

69 वां अंक
69th Issue

मुख्य फसलों
पर
फसल प्राक्कलन सर्वेक्षण
के
समेकित परिणाम

Consolidated Results
Of
Crop Estimation Survey
On
Principal Crops

2016-17

राकेश कुमार
महा निदेशक

संदेश

कृषि और इसके सहयोगी क्षेत्र भारत में, मुख्य रूप से बहुत ग्रामीण क्षेत्रों में, सबसे बड़ा आजीविका प्रदाता हैं। सकल घरेलू उत्पाद में इसका महत्वपूर्ण योगदान है। भारत जैसे कृषि प्रधान देश में, कृषि सांख्यिकी की उपयोगिता को कमतर नहीं आँका जा सकता है तथा समयबद्ध कृषि सांख्यिकी आंकड़ों के संग्रहण के लिए बहुआयामी दृष्टिकोण की आवश्यकता है।

2. उत्पादन सांख्यिकी में फसलों की उपज दर एक मुख्य घटक 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। सामान्य फसल प्राक्कलन सर्वेक्षण (GCES) के अंतर्गत औसत उपज आंकलित करने हेतु उत्तम प्रकार से अभिकल्पित आंकलन सर्वेक्षणों के अंतर्गत एक निर्दिष्ट संख्या में फसल कटाई प्रयोग संचालित किए जाते हैं। दो मुख्य घटकों, 'बोया गया क्षेत्र' एवं 'औसत उपज', के आंकड़ों के संग्रहण की प्राथमिक ज़िम्मेदारी राज्य/संघ शासित प्रदेशों की होती है। वर्तमान में, 71 फसलों (55 खाद्य एवं 16 गैर- खाद्य) के प्रति हेक्टर 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। जी.सी.ई.एस. की अभिकल्पना स्तरीकृत बहुस्तरीय यादृच्छित नमूना पर आधारित है तथा क्षेत्र कार्य आमतौर पर राज्य सरकार के अधिकारियों को सौंपा जाता है। राष्ट्रीय सांख्यिकीय कार्यालय की समग्र ज़िम्मेदारी राज्यों को तकनीकी दिशा-निर्देश प्रदान कर सहायता करने की है। राष्ट्रीय सांख्यिकीय कार्यालय का क्षेत्र संकार्य प्रभाग विभिन्न राज्य सरकार/ संघ शासित प्रदेशों से प्राप्त जानकारी के आधार पर प्रति वर्ष फसल प्राक्कलन सर्वेक्षण के तहत फसल कटाई प्रयोगों के निष्कर्षों को समेकित करता है। इन निष्कर्षों का विश्लेषण, वार्षिक प्रकाशन "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 69वां अंक है तथा यह कृषि वर्ष 2016-17 से संबंधित है। मैं इस रिपोर्ट को तैयार करने में श्री कृष्ण चंद्र, उप महानिदेशक, रासंका०(क्ष०सं०प्र०), कृषि सांख्यिकी मुख्यालय फरीदाबाद व उनकी टीम के अधिकारियों के प्रयासों की सराहना करता हूँ जिनके प्रयासों से उपयोगी 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 योगदान में बहुत उपयोगी सावित होगी।


राकेश कुमार

नई दिल्ली
जुलाई, 2019

Rakesh Kumar
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. NSO has the overall responsibility of assisting States in providing technical guidance. Field Operations Division (FOD) of National Statistical Office (NSO) 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 69th in the existing series and relates to the Agriculture year 2016-17. I take this opportunity to convey my appreciation to Sh. Krishan Chander, DDG and his team of officers of Agriculture Statistics Headquarters of NSO (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.



Rakesh Kumar

New Delhi
July, 2018

प्रस्तावना

भारत में प्रमुख खाद्यान्न तथा गैर-खाद्यान्न 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 खाद्यान्नों के कुल उत्पादन का अनुमान 29 राज्यों/संघ-राज्यों में वैज्ञानिक आधार पर संचालित फसल कटाई प्रयोगों से प्राप्त उपज दरों के आधार पर किया जाता है।

2. राष्ट्रीय सांख्यिकीय कार्यालय (रा०स०का०) का क्षेत्र संकार्य प्रभाग (क्षे०सं०प्र०) प्रमुख फसलों की उपज दरों के आंकलन हेतु सर्वेक्षणों (फ०प्र०स०) के आयोजन तथा संचालन में राज्यों/संघ-राज्यों को तकनीकी मार्गदर्शन प्रदान करता है। अपनी समन्वयी भूमिका का उत्तरदायित्व निभाने अंतर्गत रा०स०का० (क्षे० सं० प्र०) यह सुनिश्चित करने में विशेष ध्यान रखता है कि विभिन्न राज्यों/संघ-राज्यों द्वारा एक जैसी मानक तकनीक, कार्यविधि एवं प्रक्रिया अपनायी जाए। इसके अतिरिक्त (रा०स०का०), राज्यों/संघ-राज्यों के सहयोग से फसल सांख्यिकी सुधार (फ० सं० सु०) योजना के अन्तर्गत क्षेत्रफल परिणाम, 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 विशेषित फसल प्राक्कलन सर्वेक्षण के समेकित निष्कर्षों को रा०स०का० (क्षे० सं० प्र०) 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 शुरूआत का 69 वां 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 2016-17 के दौरान मानक त्रुटि के साथ फसल उपज दर आंकलित कर सर्वेक्षण के परिणामों पर ध्यान केन्द्रित कराना है।

4. वर्ष 2016-17 के दौरान फ० प्रा० स० के अंतर्गत विभिन्न राज्यों तथा संघ-राज्यों में 55 खाद्यान्न तथा 16 गैर-खाद्यान्न फसलों को शामिल करते हुए 16,47,802 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 हैं। यहां यह उल्लेख करना आपेक्षित है कि हरियाणा, कर्नाटक एवं मध्य प्रदेश राज्य के राज्य प्राधिकारों द्वारा फसल प्राक्कलन सर्वेक्षण से संबन्धित पूर्ण सूचना उपलब्ध ना करवाए जाने के फलस्वरूप संबंधित 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, 2019

३८०५०२०२५३१५

(ए. के. टोपरानी)
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 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 Statistical Office (NSO) 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, NSO 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 NSO (FOD) in this annual publication titled "**Consolidated Results of Crop Estimation Survey on Principal Crops**". The present publication is the **69th** issue of the series. The report purposes 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 2016-17.

4. **16,47,802** crop cutting experiments covering 55 food and 16 non-food crops were planned in different States/UTs during 2016-17 under CES. The analysis made and conclusions drawn in the report are primarily based on the data and information furnished by the SASAs of the concerned States/UTs. It is, however, pertinent to mention here that the information pertaining to States of Haryana, Karnataka and Madhya Pradesh 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.



(Ashok Kumar Toprani)
Addl. Director General

July, 2019



प्रकाशन से जुड़े अधिकारीगण

1.	श्री कृष्ण चंद्र	उप महानिदेशक
2.	श्री बी. एस. नेगी	संयुक्त निदेशक
3.	श्री आलोक कुमार	उप निदेशक
4.	श्रीमती हिमानी बिसियर	वरिष्ठ सांख्यिकी अधिकारी
5.	श्री प्रमेन्द्र	कनिष्ठ सांख्यिकी अधिकारी

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A. Agricultural Statistics Schemes & NSO

1. National Statistical Office(NSO)

The Directorate of National Sample Survey (NSS), established in the year 1950, was reorganized into the present NSO 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 Quality Assurance Division (DQAD) (iii) Survey Coordination 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 NSO (FOD) & State Agricultural Statistics Authority (SASA) and to suggest remedial measures. NSO (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 2016-17 is July 2016 to June 2017.

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.

(c) 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.

(d) 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.

$$\text{-----} \quad \times 10 \\ \text{Plot size in Sqr. Mtrs.}$$

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 2016-17 के लिए फसल प्राक्कलन सर्वेक्षण की मुख्य विशेषताएँ निम्न हैं:

1. वर्ष 2016-17 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 16,47,802 प्रयोगों की तुलना में वर्ष 2016-17 के लिए विभिन्न फसलों के कुल प्रयोग 1,25,2113 नियोजित किये गए। प्रतिदर्श आकार में 3,95,689 प्रयोगों की वृद्धि खाद्यान्न फसलों में 3,00,797 प्रयोगों तथा गैर-खाद्यान्न फसलों में 94,892 प्रयोगों की वृद्धि के कारण हुई। (पैरा-7.1)

4. खाद्यान्न फसलों के लिए 13,68,572 प्रयोगों में से 57,741 (4.21%) प्रयोग केवल 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 2016-17 के दौरान सभी राज्यों/संघ राज्यों में आयोजित किया गया। छत्तीसगढ़ (कृषि), हिमाचल प्रदेश (खरीफ एवं रबी में कृषि), महाराष्ट्र (खरीफ एवं रबी सभी एजेंसी में), उत्तरप्रदेश (खरीफ एवं रबी में राजस्व), उत्तराखण्ड (राजस्व) एवं दादर एवम् नागर हवेली (कृषि) प्रशिक्षण केन्द्रों में विभिन्न एजेंसियों की उपस्थिति अखिल भारतीय औसत (86 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 को और अधिक मुहैया करवाए जाने की आवश्यकता है। (पैरा-8.2)

6. फसल कटाई प्रयोग के संचालन में कार्यरत प्राथमिक कर्मियों को प्रशिक्षण देने के लिए आयोजित कुल 2058 प्रशिक्षण केन्द्रों में से 833 (40.47%) प्रशिक्षण केन्द्रों में रासांका० के कर्मचारियों ने पर्यवेक्षक के रूप में भाग लिया और 202 (9.81%) केन्द्रों में प्रशिक्षण अधिकारी के रूप में भाग लिया।

(पैरा-8.3)

7. फसल प्राक्कलन सर्वेक्षण 2016-17 के अन्तर्गत नियोजित प्रयोगों में से लगभग 17 प्रतिशत प्रयोगों का ही पर्यवेक्षण किया गया जिसमें रासांका० द्वारा कार्यान्वित फसल सांख्यिकी सुधार योजना के अंतर्गत 1 प्रतिशत पर्यवेक्षण भी सम्मिलित है। आन्ध्र प्रदेश, बिहार, छत्तीसगढ़, गोवा, हरियाणा, हिमाचल प्रदेश, जम्मू एवं कश्मीर, झारखंड, मध्य प्रदेश, मेघालय, पंजाब, राजस्थान, उत्तराखण्ड तथा पश्चिम बंगाल में राज्य सांख्यिकी विभाग द्वारा कुल पर्यवेक्षण 10 प्रतिशत से कम था।

(पैरा-9.2)

8. फसल सांचिकी सुधार योजना के अंतर्गत फसल कटाई प्रयोगों पर प्रतिदर्श जांच के निष्कर्ष यह दर्शते हैं कि केवल 57% फसल कटाई प्रयोग निर्धारित कार्यप्रणाली के अनुसार सम्पन्न किए गए। इन निष्कर्षों को नियमित रूप से विभिन्न राज्य कृषि सांचिकी 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 2016-17 के दौरान फसल प्राक्कलन सर्वेक्षण के अंतर्गत कुल प्रत्योत्तर 93 प्रतिशत था। असम, छत्तीसगढ़, गोवा, गुजरात, हरियाणा, जम्मू एवं कश्मीर, हिमाचल प्रदेश, झारखण्ड, मध्य प्रदेश, तथा दादर एवम् नागर 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 2016-17 के परिणामों से स्पष्ट होता है कि ज्वार (खरीफ एवं रबी), मङ्गा, रागी, चना, तुर/अरहर, गन्ना, मूँगफली (खरीफ एवं रबी) तथा कपास 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, आन्ध्र प्रदेश में ज्वार (खरीफ); कुलथी (ग्रीष्म), छत्तीसगढ़ में जौ (खरीफ); खेसरी (खरीफ); सोयाबीन (खरीफ) एवं कोदो-कुटकी (खरीफ), हरियाणा में मङ्गा, कर्नाटक में ज्वार (ग्रीष्म उच्च उपज सिंचित); बाजरा (ग्रीष्म उच्च उपज); मिर्च (खरीफ, रबी एवं ग्रीष्म); मङ्गा (ग्रीष्म उच्च उपज); लाख (खरीफ); आलू (खरीफ एवं रबी); प्याज (ग्रीष्म); तंबाकू (खरीफ), मध्य प्रदेश में चावल (खरीफ उच्च उपज सिंचित); मिर्च (रबी), महाराष्ट्र में तिल (रबी), ओडीशा में कुलथी (ग्रीष्म); रागी (ग्रीष्म); गेहूँ (ग्रीष्म); जूट (खरीफ), तेलंगाना में ज्वार (खरीफ), पश्चिम बंगाल में अलसी (खरीफ) और दमन एवं डीयू में चावल (खरीफ); ज्वार (खरीफ) 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 2016-17 are highlighted below: -

1. 55 food and 16 non-food crops were covered under the programme of Crop Estimation Surveys (CES) during the year 2016-17. (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 16,47,802 crop cutting experiments were planned on different crops during 2016-17 as compared to 1,25,2113 experiments in the previous year. The increase of 3,95,689 experiments in the sample size is due to increase of 3,00,797 experiments under food crops and Increase of 94,892 experiments under non-food crops. (Para-7.1)
4. Out of 13,68,572 experiments for food crops, only 57,741 (4.21 %) 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 2016-17. Attendance of various agencies at the training centers was less than All India average (86 %) in Chhattisgarh (Agriculture), Himachal Pradesh (Agriculture in Kharif, Rabi), Maharashtra (Kharif and Rabi all agencies), Uttar Pradesh (Kharif and Rabi in Zaid), Uttarakhand (Revenue) and Dadra & Nagar Haveli (Agriculture). Conducting of the experiments by untrained personnel would impact 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 2058 training centers, NSO officials participated in 833 (40.47%) centers as observers and imparted training in 202 (9.81 %) centers. (Para-8.3)
7. 17% of the experiments planned under CES during 2016-17 were supervised. This includes 1% experiment which were supervised by the NSO under Scheme of Improvement of Crop Statistics. The total supervision by State Statistical Department was below 10% in Andhra Pradesh, Bihar, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Meghalaya, Punjab, Rajasthan, Uttarakhand and West Bengal. (Para-9.2)
8. The findings of the sample check on crop cutting experiments under the Scheme of 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 2016-17, the overall response under CES was 93 percent. In Assam, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh 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 take 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 2016-17 reveal that the yield rate estimates at All-India level increased as compared to the previous year for majority of important crops except Jowar (Kharif & Rabi), Maize (Comb.), Ragi, Gram, Redgram, Sugarcane, Groundnut (Kharif & Rabi) and Cotton. (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 Andhra Pradesh for Jowar (Kharif), Horsegram (Summer), Chhattisgarh for Barley, Lakh, Soyabean and Kodon-Kutki, Haryana for Maize, Karnataka for Jowar (Sum Hyv.Ir.), Bajra (Sum. Hyv), Maize (Sum Hyv.), Chillies (Kharif, Rabi & Summer), Potato (Kharif & Rabi), Onion (Summer), Tobacco (Kharif) and Lakh, Madhya Pradesh for Rice (Kh. Hyv Ir.), Chillies (Rabi), Maharashtra for Sesamum (Rabi), Odisha for Horsegram (Summer), Ragi (Summer), Wheat (Summer) and Jute (Kharif), Telangana for Jowar (Kharif), West Bengal for Linseed (Kharif) and Daman & Diu for Rice (Kharif), Jowar (Kharif). 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)



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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 Statistical Office (NSO) 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 Ninth in the existing series and relates to the Agriculture year 2016-17.



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 2016-17, Crop Estimation Surveys (CES) was conducted in 20 land record States/UTs, 3 EARAS States and 6 other States / UTs as given in **Table-1**.

Table –1: Details of CES coverage during 2016-17

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. Dadra & Nagar Haveli 20. 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 2016-17, 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 2016-17

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



CROP ESTIMATION SURVEY

Chart - I

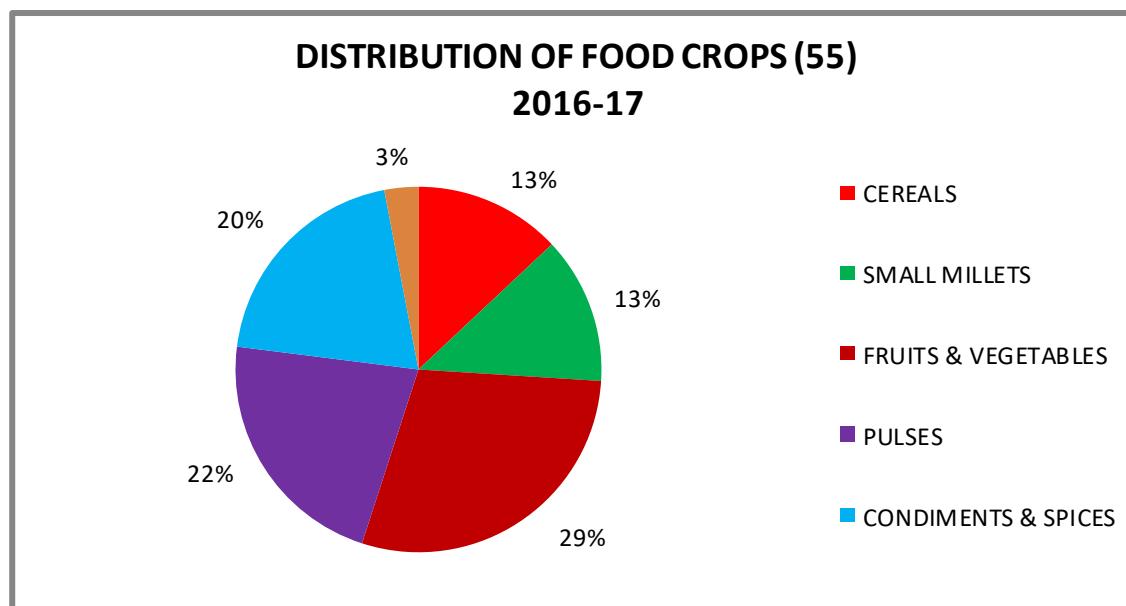
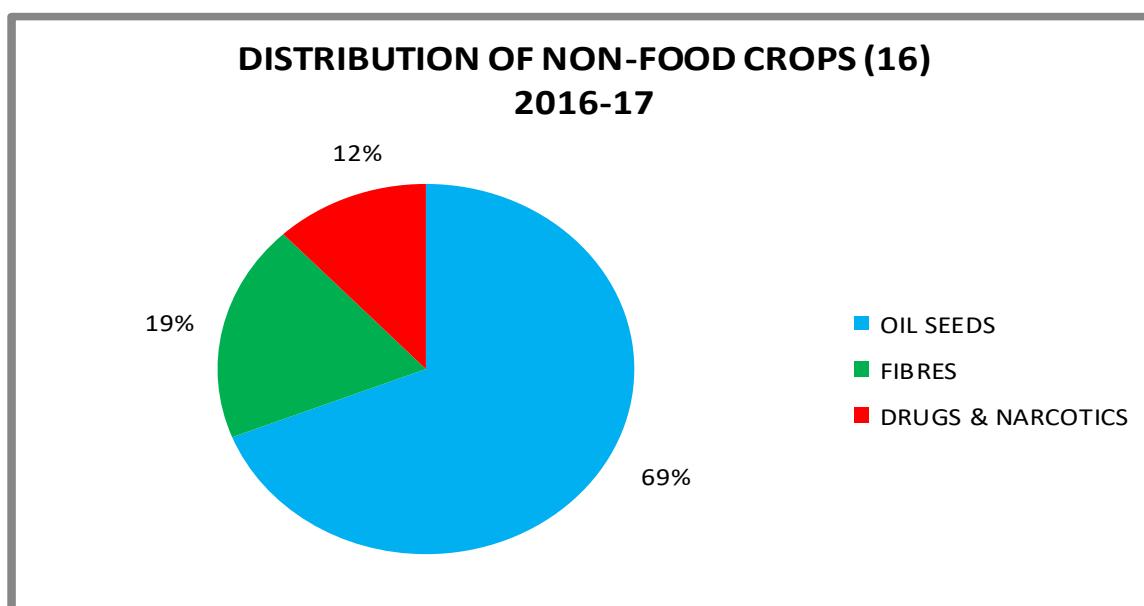
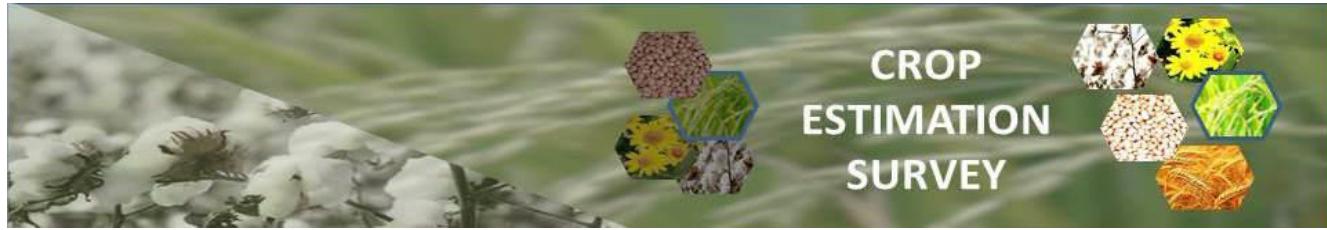


Chart – II





3.4 The Field Operations Division (FOD) of the National Statistical Office (NSO) 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. No addition and deletion of crops was done during 2016-17.



SAMPLING DESIGN

4

- 4.1 The sampling design generally adopted for the CES during 2016-17 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 in **Table-3**. 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 - 3: Stratification according to inputs adopted in sampling design during 2016-17

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, Odisha and in the UT of Puducherry, the primary work during 2016-17 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, 12.5 percent and 13.0 percent of the primary workers had to conduct more than 12 experiments during Kharif and Rabi respectively. Likewise, 18.2 percent of the primary workers had to conduct more than 20 experiments annually during 2016-17. As per the detail given in **Table-4**, it is observed that the workload of primary worker during the year was high (more than the All India figures) in Assam, Goa, Gujarat, Kerala, Madhya Pradesh, Meghalaya, Odisha, West Bengal and Dadra & Nagar.



Table - 4: Details of the high workload of primary workers during 2016-17

State	Agency for field work	Total strength	No. of primary workers conducted more than 12 Experiments		
			Kharif	Rabi	20 Expts. Annually
Assam	Statistical	101	101	94	101
Goa	Agriculture Kh.	23	19	-	23
	Agriculture Rabi	23	-	15	
Gujarat	Agriculture	1466	286	329	370
Kerala	Statistical	1028	-	-	811
Madhya Pradesh	Revenue	4407	1072	1275	1285
Meghalaya	Statistical	46	46	24	46
Odisha	Statistical	417	-	-	417
West Bengal	Agriculture	254	210	242	183
Dadra & Nagar Haveli	Development & Planning	5	4	-	-
	Soil Conservation Division	5	5	-	-
	Agriculture Dept.	6	6	-	-

- 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 Statistical Office i.e. NSO (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. NSO (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 NSO (FOD) received plan of work of CES for the year 2016-17 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. NSO(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 2016-17, a total of 16,47,802 experiments were planned under CES at All India level. The corresponding figure during 2015-16 was 12,52,113 experiments. This shows an increase of 395,689 experiments during 2016-17. The increase in sample size is due to increase of 3,00,797 experiments under food crops and increase of 94,892 experiments under non- food crops as shown in **Table-5** below.
- 7.2 The number of experiments planned over the last 10 years, given in **Table-5**, 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). **Crop Cutting Experiments during the year 2016-17 is high due to inclusion of experiments under PMFBY as single series of number of experiments were provided by the states Bihar, Gujarat and Rajasthan.**

Table –5: Number of experiments planned under CES during 2016-17

Year	Kharif			Rabi/Sum.			Total		
	Food	Non-Food	Total	Food	Non-Food	Total	Food	Non-Food	Total
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
2016-17 \$	724615	158631	883246	643957	120599	764556	1368572	279230	1647802

@ 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 from the year 2014-15 in the states of Karnataka and Jammu & Kashmir.

\$ It includes figures repeated from the year 2015-16 in the states of Haryana, Karnataka and Madhya Pradesh.

- 7.3 **Table-6** 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.



Table–6: 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
2014-15 ##	1308025	49.7	7.3	36.3	6.7
2015-16 ###	1252113	47.02	8.23	38.26	6.50
2016-17 \$	1647802	43.98	9.62	39.09	7.31

* 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 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.

\$ It includes figures repeated for the year 2010-11 in the state of Maharashtra and figures repeated for the year 2015-16 in the states of Haryana, Karnataka and Madhya Pradesh.

- 7.4 Details of number of experiments planned under CES during 2016-17 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 16,47,802 experiments planned, 13,68,572 (83%) were on food crops and 2,79230 (17%) 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 78% and 22% respectively (Chart -IV). If season-wise details are considered, it may be observed that Kharif crops account for a major share of 8,83,246 (54%) experiments and Rabi crops for 7,64,556 (46%) experiments.

Chart – III

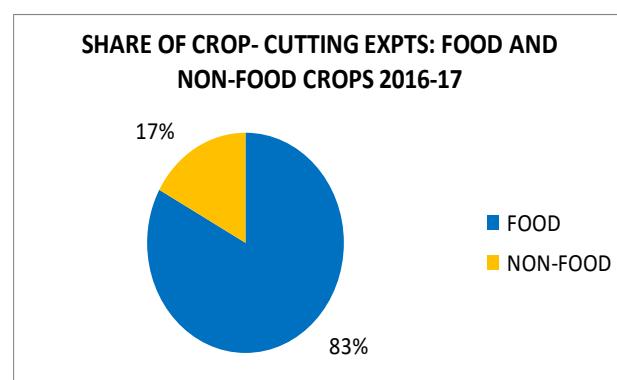
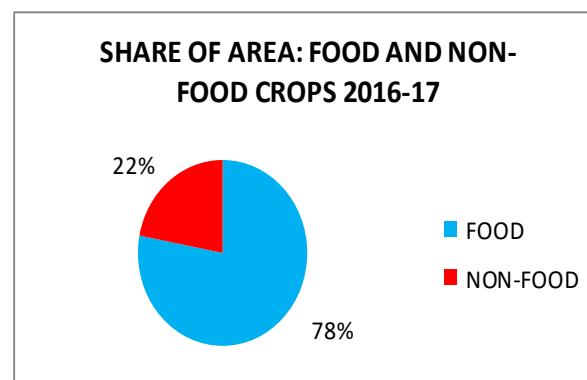


Chart – IV





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-7** that out of 13,68,572* (83%) experiments for food crops, only 57,741* (4.21 %) experiments were covered under 16 fruits and vegetable crops. Among fruits and vegetable crops, 17% of the experiments were accounted for fruits and 83% for vegetable crops.

Table -7: Fruits and Vegetables covered under CES during 2016-17

Sl. No.	Fruits	No. of Experiments Planned
1	Lichi	300
2	Banana	3351
3	Mango	2220
4	Guava	280
5	Jackfruit	2038
6	Pineapple	1571
7	Papaya	32
Total		9792
Sl. No.	Vegetables	No. of Experiments Planned
1	Tapioca	1587
2	Cashewnut	1536
3	Potato	35228
4	Onion	4066
5	Brinjal	1550
6	Tomato	1620
7	Cauliflower	340
8	Plaintain	1622
9	Avare	400
Total		47949

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%), Bihar (8%) and Rajasthan (6%) have accounted for more than 49 percent of the gross cropped area (Chart-V). However, the distribution of experiments over States/UTs reveals that more than 55 percent of the experiments were planned in Uttar Pradesh (38%), Karnataka (7%), Bihar (6%), Gujarat (9%) and Rajasthan (14%) (Chart-VI).

* Figures for experiments planned are obtained from Annexure V.



Chart – V

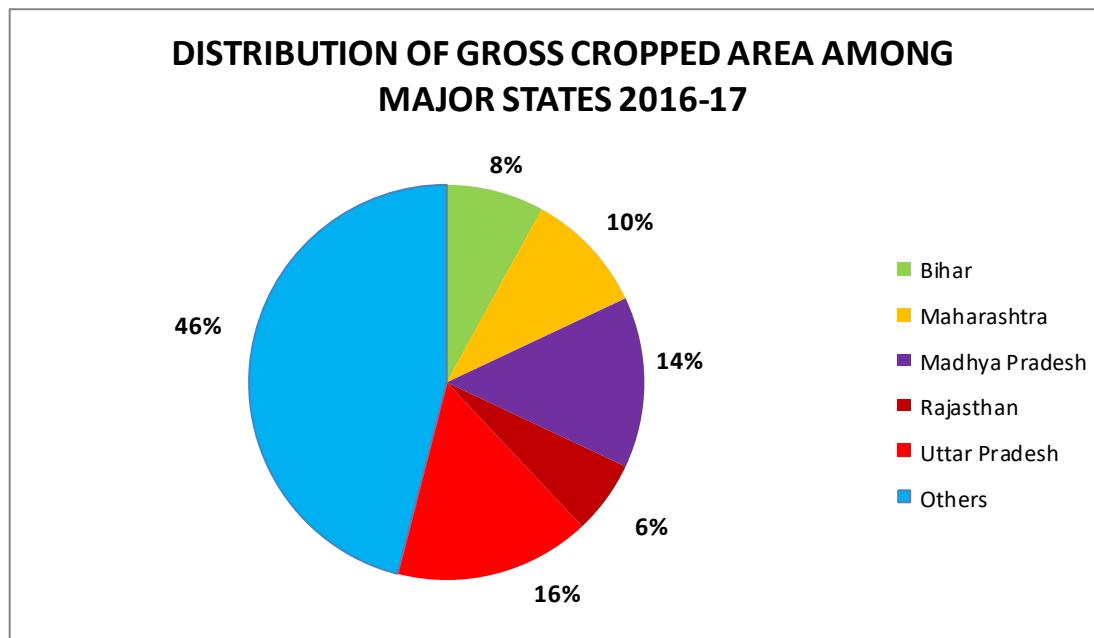
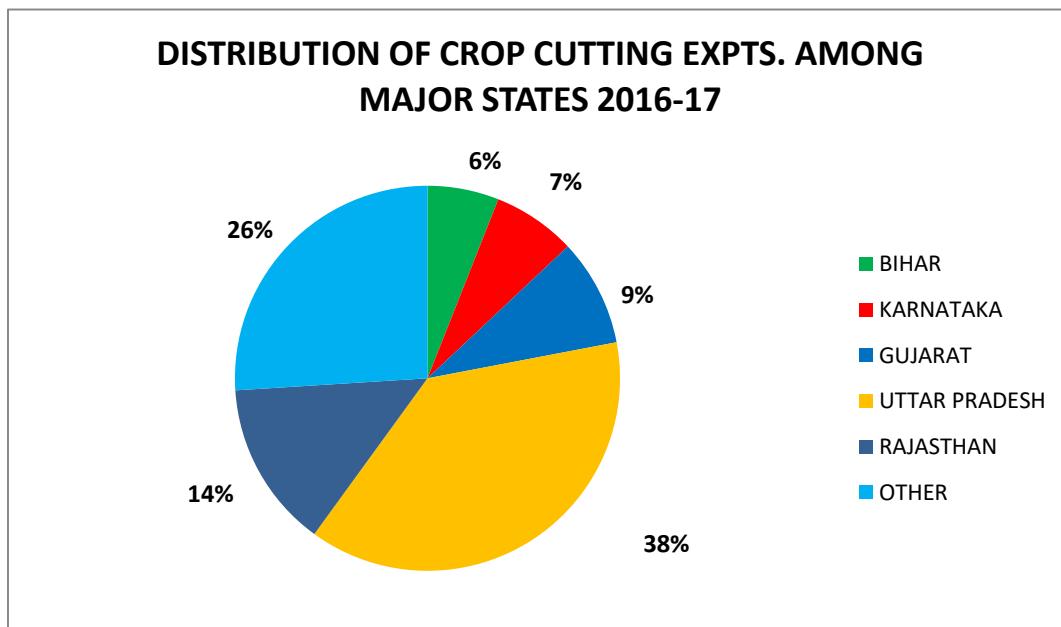


Chart – VI





7.7 **Table-8** shows increase of 3,97,497 experiments during 2016-17 due to increase in number of experiments planned for a number of crops in the States of Bihar, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Meghalaya, Odisha, Rajasthan, Telangana and Uttar Pradesh. The total number of experiments planned decreased by 1,805 due to decrease in experiments planned in the States of Andhra Pradesh, Kerala, Punjab, Uttarakhand, West Bengal and Puducherry. This shows net decrease of experiments in the States is 3,95,692 during 2016-17 over 2015-16. There was no change in planning in the States of Assam, Dadra & Nagar Haveli and Daman & Diu whereas for the States of Haryana, Madhya Pradesh and Karnataka information was not received.

Table-8: Comparison of number of experiments planned during 2016-17 and 2015-16

States showing increase in experiments planned	No. of experiments planned			States showing decrease in experiments planned	No. of experiments planned		
	2016-17	2015-16	Net increase over previous year		2016-17	2015-16	Net decrease over previous year
Bihar	97970	34090	63880	Andhra Pradesh	22700	23128	428
Chhattisgarh	5986	5976	10	Kerala	28384	28638	254
Goa	690	680	10	Punjab	6976	6982	6
Gujarat	155139	34750	120389	Uttarakhand	8312	8342	30
Himachal Pradesh	6046	5036	1010	West Bengal	48950	50027	1077
Jammu & Kashmir	5546	5398	148	Puducherry	290	300	10
Jharkhand	72810	27030	45780				
Karnataka#	118730	107802	10928				
Meghalaya	2080	2052	28				
Odisha	48489	44916	3573				
Rajasthan	233510	109176	124334				
Telangana*	14162	13456	706				
Uttar Pradesh	628240	601542	26698				
	Total		397497				

#: - The data pertaining to Karnataka for 2016-17 and 2015-16 correspond to 1 year prior to the year mentioned.

*:- The data pertaining to Karnataka for 2016-17 and 2015-16 corresponds to 1 year prior to the date of survey.
**:- 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, 2016-17 respectively and **Annexures-1(d) and 1(e)** give similar details for non-food crops. Summary of details are presented in **Table-9 & Table-10**. On examination of these tables, it can be concluded that except for Wheat, Maize, R & M, Bajra, Gram, Jowar, Groundnut, Blackgram and Sesamum, the representation of remaining 2 main crops has decreased in percentage terms as compared to previous year.

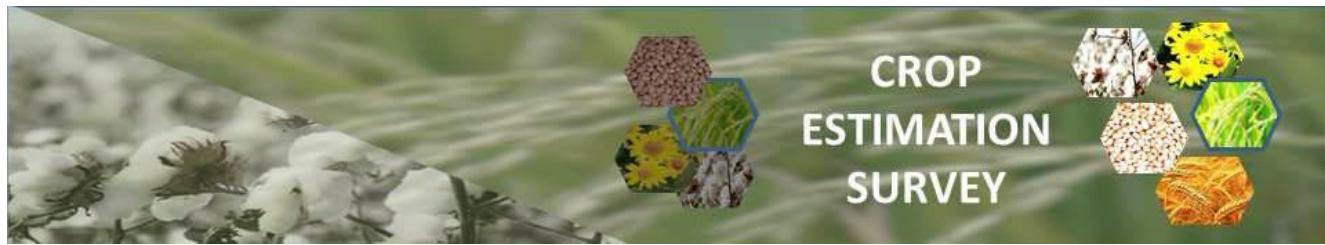


Table – 9: Details of experiments planned on Food and Non- Food Crops during 2016-17

S. No.	Particulars	No. of Expts.	Percentage
A. FOOD CROPS		1368572	83.05
1	Cereals	1019925	61.90
2	Pulses & beans	230764	14.00
3	Small Millets	3460	0.21
4	Sugar & Cocoa	27386	1.66
5	Condiments & Spices	29296	1.78
6	Fruits & Vegetables	57741	3.50
B. NON-FOOD CROPS		279230	16.95
1	Oil Seeds	220093	13.36
2	Fiber Crops	53759	3.26
3	Drugs & Narcotics	5378	0.33
TOTAL		1647802	100

Table- 10: Distribution of experiments planned for Main Crops during 2016-17

Sl. No.	Crop	No. of Expts.	% to Total Expts.
1.	Paddy	378705	22.98
2.	Wheat	399076	24.22
3.	Maize	88466	5.37
4.	R & M	81090	4.92
5.	Bajra	82291	4.99
6.	Gram	64441	3.91
7.	Jowar	47662	2.89
8.	Redgram	31969	1.94
9.	Groundnut	61771	3.75
10.	Blackgram	32862	1.99
11.	Sugarcane	26586	1.61
12.	Sesamum	31061	1.88

7.9 **Annexure-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-11**, 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 – 11: Percentage of area covered under CES during 2016-17

Sl. No.	Crop	%age of area covered by CES to total area under the crop in the States covered
1.	Paddy (Kharif)	89
	Paddy (Rabi / Sum.)	95
2.	Jowar (Kharif)	90
	Jowar (Rabi / Sum.)	20
3.	Bajra (Kharif & Rabi / Sum.)	84
4.	Maize (Kharif)	89
	Maize (Rabi / Sum.)	74
5.	Ragi (Kharif & Rabi / Sum.)	89
6.	Wheat	93
7.	Barley	89
8.	Gram	97
9.	Redgram/Tur (Kharif&Rabi)	89
10.	Sugarcane	95
11.	Sunflower (Kharif)	90
	Sunflower (Rabi / Sum.)	90
12.	Groundnut (Kharif)	98
	Groundnut (Rabi / Sum.)	85
13.	Sesamum(Kharif& Rabi/Sum.)	93
14.	Castor	94
15.	Rape & Mustard	93
16.	Linseed	86
17.	Safflower	94
18,	Coconut	30
19.	Niger	68
20.	Cotton	48
21.	Jute	99
22.	Mesta	96
23.	Tobacco	87



Chart-VII

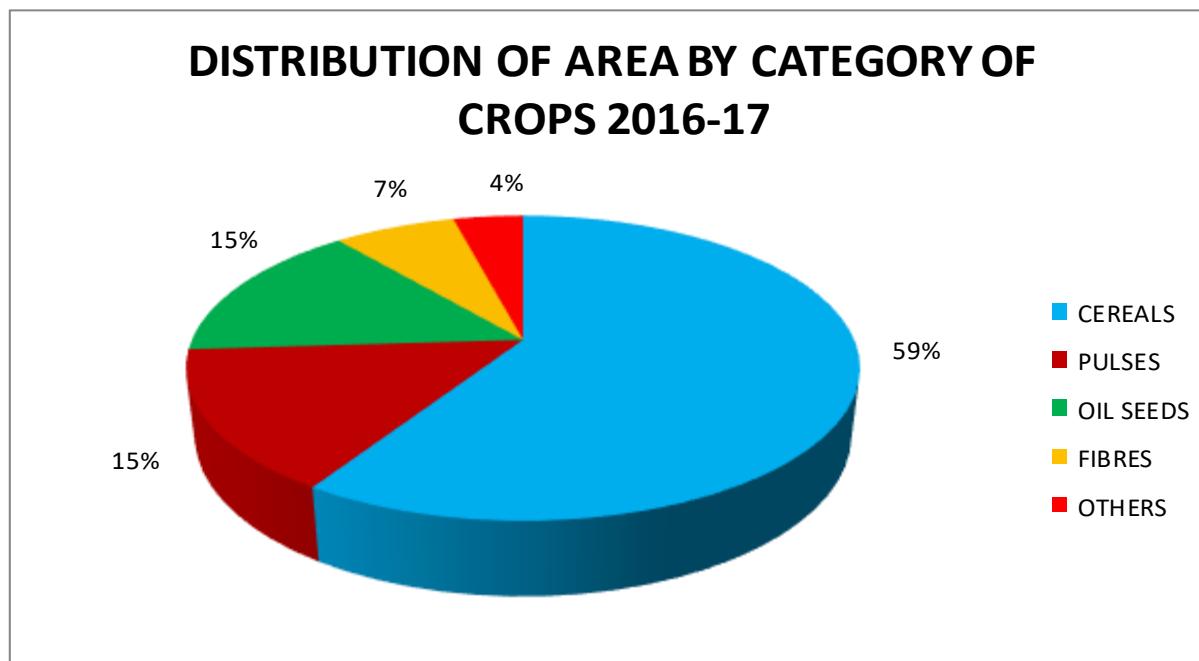
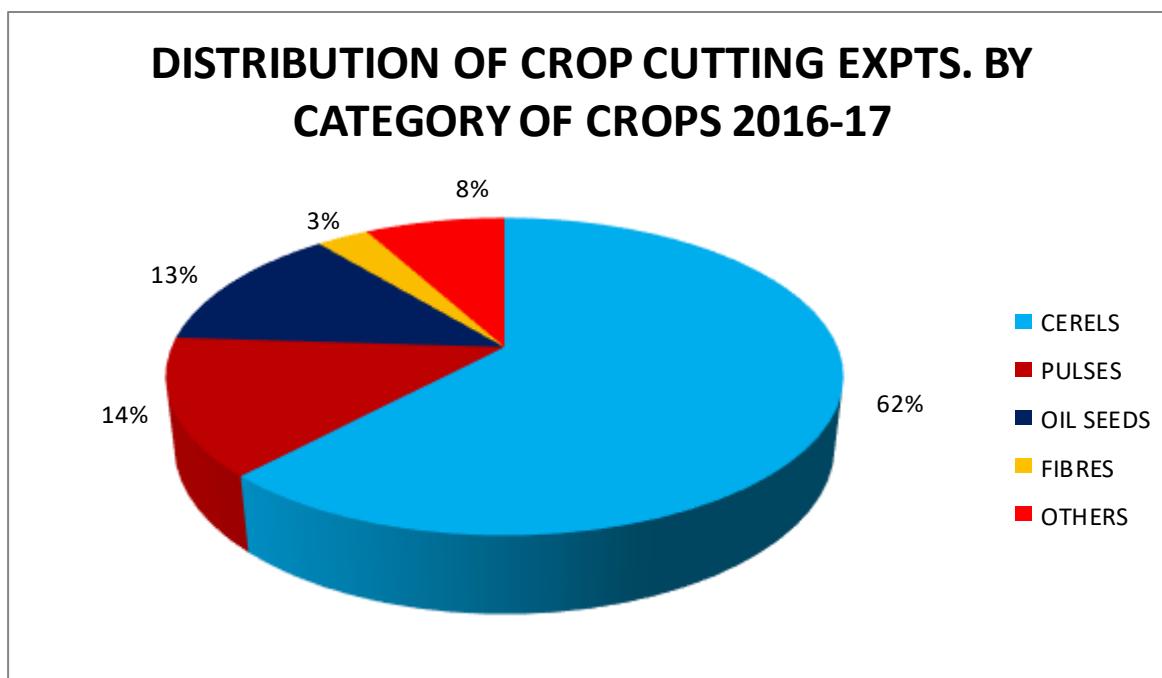


Chart- VIII





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 2016-17. NSO officials also participated in the training programmes either as trainers or as observers.
- 8.2 **Annexure-II** shows the agency-wise details of the number of training centres, number of primary workers who attended the training and the extent of NSO participation in the training programmes in the year 2016-17. During the year, training was organised in 2058 centres. At All India level, 67097 out of 67776 primary workers were called for training and 57758 attended the training camps resulting in 86% attendance in CES training camps. States where the attendance of primary workers of various agencies was less than the All-India average were Chhattisgarh (Agriculture/Statistical), Himachal Pradesh (Agriculture in Kharif, Rabi), Maharashtra (Revenue, Zila Parishad, Agriculture both season), Uttarakhand (Revenue) Uttar Pradesh (Revenue in Kharif & Zaid) and Dadra & Nagar Haveli (Division Soil Conservation, Agriculture Deptt). 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 2016-17, the officers of NSO (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, Karnataka, Kerala, Maharashtra, Meghalaya, West Bengal, Dadra & Nagar Haveli and Daman & Diu. In all, out of the 2058 training centers, NSO officials participated in 833 (40.47%) centers as observers and imparted training in 202 (9.81 %) 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 NSO (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, NSO (FOD), NSO 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 2016-17, 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 **Annexure-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. **Annexure-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 -12**.



