करने हेतु प्रभावी उपचारी कदम उठाने के उद्देश्य से यह आवश्यक है कि क्षेत्र स्तर पर अप्रत्योत्तर तथा सारणीयन स्तर पर प्रयोगों को रद्द करने के कारणों का विश्लेषण किया जाए। (पैरा-10.6)

11. फसल प्राक्कलन सर्वेक्षण 2015-16 के परिणामों से स्पष्ट होता है कि चावल (खरीफ), ज्वार (खरीफ), बाजरा (मिश्रित), मक्का (मिश्रित), तुर/अरहर, मूँगफली (खरीफ), तिल, अरंडी, अलसी तथा जूट को छोड़ कर ज्यादातर महत्वपूर्ण फसलों में पिछले वर्ष की तुलना में अखिल भारतीय स्तर पर उपज दर अनुमानों में बढ़ात्तरी आयी है। (पैरा-11.3)

12. फसलों के उपज दरों के अनुमानों का मानक त्रुटि प्रतिशत, छत्तीसगढ़ में ज्वार एवं तिल, हरियाणा में मक्का, कर्नाटक में चावल (रबी स्थानीय सिंचित) ज्वार (ग्रीष्म उच्च उपज सिंचित); मक्का (खरीफ स्थानीय सिंचित); रागी (खरीफ स्थानीय सिंचित); मिर्च (रबी एवं ग्रीष्म): आलू (खरीफ व रबी); प्याज (रबी एवं ग्रीष्म), मध्य प्रदेश में चावल (खरीफ उच्च उपज सिंचित); मिर्च, महाराष्ट्र में तिल (रबी), ओड़ीशा में मक्का (शीत); कुलथी (ग्रीष्म); मूँगफली (शीत), तेलंगाना में बाजरा (खरीफ); रागी (खरीफ); तिल (खरीफ); तंबाकू (वी), पश्चिम बंगाल में अरहर (रबी); लाख; अलसी और दमन एवं दीव में चावल; बाजरा फसल के लिए ज्यादा (10 प्रतिशत से अधिक) पाया गया। महत्वपूर्ण फसलों के आंकलन में अपेक्षित परिशुद्धता सुनिश्चित करने के लिए या तो प्रतिदर्श आकार बढ़ाकर या अप्रत्युत्तर की दर को कम कर मानक त्रुटि को घटाने के लिए समुचित कदम उठाने की आवश्यकता है। (पैरा-11.5 और सारणी 18)

13. उपज दरों के स्तरीकरणोत्तर विश्लेषण को कुछ राज्यों में कुछ फसलों पर लागू किया जा रहा है। यह आवश्यक है कि इस विश्लेषण के क्षेत्र को सभी राज्यों में अधिक से अधिक फसलों पर लागू किया जाए। (पैरा-12.2)



EXECUTIVE SUMMARY

Estimates of average yield per hectare of principal food and non-food crops for each State/District/Division or such administrative levels which are of importance from the point of view of working out estimates of crop production, are derived from scientifically planned crop cutting experiments under the programme of Crop Estimation Surveys. The salient features of the Crop Estimation Surveys for the year 2015-16 are highlighted below:-

1. 55 food and 16 non-food crops were covered under the programme of Crop Estimation Surveys (CES) during the year 2015-16. (Para-3.3)
2. Two-fold as well as four-fold stratification has been adopted for some important crops in Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Maharashtra, Rajasthan and Tamil Nadu. In Madhya Pradesh and Chhattisgarh, however, a three fold classification has been adopted for Paddy and Wheat. (Para-4. 4 & Table-4)
3. A total of 13,08,025 crop cutting experiments were planned on different crops in the previous year as compared to 12,52,113 experiments in 2015-16. The decrease of 55912 experiments in the sample size is due to decrease of 55835 experiments under food crops and decrease of 77 experiments under non-food crops. (Para-7.1)
4. Out of 10,67,775 experiments for food crops, 49,355 (4.62 %) experiments were planned on 16 fruits and vegetable crops covered in 13 States. (Para-7.5 & Appendix-II)
5. Regular programmes of training for primary workers engaged in the conduct of crop cutting experiments were organised in all the States/UTs during 2015-16. Attendance of various agencies at the training centers was less than All India average (85 %) in Himachal Pradesh (Agriculture in Kharif, Rabi), Jharkhand (Agriculture), Maharashtra (Kharif and Rabi for all agencies), Uttar Pradesh (Revenue in Kharif) and Uttarakhand (Revenue). Conducting of the experiments by untrained personnel impacts its objectivity adversely. The feasibility of organising separate training for the absentee primary workers needs to be explored. (Para-8.2)
6. In all, out of the 2383 training centers, NSSO officials participated in 794 (33.31%) centers as observers and imparted training in 199 (8.35 %) centers. (Para-8.3)
7. Only 16% of the experiments planned under CES during 2015-16 were supervised. This includes 1% experiment which were supervised by the NSSO under Scheme for Improvement of Crop Statistics. The total supervision by State Statistical Department was below 10% in Andhra Pradesh, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Meghalaya, Punjab, Rajasthan, Telangana, Uttarakhand and West Bengal. (Para-9.2)
8. The findings of the sample check on crop cutting experiments under the Scheme for Improvement of Crop Statistics show that only 57% sample experiments were conducted as per the prescribed procedure. These findings are brought to the notice of the various State Agricultural Statistics Authorities (SASAs) on a regular basis. Adequate emphasis is also given to focus on the problem areas in the deliberations of the High Level Co-ordination Committee meetings of the States. (Para-9.5)

9. In 2015-16, the overall response for crop cutting experiments under CES was 95 percent. In Assam, Bihar, Chhattisgarh, Goa, Haryana, Jammu & Kashmir, Himachal Pradesh, Jharkhand, Madhya Pradesh, West Bengal and Dadra & Nagar Haveli the response was below 90 per cent. Adequate remedial measures need to be taken by SASAs of these States to improve the response so as to increase the reliability of the crop yield estimates. (Para-10.2)

10. With a view to taking effective remedial measures to control non-response, it is necessary to analyse the reasons for non-response at field level and rejection of experiments at the tabulation stage. (Para-10.6)

11. The results of CES for 2015-16 reveal that the yield rate estimates at All-India level increased as compared to the previous year for majority of important crops except Rice (Kharif), Jowar (Kharif), Bajra (Comb.), Maize (Comb.), Redgram, Groundnut (Kharif) Sesamum (Comb.), Castor, Linseed and Jute. (Para-11.3)

12. The percentage standard error of the estimates of yield rate of crops was found to be high (more than 10%) in Chhattisgarh for Jowar & Sesamum, Haryana for Maize, Karnataka for Rice (Rabi Tra. Ir.), Jowar (Sum Hyv.Ir.), Maize (Kharif Tra. Ir.), Ragi (Kharif Tra. Ir.), Chillies (Rabi & Summer), Potato (Kharif & Rabi), Onion (Rabi & Summer), Madhya Pradesh for Rice (Kh. Hyv Ir.), Chillies, Maharashtra for Sesamum (Rabi), Odisha for Maize (Winter), Horsegram (Summer), Groundnut (Winter), Telangana for Bajra (Kharif), Ragi (Kharif), Sesamum (Kharif), Tobacco (V), West Bengal for Redgram (Rabi), Lakh, Linseed and Daman & Diu for Rice, Bajra. Suitable steps need to be taken to reduce the standard error either by increasing the sample size or reducing the rate of non-response to ensure the desired precision in estimates at least in respect of important crops.

(Para-11.5 & Table-18)

13. Post-stratification analysis of yield rates as is being adopted by some States for a few crops. It is necessary to extend the scope of this analysis to more crops in all the States. (Para-12.2)



LIST OF CHARTS

CHART		Page No.
Chart - I.	DISTRIBUTION OF FOOD CROPS	5
Chart -II	DISTRIBUTION OF NON-FOOD CROPS	5
Chart- III	SHARE OF CROP CUTTING EXPTs – FOOD AND NON-FOOD CROPS	15
Chart –IV	SHARE OF AREA - FOOD AND NON-FOOD CROPS	15
Chart –V	DISTRIBUTION OF GROSS CROPPED AREA AMONG MAJOR STATES	18
Chart -VI	DISTRIBUTION OF CROP CUTTING EXPTs. AMONG MAJOR STATES	18
Chart –VII	DISTRIBUTION OF AREA BY CATEGORY OF CROPS	22
Chart -VIII	DISTRIBUTION OF CROP CUTTING EXPERIMENTS BY CATEGORY OF CROPS	22
Chart -IX	SUPERVISION OF CROP CUTTING EXPERIMENTS	26
Chart –X	TREND OF AREA UNDER IMPORTANT CROPS	36
Chart -XI	TREND OF YIELD RATES	37
Chart -XII	TREND OF PRODUCTION	38



LIST OF TABLES

TABLE		Page No.
Table-1	Details of CES coverage during 2015-16	3
Table-2	Crops covered under CES during 2015-16	4
Table-3	Addition and Deletion of Crops under CES in 2015-16	6
Table-4	Stratification according to inputs adopted in sampling design during 2015-16	10
Table-5	Details of the high work load of primary workers during 2015-16	12
Table-6	Number of experiments planned under CES during 2015-16	14
Table-7	Summary of experiments planned under CES since 1974-75	15
Table-8	Fruits & Vegetables covered under CES 2015-16	16
Table-9	Comparison of number of experiments planned during 2015-16and 2014-15	19
Table-10	Details of experiments planned on Food and Non-Food Crops during 2015-16	20
Table-11	Distribution of Experiments planned for Main Crops during 2015-16	20
Table-12	Percentage of area covered under CES during 2015-16	21
Table-13	Supervision of Crop Cutting experiments during 2015-16	25
Table-14	Crop-wise percentage of experiments supervised during 2015-16	28
Table-15	Supervision under ICS scheme during 2015-16	29
Table-16	Crop-wise percentage response at All India level for important crops under CES 2015-16	32
Table-17	Comparison of CES Yield Rates during 2015-16 and 2014-15	34
Table-18	State-wise crops with high standard error during 2015-16	35
Table-19	States where number of experiments have been used as weights instead of area for yield calculation during 2015-16	41
Table-20	Non-receipt of data on four fold classification during 2015-16	41
Table-21	Non-receipt of data on two fold classification during 2015-16	41



INTRODUCTION

1

- 1.1 Agricultural sector continues to play a dominant and vital role in the Indian Economy by contributing a sizable share in the National Product and absorbing bulk of the economic activity pursued by majority of the population. In the context of primacy of Agriculture, timely and reliable statistics on crop production is of vital importance and significance. Crop Production has two major components viz., Area sown and average Yield rate. The primary responsibility for collection of statistics on these two aspects rests with the State/UT Governments. Statistics of land use and area under crops are obtained as by-product of land revenue administration in respect of the land record States/UTs, commonly known as Temporarily Settled States. On the other hand, the Permanently Settled States, viz., Kerala, Odisha and West Bengal are reporting land utilisation and area statistics based on sample surveys. At present, over **95 percent** of foodgrain production is estimated on the basis of yield rates obtained from scientifically planned crop cutting experiments conducted under the programme of Crop Estimation Surveys (CES) carried out by the State/UT Governments.

- 1.2 In 1962, Agriculture Statistics Division of Directorate of National Sample Survey started publication of systematic series of reports on its work and the first such review was published in September 1964 containing consolidated results of Crop Estimation Surveys on principal food crops carried out in the States from 1949-50 to 1960-61. Field Operations Division (FOD) of National Sample Survey Office (NSSO) continues to consolidate the results of crop cutting experiments under Crop Estimation Survey every year on the basis of information received from various State Government/UTs. The report attempts to bring out the consolidated results on principal food and non food crops. The present report is Sixty Seventh in the existing series and relates to the Agriculture year 2015-16.



OBJECTIVE

2

- 2.1 The primary objective of Crop Estimation Surveys is to obtain fairly reliable estimates of average yield rates of principal food and non-food crops for each State and Union Territory and for lower administrative unit such as Block, District etc. which are important from the point of view of crop production. The estimates of yield rates, thus arrived at, are generally adopted for the compilation of official estimates of crop production and used for the purposes of planning, policy formulation and implementation.
- 2.2 Under the programme of Crop Estimation Surveys, data on yield rates are collected through organising and conducting crop cutting experiments by applying statistical techniques of random sampling. The crop cutting experiment consists of identification & marking of an experimental plot of a specified size & shape in a selected field on the principle of random sampling, harvesting & threshing the produce and recording the weight of the produce. For a part of the experimental produce or in some cases for the entire produce of experiment, further processing of the harvested produce is done for determining the percentage recovery of dry grains or the marketable produce. For Paddy and Cotton, the yield is expressed in terms of Rice and Lint respectively after applying the standard recovery ratio and ginning ratio.



COVERAGE

3

- 3.1 During 2015-16, Crop Estimation Surveys (CES) was conducted in 21 land record States/UTs, 3 EARAS States and 6 other States / UTs as given in **Table-1**.

Table –1: Details of CES coverage during 2015-16

States in which C E S was conducted	
Land Record States/UTs	1. Andhra Pradesh 2. Assam 3. Bihar 4. Chhattisgarh 5. Gujarat 6. Haryana 7. Himachal Pradesh 8. Jammu & Kashmir 9. Jharkhand 10. Karnataka 11. Madhya Pradesh 12. Maharashtra 13. Punjab 14. Rajasthan 15. Tamil Nadu 16. Telangana 17. Uttar Pradesh 18. Uttarakhand 19. Delhi 20. Dadra & Nagar Haveli 21. Puducherry
EARAS States	1. Kerala 2. Odisha 3. West Bengal
Other States and UTs	1. Andaman district of A & N Islands 2. Daman & Diu 3. Goa 4. Manipur 5. Meghalaya 6. Tripura
States/UTs in which CES was not conducted	
1. Arunachal Pradesh 2. Chandigarh 3. Lakshadweep	4. Mizoram 5. Nagaland 6. Sikkim



- 3.2 Details of crops for which crop cutting experiments under CES were planned in States/UTs together with the year of initiation of the survey and adoption of CES results for estimates of production are given in **Appendix-I**. It also gives information about the stratum, pre-stratification, if any, made in different States and size & shape of the plot adopted for the crop cutting experiments. It is evident that there is no uniformity among the States in respect of the plot size and shape even for major crops. Attempts need to be made to adopt the uniform shape and size of the cuts at least for important crops.
- 3.3 During the agricultural year 2015-16, a total of 71 crops comprising 55 food and 16 non-food crops were covered under CES in different States/UTs. The details of different categories of crops are given in Table –2 and also presented in Chart I & II.

Table - 2: Crops covered under CES during 2015-16

S. No.	Particulars	No. of crops (%)
A. Food Crops		
1	Cereals (Paddy, Jowar, Bajra, Maize, Ragi (Mandua), Wheat, Barley)	7 (13%)
2	Pulses & Beans (Gram (Bengalgram), Redgram (Tur/Arhar), Greengram (Moong), Blackgram (Urd), Lakh (Khesari), Masur, Horsegram (Kulthi), Peas, Moth, Cowpea (Lobia), Guar, Chowla	12 (22%)
3	Small Millets (Sawan (Jhangora), Korra, Kodon-Kutki (Kodan), Navane, Save, Samai, Varagu)	7 (13%)
4	Condiments & Spices (Chillies, Cumin, Fennel, Areca nut, Pepper, Saffron, Turmeric, Ginger, Garlic, Coriander, Methi)	11 (20%)
5	Fruits & Vegetables (Lichi, Banana, Mango, Guava, Jackfruit, Cashewnut, Tapioca, Pine Apple, Potato, Onion, Brinjal, Tomato, Cauliflower, Papaya, Plantain, Avare (Sem))	16 (29%)
6	Sugar (Sugarcane & Cocoa)	2 (3%)
Total		55
B. Non -Food Crops		
1	Oil Seeds (Groundnut, Sesamum (Gingelly), Castor, Rape & Mustard, Linseed (Alsi), Safflower, Sunflower, Soyabean, Tara Meera, Coconut, Niger)	11 (69%)
2	Fibres (Cotton, Jute, Mesta)	3 (19%)
3	Drugs & Narcotics (Tobacco, Isabgol)	2 (12%)
Total		16



Chart - I

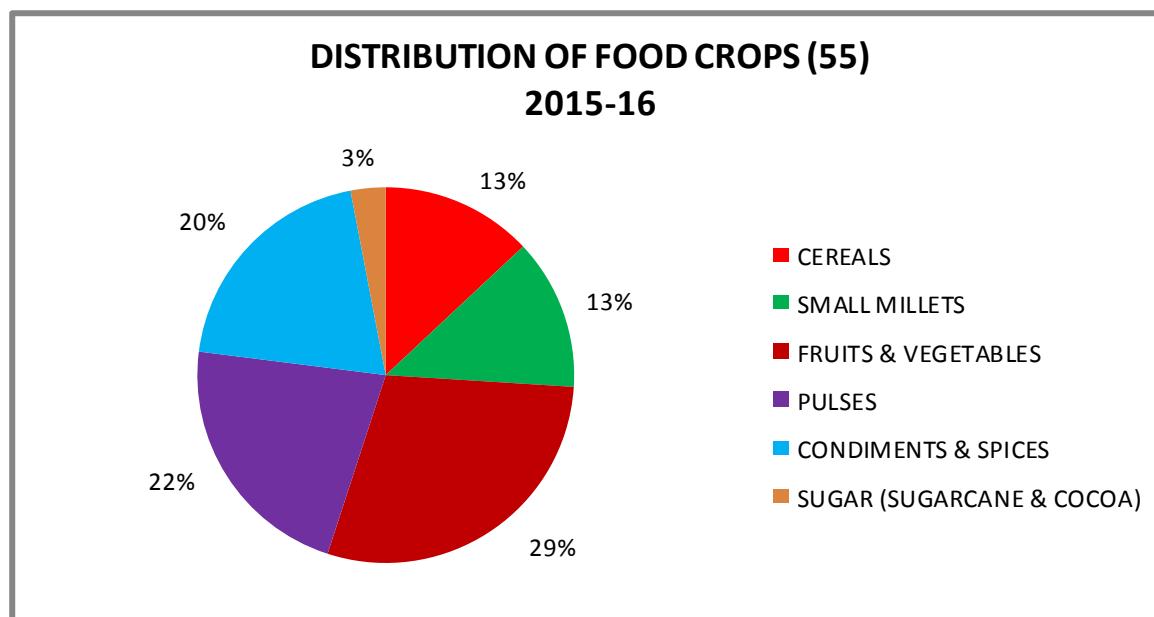
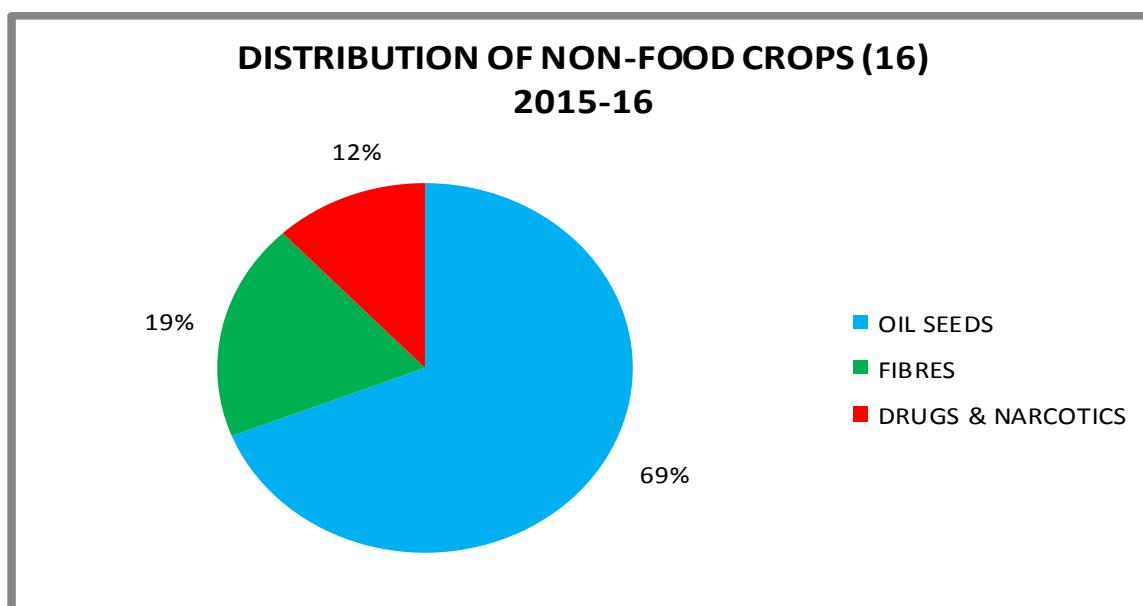


Chart – II





3.4 The Field Operations Division (FOD) of the National Sample Survey Office (NSSO) continuously reviews the coverage of crops under CES in States / UTs from the point of view of its importance, relative significance etc. measured in terms of share in All India production. Details of the addition & deletion of crops under CES during 2015-16 are given in **Table – 3**.

Table – 3: Addition and Deletion of Crops under CES in 2015-16.

State	Crop	No. of Experiments
Addition		
Jharkhand	Urd (Kharif)	720
	Peas (Rabi)	720
Total	1440	
No Crop was deleted under CES during the year 2015-16		



SAMPLING

4

- 4.1 The sampling design generally adopted for the CES during 2015-16 is that of Stratified Multi-Stage Random Sampling, with Tehsils/Taluks/RI circles/CD Blocks/Anchals etc. as Strata and revenue village within a Stratum as the First Stage Unit of sampling, survey number/field within each selected village as the Second Stage Unit of sampling and experimental plot of a specified shape and size as the ultimate unit of sampling. **Appendix -I** inter-alia, gives the stratum, shape and size of the experimental plot for each crop in different States/UTs. In each selected primary unit of sampling, generally two survey numbers/fields growing the experimental crop are selected for conducting crop cutting experiments. However, in Dadra and Nagar Haveli, three survey numbers/ fields are selected instead of two.
- 4.2 Generally, 80-120 experiments are conducted for a crop in a major district, where a district is considered as major for a given crop if the area under the crop in the district exceeds 80,000 hectares or lies between 40,000 and 80,000 hectares but exceeds the average area per district in the State. Otherwise, district is considered as minor for a given crop. Experiments in minor districts are so adjusted that the precision of the estimate is fairly high and the workload on the field staff is manageable. On an average, about 44 or 46 experiments are planned in a minor district. The number of experiments allotted to a district is distributed among the strata within the district roughly in proportion to the area under the crop in the stratum.
- 4.3 In the 3 non-land record States of Kerala, Odisha and West Bengal, both area and yield are estimated on the basis of sample surveys. The crop cutting experiments are planned in a sub-sample of the primary units selected for the purpose of area enumeration. While the general procedure for selection of sampling units at different stages is the same as that in other States, some special features in these States need specific mention. In **Kerala**, block/city corporation or municipalities with an area of 10 sq. kms. and above are treated as separate stratum. Municipalities with an area of less than 10 sq. kms. are merged with adjoining blocks and treated as a single stratum. These blocks are divided into a number of Investigator Zones



depending on the area of a block, nature of land etc. City corporation area is divided into three Investigator Zones. Each Municipality with an area more than 10 sq. kms. is treated as a single Investigator Zone. The number of crop cutting experiments conducted in each Investigator Zone is 8 per season for Paddy, 3 each for Coconut and Banana, and 2 each for Tapioca, Areca nut, Cashewnut, Pepper, Plantain, Sesamum and Jackfruit in an agricultural year. In Municipal area having separate Investigator Zone, 10 crop cutting experiments are conducted in respect of Paddy per season and 5 for Coconut per year. For City Corporation areas, 8 experiments for Paddy per season and 5 for Coconut per year in one Investigator Zone are conducted. In **Odisha**, crop-cutting experiments for Paddy are conducted in 40% of EARAS villages having even serial nos. except serial nos. ending with “Zero” i. e. 10, 20, etc. in each block and for other crops, 50% of sample villages occurring against the even serial nos. i.e. 2,4,6, etc. during Autumn and Winter Seasons. In Summer season, all the villages selected for Area Enumeration Survey under EARAS are covered under CES for Paddy and other crops. For Paddy, the crop cutting experiments are planned in proportion to crop area subject to minimum of two and maximum of four experiments in a village. For other crops, only one experiment is conducted in a village. In the State of **West Bengal**, the area and yield surveys conducted by the Bureau of Applied Economics & Statistics (BAE&S) on the basis of grid sampling followed till 1985-86, has been dispensed with and the Scheme “Establishment of an Agency for Reporting Agricultural Statistics” (EARAS) has become not only the primary source for area statistics but also the source to provide the frame for selection of villages for conduct of crop cutting experiments under CES in the State. Since Kharif 1996-97, the frame for sampling of plots for CCEs is prepared by BAE&S on its own. Ten mouzas out of all the EARAS mouzas in a block are randomly selected for CCE. A 10% systematic sample (subject to a minimum of 100 plots) of all the plots in a selected mouza, is taken and the type of land use for each plot in the sample is identified. In this way, a sub-frame of plots cultivating each crop is prepared for each such mouza. If the number of plots cultivating a crop in a mouza is too small, all the plots cultivating the crop are enumerated. The plots for conducting CCEs are sampled out of this sub-frame. In all, 20 plots are taken in the form of two inter-penetrating sub-samples of size 10 each for each block for a crop. On the basis of these, two independent



estimates of yield rate are obtained for a block and these are later combined to give an overall estimate.

- 4.4 In some States, the sampling design takes into account the stratification according to inputs viz. Irrigation and Seed variety for major crops. Details of such stratification are given **Table-4**. While the idea of evolving a general design for stratification needs examination, it is felt that there would be practical difficulties in attempting stratification according to variety mainly due to non-availability of required data in the present system of area statistics at different levels.



Table - 4: Stratification according to inputs adopted in sampling design during 2015-16

Sl. No.	State	Crop for which pre- stratification is done according to		
		Irrigation & seed	Irrigation	Seed
1.	Andhra Pradesh	-	Paddy (Kharif & Rabi)	-
2.	Bihar	Paddy (Agh.) & Wheat	Paddy (Bha.) & Sugarcane	Paddy (Gar.) & Maize (Bha. & Gar.)
3.	Chhattisgarh	Paddy* & Wheat*	-	-
4.	Gujarat	-	Paddy (Kharif), Wheat & Cotton	-
5.	Jharkhand	-	-	Paddy (Agh.) & Wheat
6.	Karnataka	Paddy (Kharif, Rabi.* & Sum.*), Jowar (Kharif Rabi & Sum.**), Bajra (Kharif), Maize (Kharif, Rabi & Sum.**), Ragi (Kharif,Rabi & Sum.**) & Wheat	Groundnut [@] (Kharif, Rabi & Sum.), Cotton (Kharif), Gram , Sunflower (Kharif, Rabi & Sum. *)	Maize (Sum.)
7.	Madhya Pradesh	Paddy * & Wheat *	-	-
8.	Maharashtra	-	Paddy (Kharif), Jowar (Rabi), Bajra, Wheat & Cotton .	-
9.	Rajasthan	-	Gram & Wheat	-
10.	Tamil Nadu	-	Jowar, Bajra, Maize, Ragi, Groundnut, Sesamum & Cotton.	-

* Pre –stratification according to seed is only for irrigated.

@ Pre-stratification is only in the relevant districts and not for the State as a whole.

** Pre –stratification according to irrigation is only for HYV.



ORGANISATION

5

- 5.1 Assignment relating to planning of survey, training of field staff, organisation of field work and tabulation of data is the responsibility of the State Agricultural Statistics Authority (SASA) in each State/UT. The SASA in the State is either the Director of the Bureau/Directorate of Economics and Statistics or the Director of Agriculture or the Director of Land Record depending on the administrative arrangements in each State/UT. The primary field work of the survey is generally entrusted to the staff of the State Department of Revenue, Agriculture, Community Development or Statistics, exclusively or as a part of their normal duties. In the five States viz. Assam, Kerala, Meghalaya and Odisha and in the UT of Puducherry, the primary work during 2015-16 was carried out by trained whole time staff of the Department of Statistics. **Appendix- III** gives State-wise information about the primary agency assigned with the task of conduct of crop cutting experiments on different crops. Workload of the primary field staff of different agencies in the State/UT in the two seasons and also for the entire year is shown in **Appendix - IV**. It is observed that at all India level, 10.0 percent and 10.5 percent of the primary workers had to conduct more than 12 experiments during Kharif and Rabi respectively. Likewise, 14.3 percent of the primary workers had to conduct more than 20 experiments annually during 2015-16. As per the detail given in **Table-5**, it is observed that the workload of primary worker during the year was high (more than the All India figures) in Andhra Pradesh, Goa, Gujarat, Kerala, Madhya Pradesh, Meghalaya, Odisha, West Bengal and Dadra & Nagar.



Table - 5: Details of the high workload of primary workers during 2015-16

State	Agency for field work	Total strength	No. of primary workers conducted more than		
			12 Experiments	20 Expts.	Annually
Andhra Pradesh	Statistical	474	233	116	281
	Agriculture	887	143	53	
Goa	Agriculture Kh.	21	15	-	11
	Agriculture Rabi	21	-	15	11
Gujarat	Agriculture	1466	286	329	370
Kerala	Statistical	1036	-	-	811
Madhya Pradesh	Revenue	4407	1072	1275	1285
Meghalaya	Statistical	46	46	24	46
Odisha	Statistical	446	-	-	446
West Bengal	Agriculture	217	253	465	202
Dadra & Nagar Haveli	Development & Planning	8	7	-	7
	Soil Conservation Division	9	10	-	10
	Agriculture Dept.	3	3	-	3

- 5.2 Heavy work load of primary workers adversely affects the results of crop cutting experiments and may also lead to loss of experiments. States may make efforts to ensure at experiments are allotted to the primary workers as per the norms in order to improve the quality in the conduct of experiments.



CO-ORDINATION

6

- 6.1 The Field Operations Division of National Sample Survey Office i.e. NSSO (FOD) has the overall responsibility of assisting the States/UTs in developing suitable techniques for obtaining reliable and timely estimates, providing technical guidance and ensuring adoption of uniform concepts, definitions and procedures in CES in the States/UTs. It reviews the design, plan, details of implementation and the results of the surveys. NSSO (FOD) also associates itself with the conduct of training camps organised for the State field staff in the capacity of trainers and observers. Under the scheme namely Improvement of Crop Statistics (ICS), it participates in the primary field work on sample basis by exercising technical supervision.
- 6.2 The NSSO (FOD) received plan of work of CES for the year 2015-16 from most of the States and offered comments, wherever necessary, with regard to planning and organisation of the survey. Some of the earlier suggestions with regard to timely selection of sample units, improving the response rates, ensuring adequate departmental supervision, timely communication of preliminary results and supply of equipment were reiterated. NSSO(FOD) stresses on adoption of uniform plot size by States as far as possible for the conduct of Crop Cutting Experiments.



SAMPLE SIZE

7

- 7.1 During the year 2015-16, a total of 12,52,113 experiments were planned under CES at All India level. The corresponding figure during 2014-15 was 13,08,025 experiments. This shows a decrease of 55,912 experiments during 2015-16. The decrease in sample size is due to decrease of 55,835 experiments under food crops and decrease of 77 experiments under non-food crops as shown in **Table-6** below.
- 7.2 The number of experiments planned over the last 10 years, given in **Table-6**, shows an overall rising trend, indicating the overwhelming response to the adoption of objective sampling technique of crop cutting experiments in greater magnitude from year to year for estimation of yield rates in the country. The number of experiments is showing steady increase over the past few years owing to the need for crop yield estimates at lower administrative levels i.e. Block, Gram Panchayats in the wake of Government's efforts of providing insurance cover to farmers for crop damage under Pradhan Mantri Fasal Bima Yojana (PMFBY).

Table –6: Number of experiments planned under CES during 2015-16

Year	Kharif			Rabi/Sum.			Total		
	Food	Non-Food	Total	Food	Non-Food	Total	Food	Non-Food	Total
2006-07	446505	104469	550974	299106	70103	369209	745611	174572	920183
2007-08	489671	106748	596419	306138	71061	377199	795809	177809	973618
2008-09	433612	84688	518300	304113	69344	373457	737725	154032	891757
2009-10 @	470887	100605	571492	307216	72049	379265	778103	172654	950757
2010-11 *	433789	84023	517812	333409	68004	401413	767198	152027	919225
2011-12 #	438205	87113	525318	328639	72660	401299	766844	159773	926617
2012-13 **	453042	92265	545307	327987	73790	401777	781029	166055	947084
2013-14***	532491	90424	622915	416531	77460	493991	949022	167884	1116906
2014-15 ##	649352	96000	745352	474258	88415	562673	1123610	184415	1308025
2015-16 ###	588743	102948	691691	479032	81390	560422	1067775	184338	1252113

@ It includes figures for the year 2005-06 for Jammu & Kashmir.

* It includes figures for the year 2005-06 for Jammu & Kashmir and Jharkhand, Uttarakhand and for the year 2009-10 as no data for subsequent years 2010-11, 2012-13 and 2013-14 was received from respective SASA, till finalization of the Report. In the State of Tamil Nadu, data in respect of NAIS not included.

It includes figures for the year 2009-10 for Jharkhand and for the year 2010-11 for Bihar, Haryana, Maharashtra and Daman & Diu as no data was received till the finalization of the Report.

** It includes figures repeated for the year 2010-11 in the states of Bihar and Maharashtra.

*** It includes figures repeated for the year 2010-11 in the state of Maharashtra and 2012-13 in the state of Gujarat.

It includes figures repeated for the year 2010-11 in the state of Maharashtra and 2013-14 in the state of Karnataka

It includes figures repeated for the year 2014-15 in the states of Karnataka and Jammu & Kashmir.

- 7.3 **Table-7** gives the percentage of food and non-food crops season-wise (Kharif and Rabi) to the total experiments planned at the interval of every 5 years starting from 1974-75. As seen from the



table, there is consistent increase in the number of experiments planned for Rabi non-food crops under CES up to 1994-95.

Table-7: Summary of Experiments planned under CES since 1974-75

Year	Total Experiments	Percentage of Kharif Crops		Percentage of Rabi Crops	
		Food	Non-Food	Food	Non -Food
1974-75	193639	43.0	18.9	33.5	4.6
1979-80	268782	51.7	10.7	32.2	5.4
1984-85	303465	50.2	10.3	32.0	7.5
1989-90 *	373094	47.9	9.3	35.1	7.7
1994-95	446003	46.7	9.4	34.5	9.4
1999-2000@	477514	47.4	10.6	33.6	8.4
2004-05	816315	49.1	9.0	35.0	6.9
2009-10	950757	49.5	10.6	32.3	7.6
2012-13 **	947084	47.8	9.7	34.7	7.8
2013-14***	1116906	47.7	8.1	37.3	6.9
2014-15 ##	1308025	49.7	7.3	36.3	6.7
2015-16 ###	1252113	47.02	8.23	38.26	6.50

* It does not include figures for West Bengal and Meghalaya as information was not received.

@ It includes figures for the year 1998-99 for Jammu & Kashmir as no data for the year 1999-2000 was received from SASA.

** It includes figures repeated for the year 2010-11 in the states of Bihar and Maharashtra.

*** It includes figures repeated for the year 2010-11 in the state of Maharashtra and 2012-13 in the state of Gujarat.

It includes figures repeated for the year 2010-11 in the state of Maharashtra and 2013-14 in the state of Karnataka

It includes figures repeated for the year 2014-15 in the states of Jammu & Kashmir and Karnataka.

7.4 Details of number of experiments planned under CES during 2015-16 for food and non-food crops are given in **Annexure-I (a)**. It may be seen from the Annex-I(a) that out of total 12,52,113 experiments planned, 10,67,775 (85%) were on food crops and 1,84,338 (15%) on non-food crops (Chart -III). Corresponding shares in cropped area under food and non-food crops which may be seen from **Annexure-V** were 77% and 23% respectively (Chart -IV). If season-wise details are considered, it may be observed that Kharif crops account for a major share of 6,91,691 (55%) experiments and Rabi crops for 5,60,422 (45%) experiments.

Chart – III

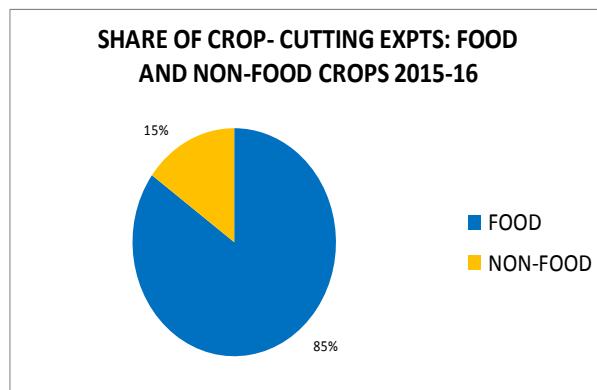
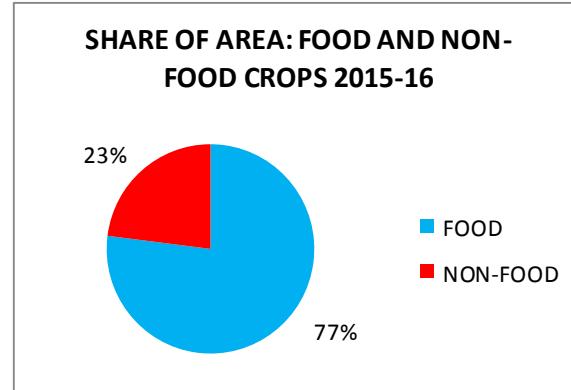


Chart – IV





7.5 Fruits and Vegetables form an essential component of human diet. Sixteen important fruits and vegetable crops in 13 States were covered under CES (**Appendix-II**) on which information has been presented in this report. It can be seen from the **Table-8** that out of 10,67,775* (85%) experiments for food crops, only 49,355* (4.62 %) experiments were covered under 16 fruits and vegetable crops. Among fruits and vegetable crops, 20% of the experiments were accounted for fruits and 80% for vegetable crops.

Table -8: Fruits and Vegetables covered under CES during 2015-16

<u>Sl. No.</u>	<u>Fruits</u>	<u>No. of Experiments Planned</u>
1	Lichi	300
2	Banana	3355
3	Mango	2220
4	Guava	250
5	Jackfruit	1919
6	Pineapple	1580
7	Papaya	32
Total		9656
<u>Sl. No.</u>	<u>Vegetables</u>	<u>No. of Experiments Planned</u>
1	Tapioca	1598
2	Cashewnut	1535
3	Potato	26570
4	Onion	3984
5	Brinjal	1850
6	Tomato	1710
7	Cauliflower	300
8	Plaintain	1622
9	Avare	530
Total		39699

The Centrally Sponsored Scheme “Crop Estimation Survey on Fruits and Vegetables” which started in the year 1982-83 is no longer in operation. However, considering the importance of Horticulture for the national economy and nutrient security, the Department of Agriculture & Cooperation, Ministry of Agriculture has launched a national level programme on horticulture



assessment and development, called CHAMAN (Coordinated Horticulture Assessment and Management using geo-informatics) from September, 2014. This programme envisages use of satellite remote sensing data for area and production estimation of 7 horticultural crops (Potato, Onion, Tomato, Chili, Mango, Banana and Citrus) in selected districts of major producing States. The programme also uses GIS (Geographical Information System) tools along with remote sensing data for generating action plans for horticultural development (site suitability, infrastructure development, crop intensification, orchard rejuvenation, aqua-horticulture, etc.). Another component of CHAMAN is to carry out research activities on horticultural crop condition studies, diseases assessment and precision farming. Two National Level Agencies have been identified for implementing this programme i.e. Mahalanobis National Crop Forecast Centre (MNCFC) of Department of Agriculture & Cooperation for the remote sensing component and the Indian Agricultural Statistical Research Institute (IASRI) for the field survey component. The programme is being jointly implemented through Space Applications Centre, Ahmedabad; National Remote Sensing Centre, Hyderabad; State Horticulture Departments; State Remote Sensing Centres, National Horticulture Research & Development Foundation, Nasik; India Meteorological Department and ICAR Centres.

7.6 The States of Uttar Pradesh (16%), Maharashtra (10%), Madhya Pradesh (14%), Gujarat (6%) and Karnataka (6%) have accounted for more than 57 percent of the gross cropped area (Chart-V). However, the distribution of experiments over States/UTs reveals that more than 77 percent of the experiments were planned in Uttar Pradesh (48%), Karnataka (9%), Maharashtra (7%), West Bengal (4%) and Rajasthan (9%) (Chart-VI).

* Figures for experiments planned are obtained from Annexure V.



Chart – V

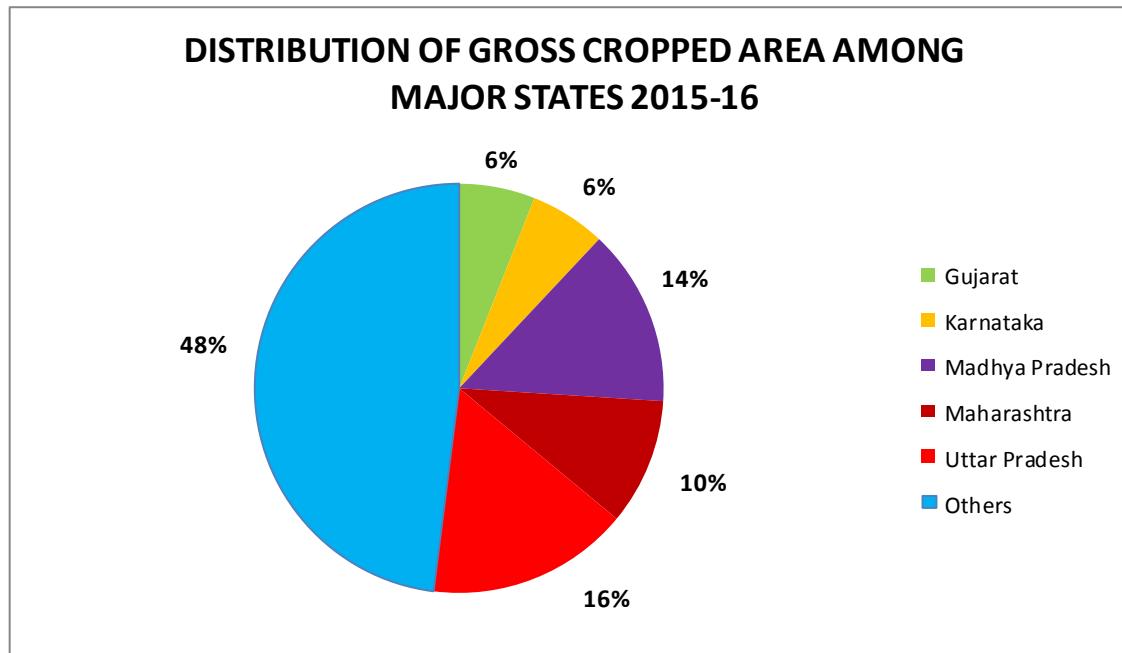
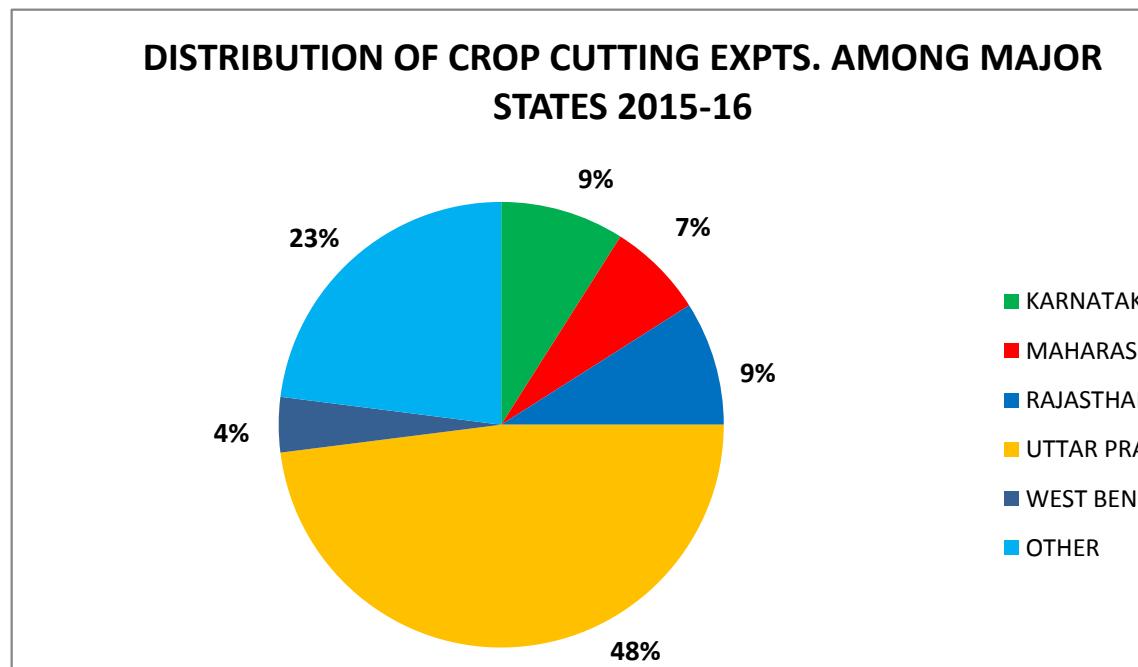


Chart – VI





7.7 **Table-9** shows increase of 52,439 experiments during 2015-16 due to increase in number of experiments planned for a number of crops in the States of Andhra Pradesh, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Meghalaya, Punjab, Rajasthan, Tamil Nadu, Uttarakhand, Uttar Pradesh and Puducherry. The total number of experiments planned decreased by 1,21,807 due to decrease in experiments planned in the States of Bihar, Chhattisgarh, Haryana, Kerala, Madhya Pradesh, Maharashtra, Odisha and West Bengal. This shows net decrease of experiments in the States is 69,368 during 2015-16 over 2014-15. There was no change in planning in the States of Assam, Dadra & Nagar Haveli and Daman & Diu whereas for the States of Jammu & Kashmir and Karnataka information was not received.

Table-9: Comparison of number of experiments planned during 2015-16 and 2014-15

States showing increase in experiments planned	No. of experiments planned			States showing decrease in experiments planned	No. of experiments planned		
	2015-16	2014-15	Net increase over previous year		2015-16	2014-15	Net decrease over previous year
Andhra Pradesh	23128	19714	3414	Bihar	34090	107586	73496
Goa	680	623	57	Chhattisgarh	5976	13442	7466
Gujarat	34750	24196	10554	Haryana	9584	9614	30
Himachal Pradesh	5036	5002	34	Kerala	28638	29030	392
				Madhya Pradesh	30710	20275	20275
Jharkhand	27030	24540	2490				
Karnataka #	107802	90148	17654	Maharashtra	81788	92608	10820
Meghalaya	2052	2020	32	Odisha	44916	47505	2589
Punjab	6982	6892	90	West Bengal	50027	56766	6739
Rajasthan	109176	92408	16768			Total	121807
Tamil Nadu	9276	9180	96				
Telangana*	13456	-	13456				
Uttarakhand	8342	8278	64				
Uttar Pradesh	601542	600358	1184				
Puducherry	300	298	2				
	Total		65895				

#:- The data pertaining to Karnataka for 2015-16 and 2014-15 correspondent to 1 year prior to the year mentioned.

*:- CES data in respect of newly formed state Telangana was received first time from year 2015-16.

7.8 **Annexes-I(b) and I(c)** give the State-wise details of experiments planned for food crops during Kharif and Rabi, 2015-16 respectively and **Annexes-1(d) and 1(e)** give similar details for non-food crops. Summary of details are presented in **Table-10 & Table-11**. On examination of these tables, it can be concluded that except for Jowar, Redgram, Groundnut, Blackgram and Sesamum, the representation of remaining 7 main crops has decreased in percentage terms as compared to previous year.



Table – 10: Details of experiments planned on Food and Non- Food Crops during 2015-16

S. No.	Particulars	No. of Expts.	Percentage
A. FOOD CROPS		1067775	85.27
1	Cereals	775133	61.91
2	Pulses & beans	195195	15.59
3	Small Millets	3396	0.27
4	Sugar & Cocoa	27448	2.19
5	Condiments & Spices	17248	1.38
6	Fruits & Vegetables	49355	3.94
B. NON-FOOD CROPS		184338	14.73
1	Oil Seeds	154230	12.32
2	Fiber Crops	26124	2.09
3	Drugs & Narcotics	3984	0.32
TOTAL		1252113	100

Table- 11: Distribution of experiments planned for Main Crops during 2015-16

Sl. No.	Crop	No. of Expts.	% to Total Expts.
1.	Paddy	306781	24.50
2.	Wheat	281467	22.48
3.	Maize	66577	5.32
4.	R & M	53793	4.30
5.	Bajra	55988	4.47
6.	Gram	47995	3.83
7.	Jowar	43609	3.48
8.	Redgram	32524	2.60
9.	Groundnut	37603	3.00
10.	Blackgram	32421	2.59
11.	Sugarcane	26647	2.13
12.	Sesamum	27453	2.19

7.9 **Annexures -V** also provide information on the percentage of area covered under CES to the total area in the CES States. Crop-wise summary for main crops is presented in **Table-12**, which indicates that the area covered under CES for food and non- food crops was substantial. However, there exists a need for extending CES in different States to cover important pulses, oil seeds and cash crops. The issue of extending the scope of the CES to encompass important crops which are not covered at present needs attention of the concerned States/UTs. Distribution of area and experiments by category of crops are presented in **Chart-VII** and **Chart-VIII** respectively.



Table – 12: Percentage of area covered under CES during 2015-16

Sl. No.	Crop	%age of area covered by CES to total area under the crop in the States covered
1.	Paddy (Kharif)	88
	Paddy (Rabi / Sum.)	97
2.	Jowar (Kharif)	90
	Jowar (Rabi / Sum.)	20
3.	Bajra (Kharif & Rabi / Sum.)	84
4.	Maize (Kharif)	89
	Maize (Rabi / Sum.)	70
5.	Ragi (Kharif & Rabi / Sum.)	87
6.	Wheat	93
7.	Barley	88
8.	Gram	98
9.	Redgram/Tur (Kharif&Rabi)	88
10.	Sugarcane	95
11.	Sunflower (Kharif)	99
	Sunflower (Rabi / Sum.)	70
12.	Groundnut (Kharif)	98
	Groundnut (Rabi / Sum.)	83
13.	Sesamum(Kharif& Rabi/Sum.)	94
14.	Castor	94
15.	Rape & Mustard	94
16.	Linseed	85
17.	Safflower	93
18,	Coconut	100
19.	Niger	68
20.	Cotton	56
21.	Jute	99
22.	Mesta	92
23.	Tobacco	85



Chart-VII

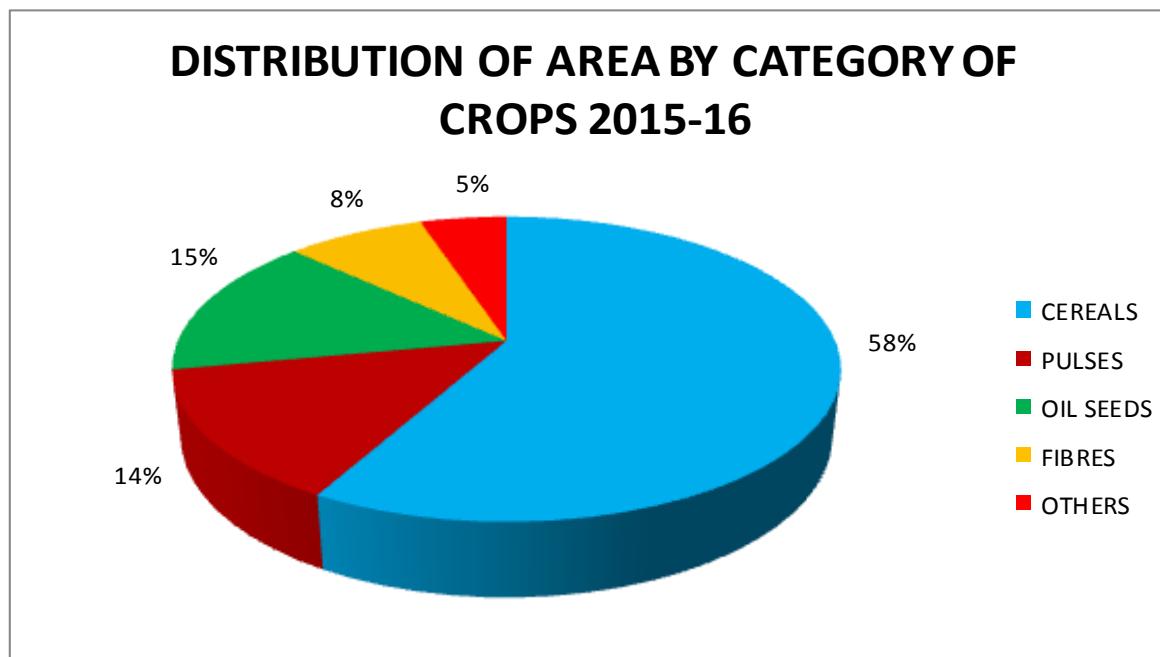
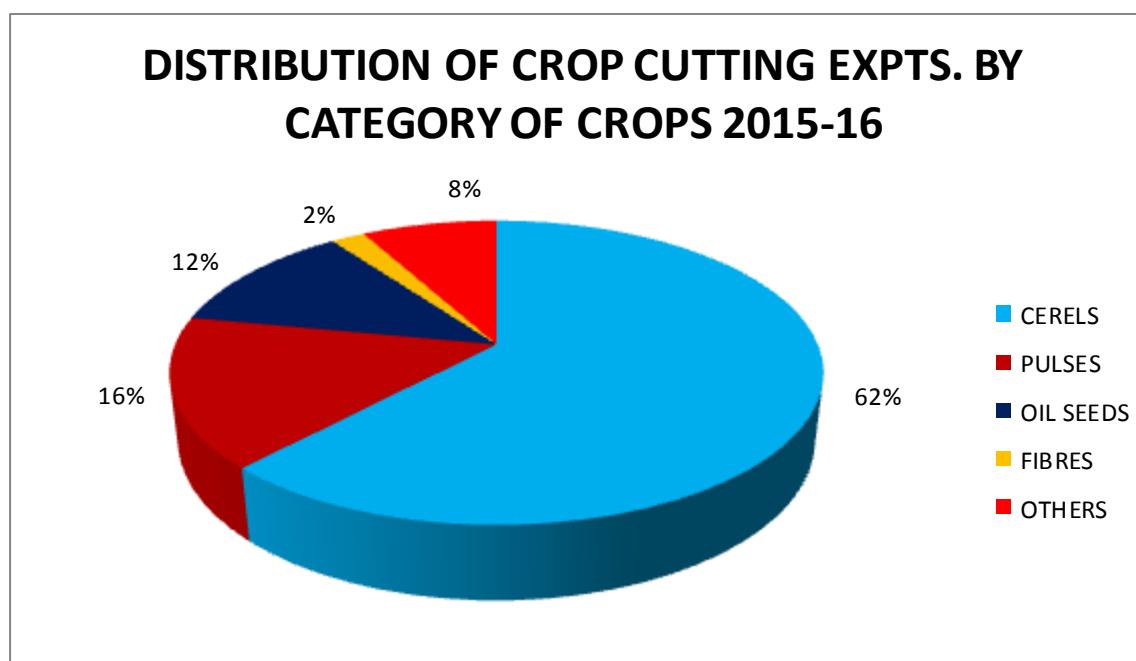


Chart- VIII





TRAINING

8

- 8.1 A programme for imparting training to primary workers engaged in the conduct of crop cutting experiments under CES is held in each State by respective agencies (**Annex-II**) at the beginning of each season/year. In Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Punjab, Rajasthan, Uttar Pradesh and Puducherry, the training was held in the beginning of each crop season and in other States, it was held at the commencement of the agricultural year 2015-16. NSSO officials also participated in the training programmes either as trainers or as observers.
- 8.2 **Annex-II** shows the agency-wise details of the number of training centres, number of primary workers who attended the training and the extent of NSSO participation in the training programmes in the year 2015-16. During the year, training was organised in 2383 centres. At All India level, 54740 out of 61024 primary workers were called for training and 46455 attended the training camps resulting in 85% attendance in CES training camps. States where the attendance of primary workers of various agencies was less than the All-India average were Himachal Pradesh (Agriculture in Kharif, Rabi), Jharkhand (Agriculture), Maharashtra (Revenue, Zila Parishad, Agriculture in both season), Uttarakhand (Revenue) and Uttar Pradesh (Revenue in Kharif). It is essential that all the staff engaged in the conduct of crop cutting experiments are fully familiar with the technical aspects, the methodology and operational procedures relevant to the conduct of the experiments. Conduct of experiments by untrained personnel would introduce subjectivity and result in generation of unreliable data. To obviate this, the feasibility of arranging separate training for absentees subsequently needs to be explored.
- 8.3 During 2015-16, the officers of NSSO (FOD) posted in different States associated themselves with the training programmes, either as trainers or observers in all the States except in Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Jammu & Kashmir, Jharkhand, Kerala, Maharashtra, Meghalaya, Odisha, West Bengal, Dadra & Nagar Haveli and Daman & Diu. In all, out of the 2383 training centers, NSSO officials participated in 794 (33.31%) centers as observers and imparted training in 199 (8.35 %) centers.



SUPERVISION

9

- 9.1 Supervision of field work is an essential part of any large-scale sample survey for ensuring quality of data collected. A threefold approach is adopted in the States for supervision of crop cutting experiments planned under CES. This includes the following:-
- (i) Supervision by the statistical staff of State Agricultural Statistics Authorities (SASA),
 - (ii) Supervision by the Departmental staff i.e. by the supervisory officers of the Departments whose workers are responsible for the conduct of crop cutting experiments in the field and
 - (iii) Supervision by the Technical personnel of the NSSO (FOD).

