

कृषि अनुसंधान  
डाटा पुस्तिका

AGRICULTURAL RESEARCH

DATA  
BOOK  
2016



भारतीय कृषि अनुसंधान परिषद्  
कृषि भवन, नई दिल्ली-110 001

Indian Council of Agricultural Research  
Krishi Bhawan, New Delhi - 110 001



भारत-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान  
लाइब्रेरी एवेन्यू, पूसा, नई दिल्ली-110 012

ICAR-Indian Agricultural Statistics Research Institute  
Library Avenue, Pusa, New Delhi - 110012



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2016

The contents of **AGRICULTURAL RESEARCH DATA BOOK 2016** are also available at the ICAR-Indian Agricultural Statistics Research Institute

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INDIAN COUNCIL OF AGRICULTURAL RESEARCH  
KRISHI BHAWAN, NEW DELHI - 110 001



भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान  
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निदेशक, भाकृअनुप - भारतीय कृषि सांख्यिकी अनुसंधान संस्थान, लाइब्रेरी एवेन्यू, नई दिल्ली-110 012 द्वारा प्रकाशित तथा कृषि ज्ञान प्रबंधन निदेशालय द्वारा मै. रॉयल ऑफसेट प्रिंटेर्स, ए-89/1, नारायणा इंडस्ट्रियल एरिया, फेज़-1, नई दिल्ली-110 028 में मुद्रित।  
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## प्राक्कथन

एक शीर्ष संगठन के रूप में भारतीय कृषि अनुसंधान परिषद (भा.कृ.अनु.प.) देश में कृषि अनुसंधान और शिक्षा के संयोजन और प्रबन्ध के प्रति उत्तरदायी है तथा स्वतंत्रता प्राप्ति से ही इसने देश में कृषि के समग्र विकास के लिए एक महत्वपूर्ण और कारगर भूमिका निभाई है।

भारतीय कृषि अनुसंधान परिषद नीति निर्माताओं, वैज्ञानिकों, विस्तार पदाधिकारियों, छात्रों और शोधकर्ताओं, उद्यमियों और उद्योगों तथा प्रगतिशील किसानों आदि के उपयोगार्थ कृषि के विभिन्न पहलुओं पर जानकारी एकत्रित व समेकित करती है।

कृषि प्रौद्योगिकी का व्यापक प्रसार सुनिश्चित करने के लिए भारतीय कृषि अनुसंधान परिषद इस मूल्यवान जानकारी को **कृषि अनुसंधान डाटा पुस्तिका (कृ.अनु.डा.पु.)** के रूप में वार्षिक आधार पर नियमित रूप से एक विस्तृत सार-संग्रह प्रकाशित करती है। इस प्रकाशन ने उपयोगकर्ताओं में अच्छी प्रसिद्धि हासिल कर ली है।

**कृषि अनुसंधान डाटा पुस्तिका 2016** के वर्तमान अंक में नवीनतम उपलब्ध आंकड़ों (डाटा) को अद्यतन किया गया है। आशा की जाती है कि यह प्रकाशन कृषि पर जानकारी का एक विश्वसनीय आधार बना रहेगा। हम पाठकों से उनकी टिप्पणियां/सुझाव देने का आग्रह करते हैं, ताकि प्रकाशन की उपयोगिता को और बढ़ाया जा सके। मैं भारतीय कृषि अनुसंधान परिषद के अभियांत्रिकी प्रभाग विशेषकर भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान (भा.कृ.सां.अ.सं.) को यह **कृ.अनु.डा.पु.-2016** अंक प्रकाशित करने के लिए बधाई देता हूँ व उनके इस सफल प्रयास की प्रशंसा करता हूँ।

त्रि. महापात्र

(त्रिलोचन महापात्र)

सचिव, कृषि अनुसंधान एवं शिक्षा विभाग  
एवं

महानिदेशक, भारतीय कृषि अनुसंधान परिषद,  
कृषि भवन, नई दिल्ली-110 001, भारत

## FOREWORD

As an apex organization, Indian Council of Agricultural Research (ICAR) is responsible for the organization and management of agricultural research and education in the country, and ever since Independence, it has been playing an important and effective role towards overall growth of agriculture in the country.

ICAR also collects and collates information on various aspects of agriculture for use by diverse stakeholders such as the policy makers, scientists, extension workers, students and researchers, entrepreneurs and industry, progressive farmers etc.

In order to ensure wide dissemination, the ICAR publishes this valuable information in the form of **Agricultural Research Data Book (ARDB)**, a comprehensive compendium regularly on annual basis. The publication has been well received by the users.

The present issue of **Agricultural Research Data Book 2016** has been updated with the latest available data. It is hoped that the publication will continue to serve as a reliable source of information on agriculture. We look forward to comments/suggestions from readers to improve upon the utility of the publication. I compliment the Engineering Division of the ICAR especially the ICAR-Indian Agricultural Statistics Research Institute (IASRI) for their efforts in bringing out ARDB 2016.



**(T. MOHAPATRA)**

Secretary, Department of Agricultural Research & Education  
and  
Director General, Indian Council of Agricultural Research  
Krishi Bhawan, New Delhi-110 001, India

## आम्रव

देश में कृषि के नियोजित विकास एवं अक्षुण्ण विकास के लिए कृषि अनुसंधान एक सक्रिय निवेश है। भारतीय कृषि अनुसंधान परिषद, राष्ट्रीय स्तर पर शीर्ष वैज्ञानिक संगठन होने के नाते कृषि अनुसंधान एवं शिक्षा से सम्बन्धित विज्ञान एवं प्रौद्योगिकी के कार्यक्रमों के प्रयोग में तेजी लाने व बढ़ावा देने में महत्वपूर्ण भूमिका निभाता है। यह कृषि में नई प्रौद्योगिकियों के प्रयोग के प्रदर्शन में सहायता एवं सहयोग भी उपलब्ध कराता है।

विभिन्न स्रोतों से उपलब्ध, कृषि अनुसंधान, शिक्षा और सम्बद्ध पहलुओं से सम्बन्धित सूचना अनेक प्रकार के प्रकाशित व अप्रकाशित रिकार्डों में मौजूद है। यह कृषि अनुसंधान डाटा पुस्तिका-2016, जो श्रृंखला में उन्नीसवीं है, में ऐसी सूचनाओं के मुख्य घटकों/सूचकों को एक साथ रखने का प्रयास किया गया है। डाटा पुस्तिका में 148 तालिकाएँ हैं जिन्हें प्रयोक्ता की सुविधा के उद्देश्य से 10 भागों में रखा गया है, ये हैं – प्राकृतिक संसाधन, कृषि निविष्टि, पशुपालन व डेरी उद्योग एवं मात्स्यकी, बागवानी, उत्पादन एवं उत्पादकता, कृषि अभियांत्रिकी एवं उत्पाद प्रबंधन, निर्यात एवं आयात, विश्व कृषि में भारत का स्थान, कृषि अनुसंधान एवं शिक्षा में निवेश, और राष्ट्रीय कृषि अनुसंधान प्रणाली (एन.ए.आर.एस.) के तहत मानव संसाधन।

यह डाटा पुस्तिका, भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान (भा.कृ.सां.अ.सं.) और भारतीय कृषि अनुसंधान परिषद (भा.कृ.अ.प.) के संयुक्त प्रयासों से संकलित की गई है। इस संस्करण में जून, 2016 के अंत तक देश में उपलब्ध नवीनतम सूचना/आंकड़े शामिल किए गए हैं। डाटा पुस्तिका का प्रथम संस्करण वर्ष 1995 के अन्त तक की सूचनाओं के आधार पर वर्ष 1996 में प्रकाशित किया गया था। इसका प्रकाशन नियमित रूप से उपलब्ध नवीनतम आंकड़ों को अद्यतन करके प्रति वर्ष किया जा रहा है। कृ.अ.डा.पु.-2016 में कुछ मूल्य वर्धन किये गये हैं जैसे कि गत वर्षों के आंकड़ों के आधार पर सांख्यिकीय मॉडलों के उपयोग द्वारा भावी वर्षों में खाद्य पदार्थ फसलों इत्यादि के उत्पादन का आकलन, आंकड़ों की सचित्र/ग्राफिकल प्रस्तुति। विभिन्न प्रकार के राज्यवार आंकड़ों को भौगोलिक सूचना तंत्र पध्ति द्वारा मानचित्र बना कर प्रस्तुत किया गया है। यह आशा की जाती है कि इस डाटा पुस्तिका में प्रस्तुत सूचना पाठकों के लिए रुचिकर एवं लाभप्रद होगी। विभिन्न प्रयोक्ताओं से प्राप्त टिप्पणियों और सुझावों को इसमें शामिल करने का प्रयास किया गया है। डाटा पुस्तिका की सामग्री के प्रस्तुतीकरण एवं विषय-सूची पर आलोचनात्मक टिप्पणी एवं रचनात्मक सुझाव इसके भावी अंकों में सुधार लाने के लिए लाभदायक होंगे। अपनी टिप्पणी एवं सुझाव कृपया इस पते पर भेजें:

डॉ. उमेश चन्दर सूद, निदेशक

भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान

लाइब्रेरी एवेन्यू, पूसा, नई दिल्ली-110 012

फैक्स: 011-25841564, दूरभाष: 011-25841479, ई-मेल: [director.iasri@icar.gov.in](mailto:director.iasri@icar.gov.in)

इस डाटा पुस्तिका में शामिल की गई अपेक्षित सूचना उपलब्ध कराने के लिए विभिन्न संगठन एवं स्रोत धन्यवाद के पात्र हैं।

परिषद के विभिन्न विषय वस्तु प्रभागों के सहायक महानिदेशकों, विशेष रूप से डॉ. कंचन के. सिंह, सहायक महानिदेशक (अभियांत्रिकी) एवं अन्य अधिकारियों का योगदान सराहनीय है।

इस डाटा पुस्तिका को तैयार करने के लिए भाकृअनुप-भा.कृ.सां.अ.सं. तथा परिषद के सम्बन्धित अधिकारियों द्वारा किए गए प्रयास भी सराहनीय हैं।

डॉ. अमलकुसुन्दरम

(क. अलकुसुन्दरम)

उप-महानिदेशक (अभियांत्रिकी), भा.कृ.अनु.प.

डॉ. उमेश चन्दर सूद

(उमेश चन्दर सूद)

निदेशक, भाकृअनुप-भा.कृ.सां.अ.सं.

## PREFACE

Agricultural research is a vital input for planned growth and sustainable development of agriculture in the country. Indian Council of Agricultural Research, being an apex scientific organization at national level, plays a crucial role in promoting and accelerating the use of science and technology programmes relating to agricultural research and education. It also provides assistance and support in demonstrating the use of new technologies in agriculture.

Information pertaining to agricultural research, education and related aspects available from different sources is scattered over various types of published and unpublished records. This Agricultural Research Data Book 2016, which is the Nineteenth in the series, is an attempt to put together main components/indicators of such information. The Data Book comprising of 148 tables, is organized, for the purpose of convenience of the users into 10 sections namely, Natural Resources, Agricultural Inputs, Animal Husbandry & Dairying and Fisheries, Horticulture, Production and Productivity, Agricultural Engineering & Produce Management, Export & Import, India's Position in World Agriculture, Investment in Agricultural Research & Education, and Human Resources under National Agricultural Research System (NARS).

The Data Book has been compiled through the joint efforts of the ICAR-Indian Agricultural Statistics Research Institute (IASRI) and Indian Council of Agricultural Research (ICAR). This edition contains the latest information / data as available in the country at the end of June 2016. The first edition of the Data Book, which had the information up to the end of 1995, was published during 1996. Subsequently, an updated version of Agricultural Research Data Book is being brought out every year regularly. In ARDB 2016, some value additions like predicting the future year production of food grain crops etc., based on previous year data using statistical models, pictorial/graphical representations of data have been done. For depicting state-wise data, thematic maps have been prepared using Geographical Information System (GIS). It is hoped that the information presented in this Data Book will be useful for readers. Efforts have been made to incorporate the comments and suggestions received from various users. Critical comments and constructive suggestions on the content and presentation of the material in the Data Book will help enrich the future issues and will, therefore, be much appreciated. These may please be sent to:

**Dr. U.C. Sud, Director**

**ICAR-Indian Agricultural Statistics Research Institute**

**Library Avenue, Pusa, New Delhi-110 012**

**Fax: 011-25841564, Ph.: 011-25841479, e-mail: [director.iasri@icar.gov.in](mailto:director.iasri@icar.gov.in)**

Help from various organizations and sources in supplying requisite information included in the Data Book are very much acknowledged.

The contributions by ADGs and other officials of various SMDs of the Council, particularly of Dr. Kanchan K. Singh, ADG( Engg.) are highly acknowledged.

Efforts made by the concerned staff members from ICAR-IASRI and the Council in the preparation of the Data Book are duly appreciated.



**(K. ALGUSUNDARAM)**

Dy. Director General (Engg.), ICAR



**(U.C. SUD)**

Director, ICAR-IASRI

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|            | परिवर्णी शब्द                               | ACRONYMS                             |
|------------|---|--------------------------------------|
| 000'       | हजार  | Thousand                             |
| 000' t     | हजार टन                                     | Thousand tonnes                      |
| cm         | सेंटीमीटर                                   | Centimeter                           |
| ha         | हेक्टेयर                                    | Hectare                              |
| kg         | किलोग्राम                                   | Kilogram                             |
| kg/ha      | किलोग्राम / हेक्टेयर                        | Kilogram/ hectare                    |
| kW         | किलोवाट                                     | Kilowatt                             |
| kWh        | किलोवाट घंटा                                | Kilowatt hour                        |
| mm         | मिलिमीटर                                    | Milimeter                            |
| Mw         | मेगावाट                                     | Megawatt                             |
| million ha | मिलियन हेक्टेयर                             | Million hectare                      |
| MJ         | मेगा जूल्स                                  | Mega Joules                          |
| ppm        | पार्ट्स प्रति मिलियन                        | Parts per million                    |
| ppbv       | पार्ट्स प्रति बिलियन बाई वॉल्यूम            | Parts per billion by volume          |
| ppmv/year  | पार्ट्स प्रति मिलियन बाई वॉल्यूम प्रति वर्ष | Parts per million by volume per year |
| ppmv       | पार्ट्स प्रति मिलियन बाई वॉल्यूम            | Parts per million by volume          |
| pptv       | पार्ट्स प्रति ट्रायलियन बाई वॉल्यूम         | Part per trillion by volume          |
| q          | क्विंटल                                     | Quintal                              |
| Rs         | रुपये                                       | Rupees                               |
| t          | टन्स  | Tonnes                               |
| t/ha       | टन्स / हेक्टेयर                             | Tonnes/ hectare                      |
| µm         | माइक्रोमीटर                                 | Micrometer                           |
| Neg.       | नगण्य                                       | Negligible                           |
| FAO        | खाद्य एवं कृषि संगठन                        | Food and Agriculture Organisation    |
| FAQ        | उचित औसत गुणवत्ता                           | Fair Average Quality                 |
| K          | पोटाश                                       | Potash                               |

|      |                                      |   |
|------|--------------------------------------|---|
| N    | नाइट्रोजन                            | Nitrogen                                      |
| B    | बोरोन                                | Boron   |
| Fe   | आयरन                                 | Iron  |
| Zn   | जिंक                                 | Zinc  |
| Cu   | कॉपर                                 | Copper  |
| Mn   | मैंगनीज                              | Manganese                                     |
| Mo   | मॉलिबडीनम                            | Molybdenum                                    |
| SPM  | सोलिड पार्टिकुलेट मैटर               | Solid Particulate Matter                      |
| CWC  | केन्द्रीय जल आयोग                    | Central Water Commission                      |
| DAP  | लद्दू पशु शक्ति                      | Draught Animal Power                          |
| HSD  | उच्च श्रेणी का डीजल                  | High Speed Diesel                             |
| HYV  | उच्च उपज वाली किस्म                  | High Yielding Varieties                       |
| SPV  | सोलर फोटो वोल्टेक                    | Solar Photo Voltaic                           |
| R&D  | अनुसंधान एवं विकास                   | Research and Development                      |
| GNP  | सकल राष्ट्रीय उत्पाद                 | Gross National Product                        |
| NNP  | शुद्ध राष्ट्रीय उत्पाद               | Net National Product                          |
| PM   | पार्टिकुलेट मैटर                     | Particulate Matter                            |
| CFC  | क्लोरो-फ्लोरो कार्बन्स               | Chloro-Fluoro-Carbons                         |
| CIAE | केन्द्रीय कृषि अभियान्त्रिकी संस्थान | Central Institute of Agricultural Engineering |



## Conversion Factors between Important Primary and Secondary Agricultural Commodities

| <b>Commodity</b>              | <b>Conversion Factor</b>  |
|-------------------------------|---|
| Rice (Cleaned) Production     | 2/3 of Paddy Production   |
| <b>Cotton</b>                 |   |
| Cotton Lint Production        | 1/3 of Kapas Production   |
| Cotton Seed Production        | 2/3 of Kapas Production<br>2 times of Cotton Lint Production      |
| <b>Jute</b>                   |   |
| 100 Yards of Hessian          | 54 lbs of Raw Jute  |
| 4148 Yards of Hessian         | 1 Ton of Raw Jute<br>5.55 Bales of Raw Jute (of 180 kg. Each)     |
| 1 Ton of Sacking              | 1.11 Tons of Raw Jute<br>6.17 Bales of Raw Jute (of 180 kg. Each) |
| 1 Ton of Hessian Sacking etc. | 1.05 Tons of Raw Jute<br>5.85 Bales of Raw Jute (of 180 kg. Each) |
| <b>Groundnut</b>              |   |
| Kernel to Nuts in Shell       | 70 per cent   |
| Oil to Nuts in Shell          | 28 per cent   |
| Oil to Kernels Crushed        | 40 per cent   |
| Cake to Kernels Crushed       | 60 per cent   |
| <b>Sesamum</b>                |   |
| Oil to Seeds Crushed          | 40 per cent   |
| Cake to Seeds Crushed         | 60 per cent   |
| <b>Rapeseed and Mustard</b>   |   |
| Oil to Seeds Crushed          | 33 per cent   |
| Cake to Seeds Crushed         | 67 per cent   |
| <b>Linseed</b>                |   |
| Oil to seeds Crushed          | 33 per cent   |
| Cake to Seeds Crushed         | 67 per cent   |
| <b>Castor Seed</b>            |   |
| Oil to Seeds Crushed          | 37 per cent   |
| Cake to Seeds Crushed         | 63 per cent   |
| <b>Cotton Seed</b>            |   |
| Oil to Seeds Crushed          | 14 to 18 per cent   |
| Cake to Seeds Crushed         | 82 to 86 per cent   |
| <b>Coconut</b>                |   |
| Copra to Nuts                 | One Ton of Copra = 6773 Nuts                                      |
| Oil to Copra Crushed          | 62 per cent   |
| Cake to Copra Crushed         | 38 per cent   |
| <b>Nigerseed</b>              |   |
| Oil to Seeds Crushed          | 28 per cent   |
| Cake to Seeds Crushed         | 72 per cent   |

|  |  |
|--|--|
| <b>Kardi Seed</b>  |  |
| Oil to Seeds Crushed   | 40 per cent  |
| Cake to Seeds Crushed  | 60 per cent  |
| <b>Mahua Seed</b>  |  |
| Oil to Seeds Crushed   | 36 per cent  |
| Cake to Seeds Crushed  | 64 per cent  |
| <b>Neem Seed</b>   |  |
| Oil to Kernels Crushed   | 45 to 50 per cent                                    |
| Cake to Kernels Crushed  | 50 to 55 per cent                                    |
| <b>Soybean Seed</b>  |  |
| Oil to Soybean Seed Crushed  | 18 per cent  |
| Meal to Soybean Seed Crushed   | 73 per cent  |
| Hull from Soybean Seed Crushed                                       | 8 per cent   |
| Wastage from Soybean Seed Crushed                                    | 1 per cent   |
| <b>Sugar</b>   |  |
| Gur from Cane Crushed  | 11.20 per cent to 11.50 per cent                     |
| Crystal Sugar from Gur Refined (Gur Refineries)                      | 62.5 per cent  |
| Crystal Sugar from Cane Crushed (Cane Factories)                     | 10.20 per cent                                       |
| Khandasari Sugar (Sulpher and Non-sulpher) from standard Gur Refined | 46 per cent  |
| Molasses from Cane Crushed   | 4.0 per cent to 4.5 per cent                         |
| Cane-Trash* from Cane Harvested                                      | 8.0 per cent to 12.0 per cent                        |
| <b>Lac</b>   |  |
| Seed Lac   | 66.0 per cent of Stick Lac                           |
| Shell Lac  | 57.4 per cent of Stick, or 87.0 per cent of Seed Lac |
| <b>Cashewnut</b>   |  |
| Cashew Kernel  | 25 per cent of Cashewnuts                            |

**Note** : \*This consists of leaves and portion of the top of stalk which are removed from the cane stalk, while harvesting and before sending the cane for milling.

**Source** : Agricultural Statistics at a Glance, 2014, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

## CONVERSION FACTORS

| Area                      |          |                                 | Weight          |                    |   |
|---------------------------|----------|---------------------------------|-----------------|--------------------|---|
| 1 ha                      | =        | 2.47100 acres                   | 1 metric tonne  | =                  | 2204.7 pounds                               |
|                           | =        | 100 x 100 sq m                  |                 | =                  | 0.98421 long ton                            |
|                           | =        | 50 Nali                         |                 | =                  | 1.10231 short ton                           |
| 1 Nali                    | =        | 200 sq m                        |                 | =                  | 1000 kg                                     |
| 1 acre                    | =        | 0.40468 ha                      | 1 q             | =                  | 100 kg                                      |
|                           | =        | 4840 sq yd                      | 1 long ton      | =                  | 2.240 pounds                                |
|                           | =        | 43560 sq ft                     |                 | =                  | 1.01605 metric tons                         |
|                           | =        | 0.00156 sq miles                | 1 short ton     | =                  | 2.000 pounds                                |
| =                         | 8 Kanals | =                               |                 | 0.90781 metric ton |   |
| 1 sq mile                 | =        | 640 acres                       | 1 kg            | =                  | 2.20462 pounds                              |
|                           | =        | 259 ha                          | 1 pound         | =                  | 0.45359 kg                                  |
|                           | =        | 2.59 sq km                      | 1 ounce         | =                  | 0.283 kg or 28.35 gm                        |
| 1 sq kilometer            | =        | 0.3861 sq miles                 | 16 ounce        | =                  | 1 pound                                     |
| 100 sq ft                 | =        | 9.290 sq m                      | 10 pounds       | =                  | 4.54 kg                                     |
| 10 Marlas                 | =        | 0.0253 ha                       | 1 mound         | =                  | 81.2857 pounds                              |
| 10 Bighas                 | =        | 0.8440 ha                       |                 | =                  | 37.32410 kg                                 |
|                           | =        | 2.0830 acre                     | <b>Distance</b> |                    |   |
| 10 Biswas                 | =        | 0.0420 ha                       | 1 mile          | =                  | 8 furlongs or 1760 yards or 5280 ft         |
| 20 Biswas                 | =        | 1 Bigha                         |                 | =                  | 1.609344 km                                 |
| 20 Biswani                | =        | 1 Biswa                         |                 | =                  | 1609.344 m                                  |
| 4.8 Bighas                | =        | 1 acre                          | 1 furlong       | =                  | 220 yards                                   |
| 640 acre                  | =        | 1 sq mile                       |                 | =                  | 660 ft                                      |
| 10 Kanals                 | =        | 0.5058 ha                       |                 | =                  | 0.201168 km                                 |
| 1 Kanal                   | =        | 20 Marla                        |                 | =                  | 201.168 m                                   |
| <b>Yield</b>              |          |                                 |                 | =                  | 0.125 mile                                  |
| 100 kg per ha             | =        | 1.4869 bushels (60 lb) per acre | 1 km            | =                  | 5/8 mile = 0.6213712 mile = 4.97097 furlong |
| 1 bushel (60 lb) per acre | =        | 67.253 kg per ha                |                 | =                  | 3280.83 ft                                  |
| 1 kg per ha               | =        | 0.892169 lb per acre            |                 | =                  | 1000 m                                      |
| 1 lb per acre             | =        | 1.120864 kg per ha              |                 | =                  | 1093.613 yards                              |
| <b>Energy</b>             |          |                                 | =               | 1.0936 yards       |   |
| 1 BTU                     | =        | 251.9958 calorie                | 1 meter         | =                  | 3.28089 ft                                  |
|                           | =        | 0.0003930148 horse power-hour   |                 | =                  | 100 cm                                      |
|                           | =        | 1055.056 Joule                  | 1 inch          | =                  | 25.4 mm                                     |
|                           | =        | 0.0002930711 kilo watt-hour     |                 | =                  | 2.54 cm                                     |
|                           | =        | 0.2930711 watt hour             | 1 foot          | =                  | 30.48 cm                                    |
| 1 calorie                 | =        | 0.003968321 BTU                 | 1 yard          | =                  | 0.3048 m                                    |
|                           | =        | 4.1868 Joule                    |                 | =                  | 91.44 cm                                    |
|                           | =        | 0.001163 watt-hour              | =               | 0.9144 m           |   |

## CONVERSION FACTORS

|                                      |          |
|--------------------------------------|----------|
| Atmosphere to lbs per sq inch        | 14.73    |
| British thermal unit to kilo calorie | 0.252    |
| Cubic centimeter to cubic inch       | 0.061103 |
| Cubic feet to cubic metre            | 0.02832  |
| Cubic feet to gallons                | 6.228    |
| Cubic inch to litre                  | 0.01639  |
| Cubic metre to cubic yard            | 1.308    |
| Foot lbs per second to horse power   | 0.001818 |
| Foot lbs to kilogram metre           | 0.1383   |
| U.S. Gallons to litre                | 3.785    |
| Barrels to gallons                   | 42.00    |
| Grams to ounces                      | 0.03527  |
| Grams to lbs                         | 0.002205 |
| Horse power to kWatts                | 0.746    |

**Source** : *Fertiliser Statistics, 2010-11*, The Fertiliser Association of India, New Delhi.



भाग-I  
प्राकृतिक संसाधन

SECTION-I  
Natural Resources





Table 1.1: Land use classification in India

| Classification   | 1950-51          | 1960-61          | 1970-71          | 1980-81          | 1990-91          | 2000-01          | 2008-09#         | 2009-10#         | 2010-11#         | 2011-12#         | 2012-13#         |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>I. Geographic area</b>  | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           | 328.73           |
| <b>II. Reporting area for land utilisation statistics (1 to 5)</b> | 284.32           | 298.46           | 303.75           | 304.16           | 304.86           | 305.19           | 305.84           | 305.83           | 305.92           | 305.83           | 305.94           |
| <b>1. Forests</b>  | 40.48<br>(14.2)  | 54.05<br>(18.1)  | 63.83<br>(21.0)  | 67.46<br>(22.2)  | 67.81<br>(22.2)  | 69.84<br>(22.9)  | 69.98<br>(22.9)  | 69.99<br>(22.9)  | 70.03<br>(22.9)  | 70.04<br>(22.9)  | 70.01<br>(22.9)  |
| <b>2. Not available for cultivation (a+b)</b>                      | 47.52            | 50.75            | 44.61            | 39.55            | 40.48            | 41.23            | 43.06            | 43.34            | 59.67            | 59.92            | 60.27            |
| (a) Non-agricultural uses  | 9.36<br>(3.3)    | 14.84<br>(5.4)   | 16.48<br>(5.4)   | 19.60<br>(6.4)   | 21.09<br>(6.9)   | 23.75<br>(7.8)   | 26.21<br>(8.6)   | 26.16<br>(8.6)   | 26.40<br>(8.7)   | 26.31<br>(8.6)   | 26.45<br>(8.6)   |
| (b) Barren and uncultivable land                                   | 38.16<br>(13.4)  | 35.91<br>(12.0)  | 28.13<br>(9.3)   | 19.96<br>(6.6)   | 19.39<br>(6.4)   | 17.48<br>(5.7)   | 16.85<br>(5.5)   | 17.18<br>(5.6)   | 17.18<br>(5.6)   | 17.22<br>(5.6)   | 17.28<br>(5.6)   |
| <b>3. Other uncultivated land excluding fallow land (a+b+c)</b>    | 49.45            | 37.64            | 35.13            | 32.31            | 30.22            | 27.74            | 26.42            | 26.50            | 33.27            | 33.61            | 33.82            |
| (a) Permanent pastures and other grazing land                      | 6.68<br>(2.3)    | 13.97<br>(4.7)   | 13.26<br>(4.4)   | 11.99<br>(3.9)   | 11.40<br>(3.7)   | 10.66<br>(3.5)   | 10.34<br>(3.4)   | 10.34<br>(3.4)   | 10.31<br>(3.4)   | 10.31<br>(3.4)   | 10.24<br>(3.3)   |
| (b) Miscellaneous tree crops and groves                            | 19.83<br>(7.0)   | 4.46<br>(1.5)    | 4.37<br>(1.4)    | 3.58<br>(1.2)    | 3.82<br>(1.3)    | 3.44<br>(1.1)    | 3.34<br>(1.1)    | 3.21<br>(1.1)    | 3.20<br>(1.1)    | 3.17<br>(1.03)   | 3.16<br>(1.03)   |
| (c) Culturable waste land  | 22.94<br>(8.1)   | 19.21<br>(6.4)   | 17.50<br>(5.8)   | 16.74<br>(5.5)   | 15.00<br>(4.9)   | 13.63<br>(4.5)   | 12.73<br>(4.2)   | 12.95<br>(4.2)   | 12.65<br>(4.1)   | 12.64<br>(4.1)   | 12.58<br>(4.1)   |
| <b>4. Fallow land (a+b)</b>  | 28.12            | 22.82            | 19.33            | 24.55            | 23.37            | 25.04            | 24.48            | 26.85            | 24.60            | 25.18            | 26.28            |
| (a) Fallow land other than current fallow                          | 17.45<br>(6.1)   | 11.18<br>(3.7)   | 8.73<br>(2.9)    | 9.72<br>(3.2)    | 9.66<br>(3.2)    | 10.27<br>(3.4)   | 10.29<br>(3.4)   | 10.84<br>(3.5)   | 10.32<br>(3.4)   | 10.66<br>(3.5)   | 11.00<br>(3.6)   |
| (b) Current fallow   | 10.68<br>(3.8)   | 11.64<br>(3.9)   | 10.60<br>(3.5)   | 14.83<br>(4.9)   | 13.70<br>(4.5)   | 14.78<br>(4.8)   | 14.19<br>(4.6)   | 16.01<br>(5.2)   | 14.28<br>(4.7)   | 14.51<br>(4.7)   | 15.28<br>(5.0)   |
| <b>5. Net area sown</b>  | 118.75<br>(41.8) | 133.20<br>(44.6) | 140.86<br>(46.4) | 140.29<br>(46.1) | 143.00<br>(46.9) | 141.34<br>(46.3) | 141.90<br>(46.4) | 139.17<br>(45.5) | 141.56<br>(46.3) | 140.97<br>(46.1) | 139.93<br>(45.7) |
| <b>6. Area sown more than once</b>                                 | 13.15            | 19.57            | 24.93            | 34.63            | 42.74            | 44.00            | 53.41            | 49.82            | 56.00            | 54.66            | 54.47            |
| <b>7. Gross cropped area (5+6)</b>                                 | 131.89           | 152.77           | 165.79           | 172.63           | 185.74           | 185.34           | 195.31           | 188.99           | 197.56           | 195.63           | 194.40           |
| <b>8. Cropping intensity*</b>                                      | 111.07           | 114.69           | 117.70           | 123.05           | 129.89           | 131.13           | 137.64           | 135.80           | 139.56           | 138.77           | 138.92           |
| <b>III. Net irrigated area</b>                                     | 20.85            | 24.66            | 31.10            | 38.72            | 48.02            | 55.20            | 63.64            | 61.94            | 63.66            | 65.69            | 66.10            |
| <b>IV. Gross irrigated area</b>                                    | 22.56            | 27.98            | 38.20            | 49.78            | 63.20            | 76.19            | 88.90            | 85.08            | 88.89            | 91.73            | 92.58            |

**Note :** 1. # Provisional, 2. \* Cropping intensity is percentage of the gross cropped area to the net area sown, 3. Figures in parentheses indicate percentage to the reported area.  
**Source :** 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India (Website: <http://www.daenet.nic.in/cands>).  
 2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: <http://www.daenet.nic.in/PDF/Pocket-Book2015.pdf>).

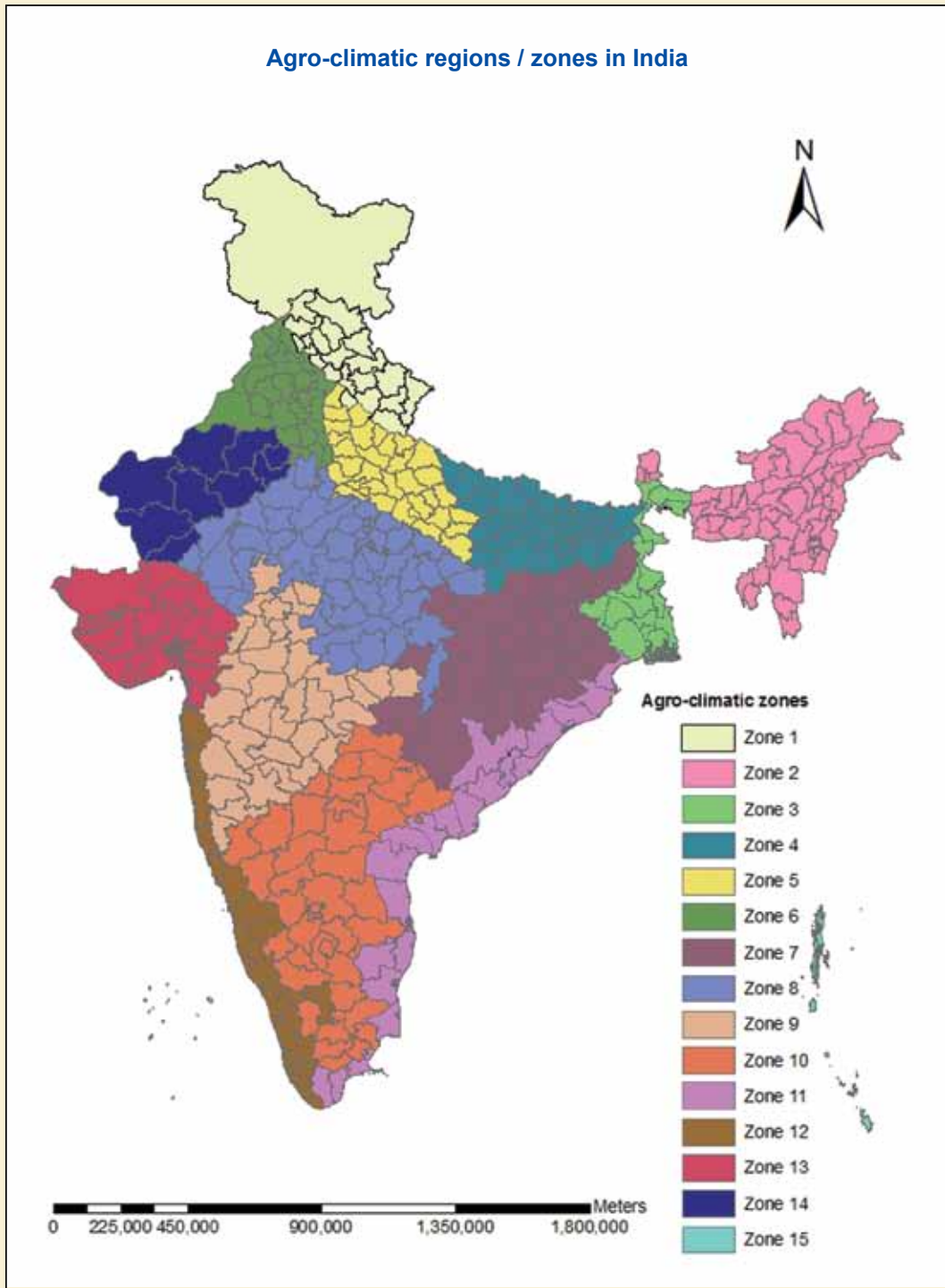
**Table 1.2: Agro-climatic regions / zones in India**

| S.No. | Agro-climatic regions/zones        | States represented  |
|-------|------------------------------------|---|
| I     | Western Himalayan region           | Himachal Pradesh, Jammu & Kashmir, Uttarakhand  |
| II    | Eastern Himalayan region           | Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, West Bengal |
| III   | Lower Gangetic plain region        | West Bengal   |
| IV    | Middle Gangetic plain region       | Uttar Pradesh, Bihar  |
| V     | Upper Gangetic plain region        | Uttar Pradesh   |
| VI    | Trans Gangetic plain region        | Chandigarh, Delhi, Haryana, Punjab, Rajasthan   |
| VII   | Eastern plateau and hills region   | Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, West Bengal                     |
| VIII  | Central plateau and hills region   | Madhya Pradesh, Rajasthan, Uttar Pradesh  |
| IX    | Western plateau and hills region   | Madhya Pradesh, Maharashtra   |
| X     | Southern plateau and hills region  | Andhra Pradesh, Karnataka, Tamil Nadu   |
| XI    | East coast plains and hills region | Andhra Pradesh, Odisha, Puducherry, Tamil Nadu  |
| XII   | West coast plains and ghat region  | Goa, Karnataka, Kerala, Maharashtra, Tamil Nadu   |
| XIII  | Gujarat plains and hills region    | Gujarat, Dadra & Nagar Haveli, Daman & Diu  |
| XIV   | Western dry region                 | Rajasthan   |
| XV    | Island region                      | Andaman & Nicobar Islands, Lakshdweep   |

**Source** : Planning Commission (Khanna, 1989) has identified 15 resource development regions in the country, 14 in the main land and remaining one in the islands of Bay of Bengal and Arabian Sea.



### Agro-climatic regions / zones in India



**Table 1.3: Agro-ecological regions in India**

| Eco-system             | Region   | States represented                                     | Eco-region  | Soil type   | Growing period (no. of days) |
|------------------------|--|--|---|---|------------------------------|
| <b>Arid</b>            | 1. Western Himalaya  | Jammu & Kashmir, HP                                    | Cold arid   | Shallow Skeletal                                  | <90                          |
|                        | 2. Western plain, Kutch and part of Kathiawar Peninsula            | Gujarat, Rajasthan, Haryana, Punjab                    | Hot arid  | Desert & Saline                                   | <90                          |
|                        | 3. Deccan plateau  | AP, Karnataka  | Hot arid  | Red & Black                                       | <90                          |
| <b>Semi-arid</b>       | 4. Northern plain and Central Highlands including Aravallis        | Gujarat, Rajasthan, UP, MP, Haryana, Punjab            | Hot semi-arid   | Alluvium-derived                                  | 90-150                       |
|                        | 5. Central (Malwa) Highlands, Gujarat plains & Kathiawar Peninsula | Gujarat, MP  | Hot semi-arid   | Medium & Deep black                               | 90-150                       |
|                        | 6. Deccan Plateau  | Karnataka, AP, Maharashtra, MP                         | Hot semi-arid   | Shallow and Medium (with inclusion of deep) black | 90-150                       |
|                        | 7. Deccan (Telangana) Plateau and Eastern Ghats                    | AP   | Hot semi-arid   | Red & Black                                       | 90-150                       |
|                        | 8. Eastern Ghats, TN uplands and Deccan (Karnataka) Plateau        | Karnataka, TN, Kerala                                  | Hot semi-arid   | Red loamy   | 90-150                       |
| <b>Sub-humid</b>       | 9. Northern plain  | Bihar, UP, Punjab                                      | Hot sub-humid (dry)                                     | Alluvium-derived                                  | 150-180                      |
|                        | 10. Central Highlands (Malwa, Bundelkhand & Eastern Satpura)       | MP, Maharashtra  | Hot sub-humid   | Black & Red                                       | 150-180 (to 210)             |
|                        | 11. Eastern Plateau (Chhattisgarh)                                 | MP   | Hot sub-humid   | Red & Yellow                                      | 150-180                      |
|                        | 12. Eastern (Chhota Nagpur) Plateau and Eastern Ghats              | Odisha, W. Bengal, Bihar, MP, Maharashtra              | Hot sub-humid   | Red & Lateritic                                   | 150-180 (to 210)             |
|                        | 13. Eastern plain  | UP, Bihar  | Hot sub-humid (moist)                                   | Alluvium-derived                                  | 180-210                      |
|                        | 14. Western Himalayas  | J&K, HP, UP  | Warm sub-humid (to humid with inclusion of per humid)   | Brown forest and podzolic                         | 180-210+                     |
| <b>Humid-per humid</b> | 15. Bengal and Assam plains  | West Bengal, Assam                                     | Hot sub-humid (moist) to humid (inclusion of per humid) | Alluvium-derived                                  | 210+                         |
|                        | 16. Eastern Himalayas  | Arunachal Pradesh, Sikkim, W. Bengal                   | Warm per humid  | Brown and Red hill                                | 210+                         |
|                        | 17. North Eastern Hills (Purvanchal)                               | Tripura, Mizoram, Meghalaya                            | Warm per humid  | Red and Lateritic                                 | 210+                         |
| <b>Coastal</b>         | 18. Eastern Coastal plain  | TN, Puducherry, AP, Odisha, W. Bengal                  | Hot sub-humid to semi-arid                              | Coastal Alluvium-derived                          | 90-210+                      |
|                        | 19. Western Ghats & Coastal plain                                  | Kerala, Goa, Daman & Diu, Maharashtra, Gujarat, Kerala | Hot humid per humid                                     | Red, lateritic and alluvium-derived               | 210+                         |
| <b>Island</b>          | 20. Island of Andaman- Nicobar and Lakshadweep                     | Andaman-Nicobar and Lakshadweep                        | Hot humid per humid                                     | Red loamy and sandy                               | 210+                         |

**Source** : 1. *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.  
2. ICAR-National Bureau of Soil Survey and Land Use Planning, Nagpur.

**Table: 1.4 Gross cropped area percentage distribution**

| Crop                                 | Percentage Share of Area to Gross Cropped Area |             |
|--------------------------------------|--|-------------|
|                                      | 2011-12 <sup>1</sup>                           | 2012-13*    |
| Rice                                 | 22.3   | 22.0        |
| Jowar                                | 3.2  | 3.2         |
| Bajra                                | 4.5  | 3.9         |
| Maize                                | 4.4  | 4.4         |
| Ragi                                 | 0.6  | 0.6         |
| Wheat                                | 15.4   | 15.7        |
| Barley                               | 0.3  | 0.4         |
| Other Cereals and Millets            | 0.4  | 0.4         |
| <b>Total Cereals and Millets</b>     | <b>51.2</b>                                    | <b>50.6</b> |
| Gram                                 | 4.0  | 4.1         |
| Tur                                  | 1.9  | 1.8         |
| Other Pulses (Excl.Gram & Tur)       | 6.1  | 5.4         |
| <b>Total Pulses</b>                  | <b>12.0</b>                                    | <b>11.3</b> |
| <b>Total Foodgrains</b>              | <b>63.2</b>                                    | <b>61.9</b> |
| Sugarcane                            | 2.8  | 2.8         |
| <b>Total Condiments and Spices</b>   | <b>1.9</b>                                     | <b>1.7</b>  |
| <b>Total Fruits &amp; Vegetables</b> | <b>4.8</b>                                     | <b>5.0</b>  |
| Other Food Crops                     | 0.1  | 0.1         |
| <b>Total Food Crops</b>              | <b>72.7</b>                                    | <b>71.6</b> |
| Groundnut                            | 2.7  | 2.7         |
| Castor-seed                          | 0.7  | 0.6         |
| Sesamum                              | 1.0  | 0.9         |
| Rapeseeds and Mustard                | 2.8  | 3.1         |
| Linseed                              | 0.1  | 0.1         |
| Coconut                              | 1.0  | 1.0         |
| Other Oilseeds                       | 6.1  | 6.6         |
| <b>Total Oilseeds</b>                | <b>14.4</b>                                    | <b>15.0</b> |
| Cotton                               | 6.2  | 6.1         |
| Jute                                 | 0.4  | 0.4         |
| Other Fibres                         | 0.1  | 0.1         |
| <b>Total Fibres</b>                  | <b>6.7</b>                                     | <b>6.6</b>  |
| Tobacco                              | 0.2  | 0.2         |
| Tea                                  | 0.3  | 0.3         |
| Coffee                               | 0.2  | 0.2         |
| Fodder Crops                         | 4.0  | 4.7         |
| Other Non-food Crops                 | 1.5  | 1.4         |
| <b>Total Non-food Crops</b>          | <b>27.3</b>                                    | <b>28.4</b> |
| <b>Total area under crops</b>        | <b>100</b>                                     | <b>100</b>  |

**Note :** \* Provisional.

**Source :** 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India (Website: <http://www.dacnet.nic.in/eands>).

2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: [eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf](http://eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf)).