Table –12: Supervision of crop cutting experiments during 2016-17

Item	No. of expts. Planned	No. of Experiments Supervised by					
		State Statistical Department		Other State Departments		NSO	
1	2	3	4	5	6	7	8
Kharif							
Food Crops	724615	31117 (8)	25839 (7)	95320 (30)	94807 (30)	7284 (1)	7112 (1)
Non-Food Crops	158631	11174 (10)	8765 (7)	30452 (29)	30390 (29)	2042 (1)	1975 (21)
Combined	883246	42291 (8)	34604 (7)	125772 (30)	125197 (30)	9326 (1)	9087 (1)
Rabi							
Food Crops	643957	11781 (4)	11541 (3)	56544 (20)	56261 (20)	4506 (1)	4273 (1)
Non-Food Crops	120599	4230 (5)	4196 (5)	24128 (32)	24063 (32)	1010 (1)	908 (1)
Combined	764556	16011 (4)	15737 (4)	80672 (23)	80324 (23)	5516 (1)	5181 (1)
TOTAL (Percentage)	1647802	58302 (6)	50341 (5)	206444 (27)	205521 (26)	14842 (1)	14268 (1)

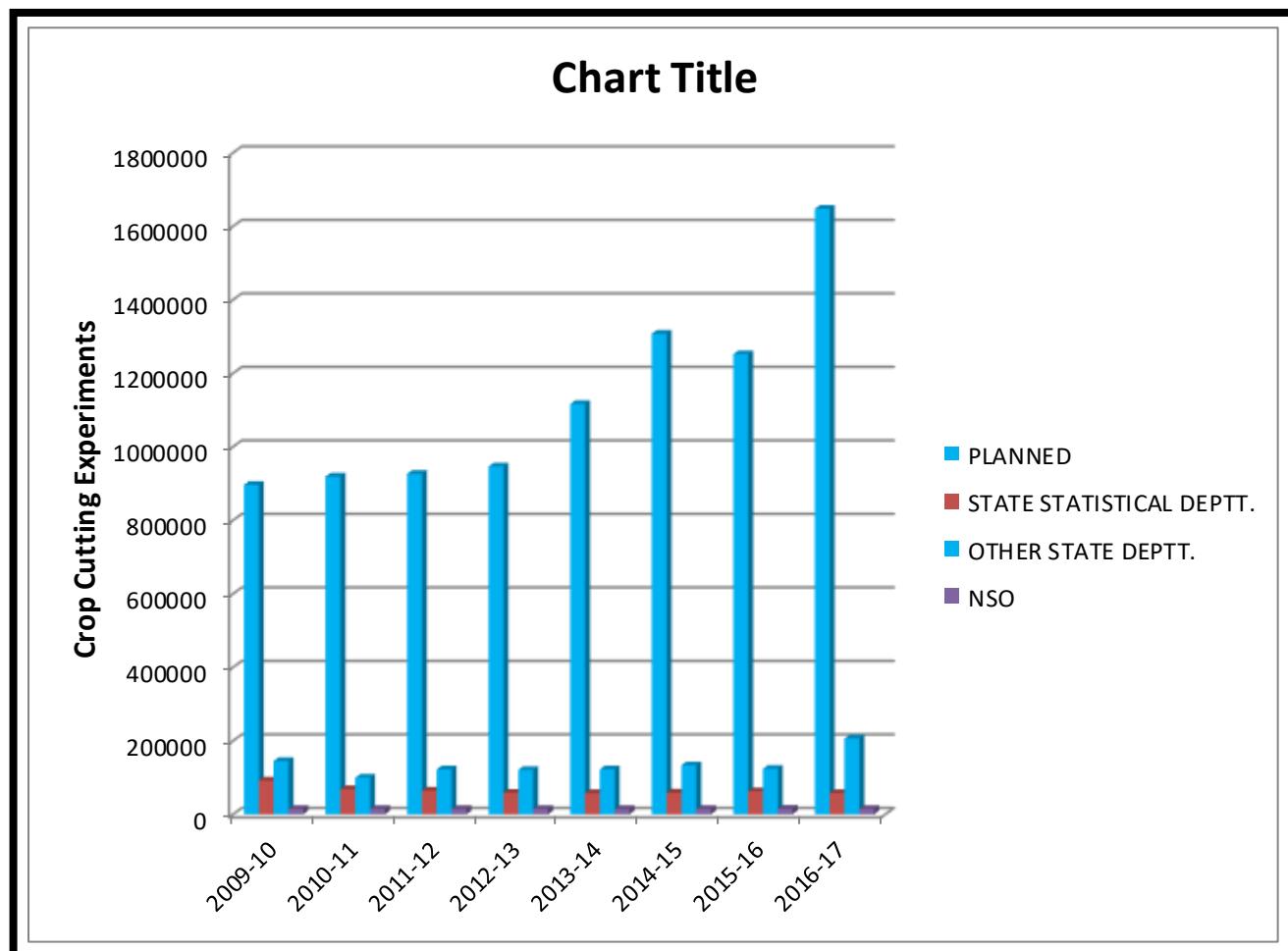
* Total Percentages have been calculated by including only those States from which complete data was received.

During 2016-17, about 17% of the total experiments planned were supervised, out of which 6 percent were supervised by the State Statistical Department, 27 percent by other State Departments and 1 percent by NSO. However, the supervision was conducted at harvest stage in approximately 97% cases. It may also be observed from the State-wise position as given in **Annexure-III (a)** that the total supervision by State Statistical Department was above 25 percent in the States Kerala, Tamil Nadu, and Union Territories of Dadra & Nagar Haveli, Daman & Diu and Puducherry and was below 10 percent in the States of Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Meghalaya, Punjab, Rajasthan, 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, Himachal Pradesh,



Meghalaya, TamilNadu and West Bengal. Total supervision by NSO officers in individual States varied from 0.3 percent in Jharkhand 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-13**. It is seen that at All India level, the total supervision (adding up figures for all the concerned departments) varied between 9 and 48 percent for important crops like Paddy, Jowar, Bajra, Maize, Ragi, Wheat, Barley, Groundnut, Sesamum, Cotton and Jute, and in the range of 21 to 36 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 3 to 32 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-13: Crop- wise percentage of experiments supervised during 2016-17

Crop	State Statistical Deptt		Other State Departments		NSO		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	4	4	12	12	1	1	10	10
Jowar	7	7	37	37	1	1	26	26
Bajra	4	4	45	45	1	1	27	27
Maize	6	6	27	27	1	1	18	17
Wheat	2	2	21	21	1	1	9	9
Barley	4	4	48	48	2	2	48	48
Gram	3	3	31	31	1	1	21	20
Other Pluses & Beans	3	3	22	22	1	1	26	40
Small Millets	12	12	11	10	2	2	25	24
Sugars	4	3	1	1	2	2	8	6
Condiments & Spices	8	3	18	18	0	0	27	21
Fruits & Veg.	6	2	3	3	0	0	10	5
Ragi	13	13	17	17	1	1	27	24
Groundnut	8	8	16	16	1	1	25	25
Sesamum	5	5	17	17	1	1	23	22
Castor	15	15	15	15	2	2	32	31
Rape & Mustard	2	2	24	24	1	1	28	27
Linseed	6	6	22	21	9	9	26	26
Other Oil Seeds	12	6	23	23	1	1	36	30
Cotton	3	3	20	20	2	2	19	19
Jute	12	12	1	1	3	3	15	15
Mesta	3	3	0	0	-	-	3	3
Drugs & Narcotics	4	4	29	29	0	0	32	32

9.4 An idea about the extent of participation by the State Statistical and the NSO 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-14**. It is seen that a total of



23178 (1.73%) experiments out of the 14,45,904 experiments planned (for the crops covered under ICS) were spot checked at harvest stage either by Central or State agencies during 2016-17 as against 24996 (2.46%) experiments out of 10,14,347 experiments planned during 2015-16. 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 NSO (FOD) and State Govts. on matching basis in two non-overlapping samples.

Table -14: Supervision under ICS scheme during 2016-17

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	15436	656	1326	670	8.59
2.	Assam	11250	452	832	380	7.40
3.	Bihar	88514	684	884	200	1.00
4.	Chhattisgarh	4908	348	679	331	13.83
5.	Gujarat	122208	792	1181	389	0.97
6.	Haryana	8994	658	1085	427	12.06
7.	Himachal Pradesh	6046	258	504	246	8.34
8.	Jammu & Kashmir	5056	186	252	66	4.98
9.	Jharkhand	59790	214	298	84	0.50
10.	Karnataka	90334	738	1047	309	1.16
11.	Kerala	14064	520	1038	518	7.38
12.	Madhya Pradesh	28310	1110	1668	558	5.89
13.	Maharashtra	75094	1061	1649	588	2.20
14.	Odisha	37518	824	1639	815	4.37
15.	Punjab	6976	673	1311	638	18.79
16.	Rajasthan	190434	830	1556	726	0.82
17.	Tamil Nadu	8096	709	1446	737	17.86
18.	Telangana	9050	446	632	186	6.98
19.	Uttarakhand	7014	130	268	138	3.82
20.	Uttar Pradesh	615608	2211	2567	356	0.42
21.	West Bengal	40914	715	1256	541	3.07
22.	Puducherry	290	30	60	30	20.69
All States		1445904	14245	23178	8933	1.60

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 2016-17, 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 Assam, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, 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 (Winter Agh.) and Uttar Pradesh (Kharif & Rabi) during 2016-17. 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 2016-17, the overall response for c.c. experiments recorded was 93 percent. Percentage response for food crops during Kharif and Rabi, 2016-17 was 95 % and 94% respectively and for non-food crops, it was 87 % & 88 % respectively. Response was below 90 percent in Assam (86%), Chhattisgarh (77%), Goa (77%), Gujarat (84), Haryana (89%), Himachal Pradesh (85%), Jammu & Kashmir (68%), Jharkhand (71%), Madhya Pradesh (85%), and Dadra & Nagar Haveli (59%). 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 93.2 percent of the total number of experiments planned were analysed. Of the remaining (6.8 percent) experiments, which could not be analysed, 10.6 percent were reported to be lost in the field, 0.7 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 10.6 percent experiments lost in the field, no specific reasons had been reported in respect of 8.4 percent experiments while 8.6 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 (13.8 %), Chhattisgarh (23.5%), Goa (23.3%), Gujarat (15.5%), Haryana (11.5%), Himachal Pradesh (15.2%), Jammu & Kashmir (32 %), Jharkhand (28.7%), Madhya Pradesh (14.9 %), and Union Territory of Dadra & Nagar Haveli (41 %).



- 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 2016-17 are given in Annex -V. **Table-15** shows the crop-wise percentage response at All India level for important crops during 2016-17.

Table-15: Crop - wise percentage response at All India level for important crops under CES 2016-17

Sl.No.	Crop	Response (%)
1.	Paddy (Kharif)	96
	Paddy (Rabi / Sum.)	93
2.	Jowar (Kharif)	91
	Jowar (Rabi)	96
3.	Bajra (Kharif)	94
	Bajra (Sum.)	93
4.	Maize (Kharif)	87
	Maize (Rabi / Sum.)	92
5.	Ragi (Kharif)	95
	Ragi (Rabi / Sum.)	97
6.	Wheat	96
7.	Barley	93
8.	Gram	90
9.	Redgram/Tur	94
10.	Sugarcane	92
11.	Groundnut (Kharif)	79
	Groundnut (Rabi / Sum.)	77
12.	Sesamum (Kharif)	95
	Sesamum (Rabi)	88
13.	Castor	95
14.	Rape & Mustard	91
15.	Linseed	85
16.	Cotton	90
17.	Jute	88



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 2012-13 to 2016-17 are presented in **Charts-X to XII** respectively.
- 11.2 The results of CES for 2016-17 reveal that for some crops, response was very low in few States. For instance, it was less than 50 percent in Bihar for Rice (Bhadai U.I. 49%, Gar HYV 29%, Gar. LV 29%), Maize (Gar. Hyv) (41%), Greengram (Gar. 43%), Mesta (43%), Lichi (10%), Guava (24%), Tomato (Agh. 46%); Chhattisgarh for Potato (Rabi 18%), Onion (Rabi 25%); Goa for Groundnut (29%); Gujarat for (Wheat U.I. 29%); Haryana for Sunflower (29%), Jharkahand for Redgram (42%), Uttar Pradesh for Sunflower (Z) (18%) and Dadara & Nagar Haveli for Ragi (28%). **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 2016-17 and for the previous year for some important crops are given in **Table-16**. These results show that the average yield per hectare during 2016-17 was more than that of previous year for Rice Kharif, (Rabi/Sum.), Bajra, Wheat, Barley, Sesamum, Castor, Rape & Mustard, Linseed and Jute. In case of Jowar (Kh. & Rabi), Maize (Comb.), Ragi (Comb.), Gram, Redgram, Sugarcane, Groundnut (Kh., Rabi & Summer), and Cotton the average yield has shown decline as compared to the previous year 2015-16.

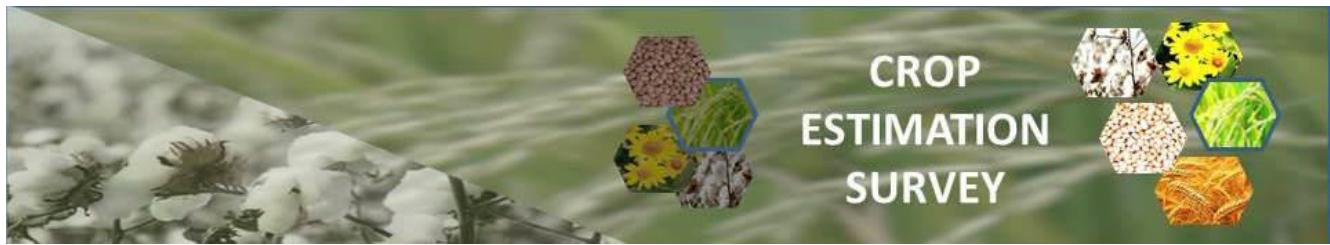


Table -16: Comparison of CES Yield Rates during 2016-17 and 2015-16

Sl. No.	Crop	Yield rate in (kg/ha.)		Percentage difference
		2016-17	2015-16	
1.	Rice (Kharif)	2768	2435	13.68
2.	Rice (Rabi/Sum.)	4075	4058	0.42
3.	Jowar (Kharif)	951	1010	-5.84
4.	Jowar (Rabi/ Sum.)	785	839	-6.44
5.	Bajra (Comb.)	1248	1148	8.71
6.	Maize (Comb.)	2426	2536	-4.34
7.	Ragi (Comb.)	844	1596	-47.12
8.	Wheat	3429	3044	12.65
9.	Barley	2761	2479	11.38
10.	Gram	956	958	-0.21
11.	Redgram/Tur	570	583	-2.23
12.	Sugarcane	71598	75617	-5.31
13.	Groundnut (Kharif)	1303	1360	-4.19
14.	Groundnut (Rabi / Sum.)	2152	2170	-0.83
15.	Sesamum (Comb.)	448	418	7.18
16.	Castor	1867	1789	4.36
17.	Rape & Mustard	1334	1144	16.61
18.	Linseed	472	444	6.31
19.	Cotton (Lint)	797	809	-1.48
20.	Jute	2606	2486	4.83

- 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, Chillies, Lichi, Banana, Mango, Guava, Potato (Agh.), Cauliflower, Onion, Rape & Mustard, Jute and Mesta; Haryana for Gram, 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 Jowar, Chowla, Sugarcane, Coriander Methi, Tara Meera, Cotton and Isabgol.



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 of a good estimate of crop yield 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-17** presents the cases where the standard errors were higher than the desirable range.

Table-17: State-wise crops with high standard error during 2016-17

Sl. No	State	Crop with percentage S.E.
1.	Andhra Pradesh	Jowar Kh. (10.3), Greengram Kh. (8.0), Horsegram Kh. (12.2), Korra 6.7Sesamum Kh. (5.4) & Rabi (5.1) Sunflower Kh. (6.6) & Rabi (6.0) and Soyabean (9)
2.	Bihar	Brinjal Rabi (7.82)
3.	Chhattisgarh	Jowar (15.1), Barley (33.8), Lakh (32.1), Kodon-Kutki (10.1), Sesamum (7.8) and Soyabean (10.5)
4.	Gujarat	Rice Kh.UI. (9), Moth (8)
5.	Haryana	Maize (12.6)
6.	Jammu & Kashmir	Rice (8), Maize (6) and Wheat (6)
7.	Karnataka	Jowar Sum. Hyv Ir. (19.3), Maize Sum. Hyv. (21.2); Ragi Sum. Hyv Ir (10.0); Wheat Tr. Ir. & U.I. (7); Greengram Rabi (9.8), Blackgram Rabi (9.1), Navane (6.7); Save (8.4); Sugarcane (6.5); Chillies Kh. (16.1), Linseed (10.6), Onion Kh. (9.5), Rabi (9.2) & Summer (10.9), Groundnut Rabi (9.8), Castor (6.2), Sunflower Sum. Ir. (5.3), Tobacco V (6.7), Avare (9) and Cowpea (8.8)
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	Bajra (10.5), Ragi Sum. (11.2), Wheat (12.4), Greengram Aut. (9.5), Blackgram (6.9) Horsegram Kh. (9.0) & Rabi (8.7), Korra (7.5) Sesamum Aut. (7.4) and Sunflower Kh. (7.4)
11.	Telangana	Bajra kh. (14.9), Ragi Kh. (5.9), Greengram Rabi (7.58), Horsegram Kh. (9.0); Rabi (8.7), Sunflower Kh. (7.4), Sesamum (7.4) and Korra (8.6)
12.	Tamil Nadu	Maize (5.1), Ragi Ir. (7.3), Blackgram (8.5) and Cotton (7.2)
13.	West Bengal	Lakh (8.7), Peas (9), Sugarcane (8.2) and Linseed (27.7)
14.	Daman & Diu	Rice (16.6) and Bajra (25.57)



Chart - X

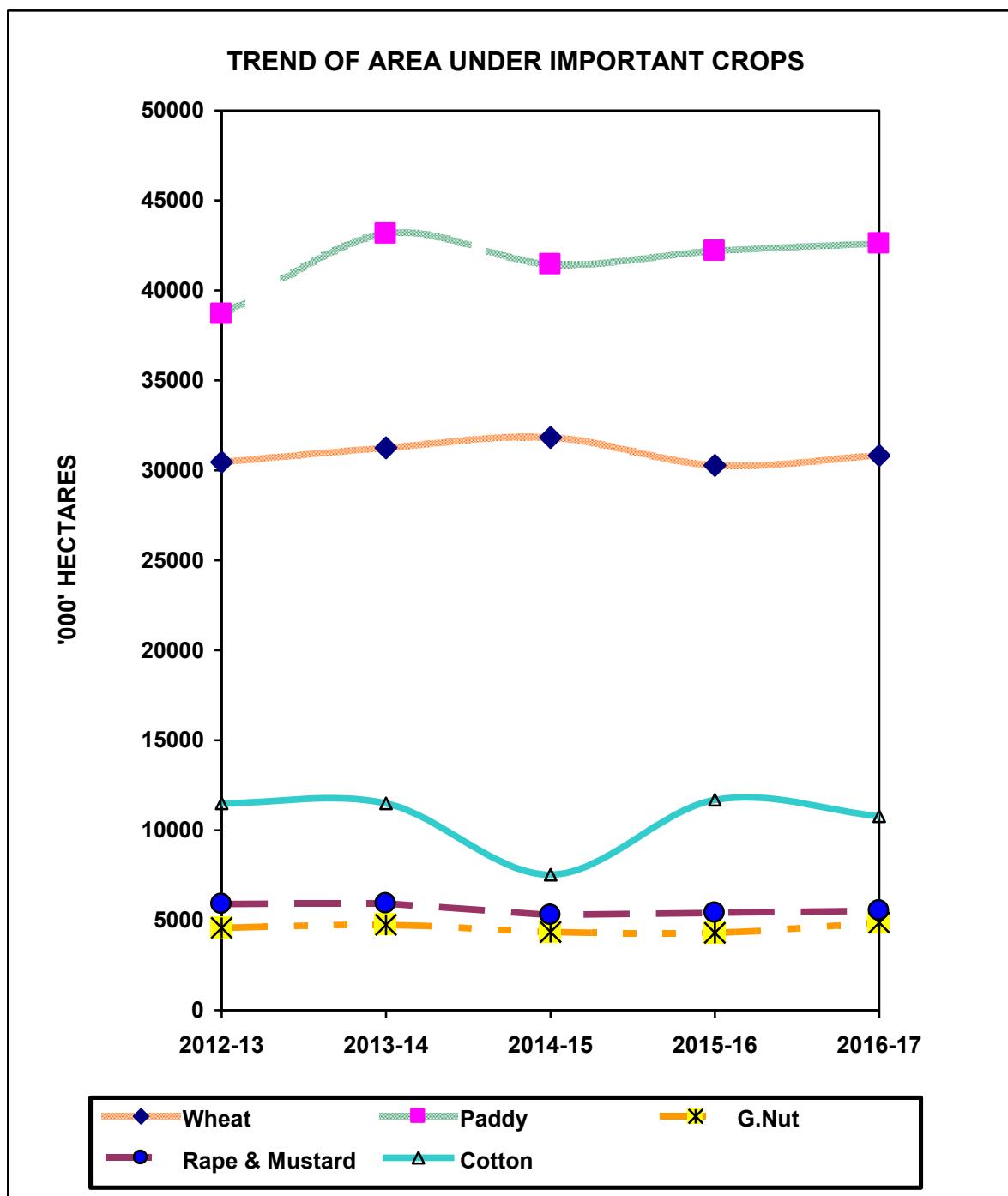




Chart – XI

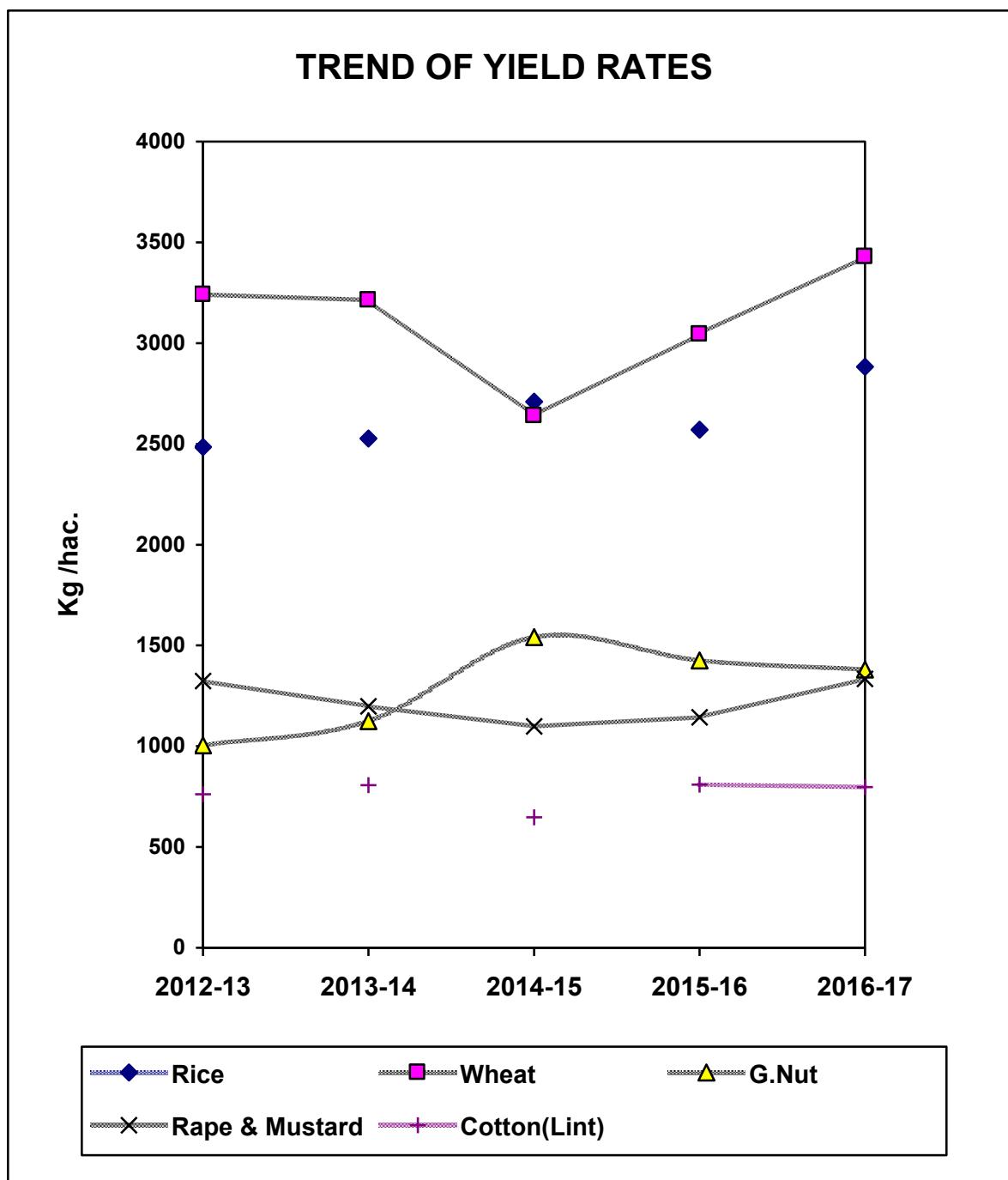
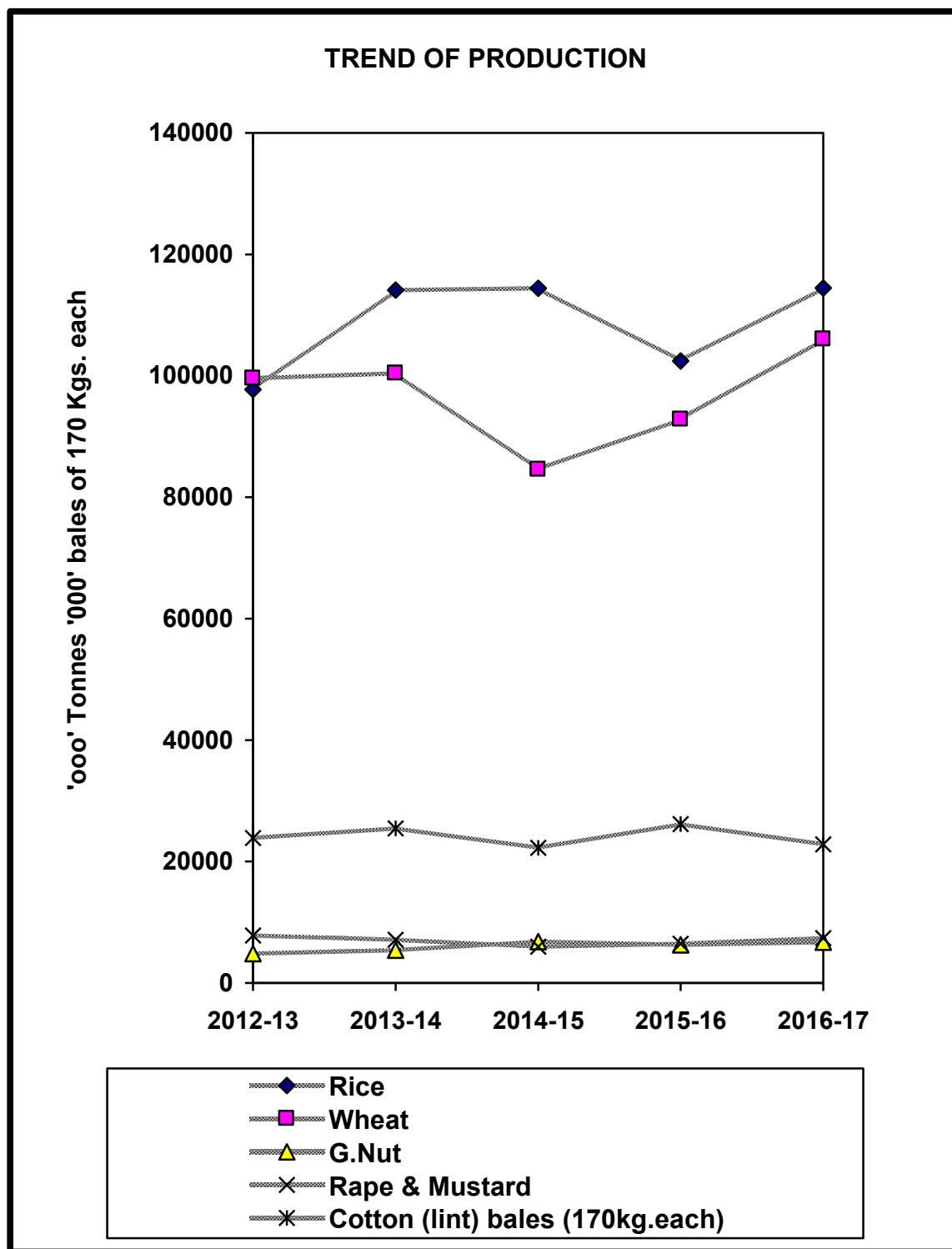




Chart - XII





11.6 Comparison of estimates of crop production for 2016-17 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, NSO 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-18**.



Table-18: States where number of experiments have been used as weights instead of area for yield calculation during 2016-17

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-19**.

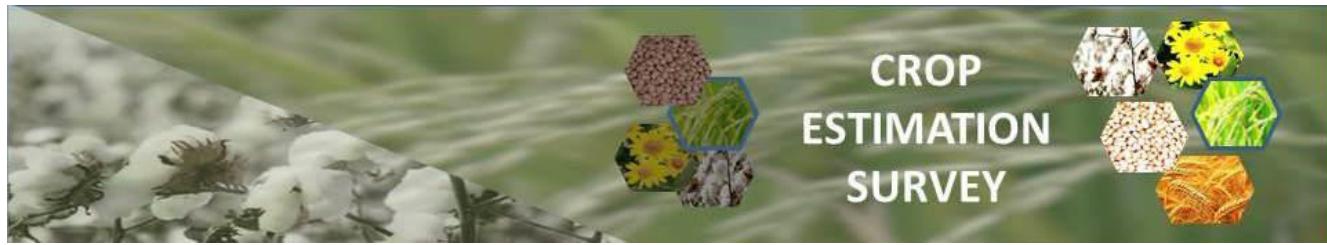
Table-19: Non-receipt of data on four-fold classification during 2016-17

Sl.No.	State	Crop
1.	Gujarat	Rice, Jowar, Bajra, 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-20**) from the following States for the crops mentioned against each: -

Table-20: Non-receipt of data on two-fold classification during 2016-17

Sl. No.	State	Crop
1.	Gujarat	All Crops
2.	Jammu & Kashmir	Saffron, Potato, R&M, Linseed.
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 and Uttar Pradesh for all the crops; Jharkhand for Barley; Rajasthan for Linseed; Kerala for 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 2016-17 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 2016-17 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 2016-17. 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)



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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 2016-17

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	8706	4536	13242	7246	2212	9458	15952	6748	22700
2.	Assam	5700	600	6300	3700	1250	4950	9400	1850	11250
3.	Bihar	45593	400	45993	50913	1064	51977	96506	1464	97970
4.	Chhattisgarh	2860	510	3370	1842	774	2616	4702	1284	5986
5.	Goa	320	80	400	190	100	290	510	180	690
6.	Gujarat %	29392	47296	76688	68003	10448	78451	97395	57744	155139
7.	Haryana *	4096	940	5036	3278	1270	4548	7374	2210	9584
8.	Himachal Pradesh	3216	0	3216	2830	0	2830	6046	0	6046
9.	Jammu & Kashmir \$	3098	0	3098	2138	310	2448	5236	310	5546
10.	Jharkhand	28770	0	28770	36210	7830	44040	64980	7830	72810
11.	Karnataka %%	54636	17422	72058	34728	11944	46672	89364	29366	118730
12.	Kerala	24523	2511	27034	1350	0	1350	25873	2511	28384
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	1708	58	1766	314	0	314	2022	58	2080
16.	Odisha	36543	2316	38859	6298	3332	9630	42841	5648	48489
17.	Punjab	3036	696	3732	2678	566	3244	5714	1262	6976
18.	Rajasthan	97706	26820	124526	72276	36708	108984	169982	63528	233510
19.	Tamil Nadu	6516	2760	9276	0	0	0	6516	2760	9276
20.	Telangana	6674	2022	8696	4454	1012	5466	11128	3034	14162
21.	Uttarakhand	4686	0	4686	3626	0	3626	8312	0	8312
22.	Uttar Pradesh	293936	21850	315786	285602	26852	312454	579538	48702	628240
23.	West Bengal	17432	3132	20564	19399	8987	28386	36831	12119	48950
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	80	0	80	210	0	210	290	0	290
GRAND TOTAL		724615	158631	883246	643957	120599	764556	1368572	279230	1647802

Note :

1. \$: Data repeated from the year 2011-12 for crops Linseed, Potato, R&M and Saffron.

3. # : Figure repeated for the year 2013-14 in respect for crops Banana, Onion and Papaya and all other crop 2015-16 for Madhya Pradesh.

3. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.

4. %% : Data repeated from the year 2015-16.

5. * : Data repeated from the year 2015-16

ANNEX -I (b): SAMPLE SIZE - KHARIF FOOD CROPS UNDER CES DURING 2016-17

Sl. No.	S T A T E	Number of Experiments Planned under the crops										Total	
		Paddy	Jowar	Bajra	Maize	Ragi	Red-gram	Green-gram	Black-gram	Sugarcane	Others		
1	2	3	4	5	6	7	8	9	10	11	12	13	
1.	Andhra Pradesh	REG. Ir.	3562	0	0	0	0	0	0	0	0	0	
		REG.	0	0	0	0	0	0	0	0	0	0	
		REG. UI	242	0	0	0	0	0	0	0	0	0	
		Total	3804	178	488	234	200	818	348	310	1602	724	8706
2.	Assam	Aut.	2000	0	0	0	0	0	0	700	0	0	
		Wint.	3000	0	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	616	0	0	0	0	0	0	
		Bha.Lv.	0	0	0	704	0	0	0	0	0	0	
		Bha.Ir.	392	0	0	0	0	0	0	0	0	0	
		Bha.UL	560	0	0	0	0	0	0	0	0	0	
		Bha.	0	0	0	0	280	0	280	0	0	0	
		Agh.Hyv.Ir.	21940	0	0	0	0	0	0	0	0	0	
		Agh.Hyv.UL	5405	0	0	0	0	0	0	0	0	0	
		Agh.Lv.Ir.	9785	0	0	0	0	0	0	0	0	0	
		Agh.Lv.UL	3955	0	0	0	0	0	0	0	0	0	
		Total	42037	0	0	1320	280	0	280	0	856	820	45593
4.	Chhattisgarh	Ir. Hyv.	366	0	0	0	0	0	0	0	0	0	
		Ir.Lv.	154	0	0	0	0	0	0	0	0	0	
		UL	1002	0	0	0	0	0	0	0	0	0	
		Total	1522	80	0	490	0	474	0	0	0	294	2860
5.	Goa		190	0	0	0	0	0	0	0	130	0	320
6.	Gujarat %	Ir.	10650	0	0	0	0	0	0	0	0	0	0
		UL	3886	0	0	0	0	0	0	0	0	0	0
		Total	14536	468	2162	8140	290	1370	1032	972	0	422	29392
7.	Haryana *	REG.	990	0	1532	144	0	360	0	0	1070	0	0
		Total	990	0	1532	144	0	360	0	0	1070	0	4096
8.	Himachal Pradesh		1334	0	0	1882	0	0	0	0	0	0	3216
9.	Jammu & Kashmir \$		1412	0	0	1378	0	0	0	0	0	0	308
10.	Jharkhand	Bha.	600	0	0	7830	0	0	0	0	0	0	0
		Agh.Hyv.	17520	0	0	0	0	0	0	0	0	0	0
		Agh.Lv.	0	0	0	0	0	0	0	0	0	0	0
		Total	18120	0	0	7830	450	510	0	0	240	1620	28770
11.	Karnataka % %	Hyv.Ir.	6572	1000	770	4338	1360	0	0	0	0	0	0
		Hyv.UL	3362	2150	2656	6978	5726	0	0	0	0	0	0
		Tra.Ir.	464	0	0	58	0	0	0	0	0	0	0
		Tra.UL	1442	300	136	14	64	0	0	0	0	0	0
		Total	11840	3450	3562	11388	7150	6342	3264	1000	940	5700	54636
12.	Kerala	Aut.	2344	0	0	0	0	0	0	0	0	0	0
		Wint.	3140	0	0	0	0	0	0	0	0	0	0
		Total	5484	0	0	0	0	0	0	0	46	18993	24523
13.	Madhya Pradesh #	Ir. Hyv.	790	0	0	0	0	0	0	0	0	0	0
		Ir.Lv.	560	0	0	0	0	0	0	0	0	0	0
		UL	1410	0	0	0	0	0	0	0	0	0	0
		Total	2760	1746	320	1928	0	1650	0	0	0	864	9268
14.	Maharashtra	Ir.	0	0	0	0	0	0	0	0	0	0	0
		UL	0	0	0	0	0	0	0	0	0	0	0
		Comp.	0	0	0	0	0	0	0	0	0	0	0
		Total	4214	4248	762	678	866	5758	5902	4766	8742	0	35936

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
15.	Meghalaya	Aut.	328	0	0	0	0	0	0	0	0	0
		Wint.	748	0	0	0	0	0	0	0	0	0
		Total	1076	0	0	0	0	0	0	0	632	1708
16.	Odisha	Aut.	7327	0	0	2058	807	0	622	834	0	0
		Wint.	16499	0	0	104	511	0	1307	1942	249	0
		Total	23826	0	0	2162	1318	0	1929	2776	249	4283
17.	Punjab		1978	0	0	360	0	0	0	0	698	0
18.	Rajasthan		3116	10840	26064	11968	0	0	10872	3576	450	30820
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.	2708									
		UL	104									
		Total	2812	448	52	960	76	788	532	114	556	336
21.	Uttarakhand		2956	0	0	0	1106	0	0	0	0	624
22.	Uttar Pradesh		182544	6452	36462	29652	0	12614	2184	14478	9400	150
23.	West Bengal	Aus.	2281	0	0	0	0	0	0	0	0	0
		Aman.	13308	0	0	0	0	0	0	0	0	0
		Total	15589	0	0	634	0	0	0	1209	0	0
24.	Dadra & N.Haveli		78	0	0	0	78	0	0	0	0	156
25.	Daman & Diu		20	0	8	0	0	0	0	0	0	28
26.	Puducherry		80	0	0	0	0	0	0	0	0	80
Grand Total		349306	28990	71856	81580	12174	31020	26783	29625	26147	67134	724615
% of area under CES to total area under the crop in the CES States (Ref.-Annex-v, Col-4)		89	90	83	89	89	89@	97	85	95@	-	-

Note :-

1. Crops included under "Others" are:-

Andhra Pradesh:-	Korra (204) , Horsegram (120) and Chillies (400) under Regular Scheme.
Bihar :-	Potato Agh. (340) , Brinjal Agh. (340) and Tomato Agh. (140).
Chhattisgarh :-	Kodon-Kutki (294).
Gujarat:-	Moth (256) and Gowar (166)
Jammu & Kashmir:-	Saffron (102) and Potato (206).
Jharkhand	Potato Agh. (570), Tomato Agh. (660) and Brinjal (390).
Karnataka :-	Horsegram (2370), Navane (740), Save (320), Potato (180), Onion (750), Chillies (510), Avare (Sem) (400) and Cowpea (Lobia) (430).
Kerala :-	Arecanut (1620), Tapioca (1587), Cashewnut (1536), Pepper (1614), Cocoa (800), Banana (2409), Jackfruit (1618), Plantain (1622), Turmeric (1540), Pineapple (1571), Ginger (1456), and Mango (1620).
Madhya Pradesh:-	Kodon-Kutki (864).
Maharashtra :-	Arecanut (N.A.) and Cashewnut (N.A.).
Meghalaya:-	Ginger (632).
Odisha:-	Horsegram-Wint. (2271) and Potato-Wint. (2012).
Rajasthan :-	Chowla (1548), Moth (6620) and Gwar (22652)
Tamil Nadu:-	Horsegram (320) , Varagu (124), Samai (100).
Telangana :-	Horsegram (40) , Korra (20), Chillies (276)
Uttarakhand:-	Sawan (624).
Uttar Pradesh:-	Sawan (70) and Kodan (80).