In the States of Assam, Meghalaya, Odisha and the UT of Puducherry, the field work and supervision were done only by the Statistical Department. In the case of Himachal Pradesh and Union Territory of Dadra & Nagar Haveli, though there are other supervisory agencies, the supervision was done by the State Statistical Departments only. Though supervision of the conduct of crop cutting experiments in various States was in vogue prior to inception of the Agricultural Statistical Wing, NSSO (FOD), NSSO personnel started supervision under the Scheme for Improvement of Crop Statistics (ICS) in 21 States and 1 Union Territory from the year 1973-74 (Rabi) onwards. Under this Scheme, State Statistical Staff also undertakes similar sample checks on matching sample basis. During the year 2015-16, total number of experiments planned for sample check under the ICS Scheme were 15,662 for each Central and as well for State samples during Kharif, Rabi and Summer seasons.

- 9.2 **Annex -III (a)** shows State-wise total number of experiments planned under CES, number of experiments inspected by each agency and breakup of these supervisory checks for Kharif and Rabi seasons according to food and non-food crops. **Annex- III (b)** gives crop-wise details of experiments supervised by each agency in a State. Summary of details of supervision at All India level is given in **Table -13**.



Table –13: Supervision of crop cutting experiments during 2015-16

Item	No. of expts. Planned	No. of Experiments Supervised by					
		State Statistical Department		Other State Departments		NSSO	
1	2	3	4	5	6	7	8
Kharif							
Food Crops	588743	35319 (14)	30794 (12)	61441 (27)	61121 (27)	7462 (1)	7224 (1)
Non-Food Crops	102948	10386 (17)	8420 (14)	13655 (25)	13627 (25)	2125 (2)	2053 (2)
Combined	691691	45705 (15)	39214 (13)	75096 (26)	74748 (26)	9587 (1)	9277 (1)
Rabi							
Food Crops	479032	13434 (8)	13117 (8)	34943 (23)	34655 (22)	4529 (1)	4421 (1)
Non-Food Crops	81390	3682 (7)	3636 (8)	14099 (31)	13909 (31)	1015 (1)	968 (1)
Combined	560422	17116 (8)	16753 (8)	49042 (25)	48564 (24)	5544 (1)	5389 (1)
TOTAL (Percentage)	1252113	62821 (12)	55967 (11)	124138 (26)	123312 (25)	15131 (1)	14666 (1)

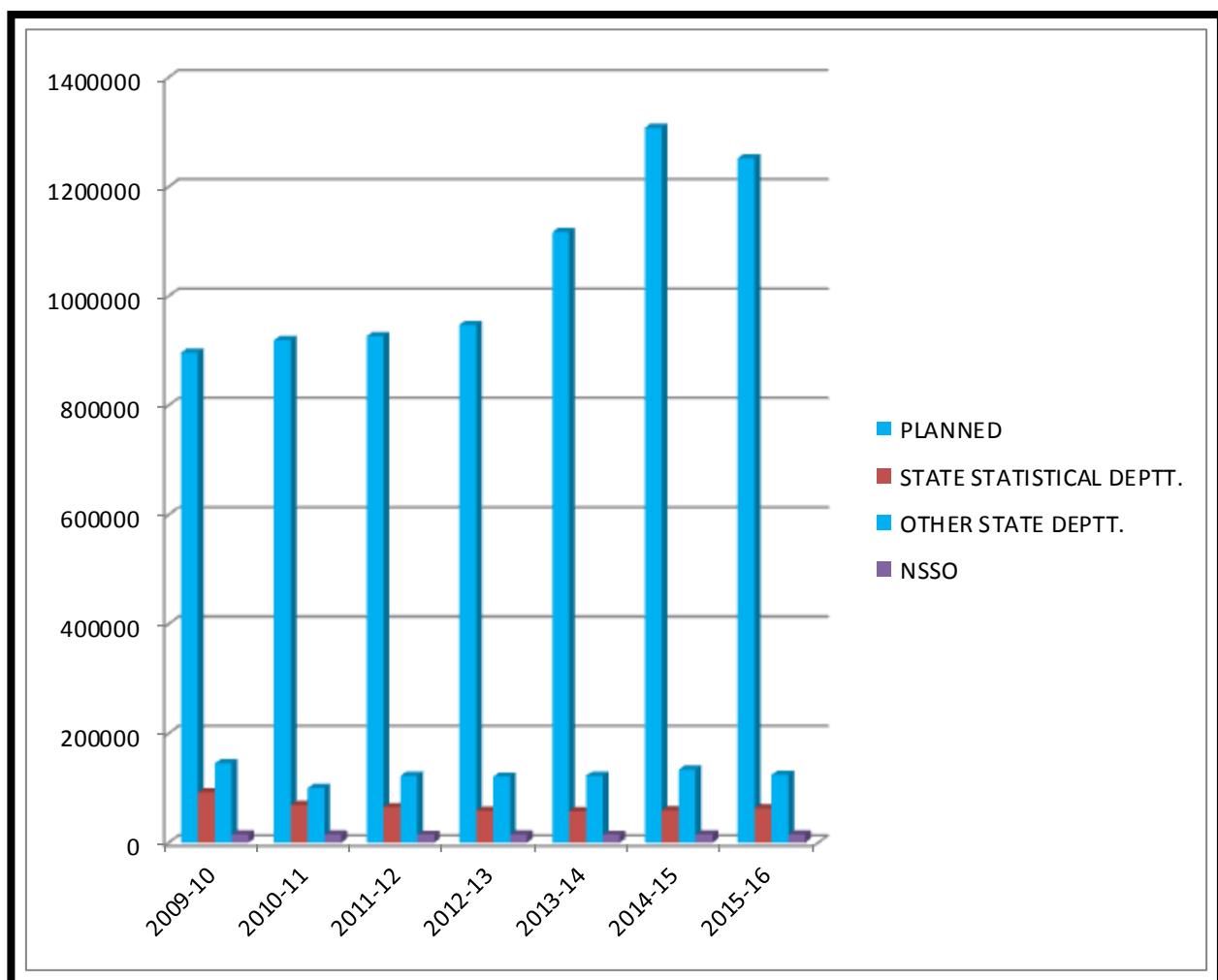
* Total Percentages have been calculated by including only those States from which complete data was received.

During 2015-16, about 16% of the total experiments planned were supervised, out of which 12 percent were supervised by the State Statistical Department, 26 percent by other State Departments and 1 percent by NSSO. However, the supervision was conducted at harvest stage in approximately 96% cases. It may also be observed from the State-wise position as given in **Annex-III (a)** that the total supervision by State Statistical Department was above 25 percent in the States of Goa, Kerala, Odisha, Tamil Nadu, and Union Territories of Daman & Diu and Puducherry and was below 10 percent in the States of Andhra Pradesh, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Meghalaya, Punjab, Rajasthan, Telangana, Uttarakhand and West Bengal. Total supervision by other State Departments was above 25 percent in case of Madhya Pradesh, Odisha, Rajasthan and Daman



& Diu and was below 10 percent in the States of Bihar, Chhattisgarh, Himachal Pradesh, Tamil- Nadu and West Bengal. Total supervision by NSSO officers in individual States varied from 0.3 percent in Uttar Pradesh to 10 percent in Punjab and Puducherry. Above details are summarised in the following Bar diagram (Chart-IX). Inspection plays an integral part in the improvement of data collection of data and requires due attention of the supervisory officers. No information regarding the supervision by State agencies has been received from Maharashtra and Uttar Pradesh although the supervisory agencies are in existence.

Chart – IX





9.3 **Annex-III (a)** also gives the breakup of experiments supervised during the two major seasons. It is seen that the supervision was well distributed between both the seasons as well as over food and non-food crops. Crop-wise details of supervision given in **Annex-III (b)** are summarised in **Table-14**. It is seen that at All India level, the total supervision (adding up figures for all the concerned departments) varied between 7 and 51 percent for important crops like Paddy, Jowar, Bajra, Maize, Ragi, Wheat, Barley, Groundnut, Sesamum, Cotton and Jute, and in the range of 19 to 45 percent for crops like Gram, other Pulses and Beans, Small Millets, Condiments & Spices, Linseed, Castor, Rape & Mustard and other Oilseeds. For other crops like Sugars, Drugs & Narcotics, Fruits & Vegetables and Mesta, the supervision was in the range of 8 to 52 percent, which needs improvement. It is evident from the data presented that there is a need to increase the level of supervision for the crops by all the related departments. This will definitely have a lasting effect on the improvement of the quality of data collected in the field.



Table-14: Crop- wise percentage of experiments supervised during 2015-16

Crop	State Statistical Deptt		Other State Departments		NSSO		All Deptts	
	Total	At Harvest stage	Total	At Harvest stage	Total	At Harvest stage	Total	At Harvest stage
1	2	3	4	5	6	7	8	9
Paddy	11	11	16	16	1	1	16	16
Jowar	11	11	21	21	2	2	13	13
Bajra	11	11	40	40	1	1	17	17
Maize	9	9	31	31	1	1	24	23
Wheat	5	4	24	23	1	1	7	7
Barley	4	4	33	33	4	4	30	30
Gram	5	5	27	26	1	1	19	19
Other Pluses & Beans	5	5	14	14	1	1	20	20
Small Millets	14	14	11	11	2	2	27	27
Sugars	4	3	2	2	2	2	9	7
Condiments & Spices	12	4	16	16	0	0	29	21
Fruits & Veg.	8	4	5	5	0	0	14	10
Ragi	18	18	32	31	2	2	51	38
Groundnut	21	21	32	32	4	4	38	37
Sesamum	14	14	29	29	2	2	29	28
Castor	16	16	21	21	3	3	36	36
Rape & Mustard	7	7	40	40	1	1	25	25
Linseed	4	4	15	13	6	6	20	18
Other Oil Seeds	11	4	11	11	1	1	24	17
Cotton	27	27	46	46	5	5	24	24
Jute	8	8	3	3	2	2	12	12
Mesta	12	12	0	0	-	-	9	9
Drugs & Narcotics	4	4	17	17	0	0	22	22

9.4 An idea about the extent of participation by the State Statistical and the NSSO officials under the Scheme for Improvement of Crop Statistics (ICS) by way of association in the sample check



on crop cutting experiments may be taken from the details presented in **Table-15**. It is seen that a total of 24996 (2.46%) experiments out of the 10,14,347 experiments planned (for the crops covered under ICS Scheme) were spot checked at harvest stage either by Central or State agencies during 2015-16 as against 25130 (2.31%) experiments out of 10,87,648 experiments planned during 2014-15. Details of Crop-wise allocation of number of experiments under ICS implementing States are presented in **Appendix VII**. The sample checks are undertaken by the supervisory staff of NSSO (FOD) and State Govts. on matching basis in two non-overlapping samples.

Table -15: Supervision under ICS scheme during 2015-16

Sl. No.	State	Number of Experiments			Percentage of Supervision under ICS at harvest stage	
		Planned under CES (for important crops covered under ICS)	Supervised under ICS at harvest stage by	Total	Central Staff	State Staff
1	2	3	4	5	6	7
1.	Andhra Pradesh	16496	656	613	1269	7.69
2.	Assam	11250	452	364	816	7.25
3.	Bihar	26260	669	274	943	3.59
4.	Chhattisgarh	4898	348	330	678	13.84
5.	Gujarat	23504	950	587	1537	6.54
6.	Haryana	8994	658	511	1169	13.00
7.	Himachal Pradesh	5036	254	242	496	9.85
8.	Jammu & Kashmir	4908	254	57	311	6.34
9.	Jharkhand	18706	218	94	312	1.67
10.	Karnataka	75718	808	874	1682	2.22
11.	Kerala	15908	518	511	1029	6.47
12.	Madhya Pradesh	28310	1110	761	1871	6.61
13.	Maharashtra	75094	1061	702	1763	2.35
14.	Odisha	15778	824	825	1649	10.45
15.	Punjab	6982	673	613	1286	18.42
16.	Rajasthan	85602	862	816	1678	1.96
17.	Tamil Nadu	6800	709	638	1347	19.81
18.	Telangana	9668	446	335	781	8.08
19.	Uttarakhand	6948	150	132	282	4.06
20.	Uttar Pradesh	525814	2279	318	2597	0.49
21.	West Bengal	41373	737	705	1442	3.49
22.	Puducherry	300	30	28	58	19.33
All States		1014347	14666	10330	24996	2.46

Note: Important crops include Paddy, Jowar, Bajra, Maize, Ragi, Wheat, Barley, Gram, Tur, Cotton, Jute, Sugarcane, Groundnut and Rape & Mustard.



9.5 Sample checks under ICS scheme are being undertaken since the year 1973-74 to assess the extent to which the prescribed techniques and procedures are adhered to by the State primary workers while conducting the experiments and provide spot guidance, wherever necessary. As detailed in **Annexure III-C**, the findings of the sample checks reveal that during 2015-16, 57 percent experiments were conducted as per the prescribed procedures. The occurrence of one or more type of discrepancy was observed in the remaining set of analyzed experiments. There exists ample scope for improvement especially with regard to selection of random numbers and locating & marking of plots (e4) in addition to reporting of ancillary particulars like irrigation, varieties of seed, fertilizers/manures (e6). The sample checks revealed that the primary workers assigned with the task of conducting the experiment do not use, in sizeable number of cases (more than All India figures), the equipment supplied for the purpose. This incidence was particularly noticeable in the States of Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh and Uttrakhand. The tendency to delegate the work of crop cutting experiments to others including untrained workers was observed to be comparatively high (more than All India figures) in case of Bihar (Autumn Bha. & Summer), Jammu & Kashmir (Kharif), Jharkhand (Late Kharif, Rabi), Maharashtra (Kharif), Punjab (Kharif), Uttar Pradesh (Kharif) and West Bengal (Aman., Rabi) during 2015-16. Although these small percentages do not speak for themselves, the damage done to the quality of fieldwork is substantial. Proper arrangements are needed in this regard for ensuring training of the field worker entrusted with CES work especially for those officials who are joining these ranks after the regular training camps are over, or those entrusted with these duties as a stop gap arrangement.



RESPONSE

10

- 10.1 State-wise number of experiments analysed and percentage response during Kharif and Rabi seasons for food and non - food crops under CES are detailed in **Annex-IV (a)**.
- 10.2 In 2015-16, the overall response for c.c. experiments recorded was 95 percent. Percentage response for food crops during Kharif and Rabi, 2015-16 was 96 % and 95% respectively and for non-food crops, it was 94 % & 92 % respectively. Response was below 90 percent in Assam (86%), Bihar (87 %), Chhattisgarh (76%), Goa (80%), Haryana (89%), Himachal Pradesh (84%), Jammu & Kashmir (77%), Jharkhand (84%), Madhya Pradesh (85%), West Bengal (82%) and Dadra & Nagar Haveli (63%). Special measures are needed to improve the percentage of response to more than 90 percent in these States.
- 10.3 An analysis of non-response was attempted with a view to focus and identify the specific causes leading to non- response, facilitating taking adequate corrective measures. State-wise details of number of experiments that could not be taken up for analysis are given in **Annex-IV (b)**. For all crops taken together, it is seen that 95 percent of the total number of experiments planned were analysed. Of the remaining (5 percent) experiments, which could not be analysed, 5.8 percent were reported to be lost in the field, 0.3 percent were reported to be rejected at tabulation stage and for 2 percent of experiments, precise reasons for the exclusion were not available.
- 10.4 Out of 5.8 percent experiments lost in the field, no specific reasons had been reported in respect of 4.8 percent experiments while 4.6 percent experiments were lost due to harvesting of the crop by the cultivator prior to the date fixed for the experiments.
- 10.5 At All India level, data for 2 percent of the experiments could not be included for analysis. Such cases where more than 5% experiments were rejected at the tabulation stage include the State of Haryana (10.9%). The percentage of experiments lost (in the field + rejected by Statistician) was more than 10 % in the States like Assam (14.2 %), Bihar (13.1%), Chhattisgarh (24.3%), Goa (20.0%), Haryana (11.5%), Himachal Pradesh (15.7%), Jammu & Kashmir (23 %), Jharkhand (15.7%), Madhya Pradesh (14.9 %), West Bengal (18.1 %) and Union Territory of Dadra & Nagar Haveli (37.2 %).



- 10.6 No reason could be ascribed for exclusion of experiments from analysis in 10.9% of experiments in Haryana. Non-response is to be kept within the permissible margin and timely remedial measures needs to be taken for exercising adequate checks.
- 10.7 Results of crop cutting experiments for each crop along with the number of experiments planned and analysed indicating the response achieved during 2015-16 are given in Annex -V. **Table-16** shows the crop-wise percentage response at All India level for important crops during 2015-16.

Table-16: Crop - wise percentage response at All India level for important crops under CES 2015-16

Sl.No.	Crop	Response (%)
1.	Paddy (Kharif)	97
	Paddy (Rabi / Sum.)	89
2.	Jowar (Kharif)	92
	Jowar (Rabi)	96
3.	Bajra (Kharif)	96
	Bajra (Sum.)	96
4.	Maize (Kharif)	96
	Maize (Rabi / Sum.)	91
5.	Ragi (Kharif)	96
	Ragi (Rabi / Sum.)	87
6.	Wheat	98
7.	Barley	92
8.	Gram	88
9.	Redgram/Tur	91
10.	Sugarcane	93
11.	Groundnut (Kharif)	95
	Groundnut (Rabi / Sum.)	92
12.	Sesamum (Kharif)	95
	Sesamum (Rabi)	89
13.	Castor	92
14.	Rape & Mustard	94
15.	Linseed	85
16.	Cotton	97
17.	Jute	87



RESULTS

11

- 11.1 The estimates of average yield rate along with percentage Standard Error are presented in **Annex-V**. The method of estimation followed by the States for working out the average yield rate and its Standard Error (SE) is explained in **Appendix-V**. The trend of area, yield rates and production under important crops during 2010-11 to 2015-16 are presented in **Charts-X to XII** respectively.
- 11.2 The results of CES for 2015-16 reveal that for some crops, response was very low in few States. For instance, it was less than 50 percent in Andhra Pradesh for Soyabean (45%), Bihar for Rice (Gar HYV 33%, Gar. LV 46%), Maize (Gar. Hyv) (45%), Ragi (Bha. 40%), Mest (33%), Greengram (Gar. 39%), Lichi (41%), Banana (21%); Mango (38%); Guava (30%); Jackfruit (44%); Chhattisgarh for Jowar (48%) Barley (39%), Potato (Rabi 22%), Goa for Groundnut (38%), Haryana for Sunflower (29%), Jharkahand for Masur (48%), Redgram (44%), Uttar Pradesh for Sunflower (Z) (14%) and Dadara & Nagar Haveli for Ragi (36%). **Such cases of extreme low response affects the reliability of estimates of yield rate.**
- 11.3 Estimates of average yield rates at All India Level for the year 2015-16 and for the previous year for some important crops are given in **Table-17**. These results show that the average yield per hectare during 2015-16 was more than that of previous year for Rice (Rabi/Sum.), Jowar (Rabi/Sum.), Wheat, Barley, Gram, Sugarcane, Groundnut (Rabi & Summer.), Rape & Mustard and Cotton. In case of Rice (Kh.), Jowar (Kh.), Bajra (Comb.), Maize (Comb.), Redgram, Groundnut (Kh.), Sesamum (Comb.), Castor, Linseed and Jute the average yield has shown decline as compared to the previous year 2014-15.



Table -17: Comparison of CES Yield Rates during 2015-16 and 2014-15

Sl. No.	Crop	Yield rate in (kg/ha.)		Percentage difference
		2015-16	2014-15	
1.	Rice (Kharif)	2435	2638	-7.70
2.	Rice (Rabi/Sum.)	4058	3545	14.47
3.	Jowar (Kharif)	1010	1223	-17.42
4.	Jowar (Rabi/ Sum.)	839	833	0.72
5.	Bajra (Comb.)	1148	1340	-14.33
6.	Maize (Comb.)	2536	2807	-9.65
7.	Ragi (Comb.)	1596	1596	0.00
8.	Wheat	3044	2640	15.30
9.	Barley	2479	2308	7.41
10.	Gram	958	896	6.92
11.	Redgram/Tur	583	784	-25.64
12.	Sugarcane	75617	75536	0.11
13.	Groundnut (Kharif)	1360	1518	-10.41
14.	Groundnut (Rabi / Sum.)	2170	1865	16.35
15.	Sesamum (Comb.)	418	452	-7.52
16.	Castor	1789	2122	-15.69
17.	Rape & Mustard	1144	1099	4.09
18.	Linseed	444	466	-4.72
19.	Cotton (Lint)	809	648	24.85
20.	Jute	2486	2692	-7.65

11.4 The dimension of the standard error provides an idea about the precision of the estimate. In an attempt to standardise the measure, generally it is expressed in percentage terms. The percentage standard errors of the estimates of average yield are furnished along with the estimates in **Annex-V**. Standard error was not calculated for any crop in Goa, Gujarat (except Rice Ir. & UI, Redgram, Blackgram, Moth, Garlic, Onion, Groundnut Kh., Cotton Ir & UI and Rape & Mustard), Jammu & Kashmir (except Rice and Maize), Jharkhand, Punjab and Uttar Pradesh. The standard error was also not calculated in Bihar for Rice, Maize, Ragi, Wheat, Barley, Gram Redgram, Greengram, Lakh, Masur, Sugarcane, Potato (Agh.), Cauliflower, Onion, Rape & Mustard, Jute and Mesta; Haryana for Gram, Barley, Redgram, Sugarcane, Sunflower Rabi and Cotton; Madhya Pradesh for Banana and Papaya; Maharashtra for Bajra and Linseed; Meghalaya for Potato (Sum.), Kerala for Sugarcane, Cocoa, Turmeric, Ginger, Mango, Jackfruit, Cashewnut, Pineapple, Plantain and Sesamum, Rajasthan for Moth, Guar, Coriander and Methi.



11.5 Technically, standard errors are associated with efficiency of the estimates and the degree of precision reduces with increase in the standard error. For crop yield, the desirable range of standard error at State level is between 0 to 5 percent. It is observed that in a good number of cases, the standard errors were above the desirable limits. The State Governments may consider increasing the sample size of the concerned crops with increased supervision. **Table-18** presents the cases where the standard errors were higher than the desirable range.

Table-18: State-wise crops with high standard error during 2015-16

Sl. No	State	Crop with percentage S.E.
1.	Andhra Pradesh	Jowar Kh. (5.3), Greengram Kh. (9.1), Horsegram Kh. (5.6) and Sunflower Kh. (9.3)
2.	Bihar	Guava (6.8); Brinjal Rabi (7.82)
3.	Chhattisgarh	Jowar (22.9), Kodon-Kutki (7.3) and Sesamum (10.3)
4.	Gujarat	Rice Kh.Ul. (9), Moth (8)
5.	Haryana	Maize (12.6)
6.	Jammu & Kashmir	Rice (6)
7.	Karnataka	Rice Kh. Tra. Ir. (6.6); Rabi Tr. Ir. (18.0); Jowar Kh. Tra UI (8.0); Sum. Hyv Ir. (20.0), Bajra Kh. Tra (9), Maize Kh. Tra. Ir. (43.0); Sum. sHyv Ir.(6.1); Ragi Kh. Tr. (18.2); Sum. Hyv Ir (7.2); Greengram Kh. (9.1); Rabi (8.4), Blackgram Rabi (10.0), Navane (5.1); Save (7.8); Sugarcane (6.0); Chillies Kh. (6.8); Rabi (21.2); Sum. (17.1), Potato Kh. (11.0); Rabi (44.2), Linseed (5.0), Onion Kh. (5.0); Rabi (12.3); Sum. (16.4), Tobacco (6.4); Avare (6.3) and Cotton (5.4)
8.	Madhya Pradesh	Rice Kh. Hyv Ir. (20.6); Kh. LV Ir. (8.2) and Chillies (29.6)
9.	Maharashtra	Gram (9.9), Sesamum Rabi (19.4) and Tobacco (6.6).
10.	Odisha	Maize Wint. (14.7), Ragi Sum. (6.8), Horsegram Sum. (24.2), Groundnut Win. (10.2), Sesamum Sum. (5.4) and Jute (8.1)
11.	Telangana	Bajra kh. (14.9), Ragi Kh. (11.0), Greengram Kh. (5.0), Rabi (7.6), Horsegram Kh. (8.4); Rabi (8.7), Sesamum Kh. (17.5); Rabi (5.6), Castor Kh. (9.1), Sunflower Kh. (6.1), Rabi (5.0), Tobacco [12.1 (V)] and Korra (8.6)
12.	Tamil Nadu	Sesamum (Ir.) [5.8]
13.	West Bengal	Redgram Rabi (12.5), Lakh (18.6), Peas (7.7), Linseed (10.4) and Mesta (8.6)
14.	Daman & Diu	Rice (15.2), Bajra (16.4)



Chart - X

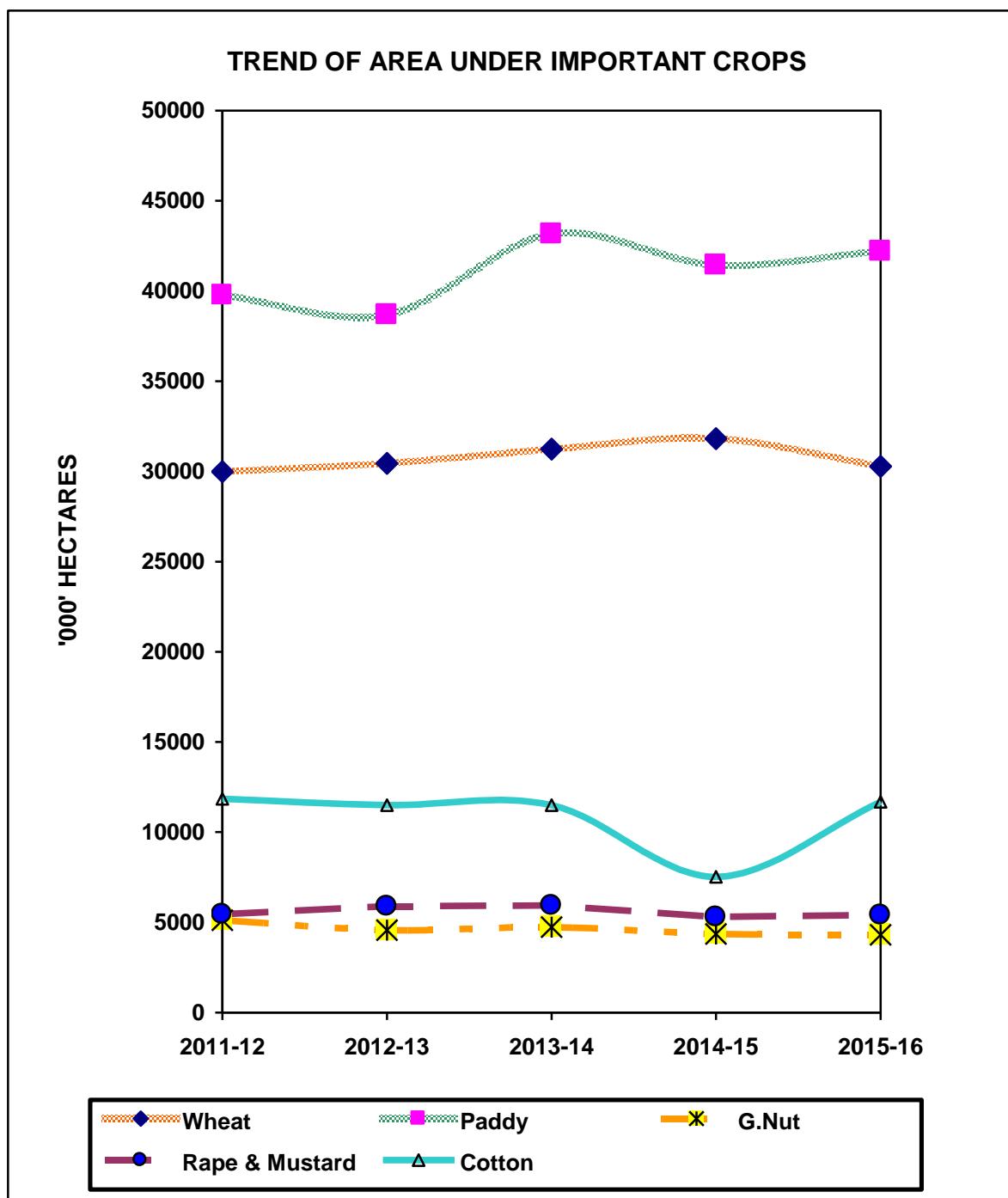




Chart – XI

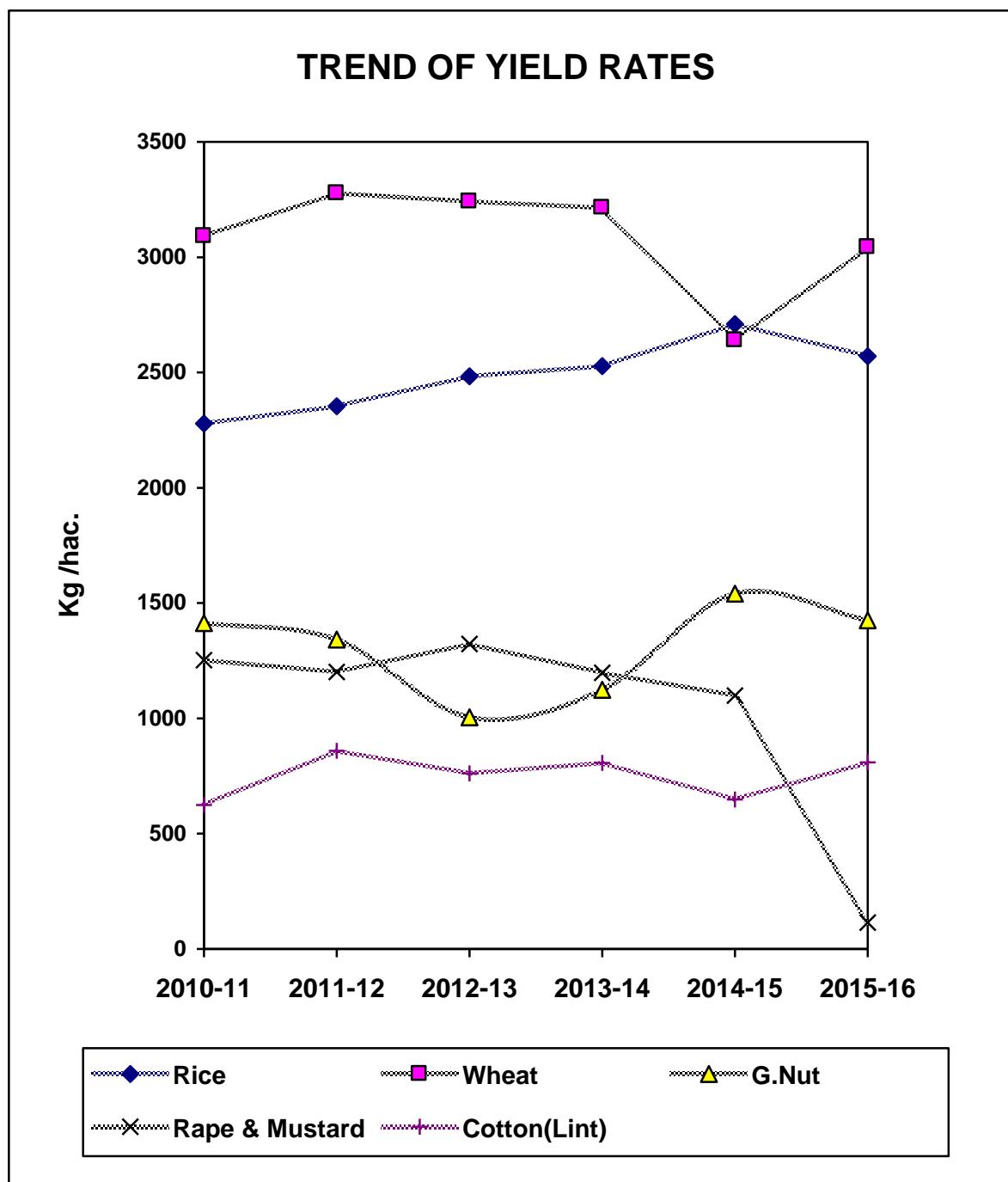
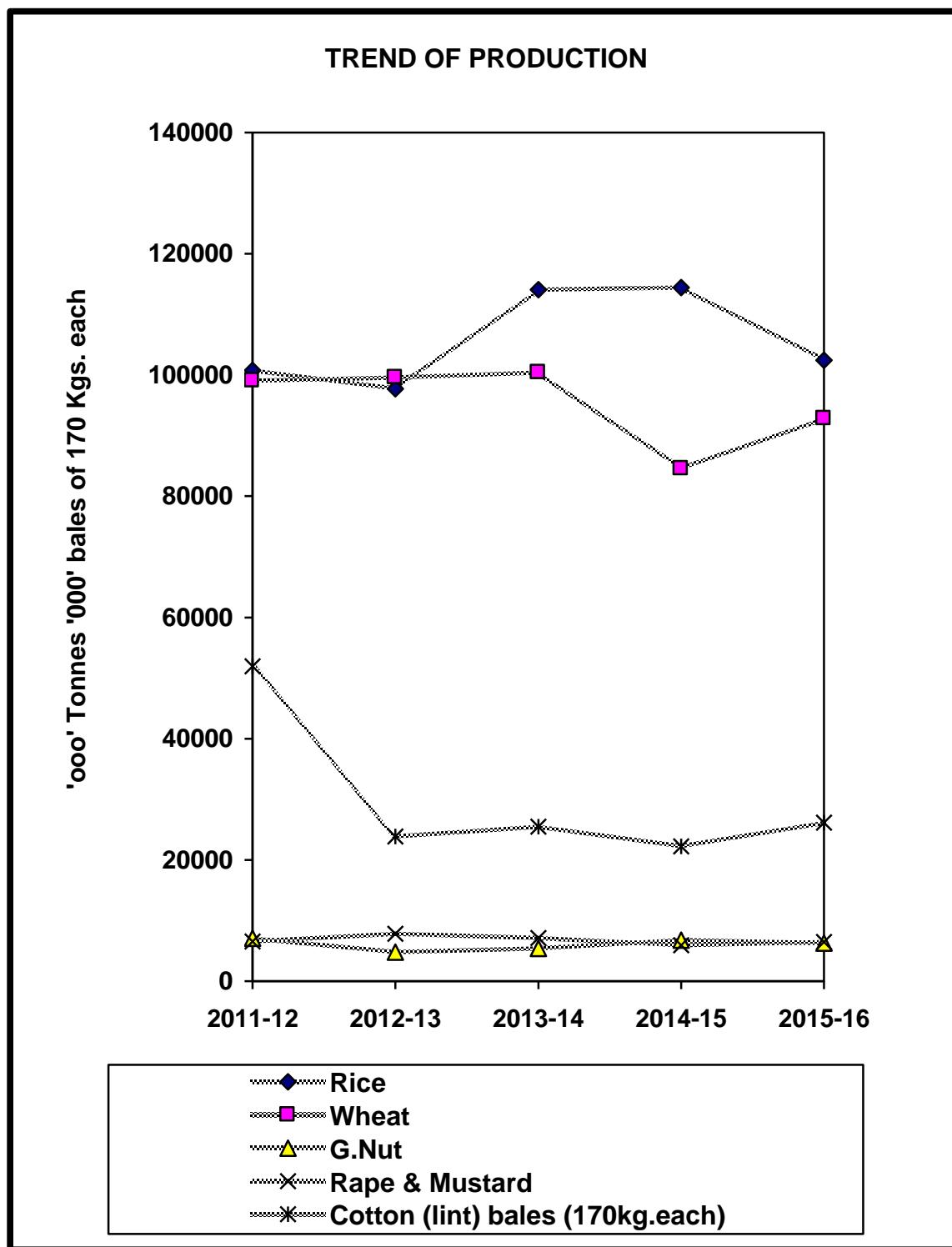




Chart - XII





11.6 Comparison of estimates of crop production for 2015-16 based on the CES results furnished by the States with the corresponding estimates issued by the Directorate of Economics and Statistics (DES), Union Ministry of Agriculture and Co-operation, shows differences in some cases. The details of such cases where the difference between the two estimates is more than 5% in area, production or average yield rate are presented in **Annex–VI**. There may be several reasons for such deviations, some of which are listed as follows:-

- (i) *Non-adoption of survey estimates for preparing official estimates for some crops in the States:* This may be due to the small size of sample adopted for these crops.
- (ii) *Adoption of survey estimates only for part of the State or part of the year (season)*
- (iii) Utilisation of previous year's area figures for official estimates.



ANCILLARY DATA

12

- 12.1 Ancillary information regarding use of inputs such as irrigation, variety of seeds, fertilizers, manures and pesticides etc. are collected in the primary schedule for crop cutting experiments. An analysis of input data by multi-fold classification, providing an idea about the extent of adoption of improved agricultural practices, enables proper appreciation of the observed yield differentials.
- 12.2 In certain States, the sampling design provides for stratification at planning stage itself. The inputs considered for this purpose are irrigation, variety of seed or both for various crops. For these crops, separate estimates of average yield for each category are available as per standard procedure. In cases where pre-stratification is not envisaged, NSSO has been advocating post-stratification analysis of the experiments according to four fold classification (Irrigated, Un-irrigated, High yielding variety and Local variety) for major crops like Rice, Jowar, Bajra, Maize and Wheat and two fold classification (Irrigated and Un-irrigated) for other crops. Under the procedure suggested, the estimates of average yield for each category are worked out as simple average at the stratum level and as weighted average at district level using corresponding area as weights. Likewise, the district level estimates are pooled in a similar manner to arrive at State level estimates. It has further been suggested that in the absence of area figures for different categories based on girdawari, TRS estimates of area may be used as weights to work out estimates at district as well as State level.
- 12.3 Preference of area figures over number of experiments adopted earlier as weights has distinct advantages and as such the procedure is being progressively adopted in many States. However, numbers of experiments continue to be used as weights in a large number of cases and as such average yield in such cases may not tally with the averages worked out on the basis of area figures as respective weights. Such cases are listed in **Table-19**.



Table-19: States where number of experiments have been used as weights instead of area for yield calculation during 2015-16

Sl.No.	State	Crop
1.	Assam	All Crops
2.	Himachal Pradesh	All Crops
3.	Madhya Pradesh	All Crops except Rice & wheat
4.	West Bengal	All Crops

- 12.4 Data according to four-fold classifications for crops of Rice, Jowar, Bajra, Maize and Wheat were not received from States listed below in **Table-20**.

Table-20: Non-receipt of data on four fold classification during 2015-16

Sl.No.	State	Crop
1.	Gujarat	Rice, Jowar, Bajra, Maize and Wheat
2.	Jammu & Kashmir	Rice, Maize and Wheat
3.	Jharkhand	Rice, Maize and Wheat
4.	Uttar Pradesh	Rice, Jowar, Bajra, Maize and Wheat

- 12.5 On account of operational problems, it is noticed that data as per the two fold classifications i.e. irrigated and un-irrigated, were not received (**Table-21**) from the following States for the crops mentioned against each:-

Table-21: Non-receipt of data on two fold classification during 2015-16

Sl. No.	State	Crop
1.	Gujarat	All Crops
2.	Jammu & Kashmir	All Crops
3..	Jharkhand	All Crops.
4.	Maharashtra	Arecanut, Cashewnut and Coconut.
5.	Kerala	All Crops except Rice.
6.	Rajasthan	Greengram, Masur, Moth, Chowla, Sugarcane, Coriander, Methi, Castor, Tara meera, Cotton and Isabgol
7.	Uttar Pradesh	All Crops.



- 12.6 Estimates of yield rates calculated separately for irrigated and un-irrigated fields are presented in **Annex-VII**. Yield rates according to four-fold classification for five major crops are detailed in **Annex-VIII**.
- 12.7 Tabulation of CES data based on the extent of area benefited by improved agricultural practices, such as use of improved variety of seed, fertilizers, manures and application of pesticides has been attempted in this report. Information about proportion of area under different agricultural practices as reported by the States is presented in **Annex-IX**. This information has not been received from Gujarat, Jammu & Kashmir, Maharashtra, Uttar Pradesh and Daman & Diu for all the crops; Jharkhand for Barley; Rajasthan for Chowla, Coriander, Linseed, Methi, Moth and Tara Meera; Kerala for all crops except Paddy & Tapioca and Madhya Pradesh for Banana & Papaya crops.



DRIAGE EXPERIMENTS 13

- 13.1 The produce which is harvested and weighed at the time of actual conduct of crop cutting experiments is often different from the marketable produce. The results of the Crop Estimation Surveys are presented in terms of the marketable produce. Therefore, determination of driage ratio, ratio of weight of marketable produce to that of the harvested produce is an important stage in the entire process. For this purpose, driage experiments are carried out in all the States. Such experiments are usually conducted in a sub-sample of plots selected for crop cutting experiments. Information enabling adequate insight about the procedure followed for different crops in various States is given in **Appendix-VI**. The details include information on the form of produce harvested for first weighment, the form of marketable produce, procedure for drawing the sub-sample for driage experiments, quantity of produce kept for driage, duration of the driage experiment, level of application of driage ratios, etc.
- 13.2 Results of the driage experiments for different crops, relevant details about the number of experiments planned and analysed, percentage recovery etc., for the year 2015-16 are given in **Annex-X (a)**. The recovery percentage shown in the Annex relates to the State level, although in actual practice, district level recovery percentages are worked out and used for estimating yield rate and production.
- 13.3 In view of the practical difficulties experienced by the field staff in conducting driage experiments, it was considered desirable to examine if the driage experiments could be conducted at a central place. Exploratory studies conclusively established the feasibility of arranging driage experiments at a Central place and accordingly, central driage experiments were conducted as a part of the programme of supervision of CES in the State from 1960-61 to 1971-72. State Governments were also requested to arrange driage experiments at a few selected centres in the CES series of crop cutting experiments.



The results of the driage experiments are not being received from the States regularly. The results for Central driage experiments for 2015-16 were received only from Assam, Karnataka, Odisha and Rajasthan. These results are presented in **Annex-X (b)**. It may be noted that in Assam, Karnataka and Odisha, field driage experiments are not conducted for the crops for which central driage experiments are planned and driage ratios used for CES results of these crops are based on Central driage experiments. Only in Rajasthan, Central driage experiments are still planned along with field driage experiments. Column (7) of **Annex-X (b)** shows the recovery percentage according to field driage experiments only for one State viz., Rajasthan in 2015-16. In Rajasthan, it is seen that loss in driage as per central driage is less for all crops except Gram from field driage.

- 13.4 As it can be seen from the procedure of conducting driage experiments that various resources have to be engaged, the experimental results are to be observed on several days and then the driage factor is to be calculated. This procedure also leads to wastage of grains etc. Instead of the conventional procedure of the driage experiments, moisture meter may be used to obtain the driage ratio. Moisture meter is an instrument to measure the moisture content in the grains from which the driage ratio can be calculated. The instrument was used by Govt. of Uttar Pradesh and the results obtained were compared with those of the conventional method. It was observed that the driage ratios obtained by the two methods were comparable. Other States may also start using moisture meter for calculating the driage ratio.

(Annexures &

Appendices)



LIST OF ANNEXES

ANNEX		PAGE NO.
Annex 1(a)	Sample size – Total number of experiments planned under CES	3
Annex 1(b)	Sample size – Kharif food crops under CES	4
Annex 1(c)	Sample size – Rabi food crops under CES	7
Annex 1(d)	Sample size – Kharif non -food crops under CES	10
Annex 1(e)	Sample size – Rabi non-food crops under CES	12
Annex II	Training of primary workers under CES	14
Annex III(a)	Supervision of field work – All Crops (Season wise)	16
Annex III(b)	Supervision of field work – Cropwise	21
Annex III(c)	Incidence of errors, use of equipments and delegation of work of crop cutting experiments	36
Annex IV(a)	Response under CES	38
Annex IV(b)	Reasons for loss of experiments under CES	39
Annex V	Estimates of yield rates and production under CES	43
Annex VI	Comparison of survey estimates and official estimates in respect of those crops where difference in Area, production and yield was more than 5%	65
Annex VII	Estimates of yield rates from Irrigated and Un-Irrigated plots	67
Annex VIII	Estimates of yield rate for Irrigated and Un-Irrigated plots according to High Yielding and local varieties	85
Annex IX	Percentage of area under different improved Agricultural practices	89
Annex X(a)	Results of field driage experiments under CES	107
Annex X(b)	Results of central driage experiments organised by the States under CES	116

LIST OF APPENDICES

APPENDIX		PAGE NO.
Appendix I	Statewise Crop coverage and details of design under CES	118
Appendix II	Crops coverage under CES	132
Appendix III	Primary field agency for crop cutting experiments under CES	136
Appendix IV	Workload on primary field staff on account of crop cutting experiments under CES	141
Appendix V	Estimation procedure under CES	144
Appendix VI	Procedure for driage experiments under CES	147
Appendix VII	Sample size under ICS (Central Samples)	152



ABBREVIATIONS USED IN ANNEXURES & APPENDICES

Agh.	Aghani
Agril.	Agricultural
Aut.	Autumn
Bha.	Bhadai
CAD	Command Area Development
CD	Cane Development
CES	Crop Estimation Surveys
Comb.	Combined
Comp.	Composite
Dev.	Development
E.	Early
Expts.	Experiments
F.C.	Food - Crops
Gar.	Garma
H	Hills
Ha.	Hectares
Hyv.	High Yielding Variety
Ir.	Irrigated
Kgs.	Kilograms
Kh	Kharif
Lv.	Local Variety
M x M	Meter x Meter
N.	Natu
NA	Not Available
NC	Not Collected/ Compiled
K/K/S	Kar/ Kuruvai / Sornavari
S/T/P	Samba/ Thalady/ Pishanam
N/K	Navarai / Kodai
NFC	Non Food Crops
NR.	Not Received
Plt.	Plant
Pln.	Plain
Reg.	Regular
Rt.	Ratoon
SASA	State Agricultural Statistics Authority
Stat.	Statistical
Sum.	Summer
Tra.	Traditional
V	Virginia
UI	Un- irrigated
Wint.	Winter
NAIS	National Agricultural Insurance Scheme
VIS	Village Insurance Scheme

ANNEX-I (a) : SAMPLE SIZE-TOTAL NUMBER OF EXPERIMENTS PLANNED UNDER CES DURING 2015-16

Sl. No.	S T A T E	Number of experiments planned under CES during								
		K H A R I F			R A B I			T O T A L		
		Food Crops	Non-Food Crops	Total	Food Crops	Non-Food Crops	Total	Food Crops	Non-Food Crops	Total
1	2	3	4	5	6	7	8	9	10	11
1.	Andhra Pradesh	9170	4520	13690	7248	2190	9438	16418	6710	23128
2.	Assam	5700	600	6300	3700	1250	4950	9400	1850	11250
3.	Bihar	13900	400	14300	18890	900	19790	32790	1300	34090
4.	Chhattisgarh	2864	510	3374	1826	776	2602	4690	1286	5976
5.	Goa	310	80	390	190	100	290	500	180	680
6.	Gujarat	9592	9914	19506	12004	3240	15244	21596	13154	34750
7.	Haryana	4096	940	5036	3278	1270	4548	7374	2210	9584
8.	Himachal Pradesh	2594	0	2594	2442	0	2442	5036	0	5036
9.	Jammu & Kashmir \$	2992	0	2992	2096	310	2406	5088	310	5398
10.	Jharkhand	12810	0	12810	13500	720	14220	26310	720	27030
11.	Karnataka **	50847	16096	66943	33381	7478	40859	84228	23574	107802
12.	Kerala	24604	2512	27116	1522	0	1522	26126	2512	28638
13.	Madhya Pradesh #	9268	6166	15434	13240	2036	15276	22508	8202	30710
14.	Maharashtra	35936	18516	54452	23432	3904	27336	59368	22420	81788
15.	Meghalaya	1664	50	1714	338	0	338	2002	50	2052
16.	Odisha	31882	2329	34211	7261	3444	10705	39143	5773	44916
17.	Punjab	3050	702	3752	2648	582	3230	5698	1284	6982
18.	Rajasthan	45912	11458	57370	35024	16782	51806	80936	28240	109176
19.	Tamil Nadu	6516	2760	9276	0	0	0	6516	2760	9276
20.	Telangana	6152	2488	8640	4062	754	4816	10214	3242	13456
21.	Uttarakhand	4700	0	4700	3642	0	3642	8342	0	8342
22.	Uttar Pradesh	285930	19680	305610	269246	26686	295932	555176	46366	601542
23.	West Bengal	17980	3227	21207	19852	8968	28820	37832	12195	50027
24.	Dadra & Nagar Haveli	156	0	156	0	0	0	156	0	156
25.	Daman & Diu	28	0	28	0	0	0	28	0	28
26.	Puducherry	90	0	90	210	0	210	300	0	300
GRAND TOTAL		588743	102948	691691	479032	81390	560422	1067775	184338	1252113

Note :

1. ** : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.

2. \$: Data repeated for year 2011-12 Linseed, Potato, R&M and Saffron, all other crop repeated for the year 2014-15.

3. # : Figure repeated for the year 2013-14 in respect for crops Banana, Onion and Papaya for Madhya Pradesh.

ANNEX -I (b): SAMPLE SIZE - KHARIF FOOD CROPS UNDER CES DURING 2015-16

Sl. No.	S T A T E	Number of Experiments Planned under the crops											
		Paddy	Jowar	Bajra	Maize	Ragi	Red-gram	Green-gram	Black-gram	Sugarcane	Others	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1.	Andhra Pradesh	REG. Ir.	4044	0	0	0	0	0	0	0	0		
		REG.	0	0	0	0	0	0	0	0	0		
		REG. UI	228	0	0	0	0	0	0	0	0		
		Total	4272	178	462	208	190	818	330	388	1602	722	9170
2.	Assam	Aut.	2000	0	0	0	0	0	0	700	0		
		Wint.	3000	0	0	0	0	0	0	0	0		
		Total	5000	0	0	0	0	0	0	700	0	5700	
3.	Bihar	Bha.Hyv.	0	0	0	560	0	0	0	0	0		
		Bha.Lv.	0	0	0	280	0	0	0	0	0		
		Bha.Ir.	280	0	0	0	0	0	0	0	0		
		Bha.UI.	560	0	0	0	0	0	0	0	0		
		Bha.	0	0	0	0	200	0	200	0	0		
		Agh.Hyv.Ir.	4260	0	0	0	0	0	0	0	0		
		Agh.Hyv.UI.	1700	0	0	0	0	0	0	0	0		
		Agh.Lv.Ir.	2800	0	0	0	0	0	0	0	0		
		Agh.Lv.UI.	1720	0	0	0	0	0	0	0	0		
		Total	11320	0	0	840	200	0	200	0	740	600	13900
4.	Chhattisgarh	Ir. Hyv.	366	0	0	0	0	0	0	0	0		
		Ir.Lv.	154	0	0	0	0	0	0	0	0		
		UL.	1024	0	0	0	0	0	0	0	0		
		Total	1544	80	0	490	0	474	0	0	0	276	2864
5.	Goa		190	0	0	0	0	0	0	120	0	310	
6.	Gujarat	Ir.	1174	0	0	0	0	0	0	0	0		
		UI.	814	0	0	0	0	0	0	0	0		
		Total	1988	596	2038	1060	150	1360	1032	972	0	396	9592
7.	Haryana	REG.	990	0	1532	144	0	360	0	0	1070	0	
		Total	990	0	1532	144	0	360	0	0	1070	0	4096
8.	Himachal Pradesh		990	0	0	1604	0	0	0	0	0	0	2594
9.	Jammu & Kashmir \$		1230	0	0	1454	0	0	0	0	0	308	2992
10.	Jharkhand	Bha.	720	0	0	720	0	0	0	0	0	0	
		Agh.Hyv.	7770	0	0	0	0	0	0	0	0		
		Agh.Lv.	0	0	0	0	0	0	0	0	0		
		Total	8490	0	0	720	570	720	0	0	240	2070	12810
11.	Karnataka **	Hyv.Ir.	5780	1030	740	3707	1310	0	0	0	0	0	
		Hyv.UI.	3468	2010	2018	6120	5436	0	0	0	0	0	
		Tra.Ir.	456	0	0	40	0	0	0	0	0	0	
		Tra.UI.	1196	424	196	0	118	0	0	0	0	0	
		Total	10900	3464	2954	9867	6864	5424	2998	1060	950	6366	50847

ANNEX - 1(b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13
12.	Kerala	Aut.	2356	0	0	0	0	0	0	0	0	0
		Wint.	3167	0	0	0	0	0	0	0	0	0
		Total	5523	0	0	0	0	0	0	47	19034	24604
13.	Madhya Pradesh	Ir. Hyv.	790	0	0	0	0	0	0	0	0	0
		Ir.Lv.	560	0	0	0	0	0	0	0	0	0
		UL.	1410	0	0	0	0	0	0	0	0	0
		Total	2760	1746	320	1928	0	1650	0	0	864	9268
14.	Maharashtra	Ir.	0	0	0	0	0	0	0	0	0	0
		UL.	0	0	0	0	0	0	0	0	0	0
		Comp.	0	0	0	0	0	0	0	0	0	0
		Total	4214	4248	762	678	866	5758	5902	4766	8742	0
15.	Meghalaya	Aut.	296	0	0	0	0	0	0	0	0	0
		Wint.	750	0	0	0	0	0	0	0	0	0
		Total	1046	0	0	0	0	0	0	0	618	1664
16.	Odisha	Aut.	6706	0	0	2786	1073	0	601	920	0	0
		Wint.	10702	0	0	109	538	0	1110	2004	394	0
		Total	17408	0	0	2895	1611	0	1711	2924	394	4939
17.	Punjab		1980	0	0	364	0	0	0	0	706	0
18.	Rajasthan		1268	5868	10450	6174	0	0	5542	2304	450	13856
19.	Tamil Nadu	K/K/S	428	0	0	0	0	0	0	0	0	0
		S/T/P	1260	0	0	0	0	0	0	0	0	0
		N/K	300	0	0	0	0	0	0	0	0	0
		REG.Ir.	0	440	240	256	160	0	132	112	0	0
		REG.UL	0	640	204	176	200	0	308	312	0	0
		REG.	0	0	0	0	0	336	0	0	468	544
		Total	1988	1080	444	432	360	336	440	424	468	544
20.	Telangana	Ir.	2356									
		UL.	152									
		Total	2508	628	98	814	70	492	484	114	556	388
21.	Uttarakhand		2972	0	0	0	1104	0	0	0	0	624
22.	Uttar Pradesh		172100	7216	35200	30244	0	14336	2368	14858	9488	120
23.	West Bengal	Aus.	2685	0	0	0	0	0	0	0	0	0
		Aman.	13318	0	0	0	0	0	0	0	0	0
		Total	16003	0	0	643	0	0	0	1334	0	0
24.	Dadra & N.Haveli		78	0	0	0	78	0	0	0	0	0
25.	Daman & Diu		20	0	8	0	0	0	0	0	0	28
26.	Puducherry		90	0	0	0	0	0	0	0	0	90
	Grand Total		276872	25104	54268	60559	12063	31728	21007	29144	26273	51725
% of area under CES to total area under the crop in the CES States (Ref.-Annex-v, Col.-4)			89	89	84@	90	86@	89@	97	88	95@	-

Note :-

1. Crops included under "Others" are:-

Andhra Pradesh:-	Korra (202), Horsegram (120) and Chillies (400) under Regular Scheme.
Bihar :-	Potato Agh. (250), Brinjal Agh. (250) and Tomato Agh. (100).
Chhattisgarh :-	Kodon-Kutki (276).
Gujarat:-	Moth (256) and Gowar (140)
Jammu & Kashmir:-	Saffron (102) and Potato (206).
Jharkhand	Potato Agh. (720), Tomato Agh. (690) and Brinjal (660).
Karnataka :-	Horsegram (2480), Navane (724), Save (322), Potato (190), Onion (730), Chillies (600), Avare (Sem) (530) and Cowpea (Lobia) (790).
Kerala :-	Arecanut (1620), Tapioca (1598), Cashewnut (1535), Pepper (1610), Cocoa (801), Banana (2413), Jackfruit (1619), Plantain (1622), Turmeric (1548), Pineapple (1580), Ginger (1468), and Mango (1620).
Madhya Pradesh:-	Kodon-Kutki (864).
Maharashtra :-	Arecanut (N.A.) and Cashewnut (N.A.).
Meghalaya:-	Ginger (618).
Odisha:-	Horsegram-Wint. (2915) and Potato-Wint. (2024).
Rajasthan :-	Chowla (526), Moth (3294) and Gwar (10036)
Tamil Nadu:-	Horsegram (320), Varagu (124), Samai (100).
Telangana :-	Horsegram (40), Korra (20), Chillies (328)
Uttarakhand:-	Sawan (624).
Uttar Pradesh:-	Sawan (70) and Kodan (50).

1. @ : Percentage includes both Kharif and Rabi seasons.

2. ** : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.

3. \$: Data repeated for year 2011-12 for Potato, Saffron and all other crop repeated for the year 2014-15.