**Table 1.5: Area under broad soil groups**

(million ha)

| Major soil groups              | Area         | % of total geographical area |
|--------------------------------|--------------|------------------------------|
| Red loamy                      | 23.0         | 7.00                         |
| Red sandy                      | 49.0         | 14.90                        |
| Laterite                       | 11.7         | 3.60                         |
| Red & yellow                   | 33.5         | 10.20                        |
| Shallow black                  | 6.5          | 2.00                         |
| Medium black                   | 41.7         | 12.70                        |
| Deep black                     | 16.2         | 4.90                         |
| Mixed red & black              | 14.8         | 4.50                         |
| Coastal alluvium               | 6.2          | 1.90                         |
| Coastal sand                   | 1.1          | 0.30                         |
| Deltaic alluvium               | 7.1          | 2.20                         |
| Alluvial-recent                | 39.0         | 11.90                        |
| Calcareous alluvium            | 2.2          | 0.70                         |
| Calcareous sierozem            | 4.9          | 1.50                         |
| Old alluvium                   | 2.8          | 0.90                         |
| Grey brown                     | 8.9          | 2.70                         |
| Desert soils-regosolic         | 13.4         | 4.10                         |
| Desert soils-lithosolic        | 8.5          | 2.60                         |
| Tarai                          | 3.1          | 0.90                         |
| Brown hill                     | 12.4         | 3.80                         |
| Sub-mountane                   | 4.7          | 1.40                         |
| Mountain meadow                | 6.6          | 2.00                         |
| Saline & alkaline              | *            | *                            |
| Peaty and saline peaty         | 0.4          | 0.10                         |
| Skeletal                       | 4.2          | 1.30                         |
| Other                          | 6.8          | 1.90                         |
| <b>Total geographical area</b> | <b>328.7</b> | <b>100.00</b>                |

**Note** : \* The area of this soil is included into the areas under different groups of soil.

**Source** : 1. *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

2. *Indian Agriculture in Brief -23<sup>rd</sup> Edition*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India (Website: <http://www.dacnet.nic.in/eands>).

**Table 1.6: Average size of holdings by different size classes**

(ha)

| Major size classes      |                 | Average size of operational holdings |             |             |             |             |             |             |
|-------------------------|-----------------|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                         |                 | 1970-71                              | 1980-81     | 1990-91     | 1995-96     | 2000-01*    | 2005-06*    | 2010-11     |
| <b>Marginal</b>         | below 1 ha      | 0.40                                 | 0.39        | 0.39        | 0.40        | 0.40        | 0.38        | 0.39        |
| <b>Small</b>            | 1 to 2 ha       | 1.44                                 | 1.44        | 1.43        | 1.42        | 1.42        | 1.38        | 1.42        |
| <b>Semi-Medium</b>      | 2 to 4 ha       | 2.81                                 | 2.78        | 2.76        | 2.73        | 2.72        | 2.68        | 2.71        |
| <b>Medium</b>           | 4 to 10 ha      | 6.08                                 | 6.02        | 5.90        | 5.84        | 5.81        | 5.74        | 5.76        |
| <b>Large</b>            | 10 ha and above | 18.10                                | 17.41       | 17.33       | 17.20       | 17.12       | 17.08       | 17.37       |
| <b>All size classes</b> |                 | <b>2.28</b>                          | <b>1.84</b> | <b>1.55</b> | <b>1.41</b> | <b>1.33</b> | <b>1.23</b> | <b>1.15</b> |

**Note** : \* Excluding Jharkhand.

**Source** : *Agriculture Census 2010-11*, Agriculture Census Division, Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India.

**Table 1.7: Number and area of operational holdings by type of holding**

(Number: 000', Area: 000' ha)

| Major size Classes             | Number                 |                        |                         |                         |                         | Area                    |                         |                         |                         |                         |                         |                         |                         |                         |
|--------------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                | 1970-71                | 1980-81                | 1990-91                 | 1995-96                 | 2000-01*                | 2005-06*                | 2010-11                 | 1970-71                 | 1980-81                 | 1990-91                 | 1995-96                 | 2000-01*                | 2005-06*                | 2010-11                 |
| <b>Marginal (Below 1 ha)</b>   | 36200<br>(51.0)        | 50122<br>(56.4)        | 63389<br>(59.4)         | 71179<br>(61.6)         | 75408<br>(62.9)         | 83694<br>(64.8)         | 92826<br>(67.0)         | 14599<br>(9.0)          | 19735<br>(12.1)         | 24894<br>(15.0)         | 28121<br>(17.2)         | 29814<br>(18.7)         | 32026<br>(22.2)         | 35908<br>(22.3)         |
| <b>Small (1 to 2 ha)</b>       | 13432<br>(18.9)        | 16072<br>(18.1)        | 20092<br>(18.8)         | 21643<br>(18.7)         | 22695<br>(18.9)         | 23930<br>(18.6)         | 24779<br>(17.9)         | 19282<br>(11.9)         | 23169<br>(14.1)         | 28827<br>(17.4)         | 30722<br>(18.8)         | 32139<br>(20.1)         | 33101<br>(20.9)         | 35244<br>(22.1)         |
| <b>Semi-medium (2 to 4 ha)</b> | 10681<br>(15.0)        | 12455<br>(14.0)        | 13923<br>(13.1)         | 14261<br>(12.4)         | 14021<br>(11.7)         | 14127<br>(10.9)         | 13896<br>(10.0)         | 29999<br>(18.5)         | 34645<br>(21.2)         | 38375<br>(23.2)         | 38953<br>(23.8)         | 38193<br>(24.0)         | 37898<br>(23.9)         | 37705<br>(23.7)         |
| <b>Medium (4 to 10 ha)</b>     | 7932<br>(11.2)         | 8068<br>(9.1)          | 7580<br>(7.1)           | 7092<br>(6.1)           | 6577<br>(5.5)           | 6375<br>(4.9)           | 5877<br>(4.2)           | 48234<br>(29.7)         | 48543<br>(29.6)         | 44752<br>(27.1)         | 41398<br>(25.4)         | 38217<br>(24.0)         | 36583<br>(23.1)         | 33828<br>(21.2)         |
| <b>Large (10 ha and above)</b> | 2766<br>(3.9)          | 2166<br>(2.4)          | 1654<br>(1.6)           | 1404<br>(1.2)           | 1230<br>(1.0)           | 1096<br>(0.8)           | 973<br>(0.7)            | 50064<br>(30.9)         | 37705<br>(23.0)         | 28659<br>(17.3)         | 24160<br>(14.8)         | 21072<br>(13.2)         | 18715<br>(11.9)         | 16907<br>(10.6)         |
| <b>All size classes</b>        | <b>71011<br/>(100)</b> | <b>88883<br/>(100)</b> | <b>106637<br/>(100)</b> | <b>115580<br/>(100)</b> | <b>119931<br/>(100)</b> | <b>129222<br/>(100)</b> | <b>138348<br/>(100)</b> | <b>162318<br/>(100)</b> | <b>163797<br/>(100)</b> | <b>165507<br/>(100)</b> | <b>163355<br/>(100)</b> | <b>159436<br/>(100)</b> | <b>158323<br/>(100)</b> | <b>159592<br/>(100)</b> |

Note : 1. Figures in parentheses indicate per cent contribution.

2. \*Excluding Jharkhand.

Source : Agriculture Census 2010-11, Agriculture Census Division, Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India.

**Table 1.8 (a) : State-wise distribution of number of operational holdings and area operated-all social groups**  
(Number: 000', Area: 000' ha)

| States/<br>Union Territories | Agriculture<br>Census | Marginal |      | Small |      | Semi-<br>medium |      | Medium |      | Large |      | All Holdings |       |
|------------------------------|-----------------------|----------|------|-------|------|-----------------|------|--------|------|-------|------|--------------|-------|
|                              |                       | No.      | Area | No.   | Area | No.             | Area | No.    | Area | No.   | Area | No.          | Area  |
| <b>Andhra Pradesh</b>        | 2005-06               | 7417     | 3287 | 2639  | 3730 | 1444            | 3835 | 487    | 2759 | 56    | 878  | 12044        | 14489 |
|                              | 2010-11               | 8425     | 3727 | 2918  | 4120 | 1399            | 3685 | 397    | 2209 | 36    | 552  | 13175        | 14293 |
| <b>Arunachal Pradesh</b>     | 2005-06               | 22       | 11   | 25    | 33   | 30              | 85   | 27     | 169  | 4     | 63   | 109          | 361   |
|                              | 2010-11               | 21       | 12   | 19    | 26   | 34              | 94   | 28     | 155  | 7     | 97   | 109          | 384   |
| <b>Assam</b>                 | 2005-06               | 1753     | 760  | 591   | 718  | 318             | 846  | 83     | 425  | 5     | 299  | 2750         | 3049  |
|                              | 2010-11               | 1831     | 775  | 497   | 687  | 304             | 818  | 85     | 437  | 4     | 282  | 2720         | 2999  |
| <b>Bihar</b>                 | 2005-06               | 13139    | 3313 | 978   | 1224 | 438             | 1135 | 98     | 505  | 4     | 74   | 14657        | 6251  |
|                              | 2010-11               | 14744    | 3669 | 948   | 1186 | 415             | 1073 | 81     | 415  | 3     | 45   | 16191        | 6388  |
| <b>Chhattisgarh</b>          | 2005-06               | 1919     | 840  | 760   | 1078 | 517             | 1396 | 231    | 1327 | 34    | 569  | 3461         | 5210  |
|                              | 2010-11               | 2183     | 953  | 831   | 1179 | 503             | 1348 | 202    | 1153 | 28    | 451  | 3746         | 5084  |
| <b>Goa</b>                   | 2005-06               | 43       | 12   | 6     | 7    | 3               | 7    | 1      | 7    | Neg.  | 28   | 53           | 61    |
|                              | 2010-11               | 45       | 14   | 6     | 9    | 4               | 10   | 2      | 10   | Neg.  | 11   | 58           | 53    |
| <b>Gujarat</b>               | 2005-06               | 1585     | 792  | 1345  | 1959 | 1081            | 3004 | 582    | 3380 | 68    | 1133 | 4661         | 10269 |
|                              | 2010-11               | 1748     | 857  | 1380  | 2004 | 1042            | 2886 | 496    | 2835 | 72    | 1397 | 4738         | 9979  |
| <b>Haryana</b>               | 2005-06               | 764      | 346  | 311   | 448  | 283             | 800  | 196    | 1186 | 49    | 803  | 1603         | 3583  |
|                              | 2010-11               | 778      | 360  | 315   | 463  | 284             | 814  | 195    | 1185 | 46    | 823  | 1617         | 3646  |
| <b>Himachal Pradesh</b>      | 2005-06               | 637      | 258  | 176   | 245  | 88              | 240  | 29     | 165  | 4     | 60   | 933          | 968   |
|                              | 2010-11               | 670      | 272  | 175   | 244  | 85              | 231  | 28     | 157  | 3     | 51   | 961          | 955   |

| States/<br>Union Territories | Agriculture<br>Census | Marginal |      | Small |      | Semi-<br>medium |      | Medium |      | Large |      | All Holdings |       |
|------------------------------|-----------------------|----------|------|-------|------|-----------------|------|--------|------|-------|------|--------------|-------|
|                              |                       | No.      | Area | No.   | Area | No.             | Area | No.    | Area | No.   | Area | No.          | Area  |
| Jammu & Kashmir              | 2005-06               | 1123     | 406  | 169   | 237  | 71              | 193  | 14     | 74   | 1     | 12   | 1378         | 923   |
|                              | 2010-11               | 1207     | 416  | 167   | 235  | 64              | 171  | 11     | 62   | 1     | 12   | 1449         | 895   |
| Jharkhand                    | 2005-06               | N.A.     | N.A. | N.A.  | N.A. | N.A.            | N.A. | N.A.   | N.A. | N.A.  | N.A. | N.A.         | N.A.  |
|                              | 2010-11               | 1848     | 764  | 429   | 591  | 283             | 775  | 129    | 725  | 20    | 311  | 2709         | 3165  |
| Karnataka                    | 2005-06               | 3656     | 1651 | 2013  | 2876 | 1278            | 3468 | 554    | 3205 | 79    | 1184 | 7581         | 12385 |
|                              | 2010-11               | 3849     | 1851 | 2138  | 3020 | 1267            | 3393 | 511    | 2904 | 68    | 994  | 7832         | 12161 |
| Kerala                       | 2005-06               | 6602     | 896  | 215   | 285  | 70              | 179  | 15     | 79   | 2     | 117  | 6904         | 1555  |
|                              | 2010-11               | 6580     | 886  | 180   | 282  | 57              | 159  | 12     | 64   | 2     | 120  | 6831         | 1511  |
| Madhya Pradesh               | 2005-06               | 3199     | 1587 | 2148  | 3076 | 1566            | 4304 | 868    | 5087 | 127   | 1939 | 7908         | 15994 |
|                              | 2010-11               | 3891     | 1915 | 2449  | 3466 | 1655            | 4510 | 789    | 4545 | 89    | 1400 | 8872         | 15836 |
| Maharashtra                  | 2005-06               | 6118     | 2801 | 4150  | 5248 | 2452            | 6130 | 925    | 4885 | 70    | 941  | 13716        | 20005 |
|                              | 2010-11               | 6709     | 3186 | 4049  | 5734 | 2158            | 5761 | 710    | 3989 | 73    | 1171 | 13699        | 19842 |
| Manipur                      | 2005-06               | 77       | 40   | 49    | 63   | 22              | 55   | 3      | 14   | Neg.  | Neg. | 150          | 172   |
|                              | 2010-11               | 77       | 40   | 49    | 63   | 22              | 55   | 3      | 13   | Neg.  | Neg. | 151          | 172   |
| Meghalaya                    | 2005-06               | 112      | 55   | 55    | 73   | 29              | 73   | 6      | 34   | Neg.  | 6    | 203          | 241   |
|                              | 2010-11               | 109      | 61   | 61    | 96   | 32              | 88   | 7      | 37   | Neg.  | 4    | 209          | 287   |
| Mizoram                      | 2005-06               | 43       | 27   | 31    | 41   | 14              | 32   | 1      | 7    | Neg.  | 3    | 90           | 110   |
|                              | 2010-11               | 50       | 30   | 30    | 38   | 10              | 24   | 2      | 9    | Neg.  | 4    | 92           | 105   |
| Nagaland                     | 2005-06               | 12       | 6    | 13    | 16   | 37              | 93   | 76     | 465  | 30    | 593  | 169          | 1173  |
|                              | 2010-11               | 8        | 4    | 20    | 23   | 47              | 122  | 78     | 476  | 25    | 441  | 178          | 1066  |

| States/<br>Union Territories             | Agriculture<br>Census | Marginal |      | Small |      | Semi-<br>medium |      | Medium |      | Large |      | All Holdings |       |
|--|-----------------------|----------|------|-------|------|-----------------|------|--------|------|-------|------|--------------|-------|
|  |                       | No.      | Area | No.   | Area | No.             | Area | No.    | Area | No.   | Area | No.          | Area  |
| <b>Odisha</b>                            | 2005-06               | 2597     | 1342 | 1156  | 1588 | 472             | 1251 | 120    | 658  | 11    | 181  | 4356         | 5019  |
|  | 2010-11               | 3368     | 1922 | 919   | 1498 | 311             | 919  | 64     | 381  | 6     | 142  | 4667         | 4862  |
| <b>Punjab</b>                            | 2005-06               | 135      | 83   | 183   | 258  | 320             | 854  | 296    | 1700 | 71    | 1067 | 1004         | 3963  |
|  | 2010-11               | 164      | 101  | 195   | 269  | 325             | 855  | 298    | 1713 | 70    | 1029 | 1053         | 3967  |
| <b>Rajasthan</b>                         | 2005-06               | 2073     | 1016 | 1321  | 1895 | 1260            | 3570 | 1103   | 6796 | 429   | 7662 | 6186         | 20939 |
|  | 2010-11               | 2512     | 1238 | 1511  | 2162 | 1335            | 3774 | 1127   | 6918 | 404   | 7044 | 6888         | 21136 |
| <b>Sikkim</b>                            | 2005-06               | 40       | 15   | 17    | 21   | 11              | 28   | 5      | 30   | 1     | 16   | 73           | 109   |
|  | 2010-11               | 40       | 15   | 17    | 20   | 11              | 27   | 6      | 32   | 1     | 12   | 75           | 107   |
| <b>Tamil Nadu</b>                        | 2005-06               | 6228     | 2286 | 1234  | 1721 | 542             | 1468 | 170    | 958  | 20    | 391  | 8193         | 6824  |
|  | 2010-11               | 6266     | 2292 | 1182  | 1644 | 502             | 1355 | 151    | 847  | 17    | 350  | 8118         | 6488  |
| <b>Tripura</b>                           | 2005-06               | 491      | 139  | 54    | 75   | 18              | 46   | 2      | 10   | Neg.  | 10   | 565          | 280   |
|  | 2010-11               | 470      | 128  | 54    | 75   | 24              | 62   | 4      | 19   | Neg.  | 1    | 552          | 286   |
| <b>Uttarakhand</b>                       | 2005-06               | 658      | 260  | 163   | 226  | 78              | 210  | 21     | 117  | 1     | 33   | 922          | 847   |
|  | 2010-11               | 672      | 296  | 157   | 225  | 65              | 175  | 17     | 94   | 1     | 25   | 913          | 816   |
| <b>Uttar Pradesh</b>                     | 2005-06               | 17507    | 6972 | 3103  | 4341 | 1392            | 3796 | 428    | 2374 | 28    | 424  | 22458        | 17906 |
|  | 2010-11               | 18167    | 6711 | 3014  | 4200 | 1327            | 3605 | 397    | 2191 | 25    | 382  | 22929        | 17089 |
| <b>West Bengal</b>                       | 2005-06               | 5675     | 2799 | 1006  | 1595 | 283             | 772  | 28     | 138  | 1     | 221  | 6992         | 5526  |
|  | 2010-11               | 5853     | 2891 | 980   | 1557 | 267             | 731  | 23     | 110  | 1     | 221  | 7123         | 5509  |
| <b>Andaman &amp;<br/>Nicobar Islands</b> | 2005-06               | 5        | 2    | 2     | 3    | 3               | 8    | 2      | 7    | Neg.  | 2    | 12           | 22    |
|  | 2010-11               | 5        | 2    | 2     | 3    | 3               | 8    | 2      | 7    | Neg.  | 1    | 12           | 22    |



| States/<br>Union Territories | Agriculture<br>Census | Marginal |       | Small |       | Semi-<br>medium |       | Medium |       | Large |       | All Holdings |        |
|------------------------------|-----------------------|----------|-------|-------|-------|-----------------|-------|--------|-------|-------|-------|--------------|--------|
|                              |                       | No.      | Area  | No.   | Area  | No.             | Area  | No.    | Area  | No.   | Area  | No.          | Area   |
| Chandigarh                   | 2005-06               | 1        | Neg.  | Neg.  | Neg.  | Neg.            | Neg.  | Neg.   | Neg.  | Neg.  | Neg.  | 1            | 1      |
|                              | 2010-11               | Neg.     | Neg.  | Neg.  | Neg.  | Neg.            | Neg.  | Neg.   | Neg.  | Neg.  | Neg.  | 1            | 1      |
| Dadra & Nagar<br>Haveli      | 2005-06               | 8        | 4     | 4     | 5     | 2               | 5     | 1      | 4     | Neg.  | 2     | 14           | 21     |
|                              | 2010-11               | 8        | 4     | 4     | 5     | 2               | 5     | 1      | 4     | Neg.  | 2     | 15           | 20     |
| Daman & Diu                  | 2005-06               | 7        | 2     | 1     | 1     | Neg.            | 1     | Neg.   | Neg.  | Neg.  | Neg.  | 8            | 4      |
|                              | 2010-11               | 8        | 2     | Neg.  | 1     | Neg.            | 1     | Neg.   | Neg.  | Neg.  | Neg.  | 8            | 3      |
| Delhi                        | 2005-06               | 14       | 6     | 6     | 8     | 3               | 10    | 2      | 11    | Neg.  | 3     | 25           | 38     |
|                              | 2010-11               | 11       | 5     | 5     | 6     | 3               | 8     | 2      | 9     | Neg.  | 2     | 20           | 30     |
| Lakshadweep                  | 2005-06               | 10       | 2     | Neg.  | Neg.  | Neg.            | Neg.  | Neg.   | Neg.  | Neg.  | Neg.  | 10           | 3      |
|                              | 2010-11               | 10       | 2     | Neg.  | Neg.  | Neg.            | Neg.  | Neg.   | Neg.  | Neg.  | Neg.  | 10           | 3      |
| Puducherry                   | 2005-06               | 25       | 7     | 4     | 5     | 2               | 5     | 1      | 4     | Neg.  | 2     | 31           | 24     |
|                              | 2010-11               | 28       | 10    | 3     | 4     | 1               | 4     | Neg.   | 3     | Neg.  | 1     | 33           | 22     |
| All India Total              | 2005-06               | 83694    | 32026 | 23930 | 33101 | 14127           | 37898 | 6375   | 36583 | 1096  | 18715 | 129222       | 158323 |
|                              | 2010-11               | 92356    | 35410 | 24705 | 35136 | 13840           | 37547 | 5856   | 33709 | 1000  | 17379 | 137757       | 159180 |

Note : 1. Data for the year 2005-06 for Jharkhand not collected, 2. Data for the year 2005-06 for Maharashtra and Bihar is estimated, 3. Total may not tally due to rounding off figures, 4. Neg.: Negligible (i.e. less than 500 units/hectare), 5. N.A.: Not Available.

Source : Agriculture Census 2010-2011. Agriculture Census Division, Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India.

**Table 1.8 (b): State-wise percentage distribution of number of operational holdings and area operated-all social groups**

| States/<br>Union Territories | Agriculture<br>Census | Marginal |       | Small |       | Semi-medium |       | Medium |       | Large |       |
|------------------------------|-----------------------|----------|-------|-------|-------|-------------|-------|--------|-------|-------|-------|
|                              |                       | No.      | Area  | No.   | Area  | No.         | Area  | No.    | Area  | No.   | Area  |
| Andhra Pradesh               | 2005-06               | 61.59    | 22.69 | 21.91 | 25.75 | 11.99       | 26.47 | 4.05   | 19.04 | 0.47  | 6.06  |
|                              | 2010-11               | 63.94    | 26.08 | 22.15 | 28.82 | 10.62       | 25.78 | 3.02   | 15.45 | 0.27  | 3.87  |
| Arunachal Pradesh            | 2005-06               | 20.33    | 3.14  | 23.11 | 9.11  | 28.06       | 23.55 | 24.61  | 46.70 | 3.88  | 17.51 |
|                              | 2010-11               | 19.63    | 3.09  | 17.69 | 6.75  | 31.14       | 24.47 | 25.56  | 40.34 | 5.97  | 25.34 |
| Assam                        | 2005-06               | 63.74    | 24.93 | 21.51 | 23.56 | 11.56       | 27.75 | 3.02   | 13.95 | 0.18  | 9.80  |
|                              | 2010-11               | 67.31    | 25.83 | 18.25 | 22.91 | 11.16       | 27.27 | 3.12   | 14.58 | 0.15  | 9.39  |
| Bihar                        | 2005-06               | 89.64    | 53.00 | 6.68  | 19.58 | 2.99        | 18.15 | 0.67   | 8.09  | 0.02  | 1.18  |
|                              | 2010-11               | 91.06    | 57.44 | 5.86  | 18.56 | 2.56        | 16.80 | 0.50   | 6.50  | 0.02  | 0.71  |
| Chhattisgarh                 | 2005-06               | 55.44    | 16.12 | 21.95 | 20.69 | 14.94       | 26.79 | 6.68   | 25.48 | 0.99  | 10.92 |
|                              | 2010-11               | 58.26    | 18.74 | 22.18 | 23.20 | 13.43       | 26.51 | 5.39   | 22.68 | 0.74  | 8.88  |
| Goa                          | 2005-06               | 80.92    | 20.45 | 10.96 | 11.83 | 5.08        | 11.07 | 2.26   | 11.22 | 0.78  | 45.44 |
|                              | 2010-11               | 78.82    | 26.61 | 11.16 | 16.80 | 6.22        | 18.36 | 2.98   | 17.89 | 0.82  | 20.34 |
| Gujarat                      | 2005-06               | 34.01    | 7.71  | 28.86 | 19.08 | 23.18       | 29.25 | 12.49  | 32.92 | 1.45  | 11.03 |
|                              | 2010-11               | 36.89    | 8.58  | 29.12 | 20.08 | 22.00       | 28.92 | 10.48  | 28.41 | 1.51  | 14.00 |
| Haryana                      | 2005-06               | 47.67    | 9.66  | 19.42 | 12.51 | 17.64       | 22.34 | 12.23  | 33.10 | 3.04  | 22.40 |
|                              | 2010-11               | 48.11    | 9.89  | 19.47 | 12.69 | 17.55       | 22.34 | 12.04  | 32.52 | 2.83  | 22.56 |
| Himachal Pradesh             | 2005-06               | 68.21    | 26.67 | 18.82 | 25.27 | 9.48        | 24.82 | 3.12   | 17.04 | 0.38  | 6.20  |
|                              | 2010-11               | 69.69    | 28.52 | 18.23 | 25.53 | 8.86        | 24.21 | 2.88   | 16.43 | 0.34  | 5.31  |
| Jammu & Kashmir              | 2005-06               | 81.50    | 44.06 | 12.12 | 25.73 | 5.18        | 20.90 | 0.99   | 8.04  | 0.05  | 1.27  |
|                              | 2010-11               | 83.25    | 46.51 | 11.53 | 26.19 | 4.39        | 19.05 | 0.79   | 6.94  | 0.04  | 1.31  |

| States/<br>Union Territories | Agriculture<br>Census | Marginal |       | Small |       | Semi-medium |       | Medium |       | Large |       |
|------------------------------|-----------------------|----------|-------|-------|-------|-------------|-------|--------|-------|-------|-------|
|                              |                       | No.      | Area  | No.   | Area  | No.         | Area  | No.    | Area  | No.   | Area  |
| <b>Jharkhand</b>             | 2005-06               | N.A.     | N.A.  | N.A.  | N.A.  | N.A.        | N.A.  | N.A.   | N.A.  | N.A.  | N.A.  |
|                              | 2010-11               | 68.23    | 24.13 | 15.83 | 18.66 | 10.44       | 24.49 | 4.75   | 22.90 | 0.75  | 9.82  |
|                              | 2005-06               | 48.23    | 13.33 | 26.56 | 23.22 | 16.86       | 28.00 | 7.31   | 25.88 | 1.05  | 9.56  |
| <b>Karnataka</b>             | 2010-11               | 49.14    | 15.22 | 27.30 | 24.83 | 16.17       | 27.90 | 6.52   | 23.88 | 0.86  | 8.17  |
|                              | 2005-06               | 95.63    | 57.61 | 3.11  | 18.32 | 1.01        | 11.49 | 0.22   | 5.07  | 0.04  | 7.52  |
|                              | 2010-11               | 96.32    | 58.62 | 2.64  | 18.69 | 0.83        | 10.53 | 0.18   | 4.24  | 0.03  | 7.92  |
| <b>Madhya Pradesh</b>        | 2005-06               | 40.45    | 9.93  | 27.16 | 19.24 | 19.81       | 26.91 | 10.98  | 31.81 | 1.60  | 12.12 |
|                              | 2010-11               | 43.86    | 12.10 | 27.60 | 21.89 | 18.65       | 28.48 | 8.89   | 28.70 | 1.00  | 8.84  |
|                              | 2005-06               | 44.61    | 14.00 | 30.26 | 26.23 | 17.87       | 30.64 | 6.74   | 24.42 | 0.51  | 4.70  |
| <b>Maharashtra</b>           | 2010-11               | 48.98    | 16.06 | 29.56 | 28.90 | 15.75       | 29.04 | 5.18   | 20.10 | 0.53  | 5.90  |
|                              | 2005-06               | 50.85    | 23.24 | 32.44 | 36.51 | 14.84       | 32.12 | 1.85   | 7.87  | 0.03  | 0.26  |
|                              | 2010-11               | 50.95    | 23.36 | 32.43 | 36.47 | 14.76       | 32.11 | 1.83   | 7.80  | 0.03  | 0.26  |
| <b>Meghalaya</b>             | 2005-06               | 55.34    | 22.72 | 27.23 | 30.50 | 14.12       | 30.32 | 3.19   | 14.05 | 0.12  | 2.41  |
|                              | 2010-11               | 52.22    | 21.29 | 29.13 | 33.35 | 15.28       | 30.61 | 3.24   | 13.00 | 0.12  | 1.55  |
|                              | 2005-06               | 48.34    | 24.36 | 34.61 | 37.13 | 15.33       | 29.12 | 1.63   | 6.39  | 0.08  | 2.99  |
| <b>Mizoram</b>               | 2010-11               | 54.65    | 28.79 | 32.38 | 36.00 | 10.80       | 22.94 | 1.88   | 8.47  | 0.29  | 3.80  |
|                              | 2005-06               | 7.31     | 0.49  | 7.97  | 1.35  | 21.74       | 7.91  | 44.97  | 39.66 | 18.01 | 50.59 |
|                              | 2010-11               | 4.29     | 0.37  | 11.47 | 2.19  | 26.45       | 11.42 | 43.65  | 44.64 | 14.14 | 41.39 |
| <b>Nagaland</b>              | 2005-06               | 59.62    | 26.73 | 26.54 | 31.63 | 10.84       | 24.92 | 2.74   | 13.11 | 0.26  | 3.61  |
|                              | 2010-11               | 72.17    | 39.53 | 19.68 | 30.81 | 6.67        | 18.90 | 1.36   | 7.84  | 0.12  | 2.92  |
|                              | 2005-06               | 13.42    | 2.10  | 18.22 | 6.52  | 31.85       | 21.55 | 29.44  | 42.91 | 7.06  | 26.92 |
| <b>Punjab</b>                | 2010-11               | 15.62    | 2.55  | 18.57 | 6.78  | 30.83       | 21.56 | 28.35  | 43.18 | 6.62  | 25.93 |

| States/<br>Union Territories             | Agriculture<br>Census | Marginal |       | Small |       | Semi-medium |       | Medium |       | Large |       |
|--|-----------------------|----------|-------|-------|-------|-------------|-------|--------|-------|-------|-------|
|  |                       | No.      | Area  | No.   | Area  | No.         | Area  | No.    | Area  | No.   | Area  |
| <b>Rajasthan</b>                         | 2005-06               | 33.51    | 4.85  | 21.36 | 9.05  | 20.37       | 17.05 | 17.83  | 32.46 | 6.93  | 36.59 |
|  | 2010-11               | 36.46    | 5.86  | 21.94 | 10.23 | 19.38       | 17.86 | 16.36  | 32.73 | 5.86  | 33.33 |
| <b>Sikkim</b>                            | 2005-06               | 54.25    | 13.83 | 22.53 | 19.16 | 14.70       | 25.33 | 7.36   | 27.24 | 1.16  | 14.44 |
|  | 2010-11               | 54.02    | 13.88 | 22.61 | 19.12 | 14.43       | 25.24 | 7.93   | 30.22 | 1.04  | 11.53 |
| <b>Tamil Nadu</b>                        | 2005-06               | 76.01    | 35.51 | 15.06 | 25.22 | 6.62        | 21.51 | 2.07   | 14.03 | 2.24  | 5.73  |
|  | 2010-11               | 77.19    | 35.33 | 14.56 | 25.34 | 6.19        | 20.89 | 1.85   | 13.06 | 0.21  | 5.39  |
| <b>Tripura</b>                           | 2005-06               | 86.77    | 49.71 | 9.63  | 26.59 | 3.23        | 16.39 | 0.34   | 3.67  | 0.03  | 3.64  |
|  | 2010-11               | 85.17    | 44.93 | 9.75  | 26.20 | 4.36        | 21.85 | 0.71   | 6.58  | 0.02  | 0.43  |
| <b>Uttarakhand</b>                       | 2005-06               | 71.42    | 30.73 | 17.67 | 26.73 | 8.44        | 24.84 | 2.32   | 13.83 | 0.14  | 3.87  |
|  | 2010-11               | 73.65    | 36.23 | 17.24 | 27.60 | 7.10        | 21.50 | 1.90   | 11.55 | 0.12  | 3.11  |
| <b>Uttar Pradesh</b>                     | 2005-06               | 77.96    | 38.93 | 13.82 | 24.24 | 6.20        | 21.20 | 1.91   | 13.26 | 0.12  | 2.37  |
|  | 2010-11               | 79.23    | 39.27 | 13.14 | 24.58 | 5.79        | 21.10 | 1.73   | 12.82 | 0.11  | 2.23  |
| <b>West Bengal</b>                       | 2005-06               | 81.17    | 50.65 | 14.38 | 28.87 | 4.04        | 13.98 | 0.40   | 2.49  | 0.01  | 4.00  |
|  | 2010-11               | 82.16    | 52.47 | 13.76 | 28.26 | 3.75        | 13.26 | 0.32   | 1.99  | 0.01  | 4.02  |
| <b>Andaman &amp; Nicobar<br/>Islands</b> | 2005-06               | 41.61    | 9.80  | 18.27 | 14.65 | 25.48       | 35.67 | 14.29  | 32.96 | 0.35  | 6.92  |
|  | 2010-11               | 39.19    | 9.25  | 20.46 | 15.85 | 26.58       | 37.71 | 13.49  | 31.62 | 0.28  | 5.57  |
| <b>Chandigarh</b>                        | 2005-06               | 68.75    | 25.64 | 17.59 | 22.54 | 8.48        | 22.18 | 4.82   | 25.49 | 0.36  | 4.16  |
|  | 2010-11               | 63.45    | 22.58 | 18.63 | 20.64 | 10.92       | 24.15 | 6.58   | 29.03 | 0.42  | 3.60  |
| <b>Dadra &amp; Nagar Haveli</b>          | 2005-06               | 53.34    | 19.18 | 27.62 | 25.54 | 12.95       | 24.75 | 5.27   | 21.61 | 0.82  | 8.92  |
|  | 2010-11               | 55.54    | 20.38 | 26.51 | 26.33 | 12.27       | 24.63 | 4.98   | 20.73 | 0.71  | 7.92  |
| <b>Daman &amp; Diu</b>                   | 2005-06               | 88.21    | 46.87 | 7.95  | 21.79 | 2.82        | 15.02 | 0.85   | 10.16 | 0.17  | 6.16  |
|  | 2010-11               | 92.35    | 56.81 | 5.48  | 19.78 | 1.64        | 11.15 | 0.43   | 7.18  | 0.13  | 5.08  |

| States/<br>Union Territories | Agriculture<br>Census | Marginal     |              | Small        |              | Semi-medium  |              | Medium      |              | Large       |              |
|------------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|
|                              |                       | No.          | Area         | No.          | Area         | No.          | Area         | No.         | Area         | No.         | Area         |
| Delhi                        | 2005-06               | 55.50        | 15.82        | 22.48        | 20.76        | 13.61        | 26.03        | 7.63        | 29.81        | 0.77        | 7.58         |
|                              | 2010-11               | 55.17        | 16.20        | 22.04        | 20.14        | 14.53        | 27.05        | 7.53        | 28.95        | 0.73        | 7.66         |
| Lakshadweep                  | 2005-06               | 95.79        | 62.61        | 2.61         | 13.10        | 1.27         | 11.67        | 0.25        | 5.72         | 0.08        | 6.91         |
|                              | 2010-11               | 95.81        | 62.22        | 2.60         | 13.23        | 1.26         | 11.79        | 0.25        | 5.78         | 0.08        | 6.98         |
| Puducherry                   | 2005-06               | 78.95        | 30.09        | 12.15        | 22.11        | 6.12         | 21.49        | 2.43        | 18.13        | 0.35        | 8.18         |
|                              | 2010-11               | 85.71        | 45.11        | 8.36         | 18.66        | 4.36         | 18.98        | 1.35        | 11.75        | 0.21        | 5.51         |
| <b>All India Total</b>       | 2005-06               | <b>64.77</b> | <b>20.23</b> | <b>18.52</b> | <b>20.91</b> | <b>10.93</b> | <b>23.94</b> | <b>4.93</b> | <b>23.11</b> | <b>0.85</b> | <b>11.82</b> |
|                              | 2010-11               | <b>67.04</b> | <b>22.24</b> | <b>17.93</b> | <b>22.07</b> | <b>10.05</b> | <b>23.59</b> | <b>4.25</b> | <b>21.18</b> | <b>0.73</b> | <b>10.92</b> |

Note : 1. Data for the year 2005-06 for Jharkhand not collected, 2. N.A.: Not Available.

Source : *Agriculture Census 2010-2011*, Agriculture Census Division, Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India.

**Table 1.9: India's major natural disasters since 1980**

| Year | Type        | Affected population location / area   | Loss (no. of human life) | Loss to crops & property   |
|------|-------------|---|--------------------------|--|
| 1980 | Floods      | Uttar Pradesh   | 1525                     | Rs. 2.0 billion  |
| 1981 | Floods      | Uttar Pradesh   | 362                      | 1.5 million hectares of cropped area affected.   |
| 1982 | Floods      | Odisha  | 1000                     | 3 million hectares of agricultural land affected.<br>Loss estimated to run into thousands of millions of Rupees. |
| 1982 | Cyclone     | Saurashtra  | 514                      | Livestock death toll nearly 0.15 million.<br>Loss to crops estimated at about Rs. 1.27 billion.                  |
| 1983 | Cyclone     | Andhra Pradesh  | 134                      | Livestock death toll-42,800.<br>Damage to crops estimated at Rs. 0.34 billion.                                   |
| 1984 | Cyclone     | Andhra Pradesh and Tamil Nadu   | 658                      | Livestock death toll-90,650.<br>Damage to crops estimated at Rs. 2.32 billion.                                   |
| 1985 | Floods      | Haryana, Punjab and Uttar Pradesh   | Heavy toll               | Large area of standing Kharif crop affected heavily.   |
| 1986 | Floods      | Andhra Pradesh, Bihar and Uttar Pradesh   | Heavy toll               | Large area of standing Kharif crop affected heavily.   |
| 1987 | Floods      | Assam, Bihar and West Bengal  | Over 1400                | N.A.   |
| 1988 | Cyclone     | West Bengal   | 532                      | Livestock death toll- 57,604.  |
| 1989 | Floods      | Andhra Pradesh, Assam, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Maharashtra, Odisha, Uttar Pradesh and West Bengal            | Over 1400                | N.A.   |
| 1990 | *Cyclone    | Andhra Pradesh and Tamil Nadu   | 928                      | Rs. 22.47 billion  |
| 1991 | *Earthquake | Uttar Kashi, Uttar Pradesh  | 768                      | Rs. 0.89 billion   |
| 1992 | Drought     | Maharashtra   |                          | Rs. 28.23 billion  |
| 1993 | *Floods     | Arunachal Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Mizoram, Punjab, Rajasthan, Tripura and Uttar Pradesh | 1643                     | Rs. 21.06 billion  |

|      |                        |  |      |   |
|------|------------------------|--|------|---|
| 1994 | Cyclone                | Andhra Pradesh and Tamil Nadu  | 226  | Loss to property estimated at Rs. 6.12 billion in Tamil Nadu and 4,44,194 ha. of land in Andhra Pradesh.  |
| 1995 | Floods                 | Large parts of the country   | 1360 | Property worth Rs. 17.7 billion and crop in 2.35 million hectare damaged.   |
| 1996 | Floods                 | Large parts of the country   | 1700 | Property worth Rs. 22.0 billion and crop in 20.0 million hectare damaged.   |
| 1996 | Cyclone                | Andhra Pradesh   | 1058 | 0.3 million houses fully and a similar number partially damaged. 0.1 million hectares of crop damaged. Loss to property worth Rs. 61.26 billion.        |
| 1997 | Earthquake*            | Jabalpur   | 39   | N.A.  |
| 1998 | Earthquake*            | Chamoli  | 100  | N.A.  |
| 1999 | Cyclone**              | Odisha   | 9887 | 1.8 million hectare of crop area and 1.6 million houses damaged.  |
| 1999 | Cyclone                | West Bengal  | N.A. | Rs. 577.30 million  |
| 2000 | Floods                 | Andhra Pradesh, Assam, Arunachal Pradesh, West Bengal, Bihar, Punjab, Uttar Pradesh, Himachal Pradesh, Gujarat, Karnataka, Kerala, MP and Sikkim | 3048 | Estimated value of public properties Rs. 1957.82 crores.  |
| 2001 | Earthquake             | Gujarat  | N.A. | Estimated value of public properties Rs 21,262 crores. Over 20,000 people killed, 1,50,000 injured and 1,59,00,000 affected, 12.54 lakh houses damaged. |
| 2004 | Tsunami/<br>Tide waves | Andaman & Nicobar Islands, Andhra Pradesh, Tamil Nadu and Puducherry   | N.A. | Over 10,749 people killed. 5,640 people expected missing. About 6.5 lakh people moved to refuge places.   |

## Natural Resources

|                   |                   |  |      |                                 |
|-------------------|-------------------|--|------|---------------------------------|
| 2005              | Earthquake        | Pakistan & Kashmir   | N.A. | Over 87,000 people killed.      |
| 2008 <sup>#</sup> | Kosi floods       | North Bihar  | 527  | 19323 livestock, million person |
|                   | Cyclone Nisha     | Tamil Nadu   | 204  |                                 |
| 2009 <sup>#</sup> | Floods            | Andhra Pradesh, Karnataka, Odisha, Kerala, Delhi, Maharashtra    | 300  |                                 |
|                   | Drought           | 252 districts in 10 States                                       |      |                                 |
| 2010 <sup>#</sup> | Cloud-burst       | Leh, Ladakh in J&K   | N.A. |                                 |
| 2011 <sup>#</sup> | Sikkim Earthquake | North Eastern India with epicenter near Nepal Boarder and Sikkim | N.A. | Most recent disaster            |

**Note** : 1. \* State of the Environment of India 1995, Ministry of Environment and Forest, Govt. of India, 2. \*\* Ministry of Agriculture & Farmers Welfare , 3. # Disaster Data and Statistics, National Disaster Management Authority, 4. N.A.: Not Available.

**Source** : 1. *Compendium of Environment Statistics India*, 2015, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India (Website: <http://www.mospi.gov.in>).