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

2. \$: Data repeated from year 2011-12 for Potato and Saffron.

3. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.

4. %% : Data repeated from the year 2015-16.

5. # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion and Papaya and all other crop 2015-16 for Madhya Pradesh.

6. * : Data repeated from the year 2015-16

ANNEX- I (c) : SAMPLE SIZE - RABI FOOD CROPS UNDER CES 2016-17

SL No.	STATE	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	1328	402	634	852	7246
	Total	2994	482	0	554	0	1328	402	634	852	7246
2. Assam	Sum	1500	0	850	0	0	0	0	500	850	3700
3. Bihar	Rabi	0	0	0	760	300	800	504	0	0	
	Hyv.Ir	0	0	25300	0	0	0	0	0	0	
	Hyv.UI	0	0	780	0	0	0	0	0	0	
	Lv.Ir	0	0	14555	0	0	0	0	0	0	
	Lv.UI	0	0	690	0	0	0	0	0	0	
	Gar.Hyv.	300	0	0	380	0	0	0	0	0	
	Gar.Lv.	140	0	0	120	0	0	0	0	0	
	Gar.	0	0	0	0	0	0	0	0	0	
	Total	440	0	41325	1260	300	800	504	0	6284	50913
4. Chhattisgarh	Hyv.Ir	0	0	508	0	0	0	0	0		
	Lv.Ir	0	0	112	0	0	0	0	0		
	Lv.UI	0	0	246	0	0	0	0	0		
	Total	0	0	866	0	36	488	0	0	452	1842
5. Goa		190	0	0	0	0	0	0	0	0	190
6. Gujarat %	Ir	0	0	40390	0	0	0	0	0	0	
	UI	0	0	984	0	0	0	0	0	0	
	Total	202	300	41374	0	0	3880	0	0	22247	68003
7. Haryana *		0	0	2200	0	516	562	0	0	0	3278
8. Himachal Pradesh		0	0	1930	0	900	0	0	0	0	2830
9. Jammu & Kashmir \$		0	0	1980	0	0	0	0	0	158	2138
10. Jharkhand	Hyv.	0	0	17520	0	0	0	0	0	0	
	Lv.	0	0		0	0	0	0	0	0	
	Total	0	0	17520	0	0	7830	0	0	10860	36210
11. Karnataka %%	Rabi Hyv.Ir	1178	1356	2088	2268	0	0	0	0	0	
	Rabi Hyv.UI	0	5182	1051	520	0	0	0	0	0	
	Rabi Tra.Ir	34	206	92	0	0	1604	0	0	0	
	Rabi Tra.UI	0	2028	257	0	0	6568	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	3320	60	0	480	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	
12. Kerala	Total	4532	8832	3488	3268	0	8172	90	130	6216	34728
	Rabi	0	0	0	0	0	0	0	0	0	
	Sum.	1350	0	0	0	0	0	0	0	0	
13. Madhya Pradesh #	Total	1350	0	0	0	0	0	0	0	0	1350
	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	13240

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
14. Maharashtra	Ir	0	0	0	0	0	0	0	0	0	23432
	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	0	
15. Meghalaya		0	0	0	0	0	0	0	0	314	314
16. Odisha	Win.	0	0	0	0	0	0	0	0	0	6298
	Sum.	3525	0	27	180	0	0	1884	653	0	
	Total	3525	0	27	180	0	0	1884	653	29	
17. Punjab		0	0	2334	0	244	100	0	0	0	2678
18. Rajasthan	Ir	0	0	0	0	0	0	0	0	0	72276
	UI	0	0	0	0	0	0	0	0	0	
	Comp.	0	0	0	0	0	0	0	0	0	
	Total	0	0	39316	0	6064	16096	0	0	10800	
19. Tamil Nadu		0	0	0		0	0	0	0	0	0
20. Telangana	Reg.Ir	2266									
	Reg.										
	Total	2266	290	0	1046	0	546	52	110	144	4454
21. Uttarakhand		0	0	2952	0	674	0	0	0	0	3626
22. Uttar Pradesh	Zaid	0	0	0	0	0	0	0	0	670	
	Total	0	0	226430	80	716	13060	600	700	44016	285602
23. West Bengal	Sum.	11674	0	0	0	0	0	0	0	0	19399
	Total	11674	0	2528	0	0	725	697	0	3775	
24. Dadra & Nagar 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	I.	140	0	0	0	0	0	0	0	0	210
	II.	70	0	0	0	0	0	0	0	0	
	Total	210	0	0	0	0	0	0	0	0	
Grand Total		29399	18672	399076	6886	9986	64441	4177	2617	108541	643957
% of area under CES to total area under the crop in the CES States. (Ref. Annex-v, col-4)		95	20	93	74	89	97	87	76	-	-

Note :-

1. Crops included under "Others" are :-

Andhra Pradesh :-	Ragi (170), Horsegram (270) and Chillies (412) under regular Scheme.
Assam :-	Potato (850)
Bihar:-	Lakh (392), Masur (980),Chillies(340), Banana (500), Mango(600),Guava (280),Potato(420) , Onion (420), Brinjal (340), Tomato (280), Cauliflower (340), Jackfruit (420), Lichi (300) and Redgram (672).
Chhattisgarh :-	Lakh (262), Potato (110), Chillies (32) and Onion (48) .
Gujarat:-	Bajra-Sum.(10435), Cumin (9442), Fennel (388), Onion (534), Banana (304), Garlic (334) and Potato (810)
Jammu & Kashmir :-	Potato (158).
Jharkhand:-	Redgram (660),Brinjal (480), Potato (7830),Tomato (540) , Onion (630) and Masur (720) .
Karnataka:-	Ragi-Rabi-Hyv -Irr (410), HYV-UI (692) Sum.Hyv.(270), Horsegram (4150), Potato (112), Onion- Rabi(160), Summer (192) and Chillies-Rabi (130), Summer (100).
Madhya Pradesh:-	Lakh (220), Chillies(80), Banana (138), Potato (432), Onion(642) and Papaya (32).
Meghalaya :-	Potato-Sum.(314).
Odisha:-	Ragi-Sum.(23) and Horsegram Sum. (6).
Rajasthan :-	Cumin (4976), Methi (1616), Masur (1036) and Coriander (3172).
Telangana :-	Horsegram(20), Chillies(124)
Uttar Pradesh:-	Masur (15132),Peas (7290), Sawan-Zaid (20), Potato (20884), Onion- Rabi (70) and Onion- Zaid (620).
West Bengal:-	Lakh (358), Masur (2537), Peas(314), Redgram (127) and Sugarcane(439).

1. \$: Data repeated from year 2011-12 for Potato.

2. %% : Figures repeated from the year 2015-16 .

3. # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion and Papaya and all other crop 2015-16 for Madhya Pradesh.

4. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.

5. * : Data repeated from the year 2015-16

ANNEX- I (d): SAMPLE SIZE- KHARIF NON-FOOD CROPS UNDER CES 2016-17

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	2608	270	232	0	0	952	0	200	196	78	4536	
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	0	510	
5.	Goa	80	0	0	0	0	0	0	0	0	0	80	
6.	Gujarat %	Ir	0	0	0	0	3044	0	0	0	0		
		UI	0	0	0	0	804	0	0	0	0		
		Total	16196	1298	3478	0	26324	0	0	0	0	47296	
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	1130	0	0	0	600	0	0	1680	0		
		UI	6040	1700	0	0	890	0	0	2884	0		
		Total	7170	1700	640	0	1490	0	0	4564	1858	17422	
12.	Kerala	0	81	0	2430	0	0	0	0	0	0	2511	
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		
		UI	0	0	0	0	0	0	0	0	0		
		Comp.	0	0	0	0	0	0	0	0	0		
		Total	2938	1040	0	0	446	8516	0	0	600	4976	18516
15.	Meghalaya	0	0	0	0	0	0	58	0	0	0	58	
16.	Odisha	Aut.	1116	223	0	0	0	0	67	0	0		
		Wint.	248	662	0	0	0	0	0	0	0		
		Total.	1364	885	0	0	0	0	67	0	0	2316	
17.	Punjab	0	0	0	0	0	696	0	0	0	0	696	
18.	Rajasthan	5904	6136	0	0	0	7204	0	0	0	7576	26820	
19.	Tamil Nadu	Reg.Ir	700	224	0	0	0	564	0	0	204	0	1692
		Reg.UI	460	256	0	0	0	256	0	0	96	0	1068
		Reg.	0	0	0	0	0	0	0	0	0	0	0
		Total	1160	480	0	0	0	820	0	0	300	0	2760
20.	Telangana	142	80	214	0	0	1318	0	0	36	232	2022	
21.	Uttarakhand	0	0	0	0	0	0	0	0	0	0	0	
22.	Uttar Pradesh	7032	13726	0	0	0	80	0	0	0	1012	21850	

Annex 1(d) (Contd...)

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
23.	West Bengal	0	0	0	0	0	0	2910	222	0	0	3132
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		45764	27296	4564	2430	446	49302	3835	622	5696	18676	158631
% of area under CES to total area under the crop in the CES States. (Ref. Annex-v, Col.-4)			98	93	94	30	68	48	99	96	99	94
-												

Note:-

1. %% : Figures repeated from the year 2015-16.

2. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.

3. # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion and Papaya and all other crop 2015-16 for Madhya Pradesh.

4. * : Data repeated from the year 2015-16

ANNEX 1(e) - SAMPLE SIZE - RABI NON -FOOD CROPS UNDER CES 2016-17

Sl. No.	S T A T E	Number Of Experiments Planned under the Crops									
		Ground- Nut.	Sesa- mum	Rape & Mustard	Lin- seed	Safl- ower	Sun- flower	Tara- Meera	Tobacco	Isabgol	Total
1	2	3	4	5	6	7	8	9	10	11	12
1.	Andhra Pradesh (Reg.)	842	310	0	0	0	368	0	(N) 296	0	0
									(V) 396	0	2212
		Total	842	310	0	0	368	0	692	0	2212
2.	Assam		0	0	1250	0	0	0	0	0	1250
3.	Bihar		0	0	1064	0	0	0	0	0	1064
4.	Chhattisgarh		0	0	438	336	0	0	0	0	774
5.	Goa		100	0	0	0	0	0	0	0	100
6.	Gujarat %		6606	0	3450	0	0	0	220	172	10448
7.	Haryana *		0	0	1040	0	0	230	0	0	1270
8.	Himachal Pradesh		0	0	0	0	0	0	0	0	0
9.	Jammu & Kashmir \$		0	0	286	24	0	0	0	0	310
10.	Jharkhand		0	0	7830	0	0	0	0	0	7830
11.	Karnataka %%	Rabi-Ir	0	0	0	0	1668	0	0	0	
		Rabi UI	0	0	0	0	2384	0	0	0	
		Sum.Ir	0	0	0	0	1190	0	0	0	
		Sum.UI	0	0		0	0	0	0	0	
		Rabi/Sum.	4352	0	0	390	1620	0	0	0	
		Total	4352	0	0	390	1620	5242	0	340	0
12.	Kerala		0	0	0	0	0	0	0	0	0
13.	Madhya Pradesh #		0	0	1116	920	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	
		Total	1382	16	0	222	1854	400	0	30	0
15.	Meghalaya		0	0	0	0	0	0	0	0	0
16.	Odisha	Wint.	0	0	1866	0	0	0	0	0	
		Sum.	1288	178	0	0	0	0	0	0	
		Total	1288	178	1866	0	0	0	0	0	3332
17.	Punjab		0	0	566	0	0	0	0	0	566
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	30712	0	0	0	2228	0	3768
19.	Tamil Nadu		0	0	0	0	0	0	0	0	0
20.	Telangana		826	78	0	0	0	72	0	36	0
21.	Uttarakhand		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	26442	120	0	170	0	120	0
23.	West Bengal		611	3183	5030	163	0	0	0	0	8987
24.	Dadra & N.Haveli		0	0	0	0	0	0	0	0	0
25.	Daman & Diu		0	0	0	0	0	0	0	0	0

Sl. No.	S T A T E	Number Of Experiments Planned under the Crops									
		Ground- Nut.	Sesa- num	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
26.	Puducherry	0	0	0	0	0	0	0	0	0	0
	Grand Total	16007	3765	81090	2175	3474	6482	2228	1438	3940	120599
% of area under CES to total area under the crop in the CES States. (Ref. Annex-v, Col.4)		85	92	93	86	94	90	97	87	94	-

Note :-

1. \$: Data repeated from year 2011-12 Linseed and R&M.
2. # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion and Papaya and all other crop 2015-16 for Madhya Pradesh
3. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.
4. %% : Figures repeated from the year 2015-16.
5. * : Data repeated from the year 2015-16

ANNEX - II : TRAINING OF PRIMARY WORKERS UNDER CES 2016-17

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 train- ing offi- cers			In Num- bers	In Per- cen- tage (%)	
1	2	3	4	5	6	7	8	9	10	11
1.	Andhra Pradesh	Statistical	397	-	-	1612	1342	1342	100	-
		Agriculture		-	-					
2.	Assam	Statistical		1			101	101	101	100
3.	Bihar	Revenue		1	-	-	534	534	472	88
		Statistical		4	-	-	543	543	486	90
		Agriculture		1	-	-	534	534	463	87
4	Chhattisgarh	Statistical/Agriculture	27	27	27	4758	4758	3998	84	-
		Agriculture								
5.	Goa	Agriculture (Kharif)		1	-	-	23	23	23	100
		Agriculture (Rabi)		1	-	-	23	23	23	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)	7	5	4	258	258	222	86	96
		Agriculture (Kharif)	7	4	7	139	139	111	80	32
		Revenue (Rabi)	7	5	5	258	258	222	86	96
		Agriculture (Rabi)	7	4	4	139	139	111	80	32
9.	Jammu & Kashmir	Revenue (Kharif)	21			2487	2142	2021	94	-
		Revenue (Rabi)		-	-					
10.	Jharkhand	Agriculture				N.A.				
11.	Karnataka #	Revenue	176	-	-	5703	5703	5588	98	-
		Agriculture	185	-	-	3079	3079	2986	97	-
		Rural Development & Panchayati Raj	176	-	-	3565	3565	3386	95	-
12.	Kerala	Statistical	-	-	-	1028	1035	984	95	-
13.	Madhya Pradesh %	Revenue	34	-	34	4407	4407	3863	88	-
14.	Maharashtra	Revenue (Kharif)	N.A.			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	-	30	417	417	417	100	-
17.	Punjab	Agriculture (Kharif)	77	0	77	686	686	625	91	-
		Agriculture (Rabi)	77	0	77	628	628	575	92	-

Sl. No.	S T A T E	A G E N C Y	Number of Centres		Attendance of Primary Staff.					
			Total	Covered by NSSO		Total Strength	Total Called	Total Attended		Trained by NSSO officer
				As training officers	As obser- vers			In Numbers	In Percen- tage (%)	
1	2	3	4	5	6	7	8	9	10	11
18.	Rajasthan	Agriculture (Kharif)	174	16	134	8512	8512	8512	100	-
		Agiculture (Rabi)	98	0	98	4269	4269	4269	100	3356
19.	Tamil Nadu	Agriculture	83	91	-	939	939	907	97	907
20.	Telangana	Statistical	39	-	91	1089	1089	1089	100	-
		Agriculture								
21.	Uttarakhand	Revenue (Kharif)	65	-	-	1804	1804	869	48	0
		Revenue (Plain)	49			1342	1342	623	46	N.A.
		Revenue (Hills)	16			462	462	259	56	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	22	-	-	254	254	254	100	-
24.	Dadra & Nagar Haveli	Development & Planning	1	-	-	4	4	4	100	-
		Division Soil Conservation				5	5	4	80	-
		Agriculture Deptt.				6	6	5	83	-
25.	Daman & Diu	Rural Development	1	-	-	4	4	4	100	-
		Revenue Department				3	3	3	100	-
		Statistical Department				3	3	3	100	-
26.	Puducherry	Statistical (Kharif)	2	-	2	22	12	12	100	-
		(Rabi-I)								
		(Rabi-II)								
Total			2058	202	833	67776	67097	57758	86	4561

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

(ii) # : Figure repeated from the year 2015-16.

(iii) % : Figure repeated from the year 2015-16.

(iv) * : Figure repeated from the year 2015-16.

ANNEX III(a):SUPERVISION OF FIELD WORK-ALL CROPS (SEASON-WISE) UNDER CES 2016-17

Sl. No.	S TATE	Season	Food / Non Food Crops	Number of experi- ments planned	Number & percentage of experiments Supervised by															
					State Statistical Department				Other State Department				NSO							
					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	8706	310	4	306	4	Not Available				320	4	309	4				
			Non-Food	4536	180	4	178	4					180	4	178	4				
			Comb.	13242	490	4	484	4					500	4	487	4				
			Food	7246	126	2	124	2					128	2	124	2				
			Non-Food	2212	50	2	50	2					50	2	45	2				
			Comb.	9458	176	2	174	2					178	2	169	2				
		Rabi	Total	22700	666	3	658	3					678	3	656	3				
			Food	5700	757	13	743	13					228	4	222	4				
			Non-Food	600	110	18	110	18					30	5	30	5				
			Comb.	6300	867	14	853	14					258	4	252	4				
		Assam	Food	3700	610	16	602	16	Not Available				136	4	132	4				
			Non-Food	1250	176	14	172	14					70	6	68	5				
			Comb.	4950	786	16	774	16					206	4	200	4				
			Total	11250	1653	15	1627	14					464	4	452	4				
3.	Bihar	Kharif	Food	45593	380	1	380	1	22	0.048	22	0.048	352	1	352	1				
			Non-Food	400	Not Available				Not Available				Not Available							
			Comb.	45993	418	1	418	1	22	0.05	22	0.05	352	1	352	1				
			Food	50913	433	0.9	433	0.9	29	0.06	29	0.06	320	1	294	1				
			Non-Food	1064	28	3	28	3	Not Available				38	4	38	4				
			Comb.	51977	461	0.9	461	0.9	29	0.06	29	0.06	358	1	332	1				
		Rabi	Total	97970	879	1	879	1	51	0.05	51	0.05	710	0.7	684	0.7				
			Food	2860	158	6	152	5	892	31	454	16	200	7	198	7				
			Non-Food	510	Not Available				132	26	86	17	Not Available							
			Comb.	3370	158	5	152	5	1024	30	540	16	200	6	198	6				
		Chhattisgarh	Food	1842	80	4	74	4	236	13	198	11	80	4	80	4				
			Non-Food	774	70	9	68	9	118	15	90	12	70	9	70	9				
			Comb.	2616	150	6	142	5	354	14	288	11	150							
			Total	5986	308	5	294	5	1378	23	828	14	350	6	348	6				
			Food	320	38	12	10	3	Not Available				Not Available							
			Non-Food	80	Not Available								Not Available							
			Comb.	400	38	10	10	3					Not Available							
		Rabi	Food	190	24	13	10	5					Not Available							
			Non-Food	100	Not Available								Not Available							
			Comb.	290	24	8	10	3					Not Available							
			Total	690	62	9	20	3					Not Available							
6.	Gujarat %	Kharif	Food	29392	1065	4	1065	4	931	3	931	3	228	1	224	1				
			Non-Food	47296	3472	7	3472	7	7160	15	7160	15	385	1	370	1				
			Comb.	76688	4537	6	4537	6	8091	11	8091	11	613	1	594	1				
			Food	68003	1656	2	1656	2	1720	3	1629	2	154	0.23	154	0.23				
			Non-Food	10448	635	6	635	6	393	4	393	4	44	0.42	44	0.42				
			Comb.	78451	2291	3	2291	3	2113	3	2022	3	198	0.25	198	0.25				
		Rabi	Total	155139	6828	4	6828	4	10204	7	10113	7	811	1	792	1				

Sl. No.	S TATE	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
7.	Haryana *	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	3216	196	6	196	6	122	4	122	4	126	4	124	4
			Non-Food						Not Available							
			Comb.	3216	196	6	196	6	122	4	122	4	126	4	124	4
		Rabi	Food	2830	218	8	218	8	78	3	78	3	134	5	134	5
			Non-Food						Not Available							
			Comb.	2830	218	8	218	8	78	3	78	3	134	5	134	5
		Total		6046	414	7	414	7	200	3	200	3	260	4	258	4
9.	Jammu & Kashmir \$\$	Kharif	Food	3098	258	8	188	6	Not Available				80	3	72	2
			Non-Food						Not Available							
			Comb.	3098	258	8	188	6					80	3	72	2
		Rabi	Food	2138	182	9	128	6					116	5	114	5
			Non-Food	310	47	15	27	9					116	5	114	5
			Comb.	2448	229	9	155	6					196	4	186	3
		Total		5546	487	9	343	6					196	4	186	3
10.	Jharkhand \$	Kharif	Food	28770	92	0.32	92	0.32					116	0.40	116	0.40
			Non-Food	0			Not Available						Not Available			
			Comb.	28770	92	0.32	92	0.32					116	0.40	116	0.40
		Rabi	Food	36210	86	0.24	86	0.24					80	0.22	78	0.22
			Non-Food	7830			Not Available						20	0.26	20	0.26
			Comb.	44040	86	0.20	86	0.20					100	0.23	98	0.22
		Total		72810	178	0.24	178	0.24					216	0.30	214	0.29
11.	Karnataka %%	Kharif	Food	54636	7543	14	7531	14	10213	19	10193	19	454	1	448	1
			Non-Food	17422	2558	15	2556	15	3546	20	3546	20	166	1	166	1
			Comb.	72058	10101	14	10087	14	13759	19	13739	19	620	1	614	1
		Rabi	Food	34728	3182	9	3182	9	3646	10	3634	10	200	0.6	94	0.3
			Non-Food	11944	1206	10	1206	10	1010	8	1008	8	80	1	30	0.3
			Comb.	46672	4388	9	4388	9	4656	10	4642	10	280	1	124	0.3
		Total		118730	14489	12	14475	12	18415	16	18381	15	900	1	738	1
12.	Kerala	Kharif	Food	24523	7147	29	2080	8					370	2	370	2
			Non-Food	2511	2403	96	0	0					50	2	50	2
			Comb.	27034	9550	35	2080	8					420	2	420	2
		Rabi	Food	1350	731	54	599	44					100	7	100	7
			Non-Food				Not Available									
			Comb.	1350	731	54	599	44					100	7	100	7
		Total		28384	10281	36	2679	9					520	2	520	2

Sl. No.	S TATE	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				
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	Not Available								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	1708	95	6	71	4	11	1	11	1	Not Available							
			Non-Food	58	Not Available															
			Comb.	1766	95	5	71	4	11	1	11	1								
		Rabi	Food	314	18	6	13	4	2	1	2	1								
			Non-Food	Not Available																
			Comb.	314	18	6	13	4	2	1	2	1								
		Total		2080	113	5	84	4	13	1	13	1								
16.	Odisha	Kharif	Food	36543	6518	18	6518	18	11459	31	11459	31	650	2	648	2				
			Non-Food	2316	347	15	347	15	556	24	556	24	0	0	0	0				
			Comb.	38859	6865	18	6865	18	12015	31	12015	31	650	2	648	2				
		Rabi	Food	6298	878	14	878	14	1750	28	1750	28	176	3	176	3				
			Non-Food	3332	392	12	392	12	783	23	783	23	Not Available							
			Comb.	9630	1270	13	1270	13	2533	26	2533	26	176	2	176	2				
		Total		48489	8135	17	8135	17	14548	30	14548	30	826	2	824	2				
17.	Punjab	Kharif	Food	3036	188	6	159	5	434	14	393	13	305	10	287	9				
			Non-Food	696	12	2	12	2	56	8	42	6	72	10	72	10				
			Comb.	3732	200	5	171	5	490	13	435	12	377	10	359	10				
		Rabi	Food	2678	116	4	99	4	363	14	235	9	276	10	276	10				
			Non-Food	566	25	4	25	4	46	8	39	7	38	7	38	7				
			Comb.	3244	141	4	124	4	409	13	274	8	314	10	314	10				
		Total		6976	341	5	295	4	899	13	709	10	691	10	673	10				
18.	Rajasthan	Kharif	Food	97706	1152	1	1152	1	67922	70	67922	70	317	0.32	315	0.32				
			Non-Food	26820	531	2	531	2	16920	63	16920	63	138	0.51	132	0.49				
			Comb.	124526	1683	1	1683	1	84842	68	84842	68	455	0.37	447	0.36				
		Rabi	Food	72276	1169	2	1169	2	42324	59	42324	59	336	0.46	328	0.45				
			Non-Food	36708	531	1	531	1	20762	57	20762	57	84	0.23	78	0.21				
			Comb.	108984	1700	2	1700	2	63086	58	63086	58	420	0.39	406	0.37				
		Total		233510	3383	1	3383	1	147928	63	147928	63	875	0.37	853	0.37				

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
19.	Tamil Nadu ##	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	6674	669	10	669	10					237	4	233	3
			Non-Food	2022	203	10	203	10					120	6	96	5
			Comb.	8696	872	10	872	10					357	4	329	4
		Rabi	Food	4454	406	9	406	9					119	3	117	3
			Non-Food	1012	76	8	76	8					Not Available			
			Comb.	5466	482	9	482	9					119	2	117	2
		Total		14162	1354	10	1354	10					476	3	446	3
21.	Uttarakhand	Kharif	Food	4686	126	3	126	3	619	13	619	13	85	2	80	2
			Non-Food				Not Available									
			Comb.	4686	126	3	126	3	619	13	619	13	85	2	80	2
		Rabi	Food	3626	217	6	217	6	702	19	702	19	56	2	50	1
			Non-Food				Not Available									
			Comb.	3626	217	6	217	6	702	19	702	19	56	2	50	1
		Total		8312	343	4	343	4	1321	16	1321	16	141	2	130	2
22.	Uttar Pradesh	Kharif	Food	293936									1314	0.4	1290	0.4
			Non-Food	21850									33	0.2	33	0.2
			Comb.	315786									1347	0.43	1323	0.42
		Rabi	Food	285602									820	0.29	803	0.28
			Non-Food	26852									100	0.37	85	0.32
			Comb.	312454									920	0.29	888	0.28
		Total		628240									2267	0.36	2211	0.35
23.	West Bengal	Kharif	Food	17432	1273	7	1273	7	97	0.6	97	0.6	256	1	254	1
			Non-Food	3132	311	10	311	10	16	0.5	16	0.5	80	3	80	3
			Comb.	20564	1584	8	1584	8	113	0.5	113	0.5	336	2	334	2
		Rabi	Food	19399	1234	6	1234	6	16	0.1	16	0.1	248	1	225	1
			Non-Food	8987	937	10	937	10	10	0.1	10	0.1	160	2	156	2
			Comb.	28386	2171	8	2171	8	26	0.1	26	0.1	408	1	381	1
		Total		48950	3755	8	3755	8	139	0.3	139	0.3	744	2	715	1
24.	Dadra & Nagar Haveli @	Kharif	Food	156	48	31	32	21								
			Non-Food				Not Available									
			Comb.	156	48	31	32	21								
		Rabi	Food				Not Available									
			Non-Food													
			Comb.													
		Total		156	48	31	32	21								

Sl. No.	S TATE	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				
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	Not Available							
		Rabi	Food	Not Available																
			Non-Food	Not Available																
			Comb.	Not Available																
		Total		28	16	57	16	57	12	43	12	43	Not Available							
26.	Puducherry	Kharif	Food	80	70	88	70	88	Not Available				10	13	10	13				
			Non-Food	Not Available																
			Comb.	80	70	88	70	88	Not Available				10	13	10	13				
		Rabi	Food	210	190	90	190	90	Not Available				20	10	20	10				
			Non-Food	Not Available																
			Comb.	210	190	90	190	90	Not Available				20	10	20	10				
		Total		290	260	90	260	90	Not Available				30	10	30	10				
TOTAL %		Kharif	Food	724615	31117	8	25839	7	95320	30	94807	30	7284	1	7112	1				
			Non-Food	158631	11174	10	8765	7	30452	29	30390	29	2042	1	1975	1				
			Comb.	883246	42291	8	34604	7	125772	30	125197	30	9326	1	9087	1				
		Rabi	Food	643957	11781	4	11541	3	56544	20	56261	20	4506	1	4273	1				
			Non-Food	120599	4230	5	4196	5	24128	32	24063	32	1010	1	908	1				
			Comb.	764556	16011	4	15737	4	80672	23	80324	23	5516	1	5181	1				
		Grand Total		1647802	58302	6	50341	5	206444	27	205521	26	14842	1	14268	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 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 2015-16.
- (iii) # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion & Papaya and all other crops 2015-16 for Madhya Pradesh.
- (iv) \$\$: Data repeated from year 2011-12 for crops Linseed, Potato, R&M and Saffron, all other crop repeated from the year 2014-15.
- (v) @ : ICS Scheme is not operational in Goa.
- (vi). % : Data in crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco and Data of State Statistical Department & Other State Department repeated from the year 2015-16.
- (vii) * : Data repeated from the year 2015-16.
- (viii) ** : Data of State Statistical Department and Other State Department repeated from the year 2015-16.
- (ix) \$\$: Data of State Statistical Department and Other State Department repeated from the year 2015-16.
- (x) # : Data of State Statistical Department and Other State Department repeated from the year 2015-16.

ANNEX III(b) SUPERVISION OF FIELD WORK - CROP-WISE UNDER CES 2016-17

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.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	3804	180	5	176	5	Not Available				180	5	176	5
			2994	86	3	84	3					88	3	84	3
2.	Assam	Aut.	2000	194	10	188	9					68	3	62	3
		Wint.	3000	443	15	435	15					120	4	120	4
		Sum.	1500	220	15	212	14					34	2	34	2
3.	Bihar	Bha.	952	26	3	26	3	Not Available				40	4	40	4
		Agh.	41085	312	1	312	1	22	0.05	22	0.05	240	0.58	240	0.58
		Gar.	440	12	3	12	3	Not Available				40	9	32	7
4.	Chhattisgarh		1522	80	5	76	5	636	42	392	26	80	5	78	5
5.	Goa @	Kharif	190	38	20	10	5	Not Available							
		Rabi	190	24	13	10	5								
6.	Gujarat %	Kharif	14536	359	2.47	359	2.47	180	1.24	180	1.24	70	0.5	70	0.5
		Sum.	202	134	66	134	66	62	31	62	31	Not Available			
7.	Haryana *		990	32	3	30	3	208	21	202	20	90	9	90	9
8.	Himachal Pradesh **		1334	74	6	74	6	36	3	36	3	46	3	44	3
9.	Jammu & Kashmir		1412	98	7	70	5	Not Available				30	2	30	2
10.	Jharkhand \$\$	Bha.	600	20	3	20	3	Not Available				20	3	20	3
		Agh.	17520	52	0.30	52	0.30					76	0.43	76	0.43
11.	Karnataka %%	Kharif	11840	1682	14	1676	14	2326	20	2324	20	144	1	144	1
		Rabi	1212	190	16	190	16	170	14	168	14	0	0	0	0
		Sum.	3320	356	11	356	11	402	12	402	12	40	1	18	0.54
12.	Kerala	Aut.	2344	1222	52	952	41	Not Available				100	4	100	4
		Wint.	3140	1456	46	1128	36					100	3	100	3
		Sum.	1350	731	54	599	44					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									Not Available			
15.	Meghalaya @	Aut.	328	18	5	14	4	2	1	2	1	Not Available			
		Wint.	748	42	6	31	4	5	1	5	1				
16.	Odisha	Aut.	7327	1507	21	1507	21	2867	39	2867	39	220	3	220	3
		Wint.	16499	3011	18	3011	18	6223	38	6223	38	270	2	268	2
		Sum.	3525	501	14	501	14	1275	36	1275	36	136	4	136	4
17.	Punjab		1978	128	6	102	5	334	17	299	15	190	10	185	9
18.	Rajasthan	Kharif	3116	30	1	30	1	1970	63	1970	63	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
20.	Telangana	Kharif	2812	281	10	281	10	Not Available				100	4	96	3
		Rabi	2266	243	11	243	11					79	3	77	3
21.	Uttarakhand		2956	68	2	68	2	439	15	439	15	47	2	42	1
22.	Uttar Pradesh		182544	Not Available								660	0.36	658	0.36
23.	West Bengal	Aus.	2281	297	13	297	13	16	0.7	16	0.7	96	4	94	4
		Aman	13308	858	6	858	6	81	0.6	81	0.6	160	1	160	1
		Sum.	11674	534	5	534	5	5	0.04	5	0.04	138	1	118	1

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	
24.	Dadra and Nagar Haveli @		78	35	45	23	29	Not Available								
25.	Daman & Diu @	Kharif	20	12	60	12	60	8	40	8	40	Not Available				
26.	Puducherry	I	80	70	88	70	88	Not Available				10	13	10	13	
		II	140	130	93	130	93					10	7	10	7	
		III	70	60	86	60	86					10	14	10	14	
Total			378705	16679	4	15786	4	18050	12	17761	12	4219	1	4124	1	
2. JOWAR.																
1.	Andhra Pradesh	Kharif	178	Not Available												
		Rabi	482													
2.	Chhattisgarh		80	Not Available				10	13	6	8	Not Available				
3.	Gujarat %	Kharif	468	119	25	119	25	53	11	53	11	Not Available				
		Rabi	300	Not Available												
4.	Karnataka %%	Kharif	3450	528	15	526	15	822	24	820	24	50	1	50	1	
		Rabi	8772	606	7	606	7	780	9	772	9	70	1	26	0.30	
		Sum.	60	18	30	18	30	6	10	6	10	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													
7.	Rajasthan	Kharif	10840	136	1	136	1	7609	70	7609	70	50	0.46	50	0.46	
8.	Tamil Nadu ##		1080	475	44	475	44	30	2.78	30	2.778	53	5	53	5	
9.	Telangana	Kharif	448	45	10	45	10	Not Available				50	11	50	11	
		Rabi	290	56	19	56	19					40	14	40	14	
10.	Uttar Pradesh		6452	Not Available								40	1	40	1	
Total			47662	1995	7	1993	7	9752	37	9738	37	646	1	583	1	
3. BAJRA.																
1.	Andhra Pradesh.		488	40	8	40	8	Not Available				40	8	36	7	
2.	Gujarat %	Kharif	2162	525	24	525	24	500	23	500	23	88	4	84	4	
		Sum.	10435	307	3	307	3	152	1	152	1	Not Available				
3.	Haryana *		1532	44	3	40	3	186	12	182	12	102	7	102	7	
4.	Karnataka %%	Kharif	3562	438	12	438	12	542	15	540	15	50	1	50	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		26064	320	1	320	1	18482	71	18482	71	58	0.22	58	0.22	
8.	Tamil Nadu ##		444	184	41	184	41	16	4	16	4	34	8	34	8	
9.	Telangana		52	6	12	6	12	Not Available								
10.	Uttar Pradesh		36462	Not Available								150	0.41	146	0.40	
11.	Daman & Diu @		8	4	50	4	50	4	50	4	50	Not Available				
Total			82291	1869	4	1865	4	19952	45	19946	45	572	1	558	1	
4. MAIZE.																
1.	Andhra Pradesh	Kharif	234	Not Available												
		Rabi	554													

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				
2.	Bihar	Bha.	1320	56	4	56	4	Not Available				36	3	36	3				
		Rabi	760	Not Available								Not Available							
		Gar.	500																
3.	Chhattisgarh		490	38	8	36	7	132	27	42	9	40	8	40	8				
4.	Gujarat %		8140	10	0.12	10	0.12	62	1	62	1	26	0.32	26	0.32				
5.	Haryana *		144	-	-			8	6	8	6	20	14	20	14				
6.	Himachal Pradesh **		1882	122	6	122	6	86	5	86	5	80	4	80	4				
7.	Jammu & Kashmir		1378	126	9	90	7	Not Available				50	4	42	3				
8.	Jharkhand \$\$	Bha.	7830	20	0.26	20	0.26	Not Available				20	0.26	20	0.26				
9.	Karnataka %%	Kharif	11388	1477	13	1477	13	1695	15	1693	15	50	0.44	50	0.44				
		Rabi	2788	260	9	260	9	350	13	350	13	Not Available							
		Sum.	480	56	12	56	12	44	9	44	9								
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.	2058	409	20	409	20	411	20	411	20	40	2	40	2				
		Wint.	104	8	8	8	8	9	9	9	9	Not Available							
		Sum.	180	46	26	46	26	22	12	22	12	Not Available							
13.	Punjab		360	34	9	31	9	70	53	68	19	48	13	35	10				
14.	Rajasthan	Kharif	11968	209	2	209	2	8240	69	8240	69	50	0.42	50	0.42				
15.	Tamil Nadu ##		432	182	42	182	42	12	3	12	3	36	8	36	8				
16.	Telangana	Kharif	960	96	10	96	10	0		0	0	49	5	49	5				
		Rabi	1046	39	4	39	4	Not Available											
17.	Uttar Pradesh	Kharif	29652	Not Available								154	1	152	1				
		Rabi	80									Not Available							
18.	West Bengal		634	66	10	66	10	Not Available											
Total				88466	3264	6	3223	6	11535	27	11441	27	779	1	756	1			

5. RAGI.

1.	Andhra Pradesh	Kharif	200	Not Available								Not Available											
		Rabi	170																				
2.	Bihar	Bha.	280	Not Available																			
3.	Goa @			Not Available																			
4.	Gujarat %		290	4	1	4	1	Not Available															
5.	Jharkhand \$\$		450	Not Available																			
6.	Karnataka %%	Kharif	7150	964	13	964	13	1412	20	1412	20	40	1	40	1	Not Available							
		Rabi	1102	154	14	154	14	214	19	214	19	Not Available											
		Sum.	270	28	10	28	10	28	10	28	10												
7.	Maharashtra		866	Not Available																			
8.	Odisha	Aut.	807	147	18	147	18	111	14	111	14	Not Available				Not Available							
		Wint.	511	75	15	75	15	43	8	43	8												
		Sum.	23	5	22	5	22	2	9	2	9												
9.	Tamil Nadu ##		360	140	39	140	39	20	6	20	6	40	11	40	11								
10.	Telangana		76	8	11	8	11	Not Available															
11.	Uttarakhand		1106	46	4	46	4	142	13	142	13	38	3	38	3								
12.	Dadra and Nagar Haveli @		78	13	17	9	12	Not Available								Not Available							
				Not Available																			
Total			13739	1584	13	1580	13	1972	17	1972	17	118	1	118	1								

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				
6. WHEAT.																			
1. Assam			850	136	16	136	16	Not Available				32	4	32	4				
2. Bihar			41325	378	1	378	1	17	0.0	17	0.0	240	1	228	1				
3. Chhattisgarh			866	44	5	40	5	130	15	104	12	40	5	40	5				
4. Gujarat %			41374	274	1	274	1	394	1	394	1	122	0.29	122	0.29				
5. Haryana *			2200	52	2	50	2	310	14	298	14	180	8	170	8				
6. Himachal Pradesh **			1930	166	9	166	9	60	3	60	3	100	5	100	5				
7. Jammu & Kashmir			1980	166	8	120	6	Not Available				116	6	114	6				
8. Jharkhand \$\$			17520	32	0.2	32	0.2	Not Available				40	0.23	40	0.23				
9. Karnataka %%			3488	444	13	444	13	498	14	498	14	50	1	27	0.77				
10. Madhya Pradesh #			5830	81	1.4	81	1.4	2826	48	2826	48	246	4	239	4				
11. Maharashtra			8126	Not Available								133	2	132	2				
12. Odisha	Sum.		27	14	52	14	52	2	7	2	7	Not Available							
13. Punjab			2334	110	5	93	4	342	15	227	10	220	9	220	9				
14. Rajasthan			39316	621	2	621	2	25202	64	25202	64	128	0.33	126	0.32				
15. Uttarakhand			2952	166	6	166	6	526	18	526	18	56	2	50	2				
16. Uttar Pradesh			226430	Not Available								570	0.25	570	0.25				
17. West Bengal			2528	374	15	374	15	10	0.4	10	0.4	110	4	107	4				
Total			399076	3058	2	2989	2	30317	21	30164	21	2383	1	2317	1				
7. BARLEY																			
1. Bihar			300	Not Available															
2. Chhattisgarh			36	Not Available															
3. Haryana *			516	4	1	4	1	40	8	40	8	29	6	25	5				
4. Himachal Pradesh **			900	52	6	52	6	18	2	18	2	34	4	34	4				
5. Jharkhand \$\$			Not Available																
6. Madhya Pradesh #			536	13	2	13	2	147	27	147	27	Not Available							
7. Punjab			244	6	2	6	2	19	8	8	3	30	12	30	12				
8. Rajasthan			6064	254	4	254	4	3876	64	3876	64	80	1	79	1				
9. Uttarakhand			674	51	8	51	8	176	26	176	26	Not Available							
10. Uttar Pradesh			716	Not Available															
11. West Bengal			Not Available																
Total			9986	380	4	380	4	4276	48	4265	48	173	2	168	2				
8.GRAM (BENGALGRAM)																			
1. Andhra Pradesh			1328	40	3	40	3	Not Available				40	3	40	3				
2. Bihar			800	24	3	24	3	12	2	12	2	40	5	34	4				
3. Chhattisgarh			488	36	7	34	7	48	10	40	8	40	8	40	8				
4. Gujarat %			3880	396	10	396	10	517	13	517	13	32	1	32	1				
5. Haryana *			562	Not Available				66	12	64	11	56	10	56	10				
6. Jharkhand \$\$			7830	16	0.20	16	0.20	Not Available				20	0.26	18	0.23				
7. Karnataka %%			8172	630	8	630	8	560	7	560	7	40	0.49	23	0.28				
8. Madhya Pradesh #			5330	67	1	67	1	2223	42	2223	42	137	3	137	3				
9. Maharashtra			5524	Not Available								96	2	91	2				
10. Punjab			100	Not Available				2	2	0	0	26	26	26	26				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	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								
11.	Rajasthan		16096	88	1	88	1	7724	48	7724	48	113	1	108	1									
12.	Telangana	Rabi	546	41	8	41	8	Not Available																
13.	Uttar Pradesh		13060	Not Available								50	0.4	50	0.4									
14.	West Bengal		725	33	5	33	5	Not Available																
Total			64441	1371	3	1369	3	11152	31	11140	31	690	1	655	1									
9. REDGRAM (TUR/ARHAR)																								
1.	Andhra Pradesh		818	30	4	30	4	Not Available				40	5	40	5									
2.	Bihar	Rabi	672	19	3	19	3	Not Available																
3.	Chhattisgarh		474	Not Available				76	16	10	2.1	40	8	40	8									
4.	Gujarat %		1370	17	1	17	1	54	4	54	3.9	44	3	44	3									
5.	Haryana *		360	8	2	8	2	40	11	38	11	Not Available												
6.	Jharkhand \$\$	Rabi	660	18	3	18	3	Not Available				20	3	20	3									
7.	Karnataka %%		6342	894	14	894	14	1056	17	1056	17	40	1	40	1									
8.	Madhya Pradesh #		1650	8	0.5	8	0.5	180	11	180	11	80	5	78	5									
9.	Maharashtra		5758	Not Available								100	2	98	2									
10.	Tamil Nadu ##		336	126	38	126	38	13	4	13	4	Not Available												
11.	Telangana		788	79	10	79	10	Not Available																
12.	Uttar Pradesh		12614	Not Available								60	0.48	60	0.48									
13.	West Bengal	Rabi	127	11	9	11	9	Not Available																
Total																								
10. GREENGRAM (MOONG)																								
1.	Andhra Pradesh	Kharif	348	Not Available								Not Available												
2.	Bihar	Rabi	402																					
3.	Gujarat %	Kharif	1032	31	9	31	9	82	11	82	11	Not Available												
4.	Karnataka %%	Kharif	3264	478	15	478	15	664	20	664	20	40	1	34	1									
		Rabi	90	12	13	12	13	8	9	8	9	Not Available												
5.	Maharashtra	Kharif	5902	Not Available								96	2	70	1									
6.	Odisha	Aut.	622	99	16	99	16	228	37	228	37	Not Available												
		Wint.	1307	128	10	128	10	210	16	210	16													
		Sum.	1884	227	12	227	12	329	17	329	17	40	2	40	2									
7.	Rajasthan	Kharif	10872	94	1	94	1	7572	70	7572	70	40	32	40	32									
8.	Tamil Nadu ##		440	202	46	202	46	19	4	19	4	16	4	16	4									
9.	Telangana	Kharif	532	53	10	53	10	Not Available				38	7	38	7									
		Rabi	52	6	12	6	12	Not Available																
10.	Uttar Pradesh	Kharif	2184	Not Available								Not Available												
		Zaid	600									40	7	38	6									
11.	West Bengal	Sum.	697	74	11	74	11	Not Available				Not Available												
		Total	31012	1404	7	1404	7	9112	47	9112	47	310	1	276	1									