ANNEX- I (c) : SAMPLE SIZE - RABI FOOD CROPS UNDER CES 2015-16

Sl. No.	S T A T E	Number of experiments planned under crops										
		Paddy	Jowar	Wheat	Maize	Barley	Gram	green gram	Black- gram	Others	Total	
1	2	3	4	5	6	7	8	9	10	11	12	
1.	Andhra Pradesh	Reg.Ir	2994	0	0	0	0	0	0	0	0	
		Reg.	0	482	0	554	0	1310	430	634	844	7248
		Total	2994	482	0	554	0	1310	430	634	844	7248
2.	Assam	Sum	1500	0	850	0	0	0	0	500	850	3700
3.	Bihar	Rabi	0	0	0	500	300	800	500	0	0	
		Hyv.Ir	0	0	6500	0	0	0	0	0	0	
		Hyv.UI	0	0	300	0	0	0	0	0	0	
		Lv.Ir	0	0	3420	0	0	0	0	0	0	
		Lv.UI	0	0	400	0	0	0	0	0	0	
		Gar.Hyv.	340	0	0	260	0	0	0	0	0	
		Gar.Lv.	100	0	0	80	0	0	0	0	0	
		Gar.	0	0	0	0	0	0	0	0	0	
		Total	440	0	10620	840	300	800	500	0	5390	18890
4.	Chhattisgarh	Hyv.Ir	0	0	506	0	0	0	0	0		
		Lv.Ir	0	0	100	0	0	0	0	0		
		Lv.UI	0	0	244	0	0	0	0	0		
		Total	0	0	850	0	36	488	0	0	452	1826
5.	Goa		190	0	0	0	0	0	0	0	0	190
6.	Gujarat	Ir	0	0	4380	0	0	0	0	0	0	
		UI	0	0	360	0	0	0	0	0	0	
		Total	246	298	4740	0	0	1324	0	0	5396	12004
7.	Haryana		0	0	2200	0	516	562	0	0	0	3278
8.	Himachal Pradesh		0	0	1784	0	658	0	0	0	0	2442
9.	Jammu & Kashmir \$		0	0	1938	0	0	0	0	0	158	2096
10.	Jharkhand	Hyv.	0	0	7770	0	0	0	0	0	0	
		Lv.	0	0		0	0	0	0	0	0	
		Total	0	0	7770	0	0	720	0	0	5010	13500
11.	Karnataka **	Rabi Hyv.Ir	1366	1278	1654	2174	0	0	0	0	0	
		Rabi Hyv.UI	0	4948	1050	660	0	0	0	0	0	
		Rabi Tra.Ir	32	243	316	0	0	1508	0	0	0	
		Rabi Tra.UI	0	1874	318	0	0	5730	0	0	0	
		Rabi.Hyv.	0	0	0	0	0	0	0	0	410	
		Rabi.HYV-UI	0	0	0	0	0	0	0	0	650	
		Sum.Hyv. Ir	3326	50	0	540	0	0	0	0	260	
		Sum. Tra. Ir.	0	0	0	0	0	0	0	0	0	
		Rabi Ir	0	0	0	0	0	0	0	0	0	
		Rabi UI	0	0	0	0	0	0	0	0	0	
		Total	4724	8393	3338	3374	0	7238	100	130	6084	33381

ANNEX 1(c) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	
12.	Kerala	Rabi	0	0	0	0	0	0	0	0	0	
		Sum.	1522	0	0	0	0	0	0	0	0	
		Total	1522	0	0	0	0	0	0	0	1522	
13.	Madhya Pradesh #	Hyv.Ir	0	0	3150	0	0	0	0	0	0	
		Lv.Ir	0	0	1380	0	0	2722	0	0	0	
		Lv.UI	0	0	1300	0	0	2608	0	0	0	
		Total	0	0	5830	0	536	5330	0	0	1544	
14.	Maharashtra	Ir	0	0	0	0	0	0	0	0	0	
		UI	0	0	0	0	0	0	0	0	0	
		Sum.	516	0	0	0	0	0	0	0	0	
		Total	516	8768	8126	498	0	5524	0	0	23432	
15.	Meghalaya		0	0	0	0	0	0	0	0	338	
16.	Odisha	Win.	0	0	0	0	0	0	0	0	0	
		Sum.	3781	0	107	292	0	0	2505	483	0	
		Total	3781	0	107	292	0	0	2505	483	93	
17.	Punjab		0	0	2334	0	240	74	0	0	0	
18.	Rajasthan	Ir	0	0	0	0	0	0	0	0	0	
		UI	0	0	0	0	0	0	0	0	0	
		Comp.	0	0	0	0	0	0	0	0	0	
		Total	0	0	17914	0	3100	8254	0	0	5756	
19.	Tamil Nadu		0	0	0		0	0	0	0	0	
20.	Telangana	Reg.Ir	2430									
		Reg.										
		Total	2430	564	0	390	0	406	52	110	110	
21.	Uttarakhand		0	0	2968	0	674	0	0	0	3642	
22.	Uttar Pradesh	Zaid	0	0	0	0	0	0	0	0	670	
		Total	0	0	207280	70	846	15050	610	700	44020	
23.	West Bengal	Sum.	11356	0	0	0	0	0	0	0	0	
		Total	11356	0	2818	0	0	915	616	0	4147	
24.	Dadra & Nagar Haveli		0	0	0	0	0	0	0	0	0	
25.	Daman & Diu		0	0	0	0	0	0	0	0	0	
26.	Puducherry	I.	140	0	0	0	0	0	0	0	0	
		II.	70	0	0	0	0	0	0	0	0	
		Total	210	0	0	0	0	0	0	0	210	
Grand Total			29909	18505	281467	6018	6906	47995	4761	2447	80192	
% of area under CES to total area under the crop in the CES States. (Ref. Annex-v, col.-4)			99	19	93	70	86	96	82	61	-	

Note :-

1. Crops included under "Others" are :-

Andhra Pradesh :-	Ragi (170), Horsegram (270) and Chillies (404) under regular Scheme.
Assam :-	Potato (850)
Bihar:-	Lakh (340), Masur (900), Chillies(250), Banana (500), Mango(600), Guava (250), Potato(300) , Onion (300), Brinjal (250), Tomato (200), Cauliflower (300), Jackfruit (300), Lichi (300) and Redgram (600).
Chhattisgarh :-	Lakh (262), Potato (110), Chillies (32) and Onion (48) .
Gujarat:-	Bajra-Sum.(1720), Cumin (1680), Fennel (428), Onion (534), Banana (304), Garlic (334) and Potato (396)
Jammu & Kashmir :-	Potato (158).
Jharkhand:-	Redgram (720), Brinjal (690), Potato (720), Tomato (720) , Onion (720), Masur (720) and Peas (720).
Karnataka:-	Ragi-Rabi-Hyy -Irr (430), HYV-UI (820) Sum.Hyy.(250), Horsegram (4014), Potato (160), Onion- Rabi(220), Summer (70) and Chillies-Rabi (40), Summer (80).
Madhya Pradesh:-	Lakh (220), Chillies(80), Banana (138), Potato (432), Onion(642) and Papaya (32).
Meghalaya :-	Potato-Sum.(338).
Odisha:-	Ragi-Sum.(72) and Horsegram Sum. (21).
Rajasthan :-	Cumin (4124), Methi (888), Masur (220) and Coriander (524).
Telangana :-	Horsegram(20), Chillies(90)
Uttar Pradesh:-	Masur (17072), Peas (7162), Sawan-Zaid (20), Potato (19716), Onion- Rabi (50) and Onion- Zaid (670).
West Bengal:-	Lakh (506), Masur (2790), Peas(281), Redgram (196) and Sugarcane(374).

1. \$: Data repeated for year 2013-14 Potato and all other crop repeated for the year 2014-15.

2. ** : Figures repeated for the year 2014-15 for all crops for Karnataka.

3. # : Figure repeated for the year 2013-14 in respect for crops Banana, Onion and Papaya for Madhya Pradesh.

ANNEX- I (d): SAMPLE SIZE- KHARIF NON-FOOD CROPS UNDER CES 2015-16

Sl. No.	S T A T E	Number of experiments planned under crops										
		Ground-nut	Sesamum	Castor	Coco-nut	Niger	Cotton	Jute	Mesta	Sun-flower	Soya-bean	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Andhra Pradesh	2626	280	232	0	0	840	0	200	178	164	4520
2.	Assam	0	0	0	0	0	0	600	0	0	0	600
3.	Bihar	0	0	0	0	0	0	200	200	0	0	400
4.	Chhattisgarh	216	124	0	0	0	0	0	0	0	170	510
5.	Goa	80	0	0	0	0	0	0	0	0	0	80
6.	Gujarat	Ir	0	0	0	0	0	3044	0	0	0	0
		UI	0	0	0	0	0	804	0	0	0	0
		Total	2112	1274	2680	0	0	3848	0	0	0	9914
7.	Haryana	0	0	0	0	0	940	0	0	0	0	940
8.	Himachal Pradesh	0	0	0	0	0	0	0	0	0	0	0
9.	Jammu & Kashmir	0	0	0	0	0	0	0	0	0	0	0
10.	Jharkhand	0	0	0	0	0	0	0	0	0	0	0
11.	Karnataka **	Ir	1132	0	0	0	0	590	0	0	1628	0
		UI	4856	1910	0	0	0	940	0	0	2834	0
		Total	5988	1910	644	0	0	1530	0	0	4462	1562
12.	Kerala	0	82	0	2430	0	0	0	0	0	0	2512
13.	Madhya Pradesh	954	1476	0	0	0	962	0	0	0	2774	6166
14.	Maharashtra	Ir	0	0	0	0	0	0	0	0	0	0
		UI	0	0	0	0	0	0	0	0	0	0
		Comp.	0	0	0	0	0	0	0	0	0	0
		Total	2938	1040	0	0	446	8516	0	0	600	4976
15.	Meghalaya	0	0	0	0	0	0	50	0	0	0	50
16.	Odisha	Aut.	975	232	0	0	0	0	156	0	0	0
		Wint.	148	801	0	0	0	0	0	0	0	0
		Total.	1123	1033	0	0	0	0	173	0	0	2329
17.	Punjab	0	0	0	0	0	702	0	0	0	0	702
18.	Rajasthan	2862	4044	0	0	0	1936	0	0	0	2616	11458
19.	Tamil Nadu	Reg.Ir	700	224	0	0	0	564	0	0	204	0
		Reg.UI	460	256	0	0	0	256	0	0	96	0
		Reg.	0	0	0	0	0	0	0	0	0	0
		Total	1160	480	0	0	0	820	0	0	300	0
20.	Telangana	508	80	432	0	0	1300	0	0	36	132	2488
21.	Uttarakhand	0	0	0	0	0	0	0	0	0	0	0
22.	Uttar Pradesh	7244	11300	0	0	0	80	0	0	0	1056	19680

Annex 1(d) (Contd...)

1	2		3	4	5	6	7	8	9	10	11	12	13
23.	West Bengal		0	0	0	0	0	0	2929	298	0	0	3227
24.	Dadra & N.Haveli		0	0	0	0	0	0	0	0	0	0	0
25.	Daman & Diu		0	0	0	0	0	0	0	0	0	0	0
26.	Puducherry		0	0	0	0	0	0	0	0	0	0	0
Grand Total			27811	23123	3988	2430	446	21474	3952	698	5576	13450	102948
% of area under CES to total area under the crop in the CES States.			98	89	93	100	68	34	99	91	98	95	-
(Ref. Annex-v, Col.-4)													

Note:-

1. ** Figures repeated for the year 2014-15 for all crops for Karnataka.

ANNEX 1(e) - SAMPLE SIZE - RABI NON -FOOD CROPS UNDER CES 2015-16

Sl. No.	S T A T E	Number Of Experiments Planned under the Crops									
		Ground- Nut.	Sesa- mum	Rape & Mustard	Lin- seed	Saffl- ower	Sun- flower	Tara- Meera	Tobacco	Isabgol	Total
1	2	3	4	5	6	7	8	9	10	11	12
1. Andhra Pradesh (Reg.)	818	310	0	0	0	380	0	(N) 296	0		
								(V) 386	0		2190
	Total	818	310	0	0	0	380	0	682	0	2190
2. Assam		0	0	1250	0	0	0	0	0	0	1250
3. Bihar		0	0	900	0	0	0	0	0	0	900
4. Chhattisgarh		0	0	440	336	0	0	0	0	0	776
5. Goa		100	0	0	0	0	0	0	0	0	100
6. Gujarat		1720	0	1080	0	0	0	0	220	220	3240
7. Haryana		0	0	1040	0	0	230	0	0	0	1270
8. Himachal Pradesh		0	0	0	0	0	0	0	0	0	0
9. Jammu & Kashmir \$		0	0	286	24	0	0	0	0	0	310
10. Jharkhand		0	0	720	0	0	0	0	0	0	720
11. Karnataka **	Rabi-Ir	0	0	0	0	0	1764	0	0	0	
	Rabi UI	0	0	0	0	0	2436	0	0	0	
	Sum.Ir	0	0	0	0	0	1300	0	0	0	
	Sum.UI	0	0		0	0	0	0	0	0	
	Rabi/Sum.	3658	0	0	430	1730	0	0	0	0	
	Total	3658	0	0	430	1730	1300	0	360	0	7478
12. Kerala		0	0	0	0	0	0	0	0	0	0
13. Madhya Pradesh		0	0	1116	920	0	0	0	0	0	2036
14. Maharashtra	Rabi	0	20	0	358	2812	642	0	56	0	
	Sum.	1382	0	0	0	0	452	0	0	0	
	Total	1382	16	0	222	1854	400	0	30	0	3904
15. Meghalaya		0	0	0	0	0	0	0	0	0	0
16. Odisha	Wint.	0	0	1733	0	0	0	0	0	0	
	Sum.	1094	617	0	0	0	0	0	0	0	
	Total	1094	617	1733	0	0	0	0	0	0	3444
17. Punjab		0	0	582	0	0	0	0	0	0	582
18. Rajasthan	Ir	0	0	0	0	0	0	0	0	0	0
	UI	0	0	0	0	0	0	0	0	0	0
	Comp.	0	0	0	0	0	0	0	0	0	0
	Total	0	0	13410	0	0	0	1072	0	2300	16782
19. Tamil Nadu		0	0	0	0	0	0	0	0	0	0
20. Telangana		464	80	0	0	0	158	0	52	0	754
21. Uttarakhand		0	0	0	0	0	0	0	0	0	0
22. Uttar Pradesh	Rabi	0	0	0	0	0	0	0	100	0	
	Zaid	0	0	0	0	0	170	0	20	0	
	Total	0	0	26276	120	0	170	0	120	0	26686

ANNEX 1(e) (Contd....)

1	2		3	4	5	6	7	8	9	10	11	12
23. West Bengal			556	3307	4960	145	0	0	0	0	0	8968
24. Dadra & N.Haveli			0	0	0	0	0	0	0	0	0	0
25. Daman & Diu			0	0	0	0	0	0	0	0	0	0
26. Puducherry			0	0	0	0	0	0	0	0	0	0
Grand Total			9792	4330	53793	2197	3584	2638	1072	1464	2520	81390
% of area under CES to total area under the crop in the CES States. (Ref. Annex-v, Col.4)			83	85	92	66	91	88	97	60	98	-

Note :-

1. \$: Data repeated for year 2011-12 Linseed and R&M, all other crop repeated for the year 2014-15.
2. ** : Figures repeated for the year 2014-15 for all crops for Karnataka.

ANNEX - II : TRAINING OF PRIMARY WORKERS UNDER CES 2015-16

Sl. No.	S T A T E	A G E N C Y	Number of Centres			Attendance of Primary Staff.						
			Total	Covered by		Total Strength	Total Called	Total Attended		Trained by NSSO officer		
				NSSO				As training officers	In Numbers			
				As	obser- vers			In Percent- age (%)				
1	2	3	4	5	6	7	8	9	10	11		
1.	Andhra Pradesh	Statistical	346	-	-	474	474	470	99	-		
		Agriculture	346	-	-	887	887	874	99	-		
2.	Assam	Statistical				N.A.						
3.	Bihar	Revenue	1	-	-	534	534	472	88	-		
		Statistical	4	-	-	543	543	486	90	-		
		Agriculture	1	-	-	534	534	472	88	-		
4	Chhattisgarh	Statistical/Agriculture	27	27	27	2583	2583	2441	95	-		
		Agriculture										
5.	Goa	Agriculture (Kharif)	1	-	-	21	21	21	100	-		
		Agriculture (Rabi)	1	-	-	21	21	21	100	-		
6.	Gujarat	Agriculture	47	-	-	1466	1408	1408	100	-		
7.	Haryana	Agriculture (Kharif)	35	21	35	719	719	691	96	21		
		Revenue (Kharif)	-	-	-	6	6	6	-	-		
		Agriculture (Rabi)	35	21	35	758	758	710	94	21		
		Revenue (Rabi)	-	-	-	52	49	46	94	-		
8.	Himachal Pradesh	Revenue (Kharif)	9	5	4	196	196	172	88	96		
		Agriculture (Kharif)	10	4	7	148	148	116	78	32		
		Revenue (Rabi)	9	5	4	196	196	172	88	96		
		Agriculture (Rabi)	10	4	7	148	148	116	78	32		
9.	Jammu & Kashmir	Revenue (Kharif)				N.A.						
		Revenue (Rabi)				N.A.						
10.	Jharkhand	Agriculture				N.A.		24	24	8		
11.	Karnataka #	Revenue	176	-	16	7580	5520	5457	99	-		
		Agriculture	194	-	14	4520	2340	2182	93	-		
		Rural Development & Panchayati Raj	194	-	6	5526	3554	3452	97	-		
12.	Kerala	Statistical	-	-	-	1036	1036	991	96	-		
13.	Madhya Pradesh	Revenue	34	-	34	4407	4407	3863	88	-		
14.	Maharashtra	Revenue (Kharif)				3370	3370	2227	66	-		
		Zila Parishad (Kharif)				780	780	431	55	-		
		Agriculture (Kharif)				1943	1943	1125	58	-		
		Revenue (Rabi)				2960	2960	1852	63	-		
		Zila Parishad (Rabi)				688	688	361	52	-		
		Agriculture (Rabi)				1860	1860	949	51	-		
15.	Meghalaya	Statistical	-	-	-	46	46	46	100	-		
16.	Odisha	Statistical	30	-	-	446	446	446	100	-		
17.	Punjab	Agriculture (Kharif)	77	0	77	686	686	625	91	-		
		Agriculture (Rabi)	77	0	77	628	628	575	92	-		

ANNEX - II (Contd...)

1	2	3	4	5	6	7	8	9	10	11
18.	Rajasthan	Agriculture (Kharif)	102	13	89	2373	2373	2373	100	-
		Agiculture (Rabi)	89	0	89	3665	3665	3665	100	3356
19.	Tamil Nadu	Agriculture	83	91	-	939	939	907	97	907
20.	Telangana	Statistical	140	-	91	893	893	861	96	-
		Agriculture								
21.	Uttarakhand	Revenue (Kharif)	65	0	7	1804	1804	1035	57	0
		Revenue (Plain)	33	0	0	874	874	536	61	N.A.
		Revenue (Hills)	32	0	0	930	930	465	50	N.A.
22.	Uttar Pradesh	Revenue (Kharif)	68	5	78	1267	1267	1051	83	-
		Revenue (Rabi)	19	3	27	1063	1063	1037	98	-
		Revenue (Zaid)	67	-	68	1158	1158	982	85	-
		Cane Dev. Staff	-	-	-	-	-	-	-	-
		Cotton Dev. Staff								
23.	West Bengal	Statistical	18	-	-	217	217	217	100	-
24.	Dadra & Nagar Haveli	Development & Planning	-	-	-	8	8	7	88	-
		Division Soil Conservation	-	-	-	9	9	8	89	-
		Agriculture Deptt.	-	-	-	2	2	2	100	-
25.	Daman & Diu	Rural Development	1	-	-	2	2	2	100	-
		Revenue Department		-	-	9	9	9	100	-
		Statistical Department		-	-	3	3	3	100	-
26.	Puducherry	Statistical (Kharif)	2	-	2	22	11	11	100	-
		(Rabi-I)	N.A.							
		(Rabi-II)	N.A.							
Total			2383	199	794	61024	54740	46455	85	4561

Note: (i) : Figures in col. 10 indicate the percentage of col. 9 to col. 8.

(ii) #: Figure in col. 7 [Total Strength] repeated for the year 2013-14.

ANNEX III(a):SUPERVISION OF FIELD WORK-ALL CROPS (SEASON-WISE) UNDER CES 2015-16

Sl. No.	S T A T E	Season	Food / Non Food Crops	Number of experi- ments planned	Number & percentage of experiments Supervised by											
					State Statistical Department				Other State Department				NSSO			
					Total	%	At Harvest	%	Total	%	At Harvest	%	Total	%	At Harvest	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Andhra Pradesh	Kharif	Food	9170	320	3	316	3	Not Available				320	3	309	3
			Non-Food	4520	178	4	177	4					180	4	178	4
			Comb.	13690	498	4	493	4					500	4	487	4
		Rabi	Food	7248	130	2	129	2					128	2	124	2
			Non-Food	2190	50	2	50	2					50	2	45	2
			Comb.	9438	180	2	179	2					178	2	169	2
		Total		23128	678	3	672	3					678	3	656	3
		Kharif	Food	5700	748	13	722	13					228	4	222	4
			Non-Food	600	116	19	116	19					30	5	30	5
			Comb.	6300	864	14	838	13					258	4	252	4
2.	Assam	Rabi	Food	3700	592	16	578	16	Not Available				136	4	132	4
			Non-Food	1250	150	12	144	12					70	6	68	5
			Comb.	4950	742	15	722	15					206	4	200	4
		Total		11250	1606	14	1560	14					464	4	452	4
		Kharif	Food	13900	380	3	380	3	22	0.2	22	0.2	340	2	313	2
			Non-Food	400	Not Available				Not Available				Not Available			
			Comb.	14300	380	3	380	3	22	0.15	22	0.15	340	2	313	2
3.	Bihar	Rabi	Food	18890	433	2.3	433	2.3	29	0.15	29	0.15	338	2	316	2
			Non-Food	900	28	3	28	3	Not Available				40	4	40	4
			Comb.	19790	461	2.3	461	2.3	29	0.15	29	0.15	378	2	356	2
		Total		34090	841	2	841	2	51	0.15	51	0.15	718	2.1	669	2.0
		Kharif	Food	2864	164	6	157	5	502	18	284	10	200	7	198	7
			Non-Food	510	Not Available				30	6	22	4	Not Available			
			Comb.	3374	164	5	157	5	532	16	306	9	200	6	198	6
4.	Chhattisgarh	Rabi	Food	1826	80	4	72	4	350	19	128	7	80	4	80	4
			Non-Food	776	66	9	64	8	182	23	26	3	70	9	70	9
			Comb.	2602	146	6	136	5	532	20	154	6	150	150		
		Total		5976	310	5	293	5	1064	18	460	8	350	6	348	6
		Kharif	Food	310	94	30	22	7	Not Available				Not Available			
			Non-Food	80	12	15	4	5								
			Comb.	390	106	27	26	7								
			Food	190	50	26	10	5								
			Non-Food	100	16	16	6	6								
			Comb.	290	66	23	16	6								
		Total		680	172	25	42	6								

ANNEX III (a) (Contd..)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6.	Gujarat	Kharif	Food	9592	1867	19	1867	19	965	10	965	10	266	3	266	3
			Non-Food	9914	3279	33	3279	33	2022	20	2022	20	458	5	458	5
			Comb.	19506	5146	26	5146	26	2987	15	2987	15	724	4	724	4
		Rabi	Food	12004	2207	18	2207	18	1941	16	1941	16	180	1	180	1
			Non-Food	3240	578	18	578	18	535	17	535	17	48	1	46	1
			Comb.	15244	2785	18	2785	18	2476	16	2476	16	228	1	226	1
		Total		34750	7931	23	7931	23	5463	16	5463	16	952	3	950	3
		Kharif	Food	4096	116	3	108	3	512	13	498	12	262	6	261	6
			Non-Food	940	16	2	14	1	124	13	122	13	56	6	56	6
			Comb.	5036	132	3	122	2	636	13	620	12	318	6	317	6
		Rabi	Food	3278	56	2	54	2	416	13	402	12	265	8	251	8
			Non-Food	1270	32	3	24	2	202	16	174	14	100	8	90	7
			Comb.	4548	88	2	78	2	618	14	576	13	365	8	341	7
		Total		9584	220	2	200	2	1254	13	1196	12	683	7	658	7
8.	Himachal Pradesh	Kharif	Food	2594	196	8	196	8	122	5	122	5	140	5	126	5
			Non-Food						Not Available							
			Comb.	2594	196	8	196	8	122	5	122	5	140	5	126	5
		Rabi	Food	2442	218	9	218	9	78	3	78	3	128	5	128	5
			Non-Food						Not Available							
			Comb.	2442	218	9	218	9	78	3	78	3	128	5	128	5
		Total		5036	414	8	414	8	200	4	200	4	268	5	254	5
		Kashmir \$\$	Food	2992	156	5	140	5					148	5	138	5
			Non-Food						Not Available							
			Comb.	2992	156	5	140	5					148	5	138	5
			Food	2096	119	6	99	5					120	6	116	6
			Non-Food	310	47	15	27	9					120	5	116	5
		Total		2406	166	7	126	5					268	5	254	5
10.	Jharkhand	Kharif	Food	12810	92	1	92	1					120	1	120	1
			Non-Food	0									Not Available			
			Comb.	12810	92	1	92	1					120	1	120	1
		Rabi	Food	13500	86	1	86	1					80	1	78	1
			Non-Food	720									20	3	20	3
			Comb.	14220	86	1	86	1					100	1	98	1
		Total		27030	178	1	178	1					220	1	218	1
		Karnataka **	Food	50847	7316	14	7306	14	7626	15	7568	15	454	1	422	1
			Non-Food	16096	2428	15	2426	15	3116	19	3116	19	166	1	146	1
			Comb.	66943	9744	15	9732	15	10742	16	10684	16	620	1	568	1
			Food	33381	2742	8	2738	8	3389	10	3380	10	200	0.6	176	0.5
			Non-Food	7478	98	1	98	1	80	1	80	1	80	1	64	0.9
			Comb.	40859	2840	7	2836	7	3469	8	3460	8	280	1	240	0.6
			Total	107802	12584	12	12568	12	14211	13	14144	13	900	1	808	1

ANNEX III (a) (Contd..)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
12.	Kerala	Kharif	Food	24604	6764	27	2454	10	Not Available				370	2	368	1
			Non-Food	2512	1950	78	0	0					50	2	50	2
			Comb.	27116	8714	32	2454	9					420	2	418	2
		Rabi	Food	1522	833	55	634	42	Not Available				100	7	100	7
			Non-Food													
			Comb.	1522	833	55	634	42	Not Available				100	7	100	7
		Total		28638	9547	33	3088	11					520	2	518	2
13.	Madhya Pradesh #	Kharif	Food	9268	45	0.5	45	0.5	1854	20	1854	20	398	4	382	4
			Non-Food	6166	88	1.4	88	1.4	1883	31	1883	31	228	4	226	4
			Comb.	15434	133	0.9	133	0.9	3737	24	3737	24	626	4	608	4
		Rabi	Food	13240	169	1.3	169	1.3	5262	40	5262	40	383	3	376	3
			Non-Food	2036	25	1	25	1	804	39	804	39	134	7	126	6
			Comb.	15276	194	1.3	194	1.3	6066	40	6066	40	517	3	502	3
		Total		30710	327	1.1	327	1.1	9803	32	9803	32	1143	4	1110	4
14.	Maharashtra	Kharif	Food	35936									498	1	441	1
			Non-Food	18516									262	1	253	1
			Comb.	54452									760	1	694	1
		Rabi	Food	23432									359	2	347	1
			Non-Food	3904									22	1	20	1
			Comb.	27336									381	1	367	1
		Total		81788									1141	1	1061	1
15.	Meghalaya @	Kharif	Food	1664	133	8	121	7	Not Available				Not Available			
			Non-Food	50	5	10	2	4								
			Comb.	1714	138	8	123	7								
		Rabi	Food	338	31	9	20	6	Not Available				Not Available			
			Non-Food													
			Comb.	338	31	9	20	6								
		Total		2052	169	8	143	7	Not Available				Not Available			
16.	Odisha	Kharif	Food	31882	11261	35	11261	35	28441	89	28441	89	650	2	648	2
			Non-Food	2329	735	32	735	32	2001	86	2001	86	0	0	0	0
			Comb.	34211	11996	35	11996	35	30442	89	30442	89	650	2	648	2
		Rabi	Food	7261	3140	43	3140	43	6137	85	6137	85	176	2	176	2
			Non-Food	3444	1359	39	1359	39	2883	84	2883	84	Not Available			
			Comb.	10705	4499	42	4499	42	9020	84	9020	84	176	2	176	2
		Total		44916	16495	37	16495	37	39462	88	39462	88	826	2	824	2
17.	Punjab	Kharif	Food	3050	228	7	184	6	508	17	478	16	305	10	287	9
			Non-Food	702					80	11	62	9	72	10	72	10
			Comb.	3752	228	6	184	5	588	16	540	14	377	10	359	10
		Rabi	Food	2648	148	6	130	5	446	17	403	15	276	10	276	10
			Non-Food	582	12	2	12	2	50	9	44	8	38	7	38	7
			Comb.	3230	160	5	142	4	496	15	447	14	314	10	314	10
		Total		6982	388	6	326	5	1084	16	987	14	691	10	673	10

ANNEX III (a) (Contd..)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
18.	Rajasthan @@	Kharif	Food	45912	763	2	763	2	19438	42	19438	42	350	1	320	1	
			Non-Food	11458	229	2	229	2	4324	38	4324	38	144	1	139	1	
			Comb.	57370	992	2	992	2	23762	41	23762	41	494	1	459	1	
		Rabi	Food	35024	685	2	685	2	16225	46	16225	46	314	1	314	1	
		Non-Food	16782	302	2	302	2	9353	56	9353	56	89	1	89	1		
		Comb.	51806	987	2	987	2	25578	49	25578	49	403	1	403	1		
		Total		109176	1979	2	1979	2	49340	45	49340	45	897	1	862	1	
		Kharif	Food	6516	2857	44	2857	44	220	3	220	3	478	7	476	7	
		Non-Food	2760	943	34	943	34	59	2	59	2	242	9	233	8		
		Comb.	9276	3800	41	3800	41	279	3	279	3	720	8	709	8		
		Rabi	Food						Not Applicable								
		Non-Food															
		Comb.															
		Total		9276	3800	41	3800	41	279	3	279	3	720	8	709	8	
20.	Telangana	Kharif	Food	6152	240	4	240	4	Not Available					237	4	233	4
		Non-Food	2488	80	3	80	3					120	5	96	4		
		Comb.	8640	320	4	320	4					357	4	329	4		
		Rabi	Food	4062	124	3	124	3					119	3	117	3	
		Non-Food	754			Not Available							Not Available				
		Comb.	4816	124	3	124	3					119	2	117	2		
		Total		13456	444	3	444	3					476	4	446	3	
21.	Uttarakhand	Kharif	Food	4700	403	9	403	9	1122	24	1122	24	90	2	90	2	
		Non-Food				Not Available											
		Comb.	4700	403	9	403	9	1122	24	1122	24	90	2	90	2		
		Rabi	Food	3642	193	5	193	5	654	18	654	18	60	2	60	2	
		Non-Food				Not Available											
		Comb.	3642	193	5	193	5	654	18	654	18	60	2	60	2		
		Total		8342	596	7	596	7	1776	21	1776	21	150	2	150	2	
22.	Uttar Pradesh	Kharif	Food	285930										1340	0.5	1336	0.5
		Non-Food	19680										40	0.2	40	0.2	
		Comb.	305610										1380	0.45	1376	0.45	
		Rabi	Food	269246										818	0.30	805	0.30
		Non-Food	26686										100	0.37	98	0.37	
		Comb.	295932										918	0.31	903	0.31	
		Total		601542										2298	0.38	2279	0.38
23.	West Bengal	Kharif	Food	17980	1045	6	1045	6	97	0.5	97	0.5	258	1	258	1	
		Non-Food	3227	327	10	327	10	16	0.5	16	0.5	77	2	76	2		
		Comb.	21207	1372	6	1372	6	113	0.5	113	0.5	335	2	334	2		
		Rabi	Food	19852	1208	6	1208	6	16	0.1	16	0.1	249	1	249	1	
		Non-Food	8968	919	10	919	10	10	0.1	10	0.1	154	2	154	2		
		Comb.	28820	2127	7	2127	7	26	0.1	26	0.1	403	1	403	1		
		Total		50027	3499	7	3499	7	139	0.3	139	0.3	738	1	737	1	
24.	Dadra & Nagar Haveli @	Kharif	Food	156	35	22	19	12	Not Available								
		Non-Food				Not Available											
		Comb.	156	35	22	19	12										
		Rabi	Food				Not Available										
		Non-Food				Not Available											
		Comb.															
		Total		156	35	22	19	12									

ANNEX III (a) (Contd..)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
25.	Daman & Diu @	Kharif	Food	28	16	57	16	57	12	43	12	43	Not Available				
			Non-Food	Not Available													
			Comb.	28	16	57	16	57	12	43	12	43					
		Rabi	Food	Not Available													
			Non-Food														
			Comb.														
	Total			28	16	57	16	57	12	43	12	43	Not Available				
	26. Puducherry	Kharif	Food	90	80	89	80	89	10	11	10	11					
			Non-Food	Not Available									Not Available				
			Comb.	90	80	89	80	89	10	11	10	11					
		Rabi	Food	210	190	90	190	90	20	10	20	10					
			Non-Food	Not Available									Not Available				
			Comb.	210	190	90	190	90	20	10	20	10					
		Total		300	270	90	270	90	30	10	30	10					
TOTAL %		Kharif	Food	588743	35319	14	30794	12	61441	27	61121	27	7462	1	7224	1	
			Non-Food	102948	10386	17	8420	14	13655	25	13627	25	2125	2	2053	2	
			Comb.	691691	45705	15	39214	13	75096	26	74748	26	9587	1	9277	1	
		Rabi	Food	479032	13434	8	13117	8	34943	23	34655	22	4529	1	4421	1	
			Non-Food	81390	3682	7	3636	7	14099	31	13909	31	1015	1	968	1	
			Comb.	560422	17116	8	16753	8	49042	25	48564	24	5544	1	5389	1	
		Grand Total		1252113	62821	12	55967	11	124138	26	123312	25	15131	1	14666	1	

Note :- (i) % : Percentage figures given under Col.7, 9, 11, 13, 15 and 17 are based on total figures in col. 5. The data in column 5

have been excluded for percentage calculation at all India level where data under any of columns 6, 8, 10, 12, 14 and 16 has not been received from concerned States.

(ii)** : Figures repeated for the year 2011-12 in respect of crop Cowpea and for the year 2014-15 for all other crops for Karnataka.

(iii) # : Figure repeated for the year 2013-14 in respect for crops Banana, Onion and Papaya for Madhya Pradesh.

(iv) \$\$: Data repeated for year 2011-12 for crops Linseed, Potato, R&M and Saffron, all other crop repeated for the year 2014-15.

(v) @ : ICS Scheme is not operational in Goa.

(vi) @@ : Data repeated for the year 2014-15 for State Statistical Department & Other State Department.

ANNEX III(b) SUPERVISION OF FIELD WORK - CROP-WISE UNDER CES 2015-16

Sl. No	S T A T E	Season	Number of Expts Planned	No.of Experiments Supervised by												
				State Statistical Department				Other State Department				N.S.S.O.				
				Total	%	At Harvest	%	Total	%	At Harvest	%	Total	%	At Harvest	%	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1. Paddy																
1. Andhra Pradesh	Kharif	4272	180	4	178	4							180	4	176	4
	Rabi	2994	90	3	89	3							88	3	84	3
2. Assam	Aut.	2000	232	12	228	11							68	3	62	3
	Wint.	3000	420	14	408	14							120	4	120	4
	Sum.	1500	256	17	248	17							34	2	34	2
3. Bihar	Bha.	840	26	3	26	3	Not Available					34	4	34	4	
	Agh.	10480	312	3	312	3	22	0.21	22	0.21		236	2.25	216	2.06	
	Gar.	440	12	3	12	3	Not Available					32	7	32	7	
4. Chhattisgarh		1544	80	5	73	5	400	26	254	16		80	5	78	5	
5. Goa @	Kharif	190	60	32	12	6	Not Available									
	Rabi	190	50	26	10	5										
6. Gujarat	Kharif	1988	763	38	763	38	290	14.59	290	14.6		74	3.7	74	3.7	
	Sum.	246	138	56	138	56	24	10	24	10		Not Available				
7. Haryana		990	32	3	30	3	208	21	202	20		90	9	90	9	
8. Himachal Pradesh		990	74	7	74	7	36	4	36	4		54	5	52	5	
9. Jammu & Kashmir		1230	58	5	52	4	Not Available					64	5	60	5	
10. Jharkhand	Bha.	720	20	3	20	3	Not Available					20	3	20	3	
	Agh.	7770	52	1	52	1						80	1	80	1	
11. Karnataka ***	Kharif	10900	1654	15	1654	15	1568	14	1554	14		144	1	144	1	
	Rabi	1398	132	9	132	9	107	8	104	7		40	3	40	3	
	Sum	3326	346	10	346	10	402	12	402	12		0	0	0	0	
12. Kerala	Aut.	2356	1149	49	859	36	Not Available					100	4	99	4	
	Wint.	3167	1499	47	1163	37						100	3	99	3	
	Sum.	1522	833	55	634	42						100	7	100	7	
13. Madhya Pradesh		2760	14	0.5	14	0.5	722	26	722	26		98	4	95	3	
14. Maharashtra	Kharif	4214	Not Available									75	2	75	2	
	Sum	516														
15. Meghalaya @	Aut.	296	36	12	32	11	Not Available									
	Wint.	750	65	9	59	8										
16. Odisha	Aut.	6706	2531	38	2531	38	6297	94	6297	94		220	3	220	3	
	Wint.	10702	4326	40	4326	40	10092	94	10092	94		270	3	268	3	
	Sum.	3781	1705	45	1705	45	3256	86	3256	86		136	4	136	4	
17. Punjab		1980	184	9	146	7	414	21	384	19		190	10	185	9	
18. Rajasthan @@	Kharif	1268	1	0	1	0	384	30	384	30		Not Available				
19. Tamil Nadu	K/K/S	428	170	40	170	40	10	2	10	2		55	13	53	12	
	S/T/P	1260	533	42	533	42	37	3	37	3		120	10	120	10	
	N/K	300	116	39	116	39	14	5	14	5		39	13	39	13	

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
20	Telangana	Kharif	2508	100	4	100	4	Not Available						100	4
		Rabi	2430	80	3	80	3							79	3
21.	Uttarakhand		2972	207	7	207	7	777	26	777	26	50	2	50	2
22.	Uttar Pradesh		172100			Not Available						660	0	656	0
23.	West Bengal	Aus.	2685	305	11	305	11	16	0.6	16	0.6	98	4	98	4
		Aman	13318	630	5	630	5	81	0.6	81	0.6	160	1	160	1
		Sum.	11356	497	4	497	4	5	0.04	5	0.04	140	1	140	1
24.	Dadra and Nagar Haveli @		78	26	33	16	21	Not Available							
25.	Daman & Diu @	Kharif	20	12	60	12	60	8	40	8	40	Not Available			
26.	Puducherry	I	90	80	89	80	89	Not Available						10	11
		II	140	130	93	130	93							10	7
		III	70	60	86	60	86							10	14
Total			306781	20276	11	19263	11	25170	16	24971	16	4258	1	4192	1

2. JOWAR.

1.	Andhra Pradesh	Kharif	178	Not Available											
		Rabi	482												
2.	Chhattisgarh		80	Not Available				4	5			Not Available			
3.	Gujarat	Kharif	596	156	26	156	26	76	13	76	13	Not Available			
		Rabi	298	Not Available											
4.	Karnataka ***	Kharif	3464	466	13	466	13	540	16	536	15	50	1	42	1
		Rabi	8343	540	6	540	6	601	7	596	7	70	1	68	1
		Sum.	50	18	36	18	36	6	12	6	12	Not Available			
5.	Madhya Pradesh		1746	12	0.7	12	0.7	442	25	442	25	100	6	90	5
6.	Maharashtra	Kharif	4248	Not Available								63	1	60	1
		Rabi	8768									130	1	124	1
7.	Rajasthan @@	Kharif	5868	88	1	88	1	1434	24	1434	24	58	1	48	1
8.	Tamil Nadu		1080	475	44	475	44	30	2.778	30	2.78	53	5	53	5
9.	Telangana	Kharif	628	50	8	50	8	Not Available				50	8	50	8
		Rabi	564	44	8	44	8					40	7	40	7
10.	Uttar Pradesh		7216	Not Available								40	1	40	1
Total			43609	1849	11	1849	11	3133	21	3120	21	654	2	615	2

3. BAJRA.

1.	Andhra Pradesh.		462	40	9	40	9	Not Available				40	9	36	8
2.	Gujarat	Kharif	2038	576	28	576	28	212	10	212	10	106	5	106	5
		Sum.	1720	494	29	494	29	406	24	406	24	Not Available			
3.	Haryana		1532	44	3	40	3	186	12	182	12	102	7	102	7
4.	Karnataka ***	Kharif	2954	428	14	428	14	368	12	366	12	50	2	42	1
5.	Madhya Pradesh		320	1	0.3	1	0.3	70	22	70	22	Not Available			
6.	Maharashtra		762	Not Available								50	7	48	6
7.	Rajasthan @@		10450	144	1	144	1	5698	55	5698	55	59	1	57	1
8.	Tamil Nadu		444	184	41	184	41	16	4	16	4	34	8	34	8

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
9	Telangana		98																
10.	Uttar Pradesh		35200											150	0.43				
11.	Daman & Diu @			8	4	50	4	50	4	50	4	50			Not Available				
	Total		55988	1915	11	1911	11	6960	40	6954	40	591	1	575	1				
4. MAIZE.																			
1.	Andhra Pradesh	Kharif	208	Not Available				Not Available				Not Available							
		Rabi	554																
2.	Bihar	Bha.	840	18	2	18	2	Not Available				32	4	32	4				
		Rabi	500	Not Available								Not Available							
		Gar.	340																
3.	Chhattisgarh		490	40	8	40	8	60	12	24	5	40	8	40	8				
4.	Gujarat		1060	163	15	163	15	158	15	158	15	40	4	40	4				
5.	Haryana		144	-	-			8	6	8	6	20	14	20	14				
6.	Himachal Pradesh		1604	122	8	122	8	86	5	86	5	86	5	74	5				
7.	Jammu & Kashmir		1454	64	4	60	4	Not Available				84	6	78	5				
8.	Jharkhand	Bha.	720	20	3	20	3	Not Available				20	3	20	3				
9.	Karnataka ***	Kharif	9867	1422	14	1422	14	1068	11	1068	11	50	1	50	1				
		Rabi	2834	260	9	260	9	350	12	350	12	Not Available							
		Sum.	540	56	10	56	10	44	8	44	8								
10.	Madhya Pradesh		1928	10	0.5	10	0.5	394	20	394	20	80	4	80	4				
11.	Maharashtra	Kharif	678	Not Available															
		Rabi	498																
12.	Odisha	Aut.	2786	782	28	782	28	2411	87	2411	87	40	1	40	1				
		Wint.	109	22	20	22	20	72	66	72	66	Not Available							
		Sum.	292	126	43	126	43	231	79	231	79	Not Available							
13.	punjab		364	28	8	22	6	64	53	64	18	48	13	35	10				
14.	Rajasthan @@	Kharif	6174	150	2	150	2	3106	50	3106	50	50	1	45	1				
15.	Tamil Nadu		432	182	42	182	42	12	3	12	3	36	8	36	8				
16.	Telangana	Kharif	814	50	6	50	6	0		0		49	6	49	6				
		Rabi	390	Not Available															
17.	Uttar Pradesh	Kharif	30244	Not Available								170	1	170	1				
		Rabi	70									Not Available							
18.	West Bengal		643	27	4	27	4	Not Available											
	Total		66577	3542	9	3532	9	8064	31	8028	31	845	1	809	1				
5. RAGI.																			
1.	Andhra Pradesh	Kharif	190	Not Available								Not Available							
		Rabi	170																
2.	Bihar	Bha.	200																
3.	Goa @			Not Available															
4.	Gujarat		150	Not Available															
5.	Jharkhand		570	Not Available															
6.	Karnataka ***	Kharif	6864	982	14	982	14	1042	15	1038	15	40	1	40	1				
		Rabi	1250	126	10	126	10	214	17	214	17	Not Available							
		Sum.	250	20	8	20	8	28	11	28	11								

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
7.	Maharashtra		866													
8.	Odisha	Aut.	1073	202	19	202	19	953	89	953	89					
		Wint.	538	74	14	74	14	432	80	432	80					
		Sum.	72	29	40	29	40	51	71	51	71					
9.	Tamil Nadu		360	140	39	140	39	20	6	20	6	40	11	40	11	
10.	Telangana		70													
11.	Uttarakhand		1104	142	13	142	13	255	23	255	23	40	4	40	4	
12.	Dadra and Nagar Haveli @		78	9	12	3	4									
	Total		13805	1724	18	1718	18	2995	32	2991	31	120	2	120	2	
6. WHEAT.																
1.	Assam		850	104	12	104	12					32	4	32	4	
2.	Bihar		10620	378	4	378	4	17	0.2	17	0.2	228	2	212	2	
3.	Chhattisgarh		850	40	5	38	4	196	23	68	8	40	5	40	5	
4.	Gujarat		4740	583	12	583	12	500	11	500	11	146	3	146	3	
5.	Haryana		2200	52	2	50	2	310	14	298	14	180	8	170	8	
6.	Himachal Pradesh		1784	166	9	166	9	60	3	60	3	96	5	96	5	
7.	Jammu & Kashmir		1938	103	5	91	5					120	6	116	6	
8.	Jharkhand		7770	32	0.4	32	0.4					40	1	40	1	
9.	Karnataka ***		3338	348	10	346	10	498	15	498	15	50	1	36	1	
10.	Madhya Pradesh		5830	81	1.4	81	1.4	2826	48	2826	48	246	4	239	4	
11.	Maharashtra		8126									133	2	132	2	
12.	Odisha	Sum.	107	79	74	79	74	94	88	94	88					
13.	punjab		2334	134	6	116	5	424	18	391	17	220	9	220	9	
14.	Rajasthan @@		17914	307	2	307	2	8397	47	8397	47	130	1	130	1	
15.	Uttarakhand		2968	161	5	161	5	514	17	514	17	60	2	60	2	
16.	Uttar Pradesh		207280									570	0	567	0	
17.	West Bengal		2818	307	11	307	11	10	0.4	10	0.4	109	4	109	4	
	Total		281467	2875	5	2839	4	13846	24	13673	23	2400	1	2345	1	
7. BARLEY																
1.	Bihar		300													
2.	Chhattisgarh		36													
3.	Haryana		516	4	1	4	1	40	8	40	8	29	6	25	5	
4.	Himachal Pradesh		658	52	8	52	8	18	3	18	3	32	5	32	5	
5.	Jharkhand															
6.	Madhya Pradesh		536	13	2	13	2	147	27	147	27					
7.	punjab		240	8	3	8	3	20	8	12	5	30	13	30	13	
8.	Rajasthan @@		3100	124	4	124	4	1304	42	1304	42	80	3	80	3	
9.	Uttarakhand		674	32	5	32	5	140	21	140	21					
10.	Uttar Pradesh		846													

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
11. West Bengal																	
Total		6906	233	4	233	4	1669	33	1661	33	171	4	167	4			
8.GRAM (BENGALGRAM)																	
1. Andhra Pradesh		1310	40	3	40	3								40	3	40	3
2. Bihar		800	24	3	24	3	12	2	12	2	40	5	40	5			
3. Chhattisgarh		488	40	8	34	7	114	23	54	11	40	8	40	8			
4. Gujarat		1324	384	29	384	29	396	30	396	30	34	3	34	3			
5. Haryana		562					66	12	64	11	56	10	56	10			
6. Jharkhand		720	16	2	16	2					20	3	18	3			
7. Karnataka ***		7238	492	7	492	7	550	8	550	8	40	1	32	0.4			
8. Madhya Pradesh		5330	67	1	67	1	2223	42	2223	42	137	3	137	3			
9. Maharashtra		5524									96	2	91	2			
10. Punjab		74	6	8	6	8	2	3	0	0	26	35	26	35			
11. Rajasthan @@		8254	192	2	192	2	3965	48	3965	48	104	1	104	1			
12. Telangana		406															
13. Uttar Pradesh		15050									50	0.3	48	0.3			
14. West Bengal		915	53	6	53	6											
Total		47995	1314	5	1308	5	7328	27	7264	26	683	1	666	1			
9.REDGRAM (TUR/ARHAR)																	
1. Andhra Pradesh		818	40	5	38	5					40	5	40	5			
2. Bihar	Rabi	600	19	3	19	3					38	6	32	5			
3. Chhattisgarh		474	4	1	4	1	12	3	2	0.4	40	8	40	8			
4. Gujarat		1360	178	13	178	13	147	11	147	10.8	46	3	46	3			
5. Haryana		360	8	2	8	2	40	11	38	11							
6. Jharkhand	Rabi	720	18	3	18	3					20	3	20	3			
7. Karnataka ***		5424	790	15	790	15	816	15	806	15	40	1	34	1			
8. Madhya Pradesh		1650	8	0.5	8	0.5	180	11	180	11	80	5	78	5			
9. Maharashtra		5758									100	2	98	2			
10. Tamil Nadu		336	126	38	126	38	13	4	13	4							
11. Telangana		492															
12. Uttar Pradesh		14336									60	0.42	60	0.42			
13. West Bengal	Rabi	196	2	1	2	1											
Total		32524	1193	12	1191	12	1208	13	1186	13	464	2	448	1			
10. GREENGRAM (MOONG)																	
1. Andhra Pradesh	Kharif	330															
	Rabi	430															
2. Bihar	Kharif	200															
	Rabi	500															
3. Gujarat	Kharif	1032	31	1	31	1	82	11	82	11							
4. Karnataka ***	Kharif	2998	452	15	450	15	550	18	546	18	40	1	34	1			
	Rabi	100	12	12	12	12	8	8	8	8							
5. Maharashtra	Kharif	5902									96	2	70	1			

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
6.	Odisha	Aut.	601	211	35	211	35	521	87	521	87	Not Available							
		Wint.	1110	300	27	300	27	735	66	735	66	Not Available							
		Sum.	2505	979	39	979	39	2033	81	2033	81	40	2	40	2				
7.	Rajasthan @@	Kharif	5542	70	1	70	1	1890	34	1890	34	46	1	42	1				
8.	Tamil Nadu		440	202	46	202	46	19	4	19	4	16	4	16	4				
9.	Telangana	Kharif	484	40	8	40	8	Not Available				38	8	38	8				
		Rabi	52	Not Available															
10.	Uttar Pradesh	Kharif	2368	Not Available								Not Available							
		Zaid	610	Not Available								40	7	38	6				
11.	West Bengal	Sum.	616	81	13	81	13	Not Available				Not Available							
Total			25820	2378	19	2376	19	5838	51	5834	51	316	2	278	2				

11. BLACKGRAM (URD/MATHIKALAI)

1.	Andhra Pradesh	Kharif	388	Not Available				Not Available				Not Available											
		Rabi	634	Not Available				Not Available				Not Available											
2.	Assam	Rabi	500	90	18	86	17	Not Available				Not Available											
3.	Gujarat	Kharif	972	Not Available																			
4.	Jharkhand		720	Not Available																			
5.	Karnataka ***	Kharif	1060	160	15	160	15	232	22	226	21	Not Available											
		Rabi	130	14	11	14	11	12	9	12	9	Not Available											
6.	Maharashtra	Kharif	4766	Not Available								62	1	46	1								
7.	Odisha	Aut.	920	316	34	316	34	835	91	835	91	Not Available											
		Wint.	2004	557	28	557	28	1638	82	1638	82	40	2	40	2								
		Sum.	483	220	46	220	46	452	94	452	94	Not Available											
8.	Rajasthan @@	Kharif	2304	94	4	94	4	1684	73	1684	73	40	1.7	38	1.6								
9.	Tamil Nadu		424	181	43	181	43	9	2	9	2	36	8.5	36	8.5								
10.	Telangana	Kharif	114	Not Available																			
		Rabi	110	Not Available																			
11.	Uttar Pradesh	Kharif	14858	Not Available								60	0.4	60	0.4								
		Zaid	700	Not Available								38	5	36	5								
12.	West Bengal		1334	83	6	83	6	Not Available															
Total			32421	1715	17	1711	17	4862	55	4856	55	306	2	286	2								

12. LAKH (KHEESARI)

1.	Bihar		340	Not Available								Not Available			
2.	Chhattisgarh		262	Not Available				40	15	6	2	Not Available			
3.	Madhya Pradesh		220	8	4	8	4	66	30	66	30	Not Available			
4.	West Bengal		506	30	6	30	6	Not Available							
Total			1328	38	8	38	8	106	12	72	8	Not Available			

13. MASUR

1.	Bihar		900	Not Available								Not Available			
2.	Jharkhand		720	Not Available											
3.	Rajasthan @@		220	10	5	10	5	152	69	152	69	Not Available			
4.	Uttar Pradesh		17072	Not Available								60	0.4	58	0.3
5.	West Bengal		2790	192	7	192	7	1	0.1	1	0.1	Not Available			
Total			21702	202	6	202	6	153	5	153	5	60	0.3	58	0.3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16									
14. HORSEGRAM (KULTHI)																								
1. Andhra Pradesh	Kharif	120	Not Available																					
	Rabi	270																						
2. Karnataka ***	Kharif	2480	402	16	402	16	556	22	548	22	Not Available													
	Rabi	4014	312	8	312	8	500	12	500	12														
3. Odisha	Wint.	2915	977	34	977	34	2371	81	2371	81	40	1	40	1										
	Sum.	21	2	10	2	10	20	95	20	95	Not Available													
4. Tamil Nadu		320	48	15	48	15	2	1	2	1														
5 Telangana	Kharif	40																						
	Rabi	20																						
Total		10200	1741	19	1741	19	3449	38	3441	38	40	1	40	1										
15. PEAS																								
1 Jharkhand		720	Not Available																					
2 Uttar Pradesh		7162	Not Available																					
3 West Bengal		281	13	5	13	5	Not Available					Not covered in I.C.S.												
Total		8163	13	4	13	4																		
16. MOTH																								
1. Gujarat	Kharif	256	Not Available																					
2. Rajasthan @@	Kharif	3294	62	2	62	2	894	27	894	27	57	2	51	2										
Total		3550	62	2	62	2	894	25	894	25	57	4	51	3										
17. CHOWLA																								
1. Rajasthan @@	Kharif	526	12	2	12	2	354	67	354	67	Not covered in I.C.S.													
18. GUAR																								
1. Gujarat		140	Not Available																					
2 Rajasthan @@		10036	118	1	118	1	3766	38	3766	38	Not covered in I.C.S.													
Total		10176	118	1	118	1	3766	37	3766	37														
19. SAWAN (JHANGORA)																								
1. Uttarakhand		624	54	9	54	9	90	327	90	14														
2 Uttar Pradesh	Kharif	70	Not Available																					
	Zaid	20																						
Total		714	54	9	54	9	90	15	90	15														
20. KORRA																								
1. Andhra Pradesh		202	Not Available																					
2 Telangana		20	Not Available																					
Total		222	Not Available																					
21. KODON-KUTKI (KODRA)																								
1. Chhattisgarh		276	40	14	40	14	26	9	4	1	40	14	40	14										
2. Madhya Pradesh		864	NA				46	5	46	5	40	5	39	5										
3. Uttar Pradesh (Kodon)		50	Not Available																					
Total		1190	40	14	40	14	72	5	50	3	80	6	79	5										
22. NAVANE																								
1. Karnataka ***		724	112	15	112	15	138	19	138	19	Not covered in I.C.S.													
23. SAVE																								
1. Karnataka ***		322	56	17	56	17	70	22	70	22	Not covered in I.C.S.													