2. Website of Ministry of Home Affairs.



**Table 1.10 Flood damages/heavy rains in India**

| Year | Area affected (million ha) | Population affected (million) | Damage to crops |                    | Damage to house |                    | Cattle lost Nos. ('000) | Human lives lost Nos. | Damage to public utilities (Rs million) | Total damages to crops, houses & public utilities (Rs million) |
|------|----------------------------|-------------------------------|-----------------|--------------------|-----------------|--------------------|-------------------------|-----------------------|---|--|
|      |                            |                               | Area million ha | Value (Rs million) | Nos. ('000)     | Value (Rs million) |                         |                       |   |  |
| 1953 | 2.29                       | 24.28                         | 0.93            | 420.80             | 265             | 74.20              | 47                      | 37                    | 29.00                                   | 524.00   |
| 1960 | 7.53                       | 8.35                          | 21.27           | 425.50             | 610             | 143.10             | 14                      | 510                   | 63.10                                   | 631.70   |
| 1965 | 1.46                       | 3.61                          | 0.27            | 58.70              | 113             | 2.00               | 7                       | 79                    | 10.70                                   | 71.40  |
| 1970 | 8.46                       | 31.83                         | 4.91            | 1627.80            | 1434            | 486.10             | 19                      | 1076                  | 764.40                                  | 2878.30  |
| 1975 | 6.17                       | 31.36                         | 3.85            | 2714.90            | 804             | 341.00             | 17                      | 686                   | 1660.50                                 | 4716.40  |
| 1980 | 11.46                      | 54.12                         | 5.55            | 3663.70            | 2533            | 1708.50            | 59                      | 1913                  | 3032.80                                 | 8405.00  |
| 1985 | 8.38                       | 59.59                         | 4.65            | 14253.70           | 2450            | 5838.60            | 43                      | 1804                  | 20500.40                                | 40592.70   |
| 1990 | 9.30                       | 40.26                         | 3.18            | 6956.10            | 1020            | 2137.30            | 134                     | 1855                  | 4552.70                                 | 17089.20   |
| 1991 | 6.36                       | 33.89                         | 2.70            | 5790.20            | 1134            | 1804.20            | 41                      | 1187                  | 7288.90                                 | 14883.30   |
| 1992 | 2.64                       | 19.26                         | 1.75            | 10275.80           | 687             | 3082.80            | 79                      | 1533                  | 20106.70                                | 33445.30   |
| 1993 | 11.44                      | 30.41                         | 3.21            | 13086.30           | 1926            | 5283.20            | 211                     | 2864                  | 14455.30                                | 33824.90   |
| 1994 | 4.81                       | 27.55                         | 3.96            | 8886.20            | 915             | 1652.10            | 52                      | 2078                  | 7407.60                                 | 17945.90   |
| 1995 | 5.24                       | 35.93                         | 3.24            | 17147.90           | 2002            | 13078.90           | 62                      | 1814                  | 6796.30                                 | 37023.10   |
| 1996 | 8.05                       | 44.73                         | 3.83            | 11244.90           | 727             | 1765.90            | 73                      | 1803                  | 8613.90                                 | 30057.40   |
| 1997 | 4.57                       | 29.66                         | 2.26            | 6927.40            | 505             | 1525.00            | 28                      | 1402                  | 19859.30                                | 28311.80   |
| 1998 | 10.85                      | 47.44                         | 7.50            | 25941.70           | 1933            | 11087.80           | 107                     | 2889                  | 51577.70                                | 88607.20   |
| 1999 | 7.77                       | 27.99                         | 1.75            | 18508.70           | 1613            | 12990.60           | 91                      | 745                   | 4628.30                                 | 36127.60   |
| 2000 | 5.38                       | 45.01                         | 3.58            | 42466.20           | 2629            | 6809.40            | 123                     | 2606                  | 39369.80                                | 88645.40   |
| 2001 | 6.18                       | 26.46                         | 3.96            | 6884.80            | 716             | 8164.70            | 33                      | 1444                  | 56044.60                                | 71094.20   |
| 2002 | 7.09                       | 26.32                         | 2.19            | 9130.90            | 762             | 5993.70            | 22                      | 1001                  | 10620.80                                | 25745.40   |
| 2003 | 6.12                       | 43.20                         | 4.27            | 7307.23            | 775             | 756.48             | 15                      | 2166                  | 3262.15                                 | 11325.87   |
| 2004 | 5.31                       | 43.73                         | 2.89            | 778.69             | 1664            | 879.60             | 134                     | 1813                  | 1656.09                                 | 3529.71  |
| 2005 | 12.56                      | 22.93                         | 12.30           | 2370.92            | 716             | 380.53             | 120                     | 1455                  | 4688.22                                 | 7660.49  |

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| Year           | Area affected (million ha) | Population affected (million) | Damage to crops |                    | Damage to house |                    | Cattle lost Nos. ('000) | Human lives lost Nos. | Damage to public utilities (Rs million) | Total damages to crops, houses & public utilities (Rs million) |
|----------------|----------------------------|-------------------------------|-----------------|--------------------|-----------------|--------------------|-------------------------|-----------------------|---|--|
|                |                            |                               | Area million ha | Value (Rs million) | Nos. ('000)     | Value (Rs million) |                         |                       |   |  |
| 2006           | 1.10                       | 25.22                         | 1.82            | 2850.67            | 1497            | 3636.85            | 267                     | 1431                  | 13303.93                                | 21546.29   |
| 2007           | 7.14                       | 41.40                         | 8.79            | 3121.53            | 3280            | 2113.11            | 89                      | 3389                  | 8049.04                                 | 13425.34   |
| 2008           | 3.43                       | 29.91                         | 3.19            | 3401.56            | 1567            | 1141.89            | 102                     | 2876                  | 5046.48                                 | 9595.34  |
| 2009           | 3.84                       | 29.54                         | 3.59            | 4232.61            | 1236            | 10809.80           | 63                      | 1513                  | 17509.35                                | 32554.77   |
| 2010           | 2.62                       | 18.30                         | 4.99            | 5887.38            | 294             | 875.95             | 40                      | 1582                  | 12757.25                                | 19520.59   |
| 2011           | 1.90                       | 15.97                         | 2.72            | 1393.85            | 1153            | 410.48             | 36                      | 1761                  | 6053.57                                 | 7857.89  |
| 2012           | 2.14                       | 14.69                         | 1.95            | 1534.11            | 175             | 240.57             | 32                      | 933                   | 9169.97                                 | 10944.65   |
| 2013           | 31.58                      | 21.15                         | 316.9           | 3214.99            | 662             | 526.12             | 157                     | 2137                  | 3938.12                                 | 11095.14   |
| <b>Total</b>   | <b>459.97</b>              | <b>1949.22</b>                | <b>542.42</b>   | <b>70758.73</b>    | <b>74879</b>    | <b>34140.02</b>    | <b>5887</b>             | <b>100621</b>         | <b>123311.37</b>                        | <b>232813.09</b>   |
| Average        | 7.54                       | 31.95                         | 8.89            | 1159.98            | 1228            | 559.67             | 97                      | 1650                  | 2021.5                                  | 3816.61  |
| Maximum (Year) | 31.58 (2013)               | 70.45 (1978)                  | 316.90 (2013)   | 7307.23 (2003)     | 3508 (1978)     | 10809.80 (2009)    | 618 (1979)              | 11316 (1977)          | 17509.35 (2009)                         | 32554.77 (2009)  |

Source : 1. *Compendium of Environment Statistics India, 2015*, Central Statistics office, Ministry of Statistics and Programme Implementation, Govt. of India (Website: <http://www.mospi.gov.in>)

2. Central Water Commission (Flood Management Planning (FMP) Directorate) (as per the report from State Revenue Authorities).

**Table 1.11: Drought years in India**

| Year | Area affected<br>(million sq. km.) | % area of the<br>country affected | Category   | Ranking |
|------|------------------------------------|-----------------------------------|------------|---------|
| 1876 | 0.49                               | 15.8                              | Slight     | 34      |
| 1877 | 2.03                               | 64.7                              | Calamitous | 2       |
| 1883 | 1.03                               | 32.8                              | Moderate   | 13      |
| 1884 | 0.70                               | 22.2                              | Slight     | 26      |
| 1885 | 0.48                               | 15.4                              | Slight     | 35      |
| 1891 | 1.15                               | 36.7                              | Moderate   | 9       |
| 1896 | 0.68                               | 21.7                              | Slight     | 27      |
| 1899 | 1.99                               | 63.4                              | Calamitous | 3       |
| 1901 | 0.89                               | 28.5                              | Moderate   | 20      |
| 1902 | 0.54                               | 17.1                              | Slight     | 33      |
| 1904 | 0.98                               | 31.1                              | Moderate   | 16      |
| 1905 | 1.09                               | 34.7                              | Moderate   | 10      |
| 1907 | 0.85                               | 27.2                              | Slight     | 22      |
| 1911 | 0.97                               | 30.8                              | Moderate   | 17      |
| 1913 | 0.70                               | 22.3                              | Slight     | 25      |
| 1915 | 0.63                               | 20.2                              | Slight     | 30      |
| 1918 | 2.16                               | 68.7                              | Calamitous | 1       |
| 1920 | 1.22                               | 38.8                              | Moderate   | 8       |
| 1925 | 0.80                               | 25.5                              | Slight     | 24      |
| 1928 | 0.67                               | 21.4                              | Slight     | 28      |
| 1936 | 0.86                               | 27.6                              | Slight     | 21      |
| 1941 | 1.01                               | 32.3                              | Moderate   | 15      |
| 1951 | 1.04                               | 33.2                              | Moderate   | 11      |
| 1952 | 0.81                               | 25.8                              | Slight     | 23      |
| 1965 | 1.35                               | 42.9                              | Moderate   | 6       |
| 1966 | 1.01                               | 32.3                              | Moderate   | 14      |
| 1968 | 0.45                               | 20.6                              | Slight     | 29      |
| 1969 | 0.62                               | 19.9                              | Slight     | 31      |
| 1971 | 0.42                               | 13.3                              | Slight     | 36      |
| 1972 | 1.39                               | 44.4                              | Severe     | 5       |
| 1974 | 0.92                               | 29.3                              | Moderate   | 19      |
| 1979 | 1.24                               | 39.4                              | Moderate   | 7       |
| 1982 | 1.04                               | 33.1                              | Moderate   | 12      |
| 1985 | 0.95                               | 30.1                              | Moderate   | 18      |
| 1986 | 0.60                               | 19.0                              | Slight     | 32      |
| 1987 | 1.55                               | 49.2                              | Severe     | 4       |
| 2002 | N.A.                               | N.A.                              | Severe     | N.A.    |
| 2009 | N.A.                               | N.A.                              | Severe     | N.A.    |

**Note** : N.A.: Not Available.

**Source** : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

**Table 1.12: All India rainfall distribution**

| Year    | Monsoon Season<br>(June-September) |        |             | Post-Monsoon<br>(October-December) |        |             | Winter Season<br>(January-February) |        |             | Pre-Monsoon Season<br>(March-May) |        |             | Over all Rainfall<br>(June-May) |        |             |
|---------|------------------------------------|--------|-------------|------------------------------------|--------|-------------|-------------------------------------|--------|-------------|-----------------------------------|--------|-------------|---------------------------------|--------|-------------|
|         | Actual                             | Normal | %<br>Change | Actual                             | Normal | %<br>Change | Actual                              | Normal | %<br>Change | Actual                            | Normal | %<br>Change | Actual                          | Normal | %<br>Change |
| 1993-94 | 902.1                              | 908.9  | -0.7        | 131.6                              | 119.6  | 10.0        | 44.5                                | 40.8   | 9.1         | 106.1                             | 123.3  | -13.9       | 1184.3                          | 1192.6 | -0.7        |
| 1994-95 | 999.2                              | 906.8  | 10.2        | 121.5                              | 119.6  | 1.6         | 53.1                                | 41.1   | 29.2        | 123.5                             | 123.2  | 0.2         | 1297.3                          | 1190.7 | 9.0         |
| 1995-96 | 904.5                              | 904.7  | 0.0         | 117.8                              | 119.9  | -1.8        | 37.4                                | 40.8   | -8.3        | 94.9                              | 123.9  | -23.4       | 1154.6                          | 1189.3 | -2.9        |
| 1996-97 | 927.6                              | 905.7  | 2.4         | 128.0                              | 120.8  | 6.0         | 21.0                                | 40.6   | -48.3       | 118.9                             | 123.2  | -3.5        | 1195.5                          | 1190.3 | 0.4         |
| 1997-98 | 927.4                              | 908.6  | 2.1         | 187.7                              | 119.5  | 57.1        | 44.1                                | 41.9   | 5.3         | 132.3                             | 128.3  | 3.1         | 1291.5                          | 1198.3 | 7.8         |
| 1998-99 | 945.2                              | 903.6  | 4.6         | 178.8                              | 121.8  | 46.8        | 28.4                                | 42.8   | -33.6       | 123.1                             | 130.6  | -5.7        | 1275.5                          | 1198.8 | 6.4         |
| 1999-00 | 866.9                              | 903.2  | -4.0        | 144.7                              | 121.8  | 18.8        | 43.1                                | 42.5   | 1.4         | 128.8                             | 129.5  | -0.5        | 1183.5                          | 1197.0 | -1.1        |
| 2000-01 | 833.7                              | 902.3  | -7.6        | 64.1                               | 121.7  | -47.3       | 16.2                                | 42.2   | -61.6       | 129.7                             | 129.3  | 0.3         | 1043.7                          | 1195.5 | -12.7       |
| 2001-02 | 826.0                              | 901.1  | -8.3        | 137.7                              | 121.7  | 13.1        | 35.0                                | 41.2   | -15.0       | 121.5                             | 132.0  | -8.0        | 1120.2                          | 1196.0 | -6.3        |
| 2002-03 | 737.1                              | 911.7  | -19.2       | 83.4                               | 123.7  | -32.6       | 53.2                                | 38.3   | 38.9        | 107.7                             | 131.7  | -18.2       | 981.4                           | 1205.4 | -18.6       |
| 2003-04 | 947.3                              | 902.7  | 4.9         | 134.6                              | 125.0  | 7.7         | 34.5                                | 39.2   | -12.0       | 161.6                             | 129.6  | 24.7        | 1278.0                          | 1196.5 | 6.8         |
| 2004-05 | 779.6                              | 893.3  | -12.7       | 111.8                              | 125.7  | -11.1       | 69.8                                | 43.8   | 59.0        | 124.7                             | 134.5  | -7.3        | 1085.9                          | 1197.3 | -9.3        |
| 2005-06 | 879.3                              | 892.5  | -1.0        | 138.4                              | 125.8  | 10.0        | 27.8                                | 43.9   | -37.0       | 139.9                             | 134.6  | 3.9         | 1185.4                          | 1196.8 | -1.0        |
| 2006-07 | 886.6                              | 892.2  | -0.6        | 99.3                               | 125.9  | -21.1       | 34.3                                | 43.8   | -21.7       | 112.8                             | 133.6  | -15.6       | 1133.0                          | 1195.5 | -5.2        |
| 2007-08 | 936.9                              | 892.2  | 5.0         | 85.4                               | 125.9  | -32.2       | 42.6                                | 43.2   | -1.4        | 115.3                             | 133.5  | -13.6       | 1180.2                          | 1194.8 | -1.2        |
| 2008-09 | 873.2                              | 892.2  | -2.1        | 87.2                               | 125.9  | -30.7       | 23.6                                | 43.8   | -46.1       | 91.0                              | 134.5  | -32.3       | 1075.0                          | 1196.4 | -10.1       |
| 2009-10 | 689.8                              | 892.2  | -22.7       | 135.5                              | 125.9  | 7.6         | 24.6                                | 43.8   | -43.8       | 122.9                             | 133.7  | -8.1        | 972.8                           | 1195.6 | -18.6       |
| 2010-11 | 912.8                              | 893.2  | 2.2         | 153.2                              | 126.3  | 21.3        | 31.9                                | 40.9   | -22.0       | 114.4                             | 131.3  | -12.9       | 1212.3                          | 1191.7 | 1.7         |
| 2011-12 | 899.9                              | 887.5  | 1.4         | 65.7                               | 127.2  | -48.3       | 38.8                                | 40.9   | -5.8        | 90.3                              | 131.3  | -31.2       | 1094.7                          | 1186.9 | -7.8        |
| 2012-13 | 819.5                              | 886.9  | -7.6        | 100.6                              | 127.2  | -20.9       | 51.4                                | 40.9   | 25.7        | 101.9                             | 131.3  | -22.4       | 1073.4                          | 1186.3 | -9.5        |
| 2013-14 | 936.7                              | 886.9  | 5.6         | 149.5                              | 127.2  | 17.5        | 46.2                                | 40.9   | 13.0        | 130.0                             | 131.3  | -1.0        | 1262.4                          | 1186.3 | 6.4         |

Source : *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

**Table 1.13: State-wise consumption of electricity for agricultural purpose**(1 Giga Watt hour = 10<sup>6</sup> Kilo Watt hour)

| Zones / States / UTs      | Consumption for agricultural purposes |                  | Total consumption |                  | % Share of consumption for agricultural purposes |              |
|---------------------------|---------------------------------------|------------------|-------------------|------------------|--|--------------|
|                           | 2010-11                               | 2011-12          | 2010-11           | 2011-12          | 2010-11  | 2011-12      |
| <b>NORTHERN</b>           | <b>39744.49</b>                       | <b>44400.95</b>  | <b>173842.95</b>  | <b>193678.70</b> | <b>22.86</b>                                     | <b>22.93</b> |
| Haryana                   | 8295.69                               | 9471.67          | 24015.06          | 27614.00         | 34.54  | 34.30        |
| Himachal Pradesh          | 35.14                                 | 70.41            | 6296.21           | 6843.82          | 0.56   | 1.03         |
| Jammu & Kashmir           | 198.10                                | 140.67           | 4041.08           | 4267.00          | 4.90   | 3.30         |
| Punjab                    | 9957.38                               | 10248.62         | 32155.38          | 33888.38         | 30.97  | 30.24        |
| Rajasthan                 | 13235.89                              | 15351.69         | 33936.55          | 37903.81         | 39.01  | 40.50        |
| Uttar Pradesh             | 7689.82                               | 8756.00          | 43742.30          | 50592.00         | 17.58  | 17.31        |
| Uttarakhand               | 295.88                                | 325.02           | 7249.95           | 8252.72          | 4.08   | 3.94         |
| Chandigarh                | 1.10                                  | 1.27             | 1339.62           | 1301.48          | 0.08   | 0.10         |
| Delhi                     | 35.49                                 | 35.60            | 21076.80          | 23015.49         | 0.17   | 0.15         |
| <b>WESTERN</b>            | <b>38826.89</b>                       | <b>48440.20</b>  | <b>187398.23</b>  | <b>204899.00</b> | <b>20.72</b>                                     | <b>23.64</b> |
| Gujarat                   | 13338.33                              | 13492.34         | 54013.15          | 57654.44         | 24.69  | 23.40        |
| Madhya Pradesh            | 6810.09                               | 8018.04          | 25329.12          | 28540.78         | 26.89  | 28.09        |
| Chhattisgarh              | 1940.00                               | 2181.05          | 12205.00          | 13178.37         | 15.90  | 16.55        |
| Maharashtra               | 16713.87                              | 24725.14         | 87531.81          | 96642.38         | 19.09  | 25.58        |
| Goa                       | 20.00                                 | 21.63            | 2780.2            | 2973.03          | 0.72   | 0.73         |
| Daman & Diu               | 2.60                                  | 0.00             | 1632.95           | 1771.00          | 0.16   | 0.00         |
| Dadra & N. Haveli         | 2.00                                  | 2.0              | 3905.00           | 4139.00          | 0.05   | 0.05         |
| <b>SOUTHERN</b>           | <b>45302.48</b>                       | <b>46154.58</b>  | <b>183089.41</b>  | <b>198121.54</b> | <b>24.74</b>                                     | <b>23.30</b> |
| Andhra Pradesh            | 18798.57                              | 19076.05         | 64011.30          | 70421.00         | 29.37  | 27.09        |
| Karnataka                 | 13556.31                              | 15965.68         | 39788.83          | 47455.84         | 34.07  | 33.64        |
| Kerala                    | 240.56                                | 295.29           | 14578.15          | 15993.12         | 1.65   | 1.85         |
| Tamil Nadu                | 12632.87                              | 10761.00         | 62750.89          | 61896.54         | 20.13  | 17.39        |
| Puducherry                | 74.17                                 | 56.56            | 1930.70           | 2321.50          | 3.84   | 2.44         |
| Lakshadweep               | 0.00                                  | 0.00             | 29.54             | 33.54            | 0.00   | 0.00         |
| <b>EASTERN</b>            | <b>2439.48</b>                        | <b>1891.58</b>   | <b>66483.01</b>   | <b>69305.50</b>  | <b>3.67</b>                                      | <b>2.73</b>  |
| Bihar                     | 388.60                                | 348.37           | 5582.89           | 6183.92          | 6.96   | 5.63         |
| Jharkhand                 | 70.00                                 | 95.93            | 14666.99          | 15594.83         | 0.48   | 0.62         |
| Odisha                    | 176.20                                | 151.45           | 13099.20          | 13054.18         | 1.35   | 1.16         |
| West Bengal               | 1803.85                               | 1295.83          | 32609.31          | 33903.33         | 5.53   | 3.82         |
| Andaman & Nicobar Islands | 0.83                                  | 0.00             | 187.00            | 198.62           | 0.44   | 0.00         |
| Sikkim                    | 0.00                                  | 0.0              | 337.62            | 370.62           | 0.00   | 0.00         |
| <b>NORTH EASTERN</b>      | <b>64.09</b>                          | <b>73.10</b>     | <b>6155.32</b>    | <b>6928.51</b>   | <b>1.04</b>                                      | <b>1.06</b>  |
| Assam                     | 25.57                                 | 31.99            | 3460.00           | 3969.24          | 0.74   | 0.81         |
| Manipur                   | 0.49                                  | 0.83             | 271.10            | 324.83           | 0.18   | 0.26         |
| Meghalaya                 | 0.36                                  | 0.41             | 968.96            | 1074.88          | 0.04   | 0.04         |
| Nagaland                  | 0.00                                  | 0.04             | 288.86            | 317.49           | 0.00   | 0.01         |
| Tripura                   | 37.55                                 | 39.74            | 568.84            | 553.97           | 6.60   | 7.17         |
| Arunachal Pradesh         | 0.00                                  | 0.00             | 360.00            | 436.05           | 0.00   | 0.00         |
| Mizoram                   | 0.12                                  | 0.09             | 237.56            | 252.05           | 0.05   | 0.04         |
| <b>All-India</b>          | <b>126377.43</b>                      | <b>140960.42</b> | <b>616968.92</b>  | <b>672933.25</b> | <b>20.48</b>                                     | <b>20.95</b> |

Source : 1. *Agricultural Statistics at a Glance, 2013 & 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. Central Electricity Authority, New Delhi (Website: <http://www.cea.nic.in>).

**Table 1.14: Sector-wise electricity consumption in India**(1 Giga Watt hour = 10<sup>6</sup> Kilo Watt hour)

| Year   | Industry            | Agriculture         | Domestic            | Commercial       | Traction and Railways | Others           | Total energy consumed |
|--|---------------------|---------------------|---------------------|------------------|-----------------------|------------------|-----------------------|
| <b>1970-71</b>                                 | 29,579<br>(67.65)   | 4,470<br>(10.22)    | 3,840<br>(8.78)     | 2,573<br>(5.88)  | 1,364<br>(3.12)       | 1,898<br>(4.34)  | 43,724<br>(100.00)    |
| <b>1980-81</b>                                 | 48,069<br>(58.36)   | 14,489<br>(17.59)   | 9,246<br>(11.23)    | 4,682<br>(5.68)  | 2,266<br>(2.75)       | 3,615<br>(4.39)  | 82,367<br>(100.00)    |
| <b>1985-86</b>                                 | 66,980<br>(54.41)   | 23,422<br>(19.03)   | 17,258<br>(14.02)   | 7,290<br>(5.92)  | 3,182<br>(2.58)       | 4,967<br>(4.03)  | 123,099<br>(100.00)   |
| <b>1990-91</b>                                 | 84,209<br>(44.24)   | 50,321<br>(26.44)   | 31,982<br>(16.80)   | 11,181<br>(5.87) | 4,112<br>(2.16)       | 8,552<br>(4.49)  | 190,357<br>(100.00)   |
| <b>1995-96</b>                                 | 104,693<br>(37.79)  | 85,732<br>(30.95)   | 51,733<br>(18.67)   | 16,996<br>(6.14) | 6,223<br>(2.25)       | 11,652<br>(4.21) | 277,029<br>(100.00)   |
| <b>2000-01</b>                                 | 107,622<br>(33.99)  | 84,729<br>(26.76)   | 75,629<br>(23.89)   | 22,545<br>(7.12) | 8,213<br>(2.59)       | 17,862<br>(5.64) | 316,600<br>(100.00)   |
| <b>2005-06</b>                                 | 1,51,557<br>(36.80) | 90,292<br>(21.92)   | 1,00,090<br>(24.30) | 35,965<br>(8.73) | 9,944<br>(2.41)       | 24,039<br>(5.84) | 4,11,887<br>(100.00)  |
| <b>2007-08</b>                                 | 1,89,424<br>(37.74) | 1,04,182<br>(20.75) | 1,20,918<br>(24.09) | 46,685<br>(9.30) | 11,108<br>(2.21)      | 29,660<br>(5.91) | 5,01,977<br>(100.00)  |
| <b>2008-09</b>                                 | 2,09,474<br>(37.81) | 1,09,610<br>(19.79) | 1,31,720<br>(23.78) | 54,189<br>(9.78) | 11,425<br>(2.06)      | 37,577<br>(6.78) | 5,53,995<br>(100.00)  |
| <b>2009-10</b>                                 | 2,36,752<br>(38.64) | 1,20,209<br>(19.62) | 1,46,080<br>(23.85) | 60,600<br>(9.89) | 12,408<br>(2.03)      | 36,595<br>(5.97) | 6,12,645<br>(100.00)  |
| <b>2010-11</b>                                 | 2,72,589<br>(39.25) | 1,31,967<br>(19.00) | 1,69,326<br>(24.39) | 67,289<br>(9.69) | 14,003<br>(2.02)      | 39,218<br>(5.65) | 6,94,392<br>(100.00)  |
| <b>2011-12</b>                                 | 3,52,291<br>(44.87) | 1,40,960<br>(17.95) | 1,71,104<br>(21.79) | 65,381<br>(8.33) | 14,206<br>(1.81)      | 41,252<br>(5.25) | 7,85,194<br>(100.00)  |
| <b>2012-13</b>                                 | 3,65,989<br>(44.40) | 1,47,462<br>(17.89) | 1,83,700<br>(22.29) | 72,794<br>(8.83) | 14,100<br>(1.71)      | 40,256<br>(4.88) | 8,24,301<br>(100.00)  |
| <b>2013-14*</b>                                | 3,86,872<br>(43.83) | 1,59,144<br>(18.03) | 1,98,246<br>(22.46) | 76,968<br>(8.72) | 15,182<br>(1.72)      | 46,180<br>(5.23) | 8,82,592<br>(100.00)  |
| <b>Growth rate of 2013-14 over 2012-13 (%)</b> | 5.71                | 7.92                | 7.92                | 5.73             | 7.67                  | 14.72            | 7.07                  |
| <b>CAGR 2005-06 to 2013-14 (%)</b>             | 10.97               | 6.50                | 7.89                | 8.82             | 4.81                  | 7.52             | 8.84                  |

**Note** : 1. \* Provisional, 2. Figures in parentheses indicate percentage electricity consumption in different sectors, 3. CAGR: Compound annual growth rate.

**Source** : *Energy Statistics 2015*, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India (Website: <http://www.mospi.gov.in>).

**Table 1.15: Crop-wise irrigated area**

(million ha)

| Crops                      | 2004-05       | 2005-06       | 2006-07       | 2007-08       | 2008-09       | 2009-10       | 2010-11       | 2011-12*      | 2012-13*      |
|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Rice                       | 22.92         | 24.45         | 24.84         | 24.98         | 26.73         | 24.31         | 25.12         | 25.83         | 24.92         |
|                            | (54.7)        | (56.0)        | (56.7)        | (56.9)        | (58.7)        | (58.0)        | (58.6)        | (58.7)        | (58.3)        |
| Wheat                      | 23.58         | 23.73         | 25.25         | 25.49         | 25.33         | 26.10         | 26.77         | 27.74         | 28.2          |
|                            | (89.4)        | (89.6)        | (90.2)        | (90.9)        | (91.3)        | (91.7)        | (92.1)        | (92.9)        | (93.4)        |
| Coarse cereals             | 1.92          | 3.78          | 3.85          | 4.04          | 4.20          | 3.99          | 4.08          | 4.72          | N.A           |
|                            | (6.6)         | (13.0)        | (13.4)        | (14.2)        | (15.3)        | (14.4)        | (14.4)        | (17.9)        | (16.5)        |
| Total pulses               | 3.16          | 3.36          | 3.57          | 3.83          | 3.53          | 3.77          | 3.91          | 3.94          | 4.33          |
|                            | (13.9)        | (15.0)        | (15.4)        | (16.2)        | (16.0)        | (16.2)        | (14.8)        | (16.1)        | (18.6)        |
| Total oil seeds            | 7.32          | 7.80          | 7.5           | 7.23          | 7.47          | 6.72          | 6.83          | 7.26          | 7.49          |
|                            | (26.6)        | (28.0)        | (28.3)        | (27.1)        | (27.1)        | (25.9)        | (25.1)        | (27.6)        | (28.3)        |
| Total gross irrigated area | <b>81.08</b>  | <b>84.28</b>  | <b>86.75</b>  | <b>88.06</b>  | <b>88.90</b>  | <b>85.08</b>  | <b>88.89</b>  | <b>91.73*</b> | <b>92.58*</b> |
|                            | <b>(42.4)</b> | <b>(43.6)</b> | <b>(45.1)</b> | <b>(45.1)</b> | <b>(45.5)</b> | <b>(45.0)</b> | <b>(44.9)</b> | <b>(46.9)</b> | <b>(47.6)</b> |

Note : 1. \* Provisional, 2. Figures in parentheses indicate percentage of the total area under the crop.

Source : 1. Agricultural Statistics at a Glance, 2014, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

2. Pocket Book of Agricultural Statistics, 2015, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 1.16: Source-wise irrigated area**

(million ha)

| Source             | 2003-04        | 2004-05        | 2005-06        | 2006-07        | 2007-08        | 2008-09        | 2009-10        | 2010-11        | 2011-12*       | 2012-13*       |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Govt. canals       | 15.39          | 14.70          | 15.07          | 16.65          | 16.47          | 16.75          | 14.79          | 15.50          | 15.84          | 15.46          |
|                    | (27.48)        | (24.97)        | (25.17)        | (26.98)        | (26.10)        | (26.27)        | (23.88)        | (24.37)        | (24.27)        | (23.38)        |
| Private canals     | 0.21           | 0.21           | 0.22           | 0.22           | 0.22           | 0.20           | 0.19           | 0.17           | 0.17           | 0.16           |
|                    | (0.38)         | (0.35)         | (0.37)         | (0.36)         | (0.35)         | (0.31)         | (0.31)         | (0.26)         | (0.26)         | (0.24)         |
| Tanks              | 2.02           | 1.73           | 2.08           | 2.06           | 1.97           | 1.99           | 1.59           | 2.00           | 1.92           | 1.74           |
|                    | (3.61)         | (2.94)         | (3.47)         | (3.34)         | (3.12)         | (3.12)         | (2.57)         | (3.14)         | (2.92)         | (2.63)         |
| Tube wells         | 24.25          | 22.83          | 23.41          | 24.47          | 26.33          | 28.37          | 28.37          | 28.55          | 29.94          | 30.49          |
|                    | (43.30)        | (38.78)        | (39.09)        | (39.65)        | (41.73)        | (44.50)        | (45.80)        | (44.89)        | (45.57)        | (46.12)        |
| Other wells        | 11.52          | 11.96          | 11.65          | 12.35          | 12.03          | 10.43          | 9.99           | 10.51          | 10.59          | 10.76          |
|                    | (20.57)        | (20.31)        | (19.46)        | (20.02)        | (19.06)        | (16.35)        | (16.13)        | (16.53)        | (16.12)        | (16.27)        |
| Other sources      | 2.61           | 7.45           | 7.45           | 5.95           | 6.08           | 6.02           | 7.01           | 6.87           | 7.22           | 7.46           |
|                    | (4.66)         | (12.65)        | (12.44)        | (9.65)         | (9.64)         | (9.44)         | (11.32)        | (10.80)        | (10.99)        | (11.28)        |
| Net irrigated area | <b>56.00</b>   | <b>58.87</b>   | <b>59.88</b>   | <b>61.71</b>   | <b>63.10</b>   | <b>63.74</b>   | <b>61.94</b>   | <b>63.60</b>   | <b>65.69</b>   | <b>66.10</b>   |
|                    | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> | <b>(100.0)</b> |

Note : 1. \* Provisional. 2. Figures in parentheses indicate percentage of the net irrigated area.

Source : Fertiliser Statistics, 2014-15, The Fertiliser Association of India, New Delhi.

**Table 1.17: State-wise net area irrigated by source 2012-13\***

(000' ha)

| Zones / States / UTs | Canals         |               |              | Tanks         | Wells         |               | Other sources | Total net irrigated area |               |
|----------------------|----------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------------------|---------------|
|                      | Govt.          | Private       | Total        |               | Tube wells    | Others        |               |                          |               |
| <b>NORTH</b>         | <b>5,281</b>   | <b>113</b>    | <b>5,394</b> | <b>116</b>    | <b>15,146</b> | <b>885</b>    | <b>399</b>    | <b>21,942</b>            |               |
| Haryana              | 1,345          | -             | 1,345        | -             | 1,757         | -             | -             | 3,102                    |               |
| Himachal Pradesh**   | 4              | -             | 4            | -             | 20            | 2             | 84            | 110                      |               |
| Jammu & Kashmir      | 175            | 110           | 285          | 8             | 4             | 6             | 21            | 325                      |               |
| Punjab               | 1,133          | -             | 1,133        | -             | 2,982         | -             | -             | 4,115                    |               |
| Uttar Pradesh**      | 2,537          | -             | 2,537        | 108           | 10,175        | 836           | 272           | 13,929                   |               |
| Uttarakhand          | 85             | 3             | 88           | -             | 188           | 41            | 21            | 338                      |               |
| Chandigarh **        | -              | -             | -            | -             | 1             | -             | -             | 1                        |               |
| Delhi                | 2              | -             | 2            | -             | 19            | -             | 1             | 22                       |               |
| <b>SOUTH</b>         | <b>3,077</b>   | <b>2</b>      | <b>3,079</b> | <b>1,105</b>  | <b>3,808</b>  | <b>2,347</b>  | <b>708</b>    | <b>11,049</b>            |               |
| Andhra Pradesh#      | 1,265          | -             | 1,265        | 503           | 2,032         | 612           | 162           | 4,575                    |               |
| Karnataka            | 1,136          | -             | 1,136        | 138           | 1,321         | 407           | 418           | 3,421                    |               |
| Kerala               | 81             | 2             | 83           | 44            | 26            | 122           | 121           | 396                      |               |
| Tamil Nadu           | 590            | -             | 590          | 420           | 420           | 1,206         | 7             | 2,643                    |               |
| A & N Islands**      | -              | -             | -            | -             | -             | -             | -             | -                        |               |
| Puducherry           | 5              | -             | 5            | -             | 9             | -             | -             | 14                       |               |
| Lakshadweep**        | -              | -             | -            | -             | -             | -             | -             | -                        |               |
| <b>EAST</b>          | <b>1,034</b>   | <b>50</b>     | <b>1,083</b> | <b>114</b>    | <b>1,978</b>  | <b>79</b>     | <b>4,845</b>  | <b>8,098</b>             |               |
| Arunachal Pradesh    | -              | -             | -            | -             | -             | -             | 57            | 57                       |               |
| Assam                | 33             | -             | 33           | 5             | 27            | 2             | 94            | 161                      |               |
| Bihar                | 955            | -             | 955          | 59            | 1,902         | 20            | 118           | 3,053                    |               |
| Jharkhand            | 7              | -             | 7            | 48            | 43            | 55            | 57            | 210                      |               |
| Odisha <sup>§</sup>  | -              | -             | -            | -             | -             | -             | 1,248         | 1,248                    |               |
| West Bengal **       | -              | -             | -            | -             | -             | -             | 3,082         | 3,082                    |               |
| Manipur **           | -              | -             | -            | -             | -             | -             | 49            | 49                       |               |
| Meghalaya            | 28             | 38            | 65           | -             | -             | -             | -             | 65                       |               |
| Nagaland             | -              | -             | -            | -             | -             | -             | 85            | 85                       |               |
| Sikkim **            | -              | -             | -            | -             | -             | -             | 14            | 14                       |               |
| Tripura **           | 9              | -             | 9            | 2             | 6             | 2             | 41            | 60                       |               |
| Mizoram              | 2              | 12            | 14           | -             | -             | -             | -             | 14                       |               |
| <b>WEST</b>          | <b>6,070</b>   | <b>-</b>      | <b>6,070</b> | <b>413</b>    | <b>9,564</b>  | <b>7,452</b>  | <b>1,517</b>  | <b>25,015</b>            |               |
| Chhattisgarh         | 877            | -             | 877          | 49            | 419           | 20            | 84            | 1,449                    |               |
| Gujarat **           | 771            | -             | 771          | 45            | 1,122         | 2,181         | 114           | 4,233                    |               |
| Madhya Pradesh       | 1,440          | -             | 1,440        | 227           | 2,741         | 2,986         | 1,156         | 8,550                    |               |
| Maharashtra **       | 1,080          | -             | 1,080        | -             | 2,164         | -             | -             | 3,244                    |               |
| Rajasthan            | 1,901          | -             | 1,901        | 92            | 3,118         | 2,264         | 125           | 7,499                    |               |
| Goa                  | -              | -             | -            | -             | -             | -             | 36            | 36                       |               |
| Daman & Diu          | -              | -             | -            | -             | -             | -             | -             | -                        |               |
| D & N Haveli         | 1              | -             | 1            | -             | -             | 1             | 2             | 4                        |               |
| <b>All-India</b>     | <b>2012-13</b> | <b>15,462</b> | <b>165</b>   | <b>15,628</b> | <b>1,748</b>  | <b>30,497</b> | <b>10,764</b> | <b>7,466</b>             | <b>66,103</b> |
|                      | <b>2011-12</b> | <b>15,838</b> | <b>172</b>   | <b>16,010</b> | <b>1,918</b>  | <b>29,942</b> | <b>10,595</b> | <b>7,228</b>             | <b>65,693</b> |

**Note :** 1. \* Provisional, 2. \*\* Figures are either estimated based on the data for the latest available year received from the States/UTs or are estimated/taken from Agriculture Census, 3. N.A.: Not Available, 4. Totals may not tally due to rounding off figures, 5. § Formerly known as Orissa, 6. # Includes Telangana.