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	%		
11. BLACKGRAM (URD/MATHIKALAI)																	
1.	Andhra Pradesh	Kharif	310	Not Available				Not Available				Not Available					
		Rabi	634														
2.	Assam	Rabi	500	96	19	96	19									30 6 30 6	
3.	Gujarat %	Kharif	972	Not Available												Not Available	
4.	Jharkhand \$\$		510	Not Available													
5.	Karnataka %%	Kharif	1000	160	16	160	16	230	23	226	23						
		Rabi	130	14	11	14	11	12	9	12	9						
6.	Maharashtra	Kharif	4766	Not Available								62	1	46	1	Not Available	
7.	Odisha	Aut.	834	171	21	171	21	285	34	285	34						
		Wint.	1942	267	14	267	14	239	12	239	12	40	2	40	2		
		Sum.	653	82	13	82	13	120	18	120	18	Not Available					
8.	Rajasthan	Kharif	3576	80	2	80	2	2548	71	2548	71	37	1.0	37	1.0	Not Available	
9.	Tamil Nadu ##		424	181	43	181	43	9	2	9	2	36	8.5	36	8.5		
10.	Telangana	Kharif	114	11	10	11	10					Not Available					
		Rabi	110	11	10	11	10										
11.	Uttar Pradesh	Kharif	14478					Not Available				50	0.3	48	0.3	Not Available	
		Zaid	700									40	6	36	5		
12.	West Bengal		1209	52	4	52	4	Not Available								Not Available	
Total			32862	1125	11	1125	11	3443	40	3439	40	295	1	273	1		
12. LAKH (KHEESARI)																	
1.	Bihar		392	Not Available												Not Available	
2.	Chhattisgarh		262	Not Available				58	22	54	21						
3.	Madhya Pradesh #		220	8	4	8	4	66	30	66	30						
4.	West Bengal		358	11	3	11	3	Not Available									
Total			1232	19	3	19	3	124	26	120	25						
13. MASUR																	
1.	Bihar		980					Not Available								Not Available	
2.	Jharkhand \$\$		720														
3.	Rajasthan		1036	21	2	21	2	298	29	298	29	15	0.1	15	0.1	Not Available	
4.	Uttar Pradesh		15132					Not Available				60	0.4	51	0.3		
5.	West Bengal		2537	152	6	152	6	1	0.1	1	0.1						
Total			20405	173	5	173	5	299	8	299	8	75	0.5	66	0.4		
14. HORSEGRAM (KULTHI)																	
1.	Andhra Pradesh	Kharif	120					Not Available								Not Available	
		Rabi	270														
2.	Karnataka %%	Kharif	2370	386	16	386	16	576	24	568	24					Not Available	
		Rabi	4150	342	8	342	8	500	12	500	12						
3.	Odisha	Wint.	2271	363	16	363	16	310	14	310	14	40	2	40	2	Not Available	
		Sum.	6	3	50	3	50	Not Available									
4.	Tamil Nadu ##		320	48	15	48	15	2	1	2	1						
5.	Telangana	Kharif	40	4	10	4	10										
		Rabi	20	2	10	2	10										
Total			9567	1148	13	1148	13	1388	15	1380	15	40	2	40	2		

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												
15. PEAS																											
1	Jharkhand \$\$			Not Available																							
2	Uttar Pradesh		7290	Not Available				Not Available				Not covered in I.C.S.															
3	West Bengal		314	7	2	7	2																				
	Total		7604	7	2	7	2	Not Available																			
16. MOTH																											
1.	Gujarat %	Kharif	256	Not Available																							
2.	Rajasthan	Kharif	6620	86	1	86	1	4376	66	4376	66	46	1	46	1												
	Total		6876	86	1	86	1	4376	64	4376	64	46	3	46	3												
17. CHOWLA																											
1.	Rajasthan	Kharif	1548	18	1	18	1	1318	85	1318	85	Not covered in I.C.S.															
18. GUAR																											
1.	Gujarat %		166	Not Available				Not Available				Not covered in I.C.S.															
2	Rajasthan		22652	145	1	145	1	15555	69	15555	69																
	Total		22818	145	1	145	1	15555	68	15555	68	Not covered in I.C.S.															
19. SAWAN (JHANGORA)																											
1.	Uttarakhand		624	12	2	12	2	38	6	38	6	Not covered in I.C.S.															
2	Uttar Pradesh	Kharif	70	Not Available				Not Available																			
		Zaid	20																								
	Total		714	12	2	12	2	38	6	38	6																
20. KORRA																											
1.	Andhra Pradesh		204	Not Available				Not covered in I.C.S.				Not covered in I.C.S.															
2	Telangana		20	2	10	2	10	Not covered in I.C.S.				Not covered in I.C.S.															
	Total		224	2	1	2	1	Not covered in I.C.S.				Not covered in I.C.S.															
21. KODON-KUTKI (KODRA)																											
1.	Chhattisgarh		294	40	14	40	14	38	13	4	1	40	14	40	14												
2.	Madhya Pradesh #		864	NA				46	5	46	5	40	5	39	5												
3.	Uttar Pradesh (Kodon)		80	Not Available				Not Available				Not Available															
	Total		1238	40	14	40	14	84	6	50	3	80	6	79	5												
22. NAVANE																											
1.	Karnataka %%		740	112	15	112	15	154	21	154	21	Not covered in I.C.S.															
23. SAVE																											
1.	Karnataka %%		320	56	18	56	18	74	23	74	23	Not covered in I.C.S.															
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	120	17	120	17					40	6	40	6												
3.	Bihar		856	24	3	24	3					36	4	36	4												
4.	Goa @		130	Not Available				Not Available				Not Available															
5	Haryana *		1070	32	3	30	3	70	7	68	6	50	5	49	5												

Sl. No	STATE	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				
6	Jharkhand \$\$		240			Not Available													
7.	Karnataka %%		940			Not Available					40	4	40	4					
8.	Kerala		46	21	46	Not Available													
9.	Maharashtra		8742			Not Available					52	1	44	1					
10.	Odisha	Wint.	249	35	14	35	14	15	6	15	6	Not Available							
11.	Punjab		698	26	4	26	4	30	4	26	4	67	10	67	10				
12.	Rajasthan		450	34	8	34	8	252	56	252	56	36	8	34	8				
13.	Tamil Nadu ##		468	300	64	300	64	20	4	20	4	49	10	49	10				
14.	Telangana		556	56	10	56	10	Not Available											
15.	Uttar Pradesh		9400			Not Available					200	2	186	2					
16.	West Bengal	Rabi	439	38	38	38	9	Not Available											
	Total		26586	746	11	723	10	387	13	381	13	630	3	602	2				
	27. COCOA																		
1.	Kerala		800	440	55.0	Not Available				Not covered in I.C.S.									
	28. CHILLIES.																		
1.	Andhra Pradesh	Kharif	400	Not Available										Not covered in I.C.S.					
		Rabi	412																
2.	Bihar		340																
3.	Chhattisgarh		32																
4.	Karnataka %%	Kharif	510	88	17	88	17	158	31	158	31	Not covered in I.C.S.							
		Rabi	130	18	14	18	14	22	17	22	17								
		Sum.	100	20	20	20	20	10	10	10	10								
5.	Madhya Pradesh #		80	Not Available										Not covered in I.C.S.					
6.	Telangana	Kharif	276	28	10	28	10	Not Available											
		Rabi	124	8	6	8	6												
	Total		2404	162	14	162	14	190	26	190	26								
	29. CUMIN																		
1.	Gujarat %		9442	285	3	285	3	434	5	343	4	Not covered in I.C.S.							
2.	Rajasthan		4976	20	0.40	20	0.40	2392	48	2392	48								
	Total		14418	305	2	305	2	2826	20	2735	19								
	30. FENNEL																		
1.	Gujarat % *		388	68	18	68	18	78	20.1	78	20.1	Not covered in I.C.S.							
	31. ARECANUT																		
1.	Kerala		1620	620	38	Not Available					40	2	40	2					
2.	Maharashtra		0	Not Available															
	Total		1620	620	38	Not Available					40	2	40	2					

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		
32. PEPPER																	
1.	Kerala			1614	373	23		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			1540	285	19		Not Available				Not covered in I.C.S.					
35. GINGER																	
1.	Kerala			1456	297	20.4		Not Available				Not covered in I.C.S.					
2.	Meghalaya @			632	35	6	26	4	4	1	4	1					
	Total			2088	332	16	26	1	4	1	4	1					
36. GARLIC																	
1.	Gujarat %	Rabi		334				Not Available				Not covered in I.C.S.					
37. CORIANDER																	
1.	Rajasthan			3172	138	4	138	4	1887	59	1887	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				Not Available					
2.	Gujarat %			304	28	9	28	9	7	2	7	2					
3.	Kerala			2409	458	19		Not Available				50	2	50	2		
4.	Madhya Pradesh #			138				Not Available				Not Available					
	Total			3351	486	21	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	344	21		Not Available									
	Total			2220	378	16		Not Available				Not Available					
41. GUAVA																	
1.	Bihar			280				Not Available				Not covered in I.C.S.					
42. JACKFRUIT																	
1.	Bihar			420				Not Available				Not covered in I.C.S.					
2.	Kerala			1618	114	7		Not Available									
	Total			2038	114	7		Not Available				Not Available					
43. CASHEWNUT																	
1.	Kerala			1536	584	38		Not Available				Not covered in I.C.S.					
2.	Maharashtra			0				Not Available									
	Total			1536	584	38	0	0	0	0	0	0					

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				
44. TAPIOCA																			
1.	Kerala		1587	503	32	Not Available				40	3	40	3						
45. PINE APPLE																			
1.	Kerala		1571	178	11	Not Available				Not covered in I.C.S.									
46. POTATO																			
1.	Assam		850	158	19	158	19	Not Available				40	5	36	4				
2.	Bihar	Agh.	340	Not Available				Not Available				Not Available							
		Rabi	420																
3.	Chhattisgarh		110																
4.	Gujarat %	Rabi	810	100	12	100	12	66	8	66	8								
5.	Jammu & Kashmir \$\$	Kh.	206	22	11	18	9	Not Available											
		Rabi	158	16	10	8	5												
6.	Jharkhand \$\$	Agh.	570	Not Available				Not Available											
		Rabi	7830	20	0.26	20	0.26	Not Available											
7.	Karnataka %%	Kh.	180	30	17	28	16	46	26	46	26								
		Rabi	112	Not Available				18	16	16	14								
8.	Madhya Pradesh #	Rabi	432	Not Available				Not Available				Not Available							
9.	Meghalaya @	Sum.	314	18	6	13	4	2	1	2	1	Not Available							
10.	Odisha	Wint.	2012	298	15	298	15	508	25	508	25	40	2	40	2				
11.	Uttar Pradesh	Rabi	20884	Not Available				Not Available				60	0.3	58	0.3				
Total			35228	662	5	643	5	640	19	638	19	140	1	134	1				
47. ONION																			
1.	Bihar		420	Not Available				Not covered in I.C.S.				Not covered in I.C.S.							
2.	Chhattisgarh		48																
3.	Gujarat %		534	64	12	64	12	10	2	10	2								
4.	Jharkhand \$\$		630	Not Available															
5.	Karnataka %%	Kh.	750	110	15	108	14	206	27	206	27								
		Rabi	160	24	15	24	15	22	14	22	14								
		Sum.	192	10	5	10	5	2	1	2	1								
6.	Madhya Pradesh #		642	Not Available				Not Available				Not covered in I.C.S.							
7.	Uttar Pradesh	Rabi	70	Not Available				Not Available											
		Zaid	620																
Total			4066	208	13	206	13	240	15	240	15								
48. BRINJAL																			
1.	Bihar	Agh.	340	Not Available				Not covered in I.C.S.				Not covered in I.C.S.							
		Rabi	340																
2.	Jharkhand \$\$	Agh.	390																
		Rabi	480																
Total			1550	-	-	-	-	-	-	-	-								
49. TOMATO																			
1.	Bihar	Agh.	140	Not Available				Not covered in I.C.S.				Not covered in I.C.S.							
		Rabi	280																

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		
2.	Jharkhand \$\$	Agh.	660	Not Available								Not covered in I.C.S.					
		Rabi	540														
Total			1620	-	-	-	-	-	-	-	-	-	-	-	-		
50. CAULIFLOWER																	
1.	Bihar		340	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	252	16	Not Available								Not covered in I.C.S.			
53. METHI																	
1.	Rajasthan		1616	27	1.7	27	1.7	945	58	945	58	Not covered in I.C.S.					
54. GROUNDNUT																	
1.	Andhra Pradesh	Kharif	2608	140	5	140	5	Not Available				140	5	138	5		
		Rabi	842	50	6	50	6					50	6	45	5		
2.	Chhattisgarh		216	Not Available				78	36	54	25	Not Available					
3.	Goa @	Kharif	80	Not Available				Not Available				Not covered in I.C.S.					
		Rabi	100														
4.	Gujarat %	Kharif	16196	2246	14	2246	14	4014	25	4014	25	116	1	116	1		
		Sum.	6606	307	5	307	5	152	2	152	2	Not Available					
5.	Karnataka %%	Kharif	7170	1018	14	1018	14	1260	18	1260	18	70	1	70	1		
		Rabi	120	16	13	16	13	8	7	8	7	Not Available					
		Sum.	4232	384	9	384	9	224	5	224	5	40	1	22	0.52		
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					
8.	Odisha	Aut.	1116	152	14	152	14	366	33	366	33	Not Available					
		Wint.	248	18	7	18	7	59	24	59	24						
		Sum.	1288	140	11	140	11	288	22	288	22						
9.	Rajasthan		5904	85	1	85	1	3066	52	3066	52	32	0.5	26	0.4		
10.	Tamil Nadu ##		1160	328	28	328	28	22	2	22	2	100	9	99	9		
11.	Telangana	Kharif	142	15	11	15	11	Not Available				40	28	34	24		
		Rabi	826	46	6	46	6	Not Available				Not Available					
12.	Uttar Pradesh		7032	Not Available								Not Available					
13.	West Bengal		611	58	9	58	9	Not Available									
Total			61771	5015	10	5015	10	9906	22	9882	7	682	2	641	2		
55. SESAMUM (GINGELLY)																	
1.	Andhra Pradesh	Kharif	270	Not Available													
		Rabi	310														
2.	Chhattisgarh		124	Not Available				30	24	20	16	Not Available					
3.	Gujarat %		1298	288	22	288	22	127	10	127	10	46	4	46	4		

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
4.	Karnataka %%		1700	290	17	290	17	422	25	422	25	Not Available			
5.	Kerala		81	26	32	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.	223	26	12	26	12	59	26	59	26	Not Available			
		Wint.	662	122	18	122	18	68	10	68	10				
		Sum.	178	34	19	34	19	25	14	25	14				
9.	Rajasthan		6136	190	3	190	3	4299	70	4299	70	62	1	62	1
10.	Tamil Nadu ##		480	190	40	190	40	10	2	10	2	46	10	42	9
11.	Telangana	Kharif	80	8	10	8	10	Not Available							
		Rabi	78	8	10	8	10								
12.	Uttar Pradesh		13726	Not Available								33	0.24	33	0.24
13.	West Bengal		3183	274	9	274	9	Not Available				50	2	46	1
		Total	31061	1456	10	1430	10	5258	43	5248	43	277	1	269	1

56. CASTOR

1.	Andhra Pradesh		232	Not Available											
2.	Gujarat %		3478	575	17	575	17	518	15	518	15	43	1	39	1
3.	Karnataka %%		640	98	15	98	15	158	25	158	25	Not Available			
4.	Telangana		214	21	10	21	10	Not Available				40	19	24	11
		Total	4564	694	15	694	15	676	20	676	20	83	3	63	2

57. RAPE & MUSTARD

1.	Assam		1250	176	14	172	14	Not Available				70	6	68	5
2.	Bihar		1064	28	3	28	3					38	4	38	4
3.	Chhattisgarh		438	30	7	30	7	86	20	66	15	30	7	30	7
4.	Gujarat %		3450	256	7	256	7	152	4	152	4	44	1	44	1
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 \$\$		7830	Not Available								20	0.26	20	0.26
8.	Madhya Pradesh #		1116	12	1	12	1	547	49	547	49	60	5	52	5
9.	Odisha	Wint.	1866	218	12	218	12	470	25	470	25	Not Available			
10.	Punjab		566	25	4	25	4	46	8	39	7	38	7	38	7
11.	Rajasthan		30712	426	1	426	1	18353	60	18353	60	84	0.27	78	0.25
12.	Uttar Pradesh		26442	Not Available								100	0.4	85	0.3
13.	West Bengal		5030	605	12	605	12	10	0.2	10	0.2	110	2	110	2
		Total	81090	1848	6	1818	6	19866	74	19811	74	694	1	653	1

58. LINSEED

1.	Chhattisgarh		336	40	12	38	11	32	10	24	7.1	40	12	40	12
2.	Jammu & Kashmir \$\$		24	7	29	5	21	Not Available				Not Available			
3.	Karnataka %%		390	44	11	44	11	66	17	66	17				

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
4.	Madhya Pradesh #		920	13	1	13	1	257	28	257	28	74	8	74	8
5.	Maharashtra		222	Not Available								Not Available			
6.	Uttar Pradeshr		120	Not Available								Not Available			
7.	West Bengal		163	Not Available								Not Available			
	Total		2175	104	6	100	6	355	22	347	21	114	9	114	9

59. SAFFLOWER

1.	Karnataka %%	Rabi	4052	364	9	364	9	380	9	378	9	Not Available			
		Sum.	1620	168	10	168	10	230	14	230	14				
2.	Maharashtra		1854	Not Available								22	1	20	1
	Total		7526	532	29	532	29	610	33	608	33	22	1	20	1

60. SUNFLOWER

1.	Andhra Pradesh	Kharif	196	Not Available															
		Rabi	368																
2.	Haryana *	Rabi	230																
3.	Karnataka %%	Kharif	4564	680	15	680	15	1072	23	1072	23	40	1	40	1				
		Rabi		Not Available															
		Sum.	1190	168	14	168	14	88	7	88	7	40	3	8	1				
4.	Maharashtra	Kharif	600	Not Available															
		Rabi	348	Not Available															
		Sum.	52	Not Available															
5.	Tamil Nadu ##		300	299	100	299	100	20	7	20	7	Not Available							
6.	Telangana	Kharif	36	4	11	4	11	Not Available											
		Rabi	72	16	22	16	22												
7.	Uttar Pradesh	Zaid	170	Not Available															
	Total		8126	1167	19	1167	19	1180	19	1180	19	80	1	48	0.8				

61. SOYABEAN

1.	Andhra Pradesh		78	Not Available											
2.	Chhattisgarh		170	Not Available				24	14	12	7	Not Available			
3.	Karnataka %%		1858	258	14	256	14	290	16	290	16				
4.	Madhya Pradesh #		2774	58	2	58	2	978	35	978	35	100	4	98	4
5.	Maharashtra		4976	Not Available											
6.	Rajasthan		7576	142	2	142	2	5098	67	5098	67	8	0.11	8	0.11
7.	Telangana		232	23	10	23	10	Not Available				Not Available			
8.	Uttar Pradesh		1012	Not Available											
	Total		18676	481	4	479	4	6390	52	6378	52	178	1	170	1

62. TARA MEERA

1.	Rajasthan		2228	32	1	32	1	978	44	978	44	Not covered in I.C.S.			
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63.COCONUT

1.	Kerala		2430	2377	98	Not Available						50	2	50	2
2.	Maharashtra		0	Not Available											
	Total		2430	2377	98	Not Available						50	2	50	2

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				
64. NIGER																			
1.	Maharashtra		446			Not Available													
65. COTTON																			
1.	Andhra Pradesh		952	40	4	38	4	Not Available				40	4	40	4				
2.	Gujarat %		26324	363	1	363	1	2501	10	2501	10	180	1	169	1				
3.	Haryana *		940	16	2	14	1	124	13	122	13	56	6	56	6				
4.	Karnataka %%		1490	214	14	214	14	344	23	344	23	56	4	56	4				
5.	Madhya Pradesh #		962	18	2	18	2	318	33	318	33	48	5	48	5				
6.	Maharashtra		8516	Not Available								138	2	138	2				
7.	Punjab		696	12	2	12	2	56	8	42	6	72	10	72	10				
8.	Rajasthan		7204	114	2	114	2	4457	62	4457	62	36	0.50	36	0.50				
9.	Tamil Nadu ##		820	126	15	126	15	7	1	7	1	96	12	92	11				
10.	Telangana		1318	132	10	132	10	Not Available				40	3	38	3				
11.	Uttar Pradesh		80	Not Available															
	Total		49302	1035	3	1031	3	7807	20	7791	20	762	2	745	2				
66. JUTE																			
1.	Assam		600	110	18	110	18	Not Available				30	5	30	5				
2.	Bihar		200	Not Available															
3.	Meghalaya @		58	Not Available								Not Available							
4.	Odisha	Aut.	67	29	43	29	43	4	6	4	6	Not Available							
5.	West Bengal		2910	303	10	303	10	16	0.5	16	0.5	80	3	80	3				
	Total		3835	442	12	442	12	20	1	20	1	110	3	110	3				
67.MESTA																			
1.	Andhra Pradesh		200	Not Available															
2.	Bihar		200	Not Available															
3.	West Bengal		222	8	4	8	4	Not Available											
	Total		622	8	3	8	3	0	0	0	0	0	-	0	-				
68.TOBACCO																			
1.	Andhra Pradesh		692	Not Available								Not covered in I.C.S.							
2.	Gujarat %		220	34	14	34	14	30	14	30	14								
3.	Karnataka %%		340	62	25	62	25	14	4	14	4								
4.	Maharashtra		30	Not Available															
5.	Telangana		36	6	2	6	2	Not Available											
6.	Uttar Pradesh	Rabi	100																
	Zaid		20																
	Total		1438	102	17	102	17	44	8	44	8								

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
69. ISABGOL															
1.	Gujarat %		172	38	15	38	15	59	34	59	34	Not covered in I.C.S.			
2.	Rajasthan		3768	73	2	73	2	1431	38	1431	38				
	Total		3940	111	3	111	3	1490	38	1490	38				
70. AVARE (SEM)															
1.	Karnataka %%		400	78	20	78	20	122	31	122	31	Not covered in I.C.S.			
71. COWPEA (LOBIA)															
1.	Karnataka %%		430	62	14	62	14	130	30	130	30	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 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 from the year 2015-16.

(iii) # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion & Papaya and all other crops 2015-16 for Madhya Pradesh .

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

(v) @ : ICS Scheme is not operational .

(vi). % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.

(vii) * : Data repeated from the year 2015-16

(viii) ** : Figure of State Statistical Department and Other State Department repeated from the year 2015-16.

(ix) \$\$: Data of State Statistical Department and Other State Department repeated from the year 2015-16.

(x) ## : Data of State Statistical Department and Other State Department repeated from the year 2015-16.

Annex-III (C) INCIDENCE OF ERRORS, USE OF EQUIPMENT AND DELEGATION OF WORK OF CROP CUTTING EXPERIMENTS DURING 2016-17

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	62	42	5	7	6	4	3	4
		Rabi	67	41	9	7	9	9	3	6
2	Assam	Early Kharif	62	38	12	6	12	14	0	0
		Late Kharif	61	39	15	5	16	15	0	0
		Rabi	60	43	13	6	11	12	0	0
		Summer	69	31	32	14	32	28	0	0
3	Bihar	Autumn (Bha.)	53	49	11	7	9	7	1	23
		Winter (Agh.)	59	44	10	5	10	10	17	42
		Rabi	64	38	11	6	10	8	11	38
		Summer	83	35	0	0	0	0	0	17
4	Chhattisgrah	Kharif	96	11	37	1	42	29	5	0
		Rabi	94	8	24	1	33	20	0	0
5	Gujarat	Kharif	56	45	47	3	45	45	0	0
		Rabi	69	31	56	5	52	52	0	0
6	Haryana	Kharif	71	33	32	9	18	14	0	0
		Rabi	83	19	24	5	14	13	0	0
7	Himachal Pradesh	Kharif	60	53	29	19	35	30	0	0
		Rabi	69	40	37	13	56	32	0	5
8	Jammu & Kashmir	Kharif	27	118	17	2	14	14	2	0
		Rabi	18	108	18	3	12	12	1	0
9	Jharkhand	Early Kharif	55	46	22	16	16	16	3	41
		Late Kharif	66	38	21	0	1	0	1	22
		Rabi	54	46	10	0	1	1	5	34
10	Karnataka	Kharif	69	46	19	11	19	19	0	0
		Rabi	43	72	19	5	15	14	0	0
		Summer	27	84	29	17	27	27	0	0
11	Kerala	Autumn	86	15	2	13	9	7	0	0
		Winter	88	12	1	15	6	5	1	0
		Summer	54	46	2	5	5	3	1	0
12	Madhya Pradesh	Kharif	71	36	25	22	39	38	2	11
		Rabi	75	30	34	20	37	38	1	6
13	Maharashtra	Kharif	31	118	17	6	10	9	4	0
		Rabi	38	92	21	11	14	14	2	0
14	Odisha	Autumn	94	7	9	12	9	9	0	0
		Winter	97	2	3	4	3	3	0	0
		Summer	97	4	6	10	7	7	0	0
15	Punjab	Kharif	35	76	19	5	5	4	2	1
		Rabi	34	74	10	1	3	1	1	0
16	Rajasthan	Kharif	50	58	34	21	21	23	1	1
		Rabi	45	69	32	20	26	30	1	3
17	TamilNadu	Total @	58	48	12	28	17	15	2	0
		Kharif	73	36	10	1	9	9	0	0
18	Telangana	Rabi	72	28	14	1	13	13	0	0
		Kharif	49	77	21	5	18	14	15	48
19	Uttar Pradesh	Rabi	47	88	30	2	21	20	14	48
		Zaid Rabi	65	63	46	0	19	19	3	62
		Kharif	40	64	14	14	20	19	0	0
20	Uttarakhand	Rabi	30	80	19	23	23	23	0	0
		Aus.	78	22	8	0	8	8	0	25
21	West Bengal #	Aman	50	50	5	0	5	5	0	41
		Rabi	61	42	3	0	3	3	0	15
		Summer	39	64	1	3	1	2	6	17

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
22	Puducherry	Kharif	55	50	0	0	0	0	0	0
		Rabi I	90	10	0	0	0	0	0	0
		Rabi II	50	50	0	0	0	0	0	0
For States Covered		All Seasons	57	52	19	9	17	16	11	35

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 2016-17

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		No. of Experiments							
		Planned	Analy-sed	Resp-onse %	Planned	Analy-sed	Resp-onse %	Planned	Analy-sed	Resp-onse %	Planned	Analy-sed	Resp-onse %	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	8706	8609	99	4536	4486	99	7246	6956	96	2212	2078	94	22700	22129	97			
2.	Assam	5700	4789	84	600	568	95	3700	3172	86	1250	1166	93	11250	9695	86			
3.	Bihar	45593	41896	92	400	192	48	50913	46001	90	1064	1006	95	97970	89095	91			
4.	Chhattisgarh	2860	2438	85	510	442	87	1842	1164	63	774	538	70	5986	4582	77			
5.	Goa	320	266	83	80	23	29	190	185	97	100	55	55	690	529	77			
6.	Gujarat %	29392	26693	91	47296	36044	76	68003	61269	90	10448	7062	68	155139	131068	84			
7.	Haryana *	4096	3470	85	940	908	97	3278	3049	93	1270	1056	83	9584	8483	89			
8.	Himachal Pradesh	3216	2686	84	NOT AVAILABLE			2830	2444	86	NOT AVAILABLE			6046	5130	85			
9.	Jammu & Kashmir \$	3098	1782	58				2138	1710	80	310	282	91	5546	3774	68			
10.	Jharkhand	28770	23457	82	NOT AVAILABLE			36210	23612	65	7830	4860	62	72810	51929	71			
11.	Karnataka %%	54636	53282	98	17422	16108	92	34728	33162	95	11944	10532	88	118730	113084	95			
12.	Kerala	24523	24506	100	2511	2511	100	1350	1347	100	NOT AVAILABLE			28384	28364	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	1708	1622	95	58	44	76	314	310	99	NOT AVAILABLE			2080	1976	95			
16.	Odisha	36543	36543	100	2316	2316	100	6298	6298	100	3332	3332	100	48489	48489	100			
17.	Punjab	3036	3004	99	696	696	100	2678	2678	100	566	566	100	6976	6944	100			
18.	Rajasthan	97706	89517	92	26820	22851	85	72276	67159	93	36708	33852	92	233510	213379	91			
19.	Tamil Nadu	6516	6412	98	2760	2482	90	NOT AVAILABLE						9276	8894	96			
20.	Telangana	6674	6670	100	2022	2022	100	4454	4410	99	1012	1012	100	14162	14114	100			
21.	Uttarakhand	4686	4492	96	NOT AVAILABLE			3626	3570	98	NOT AVAILABLE			8312	8062	97			
22.	Uttar Pradesh	293936	286953	98	21850	21242	97	285602	282741	99	26852	25798	96	628240	616734	98			
23.	West Bengal	17432	16398	94	3132	2774	89	19399	17691	91	8987	7789	87	48950	44652	91			
24.	Dadra & Nagar Haveli	156	92	59	NOT AVAILABLE									156	92	59			
25.	Daman & Diu	28	28	100										28	28	100			
26.	Puducherry	80	80	100	NOT AVAILABLE			210	210	100	NOT AVAILABLE			290	290	100			
Total		724615	687506	95	158631	138797	87	643957	602817	94	120599	105929	88	1647802	1535049	93			

Note :-

1. %% : Figures repeated for the year 2015-16 from all the crops for Karnataka.
2. \$: Data repeated from year 2011-12 for Linseed, Potato, R&M and Saffron, all other data repeated from the year 2014-15.
3. # : Figure repeated from the year 2013-14 in respect for crops Banana, Onion & Papaya and all other crops 2015-16 for Madhya Pradesh
4. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.
5. * : Data repeated from the year 2015-16

ANNEX-IV (b) :REASONS FOR LOSS OF EXPERIMENTS UNDER CROP ESTIMATION SURVEY DURING 2016-17

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	15952	15565	0	0	0	0	0	387	387	0	0	0	0	0	0	0	0	387
		% age	97.6								2.4							0.0	0.0	2.4
		Non Food	6748	6564	0	0	0	0	0	184	184	0	0	0	0	0	0	0	0	184
		% age	97.3								2.7							0.0	0.0	2.7
		Total	22700	22129	0	0	0	0	0	571	571	0	0	0	0	0	0	0	0	571
		% age	97.5								2.5							0.0	0.0	2.5
2.	Assam	Food	9400	7961	0	0	0	645	0	576	1221	0	0	0	0	218	218	0	1439	
		% age	84.7								13.0							2.3		15.3
		Non Food	1850	1734	0	0	0	34	0	40	74	0	0	0	0	42	42	0	116	
		% age	93.7								4.0							2.27		6.3
		Total	11250	9695	0	0	0	679	0	616	1295	0	0	0	0	260	260	0	1555	
		% age	86.2								11.5							2.3	0.0	13.8
3.	Bihar	Food	96506	87897	0	0	0	0	0	8609	8609	0	0	0	0	0	0	0	0	8609
		% age	91.1								8.9							0.0	0.0	8.9
		Non Food	1464	1198	0	0	0	0	0	266	266	0	0	0	0	0	0	0	0	266
		% age	81.8								18.2							0.0	0.0	18.2
		Total	97970	89095	0	0	0	0	0	8875	8875	0	0	0	0	0	0	0	0	8875
		% age	90.9								9.1							0.0	0.0	9.1
4.	Chhattisgarh	Food	4702	3602	0	0	0	0	0	1100	1100	0	0	0	0	0	0	0	0	1100
		% age	76.6	0							23.4							0.0		23.4
		Non Food	1284	980	0	0	0	0	0	304	304	0	0	0	0	0	0	0	0	304
		% age	76.3								23.7							0.0		23.7
		Total	5986	4582	0	0	0	0	0	1404	1404	0	0	0	0	0	0	0	0	1404
		% age	76.5								23.5							0.0	0.0	23.5
5.	Goa	Food	510	451	0	0	0	0	0	59	59	0	0	0	0	0	0	0	0	59
		% age	88.4								11.6							0.0		11.6
		Non Food	180	78	0	0	0	0	0	102	102	0	0	0	0	0	0	0	0	102
		% age	43.3																0.0	
		Total	690	529	0	0	0	0	0	161	161	0	0	0	0	0	0	0	0	161
		% age	76.7								23.3							0.0	0.0	23.3
6.	Gujarat %	Food	97395	87962	0	0	0	404	502	8527	9433	0	0	0	0	0	0	0	0	9433
		% age	90.3								9.7							0.0		9.7
		Non Food	57744	43106	0	0	0	3740	20	10822	14582	0	0	56	0	0	56	0	0	14638
		% age	74.7								25.3							0.1		25.3
		Total	155139	131068	0	0	0	4144	522	19349	24015	0	0	56	0	0	56	0	0	24071
		% age	84.5								15.5							0.0	0.0	15.5
7.	Haryana *	Food	7374	6519	0	0	0	0	0	108	108	0	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	0	0	300
		% 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	0	0	1047
		% age	88.5								1.3							0.0	10.9	11.5
8.	Himachal Pradesh	Food	6046	5130	0	0	0	0	0	916	916	0	0	0	0	0	0	0	0	916
		% age	84.8								15.2							0.0		15.2
		Non Food																	0.0	
																			0.0	
		Total	6046	5130	0	0	0	0	0	916	916	0	0	0	0	0	0	0	0	916
		% age	84.8								15.2							0.0	0.0	15.2
9.	Jammu & Kashmir \$\$	Food	5236	3492	0	0	0	136	0	1608	1744	0	0	0	0	0	0	0	0	1744
		% age	66.7								33.3							0.0		33.3
		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	5546	3774	0	0	0	136	0	1636	1772	0	0	0	0	0	0	0	0	1772
		% age	68.0								32.0							0.0	0.0	32.0

Sl. No.	S T A T E	Food / Non-Food Crops	No. of Expts 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	
10.	Jharkhand	Food	64980	47069	0	0	0	0	0	17911	17911	0	0	0	0	0	0	0	0	17911
		% age	72.4								27.6								0.0	27.6
		Non Food	7830	4860	0	0	0	0	0	2970	2970	0	0	0	0	0	0	0	0	2970
		% age	62.1								37.9								0.0	37.9
		Total	72810	51929	0	0	0	0	0	20881	20881	0	0	0	0	0	0	0	0	20881
		% age	71.3								28.7								0.0	0.0
11.	Karnataka %%	Food	89364	86444	0	0	0	0	0	2920	2920	0	0	0	0	0	0	0	0	2920
		% age	96.7								3.3								0.0	0.0
		Non Food	29366	26640	0	0	0	0	0	2726	2726	0	0	0	0	0	0	0	0	2726
		% age	90.7								9.3								0.0	9.3
		Total	118730	113084	0	0	0	0	0	5646	5646	0	0	0	0	0	0	0	0	5646
		% age	95.2								4.8								0.0	4.8
12.	Kerala	Food	25873	25853	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	20
		% age	99.9								0.1								0.0	0.1
		Non Food	2511	2511	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	28384	28364	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	20
		% age	99.9								0.1								0.0	0.1
13.	Madhya Pradesh #	Food	22508	18946	0	0	226		0	2930	3156	0	0	0	0	0	0	0	406	3562
		% 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	198	1019
		% 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	604	4581
		% age	85.1								13.0								0.0	2.0
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	5.4
15.	Meghalaya	Food	2022	1932	0	0	0	0	0	90	90	0	0	0	0	0	0	0	0	90
		% age	95.5								4.5								0.0	4.5
		Non Food	58	44	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	14
		% age	75.9								24.1								0.0	24.1
		Total	2080	1976	0	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104
		% age	95.0								5.0								0.0	5.0
16.	Odisha	Food	42841	42841	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
		Non Food	5648	5648	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	48489	48489	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
17.	Punjab	Food	5714	5682	0	0	0	0	0	32	32	0	0	0	0	0	0	0	0	32
		% age	99.4								0.6								0.0	0.6
		Non Food	1262	1262	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	6976	6944	0	0	0	0	0	32	32	0	0	0	0	0	0	0	0	32
		% age	99.5								0.5								0.0	0.5

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		
18.	Rajasthan	Food	169982	156676	0	0	0	0	8775	2883	11658	0	0	0	1267	381	1648	0	13306	
		% age	92.2								6.9							1.0	0.0	7.8
		Non Food	63528	56703	0	0	0	0	6067	322	6389	0	0	0	418	18	436	0	6825	
		% age	89.3								10.1							0.7		10.7
		Total	233510	213379	0	0	0	0	14842	3205	18047	0	0	0	1685	399	2084	0	20131	
		% age	91.4								7.7							0.9	0.0	8.6
19.	Tamil Nadu	Food	6516	6412	0	0	0	0	0	104	104	0	0	0	0	0	0	0	104	
		% age	98.4								1.6							0.0		1.6
		Non Food	2760	2482	0	0	0	0	0	278	278	0	0	0	0	0	0	0	278	
		% age	89.9								10.1							0.0		10.1
		Total	9276	8894	0	0	0	0	0	382	382	0	0	0	0	0	0	0	382	
		% age	95.9								4.1							0.0	0.00	4.1
20.	Telangana	Food	11128	11080	0	0	0	0	0	48	48	0	0	0	0	0	0	0	48	
		% age	99.6								0.4							0.0		0.4
		Non Food	3034	3034	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	14162	14114	0	0	0	0	0	48	48	0	0	0	0	0	0	0	48	
		% age	99.7								0.3							0.0	0.00	0.3
21.	Uttarakhand	Food	8312	8062	0	0	0	0	0	250	250	0	0	0	0	0	0	0	250	
		% age	97.0								3.0							0.0		3.0
		Non Food	Not Available																	
		% age	0.0								0.0							0.0		0.0
		Total	8312	8062	0	0	0	0	0	250	250	0	0	0	0	0	0	0	250	
		% age	97.0								3.0							0.0		3.0
22.	Uttar Pradesh	Food	579538	569694	0	0	0	0	0	9844	9844	0	0	0	0	0	0	0	9844	
		% age	98.3								1.7							0.0		1.7
		Non Food	48702	47040	0	0	0	0	0	1662	1662	0	0	0	0	0	0	0	1662	
		% age	96.6								3.4							0.0		3.4
		Total	628240	616734	0	0	0	0	0	11506	11506	0	0	0	0	0	0	0	11506	
		% age	98.2								1.8							0.0		1.8
23.	West Bengal	Food	36831	34089	0	0	0	1409	0	1309	2718	0	0	0	24	0	24	0	2742	
		% age	92.6								7.4							0.1	0.0	7.4
		Non Food	12119	10563	0	0	0	1556	0	0	1556	0	0	0	0	0	0	0	1556	
		% age	87.2								12.8							0.0		12.8
		Total	48950	44652	0	0	0	2965	0	1309	4274	0	0	0	24	0	24	0	4298	
		% age	91.2								8.7							0.0	0.00	8.8
24.	Dadra & Nagar Haveli	Food	156	92	0	0	0	0	64	0	64	0	0	0	0	0	0	0	64	
		% age	59.0								41.0							0.0		41.0
		Non Food	Not Available																	
		% age									0.0							0.0		0.0
		Total	156	92	0	0	0	0	64	0	64	0	0	0	0	0	0	0	64	
		% age	59.0								41.0							0.0		41.0
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	Not Available																	
		% age									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	0.0

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	
26.	Puducherry	Food	290	290	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
		Non Food			Not Available															
		% age																		0.0
		Total	290	290	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
		Food	1368572	1290323	0	0	517	2594	9341	62304	74756	309	0	0	1291	740	2340	1153	78249	
		% age	94.3									5.5						0.2	0.1	5.7
		Non Food	279230	244726	0	0	74	5330	6087	21839	33330	195	0	56	418	77	746	498	13097	
		% age	87.6								11.9							0.3	0.2	4.7
		Total	1647802	1535049	0	0	591	7924	15428	84143	108086	504	0	56	1709	817	3086	1651	61410	
		% age	93.2	0.0	0.0	1.4	8.2	4.1	8.4	10.6	0.4	0.0	0.1	0.6	0.4	0.7	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 from the year 2013-14 in respect of crops Banana, Onion, Papaya and all other crops 2015-16 for Madhya Pradesh.