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16										
24. SAMAI																									
1.	Tamil Nadu		100	48	48	48	48	2	2	2	2	Not covered in I.C.S.													
25. VARAGU																									
1.	Tamil Nadu		124	152	123	152	123	16	13	16	13	Not covered in I.C.S.													
26. SUGARCANE																									
1.	Andhra Pradesh		1602	60	4	60	4	Not Available				60	4	57	4										
2.	Assam		700	96	14	96	14	Not Available				40	6	40	6										
3.	Bihar		740	24	3	24	3	Not Available				38	5	31	4										
4	Goa @		120	34	28	10	8	Not Available																	
5	Haryana		1070	32	3	30	3	70	7	68	6	50	5	49	5										
6	Jharkhand		240	Not Available																					
7.	Karnataka ***		950	Not Available								40	4	36	4										
8.	Kerala		47	21	45	Not Available																			
9.	Maharashtra		8742	Not Available								52	1	44	1										
10.	Odisha	Wint.	394	117	30	117	30	322	82	322	82	Not Available													
11.	punjab		706	16	2	16	2	30	4	30	4	67	9	67	9										
12.	Rajasthan @@		450	24	5	24	5	228	51	228	51	40	9	39	9										
13.	Tamil Nadu		468	300	64	300	64	20	4	20	4	49	10	49	10										
14.	Telangana		556	Not Available																					
15.	Uttar Pradesh		9488	Not Available								200	2	200	2										
16.	West Bengal	Rabi	374	33	38	33	9	Not Available																	
Total			26647	757	10	710	9	670	18	668	18	636	2	612	2										
27. COCOA																									
1.	Kerala		801	313	39.1	Not Available						Not covered in I.C.S.													
28. CHILLIES.																									
1.	Andhra Pradesh	Kharif	400	Not Available																					
		Rabi	404	Not Available																					
2.	Bihar		250	Not Available																					
3.	Chhattisgarh		32	Not Available																					
4.	Karnataka ***	Kharif	600	88	15	88	15	162	27	162	27	Not covered in I.C.S.													
		Rabi	40	18	45	16	40	22	55	22	55	Not covered in I.C.S.													
		Sum.	80	24	30	24	30	10	13	10	13	Not covered in I.C.S.													
5.	Madhya Pradesh		80	Not Available																					
6.	Telangana	Kharif	328	Not Available																					
		Rabi	90	Not Available																					
Total			2304	130	11	128	11	194	16	194	16	Not covered in I.C.S.													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16											
29. CUMIN																										
1. Gujarat			1680	348	21	348	21	454	27	454	27	Not covered in I.C.S.														
2. Rajasthan @@			4124	42	1	42	1	1617	39	1617	39															
Total			5804	390	7	390	7	2071	36	2071	36															
30. FENNEL																										
1. Gujarat *			428	68	15.888	68	15.9	78	18.22	78	18.2	Not covered in I.C.S.														
31. ARECANUT																										
1. Kerala			1620	542	33	Not Available					40	2	40	2												
2. Maharashtra			0	Not Available																						
Total			1620	542	33	Not Available					40	2	40	2												
32. PEPPER																										
1. Kerala			1610	309	19	Not Available					40	2	40	2												
33. SAFFRON																										
1. Jammu & Kashmir \$\$			102	12	12	10	10	Not Available			Not covered in I.C.S.															
34. TURMERIC																										
1. Kerala			1548	266	17	Not Available					Not covered in I.C.S.															
35. GINGER																										
1. Kerala			1468	259	17.6	Not Available					Not covered in I.C.S.															
2. Meghalaya @			618	32	5	30	5	Not Available																		
Total			2086	291	14	30	1	Not Available																		
36. GARLIC																										
1. Gujarat	Rabi		334	Not Available					Not covered in I.C.S.																	
37. CORIANDER																										
1. Rajasthan @@			524	6	1	6	1	310	59	310	59	Not covered in I.C.S.														
38. LICHI																										
1. Bihar			300	Not Available					Not covered in I.C.S.																	
39. BANANA																										
1. Bihar			500	Not Available																						
2. Gujarat			304	28	9	28	9	7	2	7	2	Not Available														
3. Kerala			2413	428	18	Not Available					50	2	50	2												
4. Madhya Pradesh #			138	Not Available																						
Total			3355	456	19	28	1	7	0	7	0	50	2	50	2											
40. MANGO																										
1. Bihar			600	Not Available					Not covered in I.C.S.																	
2. Kerala			1620	378	23	Not Available																				
Total			2220	378	16	Not Available																				

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
41. GUAVA															
1.	Bihar		250												Not covered in I.C.S.
42. JACKFRUIT															
1.	Bihar		300												Not covered in I.C.S.
2.	Kerala		1619	164	10										
	Total		1919	164	10										
43. CASHEWNUT															
1.	Kerala		1535	602	39										Not covered in I.C.S.
2.	Maharashtra		0												Not covered in I.C.S.
	Total		1535	602	39										
44. TAPIOCA															
1.	Kerala		1598	450	28	432	27								40 3 40 3
45. PINE APPLE															
1.	Kerala		1580	207	13										Not covered in I.C.S.
46. POTATO															
1.	Assam		850	142	17	140	16								40 5 36 4
2.	Bihar	Agh.	250												
		Rabi	300												
3.	Chhattisgarh		110												
4.	Gujarat	Rabi	396	100	25	100	25	66	17	66	17				
5.	Jammu & Kashmir	Kh.	206	22	11	18	9								
		Rabi	158	16	10	8	5								
6.	Jharkhand	Agh.	720												
		Rabi	720	20	3	20	3								
7.	Karnataka ***	Kh.	190	30	16	28	15	46	24	46	24				
		Rabi	160					17	11	16	10				
8.	Madhya Pradesh	Rabi	432												
9.	Meghalaya @	Sum.	338	31	9	20	6								
10.	Odisha	Wint.	2024	846	42	846	42	1762	87	1762	87	40	2	40	2
11.	Uttar Pradesh	Rabi	19716									60	0.3	58	0.3
	Total		26570	1207	26	1180	26	1891	49	1890	49	140	1	134	1
47. ONION															
1.	Bihar		300												
2.	Chhattisgarh		48												
3.	Gujarat		534	64	12	64	12	10	2	10	2				
4.	Jharkhand		720												
5.	Karnataka ***	Kh.	730	110	15	108	15	192	26	192	26				
		Rabi	220	24	11	24	11	18	8	18	8				
		Sum.	70												

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6.	Madhya Pradesh #		642	Not Available				Not Available							
7.	Uttar Pradesh	Rabi	50	Not Available								Not covered in I.C.S.			
		Zaid	670												
	Total		3984	198	22	196	22	220	25	220	25				

48. BRINJAL

1.	Bihar	Agh.	250	Not Available								Not covered in I.C.S.							
		Rabi	250																
2.	Jharkhand	Agh.	660																
		Rabi	690																
	Total		1850	-	-	-	-	-	-	-	-	-							

49.TOMATO

1.	Bihar	Agh.	100	Not Available								Not covered in I.C.S.							
		Rabi	200																
2.	Jharkhand	Agh.	690																
		Rabi	720																
	Total		1710	-	-	-	-	-	-	-	-	-							

50. CAULIFLOWER

1.	Bihar		300	Not Available								Not covered in I.C.S.			
----	-------	--	-----	---------------	--	--	--	--	--	--	--	-----------------------	--	--	--

51. PAPAYA (PAPITA)

1.	Madhya Pradesh #		32	Not Available								Not covered in I.C.S.			
----	------------------	--	----	---------------	--	--	--	--	--	--	--	-----------------------	--	--	--

52. PLANTAIN

1.	Kerala		1622	177	11	Not Available								Not covered in I.C.S.		
----	--------	--	------	-----	----	---------------	--	--	--	--	--	--	--	-----------------------	--	--

53. METHI

1.	Rajasthan @@		888	4	0.5	4	0.5	480	54	480	54	Not covered in I.C.S.			
----	--------------	--	-----	---	-----	---	-----	-----	----	-----	----	-----------------------	--	--	--

54. GROUNDNUT

1.	Andhra Pradesh	Kharif	2626	138	5	137	5	Not Available				140	5	138	5
		Rabi	818	50	6	50	6					50	6	45	6
2.	Chhattisgarh		216	Not Available				16	7	16	7	Not Available			
3.	Goa @	Kharif	80	12	15	4	5	Not Available				Not covered in I.C.S.			
3.		Rabi	100	16	16	6	6								
4.	Gujarat	Kharif	2112	1452	69	1452	69	220	10	220	10	148	7	148	7
		Sum.	1720	304	18	304	18	240	14	240	14	Not Available			
5.	Karnataka ***	Kharif	5988	920	15	920	15	1020	17	1020	17	70	1	62	1
		Rabi		Not Available											
		Sum.	3658	Not Available								40	1	32	1
6.	Madhya Pradesh		954	12	1	12	1	369	39	369	39	40	4	40	4
7.	Maharashtra	Kharif	2938	Not Available								54	2	51	2
		Sum.	1382					Not Available							

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
8. Odisha	Aut.	975	263	27	263	27	857	88	857	88	Not Available				
	Wint.	148	47	32	47	32	96	65	96	65					
	Sum.	1094	467	43	467	43	949	87	949	87					
9. Rajasthan @@		2862	59	2	59	2	1167	41	1167	41	36	1	34	1	
10. Tamil Nadu		1160	328	28	328	28	22	2	22	2	100	9	99	9	
11. Telangana	Kharif	508	40	8	40	8	Not Available					40	8	34	7
	Rabi	464					Not Available								
12. Uttar Pradesh		7244	Not Available						Not Available						
13. West Bengal		556	64	12	64	12	Not Available								
Total		37603	4172	21	4153	21	4956	32	4956	32	718	4	683	4	

55. SESAMUM (GINGELLY)

1. Andhra Pradesh	Kharif	280													
	Rabi	310													
2. Chhattisgarh		124	Not Available				12	10	4	3	Not Available				
3. Gujarat		1274	194	15	194	15	109	9	109	9	54	4	54	4	
4. Karnataka ***		1910	290	15	290	15	428	22	428	22	Not Available				
5. Kerala		82	23	28	Not Available										
6. Madhya Pradesh		1476	Not Available				218	15	218	15	40	3	40	3	
7. Maharashtra	Kharif	1040	Not Available								Not Available				
	Rabi	16													
8. Odisha	Aut.	232	92	40	92	40	210	91	210	91	Not Available				
	Wint.	801	255	32	255	32	671	84	671	84					
	Sum.	617	253	41	253	41	511	83	511	83					
9. Rajasthan @@		4044	98	2	98	2	1731	43	1731	43	72	2	69	2	
10. Tamil Nadu		480	190	40	190	40	10	2	10	2	46	10	42	9	
11. Telangana	Kharif	80	Not Available												
	Rabi	80													
12. Uttar Pradesh		11300	Not Available								40	0	40	0	
13. West Bengal		3307	331	10	331	10	Not Available				48	1	48	1	
Total		27453	1726	14	1703	14	3900	29	3892	29	300	2	293	2	

56. CASTOR

1. Andhra Pradesh		232	Not Available												
2. Gujarat		2680	548	20	548	20	578	22	578	22	50	2	50	2	
3. Karnataka ***		644	98	15	98	15	136	21	136	21	Not Available				
4. Telangana		432	Not Available								40	9	24	6	
Total		3988	646	16	646	16	714	21	714	21	90	3	74	3	

57. RAPE & MUSTARD

1. Assam		1250	150	12	144	12	Not Available					70	6	68	5
2. Bihar		900	28	3	28	3						40	4	40	4
3. Chhattisgarh		440	30	7	30	7	152	35	26	6	30	7	30	7	
4. Gujarat		1080	202	19	202	19	206	19	206	19	48	4	46	4	

Annex III (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5.	Haryana		1040	32	3	24	2	202	19	174	17	100	10	90	9
6.	Jammu & Kashmir \$\$		286	40	14	22	8	Not Available				Not Available			
7.	Jharkhand		720	Not Available								20	3	20	3
8.	Madhya Pradesh		1116	12	1	12	1	547	49	547	49	60	5	52	5
9.	Odisha	Wint.	1733	639	37	639	37	1423	82	1423	82	Not Available			
10.	punjab		582	12	2	12	2	50	9	44	8	38	7	38	7
11.	Rajasthan @@		13410	252	2	252	2	8219	61	8219	61	89	1	89	1
12.	Uttar Pradesh		26276	Not Available								100	0.4	98	0.4
13.	West Bengal		4960	513	10	513	10	10	0.2	10	0.2	106	2	106	2
Total			53793	1910	7	1878	7	10809	40	10649	40	701	1	677	1

58. LINSEED

1.	Chhattisgarh		336	36	11	34	10	30	9			40	12	40	12
2.	Jammu & Kashmir \$\$		24	7	29	5	21					Not Available			
3.	Karnataka ***		430	36	8	36	8	66	15	66	15				
4.	Madhya Pradesh		920	13	1	13	1	257	28	257	28	74	8	74	8
5.	Maharashtra		222	Not Available											
6.	Uttar Pradersh		120									Not Available			
7.	West Bengal		145	11	8	11	8	Not Available							
Total			2197	103	4	99	4	353	15	323	13	114	6	114	6

59. SAFFLOWER

1.	Karnataka ***		1730	Not Available											
2.	Maharashtra		1854	Not Available								22	1	20	1
Total			3584	Not Available								22	1	20	1

60. SUNFLOWER

1.	Andhra Pradesh	Kharif	178	Not Available											
		Rabi	380												
2.	Haryana	Rabi	230												
3.	Karnataka ***	Kharif	4462	680	15	680	15	1038	23	1038	23	40	1	30	1
		Rabi		Not Available											
		Sum.	1300									40	3	32	2
4.	Maharashtra	Kharif	600	Not Available											
		Rabi	348									Not Available			
		Sum.	52												
5.	Tamil Nadu		300	299	100	299	100	20	7	20	7				
6.	Telangana	Kharif	36	Not Available											
		Rabi	158												
7.	Uttar Pradesh	Zaid	170	Not Available											
Total			8214	979	9	979	9	1058	10	1058	10	80	1	62	0.7

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
61. SOYABEAN															
1. Andhra Pradesh		164													
2. Chhattisgarh		170								2	1	2	1		
3. Karnataka ***		1562	226	14	224	14	188	12	188	12					
4. Madhya Pradesh		2774	58	2	58	2	978	35	978	35	100	4	98	4	
5. Maharashtra		4976									70	1	64	1	
6. Rajasthan @@		2616	18	1	18	1	578	22	578	22					
7. Telangana		132													
8. Uttar Pradesh		1056													
Total		13450	302	4	300	4	1746	22	1746	22	170	2	162	2	
62. TARA MEERA															
1. Rajasthan @@		1072	16	1	16	1	546	51	546	51					
63.COCONUT															
1. Kerala		2430	1927	79							50	2	50	2	
2. Maharashtra		0													
Total		2430	1927	79							50	2	50	2	
64. NIGER															
1. Maharashtra		446													
65. COTTON															
1. Andhra Pradesh		840	40	5	40	5					40	5	40	5	
2. Gujarat		3848	1085	28	1085	28	1115	29	1115	29	206	5	206	5	
3. Haryana		940	16	2	14	1	124	13	122	13	56	6	56	6	
4. Karnataka ***		1530	214	14	214	14	306	20	306	20	56	4	54	4	
5. Madhya Pradesh		962	18	2	18	2	318	33	318	33	48	5	48	5	
6. Maharashtra		8516									138	2	138	2	
7. Punjab		702									80	11	62	9	72
8. Rajasthan @@		1936	54	3	54	3	848	44	848	44	36	2	36	2	
9. Tamil Nadu		820	126	15	116	14	7	1	7	1	96	12	92	11	
10. Telangana		1300	40	3	40	3					40	3	38	3	
11. Uttar Pradesh		80													
Total		21474	1593	27	1581	27	2798	46	2778	46	788	5	780	5	
66. JUTE															
1. Assam		600	116	19	116	19					30	5	30	5	
2. Bihar		200													
3. Meghalaya @		50	5	10	2	4									
4. Odisha	Aut.	173	78	45	78	45	167	97	167	97					
5. West Bengal		2929	298	10	298	10	16	0.5	16	0.5	77	3	76	3	
Total		3952	497	8	494	8	183	3	183	3	107	2	106	2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
67.MESTA															
1. Andhra Pradesh		200													Not Available
2. Bihar		200													
3. West Bengal		298	29	10	29	10									Not Available
Total		698	29	12	29	12	0	0	0	0	0	-	0	-	
68.TOBACCO															
1. Andhra Pradesh		682													
2. Gujarat		220	34	14	34	14	30	14	30	14					
3. Karnataka ***		360	62	25	62	25	14	4	14	4					
4. Maharashtra		30													
5 Telangana		52													
6 Uttar Pradesh	Rabi	100													
	Zaid	20													
Total		1464	96	25	96	25	44	12	44	12					
69. ISABGOL															
1. Gujarat		220	38	15	38	15	59	27	59	27					
2. Rajasthan @@		2300	34	1	34	1	588	26	588	26					
Total		2520	72	3	72	3	647	26	647	26					
70. AVARE (SEM)															
1. Karnataka ***		530	82	15	80	15	118	22	118	22					Not covered in I.C.S.
71. COWPEA (LOBIA)															
1. Karnataka ***		790	82	10	80	10	126	16	126	16					Not covered in I.C.S.

Note :- (i) % : Percentage figures given under Col.6, 8, 10, 12, 14 and 16 are based on total figures in col. 4. The data in column 4 have been excluded for percentage calculation at all India level where data under any of columns 5, 7, 9, 11, 13 and 15 has not been received from concerned States.

- (ii)*** : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.
- (iii) \$\$: Data repeated for year 2011-12 for Linseed, Potato, R&M and Saffron, all other crop repeated for the year 2014-15.
- (iv) # : Figure repeated for the year 2013-14 in respect for crops Banana, Onion and Papaya for Madhya Pradesh.
- (v) @ : ICS Scheme is not operational in Goa.
- (vi) @@ : Data repeated for the year 2014-15 for State Statistical Department & Other State Department.

**Annex-III (C) INCIDENCE OF ERRORS, USE OF EQUIPMENT AND DELEGATION OF WORK OF CROP
CUTTING EXPERIMENTS DURING 2015-16**

S.No.	State	Season	% of expts where no error noticed	% of expts where errors noticed (sum of e1 to e8)	% of expts for which primary workers did not use supplied items				% of expts. for which the work was delegated	% of expts. for which the work was conducted by untrained workers
					Tape	Pegs	Balance	Weight		
1	2	3	4	5	6	7	8	9	10	11
1	Andhra Pradesh	Kharif	66	41	8	6	8	7	1	3
		Rabi	71	39	9	4	10	9	2	3
2	Assam	Early Kharif	56	44	9	7	9	9	0	0
		Late Kharif	64	37	13	5	13	14	0	0
		Rabi	77	23	6	6	6	6	0	1
		Summer	75	25	9	13	9	9	0	0
3	Bihar	Autumn (Bha.)	49	54	11	5	8	8	7	46
		Winter (Agh.)	48	70	16	9	15	14	1	66
		Rabi	60	41	17	10	14	14	1	17
		Summer	95	5	0	0	0	0	10	15
4	Chhattisgrah	Kharif	94	10	28	5	38	24	1	0
		Rabi	97	3	31	6	32	14	0	0
5	Gujarat	Kharif	63	41	43	7	37	37	1	6
		Rabi	55	51	50	8	41	41	0	0
6	Haryana	Kharif	66	35	32	6	19	16	0	0
		Rabi	67	33	35	9	13	13	0	0
7	Himachal Pradesh	Kharif	64	48	30	13	30	23	0	2
		Rabi	48	71	27	22	42	42	0	2
8	Jammu & Kashmir	Kharif	8	172	8	1	7	7	4	9
		Rabi	15	147	16	0	14	14	0	10
9	Jharkhand	Early Kharif	62	38	44	3	26	24	0	53
		Late Kharif	58	42	27	0	12	8	7	76
		Rabi	67	32	11	0	5	5	4	50
10	Karnataka	Kharif	60	40	16	8	16	15	0	0
		Rabi	72	68	15	4	17	16	0	0
		Summer	59	43	28	13	28	24	0	0
11	Kerala	Autumn	84	18	11	11	5	5	1	1
		Winter	84	18	6	19	4	4	2	0
		Summer	70	31	2	6	6	4	0	0
12	Madhya Pradesh	Kharif	56	39	22	36	47	45	1	0
		Rabi	63	48	30	24	46	45	3	0
13	Maharashtra	Kharif	30	128	23	8	12	12	5	12
		Rabi	24	149	27	13	19	17	0	0
14	Odisha	Autumn	96	4	0	0	0	0	0	0
		Winter	96	5	0	1	0	0	0	0
		Summer	97	4	0	0	0	0	0	0
15	Punjab	Kharif	43	65	11	4	5	5	4	1
		Rabi	32	80	13	4	2	2	1	1
16	Rajasthan	Kharif	44	65	30	20	25	25	0	2
		Rabi	42	81	31	17	26	24	0	0
17	TamilNadu	Total @	55	50	13	23	17	16	2	2
18	Telangana	Kharif	74	28	14	1	13	13	1	10
		Rabi	73	33	14	1	13	13	1	0
19	Uttar Pradesh	Kharif	49	77	26	4	19	17	4	31
		Rabi	57	67	25	4	20	20	1	50
		Zaid Rabi	68	70	58	0	47	47	0	63
20	Uttarakhand	Kharif	33	85	9	14	18	18	0	4
		Rabi	31	108	19	23	29	29	0	0

Annex3c Continued.

1	2	3	4	5	6	7	8	9	10	11
21	West Bengal #	Aus.	54	46	7	1	7	7	0	4
		Aman	56	44	4	5	8	8	0	23
		Rabi	82	19	4	0	4	4	0	22
		Summer	83	19	2	0	2	2	0	0
22	Puducherry	Kharif	61	45	0	0	0	0	0	0
		Rabi I	60	40	0	0	0	0	0	0
		Rabi II	55	55	0	0	0	0	0	0
For States Covered		All Seasons	57	54	19	9	17	16	3	10

Note :-

1. e₁= Error in selection of survey/sub-survey nos.
2. e₂= Error in selection of field within survey/sub-survey nos.
3. e₃= Error in measurement of field.
4. e₄= Error in selection of random nos.,location and marking of plots.
5. e₅= Error in weighment of produce.
6. e₆= Error in reporting ancillary information.
7. e₇= Inadequate arrangements for storing of produce for driegue and incorrect reporting of constituents in crop mixture.
8. e₈= Others.
9. \$= In Kerala whole year data has been included in Summer season.
10. @= For the year as a whole (total of all seasons).
11. #= ISI Equipments in place of Tape.
- 12 . Sum total of percentages of Col. (4) and (5) can exceed 100% as in one experiment (more than one error may occur).

ANNEX - IV(a):- RESPONSE UNDER CROP ESTIMATION SURVEY 2015-16

Sl. No.	S T A T E	Kharif						Rabi						T O T A L			
		Food Crops			Non-Food Crops			Food Crops			Non-Food Crops						
		No. of Experiments			No. of Experiments			No. of Experiments			No. of Experiments			No. of Experiments			
		Planned	Analy- sed	Resp- onse %													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1.	Andhra Pradesh	9170	9124	99	4520	4302	95	7248	6928	96	2190	2110	96	23128	22464	97	
2.	Assam	5700	4828	85	600	576	96	3700	3155	85	1250	1090	87	11250	9649	86	
3.	Bihar	13900	12793	92	400	178	45	18890	15821	84	900	830	92	34090	29622	87	
4.	Chhattisgarh	2864	2203	77	510	392	77	1826	1356	74	776	570	73	5976	4521	76	
5.	Goa	310	269	87	80	30	38	190	188	99	100	57	57	680	544	80	
6.	Gujarat	9592	8821	92	9914	9665	97	12004	11222	93	3240	2713	84	34750	32421	93	
7.	Haryana	4096	3470	85	940	908	97	3278	3049	93	1270	1056	83	9584	8483	89	
8.	Himachal Pradesh	2594	2144	83	NOT AVAILABLE			2442	2103	86	NOT AVAILABLE			5036	4247	84	
9.	Jammu & Kashmir \$	2992	2310	77				2096	1562	75	310	282	91	5398	4154	77	
10.	Jharkhand	12810	11240	88	NOT AVAILABLE			13500	10972	81	720	584	81	27030	22796	84	
11.	Karnataka @	50847	49516	97	16096	15111	94	33381	29912	90	7478	6770	91	107802	101309	94	
12.	Kerala	24604	24603	100	2512	2512	100	1522	1518	100	NOT AVAILABLE			28638	28633	100	
13.	Madhya Pradesh #	9268	7828	84	6166	5385	87	13240	11118	84	2036	1798	88	30710	26129	85	
14.	Maharashtra	35936	33993	95	18516	17703	96	23432	22561	96	3904	3147	81	81788	77404	95	
15.	Meghalaya	1664	1610	97	50	40	80	338	318	94	NOT AVAILABLE			2052	1968	96	
16.	Odisha	31882	31868	100	2329	2329	100	7261	7261	100	3444	3444	100	44916	44902	100	
17.	Punjab	3050	3004	98	702	702	100	2648	2643	100	582	577	99	6982	6926	99	
18.	Rajasthan	45912	44064	96	11458	10865	95	35024	32024	91	16782	15420	92	109176	102373	94	
19.	Tamil Nadu	6516	6428	99	2760	2668	97	NOT AVAILABLE						9276	9096	98	
20.	Telangana	6152	6052	98	2488	2224	89	4062	3988	98	754	716	95	13456	12980	96	
21.	Uttarakhand	4700	4565	97	NOT AVAILABLE			3642	3608	99	NOT AVAILABLE			8342	8173	98	
22.	Uttar Pradesh	285930	278972	98	19680	18811	96	269246	266240	99	26686	25605	96	601542	589628	98	
23.	West Bengal	17980	13708	76	3227	2805	87	19852	16698	84	8968	7755	86	50027	40966	82	
24.	Dadra & Nagar Haveli	156	98	63	NOT AVAILABLE										156	98	63
25.	Daman & Diu	28	28	100											28	28	100
26.	Puducherry	90	90	100	NOT AVAILABLE			210	210	100	NOT AVAILABLE			300	300	100	
Total		588743	563629	96	102948	97206	94	479032	454455	95	81390	74524	92	1252113	1189814	95	

Note :-

1. @ : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.
2. \$: Data repeated for year 2011-12 for Linseed, Potato, R&M and Saffron, all other data repeated for the year 2014-15.
3. # : Figure repeated for the year 2013-14 in respect for corp Banana, Onion and Papaya for Madhya Pradesh.

ANNEX-IV (b) :REASONS FOR LOSS OF EXPERIMENTS UNDER CROP ESTIMATION SURVEY DURING 2015-16

Sl. No.	S T A T E	Food / Non-Food Crops	No. of Expts.		No. of Expts. not conducted due to						Rejected by statistician due to						Total Cols. (12)+ (18)+ (19)			
			Planned	Analysed	A	B	C	D	E	F	Sub Total	P	Q	R	S	T	Sub Total	U		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1.	Andhra Pradesh	Food	16418	16052	0	0	0	0	0	366	366	0	0	0	0	0	0	0	366	
		% age	97.8							2.2							0.0	0.0	2.2	
		Non Food	6710	6412	0	0	0	0	0	298	298	0	0	0	0	0	0	0	298	
		% age	95.6							4.4							0.0	0.0	4.4	
		Total	23128	22464	0	0	0	0	0	664	664	0	0	0	0	0	0	0	664	
		% age	97.1							2.9							0.0	0.0	2.9	
2.	Assam	Food	9400	7983	0	0	0	633	0	585	1218	0	0	0	0	199	199	0	1417	
		% age	84.9							13.0							2.1		15.1	
		Non Food	1850	1666	0	0	0	90	0	54	144	0	0	0	0	40	40	0	184	
		% age	90.1							7.8							2.16		9.9	
		Total	11250	9649	0	0	0	723	0	639	1362	0	0	0	0	239	239	0	1601	
		% age	85.8							12.1							2.1	0.0	14.2	
3.	Bihar	Food	32790	28614	0	0	0	0	0	4176	4176	0	0	0	0	0	0	0	4176	
		% age	87.3							12.7							0.0	0.0	12.7	
		Non Food	1300	1008	0	0	0	0	0	292	292	0	0	0	0	0	0	0	292	
		% age	77.5							22.5							0.0	0.0	22.5	
		Total	34090	29622	0	0	0	0	0	4468	4468	0	0	0	0	0	0	0	4468	
		% age	86.9							13.1							0.0	0.0	13.1	
4.	Chhattisgarh	Food	4690	3559	0	0	0	0	0	1131	1131	0	0	0	0	0	0	0	1131	
		% age	75.9	0						24.1							0.0		24.1	
		Non Food	1286	962	0	0	0	0	0	324	324	0	0	0	0	0	0	0	324	
		% age	74.8							25.2							0.0		25.2	
		Total	5976	4521	0	0	0	0	0	1455	1455	0	0	0	0	0	0	0	1455	
		% age	75.7							24.3							0.0	0.0	24.3	
5.	Goa	Food	500	457	0	0	0	0	0	43	43	0	0	0	0	0	0	0	43	
		% age	91.4							8.6							0.0		8.6	
		Non Food	180	87	0	0	0	0	0	93	93	0	0	0	0	0	0	0	93	
		% age	48.3																0.0	
		Total	680	544	0	0	0	0	0	136	136	0	0	0	0	0	0	0	136	
		% age	80.0							20.0							0.0	0.0	20.0	
6.	Gujarat	Food	21596	20043	0	0	0	0	0	1547	6	1553	0	0	0	0	0	0	0	1553
		% age	92.8							7.2							0.0		7.2	
		Non Food	13154	12378	0	0	0	24	752	0	776	0	0	0	0	0	0	0	776	
		% age	94.1							5.9							0.0		5.9	
		Total	34750	32421	0	0	0	24	2299	6	2329	0	0	0	0	0	0	0	2329	
		% age	93.3							6.7							0.0	0.0	6.7	
7.	Haryana	Food	7374	6519	0	0	0	0	0	108	108	0	0	0	0	0	0	0	747	
		% age	88.4							1.5							0.0	10.1	11.6	
		Non Food	2210	1964	0	0	0	0	0	16	16	0	0	0	0	0	0	300	246	
		% age	88.9							0.7							0.0	13.6	11.1	
		Total	9584	8483	0	0	0	0	0	124	124	0	0	0	0	0	0	1047	1101	
		% age	88.5							1.3							0.0	10.9	11.5	
8.	Himachal Pradesh	Food	5036	4247	0	0	0	0	0	444	444	4	20	0	0	321	345	0	789	
		% age	84.3							8.8							6.9	0.0	15.7	
		Non Food			Not Available														0.0	
		% age																	0.0	
		Total	5036	4247	0	0	0	0	0	444	444	4	20	0	0	321	345	0	789	
		% age	84.3							8.8							6.9	0.0	15.7	

		ANNEX IV (b) (Contd.....)																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
9.	Jammu & Kashmir \$\$	Food	5088	3872	0	0	0	200	0	1016	1216	0	0	0	0	0	0	0	0	1216
			% age	76.1							23.9							0.0		23.9
		Non Food	310	282	0	0	0	0	0	28	28	0	0	0	0	0	0	0	0	28
			% age	91.0							9.0							0.0		9.0
		Total	5398	4154	0	0	0	200	0	1044	1244	0	0	0	0	0	0	0	0	1244
			% age	77.0							23.0							0.0	0.0	23.0
10.	Jharkhand	Food	26310	22212	0	0	3872	226	0	0	4098	0	0	0	0	0	0	0	0	4098
			% age	84.4							15.6							0.0		15.6
		Non Food	720	584	0	0	136	0	0	0	136	0	0	0	0	0	0	0	0	136
			% age	81.1							18.9							0.0		18.9
		Total	27030	22796	0	0	4008	226	0	0	4234	0	0	0	0	0	0	0	0	4234
			% age	84.3							15.7							0.0	0.0	15.7
11.	Karnataka ***	Food	84228	79438	0	0	0	0	0	4790	4790	0	0	0	0	0	0	0	0	4790
			% age	94.3							5.7							0.0	0.0	5.7
		Non Food	23574	21881	0	0	0	0	0	1693	1693	0	0	0	0	0	0	0	0	1693
			% age	92.8							7.2							0.0	0.0	7.2
		Total	107802	101319	0	0	0	0	0	6483	6483	0	0	0	0	0	0	0	0	6483
			% age	94.0							6.0							0.0	0.0	6.0
12.	Kerala	Food	26126	26121	0	0	0	2	0	3	5	0	0	0	0	0	0	0	0	5
			% age	100.0							0.0							0.0		0.0
		Non Food	2512	2512	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			% age	100.0							0.0							0.0		0.0
		Total	28638	28633	0	0	0	2	0	3	5	0	0	0	0	0	0	0	0	5
			% age	100.0							0.0							0.0	0.0	0.0
13.	Madhya Pradesh #	Food	22508	18946	0	0	226		0	2930	3156	0	0	0	0	0	0	0	0	406
			% age	84.2							14.0							0.0		15.8
		Non Food	8202	7183	0	0	74	0	0	747	821	0	0	0	0	0	0	0	0	198
			% age	87.6							10.0							0.0		12.4
		Total	30710	26129	0	0	300	0	0	3677	3977	0	0	0	0	0	0	0	0	604
			% age	85.1							13.0							0.0	2.0	14.9
14.	Maharashtra	Food	59368	56554	0	0	291	0	0	2073	2364	309	0	0	0	0	141	450	0	2814
			% age	95.3							4.0							0.8		4.7
		Non Food	22420	20850	0	0	0	0	0	1358	1358	195	0	0	0	0	17	212	0	1570
			% age	93.0							6.1							0.9		7.0
		Total	81788	77404	0	0	291	0	0	3431	3722	504	0	0	0	0	158	662	0	4384
			% age	94.6							4.6							0.8	0.0	5.4
15.	Meghalaya	Food	2002	1928	0	0	0	28	0	46	74	0	0	0	0	0	0	0	0	74
			% age	96.3							3.7							0.0		3.7
		Non Food	50	40	0	0	0	4	0	6	10	0	0	0	0	0	0	0	0	10
			% age	80.0							20.0							0.0		20.0
		Total	2052	1968	0	0	0	32	0	52	84	0	0	0	0	0	0	0	0	84
			% age	95.9							4.1							0.0	0.0	4.1
16.	Odisha	Food	39143	39129	0	0	0	14	0	0	14	0	0	0	0	0	0	0	0	14
			% age	100.0							0.0							0.0		0.0
		Non Food	5773	5773	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			% age	100.0							0.0							0.0		0.0
		Total	44916	44902	0	0	0	14	0	0	14	0	0	0	0	0	0	0	0	14
			% age	100.0							0.0							0.0	0.0	0.0

ANNEX IV (b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
17.	Punjab	Food	5698	5647	0	0	0	0	0	51	51	0	0	0	0	0	0	0	51
			% age	99.1							0.9						0.0		0.9
		Non Food	1284	1279	0	0	0	0	0	5	5	0	0	0	0	0	0	0	5
			% age	99.6							0.4						0.0		0.4
		Total	6982	6926	0	0	0	0	0	56	56	0	0	0	0	0	0	0	56
			% age	99.2							0.8						0.0	0.0	0.8
18.	Rajasthan	Food	80936	76088	0	0	0	0	0	4848	4848	0	0	0	0	0	0	0	4848
			% age	94.0							6.0						0.0	0.0	6.0
		Non Food	28240	26285	0	0	0	0	0	1955	1955	0	0	0	0	0	0	0	1955
			% age	93.1							6.9						0.0		6.9
		Total	109176	102373	0	0	0	0	0	6803	6803	0	0	0	0	0	0	0	6803
			% age	93.8							6.2						0.0	0.0	6.2
19.	Tamil Nadu	Food	6516	6428	0	0	0	0	0	88	88	0	0	0	0	0	0	0	88
			% age	98.6							1.4						0.0		1.4
		Non Food	2760	2668	0	0	0	0	0	92	92	0	0	0	0	0	0	0	92
			% age	96.7							3.3						0.0		3.3
		Total	9276	9096	0	0	0	0	0	180	180	0	0	0	0	0	0	0	180
			% age	98.1							1.9						0.0	0.00	1.9
20.	Telangana	Food	10214	10040	0	0	0	0	0	174	174	0	0	0	0	0	0	0	174
			% age	98.3							1.7						0.0		1.7
		Non Food	3242	2940	0	0	0	0	0	302	302	0	0	0	0	0	0	0	302
			% age	90.7							9.3						0.0		9.3
		Total	13456	12980	0	0	0	0	0	476	476	0	0	0	0	0	0	0	476
			% age	96.5							3.5						0.0	0.00	3.5
21.	Uttarakhand	Food	8342	8173	0	0	0	0	0	160	160	0	0	0	0	9	9	0	169
			% age	98.0							1.9						0.1		2.0
		Non Food																	
			% age	0.0							0.0						0.0		0.0
		Total	8342	8173	0	0	0	0	0	160	160	0	0	0	0	9	9	0	169
			% age	98.0							1.9						0.1		2.0
22.	Uttar Pradesh	Food	555176	545212	0	0	0	0	0	9964	9964	0	0	0	0	0	0	0	9964
			% age	98.2							1.8						0.0		1.8
		Non Food	46366	44416	0	0	0	0	0	1950	1950	0	0	0	0	0	0	0	1950
			% age	95.8							4.2						0.0		4.2
		Total	601542	589628	0	0	0	0	0	11914	11914	0	0	0	0	0	0	0	11914
			% age	98.0							2.0						0.0		2.0
23.	West Bengal	Food	37832	30406	0	0	0	1614	0	5812	7426	0	0	0	0	0	0	0	7426
			% age	80.4							19.6						0.0	0.0	19.6
		Non Food	12195	10560	0	0	0	1601	0	34	1635	0	0	0	0	0	0	0	1635
			% age	86.6							13.4						0.0		13.4
		Total	50027	40966	0	0	0	3215	0	5846	9061	0	0	0	0	0	0	0	9061
			% age	81.9							18.1						0.0	0.00	18.1
24.	Dadra & Nagar Haveli	Food	156	98	0	0	0	0	38	0	38	0	0	0	0	20	20	0	58
			% age	62.8							24.4						12.8		37.2
		Non Food															0.0		0.0
			% age	62.8							24.4						12.8		37.2
		Total	156	98	0	0	0	0	38	0	38	0	0	0	0	20	20	0	58
			% age	62.8							24.4						12.8		37.2
25.	Daman & Diu	Food	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			% age	100.0							0.0						0.0		0.0
		Non Food																	0.0
			% age	100.0							0.0						0.0		0.0
		Total	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			% age	100.0							0.0						0.0		0.0

ANNEX IV(b) (Contd....)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
26. Puducherry	Food		300	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		% age	100.0							0.0						0.0		0.0	
	Non Food																		
		% age																	0.0
	Total		300	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		% age	100.0							0.0							0.0	0.0	0.0
Grand Total %	Food		1067775	1018094	0	0	4389	2717	1585	38814	47505	313	20	0	0	690	1023	1153	49681
		% age	95.3								4.4						0.1	0.1	4.7
	Non Food		184338	171730	0	0	210	1719	752	9247	11928	195	0	0	0	57	252	498	13097
		% age	93.2								6.5						0.1	0.3	7.1
	Total		1252113	1189824	0	0	4599	4436	2337	48061	59433	508	20	0	0	747	1275	1651	61410
		% age	95.0	0.0	0.0	11.1	4.6	0.6	4.8	5.8	0.4	0.0	0.0	0.0	0.4	0.3	2.0	5.5	

Note : Sum total of percentages in Col. (5), (12), (18) and (19) may not always be 100.

1. % : Percentage figures given under Col. 5 to 20 are based on total figures in col. 4. The data in column 4 have been excluded for percentage calculation at all India level where data under any of columns from 5 to 20 has not been received from concerned States.

- A : Primary worker being absent, on leave, transfer etc.
- B : Primary worker not attending the work due to other assignments.
- C : Primary worker not attending the work due to other reasons.
- D : Prior harvest by cultivators.
- E : Crop not available.
- F : Other reasons.
- P : Incomplete data.
- Q : Discrepant data.
- R : Unreliable data.
- S : Late receipt of returns.
- T : Other reasons.
- U : Experiments for which reasons for non inclusion in analysis are not known.

- 2.# : Figure repeated for the year 2013-14 in respect for crops Banana, Onion and Papaya for Madhya Pradesh.
- 3.***: Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.
- 4. \$\$: Data repeated for year 2011-12 for Linseed, Potato, R&M & Saffron and all other data repeated for the year 2014-1

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2015-16

Sl. No.	S T A T E	Area under Crop		No. of Experiments		% age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)	
		Total (000)	Coverage (ha.)	Planned	Analysed					
		1	4	6	8				10	
1. RICE										
1.	Andhra Pradesh	(Kh.Ir.)	1325	96	4044	4044	100	4513	0.6	5979
		(Kh.UL)	74	79	228	228	100	2425	4.0	179
		Comb.	1399	95	4272	4272	100	4403	0.6	6158
		(Rabi.Ir.)	762	96	2994	2736	91	6660	0.5	5075
2.	Assam	(Aut.)	191	100	2000	1348	67	1364	1.3	257
		(Wint.)	1889	100	3000	2932	98	2003	0.6	3727
		(Sum.)	405	98	1500	1316	88	2818	1.3	1141
3.	Bihar #	(Bha.Ir)	195	80	280	172	61	1579	N.A.	308
		(Bha.UL)	354	81	560	424	76	1768	N.A.	417
		Comb.	549	81	840	596	71	1701	N.A.	725
		(Agh.Hyv.Ir.)	1259	100	4260	4154	98	4238	N.A.	3556
		(Agh.Hyv.UL)	386	100	1700	1632	96	2183	N.A.	561
		(Agh.Lv.Ir.)	582	100	2800	2690	96	3261	N.A.	1264
		(Agh.Lv.UL)	376	100	1720	1710	99	1971	N.A.	494
		Comb.	2603	100	10480	10186	97	3387	N.A.	5875
		(Gar.Hyv.)	63	97	340	112	33	2516	N.A.	158
		(Gar.Lv.)	19	97	100	46	46	2326	N.A.	43
		Comb.	82	97	440	158	36	2472	N.A.	201
4.	Chhattisgarh	(Ir.)	1263	84	520	440	85	1787	2.7	2479
		(UL)	2552	89	1024	802	78	961	2.7	2565
		Comb.	3815	87	1544	1242	80	1234	1.9	5044
5.	Goa	(Kh.)	28	100	190	190	100	2830	N.A.	78
		(Rabi)	14	100	190	188	99	2687	N.A.	37
6.	Gujarat \$\$\$	(Ir.)	598	100	1174	1174	100	2368	1	1415
		(UL)	143	100	814	814	100	1173	9	252
		Comb.	741	100	1988	1988	100	2137	1.4	1667
		(Sum.)	33	86	246	246	100	4866	N.A.	108

1	2	3	4	5	6	7	8	9	10
7.	Haryana		1206	76	990	864	87	3268	1.6
8.	Himachal Pradesh \$\$\$		74	73	990	713	72	1968	3.4
9.	Jammu & Kashmir \$\$	(Plain)				N.A.			
		(Hills)				N.A.			
		Comb.	276	48	1230	930	76	1780	6
10.	Jharkhand	(Bha.)	145	N.A.	720	594	83	909	N.A.
		(Agh.Hyv.Ir.)				N.A.			
		(Agh.Hyv.UL)	1017	N.A.	7770	7350	95	989	N.A.
		(Agh.Lv.Ir.)				N.A.			
		(Agh.Lv.UL)				N.A.			
		Comb.	1162	N.A.	8490	7944	94	924	N.A.
11.	Karnataka ***	(Kh.Hyv.Ir.)	637	97	5780	5716	99	5368	1.8
		(Kh.Hyv.UI.)	240	69	3468	3452	100	4223	2.0
		(Kh.Tra.Ir.)	21	97	456	450	99	4286	6.6
		(Kh.Tra.UI.)	65	33	1196	1184	99	3293	3.9
		Comb.	963	86	10900	10802	99	4919	1.4
		(Rabi Hyv.Ir.)	48	100	1366	1196	88	3863	4.3
		(Rabi Tra. Ir.)	0.28	100	32	32	100	4042	18.0
		Comb.	48	100	1398	1228	88	3864	4.3
		(Sum. Hyv.Ir.)	278	100	3326	2964	89	4709	3.3
12.	Kerala	(Aut.)	60	2	2356	2356	100	2663	2.1
		(Wint.)	89	3	3167	3167	100	2734	1.4
		(Sum.)	47	2	1522	1518	100	3057	2.2
13.	Madhya Pradesh	(Hyv. Ir.)	507	93	790	682	86	2063	20.6
		(Lv. Ir.)	190	96	560	396	71	2008	8.2
		Comb.	697	94	1350	1078	80	2048	15.3
		(UL)	1238	90	1410	1238	88	608	2.9
		Comb.	1935	91	2760	2316	84	1127	10.0
14.	Maharashtra *	(Ir.)							
		(UL)					N.A.		
		(Comp.)							
		Comb.	1486	N.A.	4214	4061	96	1731	0.9
		(Sum.)	32	93	516	471	91	2410	1.9
15.	Meghalaya	(Aut.)	33	92	296	262	89	2333	0.01
		(Wint.)	64	96	750	750	100	2524	0.005
									161

1	2		3	4	5	6	7	8	9	10	
16.	Odisha	(Aut.)	542	100	6706	6706	100	719	1.3	390	
		(Wint.)	3167	100	10702	10688	100	1485	0.7	4703	
		(Sum.)	233	100	3781	3781	100	3356	1.5	783	
17.	Punjab #		2975	100	1980	1978	100	3974	N.A.	11823	
18.	Rajasthan #		183	96	1268	1060	84	3033	1.3	555	
19.	Tamil Nadu	(K/K/S)	324	97	428	420	98	4458	0.8	1443	
		(S/T/P)	1388	100	1260	1260	100	3418	0.8	4760	
		(N/K)	289	90	300	300	100	4113	1.1	1187	
		Comb.	2001	98	1988	1980	100	3687	0.6	7390	
20.	Telangana	(Kh.Ir.)	718	89	2356	2356	100	2966	0.6	2131	
		(Kh.U.L.)	30	70	152	152	100	2171	4.5	66	
		Comb.	748	88	2508	2508	100	2934	0.7	2197	
		(Rabi.Ir.)	297	96	2430	2430	100	2858	0.7	850	
20.	Uttarakhand		250	100	2972	2930	99	3189	0.8	879	
21.	Uttar Pradesh		5837	100	172100	169689	99	2130	N.A.	12434	
22.	West Bengal	(Aus.)	236	100	2685	2354	88	2598	1.1	613	
		(Aman)	3977	100	13318	9625	72	2743	0.6	10911	
		Comb.	4213	100	16003	11979	75	2735	0.6	11524	
		(Sum.)	1310	100	11356	9291	82	3376	0.6	4424	
23.	Dadra & Nagar Haveli		13	52	78	70	90	2372	1.3	32	
24.	Daman & Diu		2	100	20	20	100	1708	15.2	4	
25.	Puducherry	(I)	4	100	90	90	100	3348	3.1	12	
		(II)	8	100	140	140	100	2355	3.0	20	
		(III)	4	100	70	70	100	3240	4.0	13	
T O T A L		Kharif	38643	88	276872	267211	97	2435	0.4	88975	
		Rabi/Sum.	3554	97	29909	26537	89	4058	0.6	13445	
		Comb.	42197	89	306781	293748	96	2571	0.4	102421	

2. JOWAR

1.	Andhra Pradesh	(Kh.)	44	58	178	172	97	1110	5.3	49
		(Rabi)	130	84	482	478	99	2369	2.1	308
2.	Chhattisgarh		5	30	80	38	48	805	22.9	4
3.	Gujarat \$\$\$	(Kh.)	75	95	596	361	61	1414	N.A.	102
		(Rabi)	24	89	298	246	83	1191	N.A.	29

1	2	3	4	5	6	7	8	9	10
4.	Karnataka ***	(Kh.Hyv.Ir.)							
		(Kh. Hyv.) Ir. & UL	87	28	3040	2734	90	1546	2.8
		(Kh.Tra.UL.)	20	20	424	360	85	740	8.0
		Comb.	107	27	3464	3094	89	1395	2.6
		(Rabi Hyv.Ir.)							
		(Rabi Hyv.Ir. & UL)	786	82	6226	5998	96	1130	2.0
		(Rabi Tra.Ir.)							
		(Rabi.Tra. Ir. & UL)	136	18	2117	2036	96	1006	3.1
		Comb.	922	73	8343	8034	96	1112	1.8
		(Sum.Hyv.Ir.)	1.0	100	50	40	80	2383	20.0
	5. Madhya Pradesh		190	90	1746	1378	79	1491	2.2
6.	Maharashtra *	(Kh.)	1062	90	4248	3960	93	1082	0.8
		(Rabi Ir.)					N.A.		
		(Rabi UL)							
		Comb.Rabi	3027	N.A.	8768	8443	96	687	0.7
7.	Rajasthan #		631	99	5868	5656	96	545	1.9
8.	Tamil Nadu	(Ir.)	185	99	440	436	99	1047	3.1
		(UI.)	154	99	640	630	98	1606	2.6
		Comb.	339	99	1080	1066	99	1301	2.0
9.	Telangana	(Kh.)	45	89	628	588	94	1119	4.0
		(Rabi)	31	79	564	532	94	807	4.8
10.	Uttar Pradesh		155	78	7216	6844	95	677	N.A.
	T O T A L	Kharif	2653	90	25104	23157	92	1010	0.7
		Rabi/Sum.	4135	20	18505	17773	96	839	0.7
		Comb.	6788	47	43609	40930	94	906	0.5
	3. BAJRA								
1.	Andhra Pradesh		33	84	462	456	99	1768	4.0
2.	Gujarat \$\$\$	(Kh.)	147	99	2038	1828	90	1668	N.A.
		(Sum.)	244	96	1720	1650	96	2652	N.A.
3.	Haryana		370	68	1532	1438	94	1762	1
									652

1	2		3	4	5	6	7	8	9	10
4. Karnataka ***	(Kh. Hyv.Ir.)									
	(Kh. Hyv.Ul.)	224	89	2758	2678	97	1035	3.1	220	
	(Kh. Tra.)	5	100	196	196	100	943	9.0	5	
	Comb.	229	89	2954	2874	97	1033	3.1	225	
5. Madhya Pradesh		233	99	320	302	94	1575	3.5	366	
6.	(Ir.)									
	(Ul.)						N.A.			
	(Comp.)									
	Comb.	1033	N.A.	762	744	98	1086	N.A.	1122	
7. Rajasthan #		4045	100	10450	9750	93	794	1.4	3212	
8. Tamil Nadu	(Ir.)	35	97	240	240	100	2694	3.6	96	
	(Ul.)	16	94	204	194	95	2446	3.6	39	
	Comb.	51	96	444	434	98	2616	2.8	135	
9. Telangana		2	79	98	66	67	938	14.9	2	
10. Uttar Pradesh		975	99	35200	34176	97	1821	N.A.	1776	
11. Daman & Diu		0.6	100	8	8	100	1368	16.4	1.0	
T O T A L	Kharif.	7119	83	54268	52076	96	1096	0.9	7789	
	Rabi/Sum.	244	96	1720	1650	96	2652	-	647	
	Comb.	7363	84	55988	53726	96	1148	0.8	8436	
4. MAIZE										
1. Andhra Pradesh	(Kh.)	75	55	208	208	100	3682	3.9	276	
	(Rabi)	158	54	554	514	93	7204	1.9	1135	
2. Bihar #	(Bha.Hyv.)	125	72	280	252	90	3101	N.A.	388	
	(Bha. Lv.)	146	68	560	510	91	2093	N.A.	305	
	Comb.	271	70	840	762	91	2558	N.A.	693	
	(Rabi)	250	82	500	466	93	4421	N.A.	1105	
	(Gar.Hyv.)	142	79	260	116	45	3988	N.A.	567	
	(Gar.Lv.)	42	95	80	48	60	3615	N.A.	152	
	Comb.	184	83	340	164	48	3903	N.A.	719	
3. Chhattisgarh		86	75	490	401	82	1881	3.3	194	
4. Gujarat \$\$\$		298	95	1060	1040	98	1323	N.A.	394	
5. Haryana		6	7	144	88	61	3000	12.6	18	

1	2		3	4	5	6	7	8	9	10
6.	Himachal Pradesh \$\$\$		294	100	1604	1431	89	2672	1.3	707
7.	Jammu & Kashmir \$\$	(Plain)	N.A.							
		(Hills)	N.A.							
	Comb.	299	52	1454	1158	80	1236	5	360	
8.	Jharkhand	(Bha.)	118	N.A.	720	592	82	1145	N.A.	134
9.	Karnataka ***	(Kh.Hyv.Ir.)								
		(Kh.Hyv. Ir. & UL)	1163	100	9827	9684	99	3271	1.3	3614
	(Kh. Tra.Ir.)	3.0	100	40	36	90	4475	43.0	12.0	
		(Kh. Tra.UI.)								
	Comb.	1166	100	9867	9720	99	3274	1.3	3626	
		(Rabi Hyv.Ir.)								
	(Rabi Hyv.UI.)	98	100	2834	2560	90	3683	2.7	342	
		(Rabi Tra.Ir.)	0	0	0	0	0	0.0	0	
	Comb.	98	100	2834	2560	90	3683	2.7	342	
	(Sum.Hyv.)	19	100	540	528	98	3607	6.1	67	
10.	Madhya Pradesh		991	93	1928	1768	92	2308	1.7	2288
11.	Maharashtra *	(Kh.)	789	75	678	616	91	1469	1.4	1160
		(Rabi)	249	50	498	467	94	1839	1.8	457
12.	Odisha	(Aut.)	53	100	2786	2786	100	1968	2.3	104
		(Wint.)	0.2	100	109	109	100	1802	14.7	0.5
		(Sum.)	2	100	292	292	100	2620	2.5	7
13.	Punjab #		115	100	364	364	100	3683	N.A.	6607
14.	Rajasthan #	(Kh.)	867	100	6174	6160	100	1318	1.5	1142
15.	Tamil Nadu	(Ir.)	202	86	256	256	100	7352	2.0	1483
		(UL.)	153	94	176	168	95	6843	1.9	1049
		Comb.	355	89	432	424	98	7133	1.4	2532
16.	Telangana	(Kh.)	454	78	814	814	100	2556	2.3	1161
		(Rabi)	119	59	390	390	100	4978	2.2	590
17.	Uttar Pradesh	(Kh.)	605	97	30244	29456	97	1849	N.A.	1119
		(Rabi)	11	56	70	70	100	2198	N.A.	23
18.	West Bengal		46	100	643	559	87	2690	1.4	123
TOTAL	Kharif	6770	89	60559	57864	96	2447	0.6	22504	
	Rabi/Sum.	1091	70	6018	5451	91	3088	1.5	4445	
	Comb.	7861	87	66577	63315	95	2536	0.6	26949	
5. RAGI (MANDUA)										
1.	Andhra Pradesh	(Kh.)	27	95	190	190	100	955	3.3	25
		(Rabi)	5	59	170	158	93	1876	3.9	9
2.	Bihar #	(Bha.)	7	90	200	80	40	1429	N.A.	10

1	2		3	4	5	6	7	8	9	10
3.	Goa									
4.	Gujarat \$\$\$		(Kh.)	19	96	150	150	100	781	N.A.
5.	Jharkhand			21	N.A.	570	388	68	888	N.A.
6.	Karnataka ***		(Kh.Hyv.Ir.)							
			(Kh.Hyv. Ir. & UL)	643	100	6746	6668	99	1875	1.8
			(Kh.Tra.)	1	29	118	102	86	1403	18.2
			Comb.	644	100	6864	6770	99	1874	1.8
			(Rabi Hyv.Ir.)							
			(Rabi Hyv.UL)	29	100	1250	1046	84	1682	4.0
			Comb.	29	100	1250	1046	84	1682	4.0
			(Sum. Hyv.Ir.)	4	100	250	240	96	1920	7.2
7.	Maharashtra *			94	98	866	841	97	1004	2.1
8.	Odisha		(Aut.)	14	100	1073	1073	100	617	1.5
			(Wint.)	31	100	538	538	100	619	1.8
			(Sum.)	0.3	100	72	72	100	892	6.8
9.	Tamil Nadu		(Ir.)	68	97	160	160	100	2978	3.4
			(UL)	21	95	200	200	100	3621	2.2
			Comb.	89	97	360	360	100	3130	2.5
10.	Telangana			1	89	70	70	100	544	11.0
11.	Uttarakhand			107	100	1104	1055	96	1466	0.99
12.	Dadra & N. Haveli			1	58	78	28	36	1198	1.8
	T O T A L		Kharif	1055	87	12063	11543	96	1591	1.5
			Rabi/Sum.	38	95	1742	1516	87	1726	3.6
			Comb.	1093	87	13805	13059	95	1596	1.5
										1834
6. WHEAT										
1.	Assam			21	97	850	630	74	1167	1.6
2.	Bihar #		(Hyv.Ir.)							
			(Hyv.UL)							
			(Lv.Ir.)							
			(Lv.UL)							
			Comb.	2112	100	10620	10261	97	2244	N.A.
										4736

1	2		3	4	5	6	7	8	9	10
3.	Chhattisgarh	(Ir.)	104	86	606	486	80	1447	2.0	124
		(UL)	19	84	244	206	84	1037	2.3	19
		Comb.	123	86	850	692	81	1384	1.8	143
4.	Gujarat \$\$\$	(Ir.)	841	99	4380	4354	99	2742	N.A.	2305
		(UL.)	17	99	360	278	77	619	N.A.	10
		Comb.	858	99	4740	4632	98	2700	N.A.	2315
5.	Haryana		2576	100	2200	2182	99	4407	0.7	11350
6.	Himachal Pradesh \$\$\$		341	99	1784	1575	88	2033	1.4	624
7.	Jammu & Kashmir \$\$	(Plain)								
		(Hills)								
		Comb.	317	76	1938	1430	74	1004	4	311
8.	Jharkhand	(Hyv.Ir.)								
		(Lv.Ir.)								
		(Lv.UL.)								
		Comb.	71	N.A.	7770	7350	95	1448	N.A.	103
9.	Karnataka ***	(Hyv.Ir.)								
		(Hyv.Ir & UL)	154	54	2704	2620	97	1477	3.1	216
		(Tra.Ir.)								
		(Tra. Ir & UL)	40	46	634	624	98	1082	7.0	41
		Comb.	194	52	3338	3244	97	1396	2.8	257
10.	Madhya Pradesh	(Hyv. Ir.)	4044	100	3150	2824	90	3096	0.7	12520
		(Lv.Ir.)	917	98	1380	1126	82	2698	1.4	2474
		Comb.	4961	100	4530	3950	87	3022	0.7	14994
		(UL.)	447	93	1300	1196	92	1498	1.6	670
		Comb.	5408	99	5830	5146	88	2896	0.6	15664
11.	Maharashtra *	(Ir.)								
		(UL.)								
		(Comb.)	1307	N.A.	8126	7731	95	1757	0.5	2296
12.	Odisha	(Sum.)	0.37	100.00	107	107	100	1347	4.7	0.5
13.	Punjab #		3508	100	2334	2333	100	4583	N.A.	16077
14.	Rajasthan #	(Ir.)								
		(UL.)								
		(Comp.)								
		Comb.	3108	100	17914	17318	97	3367	0.67	10468

1	2	3	4	5	6	7	8	9	10
15.	Uttarakhand		342	100	2968	2961	100	2299	1.1
16.	Uttar Pradesh		9645	100	207280	206015	99	2786	N.A.
17.	West Bengal		340	100	2818	2516	89	2320	0.8
	T O T A L	30271	93	281467	276123	98	3044	0.3	92804