**Source :** *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.



**Table 1.18: All-India cultivated and irrigated area under food grains with land man ratio**

| Year    | Gross area under food grains (000' ha) |           | % Share of area under food grains to |                      | Land man ratio |
|---------|--|-----------|--------------------------------------|----------------------|----------------|
|         | Cultivated                             | Irrigated | Gross cultivated area                | Gross irrigated area |                |
| 1950-51 | 101196                                 | 18317     | 76.7                                 | 81.2                 | -              |
| 1951-52 | 100853                                 | 18563     | 75.7                                 | 80.1                 | 0.34           |
| 1952-53 | 105212                                 | 19035     | 76.4                                 | 81.7                 | 0.35           |
| 1953-54 | 110437                                 | 20021     | 77.5                                 | 82.2                 | 0.35           |
| 1954-55 | 109355                                 | 20140     | 75.9                                 | 80.7                 | 0.35           |
| 1955-56 | 111325                                 | 20626     | 75.6                                 | 80.4                 | 0.35           |
| 1956-57 | 112662                                 | 20453     | 75.4                                 | 79.6                 | 0.34           |
| 1957-58 | 109768                                 | 21163     | 75.3                                 | 79.5                 | 0.33           |
| 1958-59 | 114845                                 | 21460     | 75.7                                 | 79.6                 | 0.33           |
| 1959-60 | 116357                                 | 21844     | 76.1                                 | 79.6                 | 0.33           |
| 1960-61 | 115564                                 | 22065     | 75.6                                 | 78.9                 | 0.32           |
| 1961-62 | 117281                                 | 22448     | 75.1                                 | 78.9                 | 0.32           |
| 1962-63 | 118157                                 | 23390     | 75.4                                 | 79.4                 | 0.32           |
| 1963-64 | 117696                                 | 23340     | 75.0                                 | 78.6                 | 0.31           |
| 1964-65 | 115419                                 | 23943     | 72.5                                 | 78.0                 | 0.31           |
| 1965-66 | 114887                                 | 24032     | 74.0                                 | 77.8                 | 0.29           |
| 1966-67 | 115998                                 | 25764     | 73.7                                 | 78.8                 | 0.29           |
| 1967-68 | 121254                                 | 26167     | 74.1                                 | 78.8                 | 0.37           |
| 1968-69 | 119309                                 | 28098     | 74.8                                 | 79.2                 | 0.28           |
| 1969-70 | 122714                                 | 29080     | 75.6                                 | 78.6                 | 0.28           |
| 1970-71 | 124910                                 | 30117     | 75.3                                 | 78.9                 | 0.28           |
| 1971-72 | 122846                                 | 30081     | 74.4                                 | 78.3                 | 0.28           |
| 1972-73 | 121343                                 | 30762     | 74.8                                 | 78.8                 | 0.26           |
| 1973-74 | 127383                                 | 31173     | 75.0                                 | 77.4                 | 0.27           |
| 1974-75 | 121796                                 | 32305     | 74.2                                 | 77.4                 | 0.26           |
| 1975-76 | 128538                                 | 34093     | 75.0                                 | 78.6                 | 0.26           |
| 1976-77 | 125077                                 | 34222     | 74.7                                 | 78.6                 | 0.25           |
| 1977-78 | 127725                                 | 35405     | 74.2                                 | 76.8                 | 0.25           |
| 1978-79 | 129266                                 | 37214     | 73.9                                 | 77.0                 | 0.25           |
| 1979-80 | 125598                                 | 38118     | 74.1                                 | 77.5                 | 0.24           |
| 1980-81 | 127608                                 | 37851     | 73.9                                 | 76.0                 | 0.24           |
| 1981-82 | 129697                                 | 38381     | 73.4                                 | 74.7                 | 0.24           |
| 1982-83 | 125562                                 | 38714     | 72.7                                 | 74.7                 | 0.23           |
| 1983-84 | 131423                                 | 40654     | 73.2                                 | 75.5                 | 0.23           |
| 1984-85 | 127048                                 | 40504     | 72.1                                 | 74.3                 | 0.22           |
| 1985-86 | 128756                                 | 40407     | 72.1                                 | 74.4                 | 0.22           |

## Natural Resources

| Year     | Gross area under food grains (000' ha) |           | % Share of area under food grains to |                      | Land man ratio |
|----------|--|-----------|--------------------------------------|----------------------|----------------|
|          | Cultivated                             | Irrigated | Gross cultivated area                | Gross irrigated area |                |
| 1986-87  | 127992                                 | 41777     | 72.6                                 | 74.9                 | 0.22           |
| 1987-88  | 120876                                 | 40474     | 70.8                                 | 72.2                 | 0.21           |
| 1988-89  | 127573                                 | 43913     | 70.0                                 | 71.8                 | 0.21           |
| 1989-90  | 126526                                 | 44268     | 69.4                                 | 71.6                 | 0.21           |
| 1990-91  | 127948                                 | 44866     | 68.9                                 | 71.0                 | 0.20           |
| 1991-92  | 122520                                 | 45790     | 67.2                                 | 69.7                 | 0.20           |
| 1992-93  | 125234                                 | 46855     | 67.4                                 | 70.2                 | 0.19           |
| 1993-94  | 124782                                 | 48261     | 66.9                                 | 70.7                 | 0.19           |
| 1994-95  | 125949                                 | 49894     | 67.0                                 | 70.6                 | 0.19           |
| 1995-96  | 123463                                 | 49543     | 65.9                                 | 69.4                 | 0.18           |
| 1996-97  | 125101                                 | 52175     | 66.0                                 | 68.6                 | 0.16           |
| 1997-98  | 125716                                 | 52440     | 66.2                                 | 69.3                 | 0.16           |
| 1998-99  | 126879                                 | 54957     | 66.2                                 | 69.9                 | 0.17           |
| 1999-00  | 124719                                 | 55661     | 66.2                                 | 70.3                 | 0.17           |
| 2000-01  | 122680                                 | 53609     | 66.2                                 | 70.4                 | 0.17           |
| 2001-02  | 124222                                 | 54131     | 66.1                                 | 69.1                 | 0.16           |
| 2002-03  | 115254                                 | 50043     | 66.3                                 | 68.5                 | 0.16           |
| 2003-04  | 124971                                 | 53242     | 65.9                                 | 68.2                 | 0.16           |
| 2004-05  | 122710                                 | 54715     | 64.2                                 | 67.5                 | 0.16           |
| 2005-06  | 123610                                 | 56489     | 64.1                                 | 67.0                 | 0.15           |
| 2006-07  | 124106                                 | 58550     | 64.5                                 | 67.5                 | 0.15           |
| 2007-08  | 125859                                 | 59512     | 64.5                                 | 67.6                 | 0.15           |
| 2008-09* | 124635                                 | 60415     | 63.8                                 | 68.0                 | 0.15           |
| 2009-10* | 121481                                 | 58122     | 64.3                                 | 68.3                 | 0.15           |
| 2010-11* | 126955                                 | 61065     | 64.3                                 | 68.7                 | 0.14           |
| 2011-12* | 123576                                 | 61612     | 63.2                                 | 67.2                 | 0.14           |
| 2012-13* | 120357                                 | 61632     | 61.9                                 | 66.6                 | 0.14           |

**Note** : 1. \* Provisional, 2. Land man ratio =Arable land & land under permanent crops/population.

**Source** : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

**Table 1.19: Distribution of land use, number and area of holdings in India by irrigation status and size classes for all social groups as per Agriculture Census, 2010-11\***

(Number: '000, Area: '000 ha)

| Sl. No. | Size Class (in ha.) | Total Holdings |               | Wholly Irrigated Holdings |              | Wholly Unirrigated Holdings |              | Partially Irrigated Holdings |              | Net Area Sown | Area Under Current Fallows | Net Area Cultivated | Uncultivated Land Excluding Fallow Land | Fallow Other than Current Fallow | Culturable Waste Land | Total Uncultivated Land | Land not Available for Cultivation |             |
|---------|---------------------|----------------|---------------|---------------------------|--------------|-----------------------------|--------------|------------------------------|--------------|---------------|----------------------------|---------------------|---|----------------------------------|-----------------------|-------------------------|------------------------------------|-------------|
|         |                     | No.            | Area          | No.                       | Area         | No.                         | Area         | No.                          | Area         |               |                            |                     |   |                                  |                       |                         |                                    | Total Area  |
| 1       | Below 0.5           | 64679          | 15441         | 27668                     | 6762         | 24749                       | 5468         | 6757                         | 1418         | 796           | 13649                      | 1334                | 14983                                   | 89                               | 58                    | 36                      | 183                                | 276         |
| 2       | (0.5-1.0)           | 28147          | 20467         | 11597                     | 8002         | 11913                       | 8260         | 3230                         | 2277         | 1272          | 18539                      | 1415                | 19954                                   | 115                              | 119                   | 68                      | 302                                | 211         |
|         | <b>Marginal</b>     | <b>92826</b>   | <b>35908</b>  | <b>39266</b>              | <b>14764</b> | <b>36662</b>                | <b>13729</b> | <b>9987</b>                  | <b>3695</b>  | <b>2067</b>   | <b>32188</b>               | <b>2749</b>         | <b>34936</b>                            | <b>204</b>                       | <b>177</b>            | <b>104</b>              | <b>485</b>                         | <b>487</b>  |
| 3       | (1.0-2.0)           | 24779          | 35244         | 8643                      | 11675        | 11669                       | 15512        | 3516                         | 4795         | 2598          | 31982                      | 2267                | 34249                                   | 197                              | 286                   | 157                     | 641                                | 354         |
|         | <b>Small</b>        | <b>24779</b>   | <b>35244</b>  | <b>8643</b>               | <b>11675</b> | <b>11669</b>                | <b>15512</b> | <b>3516</b>                  | <b>4795</b>  | <b>2598</b>   | <b>31982</b>               | <b>2267</b>         | <b>34249</b>                            | <b>197</b>                       | <b>286</b>            | <b>157</b>              | <b>641</b>                         | <b>354</b>  |
| 4       | (2.0-3.0)           | 9649           | 23164         | 3167                      | 7231         | 4463                        | 9834         | 1700                         | 3793         | 2012          | 20859                      | 1494                | 22353                                   | 153                              | 259                   | 135                     | 546                                | 266         |
| 5       | (3.0-4.0)           | 4247           | 14540         | 1359                      | 4395         | 1895                        | 5908         | 847                          | 2619         | 1366          | 12922                      | 1017                | 13939                                   | 110                              | 200                   | 107                     | 417                                | 185         |
|         | <b>Semi-medium</b>  | <b>13896</b>   | <b>37705</b>  | <b>4526</b>               | <b>11626</b> | <b>6358</b>                 | <b>15742</b> | <b>2546</b>                  | <b>6412</b>  | <b>3378</b>   | <b>33781</b>               | <b>2511</b>         | <b>36291</b>                            | <b>263</b>                       | <b>459</b>            | <b>241</b>              | <b>963</b>                         | <b>450</b>  |
| 6       | (4.0-5.0)           | 2431           | 10762         | 787                       | 3295         | 1036                        | 4086         | 529                          | 2102         | 1073          | 9484                       | 778                 | 10262                                   | 87                               | 184                   | 89                      | 360                                | 140         |
| 7       | (5.0-7.5)           | 2511           | 15129         | 757                       | 4297         | 1090                        | 5739         | 593                          | 3165         | 1655          | 13201                      | 1046                | 14247                                   | 140                              | 365                   | 165                     | 670                                | 212         |
| 8       | (7.5-10.0)          | 933            | 7937          | 267                       | 2127         | 417                         | 2996         | 222                          | 1659         | 847           | 6781                       | 620                 | 7401                                    | 86                               | 238                   | 92                      | 417                                | 119         |
|         | <b>Medium</b>       | <b>5875</b>    | <b>33828</b>  | <b>1811</b>               | <b>9719</b>  | <b>2543</b>                 | <b>12821</b> | <b>1344</b>                  | <b>6926</b>  | <b>3575</b>   | <b>29466</b>               | <b>2444</b>         | <b>31910</b>                            | <b>313</b>                       | <b>787</b>            | <b>347</b>              | <b>1446</b>                        | <b>471</b>  |
| 9       | (10.0-20.0)         | 799            | 10489         | 209                       | 2548         | 385                         | 4135         | 183                          | 2041         | 971           | 8723                       | 910                 | 9633                                    | 121                              | 437                   | 132                     | 690                                | 165         |
| 10      | 20 & Above          | 174            | 6418          | 37                        | 1208         | 98                          | 2894         | 35                           | 1051         | 496           | 5153                       | 602                 | 5755                                    | 75                               | 344                   | 85                      | 504                                | 159         |
|         | <b>Large</b>        | <b>973</b>     | <b>16907</b>  | <b>246</b>                | <b>3756</b>  | <b>484</b>                  | <b>7028</b>  | <b>218</b>                   | <b>3092</b>  | <b>1467</b>   | <b>13876</b>               | <b>1512</b>         | <b>15388</b>                            | <b>197</b>                       | <b>780</b>            | <b>217</b>              | <b>1194</b>                        | <b>324</b>  |
| 11      | <b>All Classes</b>  | <b>138348</b>  | <b>159592</b> | <b>54492</b>              | <b>51540</b> | <b>57715</b>                | <b>64832</b> | <b>17611</b>                 | <b>24920</b> | <b>13085</b>  | <b>141292</b>              | <b>11483</b>        | <b>152775</b>                           | <b>1173</b>                      | <b>2490</b>           | <b>1067</b>             | <b>4729</b>                        | <b>2087</b> |

**Note** : 1. Totals may not tally due to rounding off, 2. # Exclude Bihar, Jharkhand and Maharashtra, 3. \* Provisional.

**Source** : Information received from Agriculture Census Division, Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India.

**Table 1.20: All India cultivated and irrigated area—gross and net along with cropping intensity**

(million ha)

| Year     | Area sown |        |                | Irrigated area |       |                | Intensity of irrigated gross area to gross sown area (%) | Cropping intensity (gross/ net sown area x 100) (%) |
|----------|-----------|--------|----------------|----------------|-------|----------------|--|---|
|          | Gross     | Net    | More than once | Gross          | Net   | More than once |  |   |
| 1950-51  | 131.89    | 118.75 | 13.15          | 22.56          | 20.85 | 1.71           | 17.1   | 111.1   |
| 1955-56  | 147.31    | 129.16 | 18.16          | 25.64          | 22.76 | 2.88           | 17.4   | 114.1   |
| 1960-61  | 152.77    | 133.20 | 19.57          | 27.98          | 24.66 | 3.32           | 18.3   | 114.7   |
| 1965-66  | 155.28    | 136.20 | 19.08          | 30.90          | 26.34 | 4.56           | 19.9   | 114.0   |
| 1970-71  | 165.79    | 140.86 | 24.93          | 38.20          | 31.10 | 7.09           | 23.0   | 118.2   |
| 1975-76  | 171.30    | 141.65 | 29.64          | 43.36          | 34.59 | 8.77           | 25.3   | 120.9   |
| 1980-81  | 172.63    | 140.29 | 32.34          | 49.78          | 38.72 | 11.06          | 28.8   | 123.3   |
| 1985-86  | 178.46    | 140.90 | 37.56          | 54.28          | 41.87 | 12.42          | 30.4   | 126.7   |
| 1990-91  | 185.74    | 143.00 | 42.74          | 63.20          | 48.02 | 15.18          | 34.0   | 129.9   |
| 1995-96  | 187.47    | 142.20 | 45.27          | 71.35          | 53.40 | 17.95          | 38.1   | 131.8   |
| 1996-97  | 189.50    | 142.93 | 46.57          | 76.03          | 55.11 | 20.91          | 40.1   | 132.6   |
| 1997-98  | 189.99    | 141.95 | 48.04          | 75.67          | 55.21 | 20.46          | 39.7   | 133.9   |
| 1998-99  | 191.65    | 142.75 | 48.90          | 78.67          | 57.44 | 21.23          | 41.0   | 134.3   |
| 1999-00  | 188.40    | 141.06 | 47.33          | 79.22          | 57.53 | 21.69          | 42.0   | 133.6   |
| 2000-01  | 185.34    | 141.34 | 44.01          | 76.19          | 55.21 | 20.98          | 41.1   | 131.1   |
| 2001-02  | 188.01    | 140.73 | 47.28          | 78.37          | 56.94 | 21.44          | 41.7   | 133.6   |
| 2002-03  | 173.89    | 131.94 | 41.95          | 73.06          | 53.90 | 19.16          | 42.0   | 131.8   |
| 2003-04  | 189.66    | 140.71 | 48.95          | 78.04          | 57.06 | 20.99          | 41.1   | 134.8   |
| 2004-05  | 191.10    | 140.64 | 50.46          | 81.08          | 59.23 | 21.85          | 42.4   | 135.9   |
| 2005-06  | 192.74    | 141.16 | 51.58          | 84.28          | 60.84 | 23.44          | 43.7   | 136.5   |
| 2006-07  | 192.38    | 139.82 | 52.56          | 86.75          | 62.75 | 24.01          | 45.1   | 137.6   |
| 2007-08  | 195.22    | 141.02 | 54.21          | 88.06          | 63.19 | 24.87          | 45.1   | 138.4   |
| 2008-09  | 195.33    | 141.90 | 53.43          | 88.90          | 63.64 | 25.26          | 45.5   | 137.7   |
| 2009-10  | 189.00    | 139.17 | 49.83          | 85.08          | 61.94 | 23.15          | 45.0   | 135.8   |
| 2010-11  | 197.56    | 141.56 | 56.00          | 88.89          | 63.66 | 25.23          | 45.0   | 139.0   |
| 2011-12* | 195.63    | 140.97 | 54.66          | 91.73          | 65.69 | 26.03          | 46.9   | 138.8   |
| 2012-13* | 194.40    | 139.93 | 54.47          | 92.57          | 66.10 | 26.47          | 47.6   | 138.9   |

Note : \* Provisional

Source : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

Table 1.21: Forest cover in States/UT's in India-2015

(sq km)

| States / UT's        | Forest cover area |                   |                       |                  |                  | Percent of G.A. |
|----------------------|-------------------|-------------------|-----------------------|------------------|------------------|-----------------|
|                      | Geographic area   | Very Dense forest | Moderate Dense forest | Open forest      | Total forest     |                 |
| Andhra Pradesh       | 160204            | 375               | 13093                 | 10956            | 24424            | 15.25           |
| Arunachal Pradesh    | 83743             | 20804             | 31301                 | 15143            | 672748           | 80.30           |
| Assam                | 78438             | 1441              | 11268                 | 14914            | 27623            | 35.22           |
| Bihar                | 94163             | 248               | 3376                  | 3664             | 7288             | 7.74            |
| Chhattisgarh         | 135191            | 4152              | 34846                 | 16588            | 55586            | 41.12           |
| Delhi                | 1483              | 6.76              | 57.15                 | 124.68           | 188.59           | 12.72           |
| Goa                  | 3702              | 542               | 580                   | 1102             | 2224             | 60.08           |
| Gujarat              | 196022            | 376               | 5220                  | 9064             | 14660            | 7.48            |
| Haryana              | 44212             | 27                | 452                   | 1105             | 1584             | 3.58            |
| Himachal Pradesh     | 55673             | 3224              | 6381                  | 5091             | 14696            | 26.40           |
| Jammu & Kashmir*     | 222236            | 4061              | 8815                  | 10112            | 22988            | 10.34           |
| Jharkhand            | 79714             | 2588              | 9663                  | 11227            | 23478            | 29.45           |
| Karnataka            | 191791            | 1781              | 20063                 | 14577            | 36421            | 18.99           |
| Kerala               | 38863             | 1523              | 9301                  | 8415             | 19239            | 49.50           |
| Madhya Pradesh       | 308245            | 6629              | 34902                 | 35931            | 77462            | 25.13           |
| Maharashtra          | 307713            | 8712              | 20747                 | 21169            | 50628            | 16.45           |
| Manipur              | 22327             | 727               | 5925                  | 10342            | 16994            | 76.11           |
| Meghalaya            | 22429             | 449               | 9584                  | 7184             | 17217            | 76.76           |
| Mizoram              | 21081             | 138               | 5858                  | 12752            | 18748            | 88.93           |
| Nagaland             | 16579             | 1296              | 4695                  | 6975             | 12966            | 78.21           |
| Odisha               | 155707            | 7023              | 21470                 | 21861            | 50354            | 32.34           |
| Punjab               | 50362             | 0                 | 735                   | 1036             | 1771             | 3.52            |
| Rajasthan            | 342239            | 76                | 4426                  | 11669            | 16171            | 4.73            |
| Sikkim               | 7096              | 500               | 2160                  | 697              | 3357             | 47.31           |
| Tamil Nadu           | 130058            | 2993              | 10469                 | 12883            | 26345            | 20.26           |
| Telangana            | 114865            | 513               | 12712                 | 8366             | 21591            | 18.80           |
| Tripura              | 10486             | 113               | 4609                  | 3089             | 7811             | 74.49           |
| Uttar Pradesh        | 240928            | 2195              | 4060                  | 8206             | 14461            | 6.00            |
| Uttarakhand          | 53483             | 4754              | 13602                 | 5884             | 24240            | 45.32           |
| West Bengal          | 88752             | 2948              | 4172                  | 9708             | 16828            | 18.96           |
| A & N Islands        | 8249              | 5686              | 685                   | 380              | 6751             | 81.84           |
| Chandigarh           | 114               | 1.36              | 14.09                 | 6.58             | 22.03            | 19.32           |
| Dadra & Nagar Haveli | 491               | 0                 | 80                    | 126              | 206              | 41.96           |
| Daman & Diu          | 112               | 1.4               | 5.82                  | 12.39            | 19.61            | 17.51           |
| Lakshadweep          | 32                | 0                 | 17.22                 | 9.84             | 27.06            | 84.56           |
| Puducherry           | 480               | 0                 | 29.68                 | 25.7             | 55.38            | 11.54           |
| <b>Total</b>         | <b>3287263</b>    | <b>85903.52</b>   | <b>315373.96</b>      | <b>300395.19</b> | <b>701672.67</b> | <b>21.35</b>    |

Note : G.A.: Geographic Area,\* Includes area outside LOC under illegal occupation of Pakistan and China.

Source : 1. *Compendium of Environment Statistics India, 2015*, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India (Website: <http://www.mospi.gov.in>).

2. India, State of Forest Report, 2015.

### State-wise forest cover in India

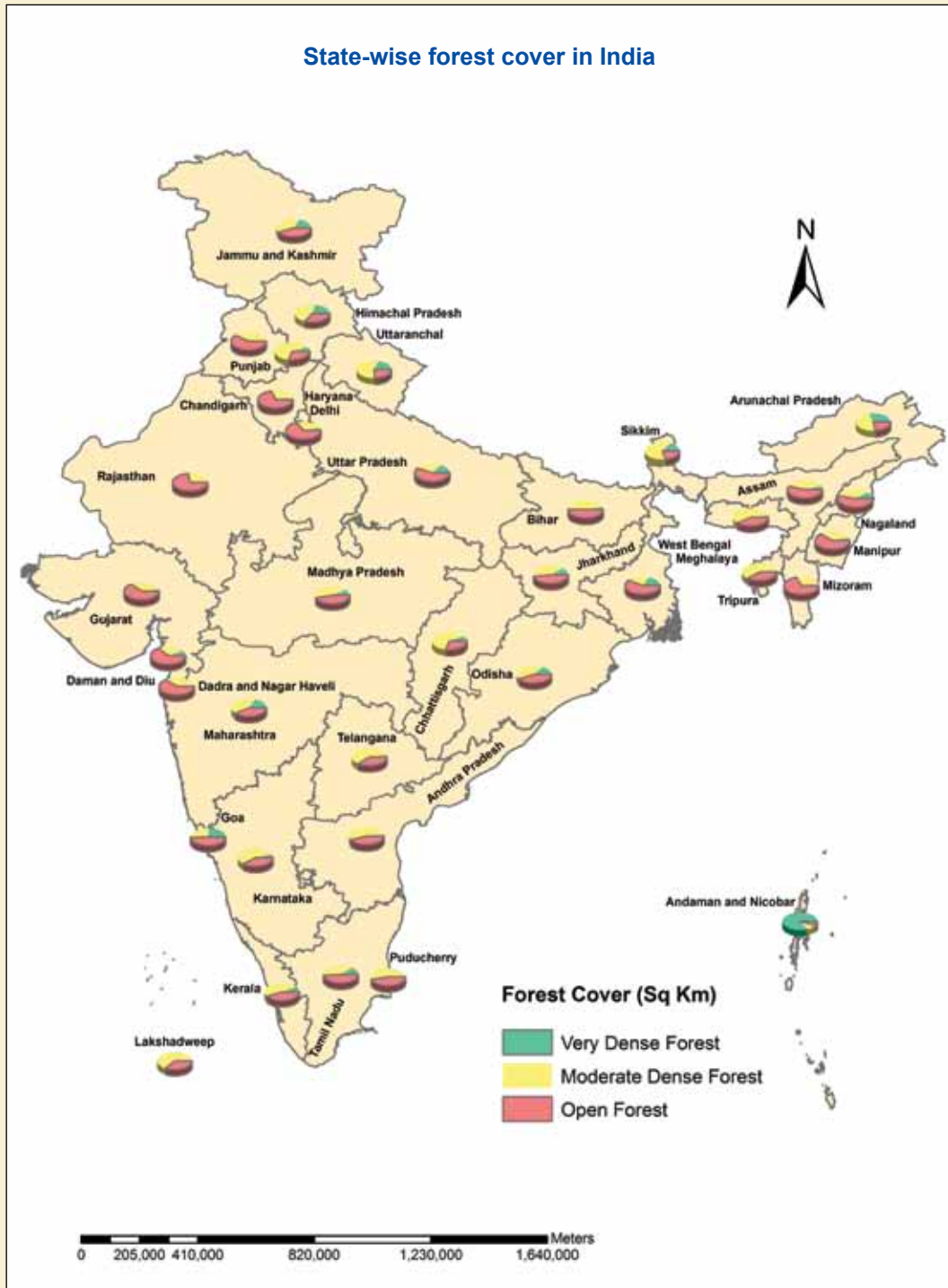


Table 1.22: Selected economic and social indicators

| Indicator   | 1950-51          | 1960-61 | 1970-71 | 1980-81 | 1990-91 | 2000-01 | 2010-11               | 2011-12               | 2012-13               | 2013-14                | 2014-15                 |
|---|------------------|---------|---------|---------|---------|---------|-----------------------|-----------------------|-----------------------|------------------------|-------------------------|
| <b>GVA at factor cost</b><br>(at current prices Rs. Crore)  | 10036            | 17049   | 44382   | 136838  | 531814  | 2000743 | 7248860 <sup>3R</sup> | 8832012 <sup>NS</sup> | 9252051 <sup>NS</sup> | 10477139 <sup>NS</sup> | 11550240 <sup>AE</sup>  |
| <b>GVA at factor cost</b><br>(at constant prices Rs. Crore)   | 279618           | 410279  | 589787  | 798506  | 1347899 | 2348481 | 4918533 <sup>3R</sup> | 8195546 <sup>NS</sup> | 8599224 <sup>NS</sup> | 9169787 <sup>NS</sup>  | 9827089 <sup>AE</sup>   |
| <b>Per capita Net National Product at factor cost at</b><br>constant prices Rs. Crore)  | 7114             | 8889    | 10016   | 10712   | 14330   | 20362   | 36202 <sup>3R</sup>   | 64316 <sup>NS</sup>   | 66344 <sup>NS</sup>   | 69959 <sup>NS</sup>    | 74104 <sup>AE</sup>     |
| <b>Gross Domestic Capital Formation</b> (as percentage<br>to GDP at current market prices)  | 9.3              | 14.3    | 15.1    | 19.2    | 26.0    | 24.4    | 36.5 <sup>3R</sup>    | 38.2                  | 36.6                  | 32.3                   | N.A                     |
| <b>Gross Domestic Saving</b> (as percentage of GDP at<br>current market prices)   | 9.5              | 11.6    | 14.3    | 17.8    | 22.9    | 23.8    | 33.7 <sup>3R</sup>    | 33.9                  | 31.8                  | 30.6                   | N.A                     |
| <b>Index of agricultural production</b><br>(base: triennium ending 1981-82) for data given till<br>2000-01 and base i.e. ending 2007-08<br>from 2009-10 onwards | 46.2             | 68.8    | 85.9    | 102.1   | 148.4   | 165.7   | 121.0                 | 125.2                 | 124.2                 | 129.6                  | 123.9                   |
| <b>Index of industrial production<sup>a</sup></b><br>(base: 2004-05=100)  | 7.9 <sup>b</sup> | 15.6    | 28.1    | 43.1    | 91.6    | 162.6   | 165.5                 | 170.3                 | 172.2                 | 172.0                  | 174.9                   |
| <b>Wholesale Price Index average<sup>c</sup></b>  | 6.8              | 7.9     | 14.3    | 36.8    | 73.7    | 155.6   | 143.3                 | 156.1                 | 167.6                 | 177.6                  | 181.2                   |
| <b>Consumer Price Index<sup>d</sup> for industrial workers</b>  | 17.0             | 21.0    | 38.0    | 81.0    | 193.0   | 444.0   | 180.0                 | 195.0                 | 215.0                 | 236.0                  | 251.0                   |
| <b>(a) Food grains</b> (million tonnes)   | 50.8             | 82.0    | 108.0   | 129.6   | 176.4   | 196.8   | 244.5                 | 259.3                 | 257.1                 | 265.0                  | 252.68 <sup>e</sup>     |
| <b>(c) Coal and lignite<sup>b</sup></b> (million tonnes)  | 32.3             | 55.2    | 76.3    | 119.0   | 225.5   | 332.6   | 570.4                 | 582.3                 | 602.9                 | 610.0                  | 459.4 <sup>f</sup>      |
| <b>(d) Crude oil</b> (million tonnes)   | 0.3              | 0.5     | 6.8     | 10.5    | 33.0    | 32.4    | 37.7                  | 38.1                  | 37.9                  | 37.8                   | 28.2 <sup>f</sup>       |
| <b>(e) Electricity generator</b> (utilities only)<br>(billion kWh)  | 5                | 17      | 56      | 111.0   | 264.0   | 500.0   | 845.0                 | 923.0                 | 964.5                 | 1014.8                 | 741.4 <sup>f</sup>      |
| <b>Plan outlay</b> (Rs. Crore)  | 2601             | 1117    | 2524    | 15023   | 58369   | 185737  | 826268                | 936292                | 971951                | 1281022(RE)            | 484533(BE) <sup>g</sup> |
| <b>(i) Export</b>   | 606              | 642     | 1535    | 6711    | 32553   | 203571  | 1142922               | 1465959               | 1634318               | 1905011                | 1897026 <sup>h</sup>    |
|   | US\$ million     | 1269    | 1346    | 2031    | 8486    | 18143   | 44076                 | 305964                | 300401                | 314405                 | 310533.9 <sup>h</sup>   |
| <b>(ii) Imports</b>   | 608              | 1122    | 1634    | 12549   | 43198   | 230873  | 1683467               | 2345463               | 2669162               | 2715434                | 2734049 <sup>h</sup>    |
|   | US\$ million     | 1273    | 2356    | 2162    | 15869   | 24075   | 49975                 | 489319                | 490737                | 450200                 | 447548.3 <sup>h</sup>   |
| <b>Foreign exchange reserves<sup>k</sup></b> (excluding   | 911              | 186     | 438     | 4822    | 4388    | 184482  | 1224883               | 1330511               | 1412631               | 1660914                | 1985458                 |
|   | US\$ million     | 1914    | 390     | 584     | 5850    | 39554   | 274330                | 260069                | 259726                | 276359                 | 317323                  |

## Natural Resources

| Indicator                                       | 1950-51              | 1960-61 | 1970-71 | 1980-81 | 1990-91 | 2000-01           | 2010-11 | 2011-12           | 2012-13           | 2013-14 | 2014-15 |
|---|----------------------|---------|---------|---------|---------|-------------------|---------|-------------------|-------------------|---------|---------|
| gold, SDRs and Reserve Tranche Position at IMF) |                      |         |         |         |         |                   |         |                   |                   |         |         |
| <b>Population</b>                               | Million <sup>1</sup> | 361.0   | 439.2   | 548.2   | 683.3   | 846.4             | 1028.7  | 1202.0            | 1235.0            | 1251.0  | 1267.0  |
| Birth rate <sup>2</sup>                         | Per 1000             | 39.9    | 41.7    | 36.9    | 33.9    | 29.5              | 25.4    | 21.6 <sup>b</sup> | 21.4 <sup>m</sup> | N.A     | N.A     |
| Death rate <sup>3</sup>                         | Per 1000             | 27.4    | 22.8    | 14.9    | 12.5    | 9.8               | 8.4     | 7.0 <sup>b</sup>  | 7.0 <sup>m</sup>  | N.A     | N.A     |
| <b>Life Expectation at birth<sup>4</sup></b>    | In years             | 32.1    | 41.3    | 45.6    | 50.4    | 58.7              | 62.5    | N.A               | 67.5 <sup>m</sup> | N.A     | N.A     |
| (a) Male  | In years             | 32.5    | 41.9    | 46.4    | 50.9    | 64.6 <sup>r</sup> | 61.6    | N.A               | 65.8 <sup>m</sup> | N.A     | N.A     |
| (b) Female                                      | In years             | 31.7    | 40.6    | 44.7    | 50.0    | 67.6 <sup>r</sup> | 63.3    | N.A               | 69.3 <sup>m</sup> | N.A     | N.A     |
| <b>Education literacy rate<sup>5</sup></b>      | (%)                  | 18.3    | 28.3    | 34.4    | 43.6    | 52.2              | 64.8    | 74.04             | N.A               | N.A     | N.A     |
| (a) Male  | (%)                  | 27.2    | 40.4    | 46.0    | 56.4    | 82.1              | 75.3    | 82.14             | N.A               | N.A     | N.A     |
| (b) Female                                      | (%)                  | 8.9     | 15.4    | 22.0    | 29.8    | 65.5              | 53.7    | N.A               | N.A               | N.A     | N.A     |

**Note :** 1. BE: Budget Estimate, RE: Revised Estimate, AE: Advance Estimate, NS: New series Estimates, 3R: 3rd Revised Estimates, 2. R: Revised estimates, 3. N.A.: Not available 4. a: The index of industrial production has been revised since 2005-06 on base (2004-05=100) The figures for the year 2007-08 onwards are on the new base, 5.b: Relates to the calendar year 1950, 6. c: New series of WPI has been released from 2004-05 with base year 2004-05 = 100, 7. d: CPI-IW: New series is based on 2001=100, 8. e: 4<sup>th</sup> advance estimates, 9. f: Figures are for April-December 2014-15, 10. g: Outlays are only of the Centre as Outlays of State plans are not yet finalised, 11. h: coal output include Meghalaya coal from 2005-06 onward, 12. i: As on end-March, 13. j: Relates to mid-financial year (as on October 1) based on population figures of C.S.O. 14. k: Revised data for 2014-15, 15. m: For calendar year. Figure shown against 1990-91 is for calendar year 1991 and so on. Source: Office of R.G.I, 16.n: Data for 1950-51, 1960-61, 1970-71 and 1980-81 relate to the decades 1941-50, 1951-60, 1961-70 and 1971-80 respectively, centred at mid points of the decade, i.e, 1946, 1956, 1966 and 1976. The estimates for 1990-91 and 1991-92 referred to the periods 1988-92 and 1989-93 respectively. The estimates for 2005-06 referred to the period 2001-05. The estimates for 2006-07 refer to the period 2002-06, 17. o: Data for 1950-51, 1960-61, 1970-71, 1980-81, 1990-91 and 2000-01 are as per Census of India 1951, 1961, 1971, 1981, 1991 and 2001. The figures for 1951, 1961 and 1971 relate to population aged 5 years and above and those for 1981, 1991 and 2001 to population aged 7 years and above. All India literacy rates exclude Assam for 1981 and J&K for 1991. For 2005-06 data is based on National Family Health Survey (2005-06) (+ 6 years).

**Source :** 1. *Ministry of Finance, CSO and RBI*  
2. *Pocket book of Agricultural Statistics 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India  
(Website: eands.daenet.nic.in/PDF/Pocket-Book2015.pdf).



**Table 1.23: Rural population and agricultural workers**

(million)

| Year | Total population | Average annual exponential growth rate (%) | Rural population | Cultivators     | Agricultural labourers | Total |
|------|------------------|--|------------------|-----------------|------------------------|-------|
| 1    | 2                | 3  | 4                | 5               | 6                      | 7     |
| 1951 | 361.1            | 1.25                                       | 298.6<br>(82.7)  | 69.9<br>(71.9)  | 27.3<br>(28.1)         | 97.2  |
| 1961 | 439.2            | 1.96                                       | 360.3<br>(82.0)  | 99.6<br>(76.0)  | 31.5<br>(24.0)         | 131.1 |
| 1971 | 548.2            | 2.22                                       | 439.0<br>(80.1)  | 78.2<br>(62.2)  | 47.5<br>(37.8)         | 125.7 |
| 1981 | 683.3            | 2.20                                       | 523.9<br>(76.7)  | 92.5<br>(62.5)  | 55.5<br>(37.5)         | 148.0 |
| 1991 | 846.4            | 2.14                                       | 628.9<br>(74.3)  | 110.7<br>(59.7) | 74.6<br>(40.3)         | 185.3 |
| 2001 | 1028.7           | 1.97                                       | 742.6<br>(72.2)  | 127.3<br>(54.4) | 106.8<br>(45.6)        | 234.1 |
| 2011 | 1210.8           | 1.50                                       | 833.5<br>(68.9)  | 118.7<br>(45.1) | 144.3<br>(54.9)        | 263.0 |

**Note** : 1. For 2011, figures include estimated figures for those of the three sub-divisions viz. Mao Maram Paomata and Purul of Senapati district of Manipur as census result of 2001, Census in these three sub-divisions were cancelled due to technical and administrative reasons, 2.The 1991 Census could not be held owing to disturbed conditions prevailing in Jammu & Kashmir. Hence the population figures for 1991 of Jammu & Kashmir have been worked out by 'interpolation'. The data on workers in columns 5-7 exclude Jammu & Kashmir, 3.The 1981 census could not be held in Assam. The figures for 1981 for Assam have been worked out by 'interpolation'. The data on workers in columns 5-7 exclude Assam, 4.Figures in parentheses in column 4 represent percentages to the total population, 5. Figures within parentheses in column 5 and 6 are percentages to column 7, 6. \* Provisional.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. Registrar General of India.

**Table 1.24: Dynamics of agricultural workers in India**

(million)

| Item  | 1991  | 2001   | 2011*  |
|---|-------|--------|--------|
| <b>Total population</b>                           | 846.3 | 1028.7 | 1210.0 |
| <b>Total workers</b>                              | 313.7 | 402.2  | 362.0  |
| <b>Total no. of workers as % of population</b>    | 37.1  | 39.1   | 29.9   |
| <b>No. of agricultural workers</b>                | 210.5 | 234.0  | 263.0  |
| <b>% of agricultural workers to total workers</b> | 67.1  | 58.2   | 72.7   |
| Male  | 136.6 | 142.8  | 165.4  |
| Female  | 73.9  | 91.2   | 97.6   |
| <b>% of females in agricultural work force</b>    | 35.1  | 39.0   | 37.1   |

**Note** : \* Provisional.

**Source** : *Census of India, 2011, Primary Census Abstract*, Registrar General of India, New Delhi.

**Table 1.25: Potential availability of agriculture-based biomass**

(million t)

| Biomass               | 1980-81 | 1990-91 | 2000-01 | 2005-06 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15' |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Rice husk             | 26.8    | 37.1    | 42.5    | 45.9    | 44.5    | 48.0    | 52.2    | 52.6    | 53.3    | 52.4     |
| Wheat straw           | 48.4    | 73.5    | 92.7    | 92.2    | 107.5   | 115.5   | 126.2   | 124.4   | 127.5   | 118.3    |
| Maize cobs            | 2.1     | 2.7     | 3.6     | 4.4     | 5.0     | 6.5     | 6.5     | 6.7     | 7.3     | 7.1      |
| Pearl millet<br>straw | 8.9     | 11.4    | 11.2    | 12.7    | 10.8    | 17.2    | 17.1    | 14.5    | 15.2    | N.A.     |
| Sugarcane<br>bagasse  | 51.4    | 80.4    | 97.7    | 92.8    | 96.5    | 113.0   | 119.1   | 112.6   | 115.5   | 118.6    |
| Coconut shell         | 0.8     | 1.3     | 1.7     | 2.0     | 1.5     | 2.1     | 2.8     | 3.1     | 3.0     | N.A.     |
| Coconut fibre         | 0.9     | 1.6     | 2.1     | 2.4     | 1.8     | 2.6     | 3.4     | 3.7     | 3.6     | N.A.     |
| Coconut pith          | 1.4     | 2.4     | 3.1     | 3.6     | 2.7     | 3.9     | 5.1     | 5.6     | 5.4     | N.A.     |
| Groundnut<br>shell    | 1.7     | 2.5     | 2.1     | 2.6     | 1.8     | 2.7     | 2.3     | 1.6     | 3.2     | 2.2      |
| Cotton stalks         | 23.5    | 22.3    | 25.6    | 26.0    | 30.4    | 33.7    | 36.5    | 35.9    | 35.1    | N.A.     |
| Jute sticks           | 3.9     | 3.1     | 3.1     | 2.7     | 2.7     | 2.6     | 2.7     | 2.6     | 2.6     | N.A.     |

- Note** :
- \* Provisional
  - The conversion factors used are listed below:
    - Rice husk = yield of clean rice x 0.5
    - Wheat straw = grain yield x 1.33
    - Maize cobs = grain yield x 0.3
    - Straw from pearl millet = grain yield x 1.66
    - Bagasse = weight of cane x 0.33
    - One coconut = 135 g shell, 164 g fibre, and 246 g pith
    - Groundnut shell = kernel yield x 0.33
    - Cotton stalks = 3 tonnes / hectare
    - Jute sticks = 3 tonnes / hectare

- Source** :
- Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India
  - Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 1.26: State-wise potential availability of agriculture-based biomass during 2013-14\***

(million t)

| States           | Rice husk | Wheat straw | Maize cobs | Pearl Millet Straw | Sugarcane bagasse | Groundnut shell | Cotton stalks |
|------------------|-----------|-------------|------------|--------------------|-------------------|-----------------|---------------|
| Andhra Pradesh   | 6.52      | N.A.        | 1.49       | 0.17               | 5.07              | 0.41            | 6.81          |
| Assam            | 2.39      | 0.04        | N.A.       | N.A.               | 0.32              | N.A.            | N.A.          |
| Bihar            | 2.76      | 6.76        | 0.61       | N.A.               | 4.45              | N.A.            | N.A.          |
| Chhattisgarh     | 3.36      | N.A.        | N.A.       | N.A.               | N.A.              | N.A.            | N.A.          |
| Gujarat          | 0.81      | 4.85        | 0.21       | 2.16               | 4.14              | 1.62            | 8.07          |
| Haryana          | 2.00      | 15.69       | N.A.       | 1.38               | 2.46              | N.A.            | 1.71          |
| Himachal Pradesh | N.A.      | 0.72        | 0.20       | N.A.               | N.A.              | N.A.            | N.A.          |
| Jammu & Kashmir  | N.A.      | 0.61        | 0.16       | 0.02               | N.A.              | N.A.            | N.A.          |
| Jharkhand        | 1.37      | 0.48        | 0.16       | N.A.               | N.A.              | N.A.            | N.A.          |
| Karnataka        | 1.88      | 0.31        | 1.19       | 0.51               | 11.85             | 0.22            | 1.77          |
| Kerala           | 0.26      | N.A.        | N.A.       | N.A.               | N.A.              | N.A.            | N.A.          |
| Madhya Pradesh   | 1.39      | 18.53       | 0.45       | 0.61               | 1.09              | 0.07            | 1.86          |
| Maharashtra      | 1.48      | 2.13        | 0.92       | 1.26               | 25.26             | 0.11            | 11.61         |
| Odisha           | 3.79      | N.A.        | N.A.       | N.A.               | 0.31              | 0.03            | N.A.          |
| Punjab           | 5.64      | 22.66       | 0.15       | N.A.               | 2.08              | N.A.            | 1.53          |
| Rajasthan        | N.A.      | 11.86       | 0.45       | 6.31               | N.A.              | 0.30            | 0.90          |
| Tamil Nadu       | 2.77      | N.A.        | 0.49       | 0.17               | 10.48             | 0.32            | 0.42          |
| Uttarakhand      | N.A.      | 1.12        | N.A.       | N.A.               | 2.12              | N.A.            | N.A.          |
| Uttar Pradesh    | 7.32      | 40.23       | 0.37       | 2.66               | 44.60             | 0.03            | N.A.          |
| West Bengal      | 7.66      | 1.26        | 0.16       | N.A.               | 0.56              | N.A.            | N.A.          |

**Note** : 1. N.A.: Not Available, 2. \*: 4<sup>th</sup> Advance estimates.

3. The conversion factors used are listed below:

|                         |   |                           |
|-------------------------|---|---------------------------|
| Rice husk               | = | yield of clean rice x 0.5 |
| Wheat straw             | = | grain yield x 1.33        |
| Maize cobs              | = | grain yield x 0.3         |
| Straw from pearl millet | = | grain yield x 1.66        |
| Bagasse                 | = | weight of cane x 0.33     |
| Groundnut shell         | = | kernel yield x 0.33       |
| Cotton stalks           | = | 3 tonnes / hectare        |

**Source** : Agricultural Statistics at a Glance, 2014, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.





भाग-II  
कृषि निविष्टि

SECTION-II  
Agricultural Inputs





**Table 2.1: Crop-wise distribution of certified/quality seeds**

(lakh q)

| Year    | Cereals | Pulses | Oilseeds | Fibers | Potato | Others | Total   |
|---------|---------|--------|----------|--------|--------|--------|---------|
| 1992-93 | 36.72   | 3.40   | 10.75    | 2.09   | 7.10   | 0.27   | 60.33   |
| 1993-94 | 38.74   | 3.62   | 11.38    | 2.01   | 6.17   | 0.28   | 62.20   |
| 1994-95 | 41.35   | 3.60   | 12.01    | 2.20   | 6.62   | 0.08   | 65.86   |
| 1995-96 | 44.03   | 3.58   | 12.64    | 2.58   | 6.85   | 0.24   | 69.92   |
| 1996-97 | 46.43   | 4.19   | 12.53    | 3.18   | 6.69   | 0.25   | 73.27   |
| 1997-98 | 51.78   | 3.89   | 12.87    | 3.21   | 6.83   | 0.21   | 78.79   |
| 1998-99 | 57.27   | 4.06   | 13.83    | 2.92   | 6.86   | 0.03   | 84.97   |
| 1999-00 | 61.14   | 3.87   | 12.98    | 2.93   | 6.89   | 0.17   | 87.98   |
| 2000-01 | 59.47   | 3.85   | 12.54    | 2.91   | 7.23   | 0.27   | 86.27   |
| 2001-02 | 65.56   | 4.69   | 12.10    | 2.89   | 6.33   | 0.23   | 91.80   |
| 2002-03 | 66.97   | 6.60   | 13.36    | 2.74   | 7.16   | 0.21   | 97.04   |
| 2003-04 | 70.82   | 8.17   | 19.39    | 2.78   | 7.01   | 0.23   | 108.40  |
| 2004-05 | 81.41   | 7.40   | 23.42    | 2.76   | 5.05   | 0.22   | 120.26  |
| 2005-06 | 86.73   | 7.37   | 24.35    | 2.89   | 5.08   | 0.33   | 126.75  |
| 2006-07 | 109.87  | 9.63   | 27.00    | 3.05   | 5.12   | 0.34   | 155.01  |
| 2007-08 | 123.80  | 12.57  | 34.33    | 2.63   | 5.35   | 0.37   | 179.05  |
| 2008-09 | 147.43  | 14.48  | 39.92    | 2.58   | 10.55  | 0.85   | 215.81  |
| 2009-10 | 165.15  | 19.69  | 50.71    | 2.65   | 18.68  | 0.23   | 257.11  |
| 2010-11 | 182.62  | 20.83  | 50.61    | 2.64   | 20.08  | 0.55   | 277.34  |
| 2011-12 | 189.96  | 22.26  | 61.49    | 3.09   | 16.68  | 1.64   | 294.85  |
| 2012-13 | 204.37  | 24.51  | 58.41    | 2.95   | 21.47  | 1.73   | 313.44  |
| 2013-14 | 183.03  | 27.80  | 61.09    | 2.87   | 24.63  | 1.97   | 301.39  |
| 2014-15 | -       | -      | -        | -      | -      | -      | 303.12* |

**Note** : -: Not available

**Source** : 1. \* *Pocket book of Agricultural Statistics 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: [eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf](http://eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf)).  
2. Department of Agriculture, Cooperation & Farmers Welfare, Seeds Division.