3.%%: Figures repeated from the year 2015-16 for all the crops for Karnataka.

4. \$\$: Data repeated from the year 2011-12 for Linseed, Potato, R&M & Saffron.

5. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.

6.* : Data repeated from the year 2015-16.

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % 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		(KharifIr.)	1450	98	3562	3562	100	5260	0.4	7629
		(KharifUL)	70	88	242	242	100	3189	3.0	222
		Comb.	1520	98	3804	3804	100	5165	0.4	7851
		(Rabi.Ir.)	585	97	2994	2830	95	7095	0.6	4153
2. Assam		(Aut.)	165	99	2000	1266	63	1380	0.9	228
		(Wint.)	1891	100	3000	2951	98	2023	0.6	3766
		Sum	408	99	1500	1298	87	2773	0.8	1132
3. Bihar @		(Bha.Ir)	195	80	392	216	55	2623	N.A.	510
		(Bha.UL)	362	81	560	272	49	2522	N.A.	914
		Comb.	557	81	952	488	51	2557	N.A.	1424
		(Agh.Hyv.Ir.)	1291	100	21940	20771	95	4588	N.A.	5922
		(Agh.Hyv.UL)	436	100	5405	5157	95	3009	N.A.	1311
		(Agh.Lv.Ir.)	590	100	9785	9225	94	3829	N.A.	2260
		(Agh.Lv.UL)	382	100	3955	3653	92	3653	N.A.	1395
		Comb.	2699	100	41085	38806	94	4035	N.A.	10888
		(Gar.Hyv.)	70	97	300	86	29	4233	N.A.	295
		(Gar.Lv.)	15	97	140	40	29	2843	N.A.	42
		Comb.	85	97	440	126	29	3988	N.A.	337
4. Chhattisgarh		(Ir.)	1293	95	520	468	90	2063	1.8	3740
		(UL)	2537	91	1002	876	87	1836	1.7	4732
		Comb.	3830	92	1522	1344	88	1913	1.3	8472
5. Goa		Kharif	28	100	190	190	100	2791	N.A.	77
		Rabi	13	100	190	185	97	2738	N.A.	36
6. Gujarat %		(Ir.)	559	100	10650	8919	84	3892	1	2174
		(UL)	234	100	3886	3645	94	2305	9	539
		Comb.	793	100	14536	12564	86	3424	2.0	2713
		Sum	55	86	202	202	100	4879	N.A.	270

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	S T A T E	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
7.	Haryana ###	1206	76	990	864	87	3268	1.6	3941
8.	Himachal Pradesh \$\$\$	74	73	1334	951	71	2039	3.1	135
9.	Jammu & Kashmir \$\$	(Plain)					N.A.		
		(Hills)					N.A.		
		Comb.	283	38	1412	734	52	3288	8
10.	Jharkhand	(Bha.)	138	N.A.	600	452	75	1675	N.A.
		(Agh.Hyv.Ir.)					N.A.		
		(Agh.Hyv.UL)	1204	N.A.	17520	14869	85	3265	N.A.
		(Agh.Lv.Ir.)					N.A.		3932
		(Agh.Lv.UL)					N.A.		
11.	Karnataka %%	Comb.	1342	N.A.	18120	15321	85	2108	N.A.
		(KharifHyv.Ir.)							
		(KharifHyv.UL)							
		(KharifTra.Ir.)					N.A.		
		(KharifTra.UL)							
		Comb.	963	86	11840	11692	99	4401	1.3
		(Rabi Hyv.Ir.)					N.A.		
12.	Kerala	(Rabi Tra. Ir.)							
		Comb.	30	100	1212	1186	98	3867	3.1
		(Sum. Hyv.Ir.)	102	100	3320	2832	85	4744	2.8
		(Aut.)	57	2	2344	2340	100	2954	2.0
		(Wint.)	72	3	3140	3132	100	1957	2.7
13.	Madhya Pradesh ***	Sum	43	2	1350	1347	100	3006	3.6
		(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
14.	Maharashtra *	Comb.	1935	91	2760	2316	84	1127	10.0
		(Ir.)							
		(UL)							
		(Comp.)					N.A.		
		Comb.	1486	N.A.	4214	4061	96	1731	0.9
15.	Meghalaya	Sum	32	93	516	471	91	2410	1.9
		(Aut.)	33	74	328	260	79	1497	0.01
		(Wint.)	64	100	748	748	100	1884	0.004
									162

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)		
		Total (000)	Coverage (ha.)	Planned	Analysed						
			% age								
1	2	3	4	5	6	7	8	9	10		
16.	Odisha	(Aut.)	512	100	7327	7327	100	1285	1.2	658	
		(Wint.)	3226	100	16499	16499	100	2586	0.3	8343	
		Sum	225	100	3525	3525	100	3531	1.7	794	
17.	Punjab		3046	100	1978	1976	100	4149	N.A.	12638	
18.	Rajasthan #		198	96	3116	2500	80	3434	1.0	679	
19.	Tamil Nadu	(K/K/S)	285	97	428	412	96	4294	1.7	1224	
		(S/T/P)	1035	100	1260	1260	100	1802	1.7	1866	
		(N/K)	122	90	300	300	100	3790	2.1	464	
		Comb.	1442	99	1988	1972	99	2463	1.1	3554	
20.	Telangana	(Kharif Ir.)	862	89	2708	2708	100	3449	0.4	2973	
		(Kharif UI)	27	72	104	104	100	2573	2.1	70	
		Comb.	889	88	2812	2812	100	3422	0.7	3043	
		(Rabi Ir.)	939	90	2266	2266	100	3801	0.7	3570	
20.	Uttarakhand		246	100	2956	2890	98	3108	0.8	860	
21.	Uttar Pradesh		5966	100	182544	179566	98	2413	N.A.	14396	
22.	West Bengal	(Aus.)	248	100	2281	2011	88	2590	1.2	642	
		(Aman)	3963	100	13308	12739	96	2774	0.5	10997	
		Comb.	4211	100	15589	14750	95	2763	0.4	11639	
		Sum	1185	100	11674	10891	93	3379	0.7	863	
23.	Dadra & Nagar Haveli		13	30	78	70	90	1901	1.3	26	
24.	Daman & Diu		2.4	72	20	20	100	1708	16.6	4	
25.	Puducherry	(I)	3	100	80	80	100	3271	3.1	11	
		(II)	8	100	140	140	100	2687	2.4	22	
		(III)	4	100	70	70	100	3635	2.6	15	
TOTAL		Kharif	38890	89	349306	334746	96	2768	0.4	106050	
		Rabi/Sum.	3714	95	29399	27369	93	4075	0.4	8396	
		Comb.	42604	89	378705	362115	96	2882	0.3	114446	
2. JOWAR											
1.	Andhra Pradesh	Kharif	14	87	178	166	93	1408	10.3	20	
		Rabi	83	87	482	456	95	2139	3.0	178	
2.	Chhattisgarh		4	58	80	74	93	1355	15.1	5	
3.	Gujarat %	Kharif	73	95	468	337	72	1540	N.A.	74	
		Rabi	30	89	300	260	87	1514	N.A.	46	

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000) (ha.)	Coverage % age	Planned	Analysed				
1	2	3	4	5	6	7	8	9	10
4. Karnataka %%	(KharifHyv.Ir.)	N.A.							
	(Kharif Hyv., Ir. & UL)								
	(KharifTra.UL)								
	Comb.	99	27	3450	3190	92	1122	3.1	106
	(Rabi Hyv.Ir.)	N.A.							
	(Rabi Hyv.Ir. & UL)								
	(Rabi Tra.Ir.)								
5. Madhya Pradesh ***	(Rabi.Tra. Ir. & UL)	N.A.							
	Comb.	943	73	8772	8400	96	943	2.8	459
	(Sum.Hyv.Ir.)	2.3	100	60	60	100	1942	19.3	4.17
		190	90	1746	1378	79	1491	2.2	283
6. Maharashtra *	Kharif	1062	90	4248	3960	93	1082	0.8	1150
	(Rabi Ir.)	N.A.							
	(Rabi UL)								
	Comb.Rabi	3027	N.A.	8768	8443	96	687	0.7	2080
7. Rajasthan #		579	99	10840	9646	89	603	N.A.	349
8. Tamil Nadu	(Ir.)	128	99	440	440	100	830	3.9	107
	(UL)	140	99	640	640	100	338	6.2	47
	Comb.	268	99	1080	1080	100	573	3.3	154
9. Telangana	Kharif	50	83	448	448	100	634	4.2	32
	Rabi	28	58	290	290	100	1190	3.1	33
10. Uttar Pradesh		183	78	6452	6108	95	1001	N.A.	183
TOTAL	Kharif	2522	90	28990	26387	91	951	0.6	2356
	Rabi/Sum.	4113	20	18672	17909	96	785	0.9	2800
	Comb.	6635	46	47662	44296	93	848	0.6	5156
3. BAJRA									
1. Andhra Pradesh		39	83	488	462	95	1744	4.9	68
2. Gujarat %	Kharif	179	99	2162	2007	93	1535	N.A.	275
	Sum	252	96	10435	9675	93	2497	N.A.	629
3. Haryana ###		370	68	1532	1438	94	1762	1	652

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
4.	Karnataka %%	(Kharif Hyv.Ir.)							
		(Kharif Hyv.UL)							N.A.
		(Kharif Tra.)							
		Comb.	162	89	3562	3370	95	624	2.8
									96
5.	Madhya Pradesh ***		233	99	320	302	94	1575	3.5
6.	Maharashtra *	(Ir.)							
		(UL)							N.A.
		(Comp.)							
		Comb.	1033	N.A.	762	744	98	1086	N.A.
									1122
7.	Rajasthan #		4150	100	26064	24262	93	1001	0.5
8.	Tamil Nadu	(Ir.)	31	97	240	236	98	2953	4.1
		(UL)	18	94	204	156	76	507	9.4
		Comb.	49	96	444	392	88	2054	3.8
9.	Telangana		3	71	52	52	100	870	10.5
10.	Uttar Pradesh		907	99	36462	34695	95	1914	N.A.
11.	Daman & Diu		0.7	65	8	8	100	1101	25.57
	TOTAL	Kharif.	7126	83	71856	67732	94	1204	0.4
		Rabi/Sum.	252	96	10435	9675	93	2497	-
		Comb.	7378	84	82291	77407	94	1248	0.4
	4. MAIZE								
1.	Andhra Pradesh	Kharif	86	59	234	234	100	4150	3.5
		Rabi	165	55	554	500	90	7879	2.5
2.	Bihar @	(Bha.Hyv.)	108	72	616	536	87	3094	N.A.
		(Bha. Lv.)	134	68	704	618	88	2176	N.A.
		Comb.	242	70	1320	1154	87	2586	N.A.
		Rabi	285	82	760	722	95	7482	N.A.
		(Gar.Hyv.)	153	79	380	156	41	6079	N.A.
		(Gar.Lv.)	41	95	120	84	70	3832	N.A.
		Comb.	194	82	500	240	48	5604	N.A.
3.	Chhattisgarh		120	86	490	426	87	2566	0.0
4.	Gujarat %		322	95	8140	7980	98	1677	N.A.
5.	Haryana ###		6	7	144	88	61	3000	12.6
									18

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
6.	Himachal Pradesh \$\$\$	281	100	1882	1735	92	2909	1.4	736
7.	Jammu & Kashmir \$\$	(Plain)		N.A.					
			(Hills)	N.A.					
		Comb.	295	40	1378	826	60	1550	6
8.	Jharkhand	(Bha.)	124	N.A.	7830	6102	78	2172	N.A.
9.	Karnataka %%	(Kharif Hyv.Ir.)		N.A.					
			(Kharif Hyv. Ir. & UL)	N.A.					
			(Kharif Tra.Ir.)	N.A.					
			(Kharif Tra.UL)	N.A.					
			Comb.	1075	100	11388	11048	97	2701
			(Rabi Hyv.Ir.)	N.A.					
			(Rabi Hyv.UL)	N.A.					
			(Rabi Tra.Ir.)	N.A.					
		Comb.	91	100	2788	2658	95	2630	2.7
		(Sum.Hyv.)	27	100	480	478	100	2624	21.2
10.	Madhya Pradesh ***	991	93	1928	1768	92	2308	1.7	2288
11.	Maharashtra *	Kharif	789	75	678	616	91	1469	1.4
		Rabi	249	50	498	467	94	1839	1.8
12.	Odisha	(Aut.)	68	100	2058	2058	100	2854	2.0
			1.3	100	104	104	100	1292	4.0
			Sum	3	100	180	180	100	2913
13.	Punjab		116	100	360	360	100	3835	N.A.
14.	Rajasthan #	Kharif	919	100	11968	11504	96	1501	0.8
15.	Tamil Nadu	(Ir.)	169	86	256	252	98	4553	4.0
			146	94	176	176	100	1255	5.1
			Comb.	315	90	432	428	99	3024
16.	Telangana	Kharif	636	77	960	960	100	2669	1.6
		Rabi	165	85	1046	1046	100	6850	1.1
17.	Uttar Pradesh	Kharif	727	97	29652	29102	98	1876	N.A.
		Rabi	12	56	80	70	88	2802	N.A.
18.	West Bengal		46	100	634	568	90	2692	2.0
	T O T A L	Kharif	7035	89	81580	70959	87	2222	0.7
		Rabi/Sum.	1191	74	6886	6361	92	3634	1.6
		Comb.	8226	87	88466	77320	87	2426	0.6
	5. RAGI (MANDUA)								
1.	Andhra Pradesh	Kharif	27	94	200	200	100	943	3.2
		Rabi	5	61	170	160	94	1713	4.46
2.	Bihar @	(Bha.)	4777	90	280	128	46	723	N.A.
									3454

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
3. Goa									
4. Gujarat %	Kharif	19	96	290	289	100	1248	N.A.	24
5. Jharkhand		19	N.A.	450	276	61	1162	N.A.	23
6. Karnataka %%	(KharifHyv.Ir.)								
	(KharifHyv. Ir. & UL)							N.A.	
	(KharifTra.)								
	Comb.	635	100	7150	7052	99	1704	1.8	1029
	(Rabi Hyv.Ir.)							N.A.	
	(Rabi Hyv.UL)								
	Comb.	33	100	1102	1078	98	1578	5.0	50
	(Sum. Hyv.Ir.)	5	100	270	258	96	1764	10.0	8
7. Maharashtra *		94	98	866	841	97	1004	2.1	94
8. Odisha	(Aut.)	14	100	807	807	100	638	1.8	9
	(Wint.)	33	100	511	511	100	735	1.5	24
	Sum	0.1	100	23	23	100	696	11.2	0.1
9. Tamil Nadu	(Ir.)	52	97	160	160	100	1635	7.3	86
	(UL)	9	95	200	200	100	3123	2.8	28
	Comb.	61	97	360	360	100	1855	5.5	114
10. Telangana		1	86	76	76	100	1158	5.9	1.0
11. Uttarakhand		107	100	1106	1038	94	1532	1.028	160
12. Dadra & N. Haveli		1	60	78	22	28	1320	1.8	1
TOTAL	Kharif	5788	89	12174	11600	95	838	2.7	4958
	Rabi/Sum.	43	95	1565	1519	97	1614	4.5	67
	Comb.	5831	89	13739	13119	95	844	2.6	5025
6. WHEAT									
1. Assam		17	98	850	644	76	1344	1.1	23
2. Bihar @	(Hyv.Ir.)	1534	100	25300	24768	98	2994	N.A.	4592
	(Hyv.UL)	37	100	780	780	100	2260	N.A.	83
	(Lv.Ir.)	493	100	14555	14012	96	2487	N.A.	1227
	(Lv.UL)	42	100	690	690	100	2028	N.A.	85
	Comb.	2106	100	41325	40250	97	2843	N.A.	5987

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)	
		Total (000)	Coverage (ha.)	Planned	Analysed					
			% age							
1	2	3	4	5	6	7	8	9	10	
3.	Chhattisgarh	(Ir.)	89	78	620	420	68	1458	2.44	140
		(UI)	25	85	246	188	76	1011	2.27	26
		Comb.	114	80	866	608	70	1360	2.1	166
4.	Gujarat %	(Ir.)	961	99	40390	38051	94	2860	N.A.	2730
		(UL)	39	99	984	455	46	633	N.A.	25
		Comb.	1000	99	41374	38506	93	2773	N.A.	2755
5.	Haryana ###		2576	100	2200	2182	99	4407	0.7	11350
6.	Himachal Pradesh \$\$\$		338	99	1930	1746	90	1988	1.4	605
7.	Jammu & Kashmir \$\$	(Plain)								
		(Hills)								
		Comb.	286	68	1980	1578	80	1822	6	54
8.	Jharkhand	(Hyv.Ir.)								
		(Lv.Ir.)								
		(Lv.UI.)								
		Comb.	112	N.A.	17520	11902	68	2022	N.A.	227
9.	Karnataka %%	(Hyv.Ir.)								
		(Hyv.Ir & UI.)								
		(Tra.Ir.)								
		(Tra. Ir & UI.)	40	46	634	624	98	1082	7.0	41
		Comb.	170	60	3488	3438	99	736	4.8	119
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	0.06	100.00	27	27	100	1421	12.4	0.1
13.	Punjab		3495	100	2334	2334	100	5046	N.A.	17636
14.	Rajasthan #	(Ir.)								
		(UL)								
		(Comp.)								
		Comb.	3349	100	39316	37486	95	3712	0.17	12430

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
15. Uttarakhand		341	100	2952	2913	99	2565	0.9	882
16. Uttar Pradesh		9885	100	226430	224792	99	3538	N.A.	34971
17. West Bengal		322	100	2528	2285	90	2682	0.9	863
TOTAL		30826	93	399076	383568	96	3429	0.3	106028
7. BARLEY									
1. Bihar @		11	89	300	232	77	1503	N.A.	16
2. Chhattisgarh		2	28	36	20	56	981	33.8	2
3. Haryana ###		29	29	516	355	69	3414	1.6	99
4. Himachal Pradesh \$\$\$		19	53	900	698	78	1634	1.9	29
5. Jharkhand		N.A.							
6. Madhya Pradesh ***		72	89	536	500	93	1670	2.4	158
7. Punjab		8	98	244	244	100	3795	N.A.	32
8. Rajasthan #		276	97	6064	5946	98	3297	0.51	910
9. Uttarakhand		22	100	674	657	97	1284	1.3	26
10. Uttar Pradesh		170	87	716	638	89	2707	N.A.	460
TOTAL		609	89	9986	9290	93	2761	0.5	1732
8. GRAM (BENGALGRAM)									
1. Andhra Pradesh		397	99	1328	1328	100	959	1.56	381
2. Bihar @		59	97	800	695	87	1120	N.A.	66
3. Chhattisgarh		307	91	488	326	67	1171	3.0	360
4. Gujarat %		164	92	3880	3602	93	1124	N.A.	184
5. Haryana ###		42	40	562	512	91	619	N.A.	26
6. Jharkhand		52	N.A.	7830	5094	65	1120	N.A.	79
7. Karnataka %%	(Ir.)								
	(UL)								
	Comb.	1028	100	8172	7890	97	439	2.2	429
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	85	100	100	100	1391	N.A.	2
11. Rajasthan #	(Ir.)	N.A.							
	(UL)	N.A.							
	(Comp.)	N.A.							
	Comb.	1548	100	16096	14562	90	910	0.8	1409

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						

1	2	3	4	5	6	7	8	9	10
12. Telangana	Rabi	101	82	546	544	100	1299	1.47	132
13. Uttar Pradesh		562	94	13060	12753	98	1115	N.A.	626
14. West Bengal		28	100	725	630	87	1030	4.5	28
T O T A L		7692	97	64441	57791	90	956	1.3	7416

9. REDGRAM (TUR/ ARHAR)

1. Andhra Pradesh		343	67	818	818	100	377	5.2	129
2. Bihar @	Rabi	21	88	672	487	72	1581	N.A.	33
3. Chhattisgarh		66	75	474	350	74	615	3.7	40
4. Gujarat %		348	96	1370	1346	98	1132	2.6	394
5. Haryana ###		4	21	360	230	64	1068	N.A.	6
6. Jharkhand	Rabi	1	N.A.	660	276	42	2076	N.A.	79
7. Karnataka %%		587	99	6342	6308	99	374	2.3	208
8. Madhya Pradesh ***		505	87	1650	1274	77	644	2.9	325
9. Maharashtra *		1237	95	5758	5628	98	359	0.7	444
10. Tamil Nadu		52	94	336	336	100	656	3.6	34
11. Telangana		386	80	788	788	100	666	2.2	257
12. Uttar Pradesh		338	78	12614	12192	97	1074	N.A.	363
13. West Bengal	Rabi	3	100	127	100	79	1249	3.4	4
T O T A L		3891	89	31969	30133	94	570	0.9	2316

10. GREENGRAM (MOONG)

1. Andhra Pradesh	Kharif	32	67	348	348	100	518	8.0	17
	Rabi	102	61	402	402	100	485	2.7	50
2. Bihar @	(Bha.)	9	93	280	156	56	820	N.A.	7
	(Gar.)	162	91	504	218	43	690	N.A.	111
3. Gujarat %		104	94	1032	942	91	505	N.A.	527
4. Karnataka %%	Kharif	242	99	3264	3118	96	242	3.9	33
	Rabi	2	100	90	90	100	340	9.8	1
5. Maharashtra *		366	98	5902	5745	97	188	0.6	69
6. Odisha	(Aut.)	41	100	622	622	100	438	9.5	18
	(Wint.)	128	100	1307	1307	100	326	1.7	42
	Sum	157	100	1884	1884	100	471	1.9	74
7. Rajasthan #		2120	100	10872	9637	89	495	0.9	1049
8. Tamil Nadu		166	87	440	440	100	703	2.8	56

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000) (ha.)	Coverage % age	Planned	Analysed				
1	2	3	4	5	6	7	8	9	10
9.	Telangana	Kharif	135	82	532	532	100	606	3.27
		Rabi	11	18	52	52	100	903	7.58
10.	Uttar Pradesh	Kharif	44	79	2184	1994	91	414	N.A.
		(Zaid)	48	84	600	582	97	705	N.A.
11.	West Bengal	Sum	46	100	697	646	93	714	2.0
T O T A L		Kharif	3387	97	26783	24841	93	452	0.7
		Rabi/ Sum.	528	87	4229	3874	92	592	1.2
		Comb.	3915	96	31012	28715	93	471	0.7
11. BLACKGRAM (URD /MATHIKALAI)									
1.	Andhra Pradesh	Kharif	60	72	310	310	100	819	3.5
		Rabi	440	64	634	630	99	636	3.5
2.	Assam	Rabi	57	78	500	442	88	658	1.5
3.	Gujarat %	Kharif	65	78	972	904	93	598	2
4.	Jharkhand		36	N.A.	510	396	78	977	N.A.
5.	Karnataka %%	Kharif	75	100	1000	988	99	268	3.6
		Rabi	5	100	130	130	100	412	9.1
6.	Maharashtra *	Kharif	286	73	4766	4614	97	211	0.6
7.	Odisha	(Aut.)	28	100	834	834	100	398	6.9
		(Wint.)	66	100	1942	1942	100	457	1.9
		Sum	15	100	653	653	100	544	4.7
8.	Rajasthan #	Kharif	477	97	3576	3544	99	641	1.1
9.	Tamil Nadu		429	69	424	418	99	697	8.5
10.	Telangana	Kharif	41	67	114	114	100	817	4.0
		Rabi	8	11	110	68	62	788	3.7
11.	Uttar Pradesh	Kharif	594	95	14478	14104	97	540	N.A.
		(Zaid)	49	77	700	636	91	652	N.A.
12.	West Bengal		66	100	1209	1080	89	692	1.8
T O T A L		Kharif	2158	85	29163	28344	97	561	2.9
		Rabi/ Sum.	574	76	3699	3463	94	649	2.9
		Comb.	2732	83	32862	31807	97	580	2.3
12. LAKH (KHEESARI)									
1.	Bihar @		52	88	392	280	71	1059	N.A.
2.	Chhattisgarh		309	59	262	166	63	935	32.1
3.	Madhya Pradesh ***		50	68	220	204	93	738	1.2
4.	West Bengal	Sum	45	100	358	299	84	1173	8.7
T O T A L			456	67	1232	949	77	951	24.2
436									

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000) (ha.)	Coverage % age	Planned	Analysed				
1	2	3	4	5	6	7	8	9	10
13. MASUR									
1. Bihar @		146	87	980	757	77	1005	N.A.	147
2. Jharkhand		9	N.A.	720	346	48	701	N.A.	6
3. Rajasthan #		76	99	1036	1014	98	1003	1.4	76
4. Uttar Pradesh		489	90	15132	14876	98	964	N.A.	472
5. West Bengal		85	100	2537	2196	87	912	1.3	77
TOTAL		805	90	20405	19189	94	967	0.9	778
14. HORSEGRAM (KULTHI)									
1. Andhra Pradesh	Kharif	1	66	120	96	80	129	12.2	0.2
	Rabi	11	67	270	242	90	496	4.6	6
2. Karnataka %%	Kharif	53	96	2370	2300	97	488	2.8	24
	Rabi	105	100	4150	3974	96	504	2.5	50
3. Odisha	(Wint.)	34	100	2271	2271	100	436	1.9	15
	Sum	0.04	100	6	6	100	395	34.4	0.02
4. Tamil Nadu		35	94	320	320	100	321	3.5	11
5. Telangana	Kharif	0.35	70	40	40	100	383	9.0	0.13
	Rabi	2	18	20	20	100	448	8.7	1
TOTAL		241	96	9567	9269	97	462	1.5	107
15. PEAS									
1. Jharkhand						N.A.			
2. Uttar Pradesh		384	77	7290	7134	98	1377	N.A.	529
3. West Bengal		14	100	314	261	83	1121	9.0	15
TOTAL		398	78	7604	7395	97	1368	-	544
16. MOTH									
1. Gujarat %		19	80	256	158	62	476	8	9
2. Rajasthan #		1388	100	6620	5474	83	313	1.3	435
TOTAL		1388	101	6876	5632	82	320	1.3	435
17. CHOWLIA									
1. Rajasthan #		88	97	1548	1400	90	731	N.A.	65
18. GUAR									
1. Gujarat %		223.0	0.0	166	166	100	667	N.A.	149.0
2. Rajasthan #		3530	100	22652	21148	93	398	1.0	1405
TOTAL		3753	94	22818	21314	93	414	0.9	1554
19. SAWAN (JHANGORA)									
1. Uttarakhand		55	100	624	564	90	1429	1.3	78
2. Uttar Pradesh	Kharif	6	96	70	70	100	706	N.A.	5
	(Zaid)	20	72	20	10	50	925	N.A.	1.0
TOTAL		81	93	714	644	90	1251	1.5	84

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	S T A T E	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
20. KORRA.									
1.	Andhra Pradesh	17	64	204	204	100	824	6.7	14
2.	Telangana	1	83	20	20	100	938	7.5	1
TOTAL		18	65	224	224	100	830	6.3	15
21. KODON - KUTKI (KODRA)									
1.	Chhattisgarh	75	88	294	244	83	302	10.1	12
2.	Madhya Pradesh ***	188	95	864	790	91	429	3.9	807
3.	Uttar Pradesh (Kodon)	3	95	80	42	53	374	N.A.	1
TOTAL		266	93	1238	1076	87	393	3.8	820
22. NAVANE									
1.	Karnataka %%	15	100	740	714	96	246	6.7	4
23. SAVE									
1.	Karnataka %%	10	100	320	292	91	620	8.4	6
24. SAMAI									
1.	Tamil Nadu	15	94	100	100	100	1559	4.4	16
25. VARAGU									
1.	Tamil Nadu	2	75	124	98	79	847	4.4	1
26. SUGARCANE									
1.	Andhra Pradesh (Plt.)	42	90	816	803	98	82000	1.2	3478
	(Rt.)	60	86	786	768	98	74000	1.2	4353
	(Comb.)	102	88	1602	1571	98	77294	0.9	7831
2.	Assam	31	91	700	572	82	38466	0.1	1207
3.	Bihar @ (Ir.)	240	93	856	754	88	54415	N.A.	13036
	(UL)								
	(Comb.)								
4.	Goa	1	100	130	76	58	44842	N.A.	40
5.	Haryana ###	93	66	1070	850	79	75183	N.A.	6992
6.	Jharkhand	1	N.A.	240	170	71	46416	N.A.	37
7.	Karnataka %%	264	100	940	940	100	89000	6.5	2226
8.	Kerala	1	0.1	46	46	100	10648	N.A.	11
9.	Maharashtra *	965	93	8742	7784	89	89000	0.4	85679
10.	Odisha	5	100	249	249	100	62679	2.9	344

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
11. Punjab		88	98	698	668	96	81271	N.A.	7152
12. Rajasthan #		7	97	450	402	89	68456	N.A.	469
13. Tamil Nadu		218	98	468	468	100	87000	1.8	18988
14. Telangana	(Plt.)	8	71	266	266	100	84000	2.3	1
	(Rt.)	18	74	290	286	99	77000	2.2	1
	(Comb.)	26	73	556	552	99	79154	1.6	2
15. Uttar Pradesh		2160	98	9400	9080	97	72667	N.A.	156949
16. West Bengal	Rabi	21	100	439	383	87	75815	8.2	1550
T O T A L		4250	95	26586	24565	92	77233	1.3	302515
27. COCOA									
1. Kerala	Kharif	14	1	800	800	100	893	N.A.	13
28. CHILLIES									
1. Andhra Pradesh	Kharif	169	73	400	396	99	5121	2.2	867
	Rabi	40	71	412	408	99	4107	3.77	165
2. Bihar @	Rabi	2	83	340	218	64	1810	N.A.	3
3. Chhattisgarh	Rabi	5	1	32	12	38	854	1.5	4
4. Karnataka %%	Kharif	61	100	510	510	100	790	16.1	45
	Rabi	3	100	130	130	100	2143	17.0	5
	Sum	1	100	100	96	96	1430	26.0	2
5. Madhya Pradesh ***	Rabi	75	44	80	48	60	533	29.6	40
6. Telangana	Kharif	110	63	276	276	100	3584	2.2	393
	Rabi	15	80	124	124	100	5543	2.0	81
T O T A L		481	69	2404	2218	92	3348	1.8	1605
29. CUMIN									
1. Gujarat %	Rabi	280	99	9442	6930	73	747	N.A.	209
2. Rajasthan #	Rabi	500	100	4976	3757	76	414	1.7	207
T O T A L		780	100	14418	10687	74	534	1.3	416
30. FENNEL									
1. Gujarat %		390	85	388	388	100	1627	N.A.	64
31. ARECANUT									
1. Kerala		98	4	1620	1620	100	1196	1.9	117
2. Maharashtra *							N.A		
T O T A L		98	4	1620	1620	100	1336	1.7	117
32. PEPPER									
1. Kerala		85	3	1614	1613	100	400	3.5	34
33. SAFFRON									
1. Jammu & Kashmir \$\$		3	N.A.	102	96	94	3	N.A.	0.009
34. TURMERIC									
1. Kerala		3	0.1	1540	1538	100	2472	N.A.	7

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
35. GINGER									
1. Kerala		5	0.2	1456	1454	100	3976	N.A.	20
2. Meghalaya		10	99	632	614	97	7400	0.01	66
T O T A L		15	65	2088	2068	99	6227	0.01	86
36. GARLIC									
1. Gujarat %	Rabi	8	63	334	264	79	5571	2	42
37. CORIANDER									
1. Rajasthan #		182	99.5	3172	2956	93	1139	N.A.	207
38. LICHI									
1. Bihar @		9	86	300	86	41	6840	N.A.	62
39. BANANA									
1. Bihar @		13	96	500	48	10	11440	N.A.	153
2. Gujarat %		24	N.A.	304	272.0	89	72350	N.A.	1768
3. Kerala		33	2	2409	2409	100	14435	0.5	489
4. Madhya Pradesh ***		N.A.	N.A.	138	80	58	N.A.	N.A.	N.A.
T O T A L		70	19	3351	2809	84	33735	0.1	2410
40. MANGO									
1. Bihar @		59	94	600	190	32	31520	N.A.	1875
2. Kerala		79	3	1620	1620	100	5284	N.A.	420
T O T A L		138	42	2220	1810	82	16501	0.0	2295
41. GUAVA									
1. Bihar @		7	86	280	118	42	9810	N.A.	67
42. JACKFRUIT									
1. Bihar @		6	88	420	100	24	22920	1.9	128
2. Kerala		92	4	1618	1618	100	3055	N.A.	301
T O T A L		98	9	2038	1718	84	4271	1.9	429
43. CASHEWNUT									
1. Kerala		42	2	1536	1536	100	671	N.A.	28
2. Maharashtra *							N.A.		
T O T A L		42	100	1536	1536	100	793	-	28
44. TAPIOCA									
1. Kerala		69	3	1587	1587	100	37283	1.1	2560
45. PINE APPLE									
1. Kerala		8	0.3	1571	1571	100	8201	N.A.	66

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
1	2	3	4	5	6	7	8	9	10
46. POTATO									
1. Assam	Rabi	113	97	850	788	93	7381	1.5	834
2. Bihar @	(Agh.)	72	66	340	172	51	12250	N.A.	882
	Rabi	93	72	420	396	94	13630	N.A.	1264
3. Chhattisgarh	Rabi	13	28	110	20	18	5962	3.6	59
4. Gujarat %	Rabi	134	98	810	780	96	25657	N.A.	3446
5. Jharkhand	(Agh.)	21	N.A.	570	412	72	7940	N.A.	166
	Rabi	25	N.A.	7830	4938	63	9159	N.A.	227
6. Jammu & Kashmir \$\$	Kharif	1	N.A.	206	126	61	7305	N.A.	7
	Rabi	1	N.A.	158	132	84	10280	N.A.	11
7. Karnataka %%	Kharif	21	97	180	180	100	4584	17.0	93
	Rabi	4	100	112	112	100	16555	10.3	70
8. Madhya Pradesh ***	Rabi	82	70	432	346	80	18458	1.1	1118
9. Meghalaya	Sum	12	100	314	310	99	11073	0.01	142
10. Odisha	(Wint.)	7	100	2012	2012	100	12593	3.8	82
11. Uttar Pradesh	Rabi	576	92	20884	20656	99	24245	N.A.	13956
T O T A L		1175	84	35228	31380	89	19383	0.4	22357
47. ONION									
1. Bihar @	Rabi	14	73	420	278	66	11860	N.A.	162
2. Chhattisgarh	Rabi	5	5	48	12	25	3297	0.3	16
3. Gujarat %	Rabi	53	63	534	390	73	26931	1	1424
4. Jharkhand	Rabi	4	N.A.	630	364	58	8010	N.A.	29
5. Karnataka %%	Kharif	128	100	750	750	100	4512	9.5	549
	Rabi	4.0	100	160	160	100	8147	9.2	30
	Sum	3	100	192	192	100	4797	10.9	12
6. Madhya Pradesh ***	Rabi	73	92	642	458	71	18760	2.4	1377
7. Uttar Pradesh	Rabi	11	32	70	60	86	13928	N.A.	147
	(Zaid)	13	42	620	534	86	13529	N.A.	173
T O T A L		308	83	4066	3198	79	12873	2.0	3919
48. BRINJAL									
1. Bihar @	(Agh.)	22	69	340	174	51	10670	0.36	231
	Rabi	9	69	340	182	54	9470	7.82	82
2. Jharkhand	(Agh.)	5	N.A.	390	304	78	5933	N.A.	32
	Rabi	4	N.A.	480	308	64	5352	N.A.	24
T O T A L		40	53	1550	968	62	9276	2.3	369

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)	
		Total (000)	Coverage (ha.)	Planned	Analysed					
			% age							
1	2	3	4	5	6	7	8	9	10	
49. TOMATO										
1. Bihar @		(Agh.)	8	45	140	64	46	9850	0.52	
		Rabi	6	61	280	196	70	11050	4.39	
2. Jharkhand		(Agh.)	8	N.A.	660	476	72	5590	N.A.	
		Rabi	5	N.A.	540	384	71	5712	N.A.	
T O T A L		27	27	1620	1120	69	8088	2.6	230	
50. CAULIFLOWER										
1.	Bihar @		48	86	340	182	54	13390	N.A.	
51. PAPAYA (PAPITA)										
1.	Madhya Pradesh ***		N.A.	N.A.	32	30	94	N.A.	N.A.	
52. PLANTAIN										
1.	Kerala		57	2	1622	1622	100	6927	N.A.	
53. METHI										
1.	Rajasthan #		130	95	1616	1438	89	1218	N.A.	
54. GROUNDNUT										
1. Andhra Pradesh		Kharif	933	99	2608	2592	99	419	2.36	
		Rabi	80	68	842	832	99	2664	1.8	
2.	Chhattisgarh		25	70	216	170	79	1283	3.84	
3. Goa		Kharif	0.4	100	80	23	29	2555	N.A.	
		Rabi	1	100	100	55	55	2302	N.A.	
4. Gujarat %		Kharif	1697	99	16196	8957	55	1632	2.5	
		Sum	63	74	6606	3776	57	1779	N.A.	
5. Karnataka %%		(KharifIr.)								
		(KharifUI.)								
		(Comb.)	348	100	7170	6876	96	635	2.8	
		(Rab,UL)	5	N.A.	120	120	100	2051	9.8	
		(Sum. Ir.)								
		(Sum. UI.)								
		(Comb.)	82	N.A.	4232	3626	86	806	2	
6.	Madhya Pradesh ***		201	86	954	792	83	1141	3.2	
7.	Maharashtra *	Kharif	224	91	2938	2744	93	959	1.0	
		Sum	85	98	1382	1281	93	1361	2.5	
									116	

ANNEX-V :ESTIMATES OF YIELD RATES AND PRODUCTION UNDER CES DURING 2016-17

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)	
		Total (000)	Coverage (ha.)	Planned	Analysed					
			% age							
1	2	3	4	5	6	7	8	9	10	
8.	Odisha	(Aut.)	21	100	1116	1116	100	945	1.7	20
		(Wint.)	4	100	248	248	100	1256	3.8	5
		Sum	19	100	1288	1288	100	1533	1.9	30
9.	Rajasthan #		556	99	5904	4390	74	2051	0.8	1141
10.	Tamil Nadu	(Ir.)	195	100	700	700	100	1567	2.8	305
		(UL)	88	100	460	448	97	3232	3.7	284
		Comb.	283	100	1160	1148	99	2085	2.3	589
11.	Telangana	Kharif	27	80	142	142	100	1930	4.6	51
		Rabi	140	87	826	826	100	2068	1.8	290
12.	Uttar Pradesh		94	90	7032	6768	96	904	N.A.	85
13.	West Bengal	Rabi	55	100	611	524	87	2536	3.7	139
TOTAL		Kharif	4414	98	45764	35966	79	1303	1.6	5754
		Rabi/Sum.	449	85	16007	12328	77	2152	1.1	975
		Comb.	4862	97	61771	48294	78	1381	1.4	6729
55. SESAMUM (GINGELLY)										
1.	Andhra Pradesh	Kharif	33	83	270	270	100	228	5.4	8
		Rabi	30	57	310	294	95	290	5.1	9
2.	Chhattisgarh		20	55	124	118	95	411	7.8	8
3.	Gujarat %		129	95	1298	1121	86	534	N.A.	69
4.	Karnataka %%		42	100	1700	1610	95	527	3.8	21
5.	Kerala		0.20	0.01	81	81	100	355	N.A.	0.06
6.	Madhya Pradesh ***		370	92	1476	1324	90	411	1.9	152
7.	Maharashtra *	Kharif	28	77	1040	890	86	106	1.3	3
		Rabi	2	22	16	12	75	512	19.4	1
8.	Odisha	(Aut.)	4	100	223	223	100	288	7.1	1
		(Wint.)	11	100	662	662	100	312	3.2	3
		Sum	1	100	178	178	100	306	5.0	0.44
9.	Rajasthan #		267	99	6136	5817	95	347	1.6	93
10.	Tamil Nadu	(Ir.)	11	100	224	126	56	394	5.4	4
		(UL)	18	100	256	240	94	378	3.1	7
		(Comb.)	29	100	480	366	76	384	2.8	11
11.	Telangana	Kharif	3	57	80	80	100	139	7.4	0.5
		Rabi	18	49	78	78	100	803	3.2	14
12.	Uttar Pradesh		271	92	13726	13440	98	214	N.A.	58
13.	West Bengal	Sum	233	100	3183	2737	86	924	1.2	215
TOTAL		Kharif	1207	93	27296	26002	95	355	1.2	428
		Rabi/Sum.	284	92	3765	3299	88	843	1.1	240
		(Comb.)	1492	93	31061	29301	94	448	0.9	667