7. BARLEY

1.	Bihar #		11	89	300	260	87	1304	N.A.	14
2.	Chhattisgarh		2	27	36	14	39	630	1.2	1
3.	Haryana		29	29	516	355	69	3414	1.6	99
4.	Himachal Pradesh \$\$\$		19	53	658	528	80	1753	2.6	30
5.	Jharkhand									N.A.
6.	Madhya Pradesh		72	89	536	500	93	1670	2.4	158
7.	Punjab #		9	93	240	236	98	3696	N.A.	33
8.	Rajasthan #		256	97	3100	3078	99	2993	1.1	766
9.	Uttarakhand		19	100	674	647	96	1018	1.9	19
10.	Uttar Pradesh		124	87	846	720	85	2166	N.A.	270
	T O T A L	541	88	6906	6338	92	2479	1.0		1390

8. GRAM (BENGALGRAM)

1.	Andhra Pradesh		471	99	1310	1310	100	1061	1.37	500
2.	Bihar #		59	97	800	732	92	986	N.A.	59
3.	Chhattisgarh		303	94	488	392	80	779	3.3	219
4.	Gujarat \$\$\$		114	92	1324	1114	84	887	N.A.	101
5.	Haryana		42	40	562	512	91	619	N.A.	26
6.	Jharkhand		36	N.A.	720	622	86	880	N.A.	32
7.	Karnataka ***	(Ir.)								
		(UI.)								
		Comb.	779	100	7238	5504	76	741	3.0	549
8.	Madhya Pradesh		2623	99	5330	4306	81	1115	0.8	2924
9.	Maharashtra *		838	92	5524	5449	99	918	9.9	770
10.	Punjab #		2	100	74	74	100	1282	N.A.	2
11.	Rajasthan #	(Ir.)								
		(UI.)								
		(Comp.)								
		Comb.	942	100	8254	6483	79	892	2.1	840

1	2	3	4	5	6	7	8	9	10
12.	Telangana	70	77	406	406	100	721	4.0	50
13.	Uttar Pradesh	268	94	15050	14635	97	611	N.A.	163
14.	West Bengal	31	100	915	797	87	798	3.0	25
T O T A L		6519	98	47995	42336	88	958	1.5	6260

9. REDGRAM (TUR/ ARHAR)

1.	Andhra Pradesh	215	64	818	818	100	598	3.8	129
2.	Bihar #	(Rabi)	24	88	600	552	92	1577	N.A.
3.	Chhattisgarh		64	75	474	342	72	470	3.1
4.	Gujarat #		229	96	1360	1310	96	1228	2.6
5.	Haryana @@@		4	21	360	230	64	1068	N.A.
6.	Jharkhand	(Rabi)	27	N.A.	720	320	44	1183	N.A.
7.	Karnataka ***		720	99	5424	5348	99	702	1.7
8.	Madhya Pradesh		505	87	1650	1274	77	644	2.9
9.	Maharashtra *		1237	95	5758	5628	98	359	0.7
10.	Tamil Nadu		53	94	336	336	100	1008	3.5
11.	Telangana		248	65	492	492	100	420	4.4
12.	Uttar Pradesh		265	78	14336	12901	90	689	N.A.
13.	West Bengal	(Rabi)	3	100	196	160	82	874	12.5
T O T A L		3594	88	32524	29711	91	583	0.9	2104

10. GREENGRAM (MOONG)

1.	Andhra Pradesh	(Kh.)	52	62	330	316	96	353	9.1	18
		(Rabi)	160	59	430	430	100	745	4.3	119
2.	Bihar #	(Bha.)	9	93	200	112	56	702	N.A.	7
		(Gar.)	157	91	500	196	39	548	N.A.	86
3.	Gujarat #		104	94	1032	942	91	505	N.A.	527
4.	Karnataka ***	(Kh.)	255	99	2998	2848	95	195	2.7	47
		(Rabi)	4	100	100	100	100	353	8.4	1
5.	Maharashtra *		366	98	5902	5745	97	188	0.6	69
6.	Odisha	(Aut.)	19	100	601	601	100	243	2.4	5
		(Wint.)	70	100	1110	1110	100	220	1.7	15
		(Sum.)	200	100	2505	2505	100	325	1.1	65
7.	Rajasthan #		1364	100	5542	5278	95	438	2.4	597
8.	Tamil Nadu		238	87	440	404	92	562	2.5	134

1	2		3	4	5	6	7	8	9	10	
9.	Telangana	(Kh.)	99	81	484	474	98	481	5	47	
		(Rabi)	12	21	52	52	100	773	7.6	9	
10.	Uttar Pradesh	(Kh.)	46	79	2368	2258	95	217	N.A.	10	
		(Zaid)	65	84	610	596	98	635	N.A.	41	
		(Sum.)	53	100	616	578	94	682	2.4	36	
T O T A L		Kharif	2622	96	21007	20088	96	383	1.5	1476	
		Rabi/ Sum.	651	85	4813	4457	93	550	2.2	357	
		Comb.	3273	94	25820	24545	95	416	1.3	1833	

11. BLACKGRAM (URD /MATHIKALAI)

1.	Andhra Pradesh	(Kh.)	44	77	388	380	98	702	4.4	31
		(Rabi)	412	64	634	634	100	922	2.1	380
2.	Assam	(Rabi)	52	77	500	472	94	658	4.9	34
3.	Gujarat #	(Kharif)	65	78	972	904	93	598	2	39
4.	Jharkhand		173	N.A.	720	464	64	729	N.A.	31
5.	Karnataka ***	(Kh.)	60	100	1060	1024	97	309	3.4	18
		(Rabi)	5	100	130	128	98	498	10.0	2
6.	Maharashtra * *	(Kh.)	286	73	4766	4614	97	211	0.6	60
7.	Odisha	(Aut.)	20	100	920	920	100	247	1.8	5
		(Wint.)	47	100	2004	2004	100	349	2.1	16
		(Sum.)	8	100	483	483	100	419	4.5	3
8.	Rajasthan #	(Kh.)	299	97	2304	2291	99	384	2.9	115
9.	Tamil Nadu		395	69	424	414	98	700	3.5	276
10.	Telangana	(Kh.)	24	69	114	114	100	464	3.6	11
		(Rabi)	8	11	110	68	62	788	3.7	6
11.	Uttar Pradesh	(Kh.)	570	95	14858	14204	96	291	N.A.	166
		(Zaid)	47	77	700	650	93	577	N.A.	27
12.	West Bengal		63	100	1334	1170	88	690	2.2	44
T O T A L		Kharif	1981	78	28892	27599	96	439	1.7	773
		Rabi/ Sum.	532	76	3529	3339	95	874	1.9	491
		Comb.	2513	78	32421	30938	95	531	1.3	1264

12. LAKH (Khesari)

1.	Bihar #		55	88	340	260	76	934	N.A.	51
2.	Chhattisgarh		276	60	262	190	73	630	3.5	198
3.	Madhya Pradesh		50	68	220	204	93	738	1.2	37
4.	West Bengal	(Sum.)	65	100	506	426	84	897	18.6	59
T O T A L			446	70	1328	1080	81	719	4.4	345

1	2	3	4	5	6	7	8	9	10
13. MASUR									
1.	Bihar #		151	87	900	828	92	932	N.A.
2.	Jharkhand		9	N.A.	720	346	48	701	N.A.
3.	Rajasthan #		74	99	220	220	100	859	4.7
4.	Uttar Pradesh		335	90	17072	16716	98	710	N.A.
5.	West Bengal		95	100	2790	2391	86	666	1.8
TOTAL			664	90	21702	20501	94	771	2.3
14. HORSEGRAM (KULTHI)									
1.	Andhra Pradesh	(Kh.)	35	65	120	120	100	299	5.6
		(Rabi)	23	73	270	264	98	506	4.0
2.	Karnataka ***	(Kh.)	53	96	2480	2340	94	484	2.6
		(Rabi)	111	100	4014	3736	93	505	2.3
3.	Odisha	(Wint.)	33	100	2915	2915	100	284	1.4
		(Sum.)	0.1	100	21	21	100	170	24.2
4.	Tamil Nadu		64	94	320	320	100	585	1.9
5.	Telangana	(Kh.)	1	63	40	40	100	216	8.4
		(Rabi)	2	18	20	20	100	448	8.7
TOTAL			322	92	10200	9776	96	471	1.3
15. PEAS									
1.	Jharkhand		6	N.A.	720	422	59	873	N.A.
2.	Uttar Pradesh		286	77	7162	6988	98	995	N.A.
3.	West Bengal		15	100	281	235	84	753	7.7
TOTAL			307	77	8163	7645	94	981	-
16. MOTH									
1.	Gujarat #		19	80	256	158	62	476	8
2.	Rajasthan #		1088	100	3294	3029	92	274	N.A.
TOTAL			1088	101	3550	3187	90	282	0.2
17. CHOWLA									
1.	Rajasthan #		66	97	526	520	99	462	2.9
18. GUAR									
1.	Gujarat \$\$\$		0.0	0.0	140	140	100	0.0	0.0
2.	Rajasthan #		4787	100	10036	9912	99	465	N.A.
TOTAL			4787	100	10176	10052	99	465	0.0
19. SAWAN (JHANGORA)									
1.	Uttarakhand		52	100	624	580	93	1331	1.1
2.	Uttar Pradesh	(Kh.)	4	96	70	70	100	540	N.A.
		(Zaid)	20	72	20	10	50	1564	N.A.
TOTAL			76	92	714	660	92	1351	1.1
71									

1	2	3	4	5	6	7	8	9	10
20. KORRA.									
1.	Andhra Pradesh		38	77	202	202	100	1048	4.5
2.	Telangana		1	73	20	20	100	797	8.6
	TOTAL		39	77	222	222	100	1042	4.4
21. KODON - KUTKI (KODRA)									
1.	Chhattisgarh		85	89	276	180	65	144	7.3
2.	Madhya Pradesh		188	95	864	790	91	429	3.9
3.	Uttar Pradesh	(Kodon)	5	95	50	50	100	732	N.A.
	T O T A L		278	93	1190	1020	86	347	3.5
22. NAVANE									
1.	Karnataka ***		7	100	724	670	93	356	5.1
23. SAVE									
1.	Karnataka ***		13	100	322	288	89	695	7.8
24. SAMAI									
1.	Tamil Nadu		18	94	100	100	100	1384	2.7
25. VARAGU									
1.	Tamil Nadu		4	75	124	122	98	1654	4.7
26. SUGARCANE									
1.	Andhra Pradesh	(Plt.)	53	88	816	816	100	82000	1.2
		(Rt.)	69	86	786	774	98	74000	1.2
		(Comb.)	122	87	1602	1590	99	77475	0.9
2.	Assam		29	91	700	548	78	35246	0.1
3.	Bihar #	(Ir.)					83	48826	N.A.
		(Ul.)							11915
		(Comb.)	244	93	740	611			
4.	Goa		1	100	120	79	66	50989	N.A.
5.	Haryana		93	66	1070	850	79	75183	N.A.
6.	Jharkhand		1	N.A.	240	170	71	46416	N.A.
7.	Karnataka ***		341	100	950	940	99	98000	6.0
8.	Kerala		1	0.1	47	46	98	10144	N.A.
9.	Maharashtra *		965	93	8742	7784	89	89000	0.4
10.	Odisha		9	100	394	394	100	64400	2.3
									577

1	2	3	4	5	6	7	8	9	10
11.	Punjab #		90	76	706	662	94	73408	N.A.
12.	Rajasthan #		6	97	450	408	91	86511	2.5
13.	Tamil Nadu		252	98	468	468	100	101058	1.1
14.	Telangana	(Plt.)	16	83	266	266	100	70000	2.9
		(Rt.)	19	89	290	290	100	68000	3.1
		(Comb.)	35	86	556	556	100	68914	2.1
15.	Uttar Pradesh		2169	98	9488	9324	98	67032	N.A.
16.	West Bengal	(Rabi)	17	100	374	304	81	77297	2.2
T O T A L			4410	95	26647	24734	93	75617	1.5

27. COCOA

1.	Kerala		14	1	801	801	100	1102	N.A.	15
----	--------	--	----	---	-----	-----	-----	------	------	----

28. CHILLIES

1.	Andhra Pradesh	(Kh.)	132	77	400	400	100	3921	2.4	516
		(Rabi)	24	61	404	404	100	4190	1.9	102
2.	Bihar #	(Rabi)	2	83	250	172	69	1280	4.0	2
3.	Chhattisgarh	(Rabi)	5	7	32	20	63	438	0.9	2
4.	Karnataka ***	(Kh.)	62	100	600	600	100	1140	6.8	70
		(Rabi)	1	100	40	40	100	2425	21.2	2
		(Sum.)	2	100	80	80	100	1726	17.1	3
5.	Madhya Pradesh	(Rabi)	75	44	80	48	60	533	29.6	40
6.	Telangana	(Kh.)	65	72	328	310	95	2803	3.9	183
		(Rabi)	16	67	90	90	100	2733	4.1	45
T O T A L			384	71	2304	2164	94	2514	2.1	965

29. CUMIN

1.	Gujarat \$\$\$	(Rabi)	289	99	1680	1624	97	692	N.A.	200
2.	Rajasthan #	(Rabi)	511	100	4124	3521	85	393	1.4	201
T O T A L			800	100	5804	5145	89	501	1.1	401

30. FENNEL

1.	Gujarat #		29	85	428	404	94	1512	N.A.	45
----	-----------	--	----	----	-----	-----	----	------	------	----

31. ARECANUT

1.	Kerala		99	4	1620	1620	100	1336	2.2	132
2.	Maharashtra *									N.A.
T O T A L			99	4	1620	1620	100	1336	2.2	132

32. PEPPER

1.	Kerala		86	3	1610	1610	100	490	4.0	42
----	--------	--	----	---	------	------	-----	-----	-----	----

33. SAFFRON

1.	Jammu & Kashmir \$\$		3	N.A.	102	96	94	3	N.A.	0.009
----	----------------------	--	---	------	-----	----	----	---	------	-------

34. TURMERIC

1.	Kerala		3	0.1	1548	1548	100	2732	N.A.	7
----	--------	--	---	-----	------	------	-----	------	------	---

1	2	3	4	5	6	7	8	9	10
35. GINGER									
1.	Kerala		5	0.2	1468	1468	100	4421	N.A.
2.	Meghalaya		10	91	618	598	97	6657	0.01
TOTAL			15	60	2086	2066	99	5891	0.01
36. GARLIC									
1.	Gujarat #	Rabi	8	63	334	264	79	5571	2
37. CORIANDER									
1.	Rajasthan #		213	99.5	524	522	100	1068	N.A.
38. LICHI									
1.	Bihar #		9	86	300	154	41	5730	1.9
39. BANANA									
1.	Bihar #		12	96	500	104	21	13530	5.4
2.	Gujarat #		24.0	N.A.	304	272.0	89	72350	N.A.
3.	Kerala		60	2	2413	2413	100	8961	1.0
4.	Madhya Pradesh @		N.A.	N.A.	138	80	58	N.A.	N.A.
TOTAL			96	13	3355	2869	86	25379	0.4
40. MANGO									
1.	Bihar #		71	94	600	230	38	31940	2.0
2.	Kerala		80	3	1620	1620	100	5182	N.A.
TOTAL			151	46	2220	1850	83	17764	3.6
41. GUAVA									
1.	Bihar #		1	86	250	76	30	8630	6.8
42. JACKFRUIT									
1.	Bihar #		6	88	300	132	44	25160	1.9
2.	Kerala		93	4	1619	1619	100	3066	N.A.
TOTAL			99	9	1919	1751	91	4405	1.9
43. CASHEWNUT									
1.	Kerala		43	2	1535	1535	100	574	N.A.
2.	Maharashtra *								
TOTAL			43	100	1535	1535	100	793	-
44. TAPIOCA									
1.	Kerala		69	3	1598	1598	100	38363	1.4
45. PINE APPLE									
1.	Kerala		8	0.3	1580	1580	100	8277	N.A.

1	2	3	4	5	6	7	8	9	10	
46. POTATO										
1.	Assam	(Rabi)	104	92	850	737	87	6685	1.8	
2.	Bihar #	(Agh.)	75	66	250	184	74	11000	N.A.	
		(Rabi)	92	72	300	290	97	11030	3	
3.	Chhattisgarh	(Rabi)	12	27	110	24	22	6714	1.5	
4.	Gujarat \$\$\$	(Rabi)	109	98	396	380	96	25397	N.A.	
5.	Jharkhand	(Agh.)	22	N.A.	720	572	79	6927	N.A.	
		(Rabi)	16	N.A.	720	652	91	7323	N.A.	
6.	Jammu & Kashmir \$\$	(Kh.)	1	N.A.	206	126	61	7305	N.A.	
		(Rabi)	1	N.A.	158	132	84	10280	N.A.	
7.	Karnataka ***	(Kh.)	27	97	190	190	100	5605	11.0	
		(Rabi)	4	160	160	98	61	14477	44.2	
8.	Madhya Pradesh	(Rabi)	82	70	432	346	80	18458	1.1	
9.	Meghalaya	(Sum.)	12	98	338	318	94	11249	N.A.	
10.	Odisha	(Wint.)	6	100	2024	2024	100	10173	2.1	
11.	Uttar Pradesh	(Rabi)	613	92	19716	19146	97	23037	N.A.	
T O T A L			1176	85	26570	25219	95	18460	0.8	
47. ONION										
1.	Bihar #	(Rabi)	16	73	300	284	95	9370	N.A.	
2.	Chhattisgarh	(Rabi)	6	11	48	24	50	6010	1.5	
3.	Gujarat #	(Rabi)	53	63	534	390	73	26931	1	
4.	Jharkhand	(Rabi)	3	N.A.	720	358	50	6391	N.A.	
5.	Karnataka ***	(Kh.)	149	100	730	730	100	5647	5.0	
		(Rabi)	8.0	100	220	210	95	6004	12.3	
		(Sum.)	3	100	70	70	100	4528	16.4	
6.	Madhya Pradesh @	(Rabi)	73	92	642	458	71	18760	2.4	
7.	Uttar Pradesh	(Rabi)	10	32	50	50	100	11765	N.A.	
		(Zaid)	14	42	670	644	96	13578	N.A.	
T O T A L			335	84	3984	3218	81	12575	1.6	
48. BRINJAL										
1.	Bihar #	(Agh.)	18	69	250	192	77	9150	0.36	
		(Rabi)	8	69	250	136	54	8180	7.82	
2.	Jharkhand	(Agh.)	5	N.A.	660	554	84	6534	N.A.	
		(Rabi)	3	N.A.	690	508	74	7251	N.A.	
T O T A L			34	53	1850	1390	75	8370	2.4	

1	2	3	4	5	6	7	8	9	10
49. TOMATO									
1. Bihar #	(Agh.)	8	45	100	70	70	9430	0.52	78
	(Rabi)	6	61	200	154	77	10080	4.39	62
2. Jharkhand	(Agh.)	9	N.A.	690	556	81	7864	N.A.	74
	(Rabi)	5	N.A.	720	394	55	7737	N.A.	37
T O T A L		28	26	1710	1174	69	8764	2.2	251
50. CAULIFLOWER									
1. Bihar #		27	86	300	212	71	11750	N.A.	317
51. PAPAYA (PAPITA)									
1. Madhya Pradesh @		N.A.	N.A.	32	30	94	N.A.	N.A.	N.A.
52. PLANTAIN									
1. Kerala		58	2	1622	1622	100	7136	N.A.	412
53. METHI									
1. Rajasthan #		157	95	888	882	99	1212	N.A.	190
54. GROUNDNUT									
1. Andhra Pradesh	(Kh.)	682	99	2626	2530	96	877	2.0	598
	(Rabi)	93	64	818	808	99	2190	1.7	203
2. Chhattisgarh		27	68	216	162	75	1283	2.06	34
3. Goa	(Kh.)	0.4	100	80	30	38	2041	N.A.	1
	(Rabi)	2	100	100	57	57	2146	N.A.	3
4. Gujarat \$\$\$	(Kh.)	1356	99	2112	2059	97	1428	2.5	1936
	(Sum.)	57	74	1720	1296	75	1665	N.A.	96
5. Karnataka ***	(Kh.Ir.)								
	(Kh.UI.)								
	(Comb.)	473	100	5988	5874	98	679	2.3	305
	(Rab.UI.)								
	(Sum. Ir.)	0	0	0	0	0	0	0.0	0
	(Sum. UI.)	0	0	0	0	0	0	0	0
6. Madhya Pradesh		151	N.A.	3658	3470	95	903	3	130
7. Maharashtra *	(Kh.)	224	91	2938	2744	93	959	1.0	215
	(Sum.)	85	98	1382	1281	93	1361	2.5	116

1	2		3	4	5	6	7	8	9	10
8. Odisha	(Aut.)		17	100	975	975	100	800	2.5	14
		(Wint.)	1	100	148	148	100	1290	10.2	2
		(Sum.)	33	100	1094	1094	100	1242	2.9	41
9. Rajasthan #			517	99	2862	2434	85	2029	1.5	1049
10. Tamil Nadu	(Ir.)		223	100	700	700	100	2175	1.4	485
		(UL)	124	100	460	460	100	3293	2.3	408
		Comb.	347	100	1160	1160	100	2575	1.3	893
11. Telangana	(Kh.)		13	93	508	408	80	1596	3.3	22
		(Rabi)	15	56	464	464	100	1143	3.9	184
12. Uttar Pradesh			97	90	7244	7005	97	675	N.A.	65
13. West Bengal	(Rabi)		62	100	556	495	87	2336	1.8	145
T O T A L	Kharif		3956	98	27811	26321	95	1360	1.3	5363
	Rabi/Sum.		347	83	9792	8965	92	2170	1.1	918
	Comb.		4303	97	37603	35286	94	1425	1.1	6281

55. SESAMUM (GINGELLY)

1. Andhra Pradesh	(Kh.)	28	72	280	274	98	183	4.9	5
	(Rabi)	25	62	310	310	100	363	5.0	9
2. Chhattisgarh		19	46	124	76	61	394	10.3	6
3. Gujarat \$\$\$		152	95	1274	1234	97	384	N.A.	55
4. Karnataka ***		41	100	1910	1774	93	572	3.8	22
5. Kerala		0.01	100	82	82	100	255	N.A.	0.04
6. Madhya Pradesh		370	92	1476	1324	90	411	1.9	152
7. Maharashtra *	(Kh.)	28	77	1040	890	86	106	1.3	3
	(Rabi)	2	22	16	12	75	512	19.4	1
8. Odisha	(Aut.)	3	100	232	232	100	211	4.5	1
	(Wint.)	12	100	801	801	100	185	3.1	2
	(Sum.)	5	100	617	617	100	263	4.0	1
9. Rajasthan #		367	99	4044	4005	99	314	1.9	115
10. Tamil Nadu	(Ir.)	19	100	224	196	88	677	5.8	13
	(UL)	27	100	256	254	99	618	3.4	17
	(Comb.)	46	100	480	450	94	642	3.2	30
11. Telangana	(Kh.)	4	57	80	78	98	37	17.5	0.1
	(Rabi)	10	47	80	80	100	281	5.6	3
12. Uttar Pradesh		546	92	11300	10676	94	303	N.A.	166
13. West Bengal	(Sum.)	225	100	3307	2833	86	932	1.1	210
T O T A L	Kharif	1616	93	23123	21896	95	348	1.2	557
	Rabi/Sum.	267	94	4330	3852	89	839	1.1	224
	(Comb.)	1883	93	27453	25748	94	418	0.9	781

1	2	3	4	5	6	7	8	9	10
56. CASTOR									
1.	Andhra Pradesh		49	83	232	232	100	564	4.5
2.	Gujarat \$\$\$		714	96	2680	2544	95	1980	N.A.
3.	Karnataka ***		8	100	644	642	100	642	4.2
4.	Telangana		47	80	432	270	63	358	9.1
TOTAL			818	94	3988	3688	92	1789	1.1
57. RAPE & MUSTARD									
1.	Assam		286	99	1250	1090	87	698	1.0
2.	Bihar #		90	80	900	830	92	1053	N.A.
3.	Chhattisgarh		43	75	440	332	75	561	2.9
4.	Gujarat \$\$\$		190	95	1080	1017	94	1453	1.1
5.	Haryana ###		482	64	1040	990	95	1434	0.5
6.	Jammu & Kashmir \$\$		59	N.A.	286	266	93	791	N.A.
7.	Jharkhand		37	N.A.	720	584	81	937	N.A.
8.	Madhya Pradesh		600	92	1116	996	89	1178	2.0
9.	Odisha	(Wint.)	7	100	1733	1733	100	205	2.6
10.	Punjab #		31	97	582	577	99	1348	N.A.
11.	Rajasthan #	(Ir.)							
		(Ul.)							
		(Comp.)							
		Comb.	2532	100	13410	12629	94	1287	0.6
12.	Uttar Pradesh		593	94	26276	25411	97	1016	N.A.
13.	West Bengal		458	100	4960	4304	87	458	1.0
TOTAL			5408	94	53793	50759	94	1144	0.5
58. LINSEED (ALSI)									
1.	Chhattisgarh		27	75	336	238	71	377	2.8
2.	Jammu & Kashmir \$\$		0.2	N.A.	24	16	67	642	N.A.
3.	Karnataka ***		4	100	430	400	93	348	5.0
4.	Madhya Pradesh		94	92	920	802	87	553	4.4
5.	Maharashtra *		16	51	222	197	89	236	N.A.
6.	Uttar Pradesh		17	89	120	100	83	191	N.A.
7.	West Bengal		6	100	145	123	85	367	10.4
TOTAL			164	85	2197	1876	85	444	4.0
59. SAFFLOWER									
1.	Karnataka ***		33	100	1730	1542	89	884	3.3
2.	Maharashtra *		57	89	1854	1332	72	225	1.5
TOTAL			90	93	3584	2874	80	467	2.4
40									

1	2	3	4	5	6	7	8	9	10
60. SUNFLOWER									
1.	Andhra Pradesh	(Kh.)	7	76	178	160	90	787	9.3
		(Rabi)	20	65	380	316	83	913	2.8
2.	Haryana	(Rabi)	8	N.A.	230	66	29	1644	N.A.
3.	Karnataka ***	(Kh.Ir.)							
		(Kh.UI.)							
		Comb.	153	100	4462	3903	87	497	2.4
		(Rabi Ir.)							
		(Rabi UI.)							
		Comb.							
		(Sum. Ir.)	16	100	1300	998	77	1039	4.1
4.	Maharashtra *	(Kh.)	18	99	600	492	82	122	1.9
		(Rabi)	28	81	348	248	71	252	2.4
		(Sum.)	1	86	52	47	90	1245	3.0
5.	Tamil Nadu		8	100	300	266	89	1330	4.1
6.	Uttar Pradesh	(Zaid)	2	28	170	24	14	1608	N.A.
7.	Telangana	(Kh.)	1	87	36	36	100	910	6.1
		(Rabi)	11	62	158	126	80	1175	5.0
T O T A L		Kharif	187	99	5576	4857	87	510	2.1
		Rabi/Sum.	86	70	2638	1825	69	843	1.5
		Comb.	273	90	8214	6682	81	615	1.4
61. SOYABEAN									
1.	Andhra Pradesh		1	N.A.	164	74	45	1476	7
2.	Chhattisgarh		120	70	170	154	91	488	4.7
3.	Karnataka ***		239	100	1562	1562	100	772	4.0
4.	Madhya Pradesh		6014	95	2774	2450	88	457	3.9
5.	Maharashtra *		3708	92	4976	4870	98	487	0.6
6.	Rajasthan #		1204	99	2616	2558	98	667	1.8
7.	Telangana		243	58	132	132	100	1037	3.1
8.	Uttar Pradesh		36	84	1056	1050	99	175	N.A.
T O T A L			11565	94	13450	12850	96	507	1.8
62. TARA MEERA									
1.	Rajasthan #		17	97	1072	724	68	433	3.8
63. COCONUT ##									
1.	Kerala		790	30	2430	2430	100	7432	0.8
2.	Maharashtra *								5873
T O T A L			790	30	2430	2430	100	7491	0.8
									5873

1	2	3	4	5	6	7	8	9	10
64. NIGER									
1.	Maharashtra *		12	68	446	357	80	149	2.4
65. COTTON \$ (Lint)									
1.	Andhra Pradesh		663	68	840	832	99	1339	2.4
2.	Gujarat #	(Ir.)	1868	98	3044	3024	99	1470	1
		(UL)	853	99	804	804	100	955	2
		Comb.	2721	98	3848	3828	99	1309	0.9
3.	Haryana		615	45	940	908	97	275	N.A.
4.	Karnataka ***	(Ir.)							
		(UL)							
		Comb.	471	N.A.	1530	1356	89	519	5.4
5.	Madhya Pradesh		557	98	962	819	85	1227	2.1
6.	Maharashtra *	(Ir.)							
		(UL)							
		(Comp.)							
		Comb.	3942	N.A.	8516	8350	98	322	0.4
7.	Punjab #		339	99	702	702	100	197	N.A.
8.	Rajasthan #		448	97	1936	1868	96	1384	1.7
9.	Tamil Nadu	(Ir.)	102	100	564	564	100	504	2.8
		(UL)	46	100	256	228	89	317	3.2
		Comb.	148	100	820	792	97	446	2.3
10.	Telangana		1773	92	1300	1300	100	1063	1.5
11.	Uttar Pradesh		8	55	80	80	100	346	N.A.
T O T A L			11685	56	21474	20835	97	809	0.6
66. JUTE. @@									
1.	Assam		72	94	600	576	96	2161	1.2
2.	Bihar #		94	96	200	112	56	2508	N.A.
3.	Meghalaya		7	90	50	40	80	1846	0.01
4.	Odisha		1	100	173	173	100	2174	8.1
5.	West Bengal		545	100	2929	2538	87	2534	0.9
T O T A L			719	99	3952	3439	87	2486	0.8
9913									

1	2	3	4	5	6	7	8	9	10
67. MESTA. @@									
1.	Andhra Pradesh		7	74	200	200	100	1271	2.0
2.	Bihar #		16	96	200	66	33	6515	N.A.
3.	West Bengal		9	100	298	267	90	2160	8.6
T O T A L		32	92	698	533	76	4143	4.5	440
68. TOBACCO									
1.	Andhra Pradesh	(N)	19	64	296	296	100	3069	3.1
		(V)	77	84	386	380	98	2040	3.0
		(Comb.)	96	80	682	676	99	2244	2.4
2.	Gujarat \$\$\$		0	0	220	200	91	0	0
3.	Karnataka ***		92	100	360	360	100	850	6.4
4.	Maharashtra *		2	100	30	30	100	737	6.6
5.	Telangana	(N)	1	28	26	20	77	4563	3.9
		(V)	4	59	26	26	100	2372	12.1
		(Comb.)	5	53	52	46	88	2810	8.9
6.	Uttar Pradesh	(Rabi)	26	90	100	60	60	4466	N.A.
		(Zaid)	20	41	20	10	50	942	N.A.
		Comb.	46	69	120	70	58	2934	-
T O T A L		241	85	1464	1382	94	1843	9.1	495
69. ISABGOL									
1.	Gujarat #		10	94	220	200	91	591	N.A.
2.	Rajasthan #		304	98	2300	2067	90	474	3.9
T O T A L		304	102	2520	2267	90	493	3.8	150
70. AVARE (SEM)									
1.	Karnataka ***		24	98	530	528	100	941	6.3
71. COWPEA (LOBIA)									
1.	Karnataka ***		68	99	790	750	95	556	2.6
Note :-									
1.	@@	All primary data have been supplied by concerned SASA.							
2.	**	Estimated average yield is in number of Jackfruits/hec. and production in million numbers for Kerala State.							
3.	##	Estimated average yield is in number of coconuts/hec. and production in million nuts.							
4.	\$	Production of cotton in `000' bales of 170 Kgs. each.							
5.	*	Coverage % & Sampling Error repeated for the crops of Rice Kh, Ragi, Redgram, Greengram, Blackgram, Groundnut (Kh & Rabi), Sesamum (Kh & Rabi), Linseed, Safflower, Sunflower (Kh, Rabi & Sum), Soyabean, Niger & Tobacco and Area, Coverage, Yield, Sampling Error, & Production repeated for crops Rice Sum., Jowar (Kh. & Rabi), Bajra Kh., Wheat, Gram Sugarcane and Cotton for the year 2011-12.							
6.	@@	Production of Jute and Mesta in `000' bales of 180 Kgs. each.							
7.	***	Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.							
8.	\$\$	Data repeated for year 2011-12 Linseed, Potato, R&M and Saffron, all other crops repeated for the year 2014-15.							
9.	#	coverage percentage repeated for the year 2013-14 .							
10.		N.A. = Not Available							
11.	@	Figure repeated for the year 2013-14 in respect for corp Banana, Onion and Papaya for Madhya Pradesh.							
12.	\$\$\$	Coverage Percentage repeated for the year 2014-15.							
13.	@@@	Production repeated for the year 2015-16.							
14.	###	Data repeated for the year 2014-15.							

APPENDIX-IV: PROCEDURE FOR DRIAGE EXPERIMENTS UNDER CES 2015-16

Sl No.	State	Crops	Contents of produce for weighment		Sub-sampling not done/done at the level of village/field/both	Sampling produce to be dried part (Weight or whole)	Duration of driage (Codes)	Level of Application Stratum/District/ State
			First	Final				
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	Paddy (Kh.& Rabi)	Wet Paddy	Dry paddy	Village	1 Kg.	C.W.	State
		Jowar (Kh.& Rabi)	Cobs	Dry Grains	Village	2 Kgs.	C.W.	State
		Bajra,	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Maize (Kh.& Rabi)	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Ragi (Kh.& Rabi)	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Korra	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Chillies (Kh.& Rabi)	Wet Chillies	Dry Grains	Village	500 gms.	C.W.	State
		Castor	Wet Capsules	Dry Capsules	Village	500 gms. Each picking	C.W.	State
		Groundnut (Kh.&Rabi)	Green Pods	Dry Pods	Village	2 Kgs.	C.W.	State
		Sunflower (Kh. & Rabi)	Green seed	Dry Seed	Village	500 gms.	C.W.	State
2	Assam	Mesta	WetPlants	Dry Fibre	Village	25 Kgs.	C.W.	State
		Paddy. (Aut.Wint. & Sum)	Wet Paddy	Dry paddy	Village	1 Kg.	C.W.	Stratum
		Wheat	Wet Grain	Dry Grain	Village	1 Kg.	C.W.	Stratum
		Blackgram	Wet Grain	Dry Grain	Village	1 Kg.	C.W.	Stratum
		Rape & Mustard	Wet Grain	Dry Grain	Village	1 Kg.	C.W.	Stratum
		Jute	Wet Plants	Dry Fibre	Village	Whole	Weight Dry Fibre	Stratum
		Paddy(Bha.Agh.&Gar.)	Wet Paddy	Dry paddy	Village	Whole	15 days	District
		Maize(Bha.Rabi.,&Gar.)	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Ragi	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Wheat	Wet Grain	Dry Grain	Village	Whole	31 days	District
3	Bihar	Barley	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Gram	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Redgram	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Greengram (Bha & Gar.)	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Lakh	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Masur	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Rape & Mustard	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Chillies	Wet Chillies	Dry chillies	Both	Whole	15 days	District
		jute	Wet Plants	Dry Fibre	Village	Whole	17 days	District
		Mesta	Wet Plants	Dry Fibre	Village	Whole	17 days	District
4	Chhattisgarh	Paddy	Wet Paddy	Dry Paddy	Village	Whole	15 days	District
		Jowar	Cobs	Dry grain	Village	Whole	15 days	District
		Maize	Cobs	Dry grain	Village	Whole	15 days	District
		Wheat	Cobs	Dry grain	Village	Whole	15 days	District
		Barley	Cobs	Dry grain	Village	Whole	15 days	District
		Gram	Cobs	Dry grain	Village	Whole	15 days	District
5	Goa	Kodan Kutki	Wet grain	Dry grain	Village	Whole	15 days	District
		Groundnut	Wet Pods	Dry pods	village	whole	15 days	District
6	Gujrat	Paddy (Kh. & Rabi)	Wet Paddy	Dry paddy	Village	5 Kgs.	10 to 15 days	Stratum
		Paddy (Kh.& Sum.)	Wet paddy	Dry paddy	Not done	1 Kg.	part	Stratum
		Jowar (Kh.& Rabi)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Bajra (Kh. & Sum.)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Maize	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum

1	2	3	4	5	6	7	8	9
7	Haryana	Ragi	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Wheat	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Gram	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Groundnut(Kh.& Sum.)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Paddy	Wet paddy	Dry paddyy	Not done	Whole	15 days	State
		Bajra	Cobs	Dry grain	Not done	Whole	22 days	State
		Maize	Cobs with sheath	Dry grain	Not done	Whole	22 days	State
		Wheat	Wet grain	Dry grain	Not done	Whole	15 days	State
		Barley	Wet grain	Dry grain	Not done	Whole	15 days	State
		Gram	Wet grain	Dry grain	Not done	Whole	15 days	State
8	Himachal Pradesh	Rape & Mustard	Wet grain	Dry grain	Not done	Whole	15 days	State
		Paddy	Wet paddy	Dry paddyy	Village	Whole	15 days	State
		Maize	Cobs	Dry grain	Village	Whole	31 days	State
		Wheat	Wet grain	Dry grain	Village	Whole	15 days	State
		Barley	Wet grain	Dry grain	Village	Whole	15 days	State
9	Jammu & Kashmir	Paddy	Wet paddy	Dry paddyy	Village	2 Kgs.	15 days	District
		Maize	Wet cobs	Dry cobs	Village	2 Kgs.	25 days	District
		Wheat	Wet grain	Dry grain	Village	2 Kgs.	15 days	District
		Saffron	Wet bristles	Dry bristles	Field	Whole	10 days	District
		Rape & Mustard	Wet grain	Dry grain	Village	1 Kg.	15 days	District
		Linseed	Wet grain	Dry grain	village	1 Kg.	15 days	District
		Paddy (Agh.)	Wet paddy	Dry paddyy	Village	Whole	15 days	District
10	Jharkhand	Wheat	Wet grain	Dry grain	Village	Whole	31 days	District
		Barley	Wet grain	Dry grain	Village	Whole	31 days	District
		Gram	Wet grain	Dry grain	Village	Whole	31 days	District
		Redgram	Wet grain	Dry grain	Village	Whole	31 days	District
		Masur	Wet grain	Dry grain	Village	Whole	15 days	District
11	Karnataka	Rape & Mustard	Wet grain	Dry grain	Village	Whole	15 days	District
		Paddy (Kh.Rabi.&Sum.)	Wet paddy	Dry paddyy	Expts.	1 Kg.	C.W.	District
		Jowar (Kh.Rabi.&Sum.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Bajra (Kh.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Maize(Kh.Rabi.&Sum.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Ragi (Kh.Rabi.&Sum.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Navane	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Wheat	Wet grain	Dry grain	Expts.	1 Kg.	C.W.	District
		Gram	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Redgram	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Greengram (Kh.& Rabi)	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Blackgram (Kh. &Rabi)	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Horsegram (Kh. &Rabi)	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Soyabean	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Sesamum	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Save	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Groundnut (Kh. &Sum.)	Wet pods	Dry grain	Expts.	1 Kg.	C.W.	District
		Castor	Capsules	Dry seeds	Expts.	1 Kg.	C.W.	District

1	2	3	4	5	6	7	8	9
		Linseed	Plants	Dry seeds	Expts.	1 Kg.	C.W.	District
		Safflower	Plants	Dry seeds	Expts.	1 Kg.	C.W.	District
		Sunflower(Kh. Rabi & Sum.)	Flower	Grain	Expts.	1 Kg.	C.W.	District
		Tobacco	Green leaves	Cured leaves	Expts.	1 Kg.	C.W.	District
12	Kerala	Paddy (Aut. Wint. & Sum)	Wet paddy	Dry paddy	Both	250 grms.	C.W.	District
13	Madhya Pradesh	Paddy	Wet paddy	Dry paddy	village	Whole	15 days	District
		Jowar	Cobs	Dry grain	village	Whole	15 days	District
		Bajra	Cobs	Dry grain	village	Whole	15 days	District
		Maize	Cobs	Dry grain	village	Whole	15 days	District
		Wheat	Cobs	Dry grain	village	Whole	15 days	District
		Barley	Cobs	Dry grain	village	Whole	15 days	District
		Gram	Cobs	Dry grain	village	Whole	15 days	District
		Kodan Kutki	Wet grain	Dry grain	village	Whole	15 days	District
		Groundnut	Wet pods	Dry pods	village	Whole	15 days	District
		Paddy (Kh. & Rabi)	Wet Paddy	Dry Paddy	village	5 Kgs.	15 days	District
		Jowar (Kh. & Rabi)	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Bajra	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Maize (Kh. & Rabi)	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
14	Maharashtra	Ragi	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Wheat	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Gram	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Groundnut	Wet Pods	Wet Pods	village	5 Kgs.	15 days	District
		Arecanut	Asoli	Rotha	village	5 Kgs.	21-28 days	District
		Cashewnut	Wet Nut	Dry Nut	village	5 Kgs.	C.W.	District
15	Meghalaya	Paddy (Aut. & Wint.)	Wet Paddy	Dry Paddy	Both	Whole	7-10 days	District
		Jute	Wet Plants	Dry Nut	Both	Whole	20-28 days	District
		Paddy (Aut. Wint. & Sum)	Wet Paddy	Dry Paddy	Both	1 Kgs.	C.W.	District
		Maize (Aut. Wint. & Sum)	Cobs	Dry grain	Both	1 Kgs.	C.W.	State
		Ragi (Aut. Wint. & Sum)	Pods	Dry grain	Both	1 Kgs.	C.W.	State
		Wheat (Sum.)	Wet grain	Dry grain	Both	1 Kgs.	C.W.	State
		Greengram (Aut. Wint. & Sum)	Wet grain	Dry grain	Both	250 gms.	C.W.	State
16	Odisha	Blackgram (Aut. Wint. & Sum)	Wet grain	Dry grain	Both	250 gms.	C.W.	State
		Horsegram Wint. & Sum)	Wet grain	Dry grain	Both	250 gms.	C.W.	State
		Groundnut (Aut., Wint & Sum.)	Wet Pods	Kernal	Both	250 gms.	C.W.	State
		Sesamum (Aut., Wint & Sum.)	Wet Pods	Dry grain	Both	250 gms.	C.W.	State
		Rape & Mustard (Wint.)	Wet Pods	Dry grain	Both	250 gms.	C.W.	State
		Jute	Wet Plants	Dry Fibre	Both	1 kgs.	C.W.	State
17	Punjab	Paddy	Wet Paddy	Dry Paddy	Village	Whole	15 Days	State
		Maize	Cobs with Sheath	Dry grain	Not Done	5 kgs.	20 Days	State
		Wheat	Wet grain	Dry grain	Village	Whole	15 Days	State
		Barley	Wet grain	Dry grain	Village	Whole	15 Days	State
		Gram	Wet grain	Dry grain	Village	Whole	15 Days	State
		Rape & Mustard	Wet grain	Dry grain	Village	Whole	15 Days	State
18	Rajasthan	Cotton	Wet Kapas	Dry grain	Village	Whole II Picking	15 Days	State
		Paddy	Wet Paddy	Dry paddy	Not done	Whole	15 days	District
		Jowar	Cobs	Dry grain	Village	Whole	22 days	District
		Bajra	Cobs	Dry grain	Village	Whole	22 days	District
		Maize (Kh. & Rabi)	Cobs	Dry grain	Village	Whole	22 days	District

1	2	3	4	5	6	7	8	9
		Wheat	Wet grain	Dry grain	Village	Whole	15 days	District
		Barley	Wet grain	Dry grain	Village	Whole	15 days	District
		Gram	Wet grain	Dry grain	Village	Whole	15 days	District
		Chowla						District
		Greengram						District
		Blackgram			N.A.			District
		Moth						District
		Cumin						District
		Soyabean	Wet grain	Dry paddy	Village	Whole	15 days	District
		Groundnut	Wet Pods	Dry grain	Not done	Whole	15 days	District
		Sesamum	Wet grain	Dry grain	Not done	Whole	15 days	District
		Rape & Mustard	Wet grain	Dry grain	Not done	Whole	15 days	District
		Linseed	Wet grain	Dry grain	Not done	Whole	15 days	District
		Tarameera	Wet grain	Dry grain	Not done	Whole	N.A.	District
19	Tamil Nadu	Paddy (K/K/S., S/T/P,& N/K)	Wet Paddy	Dry paddy	Village	2 kgs.	C.W.	Block
		Bajra	Wet cobs	Dry Cobs	Village	2 kgs.	C.W.	Block
		Jowar	Wet cobs	Dry Cobs	Village	2 kgs.	C.W.	Block
		Ragi	Wet cobs	Dry Cobs	Village	2 kgs.	C.W.	Block
		Turmeric	Wet Turmeric	Dry Turmeric	Not Done	1 Kgs.	C.W.	Taluka
		Chillies	Wet Chillies	Dry Chillies	Not Done	1 Kgs.	3 to 4 days	Taluka
		Coriander	Wet Corinder	Dry Corinder	Not Done	1 Kgs.	C.W.	Taluka
		Varagu	Wet grain	Dry grain	Village	2 kgs.	C.W.	Block
		Samai	Wet grain	Dry grain	Village	2 kgs.	C.W.	Block
		Groundnut	Wet pods	Dry pods	Village	2 kgs.	C.W.	Block
		Paddy (Kh. & Rabi)	Wet Paddy	Dry Paddy	Village	1 Kgs.	C.W.	State
		Paddy (Kh. & Rabi)	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Bajra	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Maize (Kh. & Rabi)	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Ragi (kh. & Rabi)	Cobs	Dry grain	Village	2 kgs.	C.W.	State
20	Telangana	Korra	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Chillies (kh. & Rabi)	Wet Chillies	Dry grain	Village	500 gms.	C.W.	State
		Castor	Wet Capsules	Dry Capsules	Village	500 gms.	C.W.	State
		Groundnut (kh. & Rabi)	Green Pods	Dry Pods	Village	2 kgs.	C.W.	State
		Sunflower (kh. & Rabi)	Green Seed	Dry Seed	Village	500 gms.	C.W.	State
		Mesta	Wet Plants	Dry Fibre	Village	25 kgs.	C.W.	State
		Paddy	Wet Paddy	Dry Paddy	Village	5 Kgs.	15 days	District
		Jowar	Cobs	Dry grain	Village	10 kgs.	15 days	District
		Bajra	Cobs	Dry grain	Village	10 kgs.	15 days	District
		Maize	Cobs	Dry grain	Village	10 kgs.	15 days	District
		Ragi	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
21	Uttar Pradesh	Wheat (Pln.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Barley (Pln.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Gram	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Greengram(kh. & Zaid.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Blackgram(kh. & Zaid.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Masur	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Soyabean	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Peas	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Sawan/ Jhangora (Pln)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District

1	2	3	4	5	6	7	8	9
		Kodan	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Kutki	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Tur	Pods	Dry grain	Village	5 Kgs.	15 days	District
		Groundnut	Pods	Dry pods	Village	5 Kgs.	15 days	District
		Sesamum	Pods	Dry pods	Village	10 kgs.	15 days	District
		Rape & Mustard	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Linseed	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Sunflower	N.A.	N.A.	N.A.	N.A.	N.A.	District
		Cotton (Desi/American)	Wet Cotton	Dry Cotton	Expts.	Whole	Same day	District
		Tobacco	Wet leaf & Stalk	Dry leaf & Stalk	village	10 kgs.	20 days	District
		Paddy	Wet Paddy	Dry Paddy	village	5 Kgs.	15 days	District
22	Uttarakhand	Wheat (Pln.)	Wet grain	Dry grain	village	5 Kgs.	15 days	District
		Barley (Pln.)	Wet grain	Dry grain	village	5 Kgs.	15 days	District
		Paddy (Aus. Aman & Sum.)	Wet Paddy	Dry Paddy	Expts.	500 gms.	12 days	Block
		Wheat	Ear heads	Dry grain	Expts.	500 gms.	12 days	Block
		Barley	Ear heads	Dry grain	Expts.	500 gms.	12 days	Block
		Maize	Ears without cover	Dry Corns	Expts.	500 gms.	12 days	Block
		Gram	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Redgram	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Blackgram	Pods	Seeds	Expts.	500 gms.	12 days	Block
23	West Bengal	Lakh	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Masur	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Peas	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Rape & Mustard	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Linseed	Seed buds	Seeds	Expts.	500 gms.	12 days	Block
		Sesamum	Seed buds	Seeds	Expts.	500 gms.	12 days	Block
		Jute	Plants	Dry Fibre	Expts.	20 kgs.	12 days	Block
		Mesta	Plants	Dry Fibre	Expts.	20 kgs.	12 days	Block
24	Dadar & Nagar Haveli	Paddy	Wet Paddy	Dry Paddy	Expts.	1 kg / Sample	3 days	Stratum
		Ragi	Wet grain	Dry grain	Expts.	1 kg / Sample	3 days	Stratum
25	Daman & Diu	Paddy	Wet Paddy	Dry Paddy	Village	5 kgs.	C.W-3	Taluka
		Bajra	Wet Cobs	Dry Cobs	Expts.	5 kgs.	C.W-3	Taluka
26	Puducherry	Paddy (I, II, III)	Wet Paddy	Dry Paddy	Not Done	Part	6 to 9 days	Regional Level.

Note : 1. C.W. = Constant Weight for unspecified consecutive weightment.

2. C.W. - 3 = Constant Weight for 3 consecutive weightment.

**ANNEX-VII : ESTIMATES OF YIELD RATES FROM IRRIGATED AND UN-IRRIGATED
PLOTS UNDER CES DURING 2015-16**

Sl. No.	S T A T E	Season	IRRIGATED PLOTS			UN - IRRIGATED PLOTS		
			No. of Expts. Analysed	Yield Rate Kg/ha.	Area '000' ha.	No. of Expts. Analysed	Yield Rate Kg/ha.	Area '000' ha.
1	2	3	4	5	6	7	8	9
1. RICE								
1.	Andhra Pradesh	Kh.	4044	4411	1325	228	2553	73
		Rabi	2736	6513	762	-	-	-
2.	Assam	Aut.	227	1773	N.A.	1121	1314	N.A.
		Wint.	59	2097	N.A.	2873	2024	N.A.
		Sum.	1086	2955	N.A.	230	2024	N.A.
3.	Bihar @@	Bha.	146	1974	213	302	2312	336
		Agh.	6844	3854	1840	3342	2075	762
		Gar.	284	3513	93	-	-	-
4.	Chhattisgarh		440	1930	963	802	961	2260
5.	Goa	Kh.	188	2687	14	0	0	0
		Rabi			N.A.			
6.	Gujarat	Kh.			N.A.			
		Sum.						
7.	Haryana \$\$\$		974	3124	1277	-	-	-
8.	Himachal Pradesh		358	2064	N.A.	355	1657	N.A.
9.	Jammu & Kashmir				N.A.			
10.	Jharkhand				N.A.			
11.	Karnataka ***	Kh.	6166	5159	659	2856	2619	322
		Rabi	540	2576	38	-	-	-
		Sum.	2256	3732	262	-	-	-
12.	Kerala	Aut.	755	2985	20	1601	2509	41
		Wint.	2554	2805	84	613	1653	5.4
		Sum.	1508	3058	47	10	2024	0.03
13.	Madhya Pradesh		1078	2050	697	1238	608	1238
14.	Maharashtra *	Kh.	1127	1607	332	3424	1767	1154
		Sum.	454	2228	29	-	-	-
15.	Meghalaya	Aut.	262	2333	33	-	-	-
		Wint.	750	1472	64	-	-	-
16.	Odisha	Aut.	468	1718	24	6238	674	517
		Wint.	3646	2208	1071	7042	1084	2095
		Sum.	3781	3109	233	-	-	-
17.	Punjab		1974	3978	2969	4	1985	6

1	2	3	4	5	6	7	8	9	
18.	Rajasthan			N.A.					
19.	Tamil Nadu	K/K/S	414	4507	-	6	4354	-	
		S/T/P	1127	3624	-	133	2656	-	
		N/K	300	4109	-	0	0	-	
20.	Telangana	Kh.	2348	2959	718	152	2173	30	
		Rabi	2430	2805	297	0	0	0	
21.	Uttarakhand		2120	3704	174	810	1843	76	
22.	Uttar Pradesh			N.A.					
23.	West Bengal	Aus.	1749	2464	N.A.	605	1771	N.A.	
		Aman.	5657	2820	N.A.	3968	1927	N.A.	
		Sum.	9276	3240	N.A.	15	2164	N.A.	
24.	Dadra & Nagar Haveli		-	-	-	70	2372	13	
25.	Daman & Diu		-	-	-	20	1609	1.22	
26.	Puducherry	I	90	3348	4	-	-	-	
		II	140	2355	8	-	-	-	
		III	70	3240	4	-	-	-	
T O T A L		70426	3444	-	38058	1567	-		
2. JOWAR									
1.	Andhra Pradesh	Kh.	0	0	2	172	971	43	
		Rabi	0	0	43	478	1594	87	
2.	Chhattisgarh		-	-	-	38	805	5	
3.	Gujarat	Kh.							
		Rabi			N.A.				
4.	Karnataka ***	Kh.	980	2077	24	2268	1294	127	
		Rabi	1340	1575	71	3568	1026	852	
		Sum.	20	1903	0.1	-	-	-	
5.	Madhya Pradesh		-	-	-	1378	1491	N.A.	
6.	Maharashtra *	Kh.	-	-	-	4551	1082	1062	
		Rabi	2873	1148	457	5563	605	2570	
7.	Rajasthan		178	616	2.6	5478	596	628	
8.	Tamil Nadu		436	1293	-	630	1625	-	
9.	Telangana	Kh.	0	0	0.0002	588	1040	45	
		Rabi	0	0	10	532	807	21	
10.	Uttar Pradesh			N.A.					
T O T A L		5827	1400	-	25244	914	-		

1	2	3	4	5	6	7	8	9
3. BAJRA								
1.	Andhra Pradesh	Kh.	75	2639	5	456	4225	32
2.	Gujarat	Kh.			N.A.			
		Sum.			N.A.			
3.	Haryana \$\$\$		1456	1738	393	-	-	-
4.	Karnataka ***	Kh.	720	1181	245	2164	995	205
5.	Madhya Pradesh		-	-	-	302	1444	N.A.
6.	Maharashtra *		542	1394	35		1075	998
7.	Rajasthan		831	1136	187	8919	769	3858
8.	Tamil Nadu		240	2775	-	194	2550	-
9	Telangana		0	0	10	532	807	21
10	Uttar Pradesh				N.A.			
11	Daman & Diu		0	0	0	8	1368	0.67
T O T A L		3864	1487	-	12575	826	-	
4. MAIZE								
1.	Andhra Pradesh	Kh.	0	0	0	145	3351	53
		Rabi	0	0	0	514	7299	156
2.	Bihar	Bha.	762	2559	271	-	-	-
		Rabi	-	-	-	466	4421	250
		Gar.	164	3903	184	-	-	-
3.	Chhattisgarh		-	-	-	401	1881	86
4.	Gujarat				N.A.			
5.	Haryana \$\$\$		76	2000	9	-	-	-
6.	Himachal Pradesh		73	2964	N.A.	1354	2714	N.A.
7.	Jammu & Kashmir				N.A.			
8.	Jharkhand				N.A.			
9.	Karnataka ***	Kh.	3656	4388	330	6064	2758	835
		Rabi	2102	3834	86	458	2603	12
		Sum.	528	3607	19		N.A.	
10.	Madhya Pradesh		21	2710	N.A.	1747	1772	N.A.
11.	Maharashtra *	Kh.	-	-	-	773	3024	731
		Rabi	-	-	-	378	2630	138
12.	Odisha	Aut.	7	1452	0.1	2779	1969	53
		Wint.	34	2762	0.10	75	1109	0.2
		Sum.	292	2620	2	-	-	-

1	2	3	4	5	6	7	8	9
13.	Punjab		323	3764	102.00	41	2363	13
14.	Rajasthan	Kh.	1661	1595	30	4499	1062	836
15.	Tamil Nadu		256	7437	-	168	7226	-
16.	Telangana	Kh.	191	4691	63	623	2358	391
		Rabi	356	4917	118	34	2977	0.5
17.	Uttar Pradesh				N.A.			
18.	West Bengal		188	3670	N.A.	371	2298	N.A.
T O T A L			10690	3464	-	20890	2206	-
5. RAGI								
1.	Andhra Pradesh	Kh.	26	1928	2	164	905	25
		Rabi	0	0	0	158	1810	4
2.	Bihar		-	-	-	80	1429	7
3.	Goa		-	-	-	10	696	0.015
4.	Gujarat				N.A.			
5.	Jharkhand				N.A.			
6.	Karnataka ***	Kh.	1310	2422	18	5460	1725	626
		Rabi	350	2200	6	696	1536	23
		Sum.	240	1920	4		N.A.	
7.	Maharashtra *		-	-	-	906	979	120
8.	Odisha	Aut.	-	-	-	1073	617	14
		Wint.	5	1452	0.04	533	618	33
		Sum.	72	892	0.3	-	-	-
9.	Uttarakhand		10	2175	0.1	1045	1459	107
10.	Tamil Nadu		160	2787	-	200	3677	-
11.	Telangana		0	0	0	70	589	0.7
12.	Dadra & Nagar Haveli		-	-	-	28	1198	1
T O T A L			2173	2298	-	10423	1425	-
6. WHEAT								
1.	Assam		136	1401	N.A.	494	1248	N.A.
2.	Bihar		9680	2242	2021	581	1510	90
3.	Chhattisgarh		486	1438	76	206	1037	16
4.	Gujarat				N.A.			
5.	Haryana \$\$\$		1917	3979	2628	-	-	-
6.	Himachal Pradesh		173	2561	N.A.	1399	1842	N.A.
7.	Jammu & Kashmir				N.A.			
8.	Jharkhand				N.A.			