**Table 2.2: Indent and production of breeder seeds of different crops during 2010-11 to 2014-15**

| CROPS                      | 2010-11      |              | 2011-12      |               | 2012-13      |              | 2013-14      |              | 2014-15      |              |
|----------------------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                            | Indent       | Production   | Indent       | Production    | Indent       | Production   | Indent       | Production   | Indent       | Production   |
| <b>Wheat</b>               | 29,692       | 38,469       | 28,860       | 35,745        | 20,542       | 27,502       | 20,050       | 24,250       | 19,604       | 24,192       |
| <b>Paddy</b>               | 4,604        | 6,095        | 5,772        | 6,828         | 5,267        | 11,455       | 4,745        | 10,586       | 4,328        | 7,757        |
| <b>Barley</b>              | 1,778        | 2,900        | 1,842        | 1,906         | 1,029        | 698          | 843          | 1820         | 1,112        | 1,141        |
| <b>Sorghum</b>             | 36           | 167          | 113          | 158           | 115          | 375          | 83           | 305          | 55           | 257          |
| <b>Maize</b>               | 178          | 232          | 211          | 173           | 99           | 109          | 60           | 89           | 45           | 48           |
| <b>Pearl millet</b>        | 10           | 28           | 15           | 32            | 17           | 67           | 11           | 28           | 11           | 44           |
| <b>Small millet</b>        | 22           | 42           | 18           | 47            | 37           | 109          | 44           | 116          | 23           | 62           |
| <b>Total Cereal Crops</b>  | 36294        | 47814        | 36831        | 44889         | 27106        | 40315        | 25836        | 37194        | 25178        | 33501        |
| <b>Total Oilseed Crops</b> | 33937        | 34015        | 41404        | 41446         | 38051        | 33235        | 30734        | 22398        | 25720        | 20030        |
| <b>Total Pulse Crops</b>   | 12944        | 15360        | 14303        | 16656         | 14155        | 14430        | 12341        | 12128        | 10427        | 10817        |
| <b>Total Forage Crops</b>  | 627          | 1039         | 1627         | 1708          | 1832         | 1336         | 936          | 823          | 849          | 762          |
| <b>Total Fibre Crops</b>   | 52           | 71           | 55           | 85            | 51           | 121          | 43           | 55           | 48           | 70           |
| <b>TOTAL</b>               | <b>83880</b> | <b>98419</b> | <b>94220</b> | <b>104784</b> | <b>81193</b> | <b>89436</b> | <b>69890</b> | <b>72598</b> | <b>62222</b> | <b>65180</b> |

Note : Totals may differ due to rounding of figures.

Source : Division of Crop Science, Indian Council of Agricultural Research, New Delhi.



Table 2.3: List of field crops varieties / hybrids released and notified 2015

| Crop              | Variety  | Sponsoring Authority   | Maturity Range (days) | Yield q/ha  | Recommended zone   |
|-------------------|--|--|-----------------------|-------------|--|
| <b>A. CEREALS</b> |  |  |                       |             |  |
| Rice              | Azize 6444 Gold(HRI-174) (IET-22379)                 | Bayer Bio Science Pvt. Ltd., Hyderabad   | 130-135               | 52.5        | Assam, Chhattisgarh, Odisha, Uttar Pradesh, Bihar, Meghalaya, Karnataka and Tamil Nadu under irrigated condition |
|                   | INH97288 (HRI-178) (IET-22381)                       | Bayer Bio Science Pvt. Ltd., Hyderabad   | 130-135               | 52.0        | Punjab, Chhattisgarh and Uttar Pradesh under irrigated condition   |
|                   | RC Manipou 12  | ICAR Research Complex for NEH Region, Manipur Centre, Imphal   | 120-130               | 40.0        | Manipur  |
|                   | Indira Aerobic – 1 (R1570-2649-1-1546-1) (IET 21686) | Indira Gandhi Krishi VishwaVidyalaya, Raipur   | 110-115               | 42.5        | Gujarat, Chhattisgarh, and Tamil Nadu  |
|                   | Basmati 564 (IET 17269)                              | SKUAST, Jammu  | 135-140               | 33.9        | Jammu & Kashmir  |
|                   | 6129(BS-129) (HRI 152) (IET 18815)                   | Bayer Crop Science, Hyderabad  | 115-120               | 53.0        | Haryana  |
|                   | BNKR – 1 (Dhiren) (IET 20760)                        | Rice Research Station, Bankura   | 140-145               | 50.0 - 55.0 | West Bengal  |
|                   | Pushpa (IET 17509)                                   | Rice Research Station, Bankura   | 105-110               | 45.0 - 50.0 | West Bengal  |
|                   | Vallabh Basmati – 24 (IET – 20827) (MAUB – 171)      | S.V.P. University of Agriculture and Technology, Meerut  | 140-145               | 47.9        | Western Uttar Pradesh, Haryana and Jammu and Kashmir under irrigated condition                                   |
|                   | IR-64 Dt I(IR87707-44-5-B-B) (IET 22836)             | Tamil Nadu, Andhra Pradesh, Telangana, Madhya Pradesh, Chhattisgarh and Jharkhand under both rainfed and irrigated areas | 115-120               | 40.9        | Directorate of Rice Research, Hyderabad and Birs Agricultural University, Ranchi                                 |
|                   | DRR Dhan 41(IET 22729) (RP 5311- PR 26703- 3B-PJ7)   | Aerobic areas of Bihar and Karnataka   | 120-125               | 32.2        | Directorate of Rice Research, Hyderabad  |
|                   | CO 51  | Tamil Nadu Agricultural University, Coimbatore   | 125-130               | 56.0 - 60.0 | Tamil Nadu / 2013  |

Agricultural Inputs

| Crop  | Variety                                    | Sponsoring Authority  | Maturity Range (days) | Yield q/ha  | Recommended zone  |
|-------|--|---|-----------------------|-------------|---|
|       | Birsa Vikas-Dhan - 111 (PY-84) (IET-19848) | Birsa Agricultural University, Ranchi                                 | 90-95                 | 20.0 - 25.0 | Jharkhand / 2013  |
|       | Samba Sub - 1 (IET 21248)                  | IRRI, Philippines   | 135-140               | 33.0 - 40.0 | Uttar Pradesh / 2013  |
|       | Birsa Vikas-Dhan - 203 (IET-19896)         | Birsa Agricultural University, Ranchi                                 | 120-125               | 40.0 - 45.0 | Jharkhand / 2013  |
|       | Vallabh Basmati 23 (MAUB-57) (IET-19491)   | Sardar Vallabh Patel University of Agriculture and Technology, Meerut | 140-145               | 35.9        | Uttar Pradesh / 2013  |
|       | Sabour Shree (RAU 724-48-33) (IET 18878)   | Bihar Agricultural University, Sabour                                 | 135-140               | 60.0        | Bihar / 2014  |
|       | PR-124 (IET 22767)                         | PAU, Ludhiana   | 130-135               | 76.0        | Haryana and Punjab  |
|       | Shalimar Rice - 2                          | SKUAST, Srinagar  | 130-135               | 80.0 - 85.0 | Jammu and Kashmir   |
|       | Shalimar Rice - 3                          | SKUAST, Srinagar  | 125-130               | 75.0 - 80.0 | Jammu and Kashmir   |
|       | SAVA 127                                   | Savannah Seeds Private Limited, Gurgaon                               | 120-125               | 56.9        | Uttar Pradesh / 2014  |
| Wheat | NilgiriKhapli (HW 1098)                    | IARI, Regional Station, Willington                                    | 100-110               | 45.5        | Gujarat, Maharashtra, Karnataka and Tamil Nadu under irrigated timely sown condition  |
|       | Pusa Kiran (HS-542)                        | IARI, Regional Station, Shimla  | 178-210               | 32.9        | Lower and mid hills of Himachal Pradesh, Uttarakhand, Jammu and Kashmir and North Eastern States under early sown rainfed condition       |
|       | RSP 561                                    | SKUAST, Jammu   | 130-150               | 42.6        | Jammu & Kashmir   |
|       | DBW 110                                    | Directorate of Wheat Research, Karnal                                 | 110-134               | 39.0        | M.P., Chhattisgarh, Gujarat, Kota and Udaipur divisions of Rajasthan and Jhansi division of Uttar Pradesh                                 |
|       | DBW 107                                    | Directorate of Wheat Research, Karnal                                 | 94-130                | 41.3        | Eastern Uttar Pradesh, Bihar, Jharkhand, West Bengal (excluding hills), Assam and plains of North Eastern States                          |
|       | Pusa Vatsala (HD 3118)                     | Indian Agricultural Research Institute, New Delhi                     | 109-120               | 41.7        | East of UP, Bihar, Jharkhand, West Bengal (excluding hills), Odisha, Assam and plains of N.E. States under irrigated Late Sown Conditions |
|       | Pusa Anmol (HI 8737)                       | Indian Agricultural Research Institute, New Delhi                     | 118-124               | 53.4        | Madhya Pradesh, Chhattisgarh, Gujarat, Kota and Udaipur divisions of Rajasthan  |

| Crop           | Variety                    | Sponsoring Authority                         | Maturity Range (days) | Yield q/ha                      | Recommended zone  |
|----------------|----------------------------|--|-----------------------|---------------------------------|---|
|                |                            |  |                       |                                 | and Jhansi division of Uttar Pradesh under timely sown conditions   |
|                | Shalimar Wheat-2 (SKW-355) | SKUAST, Srinagar                             | 220-225               | 33.8                            | Jammu & Kashmir   |
|                | DBW 93                     | Directorate of Wheat Research, Karnal        | 90-120                | 29.3                            | Maharashtra and Karnataka   |
|                | UAS 446                    | University of Agricultural Sciences, Dharwad | 90-105                | 18.3                            | Karnataka and Maharashtra   |
|                | WH 1142                    | CCSHAU, Hisar                                | 150-156               | 48.1                            | Punjab, Haryana, Delhi, Rajasthan, Uttar Pradesh, Jammu and Kashmir, Himachal Pradesh and Uttaranchal                                 |
| <b>Maize</b>   | CoH (M) 10 (CMH 08-433)    | TNAU, Coimbatore                             | <=95                  | 71.6                            | Andhra Pradesh, Tamil Nadu, Karnataka, Maharashtra, Rajasthan, Gujarat, Madhya Pradesh and Chhattisgarh                               |
|                | HM-13 (HKH-317)            | CCS HAU, RRS, Karnal                         | <=85                  | 66.2                            | Jammu, Himachal Pradesh and Uttarakhnad   |
|                | PMH 6 (JH 31292)           | Punjab Agricultural University, Ludhiana     | <=95                  | 63.0                            | Bihar, West Bengal, Jharkhand, Odisha and parts of Uttar Pradesh under irrigated condition in Kharif season                           |
|                | NMH-713                    | Nuziveedu Seeds Ltd, Hyderabad               | >=96                  | 94.9 for Zone-IV                | Eastern Uttar Pradesh, Bihar, Jharkhand, Odisha, A.P., Karnataka, Tamil Nadu and Maharashtra under irrigated condition in Rabi season |
|                | P-3580 (X-35A 180)         | Pioneer Overseas Corporation, Chikkaballapur | >=96                  | 90.0                            | Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra   |
| <b>Barley</b>  | PHM-12 (JPMH 4)            | SKUAST, Srinagar                             |                       |                                 | Jammu and Kashmir   |
|                | DWRB 101                   | Directorate of Wheat Research, Karnal        | 129-134               | 50.1                            | Punjab, Haryana, Delhi, Western UP, Rajasthan (except Kota and Udaipur divisions)   |
|                | BH 959                     | CCSHAU, Hisar                                | 104-116               | 49.9                            | Gujarat, Chhattisgarh, Madhya Pradesh and Rajasthan   |
| <b>Sorghum</b> | SPH 1635                   | PDKV, Akola                                  | 110-115               | GY:45 q/ha<br>FY: 130 q/ha      | Maharashtra   |
|                | Phule Suchitra (RSV 1098)  | Mahatma Phule Krishi Vidyapeeth, Rahuri      | 120-125               | GY:24-28 q/ha<br>FY: 60-65 q/ha | Maharashtra   |

Agricultural Inputs

| Crop                     | Variety                      | Sponsoring Authority                                       | Maturity Range (days) | Yield q/ha  | Recommended zone   |
|--------------------------|------------------------------|--|-----------------------|---|--|
|                          | NSH 55 (SPH 1703)            | Nuziveedu Seeds Limited, Medchal Mandal Ranga Reddy (Dist) | 97                    | GY:44 q /ha<br>FY: 118 q/ha                                 | Rajasthan, Uttar Pradesh, Gujarat, Andhra Pradesh and Tamil Nadu   |
|                          | CSV 32F (SPV 2128)           | Director of Sorghum Research, Rajendranagar                | 109-112               | Green FodderY:<br>458 q/ha<br>Dry Fodder Yield:<br>176 q/ha | Maharashtra, Tamil Nadu and Karnataka  |
| Pearl Millet             | NBH 5767                     | Nuziveedu Seeds, Hyderabad                                 | 83                    | 34.0  | Maharashtra, Karnataka, Andhra Pradesh, and Tamil Nadu   |
|                          | 86M88(MH-1816)               | Pioneer Overseas Corporation, Chikkaballapur               | 86                    | 40.0  | Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra  |
|                          | 86M01(MH-1790)               | Pioneer Overseas Corporation, Chikkaballapur               | 82                    | 35.0  | Rajasthan, Gujarat, Haryana, Uttar Pradesh, Madhya Pradesh, Punjab, Delhi, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra |
| <b>B. OIL SEED CROPS</b> |                              |  |                       |   |  |
| Soybean                  | NRC 86 (Ahilya 6)            | Directorate of Soybean Research, Indore                    | 95-97                 | 21.3  | Madhya Pradesh, Rajasthan, Gujarat, Bundelkhand region of Uttar Pradesh, Marathwada and Vidarbha region of Maharashtra           |
|                          | KDS 344 (Phule-Agrani)       | Agriculture Research Station, MPKV, Kasbe Digraj           | 94                    | 25.5  | Southern Maharashtra, Tamil Nadu, Karnataka, Telangana under rainfed timely sown condition in kharif season                      |
|                          | Pusa 12 (DS 12-13)           | Indian Agricultural Research Institute, New Delhi          | 124-131               | 22.9  | Punjab, Haryana, Delhi, Uttarakhnad, Uttar Pradesh and Bihar   |
|                          | DSB 21                       | University of Agricultural Science, Dharwad                | 90-95                 | 28.1  | Karnataka, Tamil Nadu, Andhra Pradesh, Kerala and Maharashtra  |
| Safflower                | NARI-57                      | NARI Phaltan   | 120-150               | 15.0  | Maharashtra, Karnataka, Madhya Pradesh, Rajasthan, Punjab, Uttar Pradesh   |
|                          | Samrak (OSC 560)             | OUAT, Bhubaneswar  | 75-80                 | 8.0   | Odisha   |
|                          | Subhra (OSC 207)             | OUAT, Bhubaneswar  | 75-90                 | 8.0   | Odisha   |
| Linseed                  | Pratap AIsi-2                | Agricultural University, Kota                              | 129-135               | 19.6  | Rajasthan  |
| Indian Mustard           | Gujarat Dantiwada Mustard- 4 | S.D. Agricultural University                               | 107-117               | 19.6  | Gujarat  |
|                          | Albeli - 1                   | Shakti Vardhak Hybrid Seeds Pvt. Ltd. Hisar                | 140-145               | 21.3  | Rajasthan, Uttar Pradesh, Madhya Pradesh, Uttarakhnad  |

| Crop                   | Variety  | Sponsoring Authority                                    | Maturity Range (days) | Yield q/ha  | Recommended zone   |
|------------------------|--|---|-----------------------|-------------|--|
| Gobhisarson            | RSPN 25  | SKUAST, Jammu   | 145-155               | 15.0-18.0   | Jammu and Kashmir  |
|                        | GSC 7 (Released by Punjab SVAC as GSC 7) (GSC 101) | Punjab Agricultural University, Ludiana                 | 139-232               | 19.2        | Punjab, Haryana, HP, Jammu and Kashmir and Rajasthan   |
| <b>Groundnut</b>       | Gujarat Junagadh Groundnut – 18 (JSP-49)           | Junagadh Agriculture University, Junagadh               | 121                   | 14.5        | Odisha, West Bengal, Jharkhand and Manipur in timely sown rainfed condition in Kharif season                             |
|                        | Raj Mungfali – 2 (RG-578)                          | S.K. Rajasthan Agriculture University, Bikaner          | 120                   | 14.8        | Odisha, West Bengal and Manipur in timely sown rainfed condition in Kharif season  |
|                        | Phule-Bharati (JL 776)                             | Mahatma Phule Krishi Vidhyapeeth, Jalgaon               | 108                   | 21.1        | Maharashtra and Madhya Pradesh   |
| <b>C. PULSES</b>       |  |   |                       |             |  |
| Urdbean                | Vallabh Urd-1                                      | S.V.P. University of Agriculture and Technology, Meerut | 70-75                 | 10.0 -11.0  | Punjab, Haryana, Delhi, North Rajasthan, Western Uttar Pradesh, Tarai region of Uttrakhand and plains of Jammu & Kashmir |
| Field pea<br>Mung bean | Shalimar Pea – 1 (SKUAP-8)                         | SKUAST, Srinagar  | 210-215               | 13.0 – 14.0 | Jammu and Kashmir  |
|                        | Co 8   | Tamil Nadu Agricultural University, Coimbatore          | 60-65                 | 9.0 – 10.0  | Tamil Nadu / 2013  |
|                        | Shalimar Moong – 2 (SKUAM-300)                     | SKUAST, Srinagar  | 100-105               | 10.0 – 11.0 | Jammu and Kashmir  |
| Chickpea               | Bidisha (BG 1084) (WBG 29)                         | Pulses & Oilseeds Research Station, Berhampur           | 130                   | 21.8        | West Bengal  |
|                        | Vallabh Kabuli Channa – 1 (WCGK-2000-16)           | S.V.P. University of Agriculture and Technology, Meerut | 147                   | 23.0        | Punjab, Haryana, North Rajasthan, Western Uttar Pradesh, Delhi and Jammu   |
|                        | Raj Vijay Gram 202 (RVG 202)                       | R.A.K. College of Agriculture, Sehore                   | 102                   | 20.0        | Madhya Pradesh, Gujarat, Maharashtra, Bundelkhand areas of Uttar Pradesh and Southern Rajasthan                          |
| Lentil                 | Shalimar Masoor-2 (SKUAL-9)                        | SKUAST, Srinagar  | 200-205               | 12.0 – 13.0 | Jammu and Kashmir  |
| <b>D. SUGAR CROPS</b>  |  |   |                       |             |  |
| Sugarcane              | CoP 2061   | Rajendra Agricultural University, Samastipur            | Midlate - 360         | 740.2       | Bihar, Eastern parts of U.P., W.B. and Assam   |

Agricultural Inputs

| Crop                   | Variety                            | Sponsoring Authority  | Maturity Range (days)  | Yield q/ha   | Recommended zone   |
|------------------------|------------------------------------|---|--|--|--|
| <b>E. FIBRE CROPS</b>  |                                    |   |  |  |  |
| Cotton                 | Nirmal – 18 (NACH – 18)            | Nirmal Seeds Pvt. Ltd, Jalgaon  | 150-160  | 20.0   | Maharashtra, Madhya Pradesh, Gujarat, Karnataka, Andhra Pradesh & Tamil Nadu in Kharif season under both irrigated and rainfed condition |
| Sunnhemp               | Prankur (JRJ-610)                  | Central Research Institute for Jute and Allied Fibers, Barrackpore, Kolkata | For fibre: 90-100 days<br>For seed: 150-160 days   | Average yield 10.2 q/ha<br>Potential yield 14.5 q/ha       | Adapted to Sunnhemp growing belt of India  |
| Tossa Jute             | Rithika (JROG-1)                   | Central Research Institute for Jute and Allied Fibers, Barrackpore, Kolkata | For fibre: 110-120 days<br>For seed: 185-200 days  | Average yield 27.8<br>Potential yield 35.1 q/ha            | It is adapted to Tossa jute growing belt in India  |
| Flax                   | Tiara (JRF 2)                      | Central Research Institute for Jute and Allied Fibers, Barrackpore, Kolkata | For fibre: 100-110 days<br>For seed: 135-150 days  | Average yield 12.9 q/ha<br>Potential yield 14.0-17.0 q/ha  | Himachal Pradesh Uttarakhand, Meghalaya, Sikkim, Arunachal Pradesh, Uttar Pradesh, Jammu & Kashmir and West Bengal                       |
| <b>F. FORAGE CROPS</b> |                                    |   |  |  |  |
| Oat                    | JO-03-93 (Jawahar Oat 03-93)       | Jawahar Lal Nehru Krishi Vishwavidyalaya, Jabalpur                          | Days to 50% flowering 80-90 days<br>Seed to seed 130-140 days  | GFY: 460.0 q/ha<br>DMY: 95.0 q/ha<br>Seed Yield: 15.0 q/ha | Madhya Pradesh, Maharashtra, Gujarat and Uttar Pradesh   |
|                        | OS - 377                           | CCS, Haryana Agriculture University, Hissar                                 | Days to 50% flowering 115-120 days   | GFY 537 q/ha<br>DMY 122 q/ha<br>Seed 25 q/ha               | Uttar Pradesh, Maharashtra, Gujarat, Chhattisgarh and Madhya Pradesh   |
|                        | Shalimar Fodder Oats – 4 (SKO-108) | SKUAST, Srinagar  | Days to 50% flowering range of 171-180 days and fits in Rice-Fodder Oats Cropping System in the valley | GFY: 400 q ha <sup>-1</sup><br>Seed :24.0 q/ha             | Jammu and Kashmir  |

| Crop                | Variety                        | Sponsoring Authority                           | Maturity Range (days)   | Yield q/ha          | Recommended zone  |
|---------------------|--------------------------------|--|---|---------------------|---|
| Bajra Napier hybrid | BNH 10 (BAIF Napier Hybrid 10) | BAIF Development Research Foundation, Pune     | Perennial (harvesting at 50-55 days interval for quality green fodder)                                      | GFY: 1160 q/ha/year | Punjab, Haryana, Uttar Pradesh, Jharkhand, Odisha, Gujarat, Madhya Pradesh, Maharashtra, Karnataka, Andhra Pradesh, Kerala and Tamil Nadu |
| Lucerne             | CO2                            | Tamil Nadu Agricultural University, Coimbatore | Perennial (First fodder harvest at 65-70 days after sowing and subsequent harvests at 20-25 days intervals) | GFY: 1300/ha/year   | Tamil Nadu / 2013   |
| Marvel Grass        | Phule Marvel 06-40             | MPKV, Rahuri                                   | Perennial ( First cut at 50-55 days after planting, subsequent cuts at 30-35 days interval)                 | GFY: 430 q/ha/year  | Maharashtra   |

Source : Division of Crop Science, Indian Council of Agricultural Research, New Delhi.

Table 2.4: List of Horticultural Crops Varieties / hybrids notified/released/identified during the year 2015\*

| Name of the crop                          | Variety                      | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute        | Cropping duration | Area of adaptation  | Yield                | Other traits/ characteristics  | Cropping season                            |
|---|------------------------------|---------------------------------------|-----------------------------------|-------------------|---|----------------------|--|--|
| Amaranthus<br><i>Amaranthusviridis</i> L. | CARL-AMA – Green Shaan       | IVRC                                  | ICAR-CIARI, Port Blair            | 28-32 days        | Andaman and Nicobar Islands and tropical region   | 14-16 t/ha           | Tolerance to partial shade (coconut and up to 50% shade), and rains in Islands                                 | Round the year                             |
| Amaranthus<br><i>Amaranthusviridis</i> L. | CARL-Lal Marsha              | IVRC                                  | ICAR-CIARI, Port Blair            | 27-30 days        | Andaman and Nicobar Islands and tropical region   | 14-16 t/ha           | Tolerance to partial shade (50%) condition and shade in inter-space in coconut.                                | Round the year                             |
| Bael                                      | TharDivya                    | IVRC                                  | ICAR-CIAH, Bikaner                | 270-290 days      | Semi-arid region  | 50-55 q/ha           | Early maturity (second fortnight of Feb), precocious bearer and amenable for growing under dry land condition. | May-Feb.                                   |
| Banana                                    | NamwaKhom                    | IVRC                                  | ICAR- NRC Banana, Tiruchirappalli | 90-110 days       | Recommended for multi-location testing in T. N., Karnataka, Kerala, Orissa and West Bengal By ICAR- AICRP on Fruits | Bunch weight- 25 kg/ | Dessert variety, Dwarf, suited for annual cropping & high density planting                                     | Year round                                 |
| Brinjal                                   | ArkaHarshitha IIHR 37-36-4-4 | IVRC                                  | ICAR-IIHR, Bengaluru              | 90- 115 days      | Karnataka   | 38-40t/ha            | The plants are tall and spreading with dark long green fruits, resistant to Bacterial wilt.                    | Suitable for both Kharif and Rabi seasons. |
| Brinjal                                   | ArkaUnnathi IIHR37-36-3-16   | IVRC                                  | ICAR-IIHR, Bengaluru              | 60-75 days.       | Karnataka   | 36-38t/ha            | The plants are tall and erect with dark green long fruits born in cluster. Resistant to Bacterial wilt.        | Suitable for both Kharif and Rabi seasons. |



| Name of the crop | Variety                         | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute     | Cropping duration | Area of adaptation                      | Yield                    | Other traits/ characteristics  | Cropping season                            |
|------------------|---------------------------------|---------------------------------------|--------------------------------|-------------------|---|--------------------------|--|--|
| Brinjal          | ArkaAvinash IHR 37-36-4-20      | IVRC                                  | ICAR-IIHR, Bengaluru           | 90-115 days       | Karnataka                               | 40-44t/ha                | The plants are tall and spreading with green long fruits. Resistant to Bacterial wilt.                         | Suitable for both Kharif and Rabi seasons. |
| Cassava          | SreeSwarna                      | SVRC, Kerala                          | ICAR-CTCRI, Thiruvananthapuram | 210-240 days      | Kerala                                  | 430-520 q/ha             | Field tolerant to Cassava Mosaic Disease.  |  |
| Cassava          | SreePavithra                    | SVRC, Kerala                          | ICAR-CTCRI, Thiruvananthapuram | 270-300 days      | Kerala                                  | 450-500 q/ha             | High K -use efficiency. Low cyanogenicglucoside (25.8 µg/ g)   |  |
| Greater yam      | SreeSwathy                      | SVRC, Kerala                          | ICAR-CTCRI, Thiruvananthapuram | 240 -270 days     | Kerala                                  | 280-320 q/ha             | Tolerant to drought and anthracnose disease. Starch: 20.02%  |  |
| Greater yam      | SreeNeelima                     | SVRC, Kerala                          | ICAR-CTCRI, Thiruvananthapuram | 240 -270 days     | Kerala                                  | 280-320 q/ha             | Greater yam variety having medium conical tubers with purple flesh colour. Good culinary and nutritive quality |  |
| Citrus           | NRCC Nagpur Mandarin Seedless-4 | IVRC                                  | ICAR - CCRl, Nagpur            | 250 -260 days     | Maharashtra                             | Yield potential 250 q/ha | No. of Seeds: 2.57/fruit. Fruit weight: 145.9g TSS: 10 %, Acidity: 0. 72 %.                                    | Nov.-Dec. & Feb.-Mar.                      |
| Dolichos bean    | ArkaPrasiddhi IHR 15-15         | IVRC                                  | ICAR-IIHR, Bengaluru           | 110-120 days      | Karnataka and other south Indian States | 37 t/ha                  | Purple flower, dark green pods, Pods long (16 -18 cm), flat smooth, slightly curved. Rust resistant.           | Kharif                                     |
| Dolichos bean    | Arka Pradhan IHR 15-5           | IVRC                                  | ICAR-IIHR, Bengaluru           | 110-120 days      | Maharashtra                             | 35.0 t/ha                | Green Pods, Pods are tender, smooth, shiny with undulating   | Kharif                                     |

Agricultural Inputs

| Name of the crop | Variety                           | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute   | Cropping duration                        | Area of adaptation                       | Yield                  | Other traits/ characteristics   | Cropping season |
|------------------|-----------------------------------|---------------------------------------|--|--|--|------------------------|---|-----------------|
| Dolichos bean    | Arka Vishar IIHR 15-23            | IVRC                                  | ICAR-IIHR, Bengaluru   | 110-120 days                             | Tamil Nadu & NE states.                  | 36.5 t/ha              | surface.<br>Pods are long, broad, thick dark green setting from base.         | Kharif          |
| Dolichos bean    | Arka Bhavani IIHR 15-21           | IVRC                                  | ICAR-IIHR, Bengaluru   | 110-120 days                             | Andhra Pradesh                           | 34.5 t/ha              | Pods setting from base. Pods long (18cm), slender, wavy, dark green.          | Kharif          |
| Dolichos bean    | Arka Adarsh IIHR 15-8             | IVRC                                  | ICAR-IIHR, Bengaluru   | 110-120 days                             | Karnataka                                | 36.8 t/ha              | Pods are medium long (12 cm), dark green setting from base                    | Kharif          |
| Dolichos bean    | Arka Krishna IIHR 15-7            | IVRC                                  | ICAR-IIHR, Bengaluru   | 110-120 days                             | Karnataka                                | 30 t/ha                | Early, pods are dark green, borne in clusters and start from the base.        | Kharif          |
| Cashew           | Vengurla-9 (V-4 x M-10/4 (VRI-1)) | ICAR-AICRP on Cashew.                 | Evolved at RFRS, Vengurle, Dr. BSKKV, Dapoli, Maharashtra                    | 60-70 days                               | Konkan region of Maharashtra             | 11 to 11.5 q/ha        | Bunch bearing   | January – April |
| Coconut          | VHC 4 (LCOT xCCNT)                | ICAR-AICRP on Palms.                  | ICAR- AICRP on Palms Centre, Veppenkulam                                     | Tender nut-7 months.<br>Copra- 12 months | Tamil Nadu                               | 160-162 nuts/palm/year | Copra-149.8 g/ nut & oil 70%, tender nut water (368 ml /nut)                  | Round the year  |
| Coriander        | Susthira 85-100                   | AICRP on Spices                       | Dr. YSR. Horticultural University Horticultural Research Station, Lam Guntur | 85-110 days                              | Andhra Pradesh, Telangana and Tamil Nadu | 12-17.5 q/ha           | Medium duration   | Rabi            |
| Fennel           | Ajmer Fennel-2 (AF-2)             | AICRP on Spices                       | ICAR-NRCCS, Ajmer  | 175-180 days                             | All fennel growing areas                 | 17.9 q/ha              | High essential oil content and moderate resistance to <i>Ramularia</i> blight | Rabi            |

Agricultural Inputs

| Name of the crop | Variety                   | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute          | Cropping duration   | Area of adaptation                         | Yield      | Other traits/ characteristics  | Cropping season                           |
|------------------|---------------------------|---------------------------------------|-------------------------------------|---|--|------------|--|---|
|                  | RF-157 .                  | AICRP on Spices                       | SKN College of Agri., Jobner        | 140-150 days  | Rajasthan, Gujarat and Haryana.            | 21.67 q/ha | Volatile oil content 1.95 %, long, attractive, bold seeds  | Rabi                                      |
| Fenugreek        | RMf-354 .                 | AICRP on Spices                       | SKN College of Agri., Jobner        | 130-140 days  | All fenugreek growing areas of the country | 15-16 q/ha | Moderately resistant to powdery mildew and downy mildew  | Rabi                                      |
|                  | NarendraMethi 2 (NDM 69). | AICRP on Spices                       | N.D. U.A. & T., Kumarganj, Faizabad | 120-130 days  | Uttar Pradesh                              | 13-15 q/ha | Moderately resistant to <i>Cercosporaleaf spot</i> and downy mildew  | Rabi                                      |
| Garden pea       | ArkaNirmal (IIHR-2-9)     | IVRC                                  | ICAR-IIHR, Bengaluru                | Pods mature in 40-60 days.                                      | Karnataka                                  | 8.3 t/ha   | Plants are dwarf 45-50 cm. Pods are short straight, round 7.5 cm long, 1.3 cm width, 10 pod wt. 75 g, shelling % 60, Seeds are dark green, bold and sweet. | Both kharif and rabi seasons              |
| Garden pea       | ArkaHarini(IIHR-3-16)     | IVRC                                  | ICAR-IIHR, Bengaluru                | Pod yield 8.5 t/ha. in 45-60 days.                              | Karnataka                                  | 8.5 t/ha   | Plants dwarf (55 cm). Pods straight, cylindrical, 8.5 cm long, 1.2 cm width, 10 pod wt. 75 g, shelling % 60, Seeds are dark green, bold and sweet.         | Suitable for kharif and rabi seasons.     |
| Garden pea       | ArkaMayur (IIHR 5-13)     | IVRC                                  | ICAR-IIHR, Bengaluru                | Pods mature in 45 days and pod picking continues up to 60 days. | Karnataka                                  | 8.5 t/ha   | Plants dwarf (55 cm). pods straight, 8 cm long, 10 pod wt. 70 g and shelling % 57, with 8 dark green, bold and sweet seeds/ pod.                           | Suitable for kharif & rabi seasons        |
| Garden Pea       | Arka Tapas (IIHR 15-6)    | IVRC                                  | ICAR-IIHR, Bengaluru                | 60-90 days  | Karnataka                                  | 6.7 t/ha   | Pods are nearly oval-round, medium long (7.8cm). Seeds are dark green round,   | Amenable to cultivation during summer (up |

Agricultural Inputs

| Name of the crop | Variety                               | Released by (CVRC/SVRC/IVR C/IV&TRC)*      | Releasing Centre/Institute | Cropping duration                                 | Area of adaptation  | Yield              | Other traits/ characteristics  | Cropping season  |
|------------------|---------------------------------------|--|----------------------------|---|---|--------------------|--|--|
| Garden Pea       | Arka Uttam (IIHR 15-15)               | IVRC                                       | ICAR-IIHR, Bengaluru       | Pods mature in 62 days and continue up to 90 days | Karnataka   | 7.47 t/ha          | medium bold and sweet.<br>Tall, mid-season. Pods are nearly round and dark green at maturity, medium long (6.9 cm). Seeds are dark green round, medium bold and sweet. | to 35°C).<br>Amenable to cultivation during summer (up to 35°C). |
| Garlic           | Bhima Omkar                           | CVRC                                       | ICAR-DOGR, Pune            | 120-135 days                                      | MP, Chhattisgarh, Orissa, Maharashtra, Rajasthan, Gujarat, Karnataka and TN | Rabi: 100-120 q/ha | Soft neck variety braiding, tropical type  | Rabi   |
| Gladiolus        | Arka Aayush (Gold Medal-412 x Poonam) | VTIC, ICAR-IIHR                            | ICAR -IIHR, Bengaluru      | 71-85 days  | Karnataka   | 1.92 spikes/corm   | Cut flower, resistant to <i>Fusarium</i> wilt  | Zone 5.<br>Eastern Dry Zone                                      |
| Gladiolus        | Arka Manorama (Meera x Picardy)       | VTIC, ICAR-IIHR                            | ICAR IIHR, Bengaluru       | 69-79 days  | Karnataka   | 1.66 spikes/corm   | Cut flower, attractive flower colour   | Zone 5.<br>Eastern Dry Zone                                      |
| Guava            | Dhawal                                | Institute Variety Release Committee (IVRC) | ICAR-CISH, Lucknow         | 100-120 days                                      | Guava growing regions of the country  | 384q/ha            | Heavy bearer (about 20% higher than Allahabad Safeda), fruits develop light yellow colour on ripening, soft seeded, pulp white, taste sweet with muskiness.            | Winter seasons   |
| Guava            | Lalima                                | IVRC                                       | ICAR-CISH, Lucknow         | 100-120 days                                      | Guava growing regions of the country  | 340q/ha            | Attractive crimson coloured fruits, proportion of coloured   | Winter seasons   |

| Name of the crop                   | Variety                         | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute | Cropping duration                    | Area of adaptation   | Yield                           | Other traits/ characteristics   | Cropping season          |
|------------------------------------|---------------------------------|---------------------------------------|----------------------------|--------------------------------------|--|---------------------------------|---|--------------------------|
| Khimni                             | TharRituraj                     | IVRC                                  | ICAR-CIAH, Bikaner         | 120-125 days                         | Semi-arid region   | 13 q/ha                         | fruit higher, good yield with higher shelf life. Suitable for table and processing.             | Feb.-June                |
| Karonda                            | Thar Kamal                      | IVRC                                  | ICAR-CIAH, Bikaner         | 55-65 days                           | Hot semi- arid region  | 10 kg/plant                     | Suitable for candy and jelly making.  | Feb.-July                |
| Long Melon                         | VRSLM-16                        | AICRP on VC                           | IIVR-SPC, Sargatia         | 50-70 days                           | Zone-IV  | 200-225 q/ha                    | Fruits 25-30 cm long at edible maturity   | Open pollinated          |
| Marigold                           | Arka Agni (IHRM/GYP-1 x 9-2)    | VTIC, ICAR-IIHR                       | ICAR- IIHR, Bengaluru      | 45-75 days                           | Karnataka  | 7-7.5 tons/acre                 | Flowers are compact, large, high yielding   | Zone 5. Eastern Dry Zone |
| Marigold                           | ArkaAlankara (IHRM/GYP-1 x 9-2) | VTIC, ICAR-IIHR                       | ICAR- IIHR, Bengaluru      | 45-75 days                           | Karnataka  | 6-6.5 tons/acre                 | Flowers are compact and large   | Zone 5. Eastern Dry Zone |
| Mushroom                           | <i>Agaricus bisporus</i> -NBS-1 | IV/TRC and AICRP                      | ICAR-DMR, Solan            | First harvest at 27 days and 60 days | All India under controlled conditions and temperate areas under natural conditions | 21-23 kg/ q pasteurized compost | The fruiting bodies are white, hard and non-browning even after two hours of mechanical injury. | Round the year           |
| Mushroom                           | <i>Agaricus bisporus</i> -NBS-5 | IV/TRC and AICRP                      | ICAR-DMR, Solan            | First harvest at 27 days and 60 days | All India under controlled conditions and temperate areas under natural conditions | 23-25 kg/ q pasteurized compost | The fruiting bodies are white, hard and non-browning even after two hours of mechanical injury. | Round the year           |
| Noni ( <i>Morinda citrifolia</i> ) | CARI Sanjivini,                 | IVRC                                  | ICAR-CIARI, Port Blair     | 100-105 days                         | Andaman and Nicobar Islands and tropical region                                    | 14-17 t/ha                      | Dwarf statured, consistent yielder  | Round the year           |
| Noni ( <i>Morinda citrifolia</i> ) | CARI Samridhi                   | IVRC                                  | ICAR-CIARI, Port Blair     | 100-105 days                         | Andaman and Nicobar Islands and tropical region                                    | 16-20 t/ha                      | Dwarf saturated, consistent yielder   | Round the year           |
| Noni                               | CARI Sampada                    | IVRC                                  | ICAR-CIARI, Port Blair     | 100-110 days                         | Andaman and  | 15-17 t/ha                      | Vigorous, consistent  | Round the                |

Agricultural Inputs

| Name of the crop                  | Variety        | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute | Cropping duration                             | Area of adaptation   | Yield   | Other traits/ characteristics   | Cropping season            |
|-----------------------------------|----------------|---------------------------------------|----------------------------|---|--|---|---|----------------------------|
| ( <i>Morindacitrifolia</i> )      |                |                                       | Blair                      |   | Nicobar Islands and tropical region  |   | yielder, medium sized fruits  | year                       |
| Nomi ( <i>Morindacitrifolia</i> ) | CARI Rakshak   | IVRC                                  | ICAR-CIARI, Port Blair     | 100-110 days                                  | Andaman and Nicobar Islands and tropical region  | 7 – 9 t/ha  | Dwarf, well adaptive to sea water affected lands                      | Round the year             |
| Onion                             | Bhima Super    | Institute/AINRPOG                     | ICAR-DOGR, Pune            | KhariF-100 to 105 days<br>Late khariF 110-120 | Jammu, Punjab, Delhi, Haryana, Rajasthan, MP, Chhattisgarh, Orissa, Maharashtra, Gujarat, Karnataka, TN and also late khariF in Maharashtra      | 200 to 220 q/ha in <i>khariF</i> and 400 – 450 q/ha in late <i>khariF</i>           | Bulb attractive red, globose, neck thick medium.                      | KhariF & late khariF       |
| Onion                             | Bhima Red      | CVRC                                  | ICAR-DOGR, Pune            | KhariF-105 to 110 days<br>Late khariF 110-120 | Sub-tropical areas of J&K, Punjab, Delhi, Haryana, Rajasthan, Gujarat, Maharashtra, Karnataka and TN for khariF and Maharashtra and MP for rabi. | 190-210 q/ha in khariF and 480-520 q/ha in late khariF, 300-320 q/ha in <i>rabi</i> | Bulb red, flat-globe, neck thickness medium.                          | KhariF, late khariF & rabi |
| Onion                             | Bhima Dark Red | CVRC                                  | ICAR-DOGR, Pune            | 100-110 days                                  | Jammu, Punjab, Delhi, Haryana, Rajasthan, MP, Chhattisgarh, Orissa, Maharashtra,   | 200-220 q/ha in khariF  | Bulbs attractive dark red, neck thickness medium, tolerant to thrips. | KhariF                     |

| Name of the crop | Variety                   | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute | Cropping duration                                 | Area of adaptation  | Yield   | Other traits/ characteristics   | Cropping season       |
|------------------|---------------------------|---------------------------------------|----------------------------|---|---|---|---|-----------------------|
| Onion            | BhimaKiran                | CVRC                                  | ICAR-DOGR, Pune            | 125-135 days                                      | Gujarat, Karnataka, TN<br>Andhra Pradesh, Bihar, Delhi, Haryana, Karnataka, Maharashtra, Punjab & Uttar Pradesh | 280-320 q/ha  | Uniform neckfall, good in storage, bulbs attain light red colour after harvest  | Rabi                  |
| Onion            | BhimaSafed                | Institute/AINRPOG                     | ICAR-DOGR, Pune            | 110-120 days                                      | Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan and Tamil Nadu                 | 180-200 q/ha  | Suitable for table and processing purpose   | Kharif                |
| Onion            | BhimaShweta               | CVRC                                  | ICAR-DOGR, Pune            | 110-120 days                                      | MP, Chhattisgarh, Orissa, Maharashtra, Rajasthan, Gujarat, Maharashtra, Karnataka and TN                        | 180 – 200 q/ha for <i>kharij</i> & 260-300 q/ha for <i>rabi</i> | Bulb attractive white, flat-globose, thin neck, TSS around 11-12 <sup>0</sup> B, Medium keeping quality (up to 3 months during rabi). | Kharif & rabi seasons |
| Onion            | BhimaShubhra              | CVRC                                  | ICAR-DOGR, Pune            | Kharij: 110-115 days<br>Late kharij: 120-130 days | Delhi, UP, Haryana, Bihar, Punjab, MP, Chhattisgarh, Orissa, Maharashtra, Karnataka and AP                      | Kharij: 180-200q/ha.<br>Late <i>kharij</i> : 360-420 q/ha.      | First white onion <i>kharij</i> variety in India  | Kharif & late kharij  |
| Potato           | Kufri Mohan (MS/92-1090 x | ICAR-AICRP on Potato                  | ICAR-CPRI, Shimla          | 65-75 days  | North & Eastern plains  | 350-400 q/ha  | Pleasant flavour on cooking   | Field resistant to    |

## Agricultural Inputs

| Name of the crop              | Variety                        | Released by (CVRC/SVRC/IVR C/IV&TRC)* | Releasing Centre/Institute | Cropping duration | Area of adaptation                              | Yield        | Other traits/ characteristics   | Cropping season  |
|-------------------------------|--------------------------------|---------------------------------------|----------------------------|-------------------|---|--------------|---|--|
| Poi ( <i>Basella alba</i> L.) | CP 1704)<br>CARI Poi Red-Shaan | IVRC                                  | ICAR-CIARI, Port Blair     | 35-40 days        | Andaman and Nicobar Islands and tropical region | 48 – 52 t/ha | Uniform and attractive leaves and high yield with fast growth habit   | late blight<br>Harvesting starts at 35 days after planting |
| Ridge gourd                   | TharKarni                      | IVRC                                  | ICAR-CIAH, Bikaner         | 50-55 days        | Rajasthan                                       | 150 q/ha     | Resistant to mosaic disease & melon fruit fly under field condition. Fruits are non-bitter and tender at edible stage | Feb. & July  |
| Tomato                        | ArkaSamrat                     | AICRP on Vegetable Crops              | ICAR-IIHR, Bangalore       | 70-150 days       | Zone-VIII                                       | 90-100 t/ha  | Triple disease resistant  | Rabi   |



### Varieties of Field crops identified/evolved/recommended during the year 2015

| Name of the crop | Variety      | Released by (CVRC/SVRC/IVRC/IV&TRC)** | Releasing Centre/Institute | Cropping duration | Area of adaptation          | Yield    | Other traits/ characteristics   | Cropping season |
|------------------|--------------|---------------------------------------|----------------------------|-------------------|-----------------------------|----------|---|-----------------|
| Green Gram       | CIARI Mung 1 | IVRC                                  | ICAR-CIARI, Port Blair     | 66-70 days        | Andaman and Nicobar Islands | 1.8 t/ha | Bold seeded, brown and long pods and resistant to charcoal rot, powdery mildew and MYMV                   | Dec.-Feb        |
| Green Gram       | CIARI Mung 2 | IVRC                                  | ICAR-CIARI, Port Blair     | 66-70 days        | Andaman and Nicobar Islands | 1.6 t/ha | Bold seeded, brown and long pods and resistant to charcoal rot, powdery mildew and MYMV                   | Dec.-Feb        |
| Green Gram       | CIARI Mung 3 | IVRC                                  | ICAR-CIARI, Port Blair     | 64-68 days        | Andaman and Nicobar Islands | 1.5 t/ha | Medium seed, black and long pods and resistant to charcoal rot, powdery mildew, terminal draught and MYMV | Dec.-Feb        |
| Rice             | CIARI Dhan 8 | IVRC                                  | ICAR-CIARI, Port Blair     | 215 days          | Andaman and Nicobar Islands | 3.5 t/ha | Suitable for low input management, good straw yield for fodder  | Jul-Dec.        |
| Rice             | CIARI Dhan 9 | IVRC                                  | ICAR-CIARI, Port Blair     | 216 days          | Andaman and Nicobar Islands | 3 t/ha   | Suitable for low input management, good straw yield for fodder purpose                                    | Jul-Dec.        |

- Note:** 1. \* The information is not exhaustive and covers only those varieties which have been identified/developed and released/notified by institutes/ Project Directorates, NRCs and AICRPs/AINPs under the administrative control of Horticultural Science Division of ICAR. There are some Institutes which deal with horticultural crops but controlled by other SMDs, viz., Crop Science & NRM and information on the subject need to be suitably included.
2. \*\* CVRC: Central Variety Release Committee, SVRC: State Variety Release Committee, IVRC: Institute Variety Release Committee, VTIC: Variety & Technology Identification Committee, AICRP: All India Coordinated Research Project, AINRPOG: All India Network Research Project on Onion & Garlic.
3. The varieties which have been notified by State/ Central Variety Release/Notification Committee have been appropriately indicated while the varieties identified by the Institutes/ AICRPs/AINRPs have been indicated suitably).