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						

1	2	3	4	5	6	7	8	9	10
56. CASTOR									
1. Andhra Pradesh		32	84	232	214	92	471	4.3	15
2. Gujarat %		544	96	3478	3299	95	2073	N.A.	1127
3. Karnataka %%		6	100	640	630	98	475	6.2	3
4. Telangana		44	76	214	214	100	519	4.5	26
TOTAL		626	94	4564	4357	95	1867	0.8	1171

57. RAPE & MUSTARD									
1. Assam		294	100	1250	1166	93	644	1.2	189
2. Bihar @		83	80	1064	1006	95	1180	N.A.	98
3. Chhattisgarh		51	72	438	316	72	389	3.3	20
4. Gujarat %		200	95	3450	2914	84	1771	1.1	354
5. Haryana ###		482	64	1040	990	95	1434	0.5	691
6. Jammu & Kashmir \$\$		59	N.A.	286	266	93	791	N.A.	48
7. Jharkhand		64	N.A.	7830	4860	62	935	N.A.	60
8. Madhya Pradesh ***		600	92	1116	996	89	1178	2.0	707
9. Odisha	(Wint.)	10	100	1866	1866	100	346	2.4	3
10. Punjab		32	95	566	566	100	1413	N.A.	45
11. Rajasthan #	(Ir.)						N.A.		
	(UL)						N.A.		
	(Comp.)						N.A.		
	Comb.	2503	100	30712	28875	94	1521	0.3	3808
12. Uttar Pradesh		689	94	26442	25584	97	1245	N.A.	858
13. West Bengal		459	100	5030	4397	87	1077	0.9	495
TOTAL		5526	93	81090	73802	91	1334	0.3	7376

58. LINSEED (ALSI)									
1. Chhattisgarh		30	75	336	222	66	345	3.7	10
2. Jammu & Kashmir \$\$		0.2	N.A.	24	16	67	642	N.A.	0.1
3. Karnataka %%		4	100	390	370	95	123	10.6	0.41
4. Madhya Pradesh ***		94	92	920	802	87	553	4.4	42
5. Maharashtra *		16	51	222	197	89	236	N.A.	4
6. Uttar Pradesh		32	89	120	108	90	538	N.A.	17
7. West Bengal		7	100	163	131	80	370	27.7	2
TOTAL		183	86	2175	1846	85	472	3.8	76

59. SAFFLOWER									
1. Karnataka %%		44	100	2810	2474	88	776	3.4	25
2. Maharashtra *		57	89	1854	1332	72	225	1.5	13
TOTAL		101	94	4664	3806	82	466	2.5	38

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						

1	2	3	4	5	6	7	8	9	10
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60. SUNFLOWER

1. Andhra Pradesh	Kharif	9	82	196	188	96	698	6.6	6
	Rabi	13	69	368	288	78	1215	6.0	15
2. Haryana ###	Rabi	8	N.A.	230	66	29	1644	N.A.	13
3. Karnataka %%	(KharifIr.)								
	(KharifUI.)								
	Comb.	114	100	4564	3738	82	114	3.4	39
	(Rabi Ir.)								
	(Rabi UI.)								
	Comb.								
	(Sum. Ir.)	164	100	4052	3612	89	265	5.3	41
4. Maharashtra *	Kharif	18	99	600	492	82	122	1.9	2
	Rabi	28	81	348	248	71	252	2.4	7
	Sum	1	86	52	47	90	1245	3.0	5
5. Tamil Nadu		7	100	300	178	59	465	4.5	3
6. Uttar Pradesh	(Zaid)	3	28	170	30	18	1177	N.A.	4
7. Telangana	Kharif	1	90	36	36	100	755	7.4	1
	Rabi	5	58	72	72	100	1795	1.7	9
TOTAL	Kharif	149	99	5696	4632	81	171	2.6	86
	Rabi/Sum.	222	90	5292	4363	82	420	2.7	94
	Comb.	371	94	10988	8995	82	320	2.2	180

61. SOYABEAN

1. Andhra Pradesh		2	N.A.	78	78	100	922	9	1
2. Chhattisgarh		104	83	170	154	91	791	10.5	73
3. Karnataka %%		275	100	1858	1780	96	541	3.2	141
4. Madhya Pradesh ***		6014	95	2774	2450	88	457	3.9	2748
5. Maharashtra *		3708	92	4976	4870	98	487	0.6	1802
6. Rajasthan #		1056	99	7576	6540	86	1072	0.7	1132
7. Telangana		277	80	232	232	100	1166	3.8	323
8. Uttar Pradesh		11	84	1012	954	94	673	N.A.	7
TOTAL		11447	94	18676	17058	91	546	1.7	6227

62. TARA MEERA

1. Rajasthan #		251	97	2228	1858	83	433	N.A.	109
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63. COCONUT

1. Kerala		781	30	2430	2430	100	6889	0.8	5384
2. Maharashtra *							N.A.		
TOTAL		781	30	2430	2430	100	7491	0.8	5384

Sl. No.	S T A T E	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
			% age						
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		463	74	952	944	99	1675	3.3
2.	Gujarat %	(Ir.)	1582	98	19756	17138	87	1147	1
		(UL)	809	99	6568	5529	84	767	2
		Comb.	2391	98	26324	22667	86	1018	0.9
3.	Haryana ###		615	45	940	908	97	275	N.A.
4.	Karnataka %%	(Ir.)							
		(UL)							
		Comb.	489	N.A.	1490	1474	99	489	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		285	100	696	696	100	756	N.A.
8.	Rajasthan #		471	97	7204	6104	85	1689	N.A.
9.	Tamil Nadu	(Ir.)	94	100	564	538	95	687	2.4
		(UL)	55	100	256	252	98	764	7.2
		Comb.	149	100	820	790	96	715	3.2
10.	Telangana		1409	56	1318	1318	100	1346	1.3
11.	Uttar Pradesh		6	55	80	80	100	358	N.A.
T O T A L		10777	48	49302	44150	90	797	0.6	22832
66. JUTE. @@									
1.	Assam		75	95	600	568	95	1923	1.1
2.	Bihar @		91	96	200	106	53	2671	N.A.
3.	Meghalaya		7	65	58	44	76	722	0.01
4.	Odisha		1	100	67	67	100	1678	13.9
5.	West Bengal		522	100	2910	2573	88	2720	0.5
T O T A L		696	99	3835	3358	88	2606	0.4	9303

Sl. No.	STATE	Area under Crop		No. of Experiments		Respon- se % age	Estimated yield rate (Kg/ha.)	Standard Error % age	Total Production (000 tonnes)
		Total (000)	Coverage (ha.)	Planned	Analysed				
		(000)	(ha.)						
1	2	3	4	5	6	7	8	9	10
67. MESTA. @@									
1. Andhra Pradesh		7	87	200	200	100	1703	0.8	11
2. Bihar @		16	96	200	86	43	2369	N.A.	39
3. West Bengal		14	100	222	201	91	2040	3.2	162
TOTAL		37	96	622	487	78	2119	3.1	212
68. TOBACCO									
1. Andhra Pradesh	(N)	17	57	296	290	98	2730	2.2	47
	(V)	56	82	396	374	94	2102	6.7	117
	(Comb.)	73	76	692	664	96	2248	4.8	164
2. Gujarat %		0	0	220	200	91	0	0	0
3. Karnataka %%		67	100	340	330	97	755	13.3	48
4. Maharashtra *		2	100	30	30	100	737	6.6	64
5. Telangana	(N)	1	48	10	10	100	4618	4.0	3
	(V)	3	49	26	26	100	2682	3.6	9
	(Comb.)	4	49	36	36	100	3122	8.9	12
6. Uttar Pradesh	Rabi	26	90	100	60	60	4466	N.A.	117
	(Zaid)	1	41	20	16	80	1966	N.A.	2.0
	Comb.	27	88	120	76	63	4373	-	119
TOTAL		173	87	1438	1336	93	2007	19.6	407
69. ISABGOL									
1. Gujarat %		15	94	172	172	100	760	N.A.	12
2. Rajasthan #		355	90	3768	3119	83	520	N.A.	185
TOTAL		355	94	3940	3291	84	552	0.0	197
70. AVARE (SEM)									
1. Karnataka %%		17	98	400	400	100	1392	9.0	23
71. COWPEA (LOBIA)									
1. Karnataka %%		35	99	430	430	100	434	8.8	35

Note :-

- : All primary data have been supplied by concerned SASA.
- # : Coverager % repeated for the year 2013-14.
- ** : Estimated average yield is in number of Jackfruits/hec. and production in million numbers for Kerala State.
- ## : Estimated average yield is in number of coconuts/hec. and production in million nuts.
- \$: Production of cotton in '000' bales of 170 Kgs. each.
- * : 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 (Kharif & Rabi), Bajra Kharif, Wheat, Gram Kl Sugarcane and Cotton from the year 2011-12.
- @@ : Production of Jute and Mesta in '000' bales of 180 Kgs. each.
- % : Figures repeated from the year 2015-16 .
- \$\$: Data repeated from the year 2011-12 Linseed, Potato, R&M and Saffron.
- @ : coverage percentage repeated from the year 2013-14 .
- ! : N.A. = Not Available
- \$\$\$: Coverage Percentage repeated from the year 2014-15.
- *** : Figure repeated from the year 2013-14 in respect for crops Banana, Onion and Papaya and all other crop 2015-16 for Madhya Pradesh.
- % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco Repeated from the year 2015-16.
- ## : Data repeated from the year 2015-16.

**ANNEX - VI : COMPARISON OF SURVEY ESTIMATES AND OFFICIAL ESTIMATES IN RESPECT OF THOSE CROPS
WHERE DIFFERENCE IN AREA, PRODUCTION OR YIELD IS MORE THAN FIVE PERCENT DURING 2016-17**

Sl. No.	S T A T E	SURVEY ESTIMATES			OFFICIAL ESTIMATES			
		Area in 000'ha.	Production in "000" tonnes	Yield in Kg./ha.	Area in '000'ha.	Production in "000" tonnes	Yield in Kg./ha.	
1	2	3	4	5	6	7	8	
1. RICE								
1	Andhra Pradesh	Kharif	1520	7851	5201	1520	4855	3194
		Rabi	585	4153	7095	585	2597	4440
2	Assam	Kharif	2056	3994	3403	2059	3596	1746
3	Bihar	Aghani	2699	10888	4121	3256	8015	2462
		Gar.	85	337	4060	84	224	2660
4	Chhattisgarh	Kharif	3830	8472	1936	3830	8048	2101
5	Gujarat	Kharif	793	2713	3577	782	1750	2283
		Rabi	55	270	4879	55	180	3273
6	Haryana		1206	3941	3268	1386	4453	3213
7	Himachal Pradesh		74	135	2039	75	147	1968
8	Jammu & Kashmir		283	86	3288	283	572	2019
9	Jharkhand	(Bha.)	1342	4163	2108	1707	3820	2238
10	Karnataka	Kharif	963	4027	4401	942	2343	2487
		Rabi	30	111	3867	92	262	2848
11	Kerala	Kharif	129	308	2682	132	324	2451
		Rabi	43	128	3006	39	114	2883
12	Madhya Pradesh	Kharif	1935	2120	1127	2260	4158	1840
13	Meghalaya	(Aut.)	97	240	1602	97	161	1649
14	Odisha	Kharif	3738	4501	1640	3630	7532	2075
15	Punjab		3046	12638	4149	2898	11586	3998
16	Rajasthan		198	679	3434	198	453	2289
17	Tamil Nadu	(K/K/S)	1442	3554	2920	1313	2114	1610
18	Telangana	Kharif Ir.	889	3043	3429	889	2660	2992
19	Uttarakhand		246	860	3108	246	586	2329
20	Uttar Pradesh		5966	14396	2413	5966	12433	2293
21	West Bengal	(Aus.)	4211	11639	2764	4211	11524	2598
		Summer	1185	863	3379	1285	4360	3393
22	Dadra & Nagar Haveli		13	26	1901	14	31	2200
23	Daman & Diu		2.4	4	1708	1.8	2	1139
24	Puducherry	Kharif	3	11	3271	12	36	2988
		Rabi	12	37	3579	16	44	3219
2. JOWAR								
1	Chhattisgarh		4	5	1355	5	5	1200
2	Gujarat	Kharif	73	74	1540	76	117	1539
		Rabi	30	46	1514	30	33	1100
3	Karnataka	kharif	99	106	1122	111	129	1162
		Rabi	943	459	943	837	717	857
4	Madhya Pradesh		190	283	1491	220	379	1721
5	Maharashtra	kharif	1062	1150	1082	603	575	953
		Rabi	3027	2080	687	2447	1595	652
6	Tamil Nadu	kharif	268	154	680	268	154	367
7	Telangana	kharif	50	32	634	62	55	887
3. BAJRA								
1	Andhra Pradesh		39	68	1744	42	72	1714
2	Gujarat	Kharif	179	275	1535	431	931	2160
3	Haryana		370	652	1762	478	964	2017
4	Karnataka		162	96	624	242	255	1054
5	Madhya Pradesh		233	366	1575	280	681	2431
6	Maharashtra		1033	1122	1086	837	800	955
7	Tamil Nadu		49	102	2737	50	102	2059
8	Telangana		3	3	870	17	15	882
9	Uttar Pradesh		907	1736	1914	975	1736	1914
10	Daman & Diu		0.7	1.0	1101	0.4	0.5	1101
4. MAIZE								
1	Haryana		6	18	3000	5	17	3400
2	Himachal Pradesh		281	736	2909	294	784	2672
3	Jammu & Kashmir		295	54	1550	295	541	1833
4	Jharkhand	(Bha.)	124	271	25172	285	550	1927
5	Karnataka	kharif	1075	2759	2701	1263	2983	2367
		Rabi	91	227	2630	1370	3314	2713
6	Madhya Pradesh		991	2288	2308	1263	3265	2585
7	Maharashtra	Kharif	789	1160	1469	752	2442	3246
		Rabi	249	457	1839	395	1011	2558

Sl. No.	S T A T E	SURVEY ESTIMATES			OFFICIAL ESTIMATES			
		Area in 000'ha.	Production in "000" tonnes	Yield in Kg./ha.	Area in '000'ha.	Production in "000" tonnes	Yield in Kg./ha.	
1	2	3	4	5	6	7	8	
8	Odisha	kharif	68	195	2854	70	105	2824
		Rabi	3	8	2913	3	7	2911
9	Tamil Nadu	(Ir.)	169	77	4553	169	770	4554
10	Telangana	Kharif	636	1698	2669	636	1161	2761
		Rabi	165	1126	6850	166	590	5465
11	Uttar Pradesh	Kharif	727	1365	1876	605	1119	1876
5. RAGI (MANDUA)								
1	Andhra Pradesh	kharif	27	25	943	32	35	1094
2	Gujarat	kharif	19	24	1248	19	15	1421
3	Jharkhand		19	23	1162	23	20	882
4	Karnataka	kharif	635	1029	1704	598	1188	1436
5	Maharashtra		94	94	1004	93	111	1198
6	Tamil Nadu	kharif	61	114	2000	61	114	1865
7	Telangana		1	1.0	1158	1	1.0	1000
8	Dadra & N. Haveli		1	1	1320	1	2	1700
6. WHEAT								
1	Assam		17	23	1344	18	34	1344
2	Bihar	kharif	2106	5987	2843	2106	5111	2427
3	Jammu & Kashmir	(Plain)	286	54	1822	290	476	1638
4	Jharkhand	kharif	112	227	2022	212	425	2011
5	Karnataka	kharif	170	119	736	168	171	1018
6	Madhya Pradesh	kharif	5408	15664	2965	6028	17939	2976
7	Odisha	Summer	0.06	0.1	1421	0.10	0.1	1333
8	Punjab		3495	17636	5046	3495	16441	4704
9	Rajasthan		3349	12430	3712	2830	8985	3175
10	Uttar Pradesh		9885	34971	3538	9655	30056	3113
7. BARLEY								
1	Haryana		29	99	3414	20	73	3650
2	Himachal Pradesh		19	29	1634	20	36	1753
3	Madhya Pradesh		72	158	1670	116	253	2180
4	Rajasthan		276	910	3297	276	841	3046
5	Uttarakhand		22	26	1284	22	26	1182
T O T A L			418	1222	0	454	1229	0
8. GRAM (BENGALGRAM)								
1	Andhra Pradesh		397	381	959	397	381	960
2	Haryana		42	26	619	37	44	1189
3	Jharkhand		52	79	1120	211	247	1174
4	Karnataka		1028	429	439	1003	592	590
5	Madhya Pradesh		2623	2924	1115	3222	3544	1100
6	Maharashtra		838	770	918	1929	1719	891
7	Rajasthan		1548	1409	910	942	1409	911
9. REDGRAM (TUR/ ARHAR)								
1	Haryana		4	6	1068	14	13	915
2	Jharkhand	Rabi	1	79	2076	235	236	1002
3	Karnataka		587	208	374	1214	909	749
4	Madhya Pradesh		505	325	644	690	782	1133
5	Maharashtra		1237	444	359	1436	1496	1042
6	Tamil Nadu		52	34	656	57	37	655
10. GREENGRAM (MOONG)								
1	Andhra Pradesh	Kharif	32	17	518	32	16	500
2	Bihar	(Bha.)	9	7	820	11	8	782
3	Gujarat		104	527	505	152	69	454
4	Karnataka	Kharif	242	33	242	415	115	277
		Rabi	2	1	340	5	1	106
5	Maharashtra		366	69	188	444	260	585
6	Odisha	(Aut.)	169	60	397	169	60	353
7	Rajasthan		2120	1049	495	1637	810	495
11. BLACKGRAM (URD /MATHIKALAI)								
1	Gujarat	Kharif	65	39	598	193	117	606
2	Jharkhand		36	35	977	152	139	918
3	Karnataka	Kharif	75	19	268	83	40	482
		Rabi	5	2	412	5	3	600
4	Maharashtra	Kharif	286	60	211	338	183	542
5	Odisha	kharif	94	49	420	94	41	440
6	Rajasthan	Kharif	477	305	641	477	306	641
7	Telangana	Rabi	8	6	788	11	9	818

Sl. No.	S T A T E	SURVEY ESTIMATES			OFFICIAL ESTIMATES		
		Area in 000'ha.	Production in "000" tonnes	Yield in Kg./ha.	Area in '000'ha.	Production in "000" tonnes	Yield in Kg./ha.
1	2	3	4	5	6	7	8
12. LAKH (KHESARI)							
8	West Bengal	Summer	45	55	1173	55	69
	T O T A L		45	55	0	55	69
13. MASUR							
1	Jharkhand		9	6	701	62	54
2	Uttar Pradesh		489	472	964	489	372
3	West Bengal		85	77	912	83	81
	T O T A L		583	555	0	634	507
14. HORSEGRAM (KULTHI)							
1	Andhra Pradesh	Kharif	1	0.2	129	1	0.2
		Rabi	11	6	496	11	6
2	Karnataka	Kharif	53	24	488	36	11
		Rabi	105	50	504	88	5
3	Tamil Nadu		35	11	321	4	1
4	Telangana	Rabi	2	1	448	1	1
15. PEAS							
1	Uttar Pradesh		384	529	1377	384	418
2	West Bengal		14	15	1121	18	15
	T O T A L		398	544	0	402	433
16. MOTH							
1.	Gujarat		19	9	476	32	15
17. CHOWLA							
1.	Rajasthan		88	65	731	98	68
18. SUGARCANE							
1	Andhra Pradesh		102	7831	77555	103	7830
2	Assam		31	1207	38466	31	1207
3	Haryana		93	6992	75183	102	8223
4	Jharkhand		1	37	46416	7	513
5	Karnataka		264	2226	89	397	27378
6	Maharashtra		965	85679	89000	633	52262
7	Odisha		5	344	62679	6	344
8	Rajasthan		7	469	678	7	489
9	Telangana	(Plt.)	26	2	79220	29	2061
10	Uttar Pradesh		2160	156949	72667	2160	40169
19. GROUNDNUT							
1	Goa	Kharif	0.4	1	2555	0.3	1
		Rabi	1	3	2302	1	3
2	Gujarat	Kharif	1697	2770	1632	1696	3044
		Summer	63	112	1779	63	113
3	Karnataka	kharif	348	210	635	604	248
		Rabi	5	10	2051	169	171
4	Odisha	kharif	25	25	1059	26	26
5	Tamil Nadu	kharif	283	589	2370	195	305
6	Telangana	Kharif	27	51	1930	26	52
7	West Bengal	Rabi	55	139	2536	75	173
20. SESAMUM (GINGELLY)							
1	Andhra Pradesh		63	17	228	64	17
2	Gujarat		129	69	534	150	78
3	Karnataka		42	21	527	35	22
4	Kerala		0.20	0.06	355	0.20	0.10
5	Madhya Pradesh		370	152	411	380	165
6	Odisha	kharif	15	4	297	15	5
7	Telangana		21	15.0	383	21	15.0
8	Uttar Pradesh		271	58	214	370	79
21. CASTOR							
1	Andhra Pradesh		32	15	471	33	16
2	Karnataka		6	3	475	9	5
3	Telangana		44	26	519	45	26
22. RAPE & MUSTARD							
1	Haryana		482	691	1434	510	945
2	Jammu & Kashmir		59	48	791	48	25
3	Jharkhand		64	60	935	273	199
4	Madhya Pradesh		600	707	1178	708	920
5	Odisha	(Wint.)	10	3	346	10	3
6	Rajasthan		2503	3808	1521	2564	3645

Sl. No.	S T A T E	SURVEY ESTIMATES			OFFICIAL ESTIMATES			
		Area in 000'ha.	Production in "000" tonnes	Yield in Kg./ha.	Area in '000'ha.	Production in "000" tonnes	Yield in Kg./ha.	
1	2	3	4	5	6	7	8	
23. LINSEED (ALSI)								
1	Jammu & Kashmir	0.2	0.1	642	0.1	0.1	369	
2	Karnataka	4	0.41	123	3	1.00	333	
3	Madhya Pradesh	94	42	553	121	61	504	
4	Maharashtra	16	4	236	14	3	239	
24. SAFFLOWER								
1	Karnataka	44	25	776	32	22	688	
2	Maharashtra	57	13	225	76	52	691	
25. SUNFLOWER								
1	Andhra Pradesh	Rabi	13	15	1215	12	15	1250
2	Haryana	Rabi	8	13	1644	9	12	1393
3	Karnataka	kharif	114	39	114	134	78	582
		Rabi	164	41	265	86	20	233
4	Maharashtra	Kharif	18	2	122	21	6	280
		Rabi	28	7	252	38	29	768
5	Tamil Nadu		7	3	465	7	3	625
6	Uttar Pradesh	Zaid	3	4	1177	3	4	1333
7	Telangana	Kharif	1	1	755	1	1	1000
26. SOYABEAN								
1	Andhra Pradesh		2	1	922	2	3	1612
2	Chhattisgarh		104	73	791	104	73	697
3	Karnataka		275	141	541	318	237	745
4	Madhya Pradesh		6014	2748	457	5401	6649	1231
5	Maharashtra		3708	1802	487	3841	4587	1194
6	Uttar Pradesh		11	7	673	11	7	636
T O T A L		10114	4772	0	9677	11556	0	
27. COTTON \$ (Lint)								
1	Andhra Pradesh		463	776	1675	472	1564	563
2	Gujarat		2391	2434	1050	2382	8575	612
3	Haryana		615	995	275	570	2041	609
4	Karnataka		489	88	489	510	1010	337
5	Madhya Pradesh		557	4017	1227	599	2051	582
6	Maharashtra		3942	7467	322	3800	10619	475
7	Punjab		285	276	756	285	1031	615
8	Rajasthan		471	4680	1689	471	1402	506
9	Tamil Nadu		1409	1896	1346	142	369	430
28. JUTE. @@								
1	Bihar		91	244	2671	91	1356	2671
2	Meghalaya		7	68	722	7	68	1845
3	Odisha		1	1	1678	1	1	302
29. MESTA. @@								
1	Andhra Pradesh		7	11	1703	7	63	1620
2	Bihar		16	39	2369	16	215	2371
30. AVARE (SEM)								
1	Karnataka		17	23	1392	46	17	370

Note :-

1. @@ : Production of Jute and Mesta in `000' bales of 180 Kgs. each.

2. \$: Production of cotton in `000' bales of 170 Kgs. each.

**ANNEX-VII : ESTIMATES OF YIELD RATES FROM IRRIGATED AND UN-IRRIGATED
PLOTS UNDER CES DURING 2016-17**

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.	3562	5136	1450	242	3323	69
		Rabi	2830	6690	585	-	-	-
2.	Assam	Aut.	281	1682	N.A.	985	1321	N.A.
		Wint.	120	2092	N.A.	2831	2028	N.A.
		Sum.	1034	2890	N.A.	264	1814	N.A.
3.	Bihar @@	Bha.	126	2253	212	-	-	-
		Agh.	29996	5920	1881	8810	1312	818
		Gar.	-	-	-	-	-	-
4.	Chhattisgarh		458	2755	1090	876	1836	2314
5.	Goa	Kh.	185	2738	13	190	2791	28
		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		644	2888	238	90	2997	45
10.	Jharkhand				N.A.			
11.	Karnataka ***	Kh.	6166	5159	659	2856	2619	322
		Rabi	540	2576	38	-	-	-
		Sum.	2256	3732	262	-	-	-
12.	Kerala	Aut.	830	5371	57	1510	4033	38
		Wint.	2631	3490	72	501	2586	3
		Sum.	1327	4407	43	20	2717	0.09
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.	253	1497	33	-	-	-
		Wint.	744	1903	64	4	1291	0.001
16.	Odisha	Aut.	489	2007	19	6838	1281	492
		Wint.	5461	3005	979	11038	2360	2247
		Sum.	3525	35	225	-	-	-
17.	Punjab		1976	3819	3046	-	-	-
18.	Rajasthan		1497	4171	142	1021	1612	55
19.	Tamil Nadu	K/K/S	408	4314	-	4	4864	-
		S/T/P	1056	2479	-	101	819	-
		N/K	282	3431	-	18	2955	-
20.	Telangana	Kh.	2708	3400	862	104	2520	27
		Rabi	2266	3792	939	0	0	0
21.	Uttarakhand		2041	3586	169	849	1960	76
22.	Uttar Pradesh				N.A.			
23.	West Bengal	Aus.	1423	2505	N.A.	588	2250	N.A.
		Aman.	6872	3114	N.A.	5867	2616	N.A.
		Sum.	10847	3319	N.A.	44	3097	N.A.

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
24.	Dadra & Nagar Haveli		-	-	-	70	1901	13
25.	Daman & Diu		-	-	-	20	1745	2.1
26.	Puducherry	I	80	3271	3	-	-	-
		II	140	2687	8	-	-	-
		III	70	3635	4	-	-	-
TOTAL			99115	4152	15428	50758	1972	9009.733
2. JOWAR								
1.	Andhra Pradesh	Kh.	22	3194	2	138	1114	11
		Rabi	0	0	28	456	1573	54
2.	Chhattisgarh		-	-	-	74	1355	3
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		7276	537	305	2370	782	274
8.	Tamil Nadu		436	1293	-	630	1625	-
9.	Telangana	Kh.	9	0	0	439	847	62
		Rabi	11	917	7.4	279	1260	17
10.	Uttar Pradesh				N.A.			
TOTAL			12967	928	895.218	21714	991	5032.477
3. BAJRA								
1.	Andhra Pradesh	Kh.	78	2322	7	384	1650	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		1614	965	173	22648	1064	3978
8.	Tamil Nadu		240	2775	-	194	2550	-
9.	Telangana		0	0	0	52	897	3
10.	Uttar Pradesh				N.A.			
11.	Daman & Diu		0	0	0	8	1101	0.67
TOTAL			4650	39	853	25752	25	5216.67

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
4. MAIZE								
1.	Andhra Pradesh	Kh.	76	5104	20	158	3843	64
		Rabi	458	7850	162	42	7167	2
2.	Bihar	Bha.	1154	2379	1262	-	-	-
		Rabi	-	-	-	722	7482	285
		Gar.	276	3282	429	-	-	-
3.	Chhattisgarh		-	-	-	426	2566	103
4.	Gujarat				N.A.			
5.	Haryana \$\$\$		76	2000	9	-	-	-
6.	Himachal Pradesh		73	2964	N.A.	1354	2714	N.A.
7.	Jammu & Kashmir		81	1936	28	745	1841	267
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	2009	0.04	2051	2854	68
		Wint.	22	2812	0.06	82	1265	1.3
		Sum.	180	2913	3	-	-	-
13.	Punjab		301	4113	97.00	59	2498	19
14.	Rajasthan	Kh.	1059	1716	3	10445	1422	915
15.	Tamil Nadu		252	8557	-	176	2615	-
16.	Telangana	Kh.	311	4923	87	649	2314	550
		Rabi	1010	6837	160	36	6281	0.08
17.	Uttar Pradesh				N.A.			
18.	West Bengal		161	3798	N.A.	407	2488	N.A.
T O T A L			11804	3956	2694.966	26772	2340	3990.78
5. RAGI								
1.	Andhra Pradesh	Kh.	28	2279	1	172	924	25
		Rabi	138	1913	4	22	582	0.66
2.	Bihar		-	-	-	128	723	5
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		

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
7.	Maharashtra *		-	-	-	906	979	120
8.	Odisha	Aut.	5	890	0.01	1073	617	14
		Wint.	8	774	0.2	5.3	735	32
		Sum.	23	696	0.1	-	-	-
9.	Uttarakhand		0	0	0.1	1038	1532	107
10.	Tamil Nadu		159	3323	0	199	3032	0
11.	Telangana		0	0	0	76	1211	0.8
12.	Dadra & Nagar Haveli		-	-	-	22	1320	1
T O T A L			2261	2338	33.42	9807	1482	1026.125

6. WHEAT

1.	Assam		99	950	N.A.	545	1325	N.A.
2.	Bihar		38780	4592	2027	1470	1893	79
3.	Chhattisgarh		464	1438	69	188	1032	22
4.	Gujarat				N.A.			
5.	Haryana \$\$\$		1917	3979	2628	-	-	-
6.	Himachal Pradesh		173	2561	N.A.	1399	1842	N.A.
7.	Jammu & Kashmir		578	2071	81	1000	1837	204
8.	Jharkhand				N.A.			
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.	27	1421	0.06	-	-	-
13.	Punjab		2322	5048	3477	12	2501	18
14.	Rajasthan		36071	3715	624	1415	1726	31
15.	Uttarakhand		1839	3282	200	1074	1337	141
16.	Uttar Pradesh				N.A.			
17.	West Bengal		2264	2628	N.A.	21	1716	N.A.
T O T A L			97441	3836	15382.06	10815	1493	1110

7. BARLEY

1.	Bihar @@		-	-	-	248	1398	14
2.	Chhattisgarh		-	-	-	20	910	1
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		242	3862	8	-	-	-
8.	Rajasthan		5844	3297	273	102	2640	3
9.	Uttarakhand		48	1495	0.4	609	1266	21
10.	Uttar Pradesh				N.A.			
T O T A L			3590	3014	316.4	1078	1572	39

Sl. No.	S TATE	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
8. GRAM (BENGALGRAM)								
1.	Andhra Pradesh		79	1390	12	1249	951	383
2.	Bihar		-	-	-	695	1120	59
3.	Chhattisgarh		-	-	-	326	1164	281
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
10.	Punjab		100	1374	1.6	-	-	-
11.	Rajasthan		8933	1008	774	5629	775	773
12.	Telangana		91	1414	11.02	453	1240	84
13.	Uttar Pradesh					N.A.		
14.	West Bengal		104	1067	N.A.	526	1023	N.A.
T O T A L			14590	395	1422.62	19146	618	2655
9. REDGRAM (TUR/ ARHAR)								
1.	Andhra Pradesh		2	912	13	816	367	329
2.	Bihar		-	-	-	487	1581	21
3.	Chhattisgarh		-	-	-	350	615	50
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		340	733	-	-	-	-
11.	Telangana		58	776	2	730	644	384
12.	Uttar Pradesh					N.A.		
13.	West Bengal		3	-	N.A.	97	1192	N.A.
T O T A L			931	582	20	9728	728	1621
10. GREENGRAM (MOONG)								
1.	Andhra Pradesh	Kh.	0	0	1	348	450	31
		Rabi	38	221	2	364	547	100
2.	Bihar	Bha.	-	-	-	156	820	9
		Gar.	-	-	-	218	690	162
3.	Gujarat	Kh.				N.A.		
4.	Karnataka ***	Kh.		N.A.		2848	195	255
		Rabi		N.A.		100	353	4
5.	Maharashtra *		-	-	-	6018	672	554

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
6.	Odisha	Aut.	1	583	0.07	621	438	41
		Wint.	24	697	0.4	1283	324	128
		Sum.	528	479	12	1356	471	145
7.	Rajasthan				N.A.			
8.	Tamil Nadu		132	659	-	298	236	-
9.	Telangana	Kh.	91	688	0.4	441	616	134
		Rabi	0	0	2.1	52	885	0.29
10.	Uttar Pradesh	Kh.			N.A.			
		Zaid			N.A.			
11.	West Bengal		151	960	N.A.	495	799	N.A.
T O T A L			965	594	18.19	14598	495	1635.65

11. BLACKGRAM (URD/MATHIKALAI)

1.	Andhra Pradesh	Kh.	0	0	3	310	767	54
		Rabi	61	1254	27	569	621	413
2.	Assam		-	-	-	442	678	692
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.	1	627	0.11	833	398	28
		Wint.	15	491	0.1	1927	457	65
		Sum.	210	449	4	443	573	12
7.	Rajasthan @		5	902	1	1177	458	252
8.	Tamil Nadu		112	750	-	302	654	-
9.	Telangana	Kh.	0	0	0.8	114	788	37
		Rabi	0	0	1.04	68	938	1.5
10.	Uttar Pradesh	Kh.			N.A.			
		Zaid			N.A.			
11.	West Bengal		34	583	N.A.	1046	684	N.A.
T O T A L			438	609	36.64	13171	578	2100.99

12. LAKH (KHESSARI)

1.	Bihar		-	-	-	280	1059	52
2.	Chhattisgarh		-	-	-	166	846	182
3.	Madhya Pradesh		-	-	-	204	760	N.A.
4.	West Bengal		30	1005	N.A.	269	1080	N.A.
T O T A L			30	1005	-	919	638	-

13. MASUR

1.	Bihar		-	-	-	828	932	151
2.	Rajasthan				N.A.			
3.	Uttar Pradesh				N.A.			
4.	West Bengal		442	826	N.A.	1754	815	N.A.
T O T A L			442	826	-	2582	853	-

Sl. No.	STATE	Season	IRRIGATED PLOTS			UN - IRRIGATED PLOTS			
			No. of Expts.	Yield Rate	Area '000' ha.	No. of Expts.	Yield Rate	Area '000' ha.	
			Analysed	Kg/ha.		Analysed	Kg/ha.		
1	2	3	4	5	6	7	8	9	
14. HORSEGRAM (KULTHI)									
1.	Andhra Pradesh	Kh.	-	-	0.001	96	132	1.3	
		Rabi	-	-	0.003	242	499	11	
2.	Karnataka ***	Kh.	N.A			2340	484	53	
		Rabi	N.A			3732	505	119	
3.	Odisha	Wint.	10	414	0.02	2261	436	34	
		Sum.	-	-	-	6	395	0.04	
4.	Tamil Nadu		-	-	-	320	587	-	
5	Telangana	Kh.	-	-	-	40	561	0.2	
		Rabi	-	-	-	0	0	0	
TOTAL			-	-	0.024	9037	487	218	
15. PEAS									
1.	Uttar Pradesh		N.A.						
2.	West Bengal		97	1054	N.A.	164	1207	N.A.	
TOTAL			97	1054	-	164	1207	-	
16. MOTH									
1.	Gujarat		N.A.						
2	Rajasthan		-	-	-	-	-	-	
TOTAL			-	-	-	-	-	-	
17. CHOWLA									
1.	Rajasthan		N.A.						
18 . GUAR									
1.	Gujarat		N.A.						
2	Rajasthan @		339	966	199	2797	575	2895	
TOTAL			339	966	199	2797	575	2895	
19 . SAWAN (Jhangora)									
1.	Uttarakhand		0	0	0.03	564	1429	55	
2	Uttar Pradesh	Kh.	N.A.						
		Zaid	N.A.						
TOTAL			-	-	0.03	578	1397	55	
20. KORRA									
1.	Andhra Pradesh		0	0	1	204	808	17	
2	Telangana		0	0	0	20	910	1	
TOTAL			0	0	1	224	9208	18	

Sl. No.	S T A T E	Season	IRRIGATED PLOTS			UN - IRRIGATED PLOTS		
			No. of Expts.	Yield Rate	Area '000' Kg/ha.	No. of Expts.	Yield Rate	Area '000' ha.
			Analysed	Kg/ha.	ha.	Analysed	Kg/ha.	ha.
1	2	3	4	5	6	7	8	9
21. KODON-KUTKI (KODRA)								
1.	Chhattisgarh		-	-	-	244	302	66
2.	Madhya Pradesh		-	-	-	790	450	N.A
3.	Uttar Pradesh	Kodan				N.A.		
T O T A L			-	-	-	1034	415	-
22. NAVANE								
1.	Karnataka ***			N.A		670	355	7
23. SAVE								
1.	Karnataka ***			N.A		288	695	14
24. SAMAI								
1.	Tamil Nadu		100	1215	-	-	-	-
25. VARAGU								
1.	Tamil Nadu		98	911	-	-	-	-
26. SUGARCANE								
1.	Andhra Pradesh	Plt.	803	83	38	0	0	4
		Rt.	768	74	55	0	0	5
2.	Assam		-	-	-	572	37117	N.A.
3.	Bihar		238	4794	204	240	57215	54
4.	Goa		-	-	-	76	44842	1.0
5	Haryana \$\$\$		848	73281	96	-	-	-
6	Jharkhand					N.A.		
7.	Karnataka ***			N.A		940	98	341
8.	Kerala					N.A.		
9.	Maharashtra *		8492	89000	965	-	-	-
10.	Odisha		249	62679	5	-	-	-
11.	Punjab		665	81271	88	3	7741	0.4
12.	Rajasthan					N.A.		
13.	Tamil Nadu		450	79	-	14	83	-
14.	Telangana	Plt.	250	87	8	16	0	0
		Rt.	248	77	18	38	33	0.13
15.	Uttar pradesh					N.A.		
16.	West Bengal		364	29578	N.A.	19	62387	N.A.
T O T A L			13375	67178	1477	1918	12894	405.53
27. COCOA								
1.	Kerala					N.A.		
28. CHILLIES								
1.	Andhra Pradesh	Kh.	298	5504	154	72	3812	14
		Rabi	400	3994	36	0	0	3

Sl. No.	STATE	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	
2.	Bihar		-	-	-	218	1810	2	
3.	Chhattisgarh		12	652	71	-	-	-	
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.	250	3780	102	26	1698	7	
		Rabi	124	5378	11	0	0	0	
TOTAL			758	2154	374	1010	445	167	
29. CUMIN									
1	Gujarat		-	-	-	-	-	-	
2.	Rajasthan @		1549	381	465	15	356	1	
TOTAL			1549	381	465	15	356	1	
30. FENNEL									
1.	Gujarat		-	-	-	-	-	-	
31. ARECANUT									
1.	Kerala		N.A.						
2.	Maharashtra *		N.A.						
TOTAL			-	-	-	-	-	-	
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		-	-	-	614	7400	10	
TOTAL			-	-	-	614	7400	10	
36. GARLIC									
1.	Gujarat		-	-	-	-	-	-	
37. CORIANDER									
1.	Rajasthan		N.A.						
38. LICHI									
1.	Bihar		-	-	-	86	7	9	
39. BANANA									
1.	Bihar		-	-	-	48	11	13	
2.	Gujarat		N.A.						
3.	Kerala		N.A.						
4.	Madhya Pradesh ##		80	158733	N.A.	-	-	-	
TOTAL			80	158733	-	48	16590	13	

Sl. No.	S TATE	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
40. MANGO								
1.	Bihar		-	-	-	190	32	59
41. GUAVA								
1.	Bihar		-	-	-	118	10	7
42. JACKFRUIT								
1.	Bihar		-	-	-	100	22920	6
2.	Kerala					N.A.		
T O T A L			-	-	-	100	22920	6
43. CASHEWNUT								
1.	Kerala					N.A.		
2.	Maharashtra *					N.A.		
T O T A L			-	-	-	-	-	-
44. TAPIOCA								
1.	Kerala					N.A.		
45. PINE APPLE								
1.	Kerala					N.A.		
46. POTATO								
1.	Assam		-	-	-	788	7642	N.A.
2.	Bihar	Agh.	-	-	-	172	12250	72
		Rabi	-	-	-	396	13630	93
3.	Chhattisgarh		-	-	-	20	4539	4
4.	Gujarat		-	-	-	-	-	-
5.	Jammu & Kashmir \$\$	Kh.				N.A.		
		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.	-	-	-	316	10132	12
10.	Odisha	Wint.	2012	12593	7	-	-	-
11.	Uttar Pradesh	Rabi				N.A.		
T O T A L			2438	12426	-	2468	7670	210
10.	Odisha	Wint.	2012	12593	7	-	-	-
11.	Uttar Pradesh	Rabi				N.A.		
T O T A L			6808	12621	7	4380	8644	-

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
47. ONION								
1.	Bihar		-	-	-	278	11860	14
2.	Chhattisgarh		-	-	-	12	3302	268
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
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	-	1854	9561	442
48. BRINJAL								
1.	Bihar	Agh.	-	-	-	174	10670	22
		Rabi	-	-	-	182	9470	9
2.	Jharkhand	Agh.				N.A.		
		Rabi				N.A.		
T O T A L			-	-	-	2834	9551	476
49. TOMATO								
1.	Bihar	Agh.	-	-	-	64	9850	8
		Rabi	-	-	-	196	11050	6
2.	Jharkhand	Agh.				N.A.		
		Rabi				N.A.		
T O T A L			-	-	-	260	0	14
50. CAULIFLOWER								
1.	Bihar		-	-	-	182	13390	48
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.	166	1874	46	2426	374	885
		Rabi	830	2445	77	0	0	2
2.	Chhattisgarh		-	-	-	170	1756	18
3.	Goa	Kh.	55	2302	1.3	23	2555	0.3
		Rabi				N.A.		
4.	Gujarat	Kh.	-	-	-	-	-	-
		Sum.	-	-	-	-	-	-
5.	Karnataka ***	Kh.	1098	1340	30	4776	634	443
		Rabi	-	-	-	70	1922	3
		Sum.	1844	9897	116	16	938	641