1	2	3	4	5	6	7	8	9
9.	Karnataka ***		1940	1654	119	1304	949	74
10.	Madhya Pradesh		3950	3024	4944	1196	1498	447
11.	Maharashtra *		7017	1824	1213	1191	890	94
12.	Odisha	Sum.	107	1347	0.3	-	-	-
13.	Punjab		2319	4591	3487	14	1874	21
14.	Rajasthan		16981	3208	3099	337	2257	10
15.	Uttarakhand		1936	2991	204	1025	991	137
16.	Uttar Pradesh				N.A.			
17.	West Bengal		2482	2308	N.A.	34	1347	N.A.
TOTAL		49124	2315	-	7781	1198	-	

7. BARLEY

1.	Bihar @@		-	-	-	248	1398	14
2.	Chhattisgarh		-	-	-	14	630	2
3.	Haryana \$\$\$		358	3143	35	-	-	-
4.	Himachal Pradesh		53	1741	N.A.	475	1685	N.A.
5.	Jharkhand				N.A.			
6.	Madhya Pradesh		-	-	-	500	1670	N.A.
7.	Punjab		236	3576	9	-	-	-
8.	Rajasthan		3050	2793	254	28	2331	3
9.	Uttarakhand		50	1349	0.34	597	990	19
10.	Uttar Pradesh				N.A.			
TOTAL		3590	3014	-	1078	1572	-	

8. GRAM (BENGALGRAM)

1.	Andhra Pradesh		0	0	0	1310	1088	471
2.	Bihar		-	-	-	732	986	59
3.	Chhattisgarh		-	-	-	392	779	284
4.	Gujarat				N.A.			
5.	Haryana \$\$\$		251	728	32	266	290	50
6.	Jharkhand				N.A.			
7.	Karnataka ***		1060	728	112	4444	744	667
8.	Madhya Pradesh		2104	1260	N.A.	2202	1013	N.A.
9.	Maharashtra *		1868	952	480	3356	874	358

1	2	3	4	5	6	7	8	9
10.	Punjab		74	1352	1.7	-	-	-
11.	Rajasthan		3621	1012	412	2862	661	279
12.	Telangana		26	1288	9.12	380	674	60.5
13.	Uttar Pradesh				N.A.			
14.	West Bengal		92	1167	N.A.	705	762	N.A.
T O T A L		9096	618	-	16649	618	-	
9. REDGRAM (TUR/ ARHAR)								
1.	Andhra Pradesh		0	0	1	818	587	214
2.	Bihar		-	-	-	552	1577	24
3.	Chhattisgarh		-	-	-	342	470	64
4.	Gujarat				N.A.			
5.	Haryana \$\$\$		248	991	5	-	-	-
6.	Jharkhand				N.A.			
7.	Karnataka ***			N.A		5348	702	717
8.	Madhya Pradesh		280	841	N.A.	994	572	N.A.
9.	Maharashtra *		-	-	-	906	979	120
10.	Tamil Nadu		330	980	-	-	-	-
11.	Telangana		0	0	1.3	492	445	246
12.	Uttar Pradesh				N.A.			
13.	West Bengal		-	-	-	159	811	N.A.
T O T A L		858	663	-	9611	736	-	
10. GREENGRAM (MOONG)								
1.	Andhra Pradesh	Kh.	0	0	1	316	320	45
		Rabi	0	0	0	430	747	155
2.	Bihar	Bha.	-	-	-	112	702	9
		Gar.	-	-	-	196	548	157
3.	Gujarat	Kh.			N.A.			
4.	Karnataka ***	Kh.		N.A		2848	195	255
		Rabi		N.A		100	353	4
5.	Maharashtra *		-	-	-	6018	672	554
6.	Odisha	Aut.	-	-	-	601	243	19
		Wint.	23	227	0.1	1087	221	70
		Sum.	853	417	16	1652	317	184

ANNEX -VII (Contd..)

1	2	3	4	5	6	7	8	9
7.	Rajasthan				N.A.			
8.	Tamil Nadu		132	712	-	272	492	-
9.	Telangana	Kh.	0	0	0.04	474	435	99
		Rabi	0	0	0.8	52	779	4.27
10.	Uttar Pradesh	Kh.			N.A.			
		Zaid			N.A.			
11.	West Bengal		167	1041	N.A.	411	680	N.A.
T O T A L		1175	535	-	14569	460	-	
11. BLACKGRAM (URD/MATHIKALAI)								
1.	Andhra Pradesh	Kh.	0	0	3	380	715	44
		Rabi	0	0	0	634	939	411
2.	Assam		-	-	-	472	678	N.A.
3.	Gujarat	Rabi						
4.	Karnataka ***	Kh.		N.A.		1024	309	60
		Rabi		N.A.		128	498	5
5.	Maharashtra *		-	-	-	4788	682	482
6.	Odisha	Aut.	-	-	-	920	247	20
		Wint.	11	508	0.1	1993	348	46
		Sum.	225	509	2	258	399	6
7.	Rajasthan @		5	902	1	1177	458	252
8.	Tamil Nadu		112	750	-	302	654	-
9.	Telangana	Kh.	0	0	0	114	464	23
		Rabi	0	0	1.04	68	938	1.5
10.	Uttar Pradesh	Kh.			N.A.			
		Zaid			N.A.			
11.	West Bengal		26	556	N.A.	1144	693	N.A.
T O T A L		379	550	-	13402	560	-	
12. LAKH (KHE SARI)								
1.	Bihar		-	-	-	260	934	55
2.	Chhattisgarh		-	-	-	190	630	276
3.	Madhya Pradesh		-	-	-	204	760	N.A.
4.	West Bengal		31	645	N.A.	395	763	N.A.
T O T A L		31	645	-	1049	549	-	

1	2	3	4	5	6	7	8	9	
13. MASUR									
1.	Bihar		-	-	-	828	932	151	
2.	Rajasthan				N.A.				
3.	Uttar Pradesh				N.A.				
4.	West Bengal		502	725	N.A.	1889	656	N.A.	
T O T A L		502	725	-	2717	740	-		
14. HORSEGRAM (KULTHI)									
1.	Andhra Pradesh	Kh.	-	-	-	120	310	35	
		Rabi	-	-	-	246	543	21	
2.	Karnataka ***	Kh.		N.A		2340	484	53	
		Rabi		N.A		3732	505	119	
3.	Odisha	Wint.	-	-	-	2915	284	33	
		Sum.	-	-	-	21	170	0.2	
4.	Tamil Nadu		-	-	-	320	587	-	
5	Telangana	Kh.	-	-	-	20	217	0.3	
		Rabi	-	-	-	20	453	0.49	
T O T A L		-	-	-	9734	449	261		
15. PEAS									
1.	Uttar Pradesh				N.A.				
2.	West Bengal		92	800	N.A.	143	573	N.A.	
T O T A L		92	800	-	143	573	-		
16. MOTH									
1.	Gujarat				N.A.				
2	Rajasthan		-	-	-	-	-	-	
T O T A L		-	-	-	-	-	-	-	
17. CHOWLA									
1.	Rajasthan				N.A.				
18 . GUAR									
1.	Gujarat				N.A.				
2	Rajasthan @		339	966	199	2797	575	2895	
T O T A L		339	966	199	2797	575	2895		

1	2	3	4	5	6	7	8	9	
19 . SAWAN (Jhangora)									
1.	Uttrakhand		4	1428	0.1	576	1330	52	
2	Uttar Pradesh	Kh.			N.A.				
		Zaid			N.A.				
T O T A L		-	-	-	578	1397	56		
20. KORRA									
1.	Andhra Pradesh		0	0	1	202	982	37	
2	Telangana		0	0	0	20	888	1.2	
TOTAL		0	0	1	222	5221	38		
21. KODON-KUTKI (KODRA)									
1.	Chhattisgarh		-	-	-	180	144	86	
2.	Madhya Pradesh		-	-	-	790	450	N.A	
3.	Uttar Pradesh	Kodan			N.A.				
T O T A L		-	-	-	970	393	-		
22. NAVANE									
1.	Karnataka ***			N.A		670	355	7	
23. SAVE									
1.	Karnataka ***			N.A		288	695	14	
24. SAMAI									
1.	Tamil Nadu		100	1453	-	-	-	-	
25. VARAGU									
1.	Tamil Nadu		122	1988	-	-	-	-	
26. SUGARCANE									
1.	Andhra Pradesh	Plt.	771	85	47	45	63	5	
		Rt.	749	75	63	25	48	6	
2.	Assam		-	-	-	548	37021	N.A.	
3.	Bihar		238	4794	204	240	57215	54	
4.	Goa		-	-	-	79	50989	1.0	
5	Haryana \$\$\$		848	73281	96	-	-	-	
6	Jharkhand				N.A.				
7.	Karnataka ***			N.A		940	98	341	
8.	Kerala				N.A.				

1	2	3	4	5	6	7	8	9
9.	Maharashtra *		8492	89000	965	-	-	-
10.	Odisha		394	64400	9	-	-	-
11.	Punjab		662	73408	90	-	-	-
12.	Rajasthan				N.A.			
13.	Tamil Nadu		399	107	-	68	102	-
14.	Telangana	Plt.	266	73	16	0	0	0
		Rt.	290	68	19	0	0	0
15.	Uttar pradesh				N.A.			
16.	West Bengal		287	80527	N.A.	17	60214	N.A.
T O T A L			13396	68317	-	1962	12440	-
27. COCOA								
1.	Kerala				N.A.			
28. CHILLIES								
1.	Andhra Pradesh	Kh.	322	4588	103	78	4601	27
		Rabi	0	0	0	404	4031	23
2.	Bihar		-	-	-	172	1280	2
3.	Chhattisgarh		20	438	5	-	-	-
4.	Karnataka ***	Kh.		N.A.		600	1140	62
		Rabi		N.A.		40	2424	1
		Sum.		N.A.		80	1726	2
5.	Madhya Pradesh		48	573	N.A.	-	-	-
6.	Telangana	Kh.	212	2892	63	96	1418	1.4
		Rabi	90	2627	15	0	0	0
T O T A L			390	93	-	1374	1418	117
29. CUMIN								
1.	Gujarat		-	-	-	-	-	-
2.	Rajasthan @		1549	381	465	15	356	1
T O T A L			1549	381	465	15	356	1
30. FENNEL								
1.	Gujarat		-	-	-	-	-	-
31. ARECANUT								
1.	Kerala				N.A.			
2.	Maharashtra *				N.A.			
T O T A L			-	-	-	-	-	-
32. PEPPER								
1.	Kerala				N.A.			
33. SAFFRON								
1.	Jammu & Kashmir \$\$				N.A.			
34. TURMERIC								
1.	Kerala				N.A.			

1	2	3	4	5	6	7	8	9
35. GINGER								
1.	Kerala				N.A.			
2.	Meghalaya		-	-	-	552	7024	10
T O T A L		-	-	-		552	7024	10
36. GARLIC								
1.	Gujarat		-	-	-	-	-	-
37. CORIANDER								
1.	Rajasthan				N.A.			
38. LICHI								
1.	Bihar		-	-	-	154	5730	9
39. BANANA								
1.	Bihar		-	-	-	104	13530	12
2	Gujarat				N.A.			
3	Kerala				N.A.			
4	Madhya Pradesh ##		80	158733	N.A.	-	-	-
T O T A L		80	158733	-		104	16590	12
40. MANGO								
1.	Bihar		-	-	-	230	31940	71
41. GUAVA								
1.	Bihar		-	-	-	76	8630	1
42. JACKFRUIT								
1.	Bihar		-	-	-	132	25160	6
2.	Kerala				N.A.			
T O T A L		-	-	-		132	25160	6
43. CASHEWNUT								
1.	Kerala				N.A.			
2.	Maharashtra *				N.A.			
T O T A L		-	-	-	-	-	-	-

1	2	3	4	5	6	7	8	9
44. TAPIOCA								
1.	Kerala				N.A.			
45. PINE APPLE								
1.	Kerala				N.A.			
46. POTATO								
1.	Assam		-	-	-	737	7130	N.A.
2.	Bihar	Agh.	-	-	-	184	11000	75
		Rabi	-	-	-	290	11030	92
3.	Chhattisgarh		-	-	-	24	6714	12
4.	Gujarat		-	-	-	-	-	-
5.	Jammu &	Kh.				N.A.		
	Kashmir \$\$	Rabi				N.A.		
6.	Jharkhand	Agh.				N.A.		
		Rabi				N.A.		
7.	Karnataka ***	Kh.	-	-	-	122	6907	26
		Rabi	-	-	-	98	12932	3
8.	Madhya Pradesh		346	14329	N.A.	-	-	-
9.	Meghalaya	Sum.	-	-	-	318	11142	13
10.	Odisha	Wint.	2024	10173	6	-	-	-
11.	Uttar Pradesh	Rabi				N.A.		
T O T A L			2370	10780	-	1773	9189	-
47. ONION								
1.	Bihar		-	-	-	284	9370	16
2.	Chhattisgarh		-	-	-	24	8923	6
3.	Gujarat		-	-	-	-	-	-
4.	Jharkhand					N.A.		
5.	Karnataka ***	Kh.		N.A.		730	5647	149
		Rabi		N.A.		210	6004	8
		Sum.		N.A.		70	4528	3

1	2	3	4	5	6	7	8	9	
6.	Madhya Pradesh ##		454	14061	N.A.	554	595	N.A.	
7.	Uttar Pradesh	Rabi			N.A.				
		Zaid			N.A.				
T O T A L		454	14061	-	1872	14424	261		
48. BRINJAL									
1.	Bihar	Agh.	-	-	-	192	9150	18	
		Rabi	-	-	-	136	8180	8	
2.	Jharkhand	Agh.			N.A.				
		Rabi			N.A.				
T O T A L		-	-	-	2824	10826	369		
49. TOMATO									
1.	Bihar	Agh.	-	-	-	70	9430	8	
		Rabi	-	-	-	154	10080	6	
2.	Jharkhand	Agh.			N.A.				
		Rabi			N.A.				
T O T A L		-	-	-	5802	203	670		
50. CAULIFLOWER									
1.	Bihar		-	-	-	212	11750	27	
51. PAPAYA (PAPITA)									
1.	Madhya Pradesh ##		30	227826	N.A.	-	-	-	
52. PLANTAIN									
1.	Kerala				N.A.				
53. METHI									
1.	Rajasthan				N.A.				
54. GROUNDNUT									
1.	Andhra Pradesh	Kh.	164	2190	32	2356	850	649	
		Rabi	0	0	0	808	2156	92	
2.	Chhattisgarh		-	-	-	162	1283	27	
3.	Goa	Kh.	57	2146	2	-	-	-	
		Rabi				N.A.			

1	2	3	4	5	6	7	8	9
4.	Gujarat	Kh.	-	-	-	-	-	-
		Sum.	-	-	-	-	-	-
5.	Karnataka ***	Kh.	1098	1340	30	4776	634	443
		Rabi	-	-	-	70	1922	3
		Sum.	1844	9897	116	16	938	641
6.	Madhya Pradesh		124	634	N.A.	668	1061	N.A.
7.	Maharashtra *	Kh.	-	-	-	2827	1256	275
		Sum.	1804	1394	89	-	-	-
8.	Odisha	Aut.	-	-	-	975	800	17
		Wint.	46	1895	0.6	102	986	0.85
		Sum.	780	1527	12.06	314	1092	20.7
9.	Rajasthan @		800	2108	316	878	1430	96
10.	Tamil Nadu		700	2326	-	460	3098	-
11.	Telangana	Kh.	26	2328	3.1	382	1337	10
		Rabi	0	0	6.7	80	331	0.71
12.	Uttar Pradesh				N.A.			
13.	West Bengal		419	2208	N.A.	76	1879	N.A.
T O T A L			7443	1209	-	14874	929	-
55. SESAMUM (GINGELLY)								
1.	Andhra Pradesh	Kh.	0	0	0	274	175	27
		Rabi	0	0	0	310	340	25
2.	Chhattisgarh		-	-	-	76	394	19
3.	Gujarat		-	-	-	-	-	-
4.	Karnataka ***			N.A.		1774	572	47
5.	Kerala				N.A.			
6.	Madhya Pradesh		-	-	-	1314	374	N.A.
7.	Maharashtra *	Kh.	-	-	-	1240	360	53
		Rabi	-	-	-	10	285	3
8.	Odisha	Aut.	-	-	-	232	211	2.96
		Wint.	-	-	-	801	185	12.4
		Sum.	318	420	1.43	299	189	3.2
9.	Rajasthan @		107	478	4	2413	336	506
10.	Tamil Nadu		196	627	-	254	531	-
11.	Telangana	Kh.	0	0	0.005	78	39	3
		Rabi				N.A.		
12.	Uttar Pradesh				N.A.			
13.	West Bengal		2071	927	N.A.	762	621	N.A.
T O T A L			2692	827	-	9837	388	-

1	2	3	4	5	6	7	8	9
56. CASTOR.								
1.	Andhra Pradesh		0	0	0	232	548	49
2.	Gujarat		-	-	-	-	-	-
3	Karnataka ***			N.A		642	642	8
4	Rajasthan				N.A.			
5	Telangana		0	0	0	270	291	49
T O T A L		0	0	0	874	561	57	
57. RAPE & MUSTARD								
1.	Assam		12	652	N.A.	1078	659	N.A.
2.	Bihar		-	-	-	830	1053	90
3.	Chhattisgarh		-	-	-	332	561	33
4.	Gujarat		-	-	-	-	-	-
5.	Haryana \$\$\$		835	1434	482	-	-	-
6.	Jammu & Kashmir \$\$				N.A.			
7.	Jharkhand				N.A.			
8.	Madhya Pradesh		512	1013	N.A.	484	634	N.A.
9.	Odisha	Wint.	523	349	2.54	1210	138	4.77
10.	Punjab		566	1323	305	11	441	0.6
11.	Rajasthan @		6298	1394	2439	758	1082	286
12.	Uttar Pradesh				N.A.			
13.	West Bengal		3915	970	N.A.	389	633	N.A.
T O T A L		12661	1203	-	5092	651	-	
58. LINSEED								
1.	Chhattisgarh		-	-	-	238	377	20
2.	Jammu & Kashmir \$\$				N.A.			
3.	Karnataka ***			N.A		400	348	4
4.	Madhya Pradesh		-	-	-	802	448	N.A
5.	Maharashtra *		-	-	-	266	264	39
6	Uttar Pradesh	Zaid			N.A.			
7.	West Bengal		17	264	N.A.	106	348	N.A.
T O T A L		17	264	-	1812	384	-	

1	2	3	4	5	6	7	8	9
59. SAFFLOWER								
1.	Karnataka ***			N.A		1542	884	33
2.	Maharashtra *		-	-	-	2050	544	173
	T O T A L		-	-	-	3592	457	206
60. SUNFLOWER								
1.	Andhra Pradesh	Kh.	49	1368	1	111	622	5
		Rabi	0	0	0	292	874	18
2.	Haryana \$\$\$	Rabi	92	4571	7	-	-	-
3.	Karnataka ***	Kh.	1510	898	29	2398	403	124
		Rabi	1462	851	38	2054	437	145
		Sum.	998	1039	16	-	-	-
4.	Maharashtra *	Kh.	-	-	-	845	514	69
		Rabi	-	-	-	475	646	139
		Sum.	358	567	14	-	-	-
5.	Tamil Nadu		80	1352	-	186	1044	-
6.	Telangana	Kh.	0	0	0	36	915	0.8
		Rabi	120	1170	10.3	6	953	0.01
7.	Uttar Pradesh	Zaid			N.A.			
	T O T A L		4669	980	-	6403	464	-
61. SOYABEAN								
1.	Andhra Pradesh		4	2056	0	70	1435	1
2.	Chhattisgarh		-	-	-	154	488	84
3.	Karnataka ***			N.A		1562	772	239
4.	Madhya Pradesh		-	-	-	2450	457	N.A.
5.	Maharashtra *		-	-	-	4154	1582	2730
6.	Rajasthan @		17	1167	107	945	1568	788
7.	Telangana		35	1469	27	97	987	214
8.	Uttar Pradesh				N.A.			
	T O T A L		56	1228	134	9432	1129	-
62. TARA MEERA								
1.	Rajasthan				N.A.			
63. COCONUT #								
1.	Kerala				N.A.			
2.	Maharashtra *				N.A.			
	T O T A L		-	-	-	-	-	-
64. NIGER								
1.	Maharashtra *		-	-	-	572	220	35

1	2	3	4	5	6	7	8	9
65. COTTON (LINT)								
1.	Andhra Pradesh		226	1627	101	606	1267	561
2.	Gujarat		-	-	-	-	-	-
3.	Haryana \$\$\$		696	509	647	-	-	-
4.	Karnataka ***		650	686	119	1100	424	332
			64	827	2	320	215	62
			30	679	0.34	-	-	-
5.	Madhya Pradesh		588	1317	N.A.	231	982	N.A.
6.	Maharashtra *		1505	496	153	6689	315	3789
7.	Punjab		702	197	339	-	-	-
8.	Rajasthan				N.A.			
9.	Tamil Nadu		564	345	-	228	484	-
10	Telangana		216	1541	206	1084	1008	1568
11	Uttar Pradesh				N.A.			
T O T A L		5241	506	-	10258	461	-	
66. JUTE								
1.	Assam		-	-	-	576	2306	N.A.
2.	Bihar		-	-	-	34	2571	105
3.	Meghalaya		42	1846	7	-	-	-
4.	Odisha		49	1782	0.23	124	2235	0.97
5.	West Bengal		1775	2484	N.A.	763	2130	N.A.
T O T A L		1866	2451	-	1497	2216	-	
67. MESTA								
1.	Andhra Pradesh		0	0	0	200	1480	5
2.	Bihar		-	-	-	66	6515	16
3.	West Bengal		68	2163	N.A.	199	1679	N.A.
T O T A L		68	2163	-	465	2280	-	
68. TOBACCO								
1.	Andhra Pradesh	(N)	0	0	0	296	3582	16
		(V)	250	2952	32	380	2273	77
2.	Gujarat		-	-	-	-	-	-
3.	Karnataka ***			N.A.		360	737	92

1	2	3	4	5	6	7	8	9
4.	Maharashtra *		56	993	1	-	-	-
5	Telangana	(N)	20	4308	0.44	0	0	0
		(V)	26	2280	1.7	0	0	0
6	Uttar Pradesh				N.A.			
	T O T A L		352	2881	35.14	1036	1116	269
								69. ISABGOL
1	Gujarat				N.A.			
2	Rajasthan				N.A.			
	T O T A L		-	-	-	-	-	-
								70. AVARE (SEM)
1	Karnataka ***	Kharif		N.A		528	940	24
		Rabi			N.A.			
	T O T A L		-	-	-	528	940	24
								71. COWPEA (LOBIA)
1.	Karnataka ***	Kharif	-	-	-	630	433	44
		Rabi	-	-	-	124	414	19
		Sum.	-	-	-	130	357	4
	T O T A L		-	-	-	884	139	67

Note:-

- 1. * : Figures repeated for the year 2010-11 in the state of Maharashtra.
- 2. @ : Figures repeated for the year 2011-12 for Crops Soyabean, Cumin, Blackgram, Guar, Groundnut, Sesamum, Cumin and Rape & Mustard in Rajasthan.
- 3. \$\$: Data repeated for year for 2011-12 Linseed, Potato, R&M and Saffron.
- 4. ## : Figures repeated for the year 2013-14 for the crops Banana, Onion and Papaya for Madhya Pradesh.
- 5. *** : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka .
- 6. @ @ : Figures repeated for the crops Rice (Bhadai & Garma) and Barley for the year 2013-14 in the State of Bihar.
- 7. \$\$\$: Figures repeated for the year 2014-15.

ANNEX - VIII:- ESTIMATES OF YIELD RATE FOR IRRIGATED AND UNIRRIGATED PLOTS ACCORDING TO HIGH YIELDING AND LOCAL VARIETIES UNDER CES 2015-16

Sl. No.	STATE	I R R I G A T E D						U N - I R R I G A T E D					
		HIGH YIELDING VARIETIES			LOCAL VARIETIES			HIGH YIELDING VARIETIES			LOCAL VARIETIES		
		NO. OF EXPTS.	YIELD RATES Kg/ha.	AREA '000' ha.	NO. OF EXPTS.	YIELD RATES Kg/ha.	AREA '000' ha.	NO. OF EXPTS.	YIELD RATES Kg/ha.	AREA '000' ha.	NO. OF EXPTS.	YIELD RATES Kg/ha.	AREA '000' ha.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. RICE													
1.	Andhra Pradesh	Kh.	4060	3088	1565	-	-	-	224	1762	70	-	-
		Rabi	2732	4274	758	-	-	-	-	-	0.66	-	-
2.	Assam	Aut.	87	2261	N.A.	140	1470	N.A.	77	2230	N.A.	1044	1246
		Wint.	36	2332	N.A.	23	1730	N.A.	372	2402	N.A.	2501	1968
		Sum.	521	3128	N.A.	565	2796	N.A.	24	3812	N.A.	206	1670
3.	Bihar @ @	Bha.	-	-	-	146	1974	213	-	-	-	302	2312
		Agh.	4154	4238	1259	2690	3261	582	1632	2183	386	1710	1971
		Gar.	240	3525	71	44	3473	22	-	-	-	-	-
4.	Chhattisgarh		308	2001	748	132	1681	215	-	-	-	802	961
5.	Goa	Kh.	188	2687	14	-	-	-	-	-	-	-	-
		Rabi							N.A.				
6.	Gujarat	Kh.							N.A.				
		Sum.											
7.	Haryana		408	3514	535	566	2817	742	-	-	-	-	-
8.	Himachal Pradesh		207	2380	N.A.	151	1631	N.A.	122	1883	N.A.	233	1538
9.	Jammu & Kashmir								N.A.				
10.	Jharkhand	Agh.							N.A.				
11.	Karnataka ***	Kh.	4586	3615	665	348	2786	17,624	1842	2776	239	1014	2166
		Rabi	540	2576	38	-	-	-	-	-	-	-	-
		Sum.	2256	3732	262	-	-	-	-	-	-	-	-
12.	Kerala	Aut.	729	2989	19	26	2134	0.08	1420	2539	40	181	1219
		Wint.	2071	2885	78	483	1796	6	241	2347	2	372	1177
		Sum.	1438	3060	70	70	2116	0.17	8	2035	0.3	2	386
13.	Madhya Pradesh		682	2063	N.A.	396	2008	N.A.	-	-	-	1238	608
14.	Maharashtra *	Kh.	1053	1612	329	74	1062	3	2691	1887	1041	733	1127
		Sum.	-	-	-	454	2228	29	-	-	-	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15.	Meghalaya	Aut.	-	-	-	262	2333	33	-	-	-	-	-
		Wint.	28	2254	3	722	1442	61	-	-	-	-	-
16.	Odisha	Aut.	454	1792	22.83	14	624	1.54	4810	680	462.2	1428	625
		Wint.	3541	2227	1052.3	105	1173	19.11	5866	1114	1863.5	1176	846
		Sum.	3781	3109	233.4	-	-	-	-	-	-	-	-
17.	Punjab		1974	3978	2969	-	-	-	4	1985	6	-	-
18.	Rajasthan							N.A.					
19.	Tamil Nadu	K/K/S	414	4507	N.A.	-	-	N.A.	6	4354	N.A.	-	-
		S/T/P	1127	3624	N.A.	-	-	N.A.	133	2656	N.A.	-	-
		N/K	300	4109	N.A.	-	-	-	0	0	N.A.	-	-
20.	Telangana	Kh.	2348	2959	718	-	-	-	152	2173	30	-	-
		Rabi	2430	2805	297	-	-	-	-	-	-	-	-
21.	Uttarakhand		1720	3945	137	400	2666	37	30	2408	1.2	780	1821
22.	Uttar Pradesh							N.A.					
23.	West Bengal	Aus.	1708	2467	N.A.	41	2360	N.A.	458	1881	N.A.	147	1427
		Aman	5361	2852	N.A.	296	2236	N.A.	3377	2024	N.A.	591	1379
		Sum.	9128	3246	N.A.	148	2877	N.A.	9276	3240	N.A.	14	2319
24.	Dadra & Nagar Haveli		-	-	-	-	-	-	-	-	-	70	2372
25.	Daman & Diu		0	0	0	0	0	-	10	1694	1.2	14	1573
26.	Puducherry	I	90	3348	4	-	-	-	-	-	-	-	-
		II	140	2355	8	-	-	-	-	-	-	-	-
		III	70	3240	4	-	-	-	-	-	-	-	-
2. JOWAR													
1.	Andhra Pradesh	Kh.	0	0	0	5	3802	5	0	0	0	99	1276
		Rabi	0	0	0	0	0	38	0	0	0	364	2338
2.	Chhattisgarh		-	-	-	-	-	-	-	-	-	38	805
3.	Gujarat	Kh.						N.A.					
		Rabi											
4.	Karnataka ***	Kh.	980	2077	24.396	-	-	-	2032	1381	110.37	236	723
		Rabi	1050	1652	63.398	290	957	7.878	2838	1076	710.933	730	775
		Sum.	20	1903	0.146	-	-	-	-	-	-	-	-
5.	Madhya Pradesh		-	-	-	-	-	-	676	1591	N.A.	702	1021
6.	Maharashtra *	Kh.	-	-	-	-	-	-	-	-	-	4551	1082
		Rabi	-	-	-	2873	1148	457	-	-	-	5563	2570
7.	Rajasthan		122	486	0.6	56	900	2	1672	506	377	3806	635
8.	Tamil Nadu		422	1300	N.A.	14	1081	N.A.	556	1774	N.A.	74	503
9.	Telangana	Kh.	-	-	-	0	0	0.002	-	-	-	588	1040
		Rabi	-	-	-	0	0	10	-	-	-	532	807
10.	Uttar Pradesh							N.A.					

1	2	3	4	5	6	7	8	9	10	11	12	13	14	
3. BAJRA														
1.	Andhra Pradesh	0	0	0	0	0	6	0	0	0	448	1319	18	
2.	Gujarat	Kh. Sum.					N.A.							
3.	Haryana	1378	1557	365	78	1307	28	-	-	-	-	-	-	
4.	Karnataka ***	Kh.	710	1257	24	10	861	0.093	1968	1008	200	196	943	5
5.	Madhya Pradesh		-	-	-	-	-	224	1637	N.A.	78	890	N.A.	
6.	Maharashtra *		542	1394	35	-	-	2776	1102	935	386	675	63	
7.	Rajasthan		551	1330	117	280	755	70	4595	1097	1999	4324	421	1859
8.	Tamil Nadu		238	2782	N.A.	2	1938	N.A.	194	2550	N.A.	-	-	N.A.
9.	Telangana		-	-	-	-	-	-	-	-	66	869	1.2	
9.	Uttar Pradesh							N.A.						
10.	Daman & Diu		0	0	0	0	0	0.000	0	0	0	8	1368	0.67
4. MAIZE														
1.	Andhra Pradesh	Kh. Rabi	0 0	0 0	84 218	4004 7782	28 189	0 0	0 0	0 0	124 0	2534 0	68 3	
2.	Bihar	Bha. Rabi Gar.	2316 - 68	3262 - 4250	130 - 138	4547 - 52	2721 - 3889	147 - 120	- -	- -	- 446	- 3630	- 252	
3.	Chhattisgarh		-	-	-	-	-	-	-	-	401	1881	86	
4.	Gujarat						N.A.							
5.	Haryana		52	2409	6	24	2070	3	-	-	-	-	-	
6.	Himachal Pradesh		44	3087	N.A.	33	2440	N.A.	568	2894	N.A.	786	2584	N.A.
7.	Jammu & Kashmir							N.A.						
8.	Jharkhand							N.A.						
9.	Karnataka ***	Kh. Rabi Sum.	3650 2102 528	4025 3834 3607	329 86 20	6 - -	5908 - -	2 - -	6034 458 -	2974 2603 -	834 12 -	30 - -	1856 - -	
10.	Madhya Pradesh		15	2733	N.A.	6	2561	N.A.	648	1899	N.A.	1099	1679	N.A.
11.	Maharashtra *	Kh. Rabi	- -	- -	- -	- -	- -	- -	- -	- -	773 378	3024 2630	731 138	
12.	Odisha	Aut. Wint. Sum.	7 34 292	1621 2762 2620	0.05 0.10 2	- - -	- - -	1625 57 -	2075 1110 -	46.87 0.2 -	1154 18 -	1125 1109 -	5.92 0.01 -	

1	2	3	4	5	6	7	8	9	10	11	12	13	14
13.	Punjab	304	3838	96	19	2587	6	18	2576	57	23	2197	7.3
14.	Rajasthan	Kh.	1204	1848	28	457	930	2	2290	1084	601	2209	1040
15.	Tamil Nadu		256	7437	-	-	-	N.A.	167	7218	-	1	8530
16.	Telangana	Kh.	-	-	-	191	4691	63	-	-	-	623	2358
		Rabi	-	-	-	356	4917	118	-	-	-	34	2977
17.	Uttar Pradesh							N.A.					
18.	West Bengal		127	3972	N.A.	61	3042	N.A.	134	2712	N.A.	237	2064
5. WHEAT													
1.	Assam		64	1476	N.A.	72	1335	N.A.	138	1372	N.A.	356	1200
2.	Bihar		6374	2376	1509	3306	1983	512	244	1519	41	337	1503
3.	Chhattisgarh		400	1535	89	86	1051	15	-	-	-	206	1037
4.	Gujarat							N.A.					
5.	Haryana		1822	3846	2498	95	3314	130	-	-	-	-	-
6.	Himachal Pradesh		111	2921	N.A.	62	1916	N.A.	173	2561	N.A.	568	1966
7.	Jammu & Kashmir							N.A.					
8.	Jharkhand							N.A.					
9.	Karnataka ***		1624	1676	112	316	1560	7	996	941	42	308	980
10.	Madhya Pradesh		2824	3096	4044	1126	2698	900	0	0	0	1196	1498
11.	Maharashtra *		6837	1830	1185	180	1562	28	984	906	73	207	833
12.	Odisha	Sum.	100	1318	0.33	7	1576	0.04	-	-	-	-	-
13.	Punjab		2319	4591	3487	0	0	0	14	1874	21	-	-
14.	Rajasthan		13159	3426	2794	3822	2457	305	170	2677	6	167	1830
15.	Uttarakhand		1020	3293	173	916	2655	31	18	1100	5	1007	989
16.	Uttar Pradesh							N.A.					
17.	West Bengal		2352	2328	N.A.	130	1937	N.A.	33	1388	N.A.	1	-
												N.A.	

Note

1.* : Figures repeated for the year 2010-11 in the state of Maharashtra.

2. *** : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka .

3. @@ : Figures repeated for the crops of Rice (Gar. & Bha.) and Barley for the year 2013-14 for Bihar.

**ANNEX - IX : PERCENTAGE AREA UNDER IMPROVED AGRICULTURAL
PRACTICES UNDER CES 2015-16**

Sl. No.	S T A T E	PERCENTAGE AREA UNDER								
		Seed Variety			Fertilized/Manure			Pesticides		
		High Yielding Varieties of Seed	Improved Seed	local Seed	Where Chemical Fertilizer used	Where Other Manure used	Un - manured	Treated with Pestici- des.	Not treated with pestici- des	
1	2	3	4	5	6	7	8	9	10	
1. PADDY										
1.	Andhra Pradesh	Kh.Ir.	-	92.00	8.00	98.00	1.00	1.00	77.00	23.00
		Kh.UL.	-	68.00	32.00	78.00	10.00	12.00	38.00	62.00
		Rabi.Ir.	-	96.00	4.00	100.00	0.00	0.00	90.00	10.00
2.	Assam	Aut.	-	12.00	88.00	37.00	20.00	43.00	7.00	93.00
		Wint.	-	14.00	86.00	39.00	19.00	42.00	5.00	95.00
		Sum.	-	43.00	57.00	67.00	20.00	13.00	13.00	87.00
3.	Bihar	Bha.			100.00					
		Agh.	71.00		29.00					
		Gar.	77.00		23.00					
4.	Chhattisgarh	Hyv.Ir.	-	92.00	8.00	99.00	1.00	0.00	0.00	100.00
		Lv. Ir.	-	95.00	5.00	92.00	2.00	0.00	0.00	100.00
		UL	-	34.00	66.00	69.00	14.00	17.00	0.00	100.00
5.	Goa	Kh.	100.00	-	-	90.00	10.00	-	20.00	80.00
		Rabi	100.00	-	-	90.00	10.00	-	15.00	85.00
6.	Gujarat	Ir.					N.A.			
		UL								
		Sum.								
7.	Haryana		-	58.10	41.90	100.00	0.00	0.00	70.90	29.10
8.	Himachal Pradesh		-	47.92	52.08	58.48	34.17	7.35	N.A.	N.A.
9.	Jammu & Kashmir						N.A.			
10.	Jharkhand	Bha.	-	-	100.00	70.00	30.00	-	-	-
		Agh.	60.00	-	40.00	40.00	60.00	-	-	-
11.	Karnataka ***	Kh. Hyv.Ir.	100.00	-	0.00	95.60	0.60	3.80	44.70	55.30
		Kh.Hyv.UL	100.00	-	0.00	91.80	4.60	3.60	17.10	82.90
		Kh.Tra.Ir.	0.00	-	100.00	94.20	5.30	0.50	19.90	80.10
		Kh.Tra.UL	0.00	-	100.00	98.00	1.60	0.40	26.90	73.10
		Rabi Hyv.Ir.	100.00	-	0.00	71.30	4.10	24.60	21.10	78.90
		Rabi. Tra.Ir.	0.00	-	100.00	93.80	6.30	-0.10	18.80	81.20
		Sum. Hyv.Ir.	100.00	-	0.00	85.50	1.10	13.40	39.40	60.60

1	2	3	4	5	6	7	8	9	10	
12.	Kerala	Aut.	-	91.30	8.70	31.07	64.30	4.63	55.65	44.35
		Wint.	-	73.00	27.00	31.62	65.57	2.81	61.69	38.31
		Sum.	-	95.25	4.75	39.53	51.19	9.28	71.74	28.26
13.	Madhya Pradesh	Hyv. Ir.	-	100.00	-	96.00	1.00	3.00	100.00	0.00
		Lv. Ir.	-	-	100.00	99.00	0.00	1.00	100.00	0.00
		UL	-	-	100.00	70.00	5.00	25.00	100.00	0.00
14.	Maharashtra *	Kh. Ir.	N.A.							
		Kh. UL.	N.A.							
		Kh. Comp.	N.A.							
		Sum.	N.A.							
15.	Meghalaya	Aut.	-	0.00	100.00	18.32	2.67	79.01	13.36	86.64
		Wint.	-	3.73	96.27	34.80	11.73	53.47	9.47	90.53
16.	Odisha	Aut.	89.57	-	10.43	79.14	10.63	10.23	24.20	75.80
		Wint.	92.08	-	7.92	91.44	5.08	3.48	40.66	59.34
		Sum.	100.00	-	-	97.88	0.74	1.38	70.33	29.67
17.	Punjab		-	100.00	0.00	100.00	0.00	0.00	95.40	4.60
18.	Rajasthan		-	63.40	36.60	81.55	1.06	17.39	64.94	35.06
19.	Tamil Nadu	K/K/S	100.00	0.00	0.00	59.00	39.00	2.00	17.00	83.00
		S/T/P	100.00	0.00	0.00	62.00	34.00	4.00	14.00	86.00
		N/K	100.00	0.00	0.00	58.00	39.00	3.00	1.00	99.00
20.	Telangana	Kh. Ir.	-	78.00	22.00	100.00	0.00	0.00	75.00	25.00
		Kh. UL.	-	15.00	85.00	100.00	0.00	0.00	87.00	13.00
		Rabi	-	81.00	19.00	99.00	0.00	1.00	73.00	27.00
21.	Uttarakhand		60.00	0.00	40.00	55.00	45.00	0.00	28.00	72.00
22.	Uttar Pradesh		N.A.							
23.	West Bengal	Aus.	-	97.92	2.08	98.56	-	1.44	77.40	22.60
		Aman	-	94.05	5.95	94.15	-	5.85	60.67	39.33
		Sum.	-	98.70	1.30	99.15	-	0.85	85.53	14.47
24.	Dadra & Nagar		-	-	100.00	0.00	100.00	0.00	0.00	100.00
		Haveli								
25.	Daman & Diu		N.A.							
26.	Puducherry	I	100.00	-	-	-	21.11	78.89	0.00	100.00
		II	100.00	-	-	-	27.86	72.14	0.00	100.00
		III	100.00	-	-	-	37.14	62.86	0.00	100.00

1	2	3	4	5	6	7	8	9	10	
2. JOWAR										
1.	Andhra Pradesh	Kh.	-	49.00	51.00	79.00	6.00	15.00	46.00	54.00
		Rabi	-	67.00	33.00	91.00	1.00	8.00	62.00	38.00
2.	Chhattisgarh		-	78.00	22.00	0.00	21.00	79.00	0.00	100.00
3.	Gujarat	Kh.	N.A.							
		Rabi								
4.	Karnataka ***	Kh.Hyv.Ir.	100.00	-	0.00	92.20	4.00	3.80	9.25	90.75
		Kh.Hyv.Ul.	0.00	-	100.00	95.70	2.60	1.70	0.00	100.00
		Kh.Tra.Ir.	-	-	100.00	60.50	27.50	12.00	-	100.00
		Kh.Tra.Ul.	-	-	100.00	90.60	7.30	2.10	0.60	99.40
		Rabi Hyv.Ir.	100.00	-	-	82.10	3.20	14.70	12.40	87.60
		Rabi Hyv.Ul.	100.00	-	0.00	88.70	4.10	7.20	3.95	96.05
		Rabi Tra.Ir.	0.00	-	100.00	94.55	2.65	2.80	6.80	93.20
		Rabi Tra.Ul.	-	-	100.00	84.10	4.20	11.70	1.70	98.30
		Sum.Hyv.Ir.	100.00	-	0.00	100.00	0.00	0.00	13.00	87.00
5.	Madhya Pradesh		-	49.00	51.00	53.00	3.00	44.00	0.00	100.00
6.	Maharashtra *	Kh.	N.A.							
		Rabi Ir.	N.A.							
		Rabi UL	N.A.							
7.	Rajasthan		-	22.23	77.77	42.83	2.77	54.40	4.96	95.04
8.	Tamil Nadu	Ir.	98.00	0.00	2.00	21.00	34.00	45.00	1.00	99.00
		UL	87.00	0.00	13.00	37.00	46.00	17.00	8.00	92.00
9.	Telangana	Kh.	-	23.00	77.00	97.00	0.00	3.00	7.00	93.00
		Rabi	-	15.00	85.00	92.00	0.00	8.00	19.00	81.00
10.	Uttar Pradesh		N.A.							
3. BAJRA										
1.	Andhra Pradesh		-	100.00	0.00	84.00	9.00	7.00	10.00	90.00
2.	Gujarat	Kh.	N.A.							
		Sum.								
3.	Haryana		-	72.50	27.50	100.00	0.00	0.00	65.10	34.90
4.	Karnataka ***	Kh.Hyv.Ir.	100.00	-	0.00	60.70	34.50	4.80	0.45	99.55
		Kh.Hyv.Ul.	100.00	-	-	86.00	1.60	12.40	2.00	98.00
		Kh.Tra.Ul.	0.00	-	100.00	69.95	3.40	26.65	0.00	100.00
5.	Madhya Pradesh		-	9.00	91.00	93.00	1.00	6.00	0.00	100.00

1	2	3	4	5	6	7	8	9	10	
6.	Maharashtra *	Kh. Ir. Kh. UL.. Kh. Comp.	N.A.							
			N.A.							
			N.A.							
7.	Rajasthan	-	53.49	46.51	35.03	2.23	62.74	2.53	97.47	
8.	Tamil Nadu	Ir.	98.00	0.00	2.00	5.00	9.00	86.00	1.00	99.00
		UL	98.00	0.00	2.00	5.00	9.00	86.00	1.00	99.00
9.	Telangana	-	45.00	55.00	92.00	0.00	8.00	8.00	92.00	
10.	Uttar Pradesh	N.A.								
11.	Daman & Diu	N.A.								
4. MAIZE										
1.	Andhra Pradesh	Kh.	-	81.00	19.00	86.00	11.00	3.00	39.00	61.00
		Rabi	-	96.00	4.00	100.00	0.00	0.00	79.00	21.00
2.	Bihar	Bha.	46.00	54.00						
		Rabi	100.00							
		Gar.	77.00	23.00						
3.	Chhattisgarh	-	46.00	54.00	33.00	40.00	27.00	0.00	100.00	
4.	Gujarat	N.A.								
5.	Haryana	-	91.10	8.90	100.00	0.00	0.00	72.30	27.70	
6.	Himachal Pradesh	-	48.07	51.93	67.97	30.09	1.94	N.A.		
7.	Jammu & Kashmir	N.A.								
8.	Jharkhand	10.00	-	90.00	50.00	50.00	-	-	-	
9.	Karnataka ***	Kh. Hyv.Ir.	100.00	-	0.00	94.75	3.90	1.35	3.40	96.60
		Kh. Hyv.UI.	100.00	-	-	97.70	1.00	1.30	3.50	96.50
		Kh. Tra.Ir.	0.00	-	100.00	78.45	16.65	4.90	0.20	99.80
		Rabi Hyv.Ir.	100.00	-	0.00	85.60	7.30	7.10	1.35	98.65
		Rabi Hyv.UI.	100.00	-	-	86.20	11.50	2.30	3.20	96.80
		Rabi. Tra.Ir.	-	-	-	-	-	-	-	-
		Sum.Hyv.UI.	100.00	-	0.00	94.10	2.70	3.20	4.20	95.80
10.	Madhya Pradesh	-	43.00	57.00	73.00	17.00	10.00	0.00	100.00	
11.	Maharashtra *	Kh.	N.A.							
		Rabi	N.A.							
12.	Odisha	Aut.	88.80	-	11.20	40.38	28.72	30.90	6.25	93.75
		Wint.	96.15	-	3.85	37.61	54.13	8.26	7.34	92.66
		Sum.	100.00	-	-	91.09	5.14	3.77	21.92	78.08

ANNEX -IX (Contd...)

1	2	3	4	5	6	7	8	9	10	
13.	Punjab	-	88.50	11.50	97.00	0.00	3.00	77.20	22.80	
14.	Rajasthan	Kh.	-	39.64	60.36	76.16	2.24	21.60	3.16	96.84
15.	Tamil Nadu	Ir.	98.00	1.00	1.00	58.00	42.00	0.00	34.00	66.00
		UL	100.00	0.00	0.00	54.00	45.00	1.00	21.00	79.00
16.	Telangana	Kh.	-	91.00	9.00	99.00	0.00	1.00	24.00	76.00
		Rabi	-	79.00	21.00	100.00	0.00	0.00	68.00	32.00
17.	Uttar Pradesh					N.A.				
18.	West Bengal		-	46.62	53.38	80.04	-	19.96	3.76	96.24

5. RAGI

1	2	3	4	5	6	7	8	9	10
5.	Haryana	-	90.30	9.70	100.00	0.00	0.00	72.00	28.00
6.	Himachal Pradesh	-	48.25	51.75	66.53	31.41	2.06	-	-
7.	Jammu & Kashmir				N.A.				
8.	Jharkhand	40.00	-	60.00	70.00	30.00	-	-	-
9.	Karnataka ***	Hyv.Ir.	100.00	-	0.00	89.80	6.30	3.90	2.80
		Hyv.UL	100.00	-	0.00	76.10	10.00	13.90	0.70
		Tra.Ir.	0.00	-	100.00	72.60	22.30	5.10	4.10
		Tra.UL	0.00	-	100.00	86.10	7.40	6.50	5.10
10.	Madhya Pradesh	Hyv.Ir.	-	100.00	0.00	97.00	1.00	2.00	0.00
		Lv.Ir.	-	-	100.00	96.00	1.00	3.00	1.00
		Lv.UL	-	6.00	94.00	53.00	11.00	31.00	0.00
11.	Maharashtra *	Ir.			N.A.				
		UL			N.A.				
12.	Odisha	Sum.	89.19	-	10.89	100.00	0.00	0.00	33.64
13.	Punjab		-	100.00	0.00	99.20	0.00	0.80	95.10
14.	Rajasthan		-	75.32	24.68	96.04	1.88	2.08	27.58
15.	Utrakhand		35.00	0.00	65.00	34.00	66.00	0.00	18.00
16.	Uttar Pradesh				N.A.				
17.	West Bengal		-	95.60	4.40	99.45	-	0.55	22.08
									77.92
									7. BARLEY
1.	Bihar				100.00				
2.	Chhattisgarh		-	80.00	20.00	0.00	0.00	100.00	0.00
3.	Haryana		-	88.90	11.10	100.00	0.00	0.00	5.90
4.	Himachal Pradesh		-	9.30	90.70	25.10	67.56	7.34	N.A.
5.	Jharkhand						N.A.		
6.	Madhya Pradesh		-	-	100.00	69.00	4.00	27.00	100.00
7.	Punjab		-	94.90	5.10	99.20	0.00	0.80	91.20
8.	Rajasthan		-	74.41	28.59	90.00	3.34	6.66	29.31
9.	Utrakhand		0.00	0.00	100.00	0.00	100.00	0.00	100.00
10.	Uttar Pradesh						N.A.		
									8. GRAM (BENGALGRAM)
1.	Andhra Pradesh		-	82.00	18.00	98.00	0.00	2.00	92.00
2.	Bihar				100.00				
3.	Chhattisgarh		-	72.00	28.00	70.00	12.00	18.00	0.00
									100.00

ANNEX -IX (Contd...)

1	2	3	4	5	6	7	8	9	10	
4.	Gujarat					N.A.				
5.	Haryana	-	76.40	23.60	100.00	0.00	0.00	74.50	25.50	
6.	Jharkhand	30.00	-	70.00	30.00	70.00	-	-	-	
7.	Karnataka ***	Ir .	100.00	-	0.00	82.00	14.60	3.40	22.90	77.10
		UL	98.40	-	1.60	86.10	9.80	4.10	42.90	57.10
8.	Madhya Pradesh	Ir .	-	29.00	61.00	85.00	3.00	12.00	0.00	100.00
		UL	-	13.00	87.00	59.00	7.00	34.00	0.00	100.00
9.	Maharashtra *					N.A.				
10.	Punjab	-	100.00	0.00	62.00	0.00	38.00	100.00	0.00	
11.	Rajasthan	-	40.37	59.63	54.93	9.21	35.86	41.33	58.67	
12.	Telangana	-	56.00	44.00	95.00	0.00	5.00	64.00	36.00	
13.	Uttar Pradesh					N.A.				
14.	West Bengal	-	7.38	92.62	51.98	-	48.02	28.57	71.43	

9. REDGRAM (TUR/ARHAR)

1.	Andhra Pradesh	-	87.00	13.00	84.00	7.00	9.00	81.00	19.00
2.	Bihar			100.00					
3.	Chhattisgarh	-	55.00	45.00	26.00	16.00	58.00	0.00	100.00
4.	Gujarat	-				N.A.			
5.	Haryana	-	94.80	5.20	100.00	0.00	0.00	0.00	100.00
6.	Jharkhand	20.00	-	80.00	30.00	70.00	-	-	-
7.	Karnataka ***	99.60	-	0.40	94.40	1.10	4.50	53.10	46.90
8.	Madhya Pradesh	-	22.00	78.00	36.00	1.00	63.00	0.00	100.00
9.	Maharashtra *					N.A.			
10.	Tamil Nadu	99.00	0.00	1.00	43.00	46.00	11.00	57.00	43.00
11.	Telangana	-	28.00	72.00	97.00	2.00	1.00	62.00	38.00
12.	Uttar Pradesh					N.A.			
13.	West Bengal (Rabi)	-	0.64	99.36	9.32	-	90.68	1.50	98.50

10. GREENGRAM (MOONG)

1.	Andhra Pradesh	Kh.	-	92.00	8.00	70.00	10.00	20.00	72.00	28.00
		Rabi	-	83.00	17.00	39.00	4.00	57.00	65.00	35.00
2.	Bihar	Bha.			100.00					
		Gra.			100.00					
3.	Gujarat	Kh.					N.A.			
4.	Karnataka ***	Kh.	65.70	-	34.30	77.50	7.00	15.50	18.60	81.40
		Rabi	100.00	0.00	0.00	51.40	6.20	42.40	8.20	91.80
5.	Maharashtra *						N.A.			

1	2	3	4	5	6	7	8	9	10	
6.	Odisha	Aut.	-	-	100.00	34.77	4.33	60.90	19.30	80.70
		Wint.	-	-	100.00	10.27	6.04	83.69	12.25	87.75
		Sum.	-	-	100.00	37.05	3.39	59.56	36.09	63.91
7.	Rajasthan		-	53.68	46.32	25.23	2.68	72.09	31.94	68.06
8.	Tamil Nadu	Ir.	99.00	1.00	0.00	40.00	54.00	6.00	65.00	35.00
		UL	96.00	0.00	4.00	69.00	12.00	19.00	60.00	40.00
9.	Telangana	Kh.	-	30.00	70.00	84.00	3.00	13.00	53.00	47.00
		Rabi	-	0.00	100.00	200.00	0.00	0.00	83.00	17.00
10.	Uttar Pradesh	Kh.					N.A.			
		Zaid					N.A.			
11.	West Bengal	Rabi	-	19.91	80.09	70.47	-	29.53	80.71	19.29

11. BLACKGRAM (URD/MATHIKALAI)

1.	Andhra Pradesh	Kh.	-	87.00	13.00	91.00	2.00	7.00	81.00	19.00
		Rabi.	-	89.00	11.00	39.00	6.00	55.00	58.00	42.00
2.	Assam		-	0.00	100.00	1.00	21.00	78.00	0.00	100.00
3.	Gujarat						N.A.			
4.	Karnataka ***	Kh.	94.70	-	5.30	79.50	10.20	10.30	25.60	74.40
		Rabi	100.00	0.00	0.00	40.00	23.60	36.40	1.90	98.10
5.	Maharashtra *						N.A.			
6.	Odisha	Aut.	-	-	100.00	32.50	15.98	51.52	13.37	86.63
		Wint.	-	-	100.00	5.89	13.17	80.94	6.09	93.91
		Sum.	-	-	100.00	49.89	3.73	46.38	43.89	56.11
7.	Rajasthan		-	52.78	47.22	42.89	1.13	55.98	46.05	53.95
8.	Tamil Nadu	Ir.	98.00	0.00	2.00	24.00	52.00	24.00	24.00	76.00
		UL	99.00	0.00	1.00	62.00	24.00	14.00	56.00	44.00
9.	Telangana	Kh.	-	14.00	86.00	100.00	0.00	0.00	69.00	31.00
		Rabi	-	4.00	96.00	92.00	0.00	8.00	91.00	9.00
10.	Uttar Pradesh	Kh.					N.A.			
		Zaid					N.A.			
11.	West Bengal		-	20.44	79.56	44.66	-	55.34	38.39	61.61

12. LAKH

1.	Bihar			100.00						
2.	Chhattisgarh		-	28.00	72.00	8.00	0.00	92.00	0.00	100.00
3.	Madhya Pradesh		-	4.00	96.00	38.00	0.00	62.00	0.00	100.00
4.	West Bengal		-	15.49	84.51	25.52	-	74.48	7.18	92.82
13. MASUR										
1.	Bihar		-	-	100.00	-	-	-	-	-

1	2	3	4	5	6	7	8	9	10
2.	Jharkhand	-	-	100.00	-	100.00	-	-	-
3.	Rajasthan	-	21.76	78.24	55.07	39.40	5.53	36.16	63.84
4.	Uttar Pradesh				N.A.				
5.	West Bengal	-	8.51	91.49	58.62	-	41.38	28.33	76.67

14. HORSEGRAM (KULTHI)

1.	Andhra Pradesh	Kh.	-	28.00	72.00	50.00	15.00	35.00	31.00	69.00
			-	28.00	72.00	23.00	20.00	57.00	2.00	98.00
2.	Karnataka ***	Kh.	3.10	-	96.90	41.00	8.30	50.70	0.20	99.80
			21.40	0.00	78.60	37.00	21.30	41.70	0.00	100.00
3.	Odisha	Wint.	-	-	100.00	5.87	11.42	82.71	2.02	97.98
			-	-	100.00	0.00	0.00	100.00	9.52	90.48
4.	Tamil Nadu		91.00	0.00	9.00	11.00	72.00	17.00	2.00	98.00
5	Telangana	Kh.	-	0.00	100.00	30.00	5.00	65.00	0.00	100.00
		Rabi	-	0.00	100.00	100.00	20.00	70.00	20.00	80.00

15. PEAS

1.	Uttar Pradesh				N.A.				
2.	West Bengal	-	5.92	94.08	76.94	-	23.06	20.74	79.26

16. MOTH

1.	Gujarat				N.A.				
2.	Rajasthan	-			N.A.				

17. CHOWLA

1.	Rajasthan	-			N.A.				
----	-----------	---	--	--	------	--	--	--	--

18. GUAR

1.	Gujarat				N.A.				
2.	Rajasthan	-	43.80	56.20	19.35	1.77	78.88	35.64	64.36

19. SAWAN(JHANGORA)

1.	Uttrakhand		0.00	0.00	100.00	0.00	100.00	0.00	0.00	100.00
2.	Uttar Pradesh	Kh.					N.A.			
			Zaid				N.A.			

20. KORRA

1.	Andhra Pradesh	-	35.00	65.00	82.00	7.00	11.00	19.00	81.00
2.	Telangana	-	10.00	90.00	90.00	0.00	10.00	20.00	80.00

21. KODON-KUTKI (KODRA)

1.	Chhattisgarh	-	17.00	83.00	4.00	2.00	94.00	0.00	100.00
2.	Madhya Pradesh	-	0.00	100.00	4.00	4.00	92.00	0.00	100.00
3.	Uttar Pradesh						N.A.		