**Source:** Division of Horticultural Sciences, Krishi Anusandhan Bhavan-II, ICAR, New Delhi.

## Agricultural Inputs

**Table 2.5: All India consumption of plant nutrients per unit of gross cropped area (1961-62 to 2014-15)**

| Year     | Gross cropped area (000' ha) | Consumption per hectare (kg) |                               |                  |        |
|----------|------------------------------|------------------------------|-------------------------------|------------------|--------|
|          |                              | N                            | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | Total  |
| 1961-62  | 156,209                      | 1.60                         | 0.39                          | 0.18             | 2.17   |
| 1962-63  | 156,760                      | 2.12                         | 0.53                          | 0.23             | 2.88   |
| 1963-64  | 156,963                      | 2.40                         | 0.74                          | 0.32             | 3.46   |
| 1964-65  | 159,229                      | 3.49                         | 0.93                          | 0.44             | 4.86   |
| 1965-66  | 155,276                      | 3.70                         | 0.85                          | 0.50             | 5.05   |
| 1966-67  | 157,355                      | 4.69                         | 1.58                          | 0.73             | 6.99   |
| 1967-68  | 163,736                      | 6.32                         | 2.04                          | 1.04             | 9.40   |
| 1968-69  | 159,529                      | 7.58                         | 2.40                          | 1.07             | 11.04  |
| 1969-70  | 162,265                      | 8.36                         | 2.56                          | 1.29             | 12.21  |
| 1970-71  | 165,791                      | 8.92                         | 3.26                          | 1.43             | 13.61  |
| 1971-72  | 165,186                      | 10.88                        | 3.38                          | 1.82             | 16.08  |
| 1972-73  | 162,150                      | 11.34                        | 3.58                          | 2.14             | 17.07  |
| 1973-74  | 169,872                      | 10.77                        | 3.82                          | 2.12             | 16.71  |
| 1974-75  | 164,191                      | 10.75                        | 2.87                          | 2.05             | 15.67  |
| 1975-76  | 171,296                      | 12.54                        | 2.73                          | 1.62             | 16.89  |
| 1976-77  | 167,334                      | 14.68                        | 3.79                          | 1.91             | 20.38  |
| 1977-78  | 172,232                      | 16.91                        | 5.03                          | 2.94             | 24.88  |
| 1978-79  | 174,802                      | 19.56                        | 6.33                          | 3.38             | 29.27  |
| 1979-80  | 169,589                      | 20.63                        | 6.79                          | 3.58             | 30.99  |
| 1980-81  | 172,630                      | 21.31                        | 7.03                          | 3.61             | 31.95  |
| 1981-82  | 176,750                      | 23.02                        | 7.48                          | 3.83             | 34.33  |
| 1982-83  | 172,748                      | 24.56                        | 8.29                          | 4.20             | 37.06  |
| 1983-84  | 179,560                      | 28.98                        | 9.64                          | 4.32             | 42.94  |
| 1984-85  | 176,330                      | 31.11                        | 10.70                         | 4.76             | 46.57  |
| 1985-86  | 178,464                      | 31.72                        | 11.24                         | 4.53             | 47.48  |
| 1986-87  | 176,405                      | 32.40                        | 11.78                         | 4.82             | 49.01  |
| 1987-88  | 170,738                      | 33.48                        | 12.81                         | 5.16             | 51.45  |
| 1988-89  | 182,277                      | 39.78                        | 14.93                         | 5.86             | 60.57  |
| 1989-90  | 182,269                      | 40.52                        | 16.54                         | 6.41             | 63.47  |
| 1990-91  | 185,742                      | 43.06                        | 17.34                         | 7.15             | 67.55  |
| 1991-92  | 182,242                      | 44.15                        | 18.22                         | 7.47             | 69.84  |
| 1992-93  | 185,700                      | 45.38                        | 15.31                         | 4.76             | 65.45  |
| 1993-94  | 186,580                      | 47.10                        | 14.31                         | 4.87             | 66.28  |
| 1994-95  | 188,053                      | 50.56                        | 15.59                         | 5.98             | 72.13  |
| 1995-96  | 187,471                      | 52.40                        | 15.46                         | 6.17             | 74.02  |
| 1996-97  | 189,502                      | 54.36                        | 15.71                         | 5.43             | 75.50  |
| 1997-98  | 189,988                      | 57.38                        | 20.60                         | 7.22             | 85.20  |
| 1998-99  | 191,649                      | 59.24                        | 21.46                         | 6.95             | 87.65  |
| 1999-00  | 188,396                      | 61.53                        | 25.47                         | 8.91             | 95.91  |
| 2000-01  | 185,340                      | 58.92                        | 22.74                         | 8.46             | 90.12  |
| 2001-02  | 188,014                      | 60.16                        | 23.31                         | 8.87             | 92.33  |
| 2002-03  | 173,889                      | 60.23                        | 23.11                         | 9.21             | 92.55  |
| 2003-04  | 189,661                      | 58.40                        | 21.75                         | 8.43             | 88.57  |
| 2004-05  | 191,103                      | 61.30                        | 24.20                         | 10.78            | 96.27  |
| 2005-06  | 192,737                      | 66.01                        | 27.00                         | 12.52            | 105.53 |
| 2006-07  | 192,381                      | 71.59                        | 28.81                         | 12.14            | 112.54 |
| 2007-08  | 195,223                      | 73.86                        | 28.25                         | 13.50            | 115.61 |
| 2008-09* | 195,328                      | 77.26                        | 33.31                         | 16.96            | 127.53 |
| 2009-10* | 189,002                      | 82.43                        | 38.49                         | 19.22            | 140.14 |
| 2010-11* | 197,563                      | 83.81                        | 40.74                         | 17.79            | 142.35 |
| 2011-12* | 195,632                      | 88.43                        | 40.46                         | 13.16            | 142.05 |
| 2012-13* | 194,399                      | 86.53                        | 34.23                         | 10.61            | 131.36 |
| 2013-14* |                              | 86.16                        | 28.98                         | 10.80            | 125.94 |
| 2014-15* |                              | 87.17                        | 31.37                         | 13.03            | 131.57 |

**Note** : 1. \* Provisional.  
2. Figures of consumption and gross cropped area refer to the same year, except last three years, where gross cropped area is for the year 2012-13.

**Source** : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

**Table 2.6: State-wise consumption of plant nutrients per unit of gross cropped area**  
(kg/ha)

| Zone/State           | 2013-14       |                               |                  |              | 2014-15*     |                               |                  |              |
|----------------------|---------------|-------------------------------|------------------|--------------|--------------|-------------------------------|------------------|--------------|
|                      | N             | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | Total        | N            | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | Total        |
| <b>North</b>         | <b>127.25</b> | <b>31.0</b>                   | <b>3.9</b>       | <b>162.4</b> | <b>133.3</b> | <b>36.0</b>                   | <b>6.8</b>       | <b>176.1</b> |
| Haryana              | 149.1         | 31.1                          | 2.5              | 182.7        | 158.9        | 39.8                          | 5.7              | 204.4        |
| Himachal Pradesh     | 35.2          | 8.7                           | 9.1              | 53.0         | 37.0         | 9.0                           | 10.0             | 56.0         |
| Jammu & Kashmir      | 57.8          | 21.9                          | 9.4              | 89.0         | 56.0         | 25.7                          | 13.0             | 94.7         |
| Punjab               | 173.3         | 41.3                          | 3.1              | 217.7        | 171.8        | 41.7                          | 4.8              | 218.3        |
| Uttar Pradesh        | 115.1         | 29.6                          | 4.1              | 148.8        | 122.7        | 35.4                          | 7.3              | 165.4        |
| Uttarakhand          | 119.7         | 19.4                          | 5.7              | 144.8        | 122.2        | 22.8                          | 6.5              | 151.6        |
| Delhi                | 74.3          | -                             | -                | 74.3         | 174.9        | -                             | -                | 174.9        |
| <b>South</b>         | <b>113.2</b>  | <b>44.0</b>                   | <b>23.8</b>      | <b>181.0</b> | <b>109.1</b> | <b>44.6</b>                   | <b>26.7</b>      | <b>180.4</b> |
| Andhra Pradesh       | 142.6         | 57.9                          | 23.1             | 223.7        | 135.2        | 55.7                          | 27.5             | 218.4        |
| Telangana            | 171.8         | 50.3                          | 13.3             | 235.4        | 145.3        | 47.1                          | 14.5             | 207.0        |
| Karnataka            | 80.4          | 37.6                          | 21.6             | 139.7        | 85.3         | 42.4                          | 28.3             | 155.9        |
| Kerala               | 52.4          | 27.1                          | 44.7             | 124.3        | 40.3         | 16.6                          | 23.9             | 80.8         |
| Tamil Nadu           | 106.9         | 38.3                          | 31.0             | 176.2        | 117.0        | 43.4                          | 37.0             | 197.4        |
| Puducherry           | 466.5         | 80.4                          | 58.8             | 605.8        | 306.5        | 66.5                          | 71.9             | 445.0        |
| A & NIslands         | 19.2          | 14.6                          | 12.1             | 45.8         | 20.4         | 16.3                          | 10.8             | 47.5         |
| <b>East</b>          | <b>73.0</b>   | <b>21.7</b>                   | <b>16.9</b>      | <b>111.6</b> | <b>76.9</b>  | <b>27.3</b>                   | <b>19.0</b>      | <b>123.3</b> |
| Arunachal Pradesh    | -             | -                             | -                | -            | -            | -                             | -                | -            |
| Assam                | 36.0          | 9.9                           | 19.1             | 65.1         | 37.2         | 12.0                          | 19.1             | 68.2         |
| Bihar                | 122.8         | 27.0                          | 12.3             | 162.1        | 128.6        | 30.2                          | 14.3             | 173.1        |
| Jharkhand            | 49.8          | 10.4                          | 2.2              | 62.5         | 55.4         | 11.8                          | 2.0              | 69.2         |
| Manipur              | 26.8          | 4.4                           | 3.8              | 35.0         | 35.7         | 7.0                           | 6.3              | 48.9         |
| Meghalaya            | 10.3          | 3.1                           | 0.8              | 14.2         | -            | -                             | -                | -            |
| Mizoram              | 25.3          | 2.0                           | 2.5              | 29.8         | -            | -                             | -                | -            |
| Nagaland             | 2.2           | 1.4                           | 0.7              | 4.3          | 2.7          | 1.6                           | 1.0              | 5.3          |
| Odisha               | 61.7          | 23.2                          | 11.1             | 96.1         | 62.0         | 24.9                          | 11.7             | 98.5         |
| Tripura              | 29.0          | 21.4                          | 11.8             | 62.2         | 23.3         | 18.0                          | 10.7             | 52.0         |
| West Bengal          | 71.6          | 27.2                          | 28.0             | 126.8        | 78.2         | 40.4                          | 33.0             | 151.6        |
| <b>West</b>          | <b>60.0</b>   | <b>24.8</b>                   | <b>7.2</b>       | <b>92.0</b>  | <b>59.5</b>  | <b>25.5</b>                   | <b>8.8</b>       | <b>93.8</b>  |
| Gujarat              | 92.0          | 25.0                          | 7.2              | 124.2        | 96.6         | 27.9                          | 9.1              | 133.7        |
| Madhya Pradesh       | 52.3          | 27.4                          | 2.4              | 82.2         | 48.4         | 26.2                          | 3.1              | 77.7         |
| Chhattisgarh         | 62.8          | 28.6                          | 8.4              | 99.7         | 65.6         | 30.8                          | 10.0             | 106.4        |
| Maharashtra          | 72.5          | 35.4                          | 19.4             | 127.3        | 70.4         | 34.8                          | 23.4             | 128.7        |
| Rajasthan            | 38.8          | 11.8                          | 0.2              | 50.8         | 39.8         | 13.8                          | 0.6              | 54.2         |
| Goa                  | 18.5          | 8.1                           | 5.6              | 32.2         | 15.6         | 7.0                           | 5.3              | 27.9         |
| Daman & Diu          | 26.7          | 6.7                           | 3.3              | 36.7         | -            | -                             | -                | -            |
| Dadra & Nagar Haveli | 22.5          | 14.6                          | 0.4              | 37.5         | 26.7         | 18.3                          | -                | 45.0         |
| <b>All-India</b>     | <b>86.2</b>   | <b>29.0</b>                   | <b>10.8</b>      | <b>125.9</b> | <b>87.2</b>  | <b>31.4</b>                   | <b>13.0</b>      | <b>131.6</b> |

Note : 1.\* Provisional, 2. - Not available, 3. Consumption of plant nutrients per hectare have been worked out on the basis of gross cropped area available for the year 2012-13.

Source : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

**Table 2.7: All India production of straight nitrogenous fertilisers  
1971-72 to 2014-15 (April-March)**

('000 t)

| Year    | Ammonium sulphate<br>(20.6% N) | Ammonium sulphate nitrate<br>(26% N) | Urea**<br>(46%N) | Calcium ammonium nitrate<br>(25% N) | Ammonium chloride<br>(25% N) | Total                     |          |
|---------|--------------------------------|--------------------------------------|------------------|-------------------------------------|------------------------------|---------------------------|----------|
|         |                                |                                      |                  |                                     |                              | Nutrient* N<br>(straight) | Product  |
| 1971-72 | 599.1                          | 30.4                                 | 1,236.1          | 411.5                               | 18.4                         | 807.4                     | 2,295.5  |
| 1972-73 | 554.5                          | 57.0                                 | 1,417.7          | 419.8                               | 13.9                         | 886.7                     | 2,462.9  |
| 1973-74 | 574.6                          | 48.7                                 | 1,406.8          | 431.3                               | 13.7                         | 889.4                     | 2,475.1  |
| 1974-75 | 589.4                          | 26.7                                 | 1,734.3          | 406.6                               | 10.2                         | 1,030.1                   | 2,767.1  |
| 1975-76 | 611.1                          | 21.3                                 | 2,196.7          | 617.5                               | 15.5                         | 1,300.0                   | 3,462.1  |
| 1976-77 | 586.5                          | 2.0                                  | 2,875.3          | 638.2                               | 17.6                         | 1,608.8                   | 4,119.6  |
| 1977-78 | 557.3                          | -                                    | 3,071.8          | 509.3                               | 16.7                         | 1,659.3                   | 4,155.1  |
| 1978-79 | 508.6                          | -                                    | 3,306.0          | 558.3                               | 17.9                         | 1,769.8                   | 4,391.3  |
| 1979-80 | 479.3                          | -                                    | 3,513.5          | 465.3                               | 12.7                         | 1,834.5                   | 4,470.8  |
| 1980-81 | 436.2                          | -                                    | 3,384.2          | 347.4                               | 18.9                         | 1,758.7                   | 4,186.7  |
| 1981-82 | 443.2                          | -                                    | 5,384.3          | 403.8                               | 18.9                         | 2,673.8                   | 6,250.3  |
| 1982-83 | 477.7                          | -                                    | 6,019.9          | 290.0                               | 37.2                         | 2,938.8                   | 6,824.8  |
| 1983-84 | 424.8                          | -                                    | 6,073.8          | 326.4                               | 61.6                         | 2,973.5                   | 6,886.6  |
| 1984-85 | 454.0                          | -                                    | 6,687.9          | 409.2                               | 77.2                         | 3,291.7                   | 7,629.0  |
| 1985-86 | 518.9                          | -                                    | 7,467.3          | 381.1                               | 103.8                        | 3,663.1                   | 8,471.1  |
| 1986-87 | 534.4                          | -                                    | 9,576.6          | 389.5                               | 92.3                         | 4,635.8                   | 10,592.8 |
| 1987-88 | 538.7                          | -                                    | 9,834.8          | 421.3                               | 87.2                         | 4,763.7                   | 10,882.0 |
| 1988-89 | 610.1                          | -                                    | 11,867.1         | 480.2                               | 96.7                         | 5,728.8                   | 13,054.1 |
| 1989-90 | 586.2                          | -                                    | 12,486.0         | 425.2                               | 79.9                         | 5,990.6                   | 13,577.3 |
| 1990-91 | 557.5                          | -                                    | 12,835.9         | 435.9                               | 78.8                         | 6,148.0                   | 13,908.1 |
| 1991-92 | 553.5                          | -                                    | 12,831.3         | 446.3                               | 112.5                        | 6,156.1                   | 13,943.6 |
| 1992-93 | 563.2                          | -                                    | 13,125.9         | 545.5                               | 122.2                        | 6,320.9                   | 14,356.8 |
| 1993-94 | 620.3                          | -                                    | 13,150.2         | 666.2                               | 131.4                        | 6,376.3                   | 14,568.1 |
| 1994-95 | 584.8                          | -                                    | 14,137.1         | 571.9                               | 136.5                        | 6,800.6                   | 15,430.3 |
| 1995-96 | 634.5                          | -                                    | 15,805.6         | 491.1                               | 138.9                        | 7,558.8                   | 17,070.1 |
| 1996-97 | 665.6                          | -                                    | 15,628.7         | 388.5                               | 122.1                        | 7,454.0                   | 16,804.9 |
| 1997-98 | 561.5                          | -                                    | 18,594.5         | 437.7                               | 110.4                        | 8,806.1                   | 19,704.1 |
| 1998-99 | 550.6                          | -                                    | 19,292.2         | 466.4                               | 63.4                         | 9,120.3                   | 20,372.6 |
| 1999-00 | 592.4                          | -                                    | 19,807.7         | 318.2                               | 87.5                         | 9,335.0                   | 20,805.8 |
| 2000-01 | 593.4                          | -                                    | 19,623.8         | 246.5                               | 102.4                        | 9,236.4                   | 20,566.1 |
| 2001-02 | 574.7                          | -                                    | 19,003.1         | 180.7                               | 81.5                         | 8,925.4                   | 19,840.0 |
| 2002-03 | 544.4                          | -                                    | 18,621.2         | 173.3                               | 78.9                         | 8,740.9                   | 19,417.8 |
| 2003-04 | 600.7                          | -                                    | 19,038.3         | 141.2                               | 77.8                         | 8,936.1                   | 19,858.0 |
| 2004-05 | 615.9                          | -                                    | 20,239.2         | 184.4                               | 82.4                         | 9,503.6                   | 21,121.9 |
| 2005-06 | 619.3                          | -                                    | 20,085.1         | 172.8                               | 79.8                         | 9,429.9                   | 20,957.0 |
| 2006-07 | 634.8                          | -                                    | 20,271.2         | 144.3                               | 74.4                         | 9,510.2                   | 21,124.7 |
| 2007-08 | 483.1                          | -                                    | 19,838.8         | 134.6                               | -                            | 9,259.0                   | 20,456.5 |
| 2008-09 | 554.8                          | -                                    | 19,923.2         | 138.5                               | -                            | 9,313.6                   | 20,616.5 |
| 2009-10 | 620.8                          | -                                    | 21,120.7         | 102.7                               | -                            | 9,869.1                   | 21,844.2 |
| 2010-11 | 637.0                          | -                                    | 21,872.5         | 98.7                                | 23.1                         | 10,223.0                  | 22,631.3 |
| 2011-12 | 595.4                          | -                                    | 21,992.3         | 115.0                               | 78.4                         | 10,287.4                  | 22,781.1 |
| 2012-13 | 573.2                          | -                                    | 22,586.6         | 106.9                               | 50.1                         | 10,547.2                  | 23,316.8 |
| 2013-14 | 624.1                          | -                                    | 22,718.7         | 44.4                                | 7.7                          | 10,592.2                  | 23,394.9 |
| 2014-15 | 585.5                          | -                                    | 22,592.9         | -                                   | 40.4                         | 10,523.4                  | 23,218.8 |

**Note** : a: \* For agricultural purposes only, b: These figures are for 20.5% N grade, \*\* Net production of saleable urea. Excludes urea used for manufacture of complex fertilisers, -: Not available.

**Source** : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

**Table 2.8: All India production of straight phosphates  
1964-65 to 2014-15 (April-March)**

('000 t)

| Year    | Single super phosphate of grade               |                                    |   | Triple super phosphate of grade               |  | Total   |         |
|---------|---|------------------------------------|---|---|--|---|---------|
|         | 16 %<br>W.S.<br>P <sub>2</sub> O <sub>5</sub> | Super<br>phosphate<br>other grades | Nutrient<br>W.S.<br>P <sub>2</sub> O <sub>5</sub> | 46 %<br>W.S.<br>P <sub>2</sub> O <sub>5</sub> | Nutrient W.S.<br>P <sub>2</sub> O <sub>5</sub> | Nutrient<br>P <sub>2</sub> O <sub>5</sub><br>(straight) | Product |
| 1964-65 | 745.3   | 10.6                               | 121.2   | -   | -  | 121.2   | 755.9   |
| 1965-66 | 664.1   | -                                  | 106.2   | -   | -  | 106.2   | 664.1   |
| 1966-67 | 747.3   | 24.2                               | 121.0   | -   | -  | 121.0   | 771.5   |
| 1967-68 | 949.1   | 31.3                               | 157.5   | 0.6   | 0.2  | 157.7   | 981.0   |
| 1968-69 | 664.5   | 14.7                               | 108.9   | 4.1   | 1.8  | 110.7   | 683.3   |
| 1969-70 | 609.0   | 12.4                               | 99.4  | 7.5   | 3.4  | 103.2   | 629.3   |
| 1970-71 | 613.0   | 7.9                                | 99.5  | 5.8   | 2.6  | 102.1   | 626.7   |
| 1971-72 | 773.0   | 2.6                                | 124.2   | 7.7   | 3.5  | 127.6   | 783.3   |
| 1972-73 | 781.9   | -                                  | 125.1   | 4.9   | 2.2  | 127.3   | 786.8   |
| 1973-74 | 773.3 (10.0)                                  | 0.4                                | 125.5   | 3.0   | 1.4  | 126.9   | 786.7   |
| 1974-75 | 822.8 (12.3)                                  | -                                  | 133.8   | 2.5   | 1.2  | 135.0   | 837.6   |
| 1975-76 | 461.3 (1.6)                                   | 1.6                                | 74.0  | 2.1   | 1.0  | 75.0  | 466.6   |
| 1976-77 | 779.3 (1.8)                                   | 7.0                                | 126.2   | 1.8   | 0.8  | 127.3   | 789.5   |
| 1977-78 | 987.6   | -                                  | 158.0   | 7.2   | 3.3  | 161.3   | 994.8   |
| 1978-79 | 1,081.3                                       | 34.5 #                             | 177.8   | 19.6  | 9.0  | 186.8   | 1,135.4 |
| 1979-80 | 1,033.1                                       | 16.8 #                             | 167.7   | 22.4  | 10.3   | 178.0   | 1,072.3 |
| 1980-81 | 1,085.0                                       | 22.1 #                             | 176.7   | 41.5  | 20.0   | 196.7   | 1,150.8 |
| 1981-82 | 1,202.6                                       | 6.6 #                              | 193.3   | 48.0  | 22.1   | 215.4   | 1,257.2 |
| 1982-83 | 1,320.6                                       | -                                  | 211.3   | 23.4  | 10.8   | 222.1   | 1,344.0 |
| 1983-84 | 1,491.7                                       | -                                  | 238.7   | 21.1  | 9.7  | 248.4   | 1,512.8 |
| 1984-85 | 1,898.3                                       | -                                  | 303.7   | 10.0  | 4.6  | 308.2   | 1,908.4 |
| 1985-86 | 2,136.1                                       | -                                  | 341.8   | 1.1   | 0.5  | 342.3   | 2,137.2 |
| 1986-87 | 2,006.1                                       | -                                  | 321.0   | -   | -  | 321.0   | 2,006.1 |
| 1987-88 | 2,483.5                                       | -                                  | 397.4   | -   | -  | 397.4   | 2,483.5 |
| 1988-89 | 2,944.7                                       | -                                  | 471.2   | -   | -  | 471.2   | 2,944.7 |
| 1989-90 | 3,137.8                                       | -                                  | 502.1   | -   | -  | 502.1   | 3,137.8 |
| 1990-91 | 3,650.3                                       | -                                  | 584.0   | -   | -  | 584.0   | 3,650.3 |
| 1991-92 | 2,984.8                                       | -                                  | 477.6   | -   | -  | 477.6   | 2,984.8 |
| 1992-93 | 2,329.3                                       | -                                  | 372.7   | -   | -  | 372.7   | 2,329.3 |
| 1993-94 | 2,257.2                                       | -                                  | 361.2   | -   | -  | 361.2   | 2,257.2 |
| 1994-95 | 3,010.9                                       | 13.7 #                             | 483.7   | -   | -  | 483.7   | 3,024.6 |
| 1995-96 | 3,200.2                                       | 1.7 #                              | 512.3   | -   | -  | 512.3   | 3,201.9 |
| 1996-97 | 3,187.0                                       | -                                  | 509.9   | -   | -  | 509.9   | 3,187.0 |
| 1997-98 | 3,832.5                                       | -                                  | 613.2   | -   | -  | 613.2   | 3,832.5 |
| 1998-99 | 3,816.1                                       | -                                  | 610.5   | -   | -  | 610.5   | 3,816.1 |
| 1999-00 | 3,532.7                                       | -                                  | 565.2   | -   | -  | 565.2   | 3,532.7 |
| 2000-01 | 2,742.2                                       | -                                  | 438.8   | -   | -  | 438.8   | 2,742.2 |
| 2001-02 | 2,504.6                                       | -                                  | 400.7   | -   | -  | 400.7   | 2,504.6 |
| 2002-03 | 2,407.7                                       | -                                  | 385.2   | -   | -  | 385.2   | 2,407.7 |
| 2003-04 | 2,543.4                                       | -                                  | 406.9   | -   | -  | 406.9   | 2,543.4 |
| 2004-05 | 2,461.1                                       | -                                  | 393.8   | -   | -  | 393.8   | 2,461.1 |
| 2005-06 | 2,795.2                                       | -                                  | 447.2   | -   | -  | 447.2   | 2,795.2 |
| 2006-07 | 2,972.0                                       | -                                  | 475.5   | -   | -  | 475.5   | 2,972.0 |
| 2007-08 | 2,246.3                                       | -                                  | 359.4   | -   | -  | 359.4   | 2,246.3 |
| 2008-09 | 2,533.6                                       | -                                  | 405.4   | -   | -  | 405.4   | 2,533.6 |
| 2009-10 | 3,093.0                                       | -                                  | 494.9   | -   | -  | 494.9   | 3,093.0 |
| 2010-11 | 3,712.8                                       | -                                  | 594.0   | -   | -  | 594.0   | 3,712.8 |
| 2011-12 | 4,324.0                                       | -                                  | 691.8   | -   | -  | 691.8   | 4,324.0 |
| 2012-13 | 4,434.9                                       | -                                  | 709.6   | -   | -  | 709.6   | 4,434.9 |
| 2013-14 | 4,200.1                                       | -                                  | 672.0   | -   | -  | 672.0   | 4,200.1 |
| 2014-15 | 4,174.8                                       | -                                  | 668.0   | -   | -  | 668.0   | 4,174.8 |

Note : # 14% W.S. P<sub>2</sub>O<sub>5</sub>, ( ) Pelofos, -: Not available.

Source : Fertiliser Statistics, 2014-15, The Fertiliser Association of India, New Delhi.

## Agricultural Inputs

**Table 2.9: Production and use of agricultural inputs in India**

| Programme   | 2006-07       | 2007-08       | 2008-09       | 2009-10       | 2010-11       | 2011-12       | 2012-13       | 2013-14       | 2014-15       |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>1. Seeds (lakh q)</b>  |               |               |               |               |               |               |               |               |               |
| <b>I. Production of breeder seeds</b>                                   | 0.74          | 0.92          | 0.94          | 1.02          | 1.19          | 1.23          | 1.10          | 0.82          | 0.86          |
| <b>II. Production of foundation seeds</b>                               | 7.96          | 8.22          | 9.69          | 10.50         | 18.06         | 22.36         | 16.17         | 17.43         | 15.76         |
| <b>III. Distribution of certified / quality seeds</b>                   | 155.01        | 179.05        | 215.81        | 257.11        | 277.34        | 294.85        | 313.44        | 301.39        | 303.12        |
| <b>2. Consumption of chemical fertilisers (lakh t)</b>                  |               |               |               |               |               |               |               |               |               |
| <b>I. Nitrogenous (N)</b>   | 137.73        | 144.19        | 150.91        | 155.80        | 165.58        | 173.00        | 168.21        | 167.50        | 169.46        |
| <b>II. Phosphatic (P)</b>   | 55.43         | 55.15         | 65.06         | 72.74         | 80.50         | 79.14         | 66.53         | 56.33         | 60.98         |
| <b>III. Potassic (K)</b>  | 23.35         | 26.36         | 33.13         | 36.32         | 35.14         | 25.76         | 20.62         | 20.99         | 25.32         |
| <b>Total (I+II+III)</b>   | <b>216.51</b> | <b>225.70</b> | <b>249.10</b> | <b>264.86</b> | <b>281.22</b> | <b>277.90</b> | <b>255.36</b> | <b>244.82</b> | <b>255.76</b> |
| <b>Per hectare (kg)**</b>   | 111.76        | 115.27        | 127.53        | 140.15        | 142.34        | 142.05        | 131.36        | 125.39        | 128.08        |
| <b>3. Consumption of pesticides (technical grade material) (000' t)</b> | 41.51         | 43.63         | 43.86         | 41.82         | 55.54         | 52.98         | 45.62         | 60.28         | 57.35*        |
| <b>4. Area covered under soil conservation cumulative (lakh ha)</b>     | 11.41         | 7.34          | 6.90          | 5.32          | 7.49          | 4.72          | 5.46          | 5.46          |               |

**Note :** 1. \* updated on 14 May 2015, 2. \*\* Based on gross cropped area up to 2012-13 and for 2013-14 and 2014-15, GCA is estimated in zonal Conference.

**Source :** *Pocket book of Agricultural Statistics 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 2.10: Maximum retail prices of fertilisers in terms of nutrients  
(exclusive of Central vat/ State sales tax and local taxes)  
(50 kg packing)**

(Rs. / kg of nutrient)

| Year / effective dates         | Maximum sale price of nutrient through |                    |                                  |  |  |  |
|--------------------------------|--|--------------------|----------------------------------|--|--|--|
|                                | Ammonium sulphate (20.6% N)            | Urea (46% N)       | Calcium ammonium nitrate (25% N) | Diammonium phosphate <sup>@</sup> (18% N-46% P <sub>2</sub> O <sub>5</sub> ) | Single super phosphate (16% w.s. P <sub>2</sub> O <sub>5</sub> ) | Muriate of potash (60% K <sub>2</sub> O) |
| Nutrient                       | (N)                                    | (N)                | (N)                              | (P <sub>2</sub> O <sub>5</sub> )   | (P <sub>2</sub> O <sub>5</sub> )                                 | (K <sub>2</sub> O)                       |
| 31-01-1986                     | 8.01                                   | 5.11               | 6.80                             | 5.83   | 5.94   | 2.17                                     |
| 25-07-1991                     | Decontrolled                           | 7.17               | Decontrolled                     | 8.15   | 8.38   | 3.03                                     |
| 14-08-1991                     | Decontrolled                           | 6.65               | Decontrolled                     | 7.57   | 7.75   | 2.83                                     |
| 1992-93 (w.e.f. 25-08-92)**    | 9.32                                   | 6.00               | 8.00                             | 11.78-12.43**  | 15.00-17.50**  | 7.50**                                   |
| 1993-94                        | N.A                                    | 6.00               | N.A.                             | 11.13-12.87  | 11.25-17.25  | 6.00-6.67                                |
| 1994-95 Kharif (prior 10-6-94) | N.A                                    | 6.00               | N.A.                             | 12.65-14.54  | 11.63-15.50  | 5.94-6.50                                |
| 1994-95 w.e.f. 10-6-94         | 15.44                                  | 7.22               | N.A.                             | 12.18-14.07  | 11.63-15.50  | 5.94-6.50                                |
| 1994-95 Rabi                   | 15.44                                  | 7.22               | N.A.                             | 13.58-16.30  | 13.13-16.88  | 6.13-6.57                                |
| 1995-96 Kharif                 | 15.44                                  | 7.22               | N.A.                             | 16.96-18.48  | 14.29-17.66  | 6.03-7.57                                |
| 1995-96 Rabi                   | 18.45                                  | 7.22               | N.A.                             | 18.11-19.45  | 16.25-18.21  | 7.00-8.00                                |
| 1996-97 Kharif                 | 19.42                                  | 7.22               | N.A.                             | 13.64-16.18  | 13.93-19.25  | 6.19-7.17                                |
| 1996-97 Rabi (prior 21-2-97)   | 19.42                                  | 7.22               | N.A.                             | 14.92-16.96  | 16.25-19.25  | 6.62-7.50                                |
| 1996-97 Rabi w.e.f. 21-2-97)   | 19.42                                  | 7.96               | N.A.                             | 14.63-16.67  | 16.25-19.25  | 6.17                                     |
| 1997-98                        | 19.42-20.39                            | 7.96               | N.A.                             | 14.93  | 15.63-18.75  | 6.17                                     |
| 1998-99 Kharif (prior 29-1-99) | 20.39-21.36                            | 7.96               | 24.00#                           | 14.93  | 15.63-18.75  | 6.17                                     |
| 1998-99 (w.e.f. 29-1-99)       | 20.39-21.37                            | 8.70               | 24.00#                           | 14.64  | 15.63-18.75  | 6.17                                     |
| 1999-2000 (prior 29-2-2000)    | 22.82-24.51                            | 8.70               | 24.00#                           | 14.64  | 15.63-18.75  | 6.17                                     |
| 1999-2000 (w.e.f. 29-2-2000)   | 22.82-24.52                            | 10.00              | 24.00#                           | 15.43  | 15.63-18.75  | 7.09                                     |
| 2000-01                        | 23.54-24.51                            | 10.00              | 32.00#                           | 15.43  | 15.63-21.88  | 7.09                                     |
| 2001-02 (w.e.f. Feb 02)        | 24.07-26.33                            | 10.50              | 32.00#                           | 16.22  | 15.63-21.88  | 7.43                                     |
| 2002-03 (w.e.f. Feb 03)        | 25.58-27.45                            | 11.02              | 36.00#                           | 16.45  | 16.28-21.88  | 7.76                                     |
| 2002-03 (w.e.f. 12-3-03)       | 25.58-27.46                            | 10.50              | 36.00#                           | 16.22  | 16.25-21.88  | 7.43                                     |
| 2003-04                        | 25.97-27.79                            | 10.50              | 36.00#                           | 16.22  | 16.25-23.94  | 7.43                                     |
| 2004-05                        | 26.46-28.76                            | 10.50              | 24.80-40.00                      | 16.22  | 16.25-23.38  | 7.43                                     |
| 2005-06                        | 28.28-30.22                            | 10.50              | 25.93-31.70                      | 16.22  | 16.25-26.88  | 7.43                                     |
| 2006-07                        | 30.95-32.65                            | 10.50              | 28.08-33.50                      | 16.22  | 16.88-26.88  | 7.43                                     |
| 2007-08                        | 32.65-48.83                            | 10.50              | 31.58-36.10                      | 16.22  | 16.88-26.88  | 7.43                                     |
| 2008-09                        | 50.24 <sup>d</sup>                     | 10.50              | 37.38-44.80                      | 16.22  | 21.25 <sup>e</sup>   | 7.43                                     |
| 2009-10                        | 50.24 <sup>d</sup>                     | 10.50              | 39.28-44.80                      | 16.22  | 21.25 <sup>f</sup>   | 7.43                                     |
| 2010-11                        | 38.89-42.23 <sup>g</sup>               | 11.54              | 40.42-49.60                      | 17.11-18.85 <sup>g</sup>   | 20.00 <sup>g</sup>   | 8.43 <sup>g</sup>                        |
| 2011-12                        | 38.89-68.45 <sup>h</sup>               | 11.54              | 43.56-51.60                      | 18.85-39.61 <sup>h</sup>   | 20.00-39.29 <sup>h</sup>   | 10.00-20.13 <sup>h</sup>                 |
| 2012-13                        | 47.57-53.46 <sup>h</sup>               | 11.65 <sup>a</sup> | 52.86-62.00                      | 47.62 <sup>h</sup>   | 43.78 <sup>h</sup>   | 28.33 <sup>h</sup>                       |
| 2013-14                        | 53.91-56.74 <sup>h</sup>               | 11.65              | N.A.                             | 44.35 <sup>h</sup>   | 41.43 <sup>h</sup>   | 26.67 <sup>h</sup>                       |
| 2014-15                        | 59.93-65.78 <sup>h</sup>               | 11.65              | N.A.                             | 45.95 <sup>h</sup>   | 47.54 <sup>h</sup>   | 27.74 <sup>h</sup>                       |

**Note** : @ P<sub>2</sub>O<sub>5</sub> prices of DAP worked out after deducting proportionate price of N(through urea) from prices of DAP,\*\* Price of phosphatic and potassic fertiliser were decontrolled, w.e.f. August 25, 1992, \$: Nutrient Based Subsidy (NBS) on P&K fertiliser and A/S (GSFC&FACT) was introduced w.e.f. April, 2010. Under NBS, retail prices are open and announced by the individual companies. The prices shown for 2010-11 to 2014-15 are indicative average prices. a: w.e.f. November 1, 2012, c: Statutorily controlled w.e.f. August 21, 1984, d:w.e.f. July 01, 2008, e: w.e.f. May 1, 2008, f: upto September 30,w.e.f. October 1, 2009 GOI has decided to leave the selling prices of SSP open. # inclusive of all taxes.\* Prices upto June 07, 1980 include excise duty, it was withdrawn with effect from June 08,1980 on all fertilisers, except ammonium sulphate and calcium ammonium nitrate in which case, it was 7.5 per cent ad valoremplus 5% special duty on excise duty. This was also withdrawn with effect from February 28, 1983.