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
6.	Madhya Pradesh		124	634	N.A.	668	1061	N.A.
7.	Maharashtra *	Kh.	-	-	-	2827	1256	275
		Sum.	1804	1394	89	-	-	-
8.	Odisha	Aut.	7	1303	0.03	1109	945	21.16
		Wint.	59	1455	1.1	189	1222	3.24
		Sum.	763	1832	7.28	525	1397	12.11
9.	Rajasthan @		800	2108	316	878	1430	96
10.	Tamil Nadu		699	3132	-	447	2506	-
11.	Telangana	Kh.	26	1919	10	116	1918	16
		Rabi	826	2066	132	0	0	0.27
12.	Uttar Pradesh				N.A.			
13.	West Bengal		462	2387	N.A.	62	1946	N.A.
T O T A L			9101	3482	825.73	14240	1104	2495.08
55. SESAMUM (GINGELLY)								
1.	Andhra Pradesh	Kh.	0	0	0	264	249	33
		Rabi	82	325	9	206	268	21
2.	Chhattisgarh		-	-	-	118	411	11
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.	2	393	0.02	221	287	3.55
		Wint.	7	273	0.01	655	312	10.99
		Sum.	103	358	0.66	75	257	0.78
9.	Rajasthan @		107	478	4	2413	336	506
10.	Tamil Nadu		126	686	-	232	420	-
11.	Telangana	Kh.	0	0	0.006	80	135	2.4
		Rabi	78	861	16.33	0	0	0
12.	Uttar Pradesh				N.A.			
13.	West Bengal		2098	913	N.A.	639	760	N.A.
T O T A L			2603	813	30.026	9241	413	691.72
56. CASTOR.								
1.	Andhra Pradesh		4	238	0.17	208	452	32
2.	Gujarat		-	-	-	-	-	-
3.	Karnataka ***			N.A.		642	642	8
4.	Rajasthan			N.A.				
5.	Telangana		4	604	0.02	210	559	44
T O T A L			4	0	0.19	850	490	40

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
57. RAPE & MUSTARD								
1. Assam			56	559	N.A.	1110	620	N.A.
2. Bihar			-	-	-	1006	1180	83
3. Chhattisgarh			-	-	-	316	455	37
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.		696	499	2.59	1170	278	7.11
10. Punjab			515	1513	32	6	1008	0.6
11. Rajasthan @			6298	1394	2439	758	1082	286
12. Uttar Pradesh			N.A.					
13. West Bengal			3969	997	N.A.	428	695	N.A.
T O T A L			12881	1212	2955.59	5278	715	413.71
58. LINSEED								
1. Chhattisgarh			-	-	-	222	468	22
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			9	-	-	122	254	N.A.
T O T A L			9	-	-	1812	388	65
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.		64	1269	2	124	520	6
	Rabi		160	1253	8	128	677	3
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			50	1655	-	130	277	-
6. Telangana	Kh.		0	0	0	36	817	0.9
	Rabi		70	1684	3.6	0	0	0

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
7.	Uttar Pradesh	Zaid				N.A.		
T O T A L			4764	996	117.6	6190	450	567.9
61. SOYABEAN								
1.	Andhra Pradesh		1	2080	0.11	77	959	1.2
2.	Chhattisgarh		-	-	-	154	791	86
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			53	1227	134.11	9439	1130	4058.2
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
65. COTTON (LINT)								
1.	Andhra Pradesh		310	2444	91	634	1346	372
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		696	721	284	-	-	-
8.	Rajasthan		5635	1612	37	469	1154	19
9.	Tamil Nadu		538	267	-	247	233	-
10.	Telangana		216	1967	176	1102	1248	1232
11.	Uttar Pradesh					N.A.		
T O T A L			10928	316	1509.34	10792	523	5806
66. JUTE								
1.	Assam		-	-	-	568	1898	N.A.
2.	Bihar		-	-	-	34	2571	105
3.	Meghalaya		-	-	-	44	722	7
4.	Odisha		5	2257	0.09	62	1599	0.66
5.	West Bengal		1948	2940	N.A.	625	2437	N.A.
T O T A L			1953	2938	0.09	1333	2091	112.66
67. MESTA								
1.	Andhra Pradesh		0	0	0	200	1480	5
2.	Bihar		-	-	-	86	2369	83

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.	
			4	5	6	7	8	9	
1	2	3	4	5	6	7	8	9	
3.	West Bengal		77	2570	N.A.	124	1658	N.A.	
TOTAL			77	2570	-	410	1720	-	
68. TOBACCO									
1.	Andhra Pradesh	(N)	186	3153	7	104	1781	6	
		(V)	158	3152	21	216	1667	35	
2.	Gujarat		-	-	-	-	-	-	
3.	Karnataka ***			N.A.		360	737	92	
4.	Maharashtra *		56	993	1	-	-	-	
5	Telangana	(N)	10	1463	0.24	0	0	0	
		(V)	14	2771	0.8	0	0	0	
6	Uttar Pradesh				N.A.				
TOTAL			424	3057	30.04	680	1029	133	
69. ISABGOL									
1	Gujarat				N.A.				
2	Rajasthan				N.A.				
TOTAL			-	-	-	-	-	-	
70. AVARE (SEM)									
1	Karnataka ***	Kharif		N.A.		528	940	24	
		Rabi			N.A.				
TOTAL			-	-	-	528	940	24	
71. COWPEA (LOBIA)									
1.	Karnataka ***	Kharif	-	-	-	630	433	44	
		Rabi	-	-	-	124	414	19	
		Sum.	-	-	-	130	357	4	
TOTAL			-	-	-	884	419	67	

Note:-

1. * : Figures repeated from the year 2010-11 in the state of Maharashtra.
2. @ : Figures repeated from the year 2011-12 for Crops Soyabean, Cumin, Blackgram, Guar, Groundnut, Sesamum, Cumin and Rape & Mustard.
3. \$\$: Data repeated from year for 2011-12 Linseed, Potato, R&M and Saffron.
4. ## : Figures repeated from the year 2013-14 for the crops Banana, Onion and Papaya for Madhya Pradesh.
5. *** : Figures repeated from 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 from the year 2013-14 in the State of Bihar.
7. \$\$\$: Figures repeated from the year 2014-15.

ANNEX - VIII:- ESTIMATES OF YIELD RATE FOR IRRIGATED AND UNIRRIGATED PLOTS ACCORDING TO HIGH YIELDING AND LOCAL VARIETIES UNDER CES 2016-17

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	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'
		ANALY- SED	Kg/ha.	ha.	ANALY- SED	Kg/ha.	ha.	ANALY- SED	Kg/ha.	ha.	ANALY- SED	Kg/ha.	ha.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. RICE													
1.	Andhra Pradesh	Kh.	3562	5136	1450	-	-	-	242	3323	69	-	-
		Rabi	2830	6690	585	-	-	-	-	-	0.07	-	-
2.	Assam	Aut.	53	1685	N.A.	228	1682	N.A.	44	2025	N.A.	941	1288
		Wint.	40	2320	N.A.	80	1978	N.A.	404	2311	N.A.	2427	1981
		Sum.	536	3080	N.A.	498	2686	N.A.	48	2791	N.A.	216	1597
3.	Bihar @ @	Bha.	86	4233	70	40	2843	15	-	-	-	-	-
		Agh.	20771	4588	1291	9225	3829	590	5157	3009	435	3653	3653
		Gar.	-	-	-	-	-	-	-	-	-	-	-
4.	Chhattisgarh		330	2818	983	128	2174	107	-	-	-	876	1836
5.	Goa	Kh.	185	2738	13	-	-	-	190	2791	28	-	-
		Rabi											
6.	Gujarat	Kh.											
		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		154	3860	44	490	2775	194	40	3498	20	50	2596
10.	Jharkhand	Agh.											
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.	811	3299	19	19	2072	15	1332	2816	37	178	1217
		Wint.	2163	2028	65	468	1462	5	148	1579	0.7	353	1007
		Sum.	1285	3008	43	42	1399	0.023	16	1667	0.007	4	1050
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	-	-	-	-	-
15.	Meghalaya	Aut.	-	-	-	253	1497	33	-	-	-	-	-
		Wint.	12	3072	0.06	736	1884	64	-	-	-	-	-
16.	Odisha	Aut.	475	2010	19.2	14	1795	0.24	5433	1317	426	1405	1049
		Wint.	5321	3017	964.5	140	2239	14.74	9835	2404	2059	1203	1872
		Sum.	3525	3531	225	-	-	-	-	-	-	-	-
17.	Punjab		1976	3819	3046	-	-	-	-	-	-	-	-
18.	Rajasthan		1218	4277	68	261	3676	74	137	1428	20	884	1641
													35

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	AREA '000' Kg/ha.	NO. OF EXPTS.	YIELD RATES	AREA '000' ha.	NO. OF EXPTS.	YIELD RATES	AREA '000' Kg/ha.	NO. OF EXPTS.	YIELD RATES	AREA '000' ha.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
19.	Tamil Nadu	K/K/S	408	4314	N.A.	-	-	N.A.	4	4864	N.A.	-	-	
		S/T/P	1152	2484	N.A.	4	1098	N.A.	101	819	N.A.	-	-	
		N/K	282	3431	N.A.	-	-	-	18	2955	N.A.	-	-	
20.	Telangana	Kh.	2708	3400	862	-	-	-	104	2520	27.13	-	-	
		Rabi	2266	3792	939	-	-	-	-	-	-	-	-	
21.	Uttarakhand		1209	3853	138	832	3197	31	0	0	2	849	1960	
22.	Uttar Pradesh												74	
23.	West Bengal	Aus.	1388	2521	N.A.	35	1853	N.A.	470	2352	N.A.	118	1843	N.A.
		Aman	6469	3163	N.A.	403	2336	N.A.	4940	2723	N.A.	927	2043	N.A.
		Sum.	10681	3321	N.A.	403	2336	N.A.	4940	2723	N.A.	-	-	N.A.
24.	Dadra & Nagar Haveli		-	-	-	-	-	-	-	-	70	1901	13	
25.	Daman & Diu		0	0	0	0	0	-	6	2440	1.2	14	1447	0.9
26.	Puducherry	I	80	3271	3	-	-	-	-	-	-	-	-	-
		II	140	2687	8	-	-	-	-	-	-	-	-	-
		III	70	3635	4	-	-	-	-	-	-	-	-	-
2. JOWAR														
1.	Andhra Pradesh	Kh.	0	0	0	22	3194	2	0	0	0	138	1114	11
		Rabi	0	0	0	0	0	28	0	0	0	456	1573	54
2.	Chhattisgarh		-	-	-	-	-	-	-	-	-	74	1355	3
3.	Gujarat	Kh.												
		Rabi												
4.	Karnataka ***	Kh.	980	2077	24.396	-	-	-	2032	1381	110.37	236	723	16.779
		Rabi	1050	1652	63.398	290	957	7.878	2838	1076	710.93	730	775	141.395
		Sum.	20	1903	0.146	-	-	-	-	-	-	-	-	-
5.	Madhya Pradesh		-	-	-	-	-	-	676	1591	N.A.	702	1021	N.A.
6.	Maharashtra *	Kh.	-	-	-	-	-	-	-	-	-	4551	1082	1062
		Rabi	-	-	-	2873	1148	457	-	-	-	5563	605	2570
7.	Rajasthan		88	164	0.3	7188	552	305	2222	809	273	148	373	1
8.	Tamil Nadu		422	1300	N.A.	14	1081	N.A.	556	1774	N.A.	74	503	N.A.
9.	Telangana	Kh.	-	-	-	9	0	0	-	-	-	439	847	62
		Rabi	-	-	-	11	917	7.4	-	-	-	279	1260	17
10.	Uttar Pradesh													

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	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'
1	2	3	4	5	6	7	8	9	10	11	12	13	14
3. BAJRA													
1.	Andhra Pradesh	0	0	0	78	2322	7	0	0	0	384	1650	32
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.	Madhya Pradesh	-	-	-	-	-	-	224	1637	N.A.	78	890	N.A.
6.	Maharashtra *	542	1394	35	-	-	-	2776	1102	935	386	675	63
7.	Rajasthan	1106	1104	78	508	663	95	13327	1331	1879	9321	683	2099
8.	Tamil Nadu	238	2782	N.A.	2	1938	N.A.	194	2550	N.A.	-	-	N.A.
9.	Telangana	-	-	-	-	-	-	-	-	-	52	897	3
10.	Uttar Pradesh							N.A.					
10.	Daman & Diu	0	0	0	0	0	0.000	0	0	0	8	1101	0.67
4. MAIZE													
1.	Andhra Pradesh	Kh.	0	0	0	76	5104	20	0	0	0	158	3843
		Rabi	0	0	0	458	7850	162	0	0	0	42	7167
2.	Bihar	Bha.	536	3094	108	618	2176	134	-	-	-	-	-
		Rabi	-	-	-	-	-	-	-	-	-	722	7482
		Gar.	68	4250	138	52	3889	120	-	-	-	-	-
3.	Chhattisgarh	-	-	-	-	-	-	-	-	-	-	426	2566
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	16	2251	4	65	1859	24	151	2057	68	594	1786	199
8.	Jharkhand							N.A.					
9.	Karnataka ***	Kh.	3650	4025	329	6	5908	2	6034	2974	834	30	1856
		Rabi	2102	3834	86	-	-	-	458	2603	12	-	-
		Sum.	528	3607	20	-	-	-	-	-	-	-	-
10.	Madhya Pradesh	15	2733	N.A.	6	2561	N.A.	648	1899	N.A.	1099	1679	N.A.
11.	Maharashtra *	Kh.	-	-	-	-	-	-	-	-	-	773	3024
		Rabi	-	-	-	-	-	-	-	-	-	378	2630
12.	Odisha	Aut.	1	1620	0.01	6	2079	0.03	1060	3104	57.94	991	1475
		Wint.	18	2949	0.06	4	925	0.001	59	1256	0.9	23	1288
		Sum.	174	2913	3	6	1010	0.01	-	-	-	-	-

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	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	NO. OF EXPTS.	YIELD RATES	AREA '000'	
		ANALY- SED	Kg/ha.	ha.	ANALY- SED	Kg/ha.	ha.	ANALY- SED	Kg/ha.	ha.	ANALY- SED	Kg/ha.	ha.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
14.	Rajasthan	Kh.	509	1231	2	550	2165	1	4949	1340	561	5496	1496	354
15.	Tamil Nadu		252	8557	-	-	-	N.A.	176	2615	-	-	-	-
16.	Telangana	Kh.	-	-	-	311	4923	87	-	-	-	649	2314	550
		Rabi	-	-	-	1010	6837	160	-	-	-	36	6281	0.08
17.	Uttar Pradesh							N.A.						
18.	West Bengal		112	4107	N.A.	49	3093	N.A.	207	3040	N.A.	200	1917	N.A.
5. WHEAT														
1.	Assam		64	1476	N.A.	72	1335	N.A.	138	1372	N.A.	356	1200	N.A.
2.	Bihar		24768	2994	1553	14012	2487	493	780	2260	37	690	2028	42
3.	Chhattisgarh		356	1612	65	108	1225	3	-	-	-	188	1032	22
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	N.A.
7.	Jammu & Kashmir		200	2734	45	378	1720	36	302	2000	109	698	1767	95
8.	Jharkhand							N.A.						
9.	Karnataka ***		1624	1676	112	316	1560	7	996	941	42	308	980	33
10.	Madhya Pradesh		2824	3096	4044	1126	2698	900	0	0	0	1196	1498	0
11.	Maharashtra *		6837	1830	1185	180	1562	28	984	906	73	207	833	21
12.	Odisha	Sum.	25	1430	0.06	2	900	0.001	1060	3104	57.94	991	1475	10.48
13.	Punjab		2322	5048	3477	0	0	0	10	2591	15	2	2053	3
14.	Rajasthan		13159	3426	2794	3822	2457	305	170	2677	6	167	1830	4
15.	Uttarakhand		1705	3382	174	134	2007	26	0	0	7	1074	1337	134
16.	Uttar Pradesh							N.A.						
17.	West Bengal		2167	2648	N.A.	97	2181	N.A.	15	1716	N.A.	6	-	N.A.

Note

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

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

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

**ANNEX - IX : PERCENTAGE AREA UNDER IMPROVED AGRICULTURAL
PRACTICES UNDER CES 2016-17**

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R								
		S e e d V a r i e t y			Fertilized/M a n u r e			Pesticides		
		H i g h Y i e l d i n g V a r i e t i e s o f S e e d	I m p r o v e d S e e d	l o c a l S e e d	W h e r e C h e m i c a l F e r t i l i z e r u s e d	W h e r e O t h e r M a n u r e u s e d	U n - m a n u r e d	T r e a t e d w i t h P e s t i c i - d e s .	N o t t r e a t e d w i t h p e s t i c i - d e s .	
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.	-	8.00	92.00	39.00	19.00	42.00	9.00	91.00
		Wint.	-	14.00	86.00	39.00	19.00	42.00	5.00	95.00
		Sum.	-	45.00	55.00	70.00	21.00	9.00	15.00	85.00
3.	Bihar	Bha.			100.00					
		Agh.	73.00		27.00					
		Gar.	76.00		24.00					
4.	Chhattisgarh	Hyv.Ir.	-	98.00	2.00	97.00	2.00	1.00	0.00	100.00
		Lv. Ir.	-	60.00	40.00	97.00	3.00	0.00	0.00	100.00
		UL	-	57.00	43.00	73.00	15.00	12.00	0.00	100.00
5.	Goa	Kh.	100.00	-	-	95.00	5.00	-	40.00	60.00
		Rabi	100.00	-	-	90.00	10.00	-	20.00	80.00
6.	Gujarat	Ir.				N.A.				
		UL				N.A.				
		Sum.				N.A.				
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
12.	Kerala	Aut.				N.A.				
		Wint.				N.A.				
		Sum.				N.A.				
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.				

Sl. No.	S T A T E	P E R C E N T A G E			A R E A		U N D E R				
		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		
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.	87.07	-	12.93	77.77	10.26	11.97	22.10	77.90	
		Wint.	93.71	-	6.29	89.14	5.14	5.72	37.71	62.29	
		Sum.	100.00	-	-	93.36	3.69	2.95	64.79	35.21	
17.	Punjab		-	100.00	0.00	99.70	0.00	0.30	99.90	0.10	
18.	Rajasthan		-	63.18	36.82	79.18	8.76	12.06	69.68	30.32	
19.	Tamil Nadu	K/K/S	0.00	0.00	100.00	62.00	37.00	1.00	16.00	84.00	
		S/T/P	0.00	1.00	99.00	53.00	37.00	10.00	4.00	96.00	
		N/K	0.00	0.00	100.00	53.00	31.00	16.00	0.00	100.00	
20.	Telangana	Kh. Ir.	-	76.00	24.00	100.00	0.00	0.00	69.00	31.00	
		Kh. UI.	-	18.00	82.00	100.00	0.00	0.00	87.00	13.00	
		Rabi	-	71.00	29.00	100.00	0.00	0.00	60.00	40.00	
21.	Uttarakhand		42.00	0.00	58.00	59.00	41.00	0.00	18.00	82.00	
22.	Uttar Pradesh					N.A.					
23.	West Bengal	Aus.	-	96.70	3.30	97.19	-	2.81	81.98	18.02	
		Aman	-	92.06	7.94	93.64	-	6.36	58.60	41.40	
		Sum.	-	98.39	1.61	98.42	-	1.58	79.76	20.24	
24.	Dadra & Nagar		-	-	100.00	0.00	100.00	0.00	0.00	100.00	
		Haveli									
25.	Daman & Diu		-	81.09	18.91	0.00	100.00	0.00	0.00	100.00	
26.	Puducherry	I	100.00	-	-	-	35.00	65.00	0.00	100.00	
		II	100.00	-	-	-	61.43	38.57	5.71	94.29	
		III	100.00	-	-	-	35.70	64.30	20.00	80.00	
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		-	0.00	100.00	2.00	63.00	35.00	0.00	100.00	
3.	Gujarat	Kh. Rabi					N.A.				
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	

Sl. No.	S T A T E	P E R C E N T A G E		A R E A		U N D E R			
		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
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	-	77.74	22.26	27.11	2.26	70.63	11.11	88.89
8.	Tamil Nadu	Ir.	9.00	0.00	91.00	27.00	58.00	15.00	8.00
		UL	17.00	0.00	83.00	25.00	57.00	18.00	7.00
9.	Telangana	Kh.	-	18.00	82.00	94.00	1.00	5.00	8.00
		Rabi	-	16.00	84.00	82.00	8.00	10.00	13.00
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
		Kh.Hyv.UL	100.00	-	-	86.00	1.60	12.40	2.00
		Kh.Tra.UI.	0.00	-	100.00	69.95	3.40	26.65	0.00
5.	Madhya Pradesh	-	9.00	91.00	93.00	1.00	6.00	0.00	100.00
6.	Maharashtra *	Kh. Ir.				N.A.			
		Kh. UL.				N.A.			
		Kh. Comp.				N.A.			
	Rajasthan	-	50.03	49.97	50.53	2.18	47.29	4.83	95.17
8.	Tamil Nadu	Ir.	98.00	0.00	2.00	5.00	9.00	86.00	1.00
		UL	0.00	0.00	100.00	70.00	29.00	1.00	0.00
9.	Telangana	-	32.00	68.00	92.00	0.00	8.00	6.00	94.00
10.	Uttar Pradesh					N.A.			
11.	Daman & Diu	-	81.09	18.91	0.00	100.00	0.00	0.00	100.00
	4. MAIZE								
1.	Andhra Pradesh	Kh.	-	81.00	19.00	86.00	11.00	3.00	39.00
		Rabi	-	96.00	4.00	100.00	0.00	0.00	79.00
2.	Bihar	Bha.	52.00		48.00				
		Rabi			100.00				
		Gar.	69.00		31.00				
3.	Chhattisgarh	-	23.00	77.00	39.00	38.00	23.00	0.00	100.00

Sl. No.	S T A T E	P E R C E N T A G E		A R E A		U N D E R				
		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.		
1	2	3	4	5	6	7	8	9	10	
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.UL	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.UL	100.00	-	-	86.20	11.50	2.30	3.20	96.80
		Rabi. Tra.Ir.	-	-	-	-	-	-	-	-
		Sum.Hyv.UL	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.	84.64	-	15.36	46.11	23.57	30.32	6.37	93.63
		Wint.	71.28	-	28.72	30.77	20.19	49.04	8.65	91.35
		Sum.	99.61	-	0.39	91.67	4.44	3.89	13.89	86.11
13.	Punjab	-	88.10	11.90	95.30	0.00	4.70	92.40	7.60	
14.	Rajasthan	Kh.	-	41.03	58.97	77.12	4.51	18.37	5.78	94.22
15.	Tamil Nadu	Ir.	0.00	0.00	100.00	49.00	38.00	13.00	8.00	92.00
		UL	0.00	0.00	100.00	61.00	39.00	0.00	36.00	64.00
16.	Telangana	Kh.	-	95.00	5.00	98.00	0.00	2.00	23.00	77.00
		Rabi	-	68.00	32.00	99.00	0.00	1.00	50.00	50.00
17.	Uttar Pradesh					N.A.				
18.	West Bengal	-	65.68	34.32	70.06	-	29.94	6.16	93.84	
5. RAGI										
1.	Andhra Pradesh	Kh.	-	23.00	77.00	77.00	8.00	15.00	74.00	26.00
		Rabi	-	50.00	50.00	90.00	4.00	6.00	41.00	59.00
2.	Bihar				100.00					
3.	Goa	100.00	0.00	0.00	90.00	10.00	-	20.00	80.00	
4.	Gujarat					N.A.				
5.	Jharkhand	-	-	100.00	30.00	70.00	-	-	-	-

Sl. No.	S T A T E	P E R C E N T A G E		A R E A		U N D E R				
		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	
6.	Karnataka ***	Kh. Hyv.Ir.	100.00	-	0.00	93.95	5.25	0.80	1.00	99.00
		Kh. Hyv.UL	100.00	-	-	96.70	2.20	1.10	0.10	99.90
		Kh. Tra. Ir.	0.00	-	100.00	84.40	8.50	7.10	3.75	96.25
		Kh.Tra.UL	-	-	100.00	96.20	0.00	3.80	0.00	100.00
		Rabi Hyv.Ir.	100.00	-	0.00	95.50	3.00	1.50	1.50	98.50
		Rabi Hyv.UL	100.00	-	0.00	67.30	29.70	3.00	0.30	99.70
		Sum. Hyv.Ir.	100.00	-	0.00	74.00	26.00	0.00	0.00	100.00
7.	Maharashtra *					N.A.				
8.	Odisha	Aut.	-	-	100.00	21.07	34.57	44.36	4.46	95.54
		Wint.	-	-	100.00	9.20	29.55	61.25	2.94	97.06
		Sum.	-	-	100.00	69.57	17.39	13.04	4.35	95.65
9.	Tamil Nadu	Ir .	97.00	0.00	3.00	45.00	43.00	12.00	33.00	67.00
		UL	100.00	0.00	0.00	41.00	42.00	17.00	6.00	94.00
10.	Telangana		-	0.00	100.00	45.00	52.00	3.00	4.00	96.00
11.	Uttrakhand		0.00	0.00	100.00	0.00	100.00	0.00	0.00	100.00
12.	Dadra & Nagar Haveli		0.00	-	100.00	0.00	100.00	0.00	0.00	100.00
6. WHEAT										
1.	Assam		-	30.00	70.00	45.00	27.00	28.00	0.00	100.00
2.	Bihar		95.00		5.00					
3.	Chhattisgarh	Hyv.Ir.	-	97.00	3.00	92.00	6.00	2.00	-	100.00
		Lv.Ir.	-	32.00	68.00	75.00	8.00	17.00	-	100.00
		UL	-	23.00	77.00	69.00	5.00	26.00	-	100.00
4.	Gujarat	Ir.					N.A.			
		UL								
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	97.20
		Hyv.UL	100.00	-	0.00	76.10	10.00	13.90	0.70	99.30
		Tra.Ir.	0.00	-	100.00	72.60	22.30	5.10	4.10	95.90
		Tra.UL	0.00	-	100.00	86.10	7.40	6.50	5.10	94.90
10.	Madhya Pradesh	Hyv.Ir.	-	100.00	0.00	97.00	1.00	2.00	0.00	100.00
		Lv.Ir.	-	-	100.00	96.00	1.00	3.00	1.00	99.00
		Lv.UL	-	6.00	94.00	53.00	11.00	31.00	0.00	100.00
11.	Maharashtra *	Ir.					N.A.			
		UL								
12.	Odisha	Sum.	98.25	-	1.75	100.00	0.00	0.00	22.22	77.78
13.	Punjab		-	99.90	0.10	99.60	0.00	0.40	92.40	7.60
14.	Rajasthan		-	88.75	11.25	42.86	1.50	55.64	25.39	74.61
15.	Uttrakhand		59.00	0.00	41.00	58.00	42.00	0.00	22.00	78.00
16.	Uttar Pradesh						N.A.			
17.	West Bengal		-	98.64	1.36	97.85	-	2.15	43.92	56.08

Sl. No.	S T A T E	P E R C E N T A G E			A R E A		U N D E R			
		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	
7. BARLEY										
1.	Bihar			100.00						
2.	Chhattisgarh	-	100.00	0.00	0.00	63.00	37.00	0.00	100.00	
3.	Haryana	-	88.90	11.10	100.00	0.00	0.00	5.90	94.10	
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	0.00	
7.	Punjab	-	90.60	9.40	97.50	0.00	2.50	56.60	43.40	
8.	Rajasthan	-	68.81	31.19	94.10	1.62	4.28	34.15	65.85	
9.	Uttrakhand	0.00	0.00	100.00	0.00	100.00	0.00	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	8.00	
2.	Bihar			100.00						
3.	Chhattisgarh	-	20.00	80.00	76.00	12.00	20.00	0.00	100.00	
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	-	90.00	10.00	63.00	0.00	37.00	63.00	37.00	
11.	Rajasthan	-	36.93	63.07	50.02	1.95	48.03	3.40	96.60	
12.	Telangana	-	51.00	49.00	89.00	1.00	10.00	58.00	42.00	
13.	Uttar Pradesh				N.A.					
14.	West Bengal	-	15.07	84.93	61.01	-	38.99	42.60	57.40	
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	-	9.00	91.00	33.00	12.00	55.00	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	1.00	0.00	99.00	37.00	55.00	8.00	40.00	60.00	

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R								
		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	
11.	Telangana	-	36.00	64.00	98.00	1.00	1.00	70.00	30.00	
12.	Uttar Pradesh					N.A.				
13.	West Bengal (Rabi)	-	4.46	95.54	3.17	-	96.83	4.00	96.00	
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.				
6.	Odisha	Aut.	-	-	100.00	56.11	8.52	35.37	19.13	80.87
		Wint.	-	-	100.00	18.21	6.89	74.90	15.91	84.09
		Sum.	-	-	100.00	32.22	3.77	64.01	37.00	63.00
7.	Rajasthan		-	60.35	39.65	36.62	5.52	57.86	48.59	51.41
8.	Tamil Nadu	Ir.	0.00	0.00	100.00	29.00	63.00	8.00	18.00	82.00
		UL	2.00	0.00	98.00	32.00	14.00	54.00	16.00	84.00
9.	Telangana	Kh.	-	26.00	74.00	81.00	2.00	17.00	58.00	42.00
		Rabi	-	14.00	86.00	82.00	7.00	11.00	79.00	21.00
10.	Uttar Pradesh	Kh.				N.A.				
		Zaid				N.A.				
11.	West Bengal	Rabi	-	28.44	71.56	72.45	-	27.55	74.20	25.80
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	46.16	13.91	39.93	15.23	84.77
		Wint.	-	-	100.00	12.41	8.96	78.63	8.65	91.35
		Sum.	-	-	100.00	41.35	3.98	54.67	46.25	53.75

Sl. No.	S T A T E	P E R C E N T A G E			A R E A		U N D E R		
		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
7.	Rajasthan	-	45.69	54.31	43.96	0.40	55.64	48.15	51.85
8.	Tamil Nadu	Ir.	0.00	0.00	100.00	34.00	53.00	13.00	1.00
		UL	0.00	0.00	100.00	40.00	29.00	31.00	0.00
9.	Telangana	Kh.	-	6.00	94.00	100.00	0.00	0.00	57.00
		Rabi	-	4.00	96.00	92.00	0.00	8.00	91.00
10.	Uttar Pradesh	Kh.	N.A.						
		Zaid	N.A.						
11.	West Bengal	-	23.20	76.80	31.40	-	68.60	35.34	64.66
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	-	2.05	97.95	33.44	-	66.56	3.18	96.82
13. MASUR									
1.	Bihar	-	-	100.00	-	-	-	-	-
2.	Jharkhand	-	-	100.00	-	100.00	-	-	-
3.	Rajasthan	-	10.59	89.41	71.94	1.82	26.24	2.93	97.07
4.	Uttar Pradesh		N.A.						
5.	West Bengal	-	14.02	85.98	53.55	-	46.45	14.30	85.70
14. HORSEGRAM (KULTHI)									
1.	Andhra Pradesh	Kh.	-	28.00	72.00	50.00	15.00	35.00	31.00
		Rabi	-	28.00	72.00	23.00	20.00	57.00	2.00
2.	Karnataka ***	Kh.	3.10	-	96.90	41.00	8.30	50.70	0.20
		Rabi	21.40	0.00	78.60	37.00	21.30	41.70	0.00
3.	Odisha	Wint.	-	-	100.00	10.48	7.31	82.21	3.65
		Sum.	-	-	100.00	16.67	0.00	83.33	0.00
4.	Tamil Nadu	0.00	0.00	100.00	0.00	55.00	45.00	25.00	75.00
5.	Telangana	Kh.	-	20.00	80.00	45.00	0.00	55.00	8.00
		Rabi	-	0.00	100.00	100.00	20.00	70.00	20.00
15. PEAS									
1.	Uttar Pradesh		N.A.						
2.	West Bengal	-	14.33	85.67	51.11	-	48.89	17.44	82.56

Sl. No.	S T A T E	P E R C E N T A G E			A R E A		U N D E R			
		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	
16. MOTH										
1.	Gujarat	N.A.								
2.	Rajasthan	-	44.48	55.52	11.64	0.95	87.41	27.17	72.83	
17. CHOWLA										
1.	Rajasthan	-	48.21	59.79	10.23	7.17	82.60	4.43	95.57	
18. GUAR										
1.	Gujarat	N.A.								
2.	Rajasthan	-	40.26	59.74	19.56	14.29	66.15	29.19	70.81	
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. Zaid	N.A.							
			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	60.00	0.00	40.00	20.00	80.00	
21. KODON-KUTKI (KODRA)										
1.	Chhattisgarh	-	0.00	100.00	4.00	7.00	89.00	0.00	100.00	
2.	Madhya Pradesh	-	0.00	100.00	4.00	4.00	92.00	0.00	100.00	
3.	Uttar Pradesh	Kodon	N.A.							
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	32.00	0.00	68.00	14.00	71.00	15.00	0.00	100.00	
25. VARAGU										
1.	Tamil Nadu	32.00	0.00	68.00	14.00	71.00	15.00	0.00	100.00	
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	-	2.00	98.00	53.00	9.00	38.00	0.00	100.00	
3.	Bihar	-	-	100.00	-	-	-	-	-	
4.	Goa	100.00	-	-	95.00	5.00	-	80.00	20.00	

Sl. No.	S T A T E	P E R C E N T A G E			A R E A		U N D E R				
		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		
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	97.19	1.20	1.61	37.35	62.65		
11.	Punjab	-	100.00	0.00	98.40	0.00	1.60	85.20	14.80		
12.	Rajasthan	-	70.07	29.93	96.84	0.67	2.49	62.31	37.69		
13.	Tamil Nadu	0.00	0.00	100.00	49.00	38.00	13.00	8.00	92.00		
14.	Telangana Plt.	-	49.00	51.00	100.00	0.00	0.00	38.00	62.00		
		Rt.	-	51.00	49.00	100.00	0.00	0.00	27.00	73.00	
15.	Uttar Pradesh				N.A.						
16.	West Bengal	-	55.26	44.74	99.95	-	0.05	66.57	33.43		
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	0.00	100.00	
6.	Telangana	Kh.	-	44.00	56.00	100.00	0.00	0.00	97.00	3.00	
			Rabi	-	50.00	50.00	100.00	0.00	0.00	97.00	3.00
29. CUMIN											
1.	Gujarat				N.A.						
2.	Rajasthan	-	63.05	36.95	21.53	0.00	78.47	57.63	42.37		
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.						

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R							
		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
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		19.21	80.79	63.80	34.17	2.03	48.73	51.27
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.			
41. GUAVA									
1.	Bihar			100.00					
42. JACKFRUIT									
1.	Bihar			100.00					
2.	Kerala					N.A.			
43. CASHEWNUT									
1.	Kerala					N.A.			
2.	Maharashtra * Rabi.					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.	-	11.00	89.00	53.00	26.00	21.00	20.00	80.00
2.	Bihar Agh. Rabi.			100.00					

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R							
		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
3.	Chhattisgarh	-	61.00	39.00	88.00	12.00	0.00	0.00	100.00
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	-	-	40.00
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	95.53	1.59	2.88	31.66
11.	Uttar Pradesh				N.A.				
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
		Rabi	100.00	-	0.00	15.40	84.60	0.00	18.20
		Sum.	100.00	-	0.00	24.00	76.00	0.00	7.00
6.	Madhya Pradesh #		-	44.00	56.00	92.00	6.00	2.00	-
7.	Uttar Pradesh	Zaid			N.A.				
48. BRINJAL									
1.	Bihar	Agh.			100.00				
		Rabi.			100.00				
2.	Jharkhand	Agh.	25.00	-	75.00	50.00	50.00	-	-
		Rabi.	30.00	-	70.00	30.00	70.00	-	-
49. TOMATO									
1.	Bihar	Agh.			100.00				
		Rabi			100.00				
2.	Jharkhand	Agh.	40.00	-	60.00	70.00	30.00	-	-
		Rabi	40.00	-	60.00	20.00	80.00	-	-
50. CAULIFLOWER									

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R								
		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.	Bihar			100.00						
51. PAPAYA (PAPITA)										
1.	Madhya Pradesh #					N.A.				
52. PLANTAIN										
1.	Kerala					N.A.				
53. METHI										
1.	Rajasthan		26.73	73.27	75.66	10.16	14.18	52.69	47.31	
54. GROUNDNUT										
1.	Andhra Pradesh	Kh.	-	96.00	4.00	88.00	9.00	3.00	59.00	41.00
		Rabi	-	77.00	23.00	99.00	0.00	1.00	84.00	16.00
2.	Chhattisgarh		-	18.00	82.00	59.00	23.00	18.00	0.00	100.00
3.	Goa	Kh.	100.00	0.00	-	80.00	20.00	-	20.00	80.00
		Rabi	100.00	-	-	85.00	15.00	-	20.00	80.00
4.	Gujarat	Kh.					N.A.			
		Sum.								
5.	Karnataka ***	Kh.Ir.	100.00	-	0.00	81.90	16.10	2.00	28.70	71.30
		Kh.UL	76.60	-	23.40	93.50	3.40	3.10	12.90	87.10
		Rabi.UL	100.00	-	0.00	73.50	6.80	19.70	40.90	59.10
		Sum.Ir.	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	67.02	7.44	25.54	14.96	85.04
		Wint.	-	-	100.00	58.87	5.65	35.48	10.08	89.92
		Sum.	-	-	100.00	85.87	4.66	9.47	38.28	61.72
9.	Rajasthan		-	47.15	52.85	90.42	4.47	5.11	76.99	23.01
10.	Tamil Nadu	Ir.	2.00	0.00	98.00	38.00	55.00	7.00	34.00	66.00
		UL	1.00	0.00	99.00	46.00	43.00	11.00	23.00	77.00
11.	Telangana	Kh.	-	75.00	25.00	87.00	1.00	12.00	67.00	33.00
		Rabi	-	78.00	22.00	98.00	0.00	2.00	63.00	37.00
12.	Uttar Pradesh						N.A.			
13.	West Bengal		-	90.46	9.54	57.42	-	42.58	43.24	56.76
55. SESAMUM (GINGELLY)										
1.	Andhra Pradesh	Kh.	-	45.00	55.00	43.00	29.00	28.00	24.00	76.00
		Rabi	-	41.00	59.00	51.00	14.00	35.00	42.00	58.00
2.	Chhattisgarh		-	17.00	83.00	23.00	14.00	63.00	0.00	100.00

Sl. No.	S T A T E	P E R C E N T A G E			A R E A		U N D E R		
		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
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. Rabi				N.A.				
					N.A.				
8.	Odisha Aut. Wint. Sum.	-	-	100.00	36.77	11.21	52.02	8.97	91.03
		-	-	100.00	22.66	6.65	70.69	4.53	95.47
		-	-	100.00	44.94	6.18	48.88	28.09	71.91
9.	Rajasthan	-	61.80	39.20	18.63	2.52	78.85	5.30	94.70
10.	Tamil Nadu Ir. UL	0.00	0.00	100.00	33.00	33.00	34.00	1.00	99.00
		0.00	0.00	100.00	38.00	42.00	20.00	20.00	80.00
11.	Telangana Kh. Rabi	-	11.00	89.00	77.00	8.00	15.00	53.00	47.00
		-	42.00	58.00	100.00	0.00	0.00	9.00	91.00
12.	Uttar Pradesh				N.A.				
13.	West Bengal	-	41.50	58.50	51.31	-	48.69	21.92	78.08
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	-	99.00	1.00	99.00	0.00	1.00	89.00	11.00
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	-	4.00	96.00	7.00	32.00	61.00	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	48.02	7.88	44.10	29.42	70.58
10.	Punjab	-	91.20	8.80	93.80	0.00	6.20	60.80	39.20
11.	Rajasthan	-	77.14	22.86	59.85	0.48	39.67	24.91	75.09
12.	Uttar Pradesh				N.A.				
13.	West Bengal	-	74.95	25.05	95.93	-	4.07	54.87	45.13

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R							
		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
58. LINSEED									
1.	Chhattisgarh	-	3.00	97.00	7.00	32.00	61.00	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	-	1.17	98.83	22.71	-	77.29	-	100.00
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
		Rabi	-	49.00	51.00	94.00	0.00	6.00	67.00
2.	Haryana	Rabi	-	100.00	0.00	100.00	0.00	0.00	0.00
3.	Karnataka ***	Kh.Ir.	100.00	-	0.00	97.70	1.40	0.90	25.60
		Kh.UL.	100.00	-	0.00	94.10	3.30	2.60	15.00
		Rabi.Ir.	99.00	-	1.00	98.70	0.30	1.00	25.40
		Rabi.UL.	99.90	-	0.10	97.80	0.80	1.40	18.40
		Sum.	100.00	-	0.00	98.50	0.80	0.70	41.50
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
		UL	97.00	0.00	3.00	58.00	36.00	6.00	29.00
6.	Telangana	Kh.	-	50.00	50.00	100.00	0.00	0.00	28.00
		Rabi	-	100.00	0.00	100.00	0.00	0.00	18.00
7.	Uttar Pradesh	Zaid				N.A.			
61. SOYABEAN									
1.	Andhra Pradesh			98.00	2.00	78.00	0.00	22.00	75.00
2.	Chhattisgarh	-	39.00	61.00	76.00	13.00	11.00	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.			