1	2	3	4	5	6	7	8	9	10	
22. NAVANE										
1.	Karnataka ***	54.80	0.00	45.20	77.20	9.40	13.40	0.40	99.60	
23. SAVE										
1.	Karnataka ***	0.20	0.00	99.80	60.70	36.20	3.10	0.00	100.00	
24. SAMAI										
1.	Tamil Nadu	96.00	0.00	4.00	15.00	76.00	9.00	0.00	100.00	
25. VARAGU										
1.	Tamil Nadu	91.00	0.00	9.00	41.00	47.00	12.00	1.00	99.00	
26. SUGARCANE										
1.	Andhra Pradesh	Plt.	-	91.00	9.00	96.00	0.00	4.00	21.00	79.00
		Rt.	-	91.00	9.00	93.00	1.00	6.00	32.00	68.00
2.	Assam		-	0.00	100.00	43.00	9.00	48.00	0.00	100.00
3.	Bihar		-	-	100.00	-	-	-	-	-
4.	Goa		100.00	-	-	90.00	10.00	-	85.00	15.00
5.	Haryana		-	57.50	42.50	100.00	0.00	0.00	64.70	35.30
6.	Jharkhand		-	20.00	80.00	30.00	70.00	-	-	-
7.	Karnataka ***		100.00	-	0.00	92.30	6.30	1.40	13.20	86.80
8.	Kerala						N.A.			
9.	Maharashtra *						N.A.			
10.	Odisha	Wint.	-	-	100.00	96.95	1.78	1.27	46.95	53.05
11.	Punjab		-	100.00	0.00	98.40	0.00	1.60	85.20	14.80
12.	Rajasthan		-	40.69	59.31	84.56	7.47	7.97	38.59	61.41
13.	Tamil Nadu		100.00	0.00	0.00	53.00	43.00	4.00	25.00	75.00
14.	Telangana	Plt.	-	35.00	65.00	100.00	0.00	0.00	39.00	61.00
		Rt.	-	52.00	48.00	99.00	0.00	1.00	32.00	68.00
15.	Uttar Pradesh						N.A.			
16.	West Bengal		-	65.85	34.15	99.36	-	0.64	80.05	19.95
27. COCOA										
1.	Kerala						N.A.			
28. CHILLIES										
1.	Andhra Pradesh	Kh.	-	96.00	4.00	99.00	0.00	1.00	97.00	3.00
		Rabi	-	88.00	12.00	86.00	2.00	12.00	90.00	10.00
2.	Bihar				100.00					
3.	Chhattisgarh		-	97.00	3.00	19.00	81.00	0.00	0.00	100.00
4.	Karnataka ***	Kh.	100.00	-	0.00	92.80	6.80	0.40	29.80	70.20
		Rabi	100.00	-	0.00	25.80	74.20	0.00	25.80	74.20
		Sum.	100.00	-	0.00	49.50	50.50	0.00	26.20	73.80
5.	Madhya Pradesh		-	100.00	0.00	0.00	100.00	0.00	0.00	100.00
6.	Telangana	Kh.	-	51.00	49.00	99.00	0.00	1.00	88.00	12.00
		Rabi	-	26.00	74.00	100.00	0.00	0.00	92.00	8.00

1	2	3	4	5	6	7	8	9	10
29. CUMIN									
1.	Gujarat				N.A.				
2.	Rajasthan	-	55.32	44.68	94.39	0.30	5.31	63.51	36.49
30. FENNEL									
1.	Gujarat				N.A.				
31. ARECANUT									
1.	Kerala				N.A.				
2.	Maharashtra *				N.A.				
32. PEPPER									
1.	Kerala				N.A.				
33. SAFFRON									
1.	Jammu & Kashmir				N.A.				
34. TURMERIC									
1.	Kerala				N.A.				
35. GINGER									
1.	Kerala				N.A.				
2.	Meghalaya	-	0.00	100.00	1.81	6.16	92.03	0.00	100.00
36. GARLIC									
1.	Gujarat				N.A.				
37. CORIANDER									
1.	Rajasthan				N.A.				
38. LICHI									
1.	Bihar			100.00					
39. BANANA									
1.	Bihar			100.00					
2.	Gujarat				N.A.				
3.	Kerala				N.A.				
4.	Madhya Pradesh #				N.A.				
40. MANGO									
1.	Bihar			100.00					
2.	Kerala				N.A.				

1	2	3	4	5	6	7	8	9	10
41. GUAVA									
1.	Bihar			100.00					
42. JACKFRUIT									
1.	Bihar			100.00					
2.	Kerala								N.A.
43. CASHEWNUT									
1.	Kerala								N.A.
2.	Maharashtra *								N.A.
44. TAPIOCA									
1.	Kerala	-	31.58	68.42	36.90	85.03	0.00	0.00	100.00
45. PINE APPLE									
1.	Kerala								N.A.
46. POTATO									
1.	Assam	Rabi.	-	7.00	93.00	43.00	34.00	23.00	15.00
2.	Bihar	Agh.			100.00				
		Rabi.			100.00				
3.	Chhattisgarh		-	61.00	39.00	85.00	15.00	0.00	0.00
4.	Gujarat								N.A.
5.	Jammu & Kashmir	Kh.							N.A.
		Rabi.							N.A.
6.	Jharkhand	Agh.	40.00	-	60.00	70.00	30.00	-	-
		Rabi.	40.00	-	60.00	50.00	50.00	-	-
7.	Karnataka ***	Kh.	100.00	-	0.00	100.00	0.00	0.00	82.00
		Rabi.	100.00	-	0.00	78.90	21.10	0.00	14.50
		Summer	100.00	-	-	100.00	-	-	85.50
8.	Madhya Pradesh		-	91.00	9.00	94.00	0.00	6.00	0.00
9.	Meghalaya	Sum.	-	0.63	99.37	71.70	23.27	5.03	14.78
10.	Odisha	Wint.	-	-	100.00	96.39	2.08	1.53	33.65
11.	Uttar Pradesh								N.A.

1	2	3	4	5	6	7	8	9	10	
47. ONION										
1.	Bihar			100.00						
2.	Chhattisgarh	-	42.00	58.00	31.00	29.00	40.00	0.00	100.00	
3.	Gujarat				N.A.					
4.	Jharkhand	25.00	-	75.00	50.00	50.00	-	-	-	
5.	Karnataka ***	Kh.	100.00	-	0.00	39.50	11.10	49.40	17.60	82.40
			100.00	-	0.00	15.40	84.60	0.00	18.20	81.80
			Sum.	-	0.00	24.00	76.00	0.00	7.00	93.00
6.	Madhya Pradesh #	-	44.00	56.00	92.00	6.00	2.00	-	100.00	
7.	Uttar Pradesh	Zaid			N.A.					
48. BRINJAL										
1.	Bihar	Agh.		100.00						
				100.00						
2.	Jharkhand	Agh.	25.00	-	75.00	50.00	50.00	-	-	
			30.00	-	70.00	30.00	70.00	-	-	
49. TOMATO										
1.	Bihar	Agh.		100.00						
				100.00						
2.	Jharkhand	Agh.	40.00	-	60.00	70.00	30.00	-	-	
			40.00	-	60.00	20.00	80.00	-	-	
50. CAULIFLOWER										
1.	Bihar			100.00						
51. PAPAYA (PAPITA)										
1.	Madhya Pradesh #				N.A.					
52. PLANTAIN										
1.	Kerala				N.A.					
53. METHI										
1.	Rajasthan				N.A.					
54. GROUNDNUT										
1.	Andhra Pradesh	Kh.	-	96.00	4.00	88.00	9.00	3.00	59.00	41.00
			-	77.00	23.00	99.00	0.00	1.00	84.00	16.00
2.	Chhattisgarh		-	43.00	56.00	55.00	27.00	18.00	0.00	100.00

1	2	3	4	5	6	7	8	9	10	
3.	Goa	Kh.	100.00	0.00	-	85.00	15.00	-	10.00	90.00
			-	100.00	-	85.00	15.00	-	10.00	90.00
4.	Gujarat	Kh.	N.A.							
			Sum.							
5.	Karnataka ***	Kh.Ir.	100.00	-	0.00	81.90	16.10	2.00	28.70	71.30
			76.60	-	23.40	93.50	3.40	3.10	12.90	87.10
		Rabi.IU.	100.00	-	0.00	73.50	6.80	19.70	40.90	59.10
			100.00	-	0.00	97.30	11.90	0.80	40.40	59.60
		Sum.UL	0.00	-	100.00	62.50	37.50	-	50.00	50.00
6.	Madhya Pradesh		-	39.00	61.00	64.00	5.00	31.00	3.00	97.00
7.	Maharashtra *	Kh.	N.A.							
			Sum.							
8.	Odisha	Aut.	-	-	100.00	48.51	11.59	39.90	15.49	84.51
			-	-	100.00	68.24	4.06	27.70	10.81	89.19
		Sum.	-	-	100.00	92.96	1.10	5.94	46.71	53.29
9.	Rajasthan		-	54.03	45.97	74.74	19.47	5.79	70.16	29.84
10.	Tamil Nadu	Ir.	100.00	0.00	0.00	42.00	51.00	7.00	35.00	65.00
			99.00	0.00	1.00	55.00	42.00	3.00	71.00	29.00
11.	Telangana	Kh.	-	55.00	45.00	95.00	1.00	4.00	72.00	28.00
			-	66.00	34.00	100.00	0.00	0.00	79.00	21.00
12.	Uttar Pradesh		N.A.							
13.	West Bengal		-	86.20	13.80	91.30	-	8.70	86.21	13.79
55. SESAMUM (GINGELLY)										
1.	Andhra Pradesh	Kh.	-	45.00	55.00	43.00	29.00	28.00	24.00	76.00
			-	41.00	59.00	51.00	14.00	35.00	42.00	58.00
2.	Chhattisgarh		-	35.00	65.00	0.00	0.00	100.00	0.00	100.00
3.	Gujarat		N.A.							
4.	Karnataka ***		17.00	-	83.00	76.90	4.20	18.90	2.00	98.00
5.	Kerala		N.A.							
6.	Madhya Pradesh		-	82.00	18.00	22.00	27.00	51.00	0.00	100.00
7.	Maharashtra *	Kh.	N.A.							
			N.A.							
8.	Odisha	Aut.	-	-	100.00	14.23	9.48	76.29	5.60	94.40
			-	-	100.00	19.35	12.61	68.04	8.74	91.26
			-	-	100.00	43.44	9.40	47.16	29.50	70.50
9.	Rajasthan		-	33.33	66.67	17.77	79.94	2.29	4.00	96.00
10.	Tamil Nadu	Ir.	94.00	0.00	6.00	43.00	52.00	4.00	33.00	65.00
			98.00	1.00	1.00	57.00	32.00	11.00	47.00	53.00
11.	Telangana	Kh.	-	24.00	76.00	72.00	4.00	24.00	32.00	68.00
			-	23.00	77.00	100.00	0.00	0.00	52.00	48.00

1	2	3	4	5	6	7	8	9	10
11.	Uttar Pradesh					N.A.			
12.	West Bengal	-	55.06	44.94	62.95	0.01	37.04	35.69	64.31
56. CASTOR									
1.	Andhra Pradesh	-	91.00	9.00	99.00	0.00	1.00	83.00	17.00
2.	Gujarat					N.A.			
3.	Karnataka ***	37.20	-	62.80	70.10	4.80	25.10	19.20	80.80
4.	Telangana	-	90.00	10.00	99.00	0.00	1.00	47.00	53.00
57. RAPE & MUSTARD									
1.	Assam	-	2.00	98.00	29.00	44.00	27.00	8.00	92.00
2.	Bihar			100.00					
3.	Chhattisgarh	-	65.00	35.00	21.00	25.00	54.00	0.00	100.00
4.	Gujarat					N.A.			
5.	Haryana	-	72.40	27.60	100.00	0.00	0.00	76.40	23.60
6.	Jammu & Kashmir					N.A.			
7.	Jharkhand	-	-	100.00	20.00	80.00	-	-	-
8.	Madhya Pradesh	-	64.00	36.00	83.00	6.00	11.00	0.00	100.00
9.	Odisha Wint.	-	-	100.00	34.33	12.64	53.06	24.70	75.30
10.	Punjab	-	96.40	3.60	93.70	0.00	6.30	62.40	37.60
11.	Rajasthan	-	71.94	28.06	89.61	3.55	6.84	35.56	64.44
12.	Uttar Pradesh					N.A.			
13.	West Bengal	-	78.40	21.60	99.02	-	0.64	80.05	19.95
58. LINSEED									
1.	Chhattisgarh	-	36.00	64.00	6.00	11.00	83.00	0.00	100.00
2.	Jammu & Kashmir					N.A.			
3.	Karnataka ***	100.00	-	0.00	65.10	11.10	23.80	0.00	100.00
4.	Madhya Pradesh	-	12.00	88.00	15.00	6.00	79.00	0.00	100.00
5.	Maharashtra *					N.A.			
6.	Rajasthan					N.A.			
7.	Uttar Pradesh					N.A.			
8.	West Bengal	-	0.78	99.22	21.65	-	78.35	1.38	98.62

1	2	3	4	5	6	7	8	9	10	
59. SAFFLOWER										
1.	Karnataka ***	98.80	-	1.20	89.70	2.10	8.20	23.70	76.30	
2.	Maharashtra *				N.A.					
60. SUNFLOWER										
1.	Andhra Pradesh	Kh.	-	75.00	25.00	78.00	0.00	22.00	35.00	65.00
		Rabi	-	49.00	51.00	94.00	0.00	6.00	67.00	33.00
2.	Haryana	Rabi	-	100.00	0.00	100.00	0.00	0.00	0.00	100.00
3.	Karnataka ***	Kh.Ir.	100.00	-	0.00	97.70	1.40	0.90	25.60	74.40
		Kh.UI.	100.00	-	0.00	94.10	3.30	2.60	15.00	85.00
		Rabi.Ir.	99.00	-	1.00	98.70	0.30	1.00	25.40	74.60
		Rabi.UI.	99.90	-	0.10	97.80	0.80	1.40	18.40	81.60
		Sum.	100.00	-	0.00	98.50	0.80	0.70	41.50	58.50
4.	Maharashtra *	Kh.					N.A.			
		Rabi					N.A.			
		Sum.					N.A.			
5.	Tamilnadu	Ir.	100.00	0.00	0.00	48.00	52.00	0.00	37.00	63.00
		UL	97.00	0.00	3.00	58.00	36.00	6.00	29.00	71.00
6.	Telangana	Kh.	-	44.00	56.00	100.00	0.00	0.00	28.00	72.00
		Rabi	-	76.00	24.00	100.00	0.00	0.00	24.00	76.00
7.	Uttar Pradesh	Zaid					N.A.			
61. SOYABEAN										
1.	Andhra Pradesh		98.00	2.00	78.00	0.00	22.00	75.00	25.00	
2.	Chhattisgarh	-	39.00	61.00	66.00	1.00	33.00	0.00	100.00	
3.	Karnataka ***	100.00	-	0.00	97.90	0.30	1.80	44.10	55.90	
4.	Madhya Pradesh	-	4.00	96.00	95.00	1.00	4.00	0.00	100.00	
5.	Maharashtra *					N.A.				
6.	Rajasthan	-	80.03	19.97	57.97	0.10	41.93	65.80	34.20	
7.	Telangana	-	57.00	43.00	97.00	0.00	3.00	48.00	52.00	
8.	Uttar Pradesh					N.A.				
62. TARA MEERA										
1.	Rajasthan					N.A.				
1.	Kerala					N.A.				
2.	Maharashtra *					N.A.				
64. NIGER										
1.	Maharashtra *					N.A.				

1	2	3	4	5	6	7	8	9	10
65. COTTON									
1.	Andhra Pradesh	-	92.00	8.00	99.00	0.00	1.00	89.00	11.00
2	Gujarat	Ir.	-	-	-	-	-	-	-
		UL	-	-	-	-	-	-	-
3.	Haryana	-	66.00	34.00	100.00	0.00	0.00	59.30	40.70
4.	Karnataka ***	kh. Ir.	99.00	-	1.00	99.40	0.60	-	68.90
		UL	99.10	-	0.90	97.90	1.30	0.80	54.90
		Rabi Ir.	100.00	-	0.00	100.00	-	-	30.00
		Rabi UL	69.60	-	30.40	99.40	-	0.60	7.20
		Sum.	100.00	-	-	100.00	-	-	0.00
5.	Madhya Pradesh	-	96.00	4.00	84.00	6.00	10.00	88.00	12.00
6.	Maharashtra *	Ir.	N.A.						
		UL..	N.A.						
		Comp.	N.A.						
7.	Punjab	-	99.30	0.70	99.00	0.00	1.00	98.90	1.10
8.	Rajasthan	-	83.24	16.76	82.00	15.34	2.66	83.48	16.52
9.	Tamil Nadu	Ir.	100.00	0.00	0.00	54.00	34.00	12.00	78.00
		UL.	100.00	0.00	0.00	56.00	37.00	7.00	80.00
10.	Telangana	-	69.00	31.00	99.00	0.00	1.00	80.00	20.00
11.	Uttar Pradesh								
66. JUTE									
1.	Assam	-	22.00	78.00	27.00	62.00	11.00	0.00	100.00
2.	Bihar			100.00					
3.	Meghalaya	-	0.00	100.00	4.17	16.67	79.16	0.00	100.00
4.	Odisha	-	-	100.00	82.08	6.94	10.98	24.86	75.14
5.	West Bengal	-	92.40	7.60	93.79	0.36	5.85	44.19	55.81
67. MESTA									
1.	Andhra Pradesh	-	58.00	42.00	43.00	6.00	51.00	0.00	100.00
2.	Bihar			100.00					
3.	West Bengal	-	33.64	66.36	81.14	-	18.86	41.52	58.48
68. TOBACCO									
1.	Andhra Pradesh	(N)	-	77.00	23.00	86.00	0.00	14.00	63.00
		(V)	-	100.00	0.00	98.00	0.00	2.00	87.00
2.	Gujarat						N.A.		
3.	Karnataka ***	100.00	-	0.00	99.10	0.30	0.60	50.50	49.50
4.	Telangana	(N)	-	0.00	100.00	100.00	0.00	0.00	100.00
		(V)	-	0.00	100.00	100.00	0.00	0.00	100.00

1	2	3	4	5	6	7	8	9	10	
4.	Maharashtra *						N.A.			
5.	Uttar Pradesh	Rabi					N.A.			
		Zaid					N.A.			
69. ISABGOL										
1.	Gujarat						N.A.			
2.	Rajasthan	-	30.21	69.79	90.30	0.65	9.05	21.44	78.56	
70. AVARE (SEM)										
1.	Karnataka ***	Kharif	98.30	-	1.70	76.50	4.00	19.50	8.50	
		Rabi					N.A.			
71. COWPEA (LOBIA)										
1.	Karnataka ***	Kharif	88.80	-	11.20	73.60	11.50	14.90	6.20	
		Rabi	99.30	-	0.70	63.80	0.10	36.10	42.20	
		Summer	86.10	-	13.90	88.60	0.40	11.00	47.20	

Note :-

1. * : Figures repeated for the year 2010-11 in the state of Maharashtra.

2 *** : Figures repeated for the year 2011-12 in respect of Crop Cowpea and for the year 2014-15 for all other crops for Karnataka.

3. # : Figure repeated for the year 2013-14 in respect for corp Banana, Onion and Papaya for Madhya Pradesh.

ANNEX : X(a) :- RESULTS OF FIELD DRIAGE EXPERIMENTS UNDER CES 2015-16

CROP	S T A T E	No. Of Experiments		Percentage
		Planned	Analysed	
1	2	3	4	5
PADDY	Andhra Pradesh	Kh.Ir.	3562	835
		Kh.UI.	242	73
		Rabi Ir.	2994	575
	Assam	Aut.	302	202
		Win.	450	410
		Sum.	300	250
	Bihar	Bha.Ir.	140	86
		Bha.UI.	280	212
		Agh.Hyv.Ir.	2130	2077
		Agh.Hyv.UI.	850	816
		Agh.Lv.Ir.	1400	1345
		Agh.Lv.UI.	860	855
		Gar.Hyv.	170	56
		Gar.Lv.	50	23
	Chhattisgarh	Hyv.Ir.	366	308
		Lv.Ir.	154	120
		UI.	1024	599
	Goa	Kh.	76	76
		Rabi	76	76
	Gujarat	Ir.		N.A.
		UL.		
		Sum.		
	Haryana %		990	864
	Himachal Pradesh		404	358
	Jammu & Kashmir \$\$		552	256
	Jharkhand	Agh.Hyv.Ir.		N.A.
		Agh.Hyv.UI.		
		Agh.Lv.Ir.		
		Agh.Lv.UI.		
		Bha.		
	Karnataka ###	Kh. Tra. Ir.	76	70
		Kh. Tra. UI.	868	844
		Kh. Hyv.Ir.	238	220
		Kh. HYV. UI.	492	470
		Rabi HYV. Ir.	82	46
		Sum. HYV Ir.	190	64
	Kerala	Aut.	485	485
		Wint.	556	556
		Sum.	400	400
	Madhya Pradesh	Hyv.Ir.	598	518
		Lv.Ir.	376	290
		UI.	1108	1043
	Maharashtra **	Kh.	1106	712
		Sum.		N.C
	Meghalaya	Aut.	60	54
		Wint.	152	150
	Punjab		288	274
	Rajasthan		1268	1060
	Tamil Nadu	K/K/S	214	210
		S/T/P	628	628
		N/K	150	150

1	2	3	4	5
PADDY (Contd...)	Telangana	Ir.	2356	482
		UI.	152	47
		Rabi	2430	534
	Uttarakhand		760	568
	Uttar Pradesh #		580	580
	West Bengal	Aus.	837	837
		Aman.	3891	3891
		Sum.	3598	3598
	Dadra & Nagar Haveli		78	70
	Daman & Diu ##		20	20
	Puducherry	I	90	90
		II	140	140
		III	70	70
JOWAR	Andhra Pradesh	Kh.	178	45
		Rabi.	482	183
	Chhattisgarh		80	34
	Gujarat	Kh.	-	-
		Rabi	-	-
	Karnataka ###	Kh. Tra. UI.	158	150
		Kh. Hyv.Ir.	62	60
		Kh. Hyv UI.	318	314
		Rabi Tra. Ir.	18	16
		Rabi Tra. UI.	4	4
		Rabi Hyv. Ir.	188	116
		Rabi Hyv. UI.	624	292
		Sum. Hyv. Ir.	28	24
	Madhya Pradesh		600	584
	Maharashtra **	Kh.	2128	1543
		Rabi	2228	1472
	Rajasthan		5868	5656
	Tamil Nadu	Ir.	217	217
		UI.	315	315
	Telangana	Kh.	628	183
		Rabi	564	181
	Uttar Pradesh #		20	20
BAJRA	Andhra Pradesh		488	172
	Gujarat	Kh.	-	-
		Sum.	-	-
	Haryana %		1532	1438
	Karnataka ###	Tra. Ir.	4	4
		Tra. UI.	6	6
		Hyv.Ir.	21	16
		HYV. UI.	310	290
	Madhya Pradesh		252	228
	Maharashtra **		856	511
	Rajasthan		10450	9750
	Tamil Nadu	Ir.	120	120
		UI.	102	97
				66.55

1	2	3	4	5
BAJRA (Contd..)	Telangana	98	17	50.52
	Uttar Pradesh #	80	80	57.40
	Daman & Diu ##	8	8	85.00
MAIZE	Andhra Pradesh	Kh.	234	114
		Rabi	554	150
	Bihar	Bha.Hyv.	140	126
		Bha.Lv.	280	255
		Rabi	250	233
		Gar.Hyv.	130	58
		Gar.Lv.	40	24
	Chhattisgarh		490	369
	Gujarat	Kh.	-	-
	Haryana %		144	88
	Himachal Pradesh		590	704
	Jammu & Kashmir \$\$		404	224
	Jharkhand	Bha.		N.A.
	Karnataka ###	Kh. Tra. Ir.	14	12
		Kh. Tra. UI.	544	524
		Kh. Hyv.Ir.	18	14
		Kh. HYV. UI.	910	884
		Rabi Tra. Ir.	6	4
		Rabi Hyv Ir.	148	82
		Rabi Hyv UI.	62	28
		Sum. Hyv. Ir.	34	20
	Madhya Pradesh		1418	1293
	Maharashtra ***	Kh.	112	90
		Rabi	84	58
	Punjab		100	66
	Rajasthan	Kh.	6174	6160
	Tamil Nadu	Ir.	128	128
		UI.	84	84
	Telangana	Kh.	814	245
		Rabi	390	143
	Uttar Pradesh #		96	96
	West Bengal		196	196
RAGI	Andhra Pradesh	Kh.	200	74
		Rabi	170	59
	Bihar	Bha.	100	40
	Goa			N.A.
	Gujarat		-	-
	Jharkhand			N.A.
	Karnataka ###	Kh. Tra. UI.	194	184
		Kh. Hyv.Ir.	38	32
		Kh. HYV. UI.	790	780
		Rabi Hyv. Ir.	28	10
		Rabi Hyv. UI.	24	14
		Sum. Hyv. Ir.	80	16
	Maharashtra **		492	332
	Tamil Nadu	Ir.	80	80
		UI.	100	100
	Telangana		70	27
	Uttarakhand		542	432
	Dadra & Nagar Haveli		78	28
				35.90

1	2	3	4	5
WHEAT	Bihar	Hvv.Ir.	3250	3187
		Hvv.UI.	150	122
		Lv.Ir.	1710	1653
		Lv.UI.	200	169
	Chhattisgarh	Hvv.Ir.	506	392
		Lv.Ir.	100	82
		UI.	244	206
	Gujarat	Ir.	-	-
		UI.	-	-
	Haryana %		2200	2182
	Himachal Pradesh		612	706
	Jammu & Kashmir \$\$		310	136
	Jharkhand	Hvv.Ir.		
		Hvv.UI.		N.A.
		Lv.Ir.		
		Lv.UI.		
	Karnataka ###	Rabi Tra. Ir.	6	6
		Rabi Tra. UI.	22	20
		Rabi Hvv Ir.	136	80
		Rabi Hvv UI.	114	82
	Madhya Pradesh	Hvv.Ir.	2498	2204
		Lv.Ir.	974	974
		UI.	1060	966
	Maharashtra **		464	256
	Punjab		278	226
	Rajasthan		17914	17318
	Uttarakhand		760	470
	Uttar Pradesh #		N.A.	N.A.
	West Bengal		910	910
BARLEY	Bihar		150	130
	Chhattisgarh		36	14
	Haryana %		516	355
	Himachal Pradesh		284	291
	Jharkhand			N.A.
	Madhya Pradesh		430	396
	Punjab		104	72
	Rajasthan		3100	3078
	Uttarakhand		337	231
	Uttar Pradesh #		N.A.	N.A.
GRAM	Bihar		400	366
	Chhattisgarh		488	386
	Gujarat		-	-
	Haryana %		562	512
	Jharkhand			N.A.
	Karnataka ###	Rabi Ir.	88	72
		Rabi UI.	808	370
	Madhya Pradesh	UI	2608	1360
		Ir	1078	888
	Maharashtra **		2200	1550
	Punjab		14	8
	Rajasthan		8254	6483
	Uttar Pradesh #		20	20
	West Bengal		302	302
REDGRAM (TUR)	Bihar		300	276
	Jharkhand			N.A.
	Karnataka ###	Ir.	82	74
		UI.	742	742
	Maharashtra *		3602	3006
	Uttar Pradesh #		N.A.	N.A.
	West Bengal	(Rabi)	100	100

1	2	3	4	5
GREENGRAM (MOONG)	Bihar	Bha.	100	56
		Gar.	250	98
	Karnataka ###	Kh. UI.	398	384
		Rabi UI.	6	4
	Rajasthan		5542	5278
	Uttar Pradesh #	Kh.	12	12
		Zaid	N.A.	N.A.
	West Bengal	Sum.		N.A.
BLACKGRAM	Karnataka ###	Kh. UI.	162	154
		Rabi UI.	12	12
	Rajasthan		2304	2291
	Uttar Pradesh #	Kh.	24	24
		Zaid.	N.A.	N.A.
	West Bengal		386	386
HORSEGRAM	Karnataka ###	Kh. UI.	414	410
		Rabi UI.	332	130
LAKH (KHESARI)	Bihar		170	130
	Karnataka ###	UI.	162	154
	Chhattisgarh		262	0
	West Bengal		222	222
MASUR	Bihar		450	448
	Jharkhand			N.A.
	Rajasthan		220	212
	Uttar Pradesh #		32	32
	West Bengal		817	817
PEAS	Uttar Pradesh		16	16
	West Bengal		136	136
MOTH	Rajasthan		3294	3021
CHOWLA	Rajasthan		526	520
GUAR	Rajasthan		10036	9912
NAVANE	Karnataka ###	UI.	112	108
SAVE	Karnataka ###	UI.	56	54
SAWAN	Uttarakhand		312	238
	Uttar Pradesh #	Kh.	10	10
		Zaid	N.A.	N.A.
SAMAI	Tamil Nadu		50	50
VARAGU	Tamil Nadu		62	61
SUGARCANE	Bihar		370	306
	Punjab		150	22
KORRA	Andhra Pradesh		204	74
	Telangana		20	9
KODON-KUTKI	Chhattisgarh		276	134
	Madhya Pradesh		180	176
	Uttar Pradesh # (Kodan)		N.A.	N.A.
CHILLIES	Andhra Pradesh	Kh.	400	115
		Rabi	412	150
	Bihar		125	356.00
	Karnataka ###	Ir.	44	38.00
		UL.	44	36.00
	Telangana	Kh.	328	71.00
		Rabi	90	24.00
SAFFRON	Jammu & Kashmir \$\$		108	93
CORIANDER	Rajasthan		524	522
ARECANUT	Maharashtra ****		180	21
CASHEWNUT	Maharashtra			N.C

1	2	3	4	5
CUMIN SEED	Rajasthan	4124	3521	95.73
METHI	Rajasthan	888	882	96.92
GROUNDNUT	Andhra Pradesh	Kh.	2608	663
		Rabi	842	151
	Chhattisgarh		216	142
	Gujarat	Kh.	-	-
		Sum.	-	-
	Goa	Kh.	32	12
		Rabi	40	24
	Karnataka ###	Kh. Ir.	170	164
		Kh. UI.	796	784
		Rabi UI.	10	10
		Sum. Ir.	302	44
		Sum. UI.	22	22
Madhya Pradesh		480	384	76.26
Maharashtra **		1386	948	82.63
Rajasthan		2862	2430	86.90
Tamil Nadu	Ir.	350	350	74.54
	UI.	230	230	77.00
Telangana	Kh.	508	97	66.59
	Rabi	464	143	64.60
Uttar Pradesh #		N.A.	N.A.	66.23
West Bengal		210	210	46.18
SESAMUM	Karnataka ###	UI.	294	284
	Maharashtra *	Kh.	674	512
		Rabi	202	93
	Rajasthan		4044	4005
	Uttar Pradesh		15	15
West Bengal		1079	1079	22.07
CASTOR	Andhra Pradesh		232	75
	Karnataka ###	UI.	100	94
	Telangana		432	70
RAPE & MUSTARD	Bihar		450	415
	Haryana %		1040	990
	Jammu & Kashmir \$\$		214	166
	Jharkhand			N.A.
	Punjab		270	208
	Rajasthan		13410	12629
	Uttar Pradesh #		N.A.	N.A.
	West Bengal		1506	1506
LINSEED	Jammu & Kashmir \$\$		26	24
	Karnataka ###	Rabi UI.	34	22
	Maharashtra *		882	675
	Rajasthan			N.A.
	Uttar Pradesh		6	6
	West Bengal		68	68
SUNFLOWER	Andhra Pradesh	Kh.	196	99
		Rabi	368	90
	Haryana %	Rabi	260	92
	Karnataka ###	Kh. Ir.	260	254
		Kh. UI.	438	432
		Rabi Ir.	152	56
		Rabi UI.	300	103
		Sum. Ir.	96	30
				42.55
	Maharashtra*	Kh.	680	524
		Rabi	578	463
		Sum.		N.A.
	Telangana	Kh.	36	4
		Rabi	158	36
	Uttar Pradesh #	Zaid	N.A.	N.A.
				92.21

1	2	3	4	5
SAFFLOWER	Karnataka ###	Rabi UI.	98	52
	Maharashtra *		2538	1562
SOYABEAN	Karnataka ###	Ir.	32	28
		UI.	204	184
	Rajasthan		2616	2558
	Uttar Pradesh #		N.A.	N.A.
BANANA	Bihar		250	52
MANGO	Bihar		300	115
GUAVA	Bihar		125	38
LICHI	Bihar		150	77
POTATO	Bihar	Agh.	125	92
		Rabi	150	145
ONION	Bihar	Rabi	150	142
BRINJAL	Bihar	Agh.	125	96
		Rabi	125	68
TOMATO		Agh.	50	35
		Rabi	100	77
CAULIFLOWER	Bihar		150	106
JACKFRUIT	Bihar		150	66
TARA MEERA	Rajasthan		1072	724
COTTON	Madhya Pradesh			N.A.
	Maharashtra *		3364	2834
	Punjab		68	64
	Rajasthan			N.A.
	Uttar Pradesh #		16	16
JUTE	Assam		284	284
	Bihar		100	56
	Meghalaya		26	22
	West Bengal		640	640
MESTA	Andhra Pradesh		200	198
	Bihar		100	33
	West Bengal		240	184
TOBACCO	Maharashtra *		72	52
	Uttar Pradesh #	Rabi	N.A.	N.A.
		Zaid	N.A.	N.A.
ISABGOL	Rajasthan		2300	2067
COWPEA	Karnataka ###	UI.	76	72
AVARE	Karnataka	UI.	88	84
				37.21

Note: -

1 * :- Figures have been given for the year 1994-95 as no results of driage experiments was received ever since the year 1995-96 to 2009-10 by SASA Maharashtra.

2. *** :- Figures given are for 1998-99 as no information was received ever since the year 1999-2000 to 2009-10.

3. **** :- Figures given are for 2001-02 as no information was received ever since the year 2002-03 to 2009-10.

4. # :- Figures given are for the year 2011-12, as no data received for the year 2014-15 from SASA.

5. ## :- Figure repeated for previous year.

6. \$\$:- Figures repeated for the year 2013-14 for the crops Saffron, Rape & Mustard and linseed, all other crops repeated for the year 2014-15.

7. % :- Percentage recovery repeated for the year 2013-14 for Haryana.

8. ### :- Figures repeated for the year 2014-15.

**ANNEX-X(b):RESULTS OF CENTRAL DRIAGE EXPERIMENTS ORGANISED BY STATE
UNDER C.E.S. DURING 2015-16**

Sl. No.	S T A T E	C R O P	No. Of Experiments		Percen- tage recovery	Percentage recovery as per field driage
			Planned	Analysed		
1	2	3	4	5	6	7
1. Assam @	Paddy	Aut.	302	202	89.86	No Field driage
		Wint.	450	410	88.58	No Field driage
		Sum.	300	250	89.57	No Field driage
	Wheat		-	-	94.98	No Field driage
	Blackgram		-	-	94.49	No Field driage
	Rape & Mustard		-	-	91.11	No Field driage
	Jute		284	284	6.43	No Field driage
	Sugarcane		-	-	9.82	
2. Karnataka ***	Paddy	Kh.Hyv.Ir.	238	220	84.25	No Field driage
		Kh.Hyv.UI.	492	470	85.25	No Field driage
		Kh.Tra.Ir.	76	70	89.14	No Field driage
		Kh.Tra.UI.	868	844	90.12	No Field driage
		Rabi Hyv. Ir.	82	46	82.00	No Field driage
		Rabi Tra. Ir.	-	-	-	No Field driage
		Sum.Hyv.Ir.	190	64	80.65	No Field driage
		Sum.Tra.Ir.	-	-	-	No Field driage
	Jowar	Kh.Hyv.Ir.	62	60	51.20	No Field driage
		Kh.Hyv.UI.	318	314	48.25	No Field driage
		Kh.Tra.UI.	158	150	45	No Field driage
		Rabi Hyv.Ir.	188	116	48.88	No Field driage
		Rabi Hyv.UI.	624	292	50.59	No Field driage
		Rabi Tra.Ir.	18	16	43.43	No Field driage
		Rabi Tra.UI.	4	4	41.36	No Field driage
		Sum. Hyv. Ir.	28	24	49.27	No Field driage
	Bajra	Kh.Hyv.Ir.	21	16	39.25	No Field driage
		Kh.Hyv.UI.	310	290	41.25	No Field driage
		Kh. Tra. Ir.	4	4	46.75	No Field driage
		Kh.Tra.UI.	6	6	45.15	No Field driage

1	2	3	4	5	6	7	
		Maize	Kh.Hyv.Ir.	18	14	54.78	No Field driage
			Kh.Hyv.UI.	910	884	55.06	No Field driage
			Kh.Tra.Ir.	14	12	50.79	No Field driage
			Kh.Tra.UI.	544	524	47.65	No Field driage
			Rabi Hyv. Ir.	148	82	51.06	No Field driage
			Rabi Hyv. UI.	62	28	42.42	No Field driage
			Sum Hyv Ir.	34	20	51.60	No Field driage
			Rabi Tra.Ir.	6	4	44.26	No Field driage
		Ragi	Kh.Hyv.Ir.	38	32	53.25	No Field driage
			Kh.Hyv.UI.	790	780	55.27	No Field driage
			Kh.Tra.UI.	194	184	44.08	No Field driage
			Rabi Hyv.Ir.	28	10	43.24	No Field driage
			Rabi Hyv.UI.	24	14	41.04	No Field driage
			Sum.Hyv. Ir.	80	16	51.90	No Field driage
		Wheat	Hyv.Ir.	136	80	80.57	No Field driage
			Hyv.UI.	114	82	74.54	No Field driage
			Tra.Ir.	6	6	62.67	No Field driage
			Tra.UI.	22	20	83.03	No Field driage
		Gram	Ir.	88	72	51.61	No Field driage
			UI.	808	370	58.19	No Field driage
		Redgram	Ir.	82	74	57.85	No Field driage
			UI.	742	984	49.21	No Field driage
		Greengram	Kh.	398	384	37.25	No Field driage
			Rabi	6	4	48.58	No Field driage
		Blackgram	Kh.	162	154	39.24	No Field driage
			Rabi	12	12	38.83	No Field driage
		Horsegram	Kh.	414	41	28.15	No Field driage
			Rabi	332	130	30.55	No Field driage
		Navane		112	108	28.02	No Field driage
		Save		56	54	24.01	No Field driage
		Chillies	Ir.	44	38	52.80	No Field driage
			UI.	44	36	37.03	No Field driage
		Groundnut	Kh.Ir.	170	164	58.25	No Field driage
			Kh.UI.	796	784	45.61	No Field driage
			Rabi UI.	10	10	54.08	No Field driage
			Sum. Ir.	302	44	44.53	No Field driage
			Sum UI.	22	22	50.54	No Field driage

1	2	3	4	5	6	7
		Sesamum	294	284	15.24	No Field driage
		Castor	100	94	32.25	No Field driage
		Linseed	34	22	20.45	No Field driage
		Safflower	98	52	28.20	No Field driage
		Sunflower	Kh.Ir.	260	254	36.20
			Kh.UI.	438	432	29.01
			Rabi.Ir.	152	56	36.35
			Rabi.UI.	300	103	36.11
			Sum.Ir.	96	30	42.55
		Soyabean	Ir.	32	28	52.37
			UI.	204	184	93.84
		Tobacco	-	-	-	No Field driage
		Avare	88	84	37.21	No Field driage
		Cowpea	76	72	30.15	No Field driage
3. Odisha **	Paddy	Aut.	-	-	85.26	No Field driage
		Wint.	-	-	87.34	No Field driage
		Sum.	-	-	87.74	No Field driage
	Maize	Aut.	-	-	34.42	No Field driage
		Wint.	-	-	31.90	No Field driage
		Sum.	-	-	30.98	No Field driage
	Ragi	Aut.	-	-	41.00	No Field driage
		Wint.	-	-	41.42	No Field driage
		Sum.	-	-	38.60	No Field driage
	Wheat	Sum.	-	-	92.10	No Field driage
	Greengram	Aut.	-	-	93.42	No Field driage
		Wint.	-	-	94.36	No Field driage
		Sum.	-	-	94.46	No Field driage
	Blackgram	Aut.	-	-	93.95	No Field driage
		Wint.	-	-	94.44	No Field driage
		Sum.	-	-	94.44	No Field driage
	Horsegram	Wint.	-	-	94.38	No Field driage
		Sum.	-	-	95.07	No Field driage

1	2	3	4	5	6	7	
		Groundnut	Aut.	-	-	51.53	No Field driage
			Wint.	-	-	54.96	No Field driage
			Sum.	-	-	54.52	No Field driage
		Sesamum	Aut.	-	-	93.73	No Field driage
			Wint.	-	-	93.38	No Field driage
			Sum.	-	-	94.69	No Field driage
		Rape & Mustard	Wint.	-	-	82.59	No Field driage
		Jute	Aut.	-	-	5.73	No Field driage
4. Rajasthan	Jowar		46	43	53.86	91.63	
	\$ Bajra		50	50	56.54	99.39	
	Maize	Kh.	40	38	59.10	97.58	
	Wheat		58	52	97.58	98.81	
	Gram		56	54	94.88	89.37	

Note : 1:- @ Average driage ratio for last 10 years is applied for Wheat, Blackgram, Rape & Mustard.

2:- * Driage experiments on Tobacco are not conducted due to extraneous reasons and percentage recovery ratio are obtained from Tobacco board.

3:- ** Average driage ratio on the basis of preceeding 10 years is adopted in respect of all the crops.

4:- \$ Figures given are for 2007-08 as no information was received of Central Driage ever since the year 2008-09.

5:- *** Figures given are for 2011-12 as no information was received of Central Driage ever since the year 2013-14.

APPENDIX -I : STATEWISE CROP COVERAGE AND DETAILS OF DESIGN UNDER CES DURING 2014-15							
Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimentions (MxM)	Size (ha.)		
1		2	3	4	5	6	7
1. ANDHRA PRADESH							
Paddy	Kh. Rabi	1945-46 1945-46	1954-55 1954-55	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	Ir._ UL. Ir.
Jowar	Kh. Rabi	1951-52 1951-52	1955-56 1955-56	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Bajra		1951-52	1955-56	5 x 5	1/400	MANDAL	
Maize	Kh. Rabi	1951-52 1951-52	1955-56 1955-56	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Ragi	Kh. Rabi	1951-52 1951-52	1955-56 1955-56	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Redgram		1958-59	1960-61	10 x10	1/100	MANDAL	
Greengram	Kh. Rabi	1976-77 1976-77	1976-77 1976-77	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Blackgram	Kh. Rabi	1962-63 N. A.	1963-64 N.A.	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Horsegram	Kh. Rabi	1980-81 N. A.	1980-81 N. A.	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Bengalgram	Rabi	2001-02	2001-02	5 x 5	1/400	MANDAL	
Korra		1976-77	1976-77	5 x 5	1/400	MANDAL	
Sugarcane	Plt. - Rt	1954-55	1957-58	5 x 5	1/400	MANDAL	
Chillies	Kh. Rabi	1976-77 2002-03	1976-77 2002-03	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Groundnut	Kh. Rabi	1957-58 1957-58	1959-60 1959-60	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Sesamum	Kh. Rabi	1957-58 1957-58	1959-60 1959-60	10 x 10 10 x 10	1/100 1/100	MANDAL MANDAL	
Castor		1957-58	1964-65	10 x 10	1/100	MANDAL	
Cotton		1957-58	1965-66	10 x 10	1/100	MANDAL	
Mesta		1976-77	1976-77	5 x 5	1/400	MANDAL	
Tobacco	(N & V)	1957-58	1963-64	5 x 5	1/400	MANDAL	
Sunflower	Kh. Rabi	1992-93 N . A.	1992-93 N. A.	5 x 5 5 x 5	1/400 1/400	MANDAL MANDAL	
Soyabean	Kh.	2003-04	2003-04	5 x 5	1/400	MANDAL	
2. ASSAM @							
Paddy	Aut. Wint. Sum.	1947-48 1947-48 1974-75	1951-52 1951-52 1974-75	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	R.Circle R.Circle Sub-Division	
Wheat		1973-74	1973-74	5 x 5	1/400	Sub-Division	
Blackgram		1962-63	1962-63	5 x 5	1/400	Sub-Division	
Sugarcane		1957- 58	1957- 58	5 x 5	1/400	Sub-Division	
Potato		1950-51	1952-53	5M x 7 Rows	-	R.Circle	

1	2	3	4	5	6	7
3. BIHAR						
Rape & Mustard	1957-58	1958-59	5 x 5	1/400	R.Circle	
Jute	1951-52	1951-52	5 x 5	1/400	Sub-Division	
Paddy	Bha.	1945-46	1948-49	10 x 5	1/200	ANCHAL
	Agh.	1945-46	1948-49	10 x 5	1/200	ANCHAL
	Gar.	1969-70	1969-70	10 x 5	1/200	ANCHAL
Maize	Bha.	1959-60	1959-60	10 x 5	1/200	ANCHAL
	Rabi	1976-77	1976-77	10 x 5	1/200	ANCHAL
	Gar.	1959-60	1959-60	10 x 5	1/200	ANCHAL
Ragi	Bha.	1976-77	1976-77	10 x 5	1/200	ANCHAL
Wheat		1945-46	1948-49	10 x 5	1/200	ANCHAL
Barley		1945-46	1950-51	10 x 5	1/200	ANCHAL
Gram		1945-46	1949-50	10 x 5	1/200	ANCHAL
Tur		1962-63	1962-63	5 x 5	1/400	ANCHAL
Greengram	Bha.	1976-77	1977-78	10 x 5	1/200	ANCHAL
	Gar.	1977-78	1977-78	10 x 5	1/200	ANCHAL
Lakh		1966-67	1966-67	10 x 5	1/200	ANCHAL
Masur		1945-46	1966-67	10 x 5	1/200	ANCHAL
Sugarcane		1958-59	1958-59	5 x 5	1/400	ANCHAL
Chillies		1970-71	1970-71	5 x 5	1/400	ANCHAL
Lichi		1963-64	1963-64	2 trees	—	ANCHAL
Banana		1964-65	1964-65	2 trees	—	ANCHAL
Mango		1963-64	1963-64	2 trees	—	ANCHAL
Guava		1976-77	1976-77	2 trees	—	ANCHAL
Potato	Agh.	1964-65	1964-65	5 x 5	1/400	ANCHAL
	Rabi	1964-65	1964-65	5 x 5	1/400	ANCHAL
Onion		1970-71	1970-71	5 x 5	1/400	ANCHAL
Brinjal	Agh.	1972-73	1972-73	5 x 5	1/400	ANCHAL
	Rabi	1972-73	1972-73	5 x 5	1/400	ANCHAL
Tomato	Agh.	1972-73	1972-73	5 x 5	1/400	ANCHAL
	Rabi	1972-73	1972-73	5 x 5	1/400	ANCHAL
Cauliflower		1973-74	1973-74	5 x 5	1/400	ANCHAL
Jackfruit		1965-66	1965-66	2 trees	—	ANCHAL
Rape & Mustard		1966-67	1966-67	5 x 5	1/400	ANCHAL
Jute		1958-59	1958-59	5 x 5	1/400	ANCHAL
Mesta		1959-60	1962-63	5 x 5	1/400	ANCHAL

1	2	3	4	5	6	7
4. CHHATTISGARH						
Paddy	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	Ir.(Hyv./Lv.) & UI.
Jowar	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Maize	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Wheat	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	Ir.(Hyv./Lv.) & UL(Lv)
Barley	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Gram	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Tur	2000-01	2000-01	10 x 5	1/200	R.I. CIRCLE	
Lakh	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Soyabean	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Kodan-Kutki	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Chillies	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Potato	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Onion	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Groundnut	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Sesamum	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Rape & Mustard	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
Linseed	2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	
5. GOA						
Paddy	Kh. Rabi	1967-68 1967-68	1967-68 1967-68	5 x 5 5 x 5	1/400 1/400	TALUKA TALUKA
Ragi		1970-71	1970-71	5 x 5	1/400	TALUKA
6. GUJARAT						
Paddy	Kh. Sum	1945-46 2000-01	1956-57 2000-01	5 x 5 5 x 5	1/400 1/400	TALUKA TALUKA
Jowar	Kh. Rabi	1956-57 1945-46	1956-57 1956-57	5 x 5 5 x 5	1/400 1/400	TALUKA TALUKA
Bajra	Kh. Sum	1946-47 1974-75	1956-57 1974-75	5 x 5 5 x 5	1/400 1/400	TALUKA TALUKA
Maize		1951-52	1951-52	5 x 5	1/400	TALUKA
Ragi		1951-52	1955-56	5 x 5	1/400	TALUKA
Wheat		1945-46	1956-57	5 x 5	1/400	TALUKA
Blackgram		2004-05	2004-05	5 x 5	1/400	TALUKA
Gram		1951-52	1956-57	5 x 5	1/400	TALUKA
Redgram		1976-77	1984-85	10M X Av. rows in 5M	1/200	TALUKA
Greengram		1977-78	1984-85	5 x 5	1/400	TALUKA
Guvar		1994-95	-	5 x 5	1/400	TALUKA
Moth		2004-05	2004-05	5 x 5	1/400	TALUKA

1	2	3	4	5	6	7
Cumin	1964-65	1971-72	5 x 5	1/400	TALUKA	
Fennel	1964-65	1971-72	5 x 5	1/400	TALUKA	
Onion	1968-69	1984-85	5 x 5	1/400	TALUKA	
Potato	1972-73	1984-85	5 x 5	1/400	TALUKA	
Groundnut	Kh. Sum.	1951-52 1977-78	1957-58 1983-84	5 x 5 5 x 5	1/400 1/400	TALUKA TALUKA
Rape & Mustard		1984-85	5 x 5	1/400	TALUKA	
Sesamum	1961-62	1964-65	5 x 5	1/400	TALUKA	
Castor	1961-62	1964-65	10M X Av. rows in 5 M	1/200	TALUKA	
Cotton	1946-47	1957-58	10M X Av. rows in 5 M	1/200	TALUKA	Ir.- UI.
Tobacco	1946-47	1951-52	5 x 5	1/400	TALUKA	
Isabgol	1964-65	1983-84	5 x 5	1/400	TALUKA	

7. HARYANA

Paddy	1951-52	1957-58	5 x 5	1/400	TEHSIL
Bajra	1952-53	1952-53	5 x 5	1/400	TEHSIL
Maize	1952-53	1952-53	5 x 5	1/400	TEHSIL
Wheat	1943-44	1951-52	5 x 5	1/400	TEHSIL
Barley	1951-52	1956-57	5 x 5	1/400	TEHSIL
Gram	1951-52	1951-52	5 x 5	1/400	TEHSIL
Redgram	2004-05	2004-05	5 x 5	1/400	TEHSIL
Sugarcane	1951-52	1961-62	5 x 5	1/400	TEHSIL
Rape & Mustard	1951-52	1968-69	5 x 5	1/400	TEHSIL
Sunflower	2002-03	2002-03	5 x 5	1/400	TEHSIL
Cotton	1951-52	1996-97	5 x 5	1/400	TEHSIL

8. HIMACHAL PRADESH

Paddy	1952-53	1953-54	10 x 2	1/500	KANUNGO CIRCLE
Maize	1952-53	1959-60	10 x 2	1/500	KANUNGO CIRCLE
Wheat	1951-52	1953-54	10 x 2	1/500	KANUNGO CIRCLE
Barley	1960-61	1964-65	10 x 2	1/500	KANUNGO CIRCLE

9. JAMMU & KASHMIR

Paddy	Plain & Hill	1958-59	1963-64	10 x 5	1/200	TEHSIL
Maize	Plain & Hill	1958-59	1963-64	10 x 5	1/200	TEHSIL
Wheat	Plain & Hill	1958-59	1963-64	10 x 5	1/200	TEHSIL
Potato	Kh.	2003-04	2003-04	N.A.	N.A.	TEHSIL
	Rabi	2003-04	2003-04	N.A.	N.A.	TEHSIL
Saffron		1969-70	**	4 x 4	1/625	TEHSIL
Rape & Mustard		1969-70	**	10 x 5	1/200	TEHSIL
Linseed		1969-70	**	10 x 5	1/200	TEHSIL

1	2	3	4	5	6	7
10. JHARKHAND						
Paddy	Agh. Bha.	2001-02 2002-03	2001-02 2002-03	10 x 5 10 x 5	1/200	ANCHAL
Maize	Bha.	2002-03	2002-03	10 x 5	1/200	ANCHAL
Ragi		2002-03	2002-03	10 x 5	1/200	ANCHAL
Wheat		2001-02	2001-02	10 x 5	1/200	ANCHAL
Barley		2001-02	2001-02	10 x 5	1/200	ANCHAL
Gram		2001-02	2001-02	10 x 5	1/200	ANCHAL
Tur		2001-02	2001-02	10 x 5	1/200	ANCHAL
Masur		2001-02	2001-02	10 x 5	1/200	ANCHAL
Sugarcane	Bha.	2002-03	2002-03	10 x 5	1/200	ANCHAL
Potato	Agh. Rabi	2001-02 2001-02	2001-02 2001-02	5 x 5 5 x 5	1/400	ANCHAL
Onion	Rabi	2005-06	2005-06	5 x 5	1/400	ANCHAL
Brinjal	Agh. Rabi	2003-04 2001-02	2003-04 2001-02	5 x 5 5 x 5	1/400	ANCHAL
Tomato	Agh. Rabi	2001-02 2003-04	2001-02 2003-04	5 x 5 5 x 5	1/400	ANCHAL
Rape & Mustard		2001-02	2001-02	5 x 5	1/400	ANCHAL
11. KARNATAKA						
Paddy	Kh. Rabi Sum.	1945-46 1970-71 1970-71	1945-46 1970-71 1970-71	5 x 5 5 x 5 5 x 5	1/400	TALUK
Jowar	Kh.	1945-46	1945-46	5 x 5	1/400	TALUK
Jowar	Rabi	1945-46	1945-46	5 x 5	1/400	TALUK
Bajra	Kh.	1946-47	1946-47	5 x 5	1/400	TALUK
Maize	Kh. Rabi Sum.	1970-71 1970-71 1970-71	1970-71 1970-71 1970-71	5 x 5 5 x 5 5 x 5	1/400	TALUK
Ragi	Kh. Rabi Sum.	1950-51 1984-85 1975-76	1950-51 1984-85 1977-78	5 x 5 5 x 5 5 x 5	1/400	TALUK
Wheat	Rabi	1945-46	1945-46	5 x 5	1/400	TALUK
Gram	Rabi	1951-52	1951-52	5 x 5	1/400	TALUK
Redgram	Kh.	1957-58	1957-58	10 x 5	1/200	TALUK
						Trad.(Ir./ UI)

1		2	3	4	5	6	7
Greengram	Kh.	1971-72	1971-72	5 x 5	1/400	TALUK	
	Rabi	1981-82	1981-82	5 x 5	1/400	TALUK	
Blackgram	Kh.	1971-72	1971-72	5 x 5	1/400	TALUK	
	Rabi	1981-82	1981-82	5 x 5	1/400	TALUK	
Horsegram	Kh.	1970-71	1970-71	5 x 5	1/400	TALUK	
	Rabi	1981-82	1981-82	5 x 5	1/400	TALUK	
Soyabean	Kh.	1991-92	1991-92	5 x 5	1/400	TALUK	Ir.- UI.
Navane	Kh.	1970-71	1970-71	5 x 5	1/400	TALUK	
Save	Kh.	1971-72	1971-72	5 x 5	1/400	TALUK	
Sugarcane	Annual	1958-59	1958-59	5 x 5	1/400	TALUK	
Chillies	Kh.	2002-03	2002-03	5 x 5	1/400	TALUK	Ir.- UI.
Potato	Kh.	2000-01	2000-01	5 x 5	1/400	TALUK	Ir.- UI.
	Rabi	2000-01	2000-01	5 x 5	1/400	TALUK	
Onion	Kh.	2000-01	2000-01	5 x 5	1/400	TALUK	Ir.- UI.
	Rabi	2000-01	2000-01	5 x 5	1/400	TALUK	
	Sum.	2007-08	2007-08	5 x 5	1/400	TALUK	
Groundnut	Kh.	1957-58	1957-58	5 x 5	1/400	TALUK	Ir.- UI.
	Sum.	1970-71	1970-71	5 x 5	1/400	TALUK	Ir.- UI.
	Rabi	2005-06	2005-06	5 x 5	1/400	TALUK	UI.
Sesamum	Kh.	1957-58	1957-58	5 x 5	1/400	TALUK	
Castor	Kh.	1957-58	1957-58	10 x 5	1/200	TALUK	
Linseed	Rabi	1957-58	1957-58	5 x 5	1/400	TALUK	
Safflower	Rabi	1977-78	1977-78	5 x 5	1/400	TALUK	
Sunflower	Kh.	1978-79	1978-79	10 x 5	1/200	TALUK	Ir.- UI.
	Rabi	1988-89	1988-89	10 x 5	1/200	TALUK	Ir.- UI.
	Sum.	1988-89	1988-89	10 x 5	1/200	TALUK	Ir.
Cotton	Annual	1957-58	1957-58	10 x 5	1/200	TALUK	Ir.- UI.
Tobacco	Annual	1971-72	1971-72	10 x 5	1/200	TALUK	Ir.- UI.
Aware	Kh.	2007-08	2007-08	5 x 5	1/400	TALUK	
Cowpea	Kh.	2007-08	2007-08	5 x 5	1/400	TALUK	