**Source** : *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

## Agricultural Inputs

**Table 2.11: State-wise consumption of pesticides (Technical Grade) in India**  
(in t)

| States / Union Territories  | 2007-08        | 2008-09      | 2009-10      | 2010-11      | 2011-12      | 2012-13      | 2013-14      | 2014-15      |
|-----------------------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Andaman and Nicobar Islands | NA             | 6.24         | 14           | -            | 15           | 7            | -            | NA           |
| Andhra Pradesh              | 1541           | 1381         | 1015         | 8869         | 9289         | 2803         | 4253         | 3895         |
| Assam                       | 158            | 150          | 19           | 150          | 160          | 183          | 190          | 197          |
| Arunachal Pradesh           | 16             | 10           | 10           | 10           | 17           | -            | 18           | 18           |
| Bihar                       | 870            | 915          | 828          | 675          | 655          | 687          | 765          | 787          |
| Chandigarh                  | NA             | -            | NA           | -            | -            | -            | -            | NA           |
| Chhattisgarh                | 570            | 270          | 205          | 570          | 600          | 812          | 1016         | 1020         |
| Dadra and Nagar Haveli      | NA             | -            | NA           | -            | -            | -            | -            | NA           |
| Daman and Diu               | NA             | -            | NA           | -            | -            | -            | -            | NA           |
| Delhi                       | 57             | 57           | 49           | 48           | -            | -            | 48           | NA           |
| Goa                         | 2.3            | 9            | 10           | 9            | 8            | 9            | 9            | 9            |
| Gujarat                     | 2660           | 2650         | 2750         | 2600         | 2190         | 1210         | 2330         | 1840         |
| Haryana                     | 4391           | 4288         | 4070         | 4060         | 4050         | 4050         | 4080         | 4070         |
| Himachal Pradesh            | 296            | 322          | 328          | 328          | 310          | 320          | 344          | 357          |
| Jammu and Kashmir           | 1248           | 2679         | 1640         | 1818         | 1711         | 1789         | 1723         | 1921         |
| Jharkhand                   | 81             | 85           | 89           | 84           | 151          | 151          | 430          | 650          |
| Karnataka                   | 1588           | 1675         | 1647         | 1858         | 1412         | 1615         | 1735         | 1709         |
| Kerala                      | 880            | 273          | 631          | 657          | 807          | 712          | 1276         | 919          |
| Lakshadweep                 | NA             | -            | NA           | -            | -            | -            | -            | NA           |
| Madhya Pradesh              | 696            | 663          | 645          | 633          | 850          | 846          | 987          | 696          |
| Maharashtra                 | 3050           | 2400         | 4639         | 8317         | 6723         | 6618         | 10969        | 11239        |
| Manipur                     | 26             | 30           | 30           | 30           | 33           | 30           | 31           | 30           |
| Meghalaya                   | 6              | -            | 6            | 10           | 9            | -            | 44           | 28           |
| Mizoram                     | 44             | 44           | 39           | 4            | 4            | 4            | 508          | 806          |
| Nagaland                    | 5              | 18           | 14           | -            | 15           | -            | 16           | 16           |
| Odisha                      | NA             | 1156         | 1588         | 871          | 555          | 606          | 1219         | 1680         |
| Puducherry                  | 41             | 39           | 39           | 39           | 38           | 41           | 41           | 42           |
| Punjab                      | 6080           | 5760         | 5810         | 5730         | 5625         | 5730         | 5723         | 5699         |
| Rajasthan                   | 3804           | 3333         | 3527         | 3623         | 2802         | 2559         | 2736         | 1457         |
| Sikkim                      | 6              | 3            | 4            | -            | -            | -            | -            | NA           |
| Tamil Nadu                  | 3940           | 2317         | 2335         | 2361         | 1968         | 1766         | 2142         | 2096         |
| Telangana                   | -              | -            | -            | -            | -            | -            | -            | 2805         |
| Tripura                     | 27             | 38           | 55           | 12           | 266          | 272          | 310          | 307          |
| Uttar Pradesh               | 7332           | 8968         | 9563         | 8460         | 8839         | 9057         | 10164        | 9867         |
| Uttarakhand                 | 270            | 221          | 222          | 199          | 206          | 247          | 174          | 133          |
| West Bengal                 | 3945           | 4100         | -            | 3515         | 3670         | 3465         | 3190         | 3060         |
| <b>Total</b>                | <b>43630.3</b> | <b>43860</b> | <b>41822</b> | <b>55540</b> | <b>52979</b> | <b>45619</b> | <b>60282</b> | <b>57353</b> |

**Note** : States/UTs Zonal Conferences on Inputs (Plant Protection), NA: Not available.

**Source** : Ministry of Statistics and Programme Implementation, Govt. of India (Website: www.indiastat.com).



**Table 2.12: Zone-wise consumption of fertilisers**

('000 t)

| S.No.    | State/Zone             | 2010-11         | 2011-12         | 2012-13         | 2013-14         | 2014-15         |
|----------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1        | <b>South Zone</b>      | 7150.24         | 7266.62         | 5519.08         | 6004.82         | 5985.38         |
|          |                        | (212.01)        | (201.7)         | (166.33)        | (164.05)        | (174.68)        |
| 2        | <b>West Zone</b>       | 9152.32         | 8607.24         | 7636.3          | 8042.24         | 8205.58         |
|          |                        | (110.73)        | (95.40)         | (87.33)         | (85.93)         | (92.61)         |
| 3        | <b>North Zone</b>      | 7918.70         | 7872.37         | 8284.48         | 7039.97         | 7634.61         |
|          |                        | (187.29)        | (183.92)        | (191.11)        | (162.67)        | (173.58)        |
| 4        | <b>East Zone</b>       | 3588.57         | 3683.41         | 3775.01         | 3078.25         | 3427.26         |
|          |                        | (130.37)        | (157.18)        | (156.11)        | (108.51)        | (118.47)        |
| 5        | <b>North East Zone</b> | 312.38          | 310.36          | 321.28          | 317.13          | 323.29          |
|          |                        | (52.01)         | (49.97)         | (51.42)         | (67.92)         | (82.63)         |
| <b>6</b> | <b>All India</b>       | <b>28122.21</b> | <b>27740.00</b> | <b>25536.15</b> | <b>24482.41</b> | <b>25576.12</b> |

**Note** : Figures in parentheses indicates estimated consumption of fertiliser per hectare.

**Source** : *Pocket book of Agricultural Statistics 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 2.13: Selected state-wise area coverage under drip irrigation in India**

(Cultivated area: 000' ha, Area under Micro irrigation: ha)

| States            | Net Cultivated Area | Area covered under Micro Irrigation |              |              |              |              | Total of area covered | % of Area covered under Micro Irrigation during last five years wrt net irrigated area |
|-------------------|---------------------|-------------------------------------|--------------|--------------|--------------|--------------|-----------------------|--|
|                   |                     | 2001-02                             | 2002-03      | 2003-04      | 2004-05      | 2005-06      |                       |  |
| Andhra Pradesh    | 10410               | 5900                                | 7139         | 21487        | 24905        | 51811        | 111242                | 1.100  |
| Andaman & Nicobar | 746                 | 0                                   | 7            | 0            | 0            | 0            | 7                     | 0.001  |
| Assam             | 7850                | 0                                   | 0            | 0            | 116          | 0            | 116                   | 0.001  |
| Bihar             | 5664                | 0                                   | 0            | 0            | 392          | 0            | 392                   | 0.010  |
| Chhattishgarh     | 4800                | 0                                   | 0            | 0            | 11           | 6            | 17                    | 0.000  |
| Goa               | 141                 | 6                                   | 23           | 0            | 0            | 16           | 46                    | 0.030  |
| Gujarat           | 9622                | 0                                   | 1374         | 0            | 304          | 16000        | 17678                 | 0.180  |
| Haryana           | 3566                | 226                                 | 175          | 0            | 115          | 0            | 516                   | 0.014  |
| Himachal Pradesh  | 4543                | 68                                  | 77           | 43           | 0            | 0            | 188                   | 0.004  |
| Karnataka         | 10031               | 0                                   | 6366         | 11093        | 6408         | 129          | 23996                 | 0.239  |
| Kerala            | 2191                | 0                                   | 154          | 0            | 297          | 0            | 451                   | 0.020  |
| Madhya Pradesh    | 14859               | 727                                 | 844          | 0            | 289          | 0            | 1900                  | 0.012  |
| Maharashtra       | 17619               | 7100                                | 44082        | 0            | 36957        | 23857        | 111996                | 0.640  |
| Mizoram           | 2085                | 0                                   | 50           | 20           | 2            | 0            | 72                    | 0.003  |
| Odisha            | 5845                | 0                                   | 185          | 0            | 0            | 0            | 185                   | 0.003  |
| Punjab            | 4250                | 0                                   | 0            | 0            | 279          | 560          | 839                   | 0.019  |
| Rajasthan         | 16765               | 703                                 | 444          | 668          | 1134         | 0            | 2949                  | 0.017  |
| Sikkim            | 672                 | 0                                   | 0            | 0            | 0            | 50           | 50                    | 0.007  |
| Tamil Nadu        | 5172                | 16067                               | 9674         | 0            | 9988         | 0            | 35728                 | 0.690  |
| Uttar Pradesh     | 16812               | 477                                 | 276          | 184          | 50           | 0            | 988                   | 0.050  |
| West Bengal       | 5522                | 0                                   | 0            | 0            | 110          | 0            | 110                   | 0.010  |
| <b>India</b>      | <b>149165</b>       | <b>31274</b>                        | <b>70910</b> | <b>33496</b> | <b>81357</b> | <b>92429</b> | <b>309466</b>         | <b>0.210</b>   |

Note : Difference in total is due to rounding off decimal.

Source : Rajya Sabha Unstarred Question No.437, dated 02.03.2007.

<http://www.indiaagrstatat.com/india/ShowData.asp?secid=422924&ptid=145&level=2> accessed on 14.01.2008

**Table 2.14: Flow of institutional credit in agriculture sector**

(million Rs.)

| Item  | 2007-08        | 2008-09        | 2009-10        | 2010-11        | 2011-12        | 2012-13        | 2013-14        | 2014-15        |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Production (Short term) credit</b>         |                |                |                |                |                |                |                |                |
| Co-operative Banks                            | 405150         | 402300         | 569460         | 645270         | 818290         | 1025920        | 1135740        | NA             |
| Regional Rural Banks                          | 207150         | 224130         | 298020         | 378080         | 474010         | 559570         | 706970         | NA             |
| Commercial Banks                              | 1222890        | 1478180        | 1899080        | 2167730        | 2669280        | 3149510        | 3887300        | NA             |
| Other Agencies                                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| <b>Sub-total (A)</b>                          | <b>1835190</b> | <b>2104610</b> | <b>2766560</b> | <b>3191080</b> | <b>3961580</b> | <b>4735000</b> | <b>5730010</b> | <b>6354120</b> |
| <b>Medium / Long term total</b>               |                |                |                |                |                |                |                |                |
| Co-operative Banks                            | 31690          | 59620          | 65510          | 55780          | 61340          | 86110          | 63890          | NA             |
| Regional Rural Banks                          | 40990          | 43520          | 54150          | 61600          | 70490          | 77240          | 119560         | NA             |
| Commercial Banks                              | 587980         | 811330         | 958920         | 1159330        | 1016880        | 1175400        | 1202750        | NA             |
| Other Agencies                                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| <b>Sub-total (B)</b>                          | <b>660660</b>  | <b>914470</b>  | <b>1078580</b> | <b>1276710</b> | <b>1148710</b> | <b>1338750</b> | <b>1386200</b> | <b>2099160</b> |
| <b>Short term + Medium / Long term credit</b> |                |                |                |                |                |                |                |                |
| Co-operative Banks                            | 482580         | 461920         | 634970         | 701500         | 879630         | 1112030        | 1199630        | 1384690        |
| Regional Rural Banks                          | 253120         | 267650         | 352170         | 439680         | 544500         | 636810         | 826530         | 1024830        |
| Commercial Banks                              | 1810880        | 2289510        | 2858000        | 3327060        | 3686160        | 4324910        | 5090050        | 6043760        |
| Other Agencies                                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| <b>Grand total (A+B)</b>                      | <b>2546580</b> | <b>3019080</b> | <b>3845140</b> | <b>4467790</b> | <b>5110290</b> | <b>6073750</b> | <b>7116210</b> | <b>8453280</b> |

**Note** : NA: Agency-wise segregation is not available for Short Terms/Mid Term/Long Term Credit.

**Source** : *Pocket book of Agricultural Statistics 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 2.15: State wise Crop Area Insured under all insurance Schemes**

| State/UT's           | 2012-2013       |               |                   | 2013-2014        |               |                   | 2014-2015        |               |                   |
|----------------------|-----------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|-------------------|
|                      | Gross Area Sown | Area Insured  | % of Area Insured | Gross Area Sown* | Area Insured  | % of Area Insured | Gross Area Sown* | Area Insured  | % of Area Insured |
| Andhra Pradesh       | 136.5           | 42.87         | 31.41             | 136.5            | 34.35         | 25.16             | 136.5            | 5.40          | 3.96              |
| Andaman & Nicobar    | 0.25            | 0.01          | 4.45              | 0.25             | 0.02          | 6.88              | 0.25             | 0.01          | 4.92              |
| Arunachal Pradesh    | 2.85            | 0.00          | 0.00              | 2.85             | 0.00          | 0.00              | 2.85             | 0.00          | 0.00              |
| Assam                | 41.97           | 0.43          | 1.03              | 41.97            | 0.39          | 0.92              | 41.97            | 0.30          | 0.72              |
| Bihar                | 77.78           | 34.06         | 43.79             | 77.78            | 39.81         | 51.18             | 77.78            | 37.35         | 48.02             |
| Chandigarh           | 0.02            | 0.00          | 0.00              | 0.02             | 0.00          | 0.00              | 0.02             | 0.00          | 0.00              |
| Chhattisgarh         | 56.91           | 24.33         | 42.75             | 56.91            | 13.65         | 23.98             | 56.91            | 18.85         | 33.12             |
| Dadar & Nagar Haveli | 0.24            | 0.00          | 0.00              | 0.24             | 0.00          | 0.00              | 0.24             | 0.00          | 0.00              |
| Daman & Diu          | 0.03            | 0.00          | 0.00              | 0.03             | 0.00          | 0.00              | 0.03             | 0.00          | 0.00              |
| Delhi                | 0.49            | 0.00          | 0.00              | 0.49             | 0.00          | 0.00              | 0.49             | 0.00          | 0.00              |
| Goa                  | 1.63            | 0.00          | 0.19              | 1.63             | 0.00          | 0.29              | 1.63             | 0.00          | 0.11              |
| Gujarat              | 126             | 25.44         | 20.19             | 126              | 21.98         | 17.45             | 126              | 13.89         | 11.02             |
| Haryana              | 63.76           | 3.38          | 5.30              | 63.76            | 4.84          | 7.60              | 63.76            | 0.00          | 0.00              |
| Himachal Pradesh     | 9.47            | 4.11          | 43.36             | 9.47             | 0.25          | 2.65              | 9.47             | 0.53          | 5.62              |
| Jammu & Kashmir      | 11.62           | 0.16          | 1.36              | 11.62            | 0.06          | 0.50              | 11.62            | 0.00          | 0.03              |
| Jharkhand            | 16.57           | 4.78          | 28.83             | 16.57            | 4.42          | 26.68             | 16.57            | 2.44          | 14.75             |
| Karnataka            | 117.48          | 12.91         | 10.99             | 117.48           | 9.15          | 7.79              | 117.48           | 14.39         | 12.25             |
| Kerala               | 25.92           | 0.51          | 1.98              | 25.92            | 0.48          | 1.85              | 25.92            | 0.44          | 1.70              |
| Lakshdweep           | 0.03            | 0.00          | 0.00              | 0.03             | 0.00          | 0.00              | 0.03             | 0.00          | 0.00              |
| Madhya Pradesh       | 231.3           | 90.81         | 39.26             | 231.3            | 103.23        | 44.63             | 231.3            | 106.20        | 45.91             |
| Maharashtra          | 218.74          | 20.15         | 9.21              | 218.74           | 16.05         | 7.34              | 218.74           | 48.69         | 22.26             |
| Manipur              | 3.09            | 0.10          | 3.08              | 3.09             | 0.10          | 3.17              | 3.09             | 0.06          | 2.10              |
| Meghalaya            | 3.4             | 0.02          | 0.68              | 3.4              | 0.03          | 0.86              | 3.4              | 0.01          | 0.41              |
| Mizoram              | 1.16            | 0.00          | 0.05              | 1.16             | 0.00          | 0.00              | 1.16             | 0.00          | 0.00              |
| Nagaland             | 4.89            | 0.00          | 0.00              | 4.89             | 0.00          | 0.00              | 4.89             | 0.00          | 0.00              |
| Odisha               | 50.69           | 14.09         | 27.80             | 50.69            | 14.19         | 28.00             | 50.69            | 16.90         | 33.35             |
| Puducherry           | 0.26            | 0.04          | 16.52             | 0.26             | 0.02          | 9.17              | 0.26             | 0.02          | 6.67              |
| Punjab               | 78.7            | 0.00          | 0.00              | 78.7             | 0.00          | 0.00              | 78.7             | 0.00          | 0.00              |
| Rajasthan            | 239.54          | 120.93        | 50.49             | 239.54           | 126.13        | 52.65             | 239.54           | 119.05        | 49.70             |
| Sikkim               | 1.44            | 0.00          | 0.01              | 1.44             | 0.00          | 0.00              | 1.44             | 0.00          | 0.01              |
| Tamil Nadu           | 51.4            | 14.30         | 27.83             | 51.4             | 9.40          | 18.28             | 51.4             | 8.40          | 16.33             |
| Telangana            | -               | -             | -                 | -                | -             | -                 | -                | 13.58         | -                 |
| Tripura              | 3.68            | 0.01          | 0.28              | 3.68             | 0.00          | 0.00              | 3.68             | 0.00          | 0.11              |
| Uttar Pradesh        | 258.21          | 23.16         | 8.97              | 258.21           | 21.99         | 8.52              | 258.21           | 20.53         | 7.95              |
| Uttarakhand          | 11.24           | 1.35          | 12.01             | 11.24            | 0.48          | 4.25              | 11.24            | 0.51          | 4.56              |
| West Bengal          | 96.78           | 6.07          | 6.27              | 96.78            | 6.23          | 6.44              | 96.78            | 9.97          | 10.30             |
| <b>Total</b>         | <b>1943.99</b>  | <b>444.03</b> | <b>22.84</b>      | <b>1943.99</b>   | <b>427.23</b> | <b>21.98</b>      | <b>1943.99</b>   | <b>437.56</b> | <b>22.51</b>      |

Note : Using latest available data for gross cropped area for 2012-2013, -: Not available.

Source : *Pocket book of Agricultural Statistics 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



भाग-III  
पशुपालन, डेरी उद्योग एवं मात्स्यिकी

SECTION-III  
Animal Husbandry, Dairying and Fisheries





**Table 3.1: State-wise total number of livestock and poultry-2012**

| States /<br>Union Territories | Cattle   | Buffaloes | Sheep    | Goats    | Pigs    | Horses<br>and<br>Ponies | Mules | Donkeys | Camel | Yaks  | Mithun | Total<br>livestock | Total<br>Poultry |
|-------------------------------|----------|-----------|----------|----------|---------|-------------------------|-------|---------|-------|-------|--------|--------------------|------------------|
| Andhra Pradesh                | 9595.94  | 10622.79  | 26395.58 | 9071.22  | 394.36  | 5.19                    | 0.74  | 13.43   | 0.15  | 0.00  | 0.00   | 56099.41           | 161333.93        |
| Arunachal Pradesh             | 463.76   | 5.97      | 13.55    | 305.54   | 356.35  | 4.03                    | 0.33  | 0.04    | 0.05  | 14.06 | 249.00 | 1412.67            | 2244.23          |
| Assam                         | 10307.60 | 435.27    | 518.07   | 6169.19  | 1636.02 | 14.15                   | 0.09  | 1.05    | 0.73  | 0.00  | 0.00   | 19082.17           | 27216.17         |
| Bihar                         | 12231.52 | 7567.23   | 232.47   | 12153.52 | 649.71  | 48.85                   | 25.06 | 21.38   | 8.86  | 0.00  | 0.00   | 32938.60           | 12748.05         |
| Chhattisgarh                  | 9814.90  | 1390.55   | 168.22   | 3225.31  | 439.06  | 2.96                    | 1.17  | 0.68    | 0.65  | 0.00  | 0.00   | 15043.50           | 23102.16         |
| Goa                           | 57.48    | 31.80     | 0.02     | 12.96    | 43.57   | 0.03                    | 0.00  | 0.00    | 0.00  | 0.00  | 0.00   | 145.85             | 292.03           |
| Gujarat                       | 9983.95  | 10385.57  | 1707.75  | 4958.97  | 4.28    | 18.26                   | 0.16  | 38.83   | 30.42 | 0.00  | 0.00   | 27128.20           | 15005.75         |
| Haryana                       | 1808.12  | 6085.31   | 1362.62  | 369.12   | 126.95  | 36.66                   | 9.01  | 2.90    | 18.85 | 0.00  | 0.00   | 9819.52            | 42821.35         |
| Himachal Pradesh              | 2149.26  | 716.02    | 804.87   | 1119.49  | 5.03    | 15.08                   | 23.32 | 7.35    | 0.18  | 2.92  | 0.92   | 4844.43            | 1104.48          |
| Jammu & Kashmir               | 2798.33  | 738.99    | 3389.49  | 2017.90  | 2.42    | 144.49                  | 36.51 | 17.25   | 0.93  | 54.49 | 0.06   | 9200.84            | 8273.70          |
| Jharkhand                     | 8730.08  | 1185.94   | 582.93   | 6581.45  | 962.37  | 5.71                    | 3.89  | 0.38    | 0.00  | 0.00  | 0.00   | 18052.75           | 13559.53         |
| Karnataka                     | 9516.48  | 3470.51   | 9583.76  | 4796.15  | 304.80  | 12.98                   | 0.76  | 16.31   | 0.15  | 0.00  | 0.00   | 27701.90           | 53442.03         |
| Kerala                        | 1328.63  | 102.27    | 1.45     | 1246.08  | 55.78   | 0.22                    | 0.23  | 0.50    | 0.01  | 0.00  | 0.00   | 2735.16            | 24281.93         |
| Madhya Pradesh                | 19602.37 | 8187.99   | 308.95   | 8013.94  | 175.25  | 18.80                   | 6.99  | 14.92   | 3.42  | 0.00  | 0.00   | 36332.63           | 11904.72         |
| Maharashtra                   | 15484.21 | 5594.39   | 2580.38  | 8435.31  | 325.76  | 37.29                   | 2.01  | 29.14   | 0.18  | 0.00  | 0.00   | 32488.65           | 77794.57         |
| Manipur                       | 263.84   | 66.37     | 11.46    | 65.16    | 277.22  | 1.10                    | 0.37  | 0.13    | 0.00  | 0.00  | 10.13  | 695.77             | 2499.52          |
| Meghalaya                     | 896.00   | 22.06     | 20.10    | 473.07   | 543.38  | 2.31                    | 0.18  | 0.52    | 0.01  | 0.00  | 0.00   | 1957.63            | 3400.03          |
| Mizoram                       | 34.57    | 5.17      | 0.65     | 22.21    | 245.24  | 0.72                    | 0.01  | 0.00    | 0.00  | 0.00  | 3.29   | 311.86             | 1271.35          |

(000')

Animal Husbandry, Dairying and Fisheries

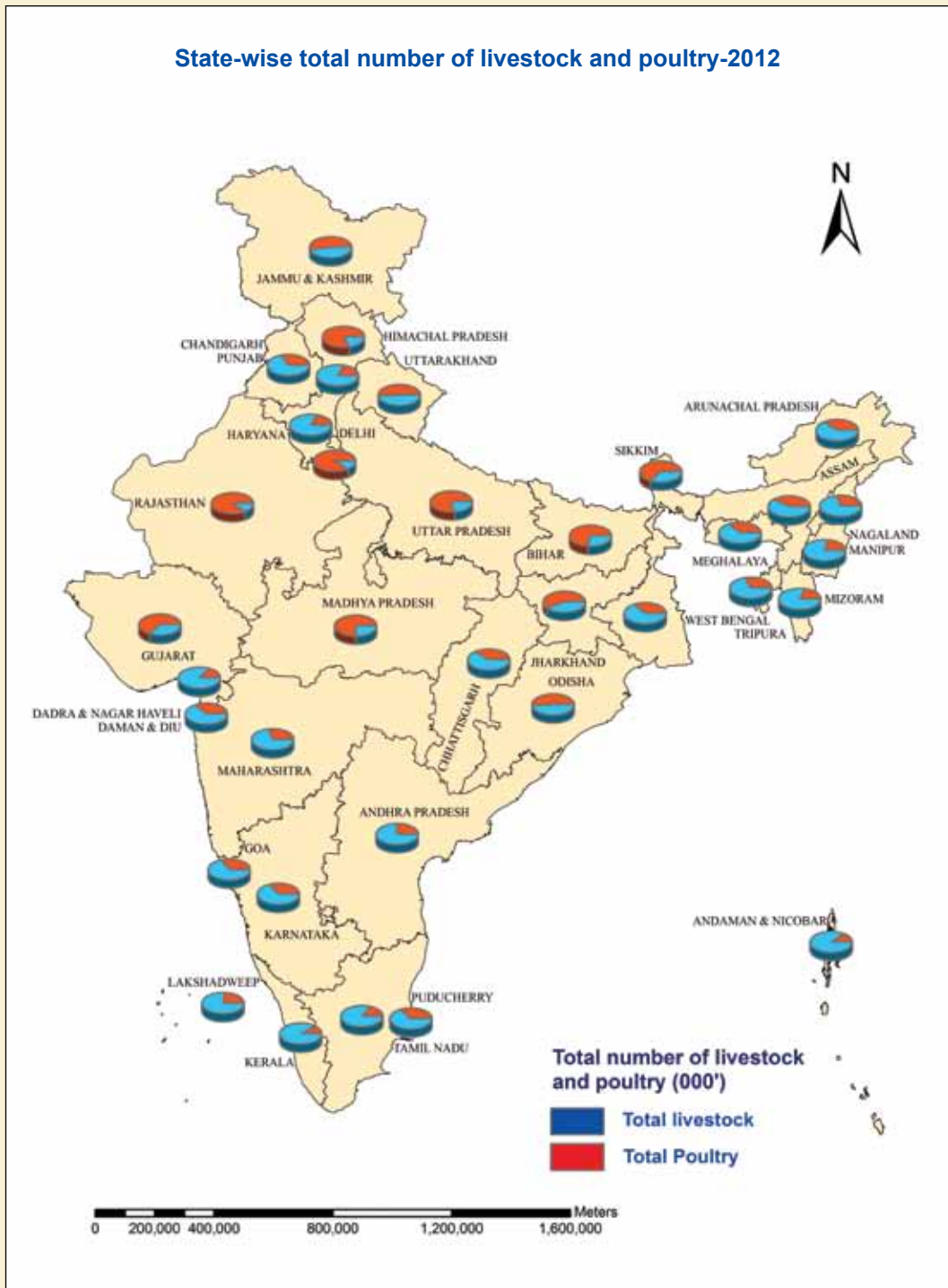
| States / Union Territories | Cattle    | Buffaloes | Sheep    | Goats     | Pigs     | Horses and Ponies | Mules  | Donkeys | Camel  | Yaks  | Mithun | Total livestock | Total Poultry |
|----------------------------|-----------|-----------|----------|-----------|----------|-------------------|--------|---------|--------|-------|--------|-----------------|---------------|
| Nagaland                   | 234.97    | 32.72     | 3.84     | 99.35     | 503.69   | 0.47              | 1.12   | 0.04    | 0.09   | 0.00  | 34.87  | 911.16          | 2178.47       |
| Odisha                     | 11621.27  | 726.31    | 1581.13  | 6513.09   | 280.32   | 3.40              | 5.63   | 0.52    | 0.84   | 0.00  | 0.00   | 20732.50        | 19890.54      |
| Punjab                     | 2427.71   | 5159.73   | 128.53   | 327.27    | 32.22    | 32.86             | 5.16   | 2.91    | 0.69   | 0.00  | 0.00   | 8117.10         | 16794.08      |
| Rajasthan                  | 13324.46  | 12976.10  | 9079.70  | 21665.94  | 237.67   | 37.78             | 3.38   | 81.47   | 325.71 | 0.00  | 0.00   | 57732.20        | 8024.42       |
| Sikkim                     | 140.47    | 0.70      | 2.63     | 113.36    | 29.91    | 511.00            | 0.00   | 0.00    | 0.00   | 4.04  | 0.00   | 802.12          | 451.97        |
| Tamil Nadu                 | 8814.04   | 780.43    | 4786.68  | 8143.34   | 183.98   | 5.30              | 0.00   | 9.18    | 0.02   | 0.00  | 0.00   | 22722.98        | 117348.89     |
| Tripura                    | 948.79    | 10.81     | 3.11     | 610.92    | 362.53   | 0.01              | 0.00   | 0.00    | 0.00   | 0.00  | 0.00   | 1936.18         | 4272.73       |
| Uttar Pradesh              | 19557.07  | 30625.33  | 1353.65  | 15585.62  | 1334.39  | 151.85            | 42.66  | 56.64   | 7.94   | 0.00  | 0.00   | 68715.15        | 18667.83      |
| Uttarakhand                | 2006.05   | 987.78    | 368.76   | 1367.41   | 19.91    | 16.36             | 26.90  | 1.51    | 0.00   | 0.06  | 0.00   | 4794.73         | 4641.94       |
| West Bengal                | 16514.24  | 597.38    | 1076.12  | 11505.95  | 648.11   | 4.41              | 0.08   | 0.61    | 0.27   | 1.09  | 0.00   | 30348.25        | 52837.58      |
| A & Nicobar Islands        | 45.63     | 7.86      | 0.00     | 65.32     | 35.92    | 0.01              | 0.00   | 0.00    | 0.00   | 0.00  | 0.00   | 154.75          | 1165.36       |
| Chandigarh                 | 8.96      | 14.03     | 0.07     | 0.81      | 0.14     | 0.19              | 0.01   | 0.00    | 0.00   | 0.00  | 0.00   | 24.20           | 108.72        |
| Dadra & Nagar Haveli       | 41.87     | 4.06      | 0.12     | 4.17      | 0.00     | 0.01              | 0.00   | 0.00    | 0.00   | 0.00  | 0.00   | 50.24           | 85.97         |
| Daman & Diu                | 2.10      | 0.43      | 0.00     | 2.06      | 0.01     | 0.03              | 0.00   | 0.00    | 0.00   | 0.00  | 0.00   | 4.63            | 28.20         |
| Delhi                      | 86.43     | 162.14    | 0.93     | 17.00     | 76.35    | 2.69              | 0.14   | 1.09    | 0.16   | 0.00  | 0.00   | 346.93          | 43.83         |
| Lakshadweep                | 3.10      | 0.00      | 0.00     | 46.50     | 0.00     | 0.00              | 0.00   | 0.00    | 0.00   | 0.00  | 0.00   | 49.60           | 164.54        |
| Puducherry                 | 59.90     | 2.11      | 1.60     | 54.95     | 1.01     | 0.03              | 0.00   | 0.02    | 0.00   | 0.00  | 0.00   | 119.61          | 208.72        |
| All India                  | 190904.11 | 108702.12 | 65069.19 | 135173.09 | 10293.70 | 624.73            | 196.38 | 318.79  | 400.27 | 76.66 | 298.26 | 512057.30       | 729209.32     |

Note : 1. Total may not tally due to rounding of figures, 2. 0 Negligible with respect to thousands/ not reported.

Source : Basic Animal Husbandry & Fisheries Statistics, 2015, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).



### State-wise total number of livestock and poultry-2012



**Table 3.2: State-wise number of milch animals-2007 and 2012**

(000')

| States /<br>Union Territories | Milch Cows |         |          |            |         |          | Milch Buffaloes |         |          |
|-------------------------------|------------|---------|----------|------------|---------|----------|-----------------|---------|----------|
|                               | Crossbred  |         |          | Indigenous |         |          | 2007            | 2012    | % Change |
|                               | 2007       | 2012    | % Change | 2007       | 2012    | % Change |                 |         |          |
| <b>Andhra Pradesh</b>         | 828.11     | 1153.25 | 39.26    | 2232.82    | 1928.41 | -13.63   | 6223.72         | 5102.78 | -18.01   |
| <b>Arunachal Pradesh</b>      | 5.55       | 8.37    | 50.80    | 90.31      | 103.98  | 15.14    | 0.50            | 1.14    | 127.94   |
| <b>Assam</b>                  | 152.81     | 158.96  | 4.02     | 2532.96    | 2913.81 | 15.04    | 148.36          | 136.60  | -7.93    |
| <b>Bihar</b>                  | 836.46     | 1647.73 | 96.99    | 2989.88    | 2873.50 | -3.89    | 2845.96         | 3112.56 | 9.37     |
| <b>Chhattisgarh</b>           | 58.80      | 71.45   | 21.53    | 2359.56    | 2515.32 | 6.60     | 315.88          | 315.44  | -0.14    |
| <b>Goa</b>                    | 8.30       | 9.71    | 17.03    | 16.09      | 13.40   | -16.75   | 16.46           | 15.19   | -7.66    |
| <b>Gujarat</b>                | 524.98     | 962.84  | 83.41    | 2003.55    | 2777.36 | 38.62    | 4389.98         | 5078.82 | 15.69    |
| <b>Haryana</b>                | 267.81     | 485.60  | 81.32    | 339.75     | 269.00  | -20.82   | 2704.05         | 2765.26 | 2.26     |
| <b>Himachal Pradesh</b>       | 409.26     | 520.86  | 27.27    | 459.93     | 372.33  | -19.05   | 447.64          | 396.50  | -11.42   |
| <b>Jammu &amp; Kashmir</b>    | 677.65     | 664.88  | -1.88    | 591.87     | 481.99  | -18.56   | 551.03          | 396.39  | -28.06   |
| <b>Jharkhand</b>              | 67.26      | 125.01  | 85.87    | 2146.66    | 2065.72 | -3.77    | 411.85          | 341.43  | -17.10   |
| <b>Karnataka</b>              | 1258.92    | 1732.24 | 37.60    | 2655.88    | 2200.53 | -17.14   | 2373.90         | 1897.90 | -20.05   |
| <b>Kerala</b>                 | 745.19     | 604.78  | -18.84   | 47.77      | 32.01   | -33.00   | 13.41           | 9.23    | -31.17   |
| <b>Madhya Pradesh</b>         | 204.83     | 383.20  | 87.09    | 5994.95    | 5930.21 | -1.08    | 3979.50         | 3911.59 | -1.71    |
| <b>Maharashtra</b>            | 1622.60    | 2037.72 | 25.58    | 3283.93    | 3053.10 | -7.03    | 3324.93         | 3171.48 | -4.62    |
| <b>Manipur</b>                | 24.15      | 17.05   | -29.40   | 73.74      | 62.13   | -15.74   | 15.56           | 16.87   | 8.42     |
| <b>Meghalaya</b>              | 16.90      | 17.57   | 3.95     | 276.28     | 261.02  | -5.52    | 4.11            | 3.22    | -21.69   |
| <b>Mizoram</b>                | 4.37       | 5.27    | 20.68    | 8.38       | 7.38    | -11.98   | 1.80            | 1.42    | -21.15   |
| <b>Nagaland</b>               | 79.01      | 39.37   | -50.18   | 59.87      | 26.92   | -55.04   | 8.49            | 6.44    | -24.11   |

| States /<br>Union Territories | Milch Cows |          |          |            |          |          | Milch Buffaloes |          |          |
|-------------------------------|------------|----------|----------|------------|----------|----------|-----------------|----------|----------|
|                               | Crossbred  |          |          | Indigenous |          |          | 2007            | 2012     | % Change |
|                               | 2007       | 2012     | % Change | 2007       | 2012     | % Change |                 |          |          |
| Odisha                        | 332.24     | 528.62   | 59.11    | 2377.45    | 2554.72  | 7.46     | 281.38          | 223.54   | -20.56   |
| Punjab                        | 683.07     | 1134.10  | 66.03    | 166.49     | 102.79   | -38.26   | 2779.36         | 2689.21  | -3.24    |
| Rajasthan                     | 397.37     | 860.11   | 116.45   | 4630.46    | 5007.32  | 8.14     | 5399.95         | 6321.76  | 17.07    |
| Sikkim                        | 23.41      | 50.53    | 115.83   | 18.87      | 4.30     | -77.20   | 0.07            | 0.29     | 314.29   |
| Tamil Nadu                    | 3071.47    | 3082.98  | 0.37     | 1240.43    | 913.98   | -26.32   | 806.08          | 377.55   | -53.16   |
| Tripura                       | 30.19      | 42.83    | 41.89    | 246.33     | 229.75   | -6.73    | 4.39            | 3.19     | -27.51   |
| Uttar Pradesh                 | 791.17     | 1659.78  | 109.79   | 5536.56    | 6594.96  | 19.12    | 10564.56        | 13949.76 | 32.04    |
| Uttarakhand                   | 156.86     | 241.52   | 53.97    | 604.89     | 510.02   | -15.68   | 664.78          | 545.95   | -17.87   |
| West Bengal                   | 1054.99    | 1101.53  | 4.41     | 5004.12    | 4285.97  | -14.35   | 174.19          | 155.99   | -10.45   |
| Andaman &<br>Nicobar          | 5.42       | 7.25     | 33.89    | 9.87       | 8.93     | -9.48    | 2.79            | 2.13     | -23.77   |
| Chandigarh                    | 2.89       | 4.53     | 56.91    | 0.72       | 0.88     | 22.84    | 12.17           | 9.46     | -22.24   |
| Dadra & Nagar<br>Haveli       | 0.55       | 0.28     | -48.27   | 10.76      | 7.56     | -29.75   | 1.48            | 1.09     | -26.36   |
| Daman & Diu                   | 0.02       | 0.07     | 283.33   | 0.82       | 0.59     | -28.07   | 0.42            | 0.21     | -50.24   |
| Delhi                         | 25.36      | 29.64    | 16.89    | 27.59      | 12.54    | -54.56   | 170.74          | 92.04    | -46.09   |
| Lakshadweep                   | 0.95       | 0.32     | -66.35   | 0.59       | 1.02     | 72.18    | 0.00            | 0.00     | 0.00     |
| Puducherry                    | 38.54      | 29.57    | -23.26   | 1.82       | 0.84     | -53.60   | 2.02            | 1.31     | -35.17   |
| All-India                     | 14407.43   | 19419.55 | 34.79    | 48041.96   | 48124.28 | 0.17     | 48641.48        | 51053.73 | 4.96     |

Note : 1. Milch animals include animals in milk and dry. 2. Totals may not tally due to rounding of figures, 3. 0 negligible with respect to thousands/not reported.

Source : Basic Animal Husbandry & Fisheries Statistics, 2015, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

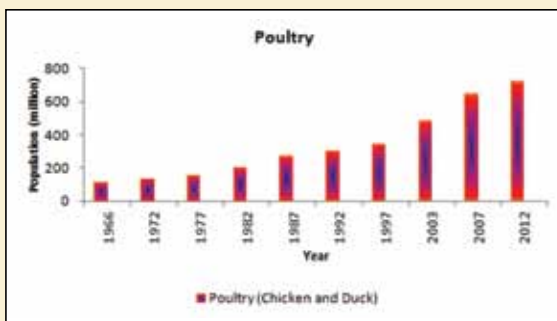
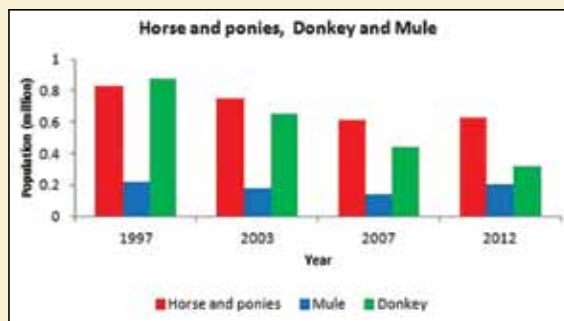
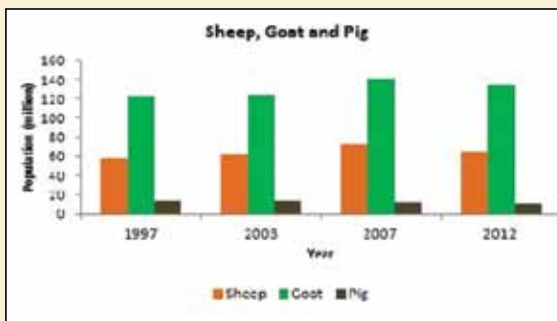
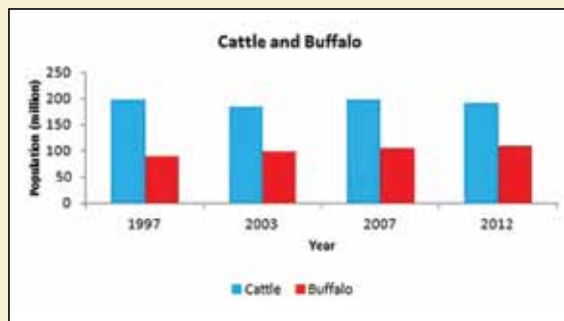
**Table 3.3: Livestock and Poultry population in India**

(Million number)

| Species                  | 1966          | 1972          | 1977          | 1982          | 1987          | 1992          | 1997          | 2003          | 2007          | 2012          |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cattle                   | 176.20        | 178.30        | 180.00        | 192.45        | 199.69        | 204.58        | 198.88        | 185.18        | 199.08        | 190.90        |
| Buffalo                  | 53.00         | 57.40         | 62.00         | 69.78         | 75.97         | 84.21         | 89.92         | 97.92         | 105.34        | 108.70        |
| Sheep                    | 42.40         | 40.00         | 41.00         | 48.76         | 45.70         | 50.78         | 57.49         | 61.47         | 71.56         | 65.07         |
| Goat                     | 64.60         | 67.50         | 75.60         | 95.25         | 110.21        | 115.28        | 122.72        | 124.36        | 140.54        | 135.17        |
| Horses & ponies          | 1.10          | 0.90          | 0.90          | 0.90          | 0.80          | 0.82          | 0.83          | 0.75          | 0.61          | 0.63          |
| Camel                    | 1.00          | 1.10          | 1.10          | 1.08          | 1.00          | 1.03          | 0.91          | 0.63          | 0.52          | 0.40          |
| Pig                      | 5.00          | 6.90          | 7.60          | 10.07         | 10.63         | 12.79         | 13.29         | 13.52         | 11.13         | 10.29         |
| Mule                     | 0.08          | 0.08          | 0.09          | 0.13          | 0.17          | 0.19          | 0.22          | 0.18          | 0.14          | 0.20          |
| Donkey                   | 1.10          | 1.00          | 1.00          | 1.02          | 0.96          | 0.97          | 0.88          | 0.65          | 0.44          | 0.32          |
| Yak/ Mithun              | 0.03          | 0.04          | 0.13          | 0.13          | 0.04          | 0.06          | 0.06          | 0.06          | 0.08          | 0.08          |
| <b>Total livestock</b>   | <b>344.10</b> | <b>353.60</b> | <b>369.00</b> | <b>419.59</b> | <b>445.29</b> | <b>470.86</b> | <b>485.39</b> | <b>485.00</b> | <b>529.70</b> | <b>512.06</b> |
| Poultry (Chicken & Duck) | 115.40        | 138.50        | 159.20        | 207.74        | 275.32        | 307.07        | 347.61        | 489.01        | 648.83        | 729.21        |
| Dog                      | NC            | NC            | NC            | 18.54         | 17.95         | 21.77         | 25.48         | 29.03         | 19.09         | 11.67         |
| Rabbit                   | NC            | NC            | NC            | NC            | NC            | NC            | NC            | 0.48          | 0.42          | 0.59          |

**Note** : 1. NC: Not collected, 2. Totals may not tally due to rounding of figures.

**Source** : 1. *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi. (Website: <http://www.dahd.nic.in>).



**Table 3.4: Growth Pattern of Livestock and Poultry population in India**

| Species                    | Compound annual growth rates (%) |             |             |             |              |             |             |             |              |             |              |
|----------------------------|----------------------------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|
|                            | 1956-61                          | 1961-66     | 1966-72     | 1972-77     | 1977-82      | 1982-87     | 1987-92     | 1992-97     | 1997-03      | 2003-07     | 2007-12      |
| <b>Cattle</b>              | 10.65                            | 0.34        | 1.19        | 0.95        | 6.92         | 3.76        | 2.45        | -2.79       | -6.89        | 7.50        | -4.10        |
| <b>Buffalo</b>             | 14.03                            | 3.52        | 8.30        | 8.01        | 12.55        | 8.87        | 10.85       | 6.78        | 8.90         | 7.58        | 3.19         |
| <b>Sheep</b>               | 2.29                             | 5.47        | -5.66       | 2.50        | 18.93        | -6.28       | 11.12       | 13.21       | 6.92         | 16.41       | -9.07        |
| <b>Goat</b>                | 9.93                             | 6.08        | 4.49        | 12.00       | 25.99        | 15.71       | 4.60        | 6.45        | 1.34         | 13.01       | -3.82        |
| <b>Horses &amp; ponies</b> | -13.33                           | -15.38      | -18.18      | 0.00        | 0.00         | -11.11      | 2.50        | 1.22        | -9.64        | -18.60      | 2.12         |
| <b>Camel</b>               | 12.50                            | 11.11       | 10.00       | 0.00        | -1.82        | -7.41       | 3.00        | -11.65      | -30.77       | -18.20      | -22.63       |
| <b>Pig</b>                 | 6.12                             | -3.85       | 38.00       | 10.14       | 32.50        | 5.56        | 20.32       | 3.91        | 1.73         | -17.66      | -7.54        |
| <b>Mule</b>                | 25.00                            | 60.00       | 0.00        | 12.50       | 44.44        | 30.77       | 11.76       | 15.79       | -18.18       | -22.16      | 43.07        |
| <b>Donkey</b>              | 0.00                             | 0.00        | -9.09       | 0.00        | 2.00         | -5.88       | 1.04        | -9.28       | -26.14       | -32.62      | -27.17       |
| <b>Yak</b>                 | N.A.                             | 50.00       | 33.33       | 225.00      | 0.00         | -69.23      | 50.00       | 0.00        | 0.00         | 38.33       | -723         |
| <b>Total livestock</b>     | <b>9.39</b>                      | <b>2.59</b> | <b>2.76</b> | <b>4.36</b> | <b>13.71</b> | <b>6.13</b> | <b>5.74</b> | <b>3.09</b> | <b>-0.08</b> | <b>9.22</b> | <b>-3.33</b> |
| <b>Poultry</b>             | 20.46                            | 1.05        | 20.02       | 14.95       | 30.49        | 32.53       | 11.53       | 13.20       | 40.68        | 32.68       | 12.39        |
| <b>Dog</b>                 | N.A.                             | N.A.        | N.A.        | N.A.        | N.A.         | -3.18       | 21.28       | 17.04       | 13.92        | -34.24      | -38.85       |