Sl. No.	STATE	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
6.	Rajasthan	-	80.50	19.50	53.49	1.17	45.34	67.01	32.99
7.	Telangana	-	57.00	43.00	98.00	0.00	2.00	28.00	72.00
8.	Uttar Pradesh					N.A.			
62. TARA MEERA									
1.	Rajasthan		30.67	69.33	47.69	5.03	47.28	19.29	80.71
1.	Kerala				N.A.				
2.	Maharashtra *				N.A.				
64. NIGER									
1.	Maharashtra *				N.A.				
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	-	-	70.00
		Rabi UL	69.60	-	30.40	99.40	-	0.60	7.20
		Sum.	100.00	-	-	100.00	-	-	92.80
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	-	99.60	0.40	96.00	0.00	4.00	96.60	3.40
8.	Rajasthan	-	87.07	12.93	69.06	1.84	29.10	92.14	7.86
9.	Tamil Nadu	Ir.	0.00	0.00	100.00	57.00	43.00	0.00	78.00
		UL	0.00	0.00	100.00	31.00	20.00	49.00	0.00
10.	Telangana	-	69.00	31.00	99.00	0.00	1.00	80.00	20.00
11.	Uttar Pradesh								
66. JUTE									
1.	Assam	-	30.00	70.00	42.00	45.00	13.00	13.00	87.00
2.	Bihar			100.00					
3.	Meghalaya	-	0.00	100.00	4.17	16.67	79.16	0.00	100.00
4.	Odisha	-	-	100.00	79.10	10.45	10.45	41.79	58.21
5.	West Bengal	-	92.23	7.77	93.77	-	6.23	51.22	48.78
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	-	74.88	25.12	90.28	-	9.72	21.95	78.05
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
									13.00

Sl. No.	S T A T E	P E R C E N T A G E A R E A U N D E R							
		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
2.	Gujarat					N.A.			
3.	Karnataka ***	100.00	-	0.00	99.10	0.30	0.60	50.50	49.50
4.	Maharashtra *					N.A.			
5.	Telangana	(N)	-	100.00	0.00	100.00	0.00	60.00	40.00
		(V)	-	100.00	0.00	100.00	0.00	54.00	46.00
6.	Uttar Pradesh	Rabi				N.A.			
		Zaid				N.A.			
69. ISABGOL									
1.	Gujarat					N.A.			
2.	Rajasthan	-	30.57	69.43	91.69	0.71	7.60	21.53	78.47
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
									52.80

Note :-

1. * : Figures repeated from the year 2010-11 in the state of Maharashtra.
- 2 *** : Figures repeated from the year 2011-12 in respect of Crop Cowpea and all other crops repeated from the year 2014-15..
3. # : Figure repeated from 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 2016-17

CROP	STATE	No. Of Experiments		Percentage	
		Planned	Analysed	recovery	
1	2	3	4	5	
PADDY	Andhra Pradesh	Kh.Ir.	3562	710	89.07
		Kh.UI.	242	61	88.08
		Rabi Ir.	2994	559	90.23
	Bihar	Bha.Ir.	196	108	55.00
		Bha.UI.	280	136	49.00
		Agh.Hyv.Ir.	10970	10386	95.00
		Agh.Hyv.UI.	2703	2579	95.00
		Agh.Lv.Ir.	4893	4613	94.00
		Agh.Lv.UI.	1978	1827	92.00
		Gar.Hyv.	150	43	29.00
		Gar.Lv.	70	20	29.00
	Chhattisgarh	Hyv.Ir.	366	330	89.70
		Lv.Ir.	154	138	94.20
		UL	1002	876	91.80
	Goa	Kh.	76	76	91.40
		Rabi	76	76	91.00
	Gujarat	Ir.			
		UL			N.A.
		Sum.			
	Haryana %		990	864	85.69
	Himachal Pradesh		404	358	88.29
	Jammu & Kashmir		498	142	88.45
	Jharkhand	Agh.Hyv.Ir.			
		Agh.Hyv.UI.			
		Agh.Lv.Ir.			N.A.
		Agh.Lv.UI.			
		Bha.			
	Kerala	Aut.	536	536	91.00
		Wint.	586	586	93.00
		Sum.	380	380	93.00
	Madhya Pradesh	Hyv.Ir.	598	518	94.95
		Lv.Ir.	376	290	96.59
		UL	1108	1043	93.57
	Maharashtra **	Kh.	1106	712	93.79
		Sum.			N.C
	Meghalaya	Aut.	68	52	90.89
		Wint.	150	150	90.25
	Punjab		276	274	90.31
	Rajasthan		3116	2500	97.01
	Tamil Nadu	K/K/S	208	208	92.95
		S/T/P	526	526	91.43
		N/K	150	150	91.43
PADDY (Contd...)	Telangana	Ir.	2708	559	85.94
		UL	104	32	85.06
		Rabi	2266	562	86.69
	Uttarakhand		836	692	84.35
	Uttar Pradesh #		580	580	94.59
	West Bengal	Aus.	647	647	90.49
		Aman.	7871	7871	89.47
		Sum.	6649	6649	89.12
	Dadra & Nagar Haveli		78	70	89.74
	Daman & Diu ##		20	20	95.00
	Puducherry	I	80	80	92.58
		II	140	140	92.40
		III	70	70	92.35

CROP	STATE	No. Of Experiments		Percentage
		Planned	Analysed	recovery
1	2	3	4	5
JOWAR	Andhra Pradesh	Kh.	178	45
		Rabi.	482	183
	Chhattisgarh		80	74
	Gujarat	Kh.	-	-
		Rabi	-	-
	Madhya Pradesh		600	584
	Maharashtra **	Kh.	2128	1543
		Rabi	2228	1472
	Rajasthan		10840	9648
	Tamil Nadu	Ir.	220	200
		UL	320	224
	Telangana	Kh.	448	90
		Rabi	290	69
	Uttar Pradesh #		20	20
BAJRA	Andhra Pradesh		488	172
	Gujarat	Kh.	-	-
		Sum.	-	-
	Haryana %		1532	1438
	Madhya Pradesh		252	228
	Maharashtra **		856	511
	Rajasthan		26064	24262
	Tamil Nadu	Ir.	118	118
		UL	65	65
	Uttar Pradesh #		8	8
BAJRA (Contd..)	Telangana		52	14
	Uttar Pradesh #		80	80
	Daman & Diu ##		8	85.00
MAIZE	Andhra Pradesh	Kh.	234	96
		Rabi	554	148
	Bihar	Bha.Hyv.	308	268
		Bha.Lv.	352	309
		Rabi	380	361
		Gar.Hyv.	190	78
		Gar.Lv.	60	42
	Chhattisgarh		490	426
	Gujarat	Kh.	-	-
	Haryana %		144	88
	Himachal Pradesh		590	704
	Jammu & Kashmir		576	216
	Jharkhand	Bha.		N.A.
	Madhya Pradesh		1418	1293
	Maharashtra ***	Kh.	112	90
		Rabi	84	58
	Punjab		100	100
	Rajasthan	Kh.	11968	11504
	Tamil Nadu	Ir.	125	125
		UL	84	84
		Kh.	960	258
	Telangana	Rabi	1046	252
	Uttar Pradesh #		96	96
	West Bengal		225	225

CROP	STATE	No. Of Experiments		Percentage
		Planned	Analysed	recovery
1	2	3	4	5
RAGI	Andhra Pradesh	Kh.	200	64
		Rabi	170	57
	Bihar	Bha.	140	78
	Goa			N.A.
	Gujarat		-	-
	Jharkhand			N.A.
	Maharashtra **		492	332
	Tamil Nadu	Ir.	80	80
		UL	100	100
	Telangana		76	19
	Uttarakhand		543	484
	Dadra & Nagar Haveli		78	22
WHEAT	Bihar	Hyv.Ir.	12650	12384
		Hyv.UL	390	390
		Lv.Ir.	7278	7006
		Lv.UL	345	345
	Chhattisgarh	Hyv.Ir.	508	356
		Lv.Ir.	112	64
		UL	246	188
	Gujarat	Ir.	-	-
		UL	-	-
	Haryana %		2200	2182
	Himachal Pradesh		612	706
	Jammu & Kashmir		436	86
	Jharkhand	Hyv.Ir.		N.A.
		Hyv.UL		
		Lv.Ir.		
		Lv.UL		
	Madhya Pradesh	Hyv.Ir.	2498	2204
		Lv.Ir.	974	974
		UL	1060	966
	Maharashtra **		464	256
	Punjab		282	248
	Rajasthan		39316	37486
	Uttarakhand		836	529
	Uttar Pradesh #		N.A.	N.A.
	West Bengal		766	766
BARLEY	Bihar		150	130
	Chhattisgarh		36	16
	Haryana %		516	355
	Himachal Pradesh		284	291
	Jharkhand			N.A.
	Madhya Pradesh		430	396
	Punjab		108	98
	Rajasthan		6064	5946
	Uttarakhand		337	240
	Uttar Pradesh #		N.A.	N.A.

CROP	STATE	No. Of Experiments		Percentage
		Planned	Analysed	recovery
1	2	3	4	5
GRAM	Bihar	400	348	87.00
	Chhattisgarh	488	326	94.80
	Gujarat	-	-	-
	Haryana %	562	512	88.70
	Jharkhand		N.A.	
	Madhya Pradesh	UI	2608	1360
		Ir	1078	888
	Maharashtra **		2200	1550
	Punjab		16	12
	Rajasthan		16096	14562
REDGRAM (TUR)	Uttar Pradesh #		20	20
	West Bengal		252	252
	Bihar		336	244
	Jharkhand			N.A.
	Maharashtra *		3602	3006
GREENGRAM (MOONG)	Uttar Pradesh #		N.A.	N.A.
	West Bengal	(Rabi)	83	83
	Bihar	Bha.	140	78
		Gar.	252	109
	Rajasthan		10872	9637
LAKH (KHESARI)	Uttar Pradesh #	Kh.	12	12
	Zaid		N.A.	N.A.
	West Bengal	Sum.		N.A.
	Rajasthan		3576	3544
	Uttar Pradesh #	Kh.	24	24
MASUR	Zaid.		N.A.	N.A.
	West Bengal		326	326
	Bihar		170	130
	Chhattisgarh		262	0
PEAS	West Bengal		170	170
	Bihar		490	379
	Jharkhand			N.A.
	Rajasthan		1036	1014
MOTH	Uttar Pradesh #		32	32
	West Bengal		658	658
CHOWLA	Uttar Pradesh		16	16
	West Bengal		133	133
GUAR	Rajasthan		6620	5474
	Uttarakhand		1548	1400
SAWAN	Rajasthan		22652	21148
	Uttarakhand		312	288
	Uttar Pradesh #	Kh.	10	10
SAMAI	Zaid		N.A.	N.A.
	Tamil Nadu		50	50
VARAGU	Tamil Nadu		62	54
	SUGARCANE		54	54
KORRA	Bihar		238	209
	Punjab		190	168
KODON-KUTKI	Andhra Pradesh		204	73
	Telangana		20	2
	Uttar Pradesh # (Kodan)		N.A.	N.A.
CHILLIES	Chhattisgarh		294	244
	Madhya Pradesh		180	176
	Uttar Pradesh # (Kodan)		N.A.	N.A.
	Andhra Pradesh	Kh.	400	115
		Rabi	412	150
Telangana	Bihar		170	109.00
	Telangana	Kh.	276	64.00
		Rabi	124	38.00

CROP	S T A T E	No. Of Experiments		Percentage
		Planned	Analysed	recovery
1	2	3	4	5
SAFFRON	Jammu & Kashmir \$\$		108	93
CORIANDER	Rajasthan		3172	2956
ARECANUT	Maharashtra ****		180	21
CASHEWNUt	Maharashtra			N.C
CUMIN SEED	Rajasthan		4976	3757
METHI	Rajasthan		1616	1438
GROUNDNUT	Andhra Pradesh	Kh.	2608	631
		Rabi	842	240
			216	170
		Gujarat	Kh.	-
		Sum.	-	-
	Goa	Kh.	32	23
		Rabi	40	24
	Madhya Pradesh		480	384
	Maharashtra **		1386	948
	Rajasthan		5904	4390
	Tamil Nadu	Ir.	230	224
		UL	350	350
	Telangana	Kh.	142	37
		Rabi	826	187
	Uttar Pradesh #		N.A.	N.A.
	West Bengal		199	199
SESAMUM	Maharashtra *	Kh.	674	512
		Rabi	202	93
	Rajasthan		6136	5817
	Uttar Pradesh		15	15
	West Bengal		1020	1020
CASTOR	Andhra Pradesh		232	66
	Telangana		214	34
RAPE & MUSTARD	Bihar		532	503
	Haryana %		1040	990
	Jammu & Kashmir \$\$		214	166
	Jharkhand			N.A.
	Punjab		234	150
	Rajasthan		30712	28875
	Uttar Pradesh #		N.A.	N.A.
LINSEED	West Bengal		1513	1513
	Jammu & Kashmir \$\$		26	24
	Maharashtra *		882	675
	Rajasthan			N.A.
	Uttar Pradesh		6	6
SUNFLOWER	West Bengal		73	73
	Andhra Pradesh	Kh.	196	99
		Rabi	368	90
	Haryana %	Rabi	260	92
	Maharashtra*	Kh.	680	524
		Rabi	578	463
		Sum.		N.A.
	Telangana	Kh.	36	6
		Rabi	72	14
	Uttar Pradesh #	Zaid	N.A.	N.A.
SAFFLOWER	Karnataka ###	Rabi UL	98	52
	Maharashtra *		2538	1562
	Rajasthan		7576	6540
	Uttar Pradesh #		N.A.	N.A.

CROP	STATE	No. Of Experiments		Percentage recovery
		Planned	Analysed	
1	2	3	4	5
BANANA	Bihar	250	24	10.00
MANGO	Bihar	300	95	32
GUAVA	Bihar	140	59	42
LICHI	Bihar	150	43	29
POTATO	Bihar	Agh. Rabi	170 210	86 198
ONION	Bihar	Rabi	210	139
BRINJAL	Bihar	Agh. Rabi	170 170	87 91
TOMATO	Bihar	Agh. Rabi	70 140	32 98
CAULIFLOWER	Bihar		170	91
JACKFRUIT	Bihar		210	50
TARA MEERA	Rajasthan		2228	1858
COTTON	Madhya Pradesh Maharashtra * Punjab Rajasthan Uttar Pradesh #			N.A. 3364 68 7204 16
JUTE	Bihar Meghalaya West Bengal		100 26 640	53 22 640
MESTA	Andhra Pradesh Bihar West Bengal		200 100 240	198 43 200
TOBACCO	Maharashtra * Uttar Pradesh #	Rabi Zaid	72 N.A. N.A.	52 N.A. N.A.
ISABGOL	Rajasthan		3768	3119
AVARE	Karnataka	UI.	88	84
				37.21

Note: -

- 1 * :- Figures have been given from the year 1994-95 as no results of drainage 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 from the year 2014-15 from SASA.
- 5. ## :- Figure repeated for previous year.
- 6. \$\$:- Figures repeated from the year 2013-14 for the crops Saffron, Rape & Mustard and linseed
- 7. % :- Percentage recovery repeated from the year 2013-14 for Haryana.
- 8. ### :- Figures repeated from the year 2014-15.

**ANNEX-X(b):RESULTS OF CENTRAL DRIAGE EXPERIMENTS ORGANISED BY STATE
UNDER C.E.S. DURING 2016-17**

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.	300	160	90	No Field driage
			Wint.	450	427	89	No Field driage
			Sum.	240	220	87	No Field driage
		Wheat		-	-		No Field driage
		Blackgram		-	-		No Field driage
		Rape & Mustard		-	-		No Field driage
		Jute		286	286	6	No Field driage
		Sugarcane		-	-	9.82	
		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
2.	Karnataka ***	Jowar	Kh.Hyv.Jr.	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

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

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	
		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	No Field driage
			Kh.UL	438	432	29.01	No Field driage
			Rabi.Ir.	152	56	36.35	No Field driage
			Rabi.UL	300	103	36.11	No Field driage
			Sum.Ir.	96	30	42.55	No Field driage
		Soyabean	Ir.	32	28	52.37	No Field driage
			UL	204	184	93.84	No Field driage
		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

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	
		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
	4. Rajasthan	Rape & Mustard	Wint.	-	-	82.59	No Field driage
		Jute	Aut.	-	-	5.73	No Field driage
		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 on the basis of preceeding 10 years is adopted in respect of all the crops.
- 2:- \$ Figures given are for 2007-08 as no information was received of Central Driage ever since the year 2008-09.
- 3:- *** Figures given are for 2014-15 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 2016-17							
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	
Sovabean	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	5x5	1/400	Sub-Division	
Sugarcane		1957-58	1957-58	5x5	1/400	Sub-Division	
Potato		1950-51	1952-53	5M x 7 Rows	-	R.Circle	
R&M		1957-58	1958-59	5x5	1/400	R.Circle	
Jute		1951-52	1951-52	5x5	1/400	Sub-Division	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimensions (MxM)			
1	2	3	4	5	6	7	
3. Bihar							
Paddy	Bha.	1945-46	1948-49	10 x 5	1/200	ANCHAL	Ir.- UL
	Agh.	1945-46	1948-49	10 x 5	1/200	ANCHAL	{Hyv.(Ir./UL)} {Lv.(Ir./UL)}
	Gar.	1969-70	1969-70	10 x 5	1/200	ANCHAL	Hvv./Lv.
Maize	Bha.	1959-60	1959-60	10 x 5	1/200	ANCHAL	Hvv./Lv.
	Rabi	1976-77	1976-77	10 x 5	1/200	ANCHAL	
	Gar.	1959-60	1959-60	10 x 5	1/200	ANCHAL	Hyv./Lv.
Ragi	Bha.	1976-77	1976-77	10 x 5	1/200	ANCHAL	
Wheat		1945-46	1948-49	10 x 5	1/200	ANCHAL	{Hyv.(Ir./UL)} {Lv.(Ir./UL)}
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	Ir.- UL
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	

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	
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	
4. CHHATTISGARH							
Paddy		2000-01	2000-01	5 x 5	1/400	R.I. CIRCLE	Ir.(Hyv./Lv.) & UL
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	Ir.-UL
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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
					Dimensions (MxM)		
1	2	3	4	5	6	7	
Ragi		1951-52	1955-56	5 x 5	1/400	TALUKA	
Wheat		1945-46	1956-57	5 x 5	1/400	TALUKA	Ir.- UI.
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	
Gwar		1994-95	-	5 x 5	1/400	TALUKA	
Moth		2004-05	2004-05	5 x 5	1/400	TALUKA	
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	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.	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	

APPENDIX -I : STATEWISE CROP COVERAGE AND DETAILS OF DESIGN UNDER CES DURING 2016-17						
Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape	Stratum	Pre-stratification
1	2	3	4	Dimentions (MxM)	Size (ha.)	7
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
10. JHARKHAND						
Paddy	Agh.	2001-02	2001-02	10 x 5	1/200	ANCHAL
	Bha.	2002-03	2002-03	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.	2001-02	2001-02	5 x 5	1/400	ANCHAL
	Rabi	2001-02	2001-02	5 x 5	1/400	ANCHAL
Onion	Rabi	2005-06	2005-06	5 x 5	1/400	ANCHAL

Crop		Year of initiation of survey	Year of adoption of results	<u>Plot Size & Shape</u>		Stratum	Pre-stratification
				Dimensions (MxM)			
1	2	3	4	5	6	7	
Brinjal	Agh.	2003-04	2003-04	5 x 5	1/400	ANCHAL	
	Rabi	2001-02	2001-02	5 x 5	1/400	ANCHAL	
Tomato	Agh.	2001-02	2001-02	5 x 5	1/400	ANCHAL	
	Rabi	2003-04	2003-04	5 x 5	1/400	ANCHAL	
Rape & Mustard		2001-02	2001-02	5 x 5	1/400	ANCHAL	
11. KARNATAKA							
Paddy	Kh.	1945-46	1945-46	5 x 5	1/400	TALUK	Hyv (Ir./UI) & Tra. (Ir./UI) {Ir(Hyv./Tra)}
	Rabi	1970-71	1970-71	5 x 5	1/400	TALUK	{Hyv (Ir./UI) & Tra. UI}
	Sum.	1970-71	1970-71	5 x 5	1/400	TALUK	Hyv.Ir.
Jowar	Kh.	1945-46	1945-46	5 x 5	1/400	TALUK	Hyv (Ir./UI) & Tra. UI
Jowar	Rabi	1945-46	1945-46	5 x 5	1/400	TALUK	{Hyv (Ir./UL) & Tra (Ir./UL)}
Bajra	Kh.	1946-47	1946-47	5 x 5	1/400	TALUK	{Hyv (Ir./UL) & Tra.UI}
Maize	Kh.	1970-71	1970-71	5 x 5	1/400	TALUK	Hyv.(Ir./UI) & Tra (Ir/UI)
	Rabi	1970-71	1970-71	5 x 5	1/400	TALUK	Hyv.(Ir./UI) & Tra Ir. Hyv.(Ir.)
	Sum.	1970-71	1970-71	5 x 5	1/400	TALUK	Hyv.(Ir.)
Ragi	Kh.	1950-51	1950-51	5 x 5	1/400	TALUK	Hyv.(Ir./UI) & Tra.UI
	Rabi	1984-85	1984-85	5 x 5	1/400	TALUK	Hyv.(Ir./UI)
	Sum.	1975-76	1977-78	5 x 5	1/400	TALUK	Hyv. Ir.
Wheat	Rabi	1945-46	1945-46	5 x 5	1/400	TALUK	Hyv.(Ir./UI) & Tra.(Ir./UI)
Gram	Rabi	1951-52	1951-52	5 x 5	1/400	TALUK	Ir.- UI.
Redgram	Kh.	1957-58	1957-58	10 x 5	1/200	TALUK	Trad.(Ir./ UI)
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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimensions (MxM)			
1	2	3	4	5	6	7	
Chillies	Kh.	2002-03	2002-03	5 x 5	1/400	TALUK	Ir.- UL
Potato	Kh.	2000-01	2000-01	5 x 5	1/400	TALUK	Ir.- UL
	Rabi	2000-01	2000-01	5 x 5	1/400	TALUK	
Onion	Kh.	2000-01	2000-01	5 x 5	1/400	TALUK	Ir.- UL
	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.- UL
	Sum.	1970-71	1970-71	5 x 5	1/400	TALUK	Ir.- UL
	Rabi	2005-06	2005-06	5 x 5	1/400	TALUK	UL
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.- UL
	Rabi	1988-89	1988-89	10 x 5	1/200	TALUK	Ir.- UL
	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.- UL
Tobacco	Annual	1971-72	1971-72	10 x 5	1/200	TALUK	Ir.- UL
Avare	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	
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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimensions (MxM)			
1	2	3	4	5	6	7	
Coconut		1976-77	1976-77	5 bearing trees	—	TALUKA	
Sesamum		1984-85	1984-85	5 x 5 13. MADHYA PRADESH	1/400	TALUKA	
Paddy		1945-46	1955-56	5 x 5	1/400	R.I. CIRCLE	Ir.(Hyy./Lv.) & UL.
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.(Hyy./Lv.) & UL.
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	Ir./UL/Comp.
	Sum.	1984-85	1993-94	10 x 5 10 x 10 10 x 5	1/200 1/100 1/200	TEHSIL	
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./UL
Bajra		1946-47	1958-59	10 x 10	1/100	TEHSIL	Ir./UL/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	
Wheat		1945-46	1951-52	10 x 10	1/100	TEHSIL	Ir./UL

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
					Dimentions (MxM)		
1	2	3	4	5	6	7	
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	Ir./UL/Comp.
Tobacco		1951-52	1958-59	10 x 10	1/100	TEHSIL	
15. MEGHALAYA							
Paddy	Aut. Wint.	1971-72 1971-72	1973-74 1973-74	5 x 5 5 x 5	1/400 1/400	DISTRICT DISTRICT	
Potato Jute	Sum.	1973-74 1973-74	1977-78 Not adopted	NOT FIXED 5 x 5	— 1/400	DISTRICT 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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimensions (MxM)			
1	2	3	4	5	6	7	
Horsegream	Wint.	1976-77	1990-91	5 x 5	1/400	C.D.BLOCK	
	Sum.	1976-77	1990-91	5 x 5	1/400	C.D.BLOCK	
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	Cumin Seed	1997-98	1997-98	5 x 5	1/400	TEHSIL
Methi		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

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimensions (MxM)			
1	2	3	4	5	6	7	
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
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	
Jowar		1950-51	1955-56	5 x 5	1/400	BLOCK	Ir./UL
Bajra		1950-51	1955-56	5 x 5	1/400	BLOCK	Ir./UL
Ragi		1950-51	1955-56	5 x 5	1/400	BLOCK	Ir./UL
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	Ir./UL
Sesamum		1973-74	1973-74	10 x 5	1/200	BLOCK	Ir./UL
Cotton		1959-60	1964-65	10 x 5	1/200	BLOCK	Ir./UL
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	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	
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 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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
					Dimensions (MxM)		
1	2	3	4	5	6	7	
Blackgram	Kh.	1962-63	1963-64	5 x 5	1/400	MANDAL	
	Rabi	N. A.	N.A.	5 x 5	1/400	MANDAL	
Horsegram	Kh.	1980-81	1980-81	5 x 5	1/400	MANDAL	
	Rabi	N. A.	N. A.	5 x 5	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	
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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
					Dimentions (MxM)		
1	2	3	4	5	6	7	
	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	
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 Rabi	1958-59 2005-06	1959-60 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 Zaid	1988-89 N.A.	- N.A.	5 x 5 5 x 5	1/400 1/400	BLOCK BLOCK	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification		
				1	2	3	4	5	6
22. UTTARAKHAND									
Paddy		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mi in Hill Area.	1/230.8	TEHSIL			
Ragi		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mi in Hill Area.	1/230.8	TEHSIL			
Wheat		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mi in Hill Area.	1/230.8	TEHSIL			
Barley		1945-46	1950-51	Equilateral Triangle of side 10 mts. In Plain area and 30 Sq.mi 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.mi in Hill Area.	1/230.8	TEHSIL			
23. WEST BENGAL									
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			

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification
				Dimensions (MxM)	Size (ha.)		
1	2	3	4	5	6	7	
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	
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	

Crop		Year of initiation of survey	Year of adoption of results	Plot Size & Shape		Stratum	Pre-stratification		
				Dimensions (MxM)					
				1	2	3	4	5	6
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 official estimates due to small 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 2016-17

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, TamilNadu, Telangana, Uttar Pradesh and West Bengal.	18
5	Ragi	Andhra Pradesh, Bihar, Goa, Gujarat, Jharkhand, Karnataka, Maharashtra, Odisha, Tamil Nadu, Telangana, Uttarakhand and Dadra & NagarHaveli.	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
3	Greengram (Moong)	Andhra Pradesh, Bihar, Gujarat (on pilot basis), Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and WestBengal.	11
4	Blackgram (Urd/Mathikalai)	Andhra Pradesh, Assam, Gujarat ,Jharkhand, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.	12

Sl.No	CROPS	STATES COVERING THE CROP UNDER C.E.S.	
1	2	3	
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	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

Sl.No	CROPS	STATES COVERING THE CROP UNDER C.E.S.	
1	2	3	
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
(B) FIBRES			
1	Cotton	Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya 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	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 2016-17

Sl. No.	State	Agency	Designation	Crops covered (Percentage)
1	2	3	4	5
1.	Andhra Pradesh	1. Statistical 2.Agriculture	1. Assistant Statistical Officer 2. Agriculture Extension Officer	All Crops 50 %.
2.	Assam	Statistical	Field Assistant	All Crops. (100%)
3.	Bihar	1. Revenue 2. Statistical 3.Agriculture	Circle Inspector 1. Block Statistical Supervisor. 2 Junior Field Investigator 3 Accredited Statistical Volunteer Block Agricultural Officer.	16.3 Percent of the planned experiments. 8.4 Percent of the planned experiments. 75.30 Percent of the planned experiments.
4.	Chhattisgarh (Data repeated for the year 2014-15)	1. Revenue 2. Agriculture	1. Revenue Inspector 1.. Headquarter Patwari 2. Rural Agriculture Extension Officer	All Crops (100%)
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)

APPENDIX - III: PRIMARY FIELD AGENCY FOR CROP CUTTING EXPERIMENTS UNDER CES 2016-17				
Sl. No.	State	Agency	Designation	Crops covered (Percentage)
1	2	3	4	5
		2. Revenue	Girdawar Kanungo	Barley (53) and Maize (53).
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 2. Statistics 3. Revenue	Block Agriculture Officer Block Statistical Supervisor Circle Inspector	All Crops (25%) All Crops (25%) All Crops (50%)
11.	Karnataka	1. Revenue 2.Agriculture 3. Rural Development & Secretary Panchayati Raj	Village Accountant Agriculture Asstt. Gram Panchayat	43.11% 39.28% 17.61%
12.	Kerala	Statistical	Investigator	All Crops

APPENDIX - III: PRIMARY FIELD AGENCY FOR CROP CUTTING EXPERIMENTS UNDER CES 2016-17				
Sl. No.	State	Agency	Designation	Crops covered (Percentage)
1	2	3	4	5
13.	Madhya Pradesh	Revenue	1. Revenue Inspector 2. Headquarter Patwari	All Crops (97.00%)
14.	Maharashtra (data repeated for the year 2010-11)	1. Revenue 2. Zila Parishad	Revenue Inspector Gram Sevak	All Kharif & Rabi Crops (40) % All Kharif & Rabi Crops (25) %
		3.Agricultural	Agricultural Assistant	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	Agricultural Officer	

APPENDIX - III: PRIMARY FIELD AGENCY FOR CROP CUTTING EXPERIMENTS UNDER CES 2016-17				
Sl. No.	State	Agency	Designation	Crops covered (Percentage)
1	2	3	4	5
(GCES,NAIS)				
		2.Statistical Department (GCES,NAIS)	Block Statistical Inspector	All Crops
		3.Horticulture Department (GCES,NAIS)	Assistant Horticulture Offficer	
20.	Telangana	1. Statistical	1. Assistant Statistical Officer	All Crops 50 %.
		2.Agriculture	2. Agriculture Extension Officer	All Crops 50 %.
21.	Uttarakhand	Revenue	1. Patwari / Lekhpal 2. Revenue Inspector	All Crops (100%)
22.	Uttar Pradesh	1 .Revenue	Revenue Inspector	All Crops
		2. Cane Development	Cane Inspector	Sugarcane crop (only in factory areas)
		3.Cotton Development	Cotton Supervisor & Kamdar	Cotton Crop.

APPENDIX - III: PRIMARY FIELD AGENCY FOR CROP CUTTING EXPERIMENTS UNDER CES 2016-17				
Sl. No.	State	Agency	Designation	Crops covered (Percentage)
1	2	3	4	5
23.	West Bengal	1. Agricultural Statistics (B.A.E & S)	Asstt.Investigator	All Crops
		2. Agriculture Department	Krishi Prajukti Sahayak (K.P.S)	
24.	Dadra & Nagar Haveli	1. Block Deptt.	Gram Sewak	All Crops (37.33%)
		2. SDSCO	Agri. Asstt.	All Crops (46.67%)
		3. Agri. Deptt.	Agri. Asstt. (Agri.)	All Crops (10.67%)
		4. Development & Planning Office	Panchayat Secretary	All Crops (5.33%)
25.	Daman & Diu	1. Revenue	Talathis	All Crops (50%)
	(Data repeated for the year 2014-15)	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 2016-17**

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	12 Expts.		20 Expts.
				Kharif	Rabi/Sum	Annual			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Andhra Pradesh	Statistical	1612	13242	9458	22700	173	110	294
		Agriculture					108	77	
2	Assam	Statistical	101	6300	4950	11250	101	94	101
3.	Bihar	Revenue	534	45993	51977	97970	32	37	19
		Statistical	543				31	34	21
		Agriculture	534				19	23	12
4	Chhattisgarh	Statistical/Agriculture	4758	3370	2616	5986	121	99	73
5	Goa	Agriculture (Kh.)	23	400	290	690	19	15	23
		(Rabi)	23						
6	Gujarat %	Agriculture	1466	76688	78451	155139	286	329	370
7	Haryana *	Agriculture (Kh.)	719	9584	4548	9584	----- NC -----		
		(Rabi)	758				----- NC -----		
		Revenue (Kh.)	6				----- NC -----		
		(Rabi)	52				----- NC -----		
8	Himachal Pradesh	Agriculture (Kh.)	258	3216	2830	6046	----- NC -----		
		(Rabi)	139				----- NC -----		
		Revenue (Kh.)	258				----- NC -----		
		(Rabi)	139				----- NC -----		
9	Jammu & Kashmir ##	Revenue (Kh.)	2487	3098	2448	3098	----- NC -----		
		(Rabi)					----- NC -----		
10	Jharkhand	Revenue	-	28770	44040	72810	----- NC -----		
		Statistical					----- NC -----		
		Agriculture					----- NC -----		
11	Karnataka	Revenue	5703	72058	46672	118730	----- NC -----		
		Agricultural	3079				----- NC -----		
		RDPR	3565				----- NC -----		
12	Kerala	Statistical	1028	27034	1350	28384	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	1766	314	2080	46	24	46
16	Odisha	Statistical	417	38859	9630	48489	-	-	417

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	12 Expts.		20 Expts.	
							Kharif	Rabi/Sum	Annual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
17	Punjab	Agriculture (Kh.)	686	3732		3732	56	-	9	
		(Rabi)	628		3244	3244	-	55	6	
18	Rajasthan	Agriculture (Kh.)	8512	124526	108984	233510	-	-	-	
		(Rabi)	4269				-	-	-	
19	Tamil Nadu	Agriculture	939	9276		9276	104	127	121	
20	Telangana	Statistical		1089	8696	5466	14162	88	10	
		Agriculture								
21	Uttarakhand	Revenue (Kharif)	1804	4686	3626	8312	14	15	20	
		Revenue (Plain)	1342				14	15	20	
		Revenue (Hills)	462				-	-	-	
22	Uttar Pradesh	Revenue (Kh.)	1267	315786	312454	628240	-	-	-	
		(Rabi)	1063				-	-	-	
		(Zaid)	1158				-	-	-	
		Cane Dev. Staff	-				-	-	-	
		Cotton Dev. Staff	-				-	-	-	
23	West Bengal	Agricultural Statistics	254	20564	28386	48950	210	242	183	
24	Dadra & Nagar Haveli	Development & Planning	4	41	0	41	4	-	0	
		Division Soil Conservation	5	54	0	54	5	-	0	
		Agriculture Deptt.	6	61	0	61	6	-	0	
25	Daman & Diu	Rural Dev. (Kh.)	4	4	0	4	----- NC -----			
		Rev. Dept. (Kh.)	3	18	0	18	----- NC -----			
		Stat. Dept. (Kh.)	3	6	0	6	----- NC -----			
26	Puducherry	Statistical (Kh)	22	80	0	80	----- NC -----			
		Rabi -I	0	0	140	140	-	8	12	
		Rabi -II	0	0	70	70	----- NC -----			
Total			67776	883246	764556	1647802	2509	2581	3843	
Percentage %							12.5	13.0	18.2	

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 from the year 2012-13.

3. % : Crop Greengram, Moth, Blackgram, Onion, Banana, Garlic & Tobacco repeated from the year 2015-16.

4.* : Data repeated from the year 2015-16.

5. ** : Data repeated from the year 2015-16.

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

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

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

the mean square between villages

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

the mean square within villages

The percentage standard error is given by

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

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.

APENDIX-VI: PROCEDURE FOR DRIAGE EXPERIMENTS UNDER CES 2016-17								
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
		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
2	Assam	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		District
3	Bihar	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
		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
4	Chhattisgarh	Mesta	Wet Plants	Dry Fibre	Village	Whole	17 days	District
		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
		Kodan Kutki	Wet grain	Dry grain	Village	Whole	15 days	District
5	Goa	Groundnut	Wet Pods	Dry pods	village	whole	15 days	District
		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
6	Gujrat	Bajra (Kh. & Sum.)	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum

Sl No .	State	Crops	Contents of produce for weightment		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
7	Haryana	Maize	Wet grain	Dry grain	Not done	1 Kg.	C.W.	Stratum
		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	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
8	Himachal Pradesh	Gram	Wet grain	Dry grain	Not done	Whole	15 days	State
		Rape & Mustard		Wet grain	Dry grain	Not done	Whole	15 days
		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
9	Jammu & Kashmir	Barley	Wet grain	Dry grain	Village	Whole	15 days	State
		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
		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
		Masur	Wet grain	Dry grain	Village	Whole	15 days	District
11	Karnataka	Rape & Mustard		Wet grain	Dry grain	Village	Whole	15 days
		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
12	Kerala	Groundnut (Kh. &Sum.)	Wet pods	Dry grain	Expts.	1 Kg.	C.W.	District
		Castor	Capsules	Dry seeds	Expts.	1 Kg.	C.W.	District
		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
		Paddy (Aut. Wint. & Sum)	Wet paddy	Dry paddy	Both	250 grms.	C.W.	District

Sl No .	State	Crops	Contents of produce for weightment		Sub-sampling not done/done at the level of village/field/both	Sampling produce to be dried part (Weight or whole)	Duration of drige (Codes)	Level of Application Stratum/District/ State
			First	Final				
1	2	3	4	5	6	7	8	9
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
		Groundnut		Wet pods	Dry pods	village	Whole	15 days
		Paddy (Kh. & Rabi)	Wet Paddy	Dry Paddy	village	5 Kgs.	15 days	District
14	Maharashtra	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
		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
		Paddy (Aut. & Wint.)	Wet Paddy	Dry Paddy	Both	Whole	7-10 days	District
15	Meghalaya	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
		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
16	Odisha	Rape & Mustard (Wint.)	Wet Pods	Dry grain	Both	250 gms.	C.W.	State
		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
		Cotton	Wet Kapas	Dry grain	Village	Whole II Picking	15 Days	State
		Paddy	Wet Paddy	Dry paddy	Not done	Whole	15 days	District
17	Punjab	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
		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
18	Rajasthan	Cumin						District

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
19	Tamil Nadu	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
		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
20	Telangana	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
		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
21	Uttar Pradesh	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
		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
		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

Sl No.	State	Crops	Contents of produce for weightment		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
22	Uttarakhand	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
		Wheat (Pln.)	Wet grain	Dry grain	village	5 Kgs.	15 days	District
		Barley (Pln.)	Wet grain	Dry grain	village	5 Kgs.	15 days	District
23	West Bengal	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
		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
24	Dadar & Nagar Haveli	Jute	Plants	Dry Fibre	Expts.	20 kgs.	12 days	Block
		Mesta	Plants	Dry Fibre	Expts.	20 kgs.	12 days	Block
		Paddy	Wet Paddy	Dry Paddy	Expts.	1 kg / Sample	3 days	Stratum
25	Daman & Diu	Ragi	Wet grain	Dry grain	Expts.	1 kg / Sample	3 days	Stratum
		Paddy	Wet Paddy	Dry Paddy	Village	5 kgs.	C.W-3	Taluka
26	Puducherry	Bajra	Wet Cobs	Dry Cobs	Expts.	5 kgs.	C.W-3	Taluka
		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 2016-17

Sl. No	State	Number of experiments planned under crops												
		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	-	-	360	
		Wint.	240											
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	230	
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.

APPENDIX -VII:- SAMPLE SIZE UNDER I.C.S. (CENTRAL SAMPLES) DURING 2016-17

Number of experiments planned for Rabi & Summer crops												
Sl. No	State	Rice (Sum.)	Jowar (Rabi)	Maize (Sum.)	Wheat	Barley	Gram	Ground -nut	Rape & Mustard	Other Crops **	Sub- Total	Total for all Crops
1	2	15	16	17	18	19	20	21	22	23	24	25
1	Andhra Pradesh	90	-	-	-	-	40	50	-	-	180	680
2	Assam	40	-	-	50	-	-	-	70	70	230	520
3	Bihar	40	-	-	230	-	40	-	40	40	390	750
4	Chhattisgarh	-	-	-	40	-	40	-	30	40	150	350
5	Gujarat	-	-	-	150	-	40	-	50	-	240	990
6	Haryana	-	-	-	180	30	70	-	100	-	380	700
7	Himachal Pradesh	-	-	-	110	40	-	-	-	-	150	300
8	Jammu & Kashmir	-	-	-	120	-	-	-	-	-	120	280
9	Jharkhand	-	-	-	40	-	20	-	20	20	100	220
10	Karnataka	40	70	-	50	-	40	40	-	40	280	900
11	Kerala	100	-	-	-	-	-	-	-	220	320	520
12	Madhya Pradesh	-	-	-	250	-	140	-	60	74	524	1152
13	Maharashtra	-	150	-	150	-	100	-	-	50	450	1300
14	Odisha	140	-	-	-	-	-	-	-	40	180	830
15	Punjab	-	-	-	220	30	30	-	40	-	320	700
16	Rajasthan	-	-	-	130	80	120	-	90	-	420	940
17	Tamil Nadu (N/K)	40	60	40	-	-	-	100	-	130	600	780
18	Telangana	80	40	-	-	-	-	-	-	-	120	480
19	Uttar Pradesh	-	-	-	570	-	50	-	100	200	920	2300
20	Uttrakhand	-	-	-	60	-	-	-	-	-	60	190
21	West Bengal	140	-	-	110	-	-	-	110	50	410	750
22	Puducherry (I)	10	-	-	-	-	-	-	-	-	10	20
	(II)	10	-	-	-	-	-	-	-	-	10	10
TOTAL		730	320	40	2460	180	730	190	710	974	6564	15662

Note : 1. ** Andhra Pradesh -Blackgram (40), Assam -Blackgram (30), Potato - (40), Bihar-Tur (40), Chhattisgarh-Linseed (40), Jharkhand -Tur (20), Karnataka - Sunflower (40), Kerala -Pepper (40), Arecanut (40), Banana (60), Plantain (40), Madhya Pradesh - Linseed (74), Maharashtra - Safflower (50), Odisha - Greengram (40) -S, Rajasthan-Linseed(40), Uttar Pradesh - Greengram (40), Blackgram (40), Masur (60), Potato (60),West Bengal - Sesamum (50).

Tamil Nadu- Bajra(40), , Ragi(40), Cotton(100), Sugarcane(50), Sesamum(50), Blackgram(40),Greenram(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.