12. Kerala *

Paddy	Aut.	1950-51	1950-51	5 x 5	1/400	TALUKA
	Wint.	1950-51	1950-51	5 x 5	1/400	TALUKA
	Sum.	1950-51	1950-51	5 x 5	1/400	TALUKA
Sugarcane		1982-83	1982-83	5 x 5	1/400	TALUKA
Arecanut		1976-77	1976-77	5 bearing trees	—	TALUKA
Cashewnut		1976-77	1976-77	5 bearing trees	—	TALUKA
Turmeric		1989-90	1989-90	2 x 2	1/2500	TALUKA
Pepper		1976-77	1976-77	5 bearing trees	—	TALUKA
Ginger		2004-05	2004-05	N.A.	N.A.	TALUKA
Cocoa		1982-83	1982-83	5 bearing trees	—	TALUKA
Banana		1985-86	1985-86	3 plants	—	TALUKA
Mango		2004-05	2004-05	N.A.	N.A.	TALUKA

1	2	3	4	5	6	7
Jackfruit	1988-89	1988-89	2 bearing trees	—	TALUKA	
Pine Apple	1981-82	1981-82	5 bearing trees	—	TALUKA	
Plantain	1986-87	1986-87	3 pits	—	TALUKA	
Tapioca	1963-64	1963-64	2 x 2	1/2500	TALUKA	
Coconut	1976-77	1976-77	5 bearing trees	—	TALUKA	
Sesamum	1984-85	1984-85	5 x 5	1/400	TALUKA	
13. MADHYA PRADESH						
Paddy	1945-46	1955-56	5 x 5	1/400	R.I. CIRCLE	Ir.(Hyv./Lv.) & UI.
Jowar	1946-47	1955-56	5 x 5	1/400	R.I. CIRCLE	
Bajra	1954-55	1956-57	5 x 5	1/400	R.I. CIRCLE	
Maize	1952-53	1957-58	5 x 5	1/400	R.I. CIRCLE	
Wheat	1944-45	1957-58	5 x 5	1/400	R.I. CIRCLE	Ir.(Hyv./Lv.) & UI.
Barley	1951-52	1957-58	5 x 5	1/400	R.I. CIRCLE	
Gram	1950-51	1955-56	5 x 5	1/400	R.I. CIRCLE	
Tur	1950-51	1957-58	10 x 5	1/200	R.I. CIRCLE	
Lakh	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Soyabean	1980-81	1983-84	5 x 5	1/400	R.I. CIRCLE	
Kodon Kutki	1950-51	1955-56	5 x 5	1/400	R.I. CIRCLE	
Chillies	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Banana	1957-58	1957-58	25 trees	—	TALUKA	
Potato	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Onion	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Papaya	1957-58	1957-58	25 trees	—	TALUKA	
Groundnut	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Sesamum	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Rape & Mustard	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Linseed	1957-58	1957-58	5 x 5	1/400	R.I. CIRCLE	
Cotton	1944-45	1957-58	10 M x 11 Rows	-	R.I. CIRCLE	
14. MAHARASHTRA						
Paddy	Kh.	1945-46	1952-53	10 x 10	1/100	TEHSIL
				10 x 5	1/200	
	Sum.	1984-85	1993-94	10 x 10	1/100	TEHSIL
				10 x 5	1/200	
Jowar	Kh.	1946-47	1952-53	10 x 10	1/100	TEHSIL
Jowar	Rabi	1945-46	1952-53	10 x 10	1/100	TEHSIL
						Ir./UI.
Bajra		1946-47	1958-59	10 x 10	1/100	TEHSIL
						Ir./UI./Comp.
Maize	Kh.	1976-77	1958-59	10 x 10	1/100	TEHSIL
	Rabi	1990-91	—	10 x 10	1/100	TEHSIL
Ragi		1946-47	1951-52	10 x 5	1/200	TEHSIL

1	2	3	4	5	6	7
Wheat	1945-46	1951-52	10 x 10	1/100	TEHSIL	Ir./UI.
Gram	1946-47	1957-58	10 x 10	1/100	TEHSIL	
Tur	1951-52	1967-68	20 x 10	Jan-50	TEHSIL	
Greengram	2001-02	2001-02	N.A.	N.A.	TEHSIL	
Blackgram	2001-02	2001-02	N.A.	N.A.	TEHSIL	
Sugarcane	1959-60	1964-65	5 x 5	1/400	TEHSIL	
Arecanut	1959-60	1959-60	Cluster of 9 palms	—	TEHSIL	
Cashewnut	1967-68	1967-68	Cluster of 6 trees	1/100	TEHSIL	
Groundnut	Kh. Sum.	1946-47 2001-02	1957-58 2001-02	10 x 10 10 x 10	1/100 1/100	TEHSIL TEHSIL
Sesamum	Kh. Rabi	1959-60 1959-60	1960-61 1960-61	10 x 10 10 x 10	1/100 1/100	TEHSIL TEHSIL
Linseed		1959-60	1970-71	10 x 10	1/100	TEHSIL
Safflower		1966-67	1966-67	10 x 10	1/100	TEHSIL
Sunflower	Kh. Sum Rabi	1983-84 1989-90 N.A.	1992-93 1993-94 N. A.	10 x 10 10 x 10 10 x 10	1/100 1/100 1/100	TEHSIL TEHSIL TEHSIL
Coconut		1959-60	1959-60	Cluster of 6 palms	—	TEHSIL
Niger		1966-67	1975-76	10 x 10	1/100	TEHSIL
Soyabean		2001-02	2001-02	N. A.	N. A.	TEHSIL
Cotton		1946-47	1957-58	20 x 10	Jan-50	TEHSIL
Tobacco		1951-52	1958-59 15. MEGHALAYA	10 x 10	1/100	TEHSIL
Paddy	Aut. Wint	1971-72 1971-72	1973-74 1973-74	5 x 5 5 x 5	1/400 1/400	DISTRICT DISTRICT
Potato	Sum.	1973-74	1977-78	NOT FIXED	—	DISTRICT
Jute		1973-74	Not adopted	5 x 5	1/400	DISTRICT
16. ODIsha						
Paddy	Aut. Wint. Sum.	1944-45 1944-45 1963-64	1959-60 1959-60 1963-64	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	C.D.BLOCK C.D.BLOCK C.D.BLOCK
Maize	Aut. Wint. Sum.	1976-77 1976-77 1976-77	1990-91 1990-91 1990-91	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	C.D.BLOCK C.D.BLOCK C.D.BLOCK
Ragi	Aut. Wint. Sum.	1976-77 1976-77 1976-77	1990-91 1990-91 1990-91	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	C.D.BLOCK C.D.BLOCK C.D.BLOCK
Wheat	Sum.	1976-77	1990-91	5 x 5	1/400	C.D.BLOCK
Greengram	Aut. Wint. Sum.	1976-77 1976-77 1976-77	1990-91 1990-91 1990-91	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	C.D.BLOCK C.D.BLOCK C.D.BLOCK
Blackgram	Aut. Wint. Sum.	1976-77 1976-77 1976-77	1990-91 1990-91 1990-91	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	C.D.BLOCK C.D.BLOCK C.D.BLOCK
Horsegram	Wint. Sum.	1976-77 1976-77	1990-91 1990-91	5 x 5	1/400	C.D.BLOCK

		2	3	4	5	6	7
Sugarcane	Wint.	1976-77	1990-91	5 x 5	1/400	C.D.BLOCK	
Potato	Wint.	1967-68	1967-68	5 Mx 8 rows.	-	C.D.BLOCK	
Groundnut	Aut.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
	Wint.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
	Sum.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
Sesamum	Aut.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
	Wint.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
	Sum.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
Rape & Mustard	Wint.	1967-68	1990-91	5 x 5	1/400	C.D.BLOCK	
Jute	Aut.	1957-58	1959-60	5 x 5	1/400	C.D.BLOCK	

17. PUNJAB

Paddy		1951-52	1957-58	5 x 5	1/400	C.D.BLOCK
Maize		1952-53	1952-53	5 x 5	1/400	C.D.BLOCK
Wheat		1943-44	1951-52	5 x 5	1/400	C.D.BLOCK
Barley		1951-52	1956-57	5 x 5	1/400	C.D.BLOCK
Gram		1951-52	1951-52	5 x 5	1/400	C.D.BLOCK
Sugarcane		1958-59	1961-62	5 x 5	1/400	C.D.BLOCK
Rape & Mustard		1958-59	1972-73	5 x 5	1/400	C.D.BLOCK
Cotton		1958-59	1979-80	10 x 5	1/200	C.D. BLOCK

18. RAJASTHAN

Paddy		1976-77	1976-77	5 x 5	1/400	TEHSIL
Jowar		1952-53	1953-54	5 x 5	1/400	TEHSIL
Bajra		1952-53	1956-57	5 x 5	1/400	TEHSIL
Maize	Kh.	1952-53	1953-54	5 x 5	1/400	TEHSIL
Wheat		1949-50	1952-53	5 x 5	1/400	TEHSIL
Barley		1951-52	1953-54	5 x 5	1/400	TEHSIL
Gram		1951-52	1956-57	5 x 5	1/400	TEHSIL
Greengram		1994-95	1994-95	5 x 5	1/400	TEHSIL
Blackgram		1994-95	1994-95	5 x 5	1/400	TEHSIL
Moth		1994-95	1994-95	5 x 5	1/400	TEHSIL
Chowla		1994-95	1994-95	5 x 5	1/400	TEHSIL
Masur		1997-98	1997-98	5 x 5	1/400	TEHSIL
Cumin Seed		1997-98	1998-99	5 x 5	1/400	TEHSIL
Corinder		1997-98	1998-99	5 x 5	1/400	TEHSIL
Methi		1997-98	1998-99	5 x 5	1/400	TEHSIL
Soyabean		1988-89	1988-89	5 x 5	1/400	TEHSIL
Sugarcane		1970-71	1970-71	5 x 5	1/400	TEHSIL
Groundnut		1970-71	1970-71	5 x 5	1/400	TEHSIL
Sesamum		1957-58	1957-58	5 x 5	1/400	TEHSIL
Rape & Mustard		1957-58	1957-58	5 x 5	1/400	TEHSIL
						Ir./UL/Comp

1	2	3	4	5	6	7
Linseed	1957-58	1958-59	5 x 5	1/400	TEHSIL	
Tara Meera	1997-98	1998-99	5 x 5	1/400	TEHSIL	
Cotton	1953-54	1956-57	10 x 5	1/200	TEHSIL	
Isabgol	1997-98	1998-99	5 x 5	1/400	TEHSIL	
19. TAMIL NADU						
Paddy	K/K/S S/T/P N/K	1944-45 1944-45 1985-86	1955-56 1955-56 1985-86	5 x 5 5 x 5 5 x 5	1/400 1/400 1/400	BLOCK BLOCK BLOCK
Jowar		1950-51	1955-56	5 x 5	1/400	BLOCK
Bajra		1950-51	1955-56	5 x 5	1/400	BLOCK
Ragi		1950-51	1955-56	5 x 5	1/400	BLOCK
Redgram		1976-77	1976-77	10 x 5	1/200	BLOCK
Greengram		1977-78	1977-78	10 x 5	1/200	BLOCK
Blackgram		1976-77	1976-77	10 x 5	1/200	BLOCK
Horsegram		1986-87	1986-87	10 x 5	1/200	BLOCK
Sugarcane		1954-55	1964-65	5 x 5	1/400	BLOCK
Groundnut		1959-60	1973-74	5 x 5	1/400	BLOCK
Sesamum		1973-74	1973-74	10 x 5	1/200	BLOCK
Cotton		1959-60	1964-65	10 x 5	1/200	BLOCK
Sunflower		1983-84	1983-84	10 x 5	1/200	BLOCK
Varagu		1986-87	1986-87	5 x 5	1/400	BLOCK
Samai		1986-87	1986-87	5 x 5	1/400	BLOCK
20. Telangana						
Paddy	Kh. Rabi	1945-46 1945-46	1954-55 1954-55	5 x 5 5 x 5	1/400 1/400	MANDAL
Jowar	Kh. Rabi	1951-52 1951-52	1955-56 1955-56	5 x 5 5 x 5	1/400 1/400	MANDAL
Bajra		1951-52	1955-56	5 x 5	1/400	MANDAL
Maize	Kh. Rabi	1951-52 1951-52	1955-56 1955-56	5 x 5 5 x 5	1/400 1/400	MANDAL
Ragi	Kh. Rabi	1951-52 1951-52	1955-56 1955-56	5 x 5 5 x 5	1/400 1/400	MANDAL
Redgram		1958-59	1960-61	10 x 10	1/100	MANDAL
Greengram	Kh. Rabi	1976-77 1976-77	1976-77 1976-77	5 x 5 5 x 5	1/400 1/400	MANDAL
Blackgram	Kh. Rabi	1962-63 N. A.	1963-64 N. A.	5 x 5 5 x 5	1/400 1/400	MANDAL
Horsegram	Kh. Rabi	1980-81 N. A.	1980-81 N. A.	5 x 5 5 x 5	1/400 1/400	MANDAL
Bengalgram	Rabi	2001-02	2001-02	5 x 5	1/400	MANDAL
Korra		1976-77	1976-77	5 x 5	1/400	MANDAL
Sugarcane	Plt. - Rt	1954-55	1957-58	5 x 5	1/400	MANDAL

1		2	3	4	5	6	7
Chillies	Kh.	1976-77	1976-77	5 x 5	1/400	MANDAL	
	Rabi	2002-03	2002-03	5 x 5	1/400	MANDAL	
Groundnut	Kh.	1957-58	1959-60	5 x 5	1/400	MANDAL	
	Rabi	1957-58	1959-60	5 x 5	1/400	MANDAL	
Sesamum	Kh.	1957-58	1959-60	10 x 10	1/100	MANDAL	
	Rabi	1957-58	1959-60	10 x 10	1/100	MANDAL	
Castor		1957-58	1964-65	10 x 10	1/100	MANDAL	
Cotton		1957-58	1965-66	10 x 10	1/100	MANDAL	
Mesta		1976-77	1976-77	5 x 5	1/400	MANDAL	
Tobacco	(N & V)	1957-58	1963-64	5 x 5	1/400	MANDAL	
Sunflower	Kh.	1992-93	1992-93	5 x 5	1/400	MANDAL	
	Rabi	N. A.	N. A.	5 x 5	1/400	MANDAL	
Soyabean	Kh.	2003-04	2003-04	5 x 5	1/400	MANDAL	

21. UTTAR PRADESH

Paddy		1945-46	1950-51	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Jowar		1950-51	1950-51	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Bajra		1950-51	1950-51	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Maize		1950-51	1950-51	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Wheat		1943-44	1949-50	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Barley		1949-50	1949-50	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Gram	Plain	1949-50	1949-50	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Tur/Arhar		1950-51	1950-51	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Greengram	Kh.	1965-66	1965-66	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
	Zaid.	1978-79	not adopted	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Blackgram	Kh.	1965-66	1965-66	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
	Zaid.	N.A.	N.A.	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Masur		1964-65	1964-65	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK
Peas		1959-60	1959-60	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK

1		2	3	4	5	6	7
Sawan / Jhongora	Kh.	1976-77	1976-77	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
	Zaid	1976-77	1976-77	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Kodan		1978-79	N. A.	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Soyabean		1988-89	Not adopted	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Potato		1979-80	1979-80	5 x 5	1/400	BLOCK	
Onion	Zaid	1958-59	1959-60	5 x 5	1/400	BLOCK	
	Rabi	2005-06	2005-06	5 x 5	1/400	BLOCK	
Sugarcane		1959-60	1960-61	5 x 5	1/400	BLOCK	
Groundnut		1956-57	1957-58	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Rape & Mustard		1956-57	1957-58	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Linseed		1959-60	1959-60	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Sesamum		1958-59	1959-60	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Sunflower	Zaid	1991-92	1991-92	Equilateral Triangle of side 10 mts.	1/230.8	BLOCK	
Cotton		1958-59	1960-61	20 x 10	Jan-50	BLOCK	
Tobacco	Rabi	1988-89	-	5 x 5	1/400	BLOCK	
	Zaid	N.A.	N.A.	5 x 5	1/400	BLOCK	
22. UTTARAKHAND							
Paddy		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mt in Hill Area.	1/230.8	TEHSIL	
Ragi		1945-46.	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mt in Hill Area.	1/230.8	TEHSIL	
Wheat		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mt in Hill Area.	1/230.8	TEHSIL	
Barley		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mt in Hill Area.	1/230.8	TEHSIL	
Sawan/Jhangora		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mt in Hill Area.	1/230.8	TEHSIL	
				side 10 mts.			

1	2	3	4	5	6	7
<u>23. WEST BENGAL</u>						
Paddy	Aus.	1975-76	1975-76	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
	Aman.	1944-45	1944-45	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
	Sum.	1980-81	1980-81	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Maize	Kh.	1980-81	1980-81	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Wheat		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Barley		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Gram		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Redgram		1951-52	1951-52	10 x 10 feet	1/435.6 acres	BLOCK
Greengram		1951-52	1951-52	10 x 10 feet	1/435.6 acres	BLOCK
Blackgram		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Lakh		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Masur		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Peas		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Sugarcane		1951-52	1951-52	10 x 10 feet	1/435.6 acres	BLOCK
Rape & Mustard		1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK
Sesamum	Rabi	1980-81	1980-81	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK

1	2	3	4	5	6	7
Linseed	1952-53	1952-53	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK	
Jute	1951-52	1951-52	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK	
Mesta	1980-81	1980-81	Circle of radius of 1.7145 mts. approx.	1/435.6 acres	BLOCK	
24. DADRA & NAGAR HAVELI						
Paddy	1967-68	1967-68	5 x 5	1/400	PATELAD	
Ragi	1968-69	1968-69	5 x 5	1/400	PATELAD	
25. DAMAN & DIU						
Paddy	Kh.	1967-68	1967-68	5 x 5	1/400	TALUKA
Bajra		1976-77	1976-77	5 x 5	1/400	TALUKA
26. PUDUCHERRY						
Paddy	I.	1974-75	1974-75	5 x 5	1/400	TALUKA
	II.	1971-72	1971-72	5 x 5	1/400	TALUKA
	III.	1974-75	1974-75	5 x 5	1/400	TALUKA

Note 1. : ** : In actual practice results are not adopted for of sample size and considered not reliable at district level

2. : * :- For minor crops, surveys are conducted periodically but not regularly

3. : @ :- Excluding Darjeeling district

APPENDIX - II : CROP COVERAGE UNDER CES DURING 2015-16

Sl.No	CROPS	STATES COVERING THE CROP UNDER C.E.S.	
1	2	3	
1. FOOD CROPS			
(A) CEREALS			
1	Paddy	Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh, West Bengal, Dadra & Nagar Haveli, Daman & Diu and Puducherry.	26
2	Jowar	Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh.	10
3	Bajra	Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and Daman & Diu.	11
4	Maize	Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.	18
5	Ragi	Andhra Pradesh, Bihar, Goa, Gujarat, Jharkhand, Karnataka, Maharashtra, Odisha, Tamil Nadu, Telangana, Uttarakhand and Dadra & Nagar Haveli.	12
6	Wheat	Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Telangana, Uttarakhand, Uttar Pradesh and West Bengal.	18
7	Barley	Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Madhya Pradesh, Punjab, Rajasthan, Uttarakhand and Uttar Pradesh.	9
(B) PULSES & BEANS			
1	Gram (Bengalgram)	Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Telangana, Uttar Pradesh and West Bengal.	14
2	Redgram (Tur/Arhar)	Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.	13

1	2	3	
3	Greengram (Moong)	Andhra Pradesh, Bihar, Gujarat (on pilot basis), Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.	11
4	Blackgram (Urd/Mathikalai)	Andhra Pradesh, Assam, Gujarat ,Jharkhand, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal. [?]	12
5	Lakh (Khesari)	Bihar, Chhattisgarh, Madhya Pradesh and West Bengal.	4
6	Masur	Bihar, Jharkhand, Rajasthan, Uttar Pradesh and West Bengal.	5
7	Horsegram (Kulthi)	Andhra Pradesh, Karnataka, Odisha, Tamil Nadu and Telangana.	5
8	Peas	Jharkhand, Uttar Pradesh and West Bengal.	3
9	Moth	Gujarat and Rajasthan.	2
10	Chowla	Rajasthan.	1
11	Cowpea (Lobia)	Karnataka	1
12	Guar	Gujarat and Rajasthan	2
(C) SMALL MILLETS			
1	Sawan (Jhangora)	Uttarakhand, Uttar Pradesh.	2
2	Korra	Andhra Pradesh and Telangana	2
3	Kodon-Kutki (Kodan)	Chhattisgarh, Madhya Pradesh and Uttar Pradesh.	3
4	Navane	Karnataka.	1
5	Save	Karnataka.	1
6	Samai	Tamil Nadu	1
7	Varagu	Tamil Nadu.	1
(D) SUGAR			
1	Sugarcane	Andhra Pradesh ,Assam, Bihar, Haryana ,Jharkhand , Karnataka, Kerala, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh ,West Bengal and Goa.	16
2	Cocoa	Kerala.	1
(E) CONDIMENTS & SPICES			
1	Chillies	Andhra Pradesh, Bihar, Chhattisgarh, Karnataka, Madhya Pradesh and Telangana.	6
2	Cumin	Gujarat and Rajasthan.	2
3	Fennel	Gujarat.	1
4	Arecanut	Kerala and Maharashtra.	2
5	Pepper	Kerala.	1
6	Saffron	Jammu and Kashmir.	1
7	Turmeric	Kerala.	1
8	Ginger	Kerala.	1
9	Garlic	Gujarat	1
10	Corinder	Rajasthan.	1
11	Methi	Rajasthan.	1

1	2	3	
(F) FRUITS & VEGETABLES			
1	Lichi	Bihar	1
2	Banana	Bihar, Kerala and Madhya Pradesh.	3
3	Mango	Bihar, Kerala	2
4	Guava	Bihar.	1
5	Jackfruit	Bihar and Kerala .	2
6	Cashewnut	Kerala and Maharashtra	2
7	Tapioca	Kerala.	1
8	Pine Apple	Kerala.	1
9	Potato	Assam, Bihar, Chhattisgarh, Gujarat, Jammu & Kashmir Jharkhand, Karnataka, Madhya Pradesh, Meghalaya, Odisha, and Uttar - Pradesh	11
10	Onion	Bihar, Chhattisgarh, Gujarat (On Pilot basis), Jharkhand, Karnataka, Madhya Pradesh and Uttar Pradesh.	7
11	Brinjal	Bihar and Jharkhand.	2
12	Tomato	Bihar and Jharkhand.	2
13	Cauliflower	Bihar.	1
14	Papaya	Madhya Pradesh.	1
15	Plantain	Kerala.	1
16	Avare (Sem)	Karnataka	1

2. NON - FOOD CROPS

(A) OIL SEEDS			
1	Groundnut	Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Goa and West Bengal.	13
2	Sesamum (Gingelly)	Andhra Pradesh, Chhattisgarh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.	13
3	Castor	Andhra Pradesh, Gujarat, Karnataka and Telangana.	4
4	Rape & Mustard	Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Odisha, Punjab, Rajasthan, Uttar Pradesh and West Bengal	13
5	Linseed (Alsi)	Chhattisgarh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Uttar Pradesh and West Bengal.	7
6	Safflower	Karnataka and Maharashtra.	2
7	Sunflower	Andhra Pradesh, Haryana, Karnataka, Maharashtra, Tamil Nadu, Telangana and Uttar Pradesh	7
8	Soyabean	Andhra Pradesh, Chhattisgarh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Telangana and Uttar Pradesh.	8
9	Tara Meera	Rajasthan	1
10	Coconut	Kerala and Maharashtra	2
11	Niger	Maharashtra	1

1	2	3	
(B) FIBRES			
1	Cotton	Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh.	12
2	Jute	Assam, Bihar, Meghalaya, Odisha and West Bengal.	5
3	Mesta	Andhra Pradesh, Bihar and West Bengal	3
(C) DRUGS & NARCOTICS			
1	Tobacco	Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Telangana and Uttar Pradesh	6
2	Isabgol	Gujarat and Rajasthan	2

Note:- Figures within brackets in col.(3) indicate the total no. of States.

**APPENDIX - III: PRIMARY FIELD AGENCY FOR CROP CUTTING
EXPERIMENTS UNDER CES 2015-16**

Sl. No.	State	Agency	Designation	Crops covered (Percentage)
1	2	3	4	5
1.	Andhra Pradesh	1. Statistical	1. Assistant Statistical Officer	All Crops 50 %.
		2.Agriculture	2. Agriculture Extension Officer	All Crops 50 %.
2.	Assam	Statistical	Field Assistant	All Crops. (100%)
3.	Bihar	1. Revenue	Circle Inspector	49.6 Percent of the planned experiments.
		2. Statistical	1. Block Statistical Supervisor. 2 Junior Field Investigator 3 Accredited Statistical Volunteer	50.4 Percent of the planned experiments.
		3.Agriculture	Block Agricultural Officer.	7.50 Percent of the planned experiments.
4.	Chhattisgarh (Data repeated for the year 2014-15)	1. Revenue	1. Revenue Inspector	All Crops (58%)
		2. Agriculture	1.. Headquarter Patwari 2. Rural Agriculture Extension Officer	All Crops (42%)
5.	Goa	Agriculture	Investigator	All Crops.
6.	Gujarat	Agriculture	Gram Sevak	All Crops
7.	Haryana	1.Agricultural	Asstt. Development Officer.	Paddy (100), Bajra (100), Maize (47), Sugarcane (100), Cotton (100), Wheat (100), Gram (100), Redgram (100), Rape & Mustard (100) and Sunflower (100) , Barley (47)
		2. Revenue	Girdawar Kanungo	Barley (53) and Maize (53).

1	2	3	4	5
8.	Himachal Pradesh	1. Revenue Field Kanungo		All Crops – 77.58
		2. Agriculture Agricultural Inspector		All Crops – 22.42
9.	Jammu & Kashmir (Data repeated for the year 2011-12)	Revenue 1. Office Qanungo 2. Girdawar Qanungo 3. Backward Class Girdawar 4. Statistical Girdawar 5 Patwari		76 % 24 %
10.	Jharkhand (Data repeated for the year 2019-10)	1. Agriculture Block Agriculture Officer 2. Statistics Block Statistical Supervisor 3. Revenue Circle Inspector		All Crops (25%) All Crops (25%) All Crops (50%)
11.	Karnataka	1. Revenue Village Accountant 2.Agriculture Agriculture Asstt. 3. Rural Gram Panchayat Development & Secretary Panchayati Raj		43.11% 39.28% 17.61%
12.	Kerala	Statistical Investigator		All Crops
13.	Madhya Pradesh	Revenue 1. Revenue Inspector 2. Headquarter Patwari		All Crops (97.00%)

1	2	3	4	5
14.	Maharashtra (data repeated for the year 2010-11)	1. Revenue 2. Zila Parishad 3.Agricultural	Revenue Inspector Gram Sevak Agricultural Assistant	All Kharif & Rabi Crops (40) % All Kharif & Rabi Crops (25) % All Kharif& Rabi Crops (35) %
15.	Meghalaya	Statistical	Field Assistant	All Crops.
16.	Odisha	Directorate of Economics & Statistics	Statistical Field Surveyor	All Crops.
17.	Punjab	Agricultural	1. Agricultural Inspector 2. Compost Inspector	All Crops
18.	Rajasthan	Revenue	Inspector Land Records	All Crops
19.	Tamil Nadu	1.Agricultural Department (GCES,NAIS) 2.Statistical Department (GCES,NAIS) 3.Horticulture Department (GCES,NAIS)	Agricultural Officer Block Statistical Inspector Assistant Horticulture Offficer	All Crops

1	2	3	4	5
20.	Telangana	1. Statistical 2.Agriculture	1. Assistant Statistical Officer 2. Agriculture Extension Officer	All Crops 50 %.
21.	Uttarakhand	Revenue	1. Patwari / Lekhpal 2. Revenue Inspector	All Crops (100%)
22.	Uttar Pradesh	1 .Revenue 2. Cane Development 3.Cotton Development	Revenue Inspector Cane Inspector Cotton Supervisor & Kamdar	All Crops Sugarcane crop (only in factory areas) Cotton Crop.
23.	West Bengal	1. Agricultural Statistics (B.A.E & S) 2. Agriculture Department	Asstt.Investigator Krishi Prajukti Sahayak (K.P.S)	All Crops
24.	Dadra & Nagar Haveli	1. Block Deptt. 2. SDSCO 3. Agri. Deptt. 4. Development & Planning Office	Gram Sewak Agri. Asstt. Agri. Asstt. (Agri.) Panchayat Secretary & Planning Office	All Crops (37.33%) All Crops (46.67%) All Crops (10.67%) All Crops (5.33%)

Appendix-III (Contd...)

1	2	3	4	5
25.	Daman & Diu	1. Revenue (Data repeated for the year 2014-15)	Talathis	All Crops (50%)
		2. Statistical	Statistical Investigator	All Crops (22) %
		3. Rural Deptt.	(i) Gram Sevak (ii) Village Panchayat Secretary	All Crops (21%) All Crops (7%)
26.	Puducherry	Directorate of Economics & Statistics	Statistical Investigator	All Crops

**APPENDIX -IV : WORK LOAD OF PRIMARY FIELD STAFF ON ACCOUNT OF
CROP CUTTING EXPERIMENTS UNDER CES DURING 2015-16**

Sl. No.	STATE	Agency for field work	Total Strength	Total number of Experiments assigned			No. of Primary workers with more than		
				Kharif	Rabi / Sum	Total	Kharif	Rabi/Sum	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Andhra Pradesh	Statistical	474	13690	9438	23128	233	116	281
		Agriculture	887				143	53	
2	Assam	Statistical	N.A.	6300	4950	11250	208	179	208
3.	Bihar	Revenue	534	14300	19790	34090	32	37	19
		Statistical	543				31	34	21
		Agriculture	534				19	23	12
4	Chhattisgarh	Statistical/Agriculture	2583	3374	2602	5976	128	102	76
5	Goa	Agriculture (Kh.)	21	390	290	680	15		11
		(Rabi)	21					15	11
6	Gujarat	Agriculture	1466	19506	15244	34750	286	329	370
7	Haryana	Agriculture (Kh.)	719	5036		9584	----- NC -----		
		(Rabi)	758		4548		----- NC -----		
		Revenue (Kh.)	6				----- NC -----		
		(Rabi)	52				----- NC -----		
8	Himachal Pradesh	Agriculture (Kh.)	196	2594	2442	5036	----- NC -----		
		(Rabi)	148				----- NC -----		
		Revenue (Kh.)	196				----- NC -----		
		(Rabi)	148				----- NC -----		
9	Jammu & Kashmir ##	Revenue (Kh.)	N.A.	2992		2992	----- NC -----		
		(Rabi)			2406	2406	----- NC -----		
10	Jharkhand	Revenue	24	12810	14220	27030	----- NC -----		
		Statistical					----- NC -----		
		Agriculture					----- NC -----		
11	Karnataka	Revenue	7580	66943	40859	107802	----- NC -----		
		Agricultural	4520				----- NC -----		
		RDPR	5526				----- NC -----		

Appendix- IV (Contd.....)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
12	Kerala	Statistical	1036	27116	1522	28638	0	0	811
13	Madhya Pradesh	Revenue	4407	15434	15276	30710	1072	1275	1285
14	Maharashtra	Revenue (Kh.)	3370	54452	27336	81788	----- NC -----		
		Zila Parishad (Kh.)	780				----- NC -----		
		Agriculture (Kh.)	1943				----- NC -----		
		Revenue (Rabi)	2960				----- NC -----		
		Zila Parishad (Rabi)	688				----- NC -----		
		Agriculture (Rabi)	1860				----- NC -----		
15	Meghalaya	Statistical	46	1714	338	2052	46	24	46
16	Odisha	Statistical	446	34211	10705	44916	-	-	446
17	Punjab	Agriculture (Kh.)	686	3752		3752	56	-	9
		(Rabi)	628		3230	3230	-	55	6
18	Rajasthan	Agriculture (Kh.)	2373	57370	51806	109176	-	-	-
		(Rabi)	3665				-	-	-
19	Tamil Nadu	Agriculture	939	9276		9276	104	127	121
20	Telangana	Statistical	893	8640	4816	13456	116	66	
		Agriculture					62	21	
21	Uttarakhand	Revenue (Kharif)	1804	4700	3642	8342	-	-	-
		Revenue (Plain)	874				-	-	-
		Revenue (Hills)	930				-	-	-
22	Uttar Pradesh	Revenue (Kh.)	1267	305610	295932	601542	-	-	-
		(Rabi)	1063				-	-	-
		(Zaid)	1158				-	-	-
		Cane Dev. Staff	-				-	-	-
		Cotton Dev. Staff	-				-	-	-
23	West Bengal	Agricultural Statistics	217	21207	28820	50027	253	465	202
24	Dadra & Nagar Haveli	Development & Planning	8	56	0	56	7	-	7
		Division Soil Conservation	9	76	0	76	10	-	10
		Agriculture Deptt.	3	24	0	24	3	-	3

Appendix- IV (Contd.....)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
25	Daman & Diu	Rural Dev. (Kh.)	2	4	0	4	----- NC -----			
		Rev. Dept. (Kh.)	9	18	0	18	----- NC -----			
		Stat. Dept. (Kh.)	3	6	0	6	----- NC -----			
26	Puducherry	Statistical (Kh)	22	90	0	90	----- NC -----			
		Rabi -I	0	0	140	140	-	8	-	
		Rabi -II	0	0	70	70	----- NC -----			
Total			61025	691691	560422	1252113	2824	2921	4240	
Percentage %							10.0	10.5	14.3	

Note : 1. # : Percentage figures given under Col.8 , 9 and 10 are based on total figures in col. 4. Those states have been excluded

for percentage calculation where data under column (8) to (10) has not been received.

2. ## : Figures repeated for the year 2012-13.

APPENDIX - V ESTIMATION PROCEDURE UNDER CES

The methodology generally adopted for estimating the average yield of a crop and its sampling error is outlined below:

At the stratum level, the average yield of the crop is obtained as a simple arithmetic mean of plot yields (net) within it.

If

X_{ijk} = The plot yield (net) in gms/plot of the k^{th} plot in the j^{th} village in the i^{th} stratum

n_{ij} = No of experiments analysed in the j^{th} village of i^{th} stratum,

m_i = Number of villages in which experiments are analysed in the i^{th} stratum .

n_i = Number of experiments analysed in the i^{th} stratum

S = The number of strata in a district

a_i = The area (net) of the crop in the i^{th} stratum

\bar{x}_{ij} = The sample arithmetic mean of the green yield of the i^{th} stratum,

\bar{x} = The district average yield of the dry marketable produce

d = The driage ratio

and f = The conversion factor for converting the green yield per plot into the yield of dry marketable produce per hectare.

We have the stratum level average of the green yield as

$$\bar{x}_{ij} = \frac{1}{n_i} \cdot \sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} X_{ijk}$$

and the district level average yield of the dry marketable produce per hectare is given by

$$\bar{x} = d.f. \frac{\sum_{i=1}^s a_i - \bar{x}_{ij}}{\sum_{i=1}^s a_i}$$

The sampling variance of the mean \bar{x} is obtained as

$$V(\bar{x}) = \frac{d^2 \cdot f^2 \left[W \sum_{i=1}^s \frac{a_i^2}{n_i} + (B - W) \sum_{i=1}^s \frac{a_i^2}{\lambda_i n_i^2} \right]}{\left[\sum_{i=1}^s a_i \right]^2}$$

$$n_i^2 - \sum_{j=1}^{m_i} n_{ij}^2$$

Where

$$\lambda_i = \frac{n_i^2 - \sum_{j=1}^{m_i} n_{ij}^2}{n_i - (m_i - 1)}$$

$$B = \frac{s \sum_{i=1}^s \left[\frac{m_i}{\sum_{j=1}^{n_{ij}} n_{ij}} \left(\sum_{k=1}^{n_{ij}} x_{ijk} \right)^2 - \frac{\left(\sum_{j=1}^{m_i} \sum_{k=1}^{n_{ij}} x_{ijk} \right)^2}{n_i} \right]}{\sum_{i=1}^s (m_i - 1)}$$

the mean square between villages

$$W = \frac{\sum_{i=1}^s m_i \sum_{j=1}^{n_{ij}} \sum_{k=1}^{m_i} x_{ijk}^2 - \sum_{j=1}^{m_i} \frac{(\sum_{k=1}^{n_{ij}} x_{ijk})^2}{n_{ij}}}{\sum_{i=1}^s (n_i - m_i)}$$

the mean square within villages

The percentage standard error is given by

$$\% SE (\bar{x}) = \frac{\sqrt{V(\bar{x})}}{\bar{x}} \times 100$$

Note:

- (i) In case the crop sown is pure, the net yield is the same as the actual yield obtained from the plot.
- (ii) If the crop is sown in mixture, then the net yield is obtained by dividing the actual yield by the eye estimate of the proportion of area occupied by the concerned crop as per the primary worker at time of crop cutting experiments.
- (iii) Net area under the crop in a stratum is the sum of the area under the pure crop and the apportioned area under the crop from all mixed crops having the crop as component, the apportionment being done at the field level on the basis of eye estimation at the time of area enumeration in some states and at district level in others on the basis of conventional ratio.

APPENDIX-IV: PROCEDURE FOR DRIAGE EXPERIMENTS UNDER CES 2015-16

Sl No.	State	Crops	Contents of produce for weighment		Sub-sampling not done/done at the level of village/field/both	Sampling produce to be dried part (Weight or whole)	Duration of driage (Codes)	Level of Application Stratum/District/ State
			First	Final				
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	Paddy (Kh.& Rabi)	Wet Paddy	Dry paddy	Village	1 Kg.	C.W.	State
		Jowar (Kh.& Rabi)	Cobs	Dry Grains	Village	2 Kgs.	C.W.	State
		Bajra,	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Maize (Kh.& Rabi)	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Ragi (Kh.& Rabi)	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Korra	Cobs	Dry Grains	Village	2 Kgs	C.W.	State
		Chillies (Kh.& Rabi)	Wet Chillies	Dry Grains	Village	500 gms.	C.W.	State
		Castor	Wet Capsules	Dry Capsules	Village	500 gms. Each picking	C.W.	State
		Groundnut (Kh.&Rabi)	Green Pods	Dry Pods	Village	2 Kgs.	C.W.	State
		Sunflower (Kh. & Rabi)	Green seed	Dry Seed	Village	500 gms.	C.W.	State
2	Assam	Mesta	Wet Plants	Dry Fibre	Village	25 Kgs.	C.W.	State
		Paddy. (Aut.Wint. & Sum)	Wet Paddy	Dry paddy	Village	1 Kg.	C.W.	Stratum
		Wheat	Wet Grain	Dry Grain	Village	1 Kg.	C.W.	Stratum
		Blackgram	Wet Grain	Dry Grain	Village	1 Kg.	C.W.	Stratum
		Rape & Mustard	Wet Grain	Dry Grain	Village	1 Kg.	C.W.	Stratum
		Jute	Wet Plants	Dry Fibre	Village	Whole	Weight Dry Fibre	Stratum
		Paddy(Bha.Agh.&Gar.)	Wet Paddy	Dry paddy	Village	Whole	15 days	District
		Maize(Bha.Rabi.,&Gar.)	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Ragi	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Wheat	Wet Grain	Dry Grain	Village	Whole	31 days	District
3	Bihar	Barley	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Gram	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Redgram	Wet Grain	Dry Grain	Village	Whole	31 days	District
		Greengram (Bha & Gar.)	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Lakh	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Masur	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Rape & Mustard	Wet Grain	Dry Grain	Village	Whole	15 days	District
		Chillies	Wet Chillies	Dry chillies	Both	Whole	15 days	District
		jute	Wet Plants	Dry Fibre	Village	Whole	17 days	District
		Mesta	Wet Plants	Dry Fibre	Village	Whole	17 days	District
4	Chhattisgarh	Paddy	Wet Paddy	Dry Paddy	Village	Whole	15 days	District
		Jowar	Cobs	Dry grain	Village	Whole	15 days	District
		Maize	Cobs	Dry grain	Village	Whole	15 days	District
		Wheat	Cobs	Dry grain	Village	Whole	15 days	District
		Barley	Cobs	Dry grain	Village	Whole	15 days	District
		Gram	Cobs	Dry grain	Village	Whole	15 days	District
5	Goa	Kodan Kutki	Wet grain	Dry grain	Village	Whole	15 days	District
		Groundnut	Wet Pods	Dry pods	village	whole	15 days	District
6	Gujrat	Paddy (Kh. & Rabi)	Wet Paddy	Dry paddy	Village	5 Kgs.	10 to 15 days	Stratum
		Paddy (Kh.& Sum.)	Wet paddy	Dry paddy	Not done	1 Kg.	part	Stratum
		Jowar (Kh.& Rabi)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Bajra (Kh.& Sum.)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Maize	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum

1	2	3	4	5	6	7	8	9
7	Haryana	Ragi	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Wheat	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Gram	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Groundnut(Kh.& Sum.)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		Paddy	Wet paddy	Dry paddy	Not done	Whole	15 days	State
		Bajra	Cobs	Dry grain	Not done	Whole	22 days	State
		Maize	Cobs with sheath	Dry grain	Not done	Whole	22 days	State
		Wheat	Wet grain	Dry grain	Not done	Whole	15 days	State
		Barley	Wet grain	Dry grain	Not done	Whole	15 days	State
		Gram	Wet grain	Dry grain	Not done	Whole	15 days	State
8	Himachal Pradesh	Rape & Mustard	Wet grain	Dry grain	Not done	Whole	15 days	State
		Paddy	Wet paddy	Dry paddy	Village	Whole	15 days	State
		Maize	Cobs	Dry grain	Village	Whole	31 days	State
		Wheat	Wet grain	Dry grain	Village	Whole	15 days	State
		Barley	Wet grain	Dry grain	Village	Whole	15 days	State
9	Jammu & Kashmir	Paddy	Wet paddy	Dry paddy	Village	2 Kgs.	15 days	District
		Maize	Wet cobs	Dry cobs	Village	2 Kgs.	25 days	District
		Wheat	Wet grain	Dry grain	Village	2 Kgs.	15 days	District
		Saffron	Wet bristles	Dry bristles	Field	Whole	10 days	District
		Rape & Mustard	Wet grain	Dry grain	Village	1 Kg.	15 days	District
		Linseed	Wet grain	Dry grain	village	1 Kg.	15 days	District
10	Jharkhand	Paddy (Agh.)	Wet paddy	Dry paddy	Village	Whole	15 days	District
		Wheat	Wet grain	Dry grain	Village	Whole	31 days	District
		Barley	Wet grain	Dry grain	Village	Whole	31 days	District
		Gram	Wet grain	Dry grain	Village	Whole	31 days	District
		Redgram	Wet grain	Dry grain	Village	Whole	31 days	District
11	Karnataka	Masur	Wet grain	Dry grain	Village	Whole	15 days	District
		Rape & Mustard	Wet grain	Dry grain	Village	Whole	15 days	District
		Paddy (Kh.Rabi.&Sum.)	Wet paddy	Dry paddy	Expts.	1 Kg.	C.W.	District
		Jowar (Kh.Rabi.&Sum.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Bajra (Kh.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Maize(Kh.Rabi.&Sum.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Ragi (Kh.Rabi.&Sum.)	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Navane	Cobs	Dry grain	Expts.	1 Kg.	C.W.	District
		Wheat	Wet grain	Dry grain	Expts.	1 Kg.	C.W.	District
		Gram	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Redgram	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Greengram (Kh.& Rabi)	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Blackgram (Kh. &Rabi)	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Horsegram (Kh. &Rabi)	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Soyabean	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Sesamum	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Save	plants	Dry grain	Expts.	1 Kg.	C.W.	District
		Groundnut (Kh. &Sum.)	Wet pods	Dry grain	Expts.	1 Kg.	C.W.	District
		Castor	Capsules	Dry seeds	Expts.	1 Kg.	C.W.	District

1	2	3	4	5	6	7	8	9
		Linseed	Plants	Dry seeds	Expts.	1 Kg.	C.W.	District
		Safflower	Plants	Dry seeds	Expts.	1 Kg.	C.W.	District
		Sunflower(Kh. Rabi & Sum.)	Flower	Grain	Expts.	1 Kg.	C.W.	District
		Tobacco	Green leaves	Cured leaves	Expts.	1 Kg.	C.W.	District
12	Kerala	Paddy (Aut. Wint. & Sum)	Wet paddy	Dry paddy	Both	250 grms.	C.W.	District
13	Madhya Pradesh	Paddy	Wet paddy	Dry paddy	village	Whole	15 days	District
		Jowar	Cobs	Dry grain	village	Whole	15 days	District
		Bajra	Cobs	Dry grain	village	Whole	15 days	District
		Maize	Cobs	Dry grain	village	Whole	15 days	District
		Wheat	Cobs	Dry grain	village	Whole	15 days	District
		Barley	Cobs	Dry grain	village	Whole	15 days	District
		Gram	Cobs	Dry grain	village	Whole	15 days	District
		Kodan Kutki	Wet grain	Dry grain	village	Whole	15 days	District
		Groundnut	Wet pods	Dry pods	village	Whole	15 days	District
		Paddy (Kh. & Rabi)	Wet Paddy	Dry Paddy	village	5 Kgs.	15 days	District
		Jowar (Kh. & Rabi)	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Bajra	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Maize (Kh. & Rabi)	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
14	Maharashtra	Ragi	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Wheat	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Gram	Wet Grain	Dry grain	village	5 Kgs.	C.W.	District
		Groundnut	Wet Pods	Wet Pods	village	5 Kgs.	15 days	District
		Arecanut	Asoli	Rotha	village	5 Kgs.	21-28 days	District
		Cashewnut	Wet Nut	Dry Nut	village	5 Kgs.	C.W.	District
15	Meghalaya	Paddy (Aut. & Wint.)	Wet Paddy	Dry Paddy	Both	Whole	7-10 days	District
		Jute	Wet Plants	Dry Nut	Both	Whole	20-28 days	District
		Paddy (Aut. Wint. & Sum)	Wet Paddy	Dry Paddy	Both	1 Kgs.	C.W.	District
		Maize (Aut. Wint. & Sum)	Cobs	Dry grain	Both	1 Kgs.	C.W.	State
		Ragi (Aut. Wint. & Sum)	Pods	Dry grain	Both	1 Kgs.	C.W.	State
		Wheat (Sum.)	Wet grain	Dry grain	Both	1 Kgs.	C.W.	State
		Greengram (Aut. Wint. & Sum)	Wet grain	Dry grain	Both	250 gms.	C.W.	State
16	Odisha	Blackgram (Aut. Wint. & Sum)	Wet grain	Dry grain	Both	250 gms.	C.W.	State
		Horsegram Wint. & Sum)	Wet grain	Dry grain	Both	250 gms.	C.W.	State
		Groundnut (Aut., Wint & Sum.)	Wet Pods	Kernal	Both	250 gms.	C.W.	State
		Sesamum (Aut., Wint & Sum.)	Wet Pods	Dry grain	Both	250 gms.	C.W.	State
		Rape & Mustard (Wint.)	Wet Pods	Dry grain	Both	250 gms.	C.W.	State
17	Punjab	Jute	Wet Plants	Dry Fibre	Both	1 kgs.	C.W.	State
		Paddy	Wet Paddy	Dry Paddy	Village	Whole	15 Days	State
		Maize	Cobs with Sheath	Dry grain	Not Done	5 kgs.	20 Days	State
		Wheat	Wet grain	Dry grain	Village	Whole	15 Days	State
		Barley	Wet grain	Dry grain	Village	Whole	15 Days	State
		Gram	Wet grain	Dry grain	Village	Whole	15 Days	State
		Rape & Mustard	Wet grain	Dry grain	Village	Whole	15 Days	State
18	Rajasthan	Cotton	Wet Kapas	Dry grain	Village	Whole II Picking	15 Days	State
		Paddy	Wet Paddy	Dry paddy	Not done	Whole	15 days	District
		Jowar	Cobs	Dry grain	Village	Whole	22 days	District
		Bajra	Cobs	Dry grain	Village	Whole	22 days	District
		Maize (Kh. & Rabi)	Cobs	Dry grain	Village	Whole	22 days	District

1	2	3	4	5	6	7	8	9
		Wheat	Wet grain	Dry grain	Village	Whole	15 days	District
		Barley	Wet grain	Dry grain	Village	Whole	15 days	District
		Gram	Wet grain	Dry grain	Village	Whole	15 days	District
		Chowla						District
		Greengram						District
		Blackgram			N.A.			District
		Moth						District
		Cumin						District
		Soyabean	Wet grain	Dry paddy	Village	Whole	15 days	District
		Groundnut	Wet Pods	Dry grain	Not done	Whole	15 days	District
		Sesamum	Wet grain	Dry grain	Not done	Whole	15 days	District
		Rape & Mustard	Wet grain	Dry grain	Not done	Whole	15 days	District
		Linseed	Wet grain	Dry grain	Not done	Whole	15 days	District
		Tarameera	Wet grain	Dry grain	Not done	Whole	N.A.	District
19	Tamil Nadu	Paddy (K/K/S., S/T/P,& N/K)	Wet Paddy	Dry paddy	Village	2 kgs.	C.W.	Block
		Bajra	Wet cobs	Dry Cobs	Village	2 kgs.	C.W.	Block
		Jowar	Wet cobs	Dry Cobs	Village	2 kgs.	C.W.	Block
		Ragi	Wet cobs	Dry Cobs	Village	2 kgs.	C.W.	Block
		Turmeric	Wet Turmeric	Dry Turmeric	Not Done	1 Kgs.	C.W.	Taluka
		Chillies	Wet Chillies	Dry Chillies	Not Done	1 Kgs.	3 to 4 days	Taluka
		Coriander	Wet Corinder	Dry Corinder	Not Done	1 Kgs.	C.W.	Taluka
		Varagu	Wet grain	Dry grain	Village	2 kgs.	C.W.	Block
		Samai	Wet grain	Dry grain	Village	2 kgs.	C.W.	Block
		Groundnut	Wet pods	Dry pods	Village	2 kgs.	C.W.	Block
		Paddy (Kh. & Rabi)	Wet Paddy	Dry Paddy	Village	1 Kgs.	C.W.	State
		Paddy (Kh. & Rabi)	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Bajra	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Maize (Kh. & Rabi)	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Ragi (kh. & Rabi)	Cobs	Dry grain	Village	2 kgs.	C.W.	State
20	Telangana	Korra	Cobs	Dry grain	Village	2 kgs.	C.W.	State
		Chillies (kh. & Rabi)	Wet Chillies	Dry grain	Village	500 gms.	C.W.	State
		Castor	Wet Capsules	Dry Capsules	Village	500 gms.	C.W.	State
		Groundnut (kh. & Rabi)	Green Pods	Dry Pods	Village	2 kgs.	C.W.	State
		Sunflower (kh. & Rabi)	Green Seed	Dry Seed	Village	500 gms.	C.W.	State
		Mesta	Wet Plants	Dry Fibre	Village	25 kgs.	C.W.	State
		Paddy	Wet Paddy	Dry Paddy	Village	5 Kgs.	15 days	District
		Jowar	Cobs	Dry grain	Village	10 kgs.	15 days	District
		Bajra	Cobs	Dry grain	Village	10 kgs.	15 days	District
		Maize	Cobs	Dry grain	Village	10 kgs.	15 days	District
		Ragi	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
21	Uttar Pradesh	Wheat (Pln.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Barley (Pln.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Gram	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Greengram(kh. & Zaid.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Blackgram(kh. & Zaid.)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Masur	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Soyabean	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Peas	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Sawan/ Jhangora (Pln)	Wet grain	Dry grain	Village	5 Kgs.	15 days	District

1	2	3	4	5	6	7	8	9
		Kodan	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Kutki	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Tur	Pods	Dry grain	Village	5 Kgs.	15 days	District
		Groundnut	Pods	Dry pods	Village	5 Kgs.	15 days	District
		Sesamum	Pods	Dry pods	Village	10 kgs.	15 days	District
		Rape & Mustard	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Linseed	Wet grain	Dry grain	Village	5 Kgs.	15 days	District
		Sunflower	N.A.	N.A.	N.A.	N.A.	N.A.	District
		Cotton (Desi/American)	Wet Cotton	Dry Cotton	Expts.	Whole	Same day	District
		Tobacco	Wet leaf & Stalk	Dry leaf & Stalk	village	10 kgs.	20 days	District
		Paddy	Wet Paddy	Dry Paddy	village	5 Kgs.	15 days	District
22	Uttarakhand	Wheat (Pln.)	Wet grain	Dry grain	village	5 Kgs.	15 days	District
		Barley (Pln.)	Wet grain	Dry grain	village	5 Kgs.	15 days	District
		Paddy (Aus. Aman & Sum.)	Wet Paddy	Dry Paddy	Expts.	500 gms.	12 days	Block
		Wheat	Ear heads	Dry grain	Expts.	500 gms.	12 days	Block
		Barley	Ear heads	Dry grain	Expts.	500 gms.	12 days	Block
		Maize	Ears without cover	Dry Corns	Expts.	500 gms.	12 days	Block
		Gram	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Redgram	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Blackgram	Pods	Seeds	Expts.	500 gms.	12 days	Block
23	West Bengal	Lakh	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Masur	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Peas	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Rape & Mustard	Pods	Seeds	Expts.	500 gms.	12 days	Block
		Linseed	Seed buds	Seeds	Expts.	500 gms.	12 days	Block
		Sesamum	Seed buds	Seeds	Expts.	500 gms.	12 days	Block
		Jute	Plants	Dry Fibre	Expts.	20 kgs.	12 days	Block
		Mesta	Plants	Dry Fibre	Expts.	20 kgs.	12 days	Block
24	Dadar & Nagar Haveli	Paddy	Wet Paddy	Dry Paddy	Expts.	1 kg / Sample	3 days	Stratum
		Ragi	Wet grain	Dry grain	Expts.	1 kg / Sample	3 days	Stratum
25	Daman & Diu	Paddy	Wet Paddy	Dry Paddy	Village	5 kgs.	C.W-3	Taluka
		Bajra	Wet Cobs	Dry Cobs	Expts.	5 kgs.	C.W-3	Taluka
26	Puducherry	Paddy (I, II, III)	Wet Paddy	Dry Paddy	Not Done	Part	6 to 9 days	Regional Level.

Note : 1. C.W. = Constant Weight for unspecified consecutive weightment.

2. C.W. - 3 = Constant Weight for 3 consecutive weightment.

APPENDIX -VII:- SAMPLE SIZE UNDER I.C.S. KHARIF (CENTRAL SAMPLES) DURING 2015-16

Number of experiments planned under crops

Sl. No	State	Rice	Jowar	Bajra	Maize	Ragi	Tur	Cotton	Jute	Sugar- Cane	Ground -nut	Other * Crops	Sub- Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	Andhra Pradesh	180	-	40	-	-	40	40	-	60	140	-	500	
2	Assam	Aut.	100	-	-	-	-	-	30	40	-	-		
		Wint.	120										290	
3	Bihar	Aut.	40	-	-	40	-	-	-	40	-	-		
		Wint.	240										360	
4	Chhattisgarh		80	-	-	40	-	40	-	-	-	40	200	
5	Gujarat		80	-	110	40	-	46	220	-	-	150	104	
6	Haryana		90	-	104	20	-	-	56	-	50	-	320	
7	Himachal Pradesh		60	-	-	90	-	-	-	-	-	-	150	
8	Jammu & Kashmir		70	-	-	90	-	-	-	-	-	-	160	
9	Jharkhand	Aut.	20	-	-	20	-	-	-	-	-	-		
		Wint.	80										120	
10	Karnataka		144	50	50	50	40	40	56	-	40	70	80	
11	Kerala	Aut.	100	-	-	-	-	-	-	-	-	-		
		Wint.	100										200	
12	Madhya Pradesh		100	100	-	80	-	80	48	-	-	40	180	
13	Maharashtra		82	80	60	-	-	100	140	-	68	60	260	
14	Odisha	Aut.	220	-	-	40	-	-	-	-	-	-		
		Wint.	270										120	
15	Punjab		190	-	-	48	-	-	72	-	70	-	380	
16	Rajasthan		-	60	60	50	-	-	40	-	40	40	520	
17	Tamil Nadu	Ph-I	60	-	-	-	-	-	-	-	-	-		
		Ph-II	120	-	-	-	-	-	-	-	-	-	180	
18	Telangana		100	50	-	50	-	-	40	-	-	40	80	
19	Uttar Pradesh		660	40	150	170	-	60	-	-	200	-	100	
20	Uttrakhand		50	-	-	-	40	-	-	-	40	-	130	
21	West Bengal	Aut.	100	-	-	-	-	-	-	80	-	-		
		Wint.	160										340	
22	Puducherry		10	-	-	-	-	-	-	-	-	-	10	
	TOTAL		3626	380	574	828	80	406	712	110	648	540	1194	9098

Note:-* Andhra Pradesh -Castor (40),Greengram (40), Chattisgarh-Kodon Kutki (40), Gujarat-Sesamum (54), Castor (50),

Karnataka- Greengram (40), Sunflower (40), Madhya Pradesh- Soyabean (100), Kodan Kutki (40),

Sesamum (40), Maharashtra-Greengram (110), Blackgram (80), Soyabean (70), Odisha-Potato (40)-W,Blackgram (40)-W,

Horsegram (40)-W, Rajasthan-Sesamum (80), Greengram(50), Moth(60), Blackgram(40), TamilNadu-Sesamum (60)

Uttar Pradesh - Blackgram (60), Sesamum (40)

2.The sample checks are undertaken by the supervisory staff of NSSO (FOD) and State Govts. on matching basis in two non-overlapping samples.