**Note** : N.A.: Not available.

**Source** : 1. *Basic Animal Husbandry Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).  
2. *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

**Table 3.5: Results of livestock Census 2007 and 2012 - India**

(Number in 000')

| Category                                    | 2007         |             |              | Category                                    | 2012         |             |              |
|---|--------------|-------------|--------------|---|--------------|-------------|--------------|
|   | Rural        | Urban       | Total        |   | Rural        | Urban       | Total        |
| <b>I. CATTLE</b>                            |              |             |              | <b>I. CATTLE</b>                            |              |             |              |
| <b>A. Cattle (exotic/crossbred)</b>         |              |             |              | <b>A. Cattle (exotic/crossbred)</b>         |              |             |              |
| <b>(i) Male</b>                             |              |             |              |   |              |             |              |
| (i) under 1 year                            | 2275         | 216         | 2491         | (i) under 1.5 year                          | 3557         | 282         | 3839         |
| (ii) 1-2.5 years                            | 1370         | 123         | 1493         |   |              |             |              |
| (iii) over 2.5 years                        |              |             |              | (ii) over 1.5 years                         |              |             |              |
| (a) used for breeding only                  | 406          | 52          | 459          | (a) used for breeding only                  | 284          | 34          | 318          |
| (b) used for agriculture & breeding         | 1389         | 87          | 1475         | (b) used for draught only                   | 1366         | 58          | 1424         |
| (c) used for bullock cart & breeding        | 508          | 50          | 558          | (c) used for both draught & breeding        | 207          | 16          | 222          |
| (d) other                                   | 339          | 28          | 367          | (d) other                                   | 152          | 17          | 169          |
| <b>Total exotic/crossbred male cattle</b>   | <b>6287</b>  | <b>556</b>  | <b>6844</b>  | <b>Total exotic/crossbred male cattle</b>   | <b>5566</b>  | <b>406</b>  | <b>5971</b>  |
| <b>(ii) Female</b>                          |              |             |              |   |              |             |              |
| (i) under 1 year                            | 4966         | 550         | 5516         | (i) under 1 year                            | 6519         | 510         | 7028         |
| (ii) under 1-2.5 years                      | 4128         | 415         | 4544         | (ii) under 1-2.5 years                      | 5116         | 348         | 5464         |
| (iii) over 2.5 years                        |              |             |              | (iii) over 2.5 years                        |              |             |              |
| (a) in milk                                 | 9608         | 1108        | 10716        | (a) in milk                                 | 13158        | 1146        | 14305        |
| (b) dry                                     | 3378         | 313         | 3691         | (b) dry                                     | 4780         | 335         | 5115         |
| (c) not calved once                         | 1143         | 114         | 1257         | (c) not calved once                         | 1449         | 116         | 1565         |
| (d) above 10 year                           | 442          | 50          | 492          | (d) others                                  | 250          | 33          | 283          |
| <b>Total exotic/crossbred female cattle</b> | <b>23666</b> | <b>2551</b> | <b>26216</b> | <b>Total exotic/crossbred female cattle</b> | <b>31271</b> | <b>2489</b> | <b>33760</b> |
| <b>Total exotic/crossbred cattle</b>        | <b>29953</b> | <b>3107</b> | <b>33060</b> | <b>Total exotic/crossbred cattle</b>        | <b>36837</b> | <b>2895</b> | <b>39731</b> |
| <b>B. Cattle (indigenous)</b>               |              |             |              |   |              |             |              |
| <b>(i) Male</b>                             |              |             |              |   |              |             |              |
| (i) under 1 year                            | 11087        | 420         | 11507        | (i) under 2 year                            | 14767        | 438         | 15205        |
| (ii) 1-3 years                              | 11785        | 337         | 12122        |   |              |             |              |

| Category                                 | 2007          |             |               | Category                             | 2012          |             |               |
|--|---------------|-------------|---------------|--------------------------------------|---------------|-------------|---------------|
|  | Rural         | Urban       | Total         |                                      | Rural         | Urban       | Total         |
| (iii) over 3 years                       |               |             |               | (ii) over 2 years                    |               |             |               |
| (a) used for breeding only               | 2082          | 79          | 2161          | (a) used for breeding only           | 2029.3        | 54.75       | 2084.05       |
| b) (used for agriculture + bullock cart) | 50036         | 952         | 50988         | (b) used for draught only            | 39372         | 482         | 39854         |
|  |               |             |               | (c) used for both draught & breeding | 2930          | 51          | 2981          |
|  |               |             |               | (d) others                           | 1784          | 41          | 1825          |
| <b>Total male (indigenous)</b>           | <b>74990</b>  | <b>1788</b> | <b>76780</b>  | <b>Total male (indigenous)</b>       | <b>60882</b>  | <b>1067</b> | <b>61949</b>  |
| <b>(ii) Female</b>                       |               |             |               |                                      |               |             |               |
| (i) under 1 year                         | 15960         | 767         | 16727         | (i) under 1 year                     | 17296         | 742         | 18038         |
| (ii) 1-3 years                           | 15126         | 623         | 15749         | (ii) 1-3 years                       | 15869         | 485         | 16354         |
| (iii) over 3 years                       |               |             |               | (iii) over 3 years                   |               |             |               |
| (a) in milk                              | 29151         | 1536        | 30687         | (a) in milk                          | 28475         | 1175        | 29649         |
| (b) dry                                  | 16733         | 622         | 17355         | (b) dry                              | 17904         | 571         | 18475         |
| (c) not calved once                      | 5819          | 227         | 6046          | (c) not calved once                  | 5850          | 181         | 6031          |
| (d) above 10 year                        | 2565          | 106         | 2671          | (d) above 10 year                    | 1210          | 52          | 1262          |
| <b>Total female (indigenous)</b>         | <b>85354</b>  | <b>3881</b> | <b>89235</b>  | <b>Total female (indigenous)</b>     | <b>86604</b>  | <b>3206</b> | <b>89809</b>  |
| <b>Total indigenous cattle</b>           | <b>160344</b> | <b>5669</b> | <b>166015</b> | <b>Total indigenous cattle</b>       | <b>147486</b> | <b>4273</b> | <b>151758</b> |
| <b>Total cattle</b>                      | <b>190297</b> | <b>8776</b> | <b>199075</b> | <b>Total cattle</b>                  | <b>184323</b> | <b>7168</b> | <b>191489</b> |
| <b>II. BUFFALOES</b>                     |               |             |               |                                      |               |             |               |
| <b>(i) Male</b>                          |               |             |               |                                      |               |             |               |
| (i) under 1 year                         | 8646          | 418         | 9065          | (i) under 2 year                     | 10367         | 439         | 10805         |
| (ii) 1-3 years                           | 3921          | 176         | 4097          |                                      |               |             |               |
| (iii) over 3 years                       |               |             |               | (ii) over 2 years                    |               |             |               |
| (a) used for breeding only               | 804           | 62          | 866           | (a) used for breeding only           | 793           | 43          | 836           |
| (b) used for agriculture & breeding      | 3657          | 90          | 3747          | (b) used for draught only            | 3403          | 65          | 3468          |
| (c) used for bullock cart & breeding     | 1134          | 48          | 1182          | (c) used for both draught & breeding | 595           | 26          | 621           |
| (d) other                                | 613           | 28          | 641           | (d) other                            | 357           | 17          | 374           |
| <b>Total male buffaloes</b>              | <b>18775</b>  | <b>823</b>  | <b>19597</b>  | <b>Total male buffaloes</b>          | <b>15514</b>  | <b>589</b>  | <b>16103</b>  |

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| Category                           | 2007         |             |                    | Category                           | 2012          |             |               |
|------------------------------------|--------------|-------------|--------------------|------------------------------------|---------------|-------------|---------------|
|                                    | Rural        | Urban       | Total              |                                    | Rural         | Urban       | Total         |
| <b>(ii) Female</b>                 |              |             |                    |                                    |               |             |               |
| (i) under 1 year                   | 16597        | 909         | 17506              | (i) under 1 year                   | 19393         | 762         | 20155         |
| (ii) 1-3 years                     | 13170        | 596         | 13766              | (ii) 1-3 years                     | 15332         | 525         | 15858         |
| (iii) over 3 years                 |              |             | (iii) over 3 years |                                    |               |             |               |
| (a) in milk                        | 33398        | 2245        | 35643              | (a) in milk                        | 3456          | 2009        | 36572         |
| (b) dry                            | 12418        | 581         | 12999              | (b) dry                            | 13954         | 528         | 14481         |
| (c) not calved once                | 3990         | 189         | 4179               | (c) not calved once                | 4378          | 160         | 4538          |
| (d) above 10 year                  | 1569         | 85          | 1654               | (d) others                         | 961           | 33          | 994           |
| <b>Total female buffaloes</b>      | <b>81141</b> | <b>4604</b> | <b>85745</b>       | <b>Total female buffaloes</b>      | <b>88582</b>  | <b>4018</b> | <b>92599</b>  |
| <b>Total buffaloes</b>             | <b>99916</b> | <b>5427</b> | <b>105343</b>      | <b>Total buffaloes</b>             | <b>104095</b> | <b>4607</b> | <b>108702</b> |
| <b>III. YAKS</b>                   |              |             |                    |                                    |               |             |               |
| (i) under 3 years                  |              |             | (i) under 3 years  |                                    |               |             |               |
| (a) male                           | 11           | 0           | 11                 | (a) male                           | 12            | 0           | 12            |
| (b) female                         | 15           | 0           | 15                 | (b) female                         | 14            | 0           | 14            |
| <b>Total yaks upto 3 years</b>     | <b>26</b>    | <b>0</b>    | <b>26</b>          | <b>Total yaks upto 3 years</b>     | <b>25</b>     | <b>0</b>    | <b>25</b>     |
| (ii) over 3 years                  |              |             | (ii) over 3 years  |                                    |               |             |               |
| (a) male                           | 27           | 0           | 27                 | (a) male                           | 23            | 0           | 23            |
| (b) female                         | 30           | 0           | 30                 | (b) female                         | 28            | 0           | 28            |
| <b>Total yaks over 3 years</b>     | <b>57</b>    | <b>0</b>    | <b>58</b>          | <b>Total yaks over 3 years</b>     | <b>51</b>     | <b>0</b>    | <b>51</b>     |
| <b>Total yaks</b>                  | <b>83</b>    | <b>0</b>    | <b>83</b>          | <b>Total yaks</b>                  | <b>76</b>     | <b>0</b>    | <b>76</b>     |
| <b>IV. MITHUNS</b>                 |              |             |                    |                                    |               |             |               |
| (i) under 3 years                  |              |             | (i) under 3 years  |                                    |               |             |               |
| (a) male                           | 49           | 6           | 55                 | (a) male                           | 61            | 1           | 62            |
| (b) female                         | 51           | 6           | 56                 | (b) female                         | 70            | 1           | 71            |
| <b>Total mithuns under 3 years</b> | <b>100</b>   | <b>12</b>   | <b>112</b>         | <b>Total mithuns under 3 years</b> | <b>130</b>    | <b>2</b>    | <b>133</b>    |
| (ii) over 3 years                  |              |             | (ii) over 3 years  |                                    |               |             |               |
| (a) male                           | 63           | 9           | 72                 | (a) male                           | 66            | 2           | 67            |
| (b) female                         | 71           | 10          | 81                 | (b) female                         | 95            | 3           | 98            |
| <b>Total mithuns over 3 years</b>  | <b>134</b>   | <b>19</b>   | <b>153</b>         | <b>Total mithuns over 3 years</b>  | <b>161</b>    | <b>4</b>    | <b>165</b>    |



| Category                              | 2007          |              |               | Category                              | 2012          |              |               |
|---------------------------------------|---------------|--------------|---------------|---------------------------------------|---------------|--------------|---------------|
|                                       | Rural         | Urban        | Total         |                                       | Rural         | Urban        | Total         |
| <b>Total mithuns</b>                  | <b>234</b>    | <b>31</b>    | <b>264</b>    | <b>Total mithuns</b>                  | <b>291</b>    | <b>7</b>     | <b>298</b>    |
| <b>V. BOVINE<sup>1</sup></b>          |               |              |               |                                       |               |              |               |
| (a) male                              | 100203        | 3183         | 103386        | (a) male                              | 82122         | 2065         | 84187         |
| (b) female                            | 190327        | 11052        | 201379        | (b) female                            | 206077        | 9717         | 215794        |
| <b>Total bovine</b>                   | <b>290530</b> | <b>14235</b> | <b>304765</b> | <b>Total bovine</b>                   | <b>288200</b> | <b>11782</b> | <b>299981</b> |
| <b>VI. SHEEP</b>                      |               |              |               |                                       |               |              |               |
| <b>Sheep (exotic/crossbred)</b>       |               |              |               |                                       |               |              |               |
| (i) male                              | 1076          | 67           | 1144          | (i) male                              | 1148          | 60           | 1207          |
| (ii) female                           | 2498          | 88           | 2586          | (ii) female                           | 2482          | 92           | 2574          |
| <b>Total sheep (exotic/crossbred)</b> | <b>3574</b>   | <b>155</b>   | <b>3730</b>   | <b>Total sheep (exotic/crossbred)</b> | <b>3630</b>   | <b>151</b>   | <b>3781</b>   |
| <b>Sheep (indigenous)</b>             |               |              |               |                                       |               |              |               |
| (i) male                              | 16107         | 623          | 16730         | (i) male                              | 13577         | 339          | 13916         |
| (ii) female                           | 49919         | 1179         | 51098         | (ii) female                           | 46569         | 804          | 47372         |
| Total sheep (indigenous)              | <b>66027</b>  | <b>1802</b>  | <b>67829</b>  | Total sheep (indigenous)              | <b>60146</b>  | <b>1142</b>  | <b>61288</b>  |
| <b>Total sheep</b>                    | <b>69601</b>  | <b>1957</b>  | <b>71558</b>  | <b>Total sheep</b>                    | <b>63775</b>  | <b>1294</b>  | <b>65069</b>  |
| <b>VII. GOATS</b>                     |               |              |               |                                       |               |              |               |
| <b>(i) Male</b>                       |               |              |               |                                       |               |              |               |
| (a) under 1 year                      | 20792         | 1162         | 21955         | (a) under 1 year                      | 19522         | 927          | 20449         |
| (b) 1 year and over                   | 17734         | 1105         | 18839         | (b) 1 year and over                   | 16264         | 904          | 17168         |
| <b>Total male goats</b>               | <b>38526</b>  | <b>2267</b>  | <b>40793</b>  | <b>Total male goats</b>               | <b>35785</b>  | <b>1832</b>  | <b>37617</b>  |
| <b>(ii) female</b>                    |               |              |               |                                       |               |              |               |
| (a) under 1 year                      | 25664         | 1428         | 27092         | (a) under 1 year                      | 25352         | 1193         | 26545         |
| (b) 1 year and over                   |               |              |               | (b) 1 year and over                   |               |              |               |
| in milk                               | 35066         | 1977         | 37043         | in milk                               | 34448         | 1805         | 36252         |
| dry                                   | 24423         | 1023         | 25446         | dry                                   | 24410         | 895          | 25305         |
| Not calved once                       | 9635          | 529          | 10163         | Not calved once                       | 9085          | 368          | 9453          |
| <b>Total female goats</b>             | <b>94787</b>  | <b>4957</b>  | <b>99744</b>  | <b>Total female goats</b>             | <b>93295</b>  | <b>4261</b>  | <b>97556</b>  |
| <b>Total goats</b>                    | <b>133314</b> | <b>7224</b>  | <b>140537</b> | <b>Total goats</b>                    | <b>129081</b> | <b>6092</b>  | <b>135173</b> |

| Category                                  | 2007        |            |                       | Category                                  | 2012        |            |             |
|---|-------------|------------|-----------------------|---|-------------|------------|-------------|
|   | Rural       | Urban      | Total                 |   | Rural       | Urban      | Total       |
| <b>VIII. HORSES &amp; PONIES</b>          |             |            |                       |   |             |            |             |
| <b>(i) Male</b>                           |             |            |                       |   |             |            |             |
| (a) under 3 years                         | 118         | 9          | 127                   | (a) under 3 years                         | 89          | 8          | 97          |
| (b) 3 years and above                     |             |            | (b) 3 years and above |   |             |            |             |
| Used for carts                            | 142         | 17         | 160                   | Used for carts                            | 185         | 22         | 207         |
| Used for once                             | 43          | 7          | 49                    | Used for once                             | 39          | 7          | 46          |
| <b>Total male horses &amp; ponies</b>     | <b>303</b>  | <b>33</b>  | <b>336</b>            | <b>Total male horses &amp; ponies</b>     | <b>312</b>  | <b>37</b>  | <b>350</b>  |
| <b>(ii) Female</b>                        |             |            |                       |   |             |            |             |
| (a) under 3 years                         | 80          | 6          | 87                    | (a) under 3 years                         | 64          | 6          | 70          |
| (b) 3years and above                      | 173         | 15         | 189                   | (b) 3years and above                      | 187         | 18         | 205         |
| <b>Total female horses &amp; ponies</b>   | <b>254</b>  | <b>22</b>  | <b>276</b>            | <b>Total female horses &amp; ponies</b>   | <b>251</b>  | <b>24</b>  | <b>275</b>  |
| <b>Total horses and ponies</b>            | <b>556</b>  | <b>55</b>  | <b>611</b>            | <b>Total horses and ponies</b>            | <b>563</b>  | <b>61</b>  | <b>625</b>  |
| <b>IX. PIGS</b>                           |             |            |                       |   |             |            |             |
| <b>A. Pigs (exotic/crossbred)</b>         |             |            |                       |   |             |            |             |
| <b>(i) Male</b>                           |             |            |                       |   |             |            |             |
| (a) below 6 months                        | 527         | 90         | 617                   | (a) below 6 months                        | 565         | 87         | 653         |
| (b) 6 months and over                     | 505         | 87         | 592                   | (b) 6 months and over                     | 547         | 84         | 630         |
| <b>Total (exotic/crossbred) male pigs</b> | <b>1032</b> | <b>177</b> | <b>1209</b>           | <b>Total (exotic/crossbred) male pigs</b> | <b>1112</b> | <b>171</b> | <b>1283</b> |
| <b>(ii) Female</b>                        |             |            |                       |   |             |            |             |
| (a) below 6 months                        | 493         | 86         | 579                   | (a) below 6 months                        | 496         | 77         | 572         |
| (b) 6 months and over                     | 506         | 95         | 601                   | (b) 6 months and over                     | 519         | 82         | 601         |
| <b>Total exotic/crossbred female pigs</b> | <b>999</b>  | <b>181</b> | <b>1180</b>           | <b>Total exotic/crossbred female pigs</b> | <b>1015</b> | <b>159</b> | <b>1174</b> |
| <b>Total exotic/crossbred pigs</b>        | <b>2031</b> | <b>358</b> | <b>2389</b>           | <b>Total exotic/crossbred pigs</b>        | <b>2126</b> | <b>330</b> | <b>2456</b> |
| <b>B. Pigs (indigenous)</b>               |             |            |                       |   |             |            |             |
| <b>(i) Male</b>                           |             |            |                       | <b>(i) Male</b>                           |             |            |             |
| (a) below 6 months                        | 1904        | 171        | 2075                  | (a) below 6 months                        | 1770        | 154        | 1924        |
| (b) 6 months and over                     | 1874        | 185        | 2059                  | (b) 6 months and over                     | 1588        | 169        | 1757        |

| Category                              | 2007          |              |               | Category                              | 2012          |              |               |
|---------------------------------------|---------------|--------------|---------------|---------------------------------------|---------------|--------------|---------------|
|                                       | Rural         | Urban        | Total         |                                       | Rural         | Urban        | Total         |
| <b>Total male pigs (indigenous)</b>   | <b>3778</b>   | <b>356</b>   | <b>4134</b>   | <b>Total male pigs (indigenous)</b>   | <b>3358</b>   | <b>323</b>   | <b>3681</b>   |
| <b>(ii) Female</b>                    |               |              |               |                                       |               |              |               |
| (a) below 6 months                    | 1964          | 192          | 2157          | (a) below 6 months                    | 1794          | 175          | 1970          |
| (b) 6 months and over                 | 2187          | 267          | 2454          | (b) 6 months and over                 | 1947          | 240          | 2186          |
| <b>Total female pigs (indigenous)</b> | <b>4151</b>   | <b>459</b>   | <b>4610</b>   | <b>Total female pigs (indigenous)</b> | <b>3741</b>   | <b>415</b>   | <b>4156</b>   |
| <b>Total pigs (indigenous)</b>        | <b>7929</b>   | <b>816</b>   | <b>8744</b>   | <b>Total pigs (indigenous)</b>        | <b>7100</b>   | <b>738</b>   | <b>7837</b>   |
| <b>Total pigs</b>                     | <b>9960</b>   | <b>1174</b>  | <b>11134</b>  | <b>Total pigs</b>                     | <b>9226</b>   | <b>1068</b>  | <b>10294</b>  |
| <b>Total livestock<sup>2</sup></b>    | <b>504965</b> | <b>24733</b> | <b>529698</b> | <b>Total livestock<sup>2</sup></b>    | <b>491686</b> | <b>20371</b> | <b>512057</b> |
| <b>X. DOGS</b>                        |               |              |               |                                       |               |              |               |
| <b>A. Domestic</b>                    |               |              |               |                                       |               |              |               |
| (a) male                              | 10701         | 1731         | 12432         | (a) male                              | 6858          | 1586         | 8444          |
| (b) female                            | 5812          | 844          | 6656          | (b) female                            | 2637          | 592          | 3228          |
| <b>Total licensed dogs</b>            | <b>16513</b>  | <b>2575</b>  | <b>19087</b>  | <b>Total licensed dogs</b>            | <b>9495</b>   | <b>2178</b>  | <b>11673</b>  |
| <b>XI. RABBITS</b>                    |               |              |               |                                       |               |              |               |
| (a) male                              | 140           | 42           | 183           | (a) male                              | 194           | 61           | 255           |
| (b) female                            | 195           | 46           | 241           | (b) female                            | 269           | 68           | 337           |
| <b>Total</b>                          | <b>335</b>    | <b>88</b>    | <b>424</b>    | <b>Total</b>                          | <b>462</b>    | <b>129</b>   | <b>592</b>    |
| <b>XII. POULTRY</b>                   |               |              |               |                                       |               |              |               |
| A. Fowls                              | 577196        | 40538        | 617734        | A. Fowls                              | 662852        | 29794        | 692646        |
| B. Ducks                              | 26402         | 1242         | 27643         | B. ducks                              | 22704         | 835          | 23539         |
| C. Turkeys & others poultry           | 3140          | 312          | 3452          | C. Turkeys & others poultry           | 12339         | 686          | 13025         |
| <b>Total poultry</b>                  | <b>606738</b> | <b>42092</b> | <b>648830</b> | <b>Total poultry</b>                  | <b>697895</b> | <b>31314</b> | <b>729209</b> |

**Note** : 1. Total may not tally due to rounding of the figures.

2. Bovines<sup>1</sup>: Cattle + Buffalo + Yaks + Mithun.

3. Livestock<sup>2</sup>: Bovines + Sheep + Goats + Horses & Ponies + Mules + Donkeys + Camels + Pigs.

**Source** : *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

**Table 3.6: Incidence of livestock diseases in India-2014**

(Number)

| Disease Name                            | Species       | 2013     |        |       | 2014     |        |       |
|---|---------------|----------|--------|-------|----------|--------|-------|
|   |               | Outbreak | Attack | Death | Outbreak | Attack | Death |
| <b>Foot and mouth disease</b>           | Bovine        | 310      | 75255  | 7736  | 168      | 20595  | 1582  |
|   | Buffalo       | 41       | 7675   | 574   | 33       | 4638   | 127   |
|   | Ovine/Caprine | 16       | 4004   | 508   | 26       | 794    | 86    |
|   | Swine         | 10       | 171    | 25    | 11       | 189    | 27    |
|   | Camel         | 0        | 4      | 0     | N.A.     | N.A.   | N.A.  |
| <b>Peste des petits ruminants (PPR)</b> | Ovine/Caprine | 122      | 4954   | 955   | 82       | 8216   | 2419  |
|   | Avian         | 1        | 43     | 23    | N.A.     | N.A.   | N.A.  |
| <b>Blue tongue</b>                      | Ovine/Caprine | 13       | 1021   | 67    | 14       | 659    | 145   |
| <b>Sheep pox and goat pox</b>           | Ovine/Caprine | 55       | 913    | 163   | 77       | 2420   | 472   |
|   | Bovine        | N.A.     | N.A.   | N.A.  | 4        | 69     | 12    |
|   | Avian         | N.A.     | N.A.   | N.A.  | 6        | 155    | 19    |
|   | Canine        | N.A.     | N.A.   | N.A.  | 1        | 6      | 0     |
| <b>Cow pox</b>                          | Bovine        | 1        | 75     | 12    | N.A.     | N.A.   | N.A.  |
| <b>Buffalo pox</b>                      | Buffalo       | N.A.     | N.A.   | N.A.  | N.A.     | N.A.   | N.A.  |
| <b>Swine fever</b>                      | Swine         | 117      | 16507  | 5902  | 69       | 1726   | 289   |
| <b>Newcastle disease</b>                | Avian         | N.A.     | N.A.   | N.A.  | N.A.     | N.A.   | N.A.  |
| <b>Avian influenza</b>                  | Avian         | 4        | 4402   | 3194  | N.A.     | N.A.   | N.A.  |
| <b>Glanders</b>                         | Equine        | 1        | 4      | 4     | N.A.     | N.A.   | N.A.  |
| <b>Avian influenza (Domestic)*</b>      | Avian         | N.A.     | N.A.   | N.A.  | 5        | 18576  | 18576 |
| <b>Avian influenza (Wild)</b>           | Avian         | N.A.     | N.A.   | N.A.  | 1        | 2      | 2     |
| <b>Anthrax</b>                          | Bovine        | N.A.     | N.A.   | N.A.  | 30       | 1878   | 1878  |
|   | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 25       | 302    | 302   |
| <b>Rabies</b>                           | Bovine        | N.A.     | N.A.   | N.A.  | 90       | 2153   | 2153  |
|   | Buffalo       | N.A.     | N.A.   | N.A.  | 23       | 119    | 119   |
|   | Canine        | N.A.     | N.A.   | N.A.  | 70       | 2588   | 2588  |
|   | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 60       | 3226   | 3226  |
|   | Equine        | N.A.     | N.A.   | N.A.  | N.A.     | N.A.   | N.A.  |
| <b>Bovine anaplasmosis</b>              | Bovine        | 37       | 487    | 2     | 82       | 1107   | 7     |
|   | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 10       | 734    | 35    |
|   | Buffalo       | 1        | 5      | 2     | 16       | 87     | 0     |
| <b>Bovine babesiosis</b>                | Avian         | N.A.     | N.A.   | N.A.  | 1        | 30     | 0     |
|   | Bovine        | 162      | 1696   | 4     | 172      | 6533   | 8     |
|   | Buffalo       | 8        | 188    | 0     | 28       | 232    | 1     |
|   | Ovine/Caprine | 7        | 14     | 0     | 71       | 722    | 0     |

| Disease Name   | Species       | 2013     |        |       | 2014     |         |       |
|--|---------------|----------|--------|-------|----------|---------|-------|
|  |               | Outbreak | Attack | Death | Outbreak | Attack  | Death |
|  | Canine        | 4        | 5      | 0     | 2        | 3       | 0     |
| <b>Brucellosis</b>                                     | Bovine        | 4        | 30     | 0     | 5        | 113     | 0     |
|  | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 1        | 92      | 0     |
|  | Buffalo       | 2        | 113    | 0     | 1        | 1       | 0     |
|  | Swine         | 1        | 8      | 0     | N.A.     | N.A.    | N.A.  |
| <b>Haemorrhagic septicaemia</b>                        | Bovine        | 104      | 1172   | 278   | 93       | 3219    | 304   |
|  | Ovine/Caprine | 5        | 79     | 55    | 6        | 153     | 36    |
|  | Buffalo       | 26       | 465    | 120   | 32       | 3444    | 201   |
|  | Swine         | N.A.     | N.A.   | N.A.  | N.A.     | N.A.    | N.A.  |
| <b>Contagious caprine Pleuropneumonia</b>              | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 2        | 29      | 5     |
| <b>Surra / Trypanosomiasis</b>                         | Bovine        | 71       | 876    | 34    | 71       | 682     | 15    |
|  | Buffalo       | 16       | 762    | 0     | 34       | 395     | 7     |
|  | Equine        | 1        | 4      | 0     | N.A.     | N.A.    | N.A.  |
|  | Camel         | 1        | 145    | 17    | N.A.     | N.A.    | N.A.  |
| <b>Porcine brucellosis</b>                             | Bovine        | N.A.     | N.A.   | N.A.  | 5        | 113     | 0     |
|  | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 1        | 92      | 0     |
|  | Buffalo       | N.A.     | N.A.   | N.A.  | 1        | 1       | 0     |
| <b>Duck virus enteritis (Duck plague)</b>              | Avian         | 79       | 3526   | 1831  | 44       | 24658   | 175   |
|  | Bovine        | N.A.     | N.A.   | N.A.  | 1        | 130     | 9     |
| <b>Fowl cholera</b>                                    | Avian         | N.A.     | N.A.   | N.A.  | 67       | 155820  | 2853  |
| <b>Fowl pox</b>  | Avian         | 212      | 80449  | 1624  | 213      | 322560  | 1264  |
|  | Buffalo       | N.A.     | N.A.   | N.A.  | 1        | 174     | 0     |
| <b>Fowl typhoid/ Salmonellosis</b>                     | Avian         | N.A.     | N.A.   | N.A.  | 41       | 43740   | 1599  |
|  | Bovine        | N.A.     | N.A.   | N.A.  | 3        | 29      | 12    |
|  | Buffalo       | N.A.     | N.A.   | N.A.  | 2        | 4       | 0     |
|  | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 1        | 10      | 3     |
|  | Swine         | N.A.     | N.A.   | N.A.  | 13       | 159     | 0     |
| <b>Infectious bursal disease (Gumboro)</b>             | Avian         | 273      | 230820 | 28434 | 183      | 1040807 | 22127 |
| <b>Marck,s disease</b>                                 | Avian         | 6        | 20606  | 256   | 48       | 1372548 | 4767  |
|  | Bovine        | 1        | 20     | 5     | N.A.     | N.A.    | N.A.  |
| <b>Avian mycoplasmosis/chronic respiratory Disease</b> | Avian         | 437      | 370531 | 58094 | 459      | 3577358 | 35885 |
|  | Swine         | N.A.     | N.A.   | N.A.  | 2        | 1050    | 100   |
| <b>Blackleg/ Black quarter</b>                         | Bovine        | 176      | 1606   | 370   | 114      | 4263    | 288   |
|  | Avian         | 1        | 4      | 1     | N.A.     | N.A.    | N.A.  |
|  | Buffalo       | N.A.     | N.A.   | N.A.  | 4        | 22      | 9     |

## Animal Husbandry, Dairying and Fisheries

| Disease Name                                     | Species       | 2013     |        |       | 2014     |        |       |
|--|---------------|----------|--------|-------|----------|--------|-------|
|  |               | Outbreak | Attack | Death | Outbreak | Attack | Death |
|  | Ovine/Caprine | N.A.     | N.A.   | N.A.  | N.A.     | N.A.   | N.A.  |
| <b>Coccidiosis</b>                               | Avian         | 387      | 201286 | 27165 | 227      | 263774 | 8974  |
|  | Bovine        | 33       | 12496  | 667   | 73       | 14328  | 0     |
|  | Buffalo       | N.A.     | N.A.   | N.A.  | 39       | 588    | 0     |
|  | Ovine/Caprine | 13       | 142    | 1     | 76       | 4483   | 2     |
|  | Swine         | 5        | 25     | 0     | 7        | 46     | 0     |
| <b>Distomatosis (Liver fluke) / Fascioliasis</b> | Avian         | N.A.     | N.A.   | N.A.  | 1        | 10     | 0     |
|  | Bovine        | 137      | 802698 | 11    | 129      | 3606   | 4     |
|  | Buffalo       | 8        | 817    | 5     | 17       | 688    | 0     |
|  | Ovine/Caprine | 12       | 254    | 17    | 43       | 1701   | 48    |
|  | Swine         | N.A.     | N.A.   | N.A.  | 2        | 4      | 0     |
| <b>Enterotoxaemia</b>                            | Ovine/Caprine | 35       | 392    | 164   | 44       | 1374   | 308   |
|  | Bovine        | 8        | 59     | 0     | 4        | 12     | 0     |
|  | Buffalo       | N.A.     | N.A.   | N.A.  | 2        | 2      | 0     |
| <b>Mange</b>                                     | Bovine        | 16       | 402    | 0     | 34       | 863    | 0     |
|  | Buffalo       | 27       | 1182   | 0     | N.A.     | N.A.   | N.A.  |
|  | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 8        | 617    | 0     |
|  | Equine/Camel  | N.A.     | N.A.   | N.A.  | N.A.     | N.A.   | N.A.  |
|  | Canine        | 5        | 115    | 0     | 1        | 12     | 0     |
|  | Swine         | N.A.     | N.A.   | N.A.  | N.A.     | N.A.   | N.A.  |
|  | Avian         | N.A.     | N.A.   | N.A.  | 2        | 31     | 0     |
| <b>Infectious coryza</b>                         | Avian         | 17       | 150505 | 492   | 46       | 573828 | 2612  |
| <b>Amphistomiasis</b>                            | Bovine        | 86       | 10046  | 7     | 104      | 14225  | 26    |
|  | Buffalo       | 5        | 80     | 0     | 11       | 234    | 0     |
|  | Ovine/Caprine | N.A.     | N.A.   | N.A.  | 39       | 2301   | 0     |
| <b>Canine Distemper</b>                          | Canine        | 64       | 732    | 23    | 71       | 1293   | 88    |
|  | Buffalo       | 2        | 6      | 6     | N.A.     | N.A.   | N.A.  |
| <b>Mastitis</b>                                  | Bovine        | 103      | 8983   | 0     | 197      | 46869  | 5     |
|  | Buffalo       | 3        | 7      | 0     | 55       | 334    | 0     |
|  | Ovine/Caprine | 9        | 42     | 0     | 102      | 11100  | 0     |
|  | Canine        | 0        | 2      | 0     | N.A.     | N.A.   | N.A.  |
|  | Swine         | 2        | 6      | 0     | N.A.     | N.A.   | N.A.  |

**Note :** N.A.: Not Available.

- Source :**
1. *Basic Animal Husbandry Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).
  2. *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

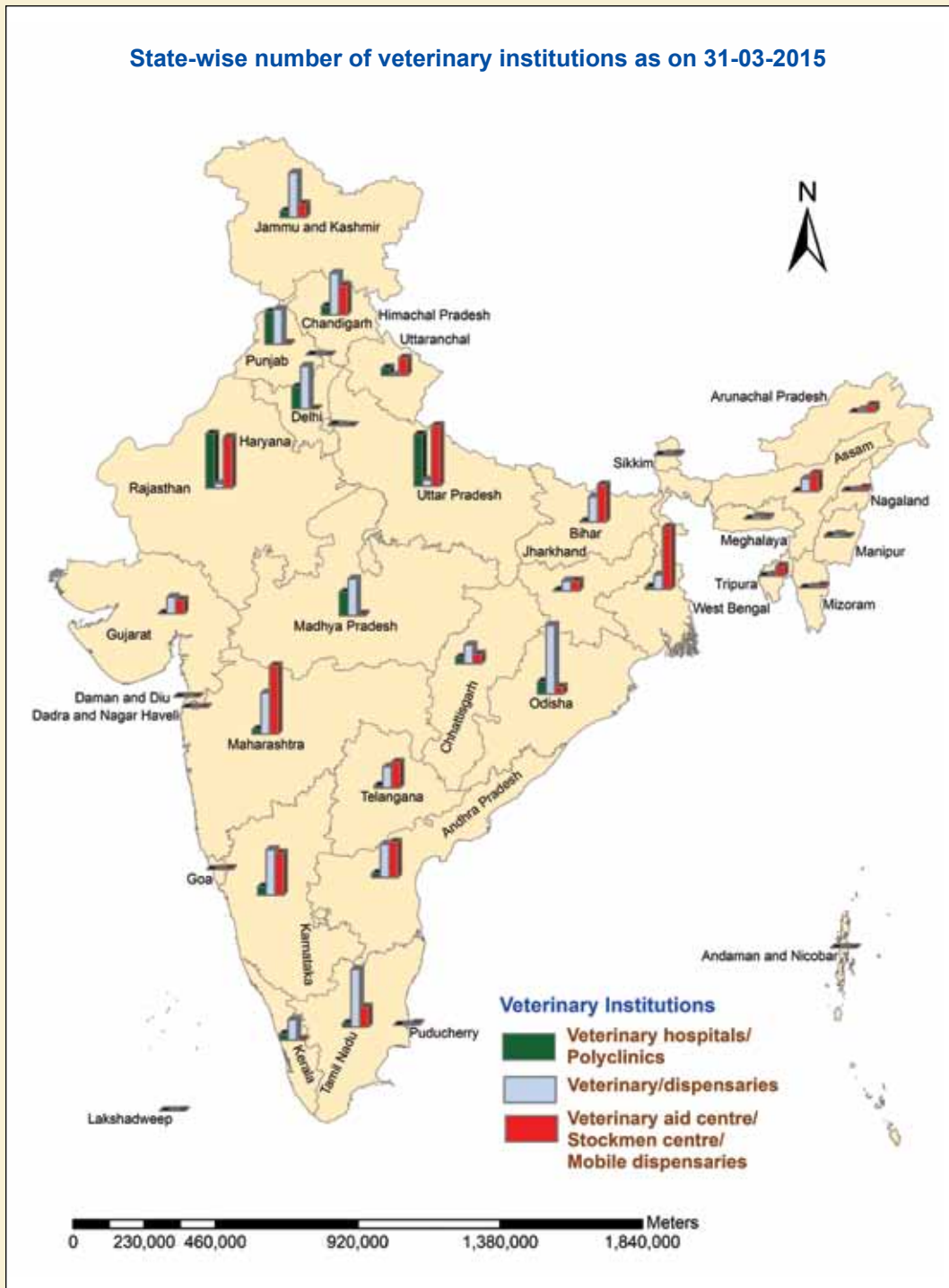
**Table 3.7: State-wise number of Veterinary Institutions (as on 31.03.2015)**

| States/ UTs          | Veterinary hospitals/<br>Polyclinics | Veterinary dispensaries | Veterinary aid centre/<br>Stockmen centre/<br>Mobile dispensaries |
|----------------------|--------------------------------------|-------------------------|---|
| Andhra Pradesh       | 194                                  | 1420                    | 1526  |
| Arunachal Pradesh    | 1                                    | 93                      | 289   |
| Assam                | 29                                   | 541                     | 767   |
| Bihar                | 39                                   | 1083                    | 1595  |
| Chhattisgarh         | 275                                  | 795                     | 407   |
| Goa                  | 5                                    | 24                      | 49  |
| Gujarat              | 23                                   | 702                     | 597   |
| Haryana              | 946                                  | 1813                    | N.A   |
| Himachal Pradesh     | 371                                  | 1766                    | 1251  |
| Jammu & Kashmir      | 270                                  | 1900                    | 584   |
| Jharkhand            | 27                                   | 424                     | 433   |
| Karnataka            | 364                                  | 1943                    | 1805  |
| Kerala               | 276                                  | 870                     | 20  |
| Madhya Pradesh       | 1008                                 | 1569                    | 65  |
| Maharashtra          | 200                                  | 1748                    | 2913  |
| Manipur              | 55                                   | 109                     | 34  |
| Meghalaya            | 4                                    | 115                     | 91  |
| Mizoram              | 5                                    | 33                      | 103   |
| Nagaland             | 11                                   | 30                      | 127   |
| Odisha               | 541                                  | 2939                    | 314   |
| Punjab               | 1386                                 | 1485                    | 45  |
| Rajasthan            | 2327                                 | 198                     | 2171  |
| Sikkim               | 17                                   | 52                      | 63  |
| Tamil Nadu           | 168                                  | 2456                    | 856   |
| Telangana            | 110                                  | 907                     | 1109  |
| Tripura              | 16                                   | 60                      | 428   |
| Uttarakhand          | 317                                  | 11                      | 748   |
| Uttar Pradesh        | 2200                                 | 268                     | 2575  |
| West Bengal          | 112                                  | 610                     | 2652  |
| A & N Islands        | 10                                   | 12                      | 11  |
| Chandigarh           | 5                                    | 8                       | NA  |
| Dadra & Nagar Haveli | 1                                    | N.A.                    | 10  |
| Daman & Diu          | N.A.                                 | 2                       | 3   |
| Delhi                | 50                                   | 26                      | NA  |
| Lakshadweep          | 4                                    | 5                       | 8   |
| Puducherry           | N.A.                                 | 17                      | 73  |
| <b>Total</b>         | <b>11367</b>                         | <b>26034</b>            | <b>23722</b>  |

Note : N.A.: Not Available.

Source : *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

State-wise number of veterinary institutions as on 31-03-2015





**Table 3.8: Achievement of some of the key components of dairy development in different states under cooperative sector as on 2011-12**

| State/ UT        | DCS Organised (no.) | Farmer Members (000') | Rural Milk Procurement (000' Kg./Day) | Liquid Milk Sale (000' L/Day) |
|------------------|---------------------|-----------------------|---------------------------------------|-------------------------------|
| Andhra Pradesh   | 4979                | 854                   | 1503                                  | 1680                          |
| Assam            | 188                 | 5                     | 7                                     | 33                            |
| Bihar            | 11131               | 614                   | 1061                                  | 521                           |
| Chhattisgarh     | 794                 | 33                    | 30                                    | 35                            |
| Delhi            | N.A.                | N.A.                  | N.A.                                  | 3050                          |
| Goa              | 178                 | 19                    | 41                                    | 69                            |
| Gujarat          | 14631               | 3041                  | 10450                                 | 3512                          |
| Haryana          | 7029                | 313                   | 534                                   | 370                           |
| Himachal Pradesh | 765                 | 32                    | 68                                    | 23                            |
| Jharkhand        | 53                  | 1                     | 5                                     | 271                           |
| Karnataka        | 12925               | 2191                  | 4277                                  | 2892                          |
| Kerala           | 3695                | 859                   | 802                                   | 1167                          |
| Madhya Pradesh   | 6744                | 285                   | 721                                   | 525                           |
| Maharashtra      | 21631               | 1827                  | 3130                                  | 2070                          |
| Nagaland         | 49                  | 2                     | 2                                     | 4                             |
| Odisha           | 3337                | 191                   | 300                                   | 316                           |
| Puducherry       | 102                 | 36                    | 30                                    | 100                           |
| Punjab           | 7639                | 403                   | 1110                                  | 866                           |
| Rajasthan        | 16809               | 683                   | 1742                                  | 1544                          |
| Sikkim           | 289                 | 10                    | 13                                    | 21                            |
| Tamil Nadu       | 10418               | 2184                  | 2161                                  | 941                           |
| Tripura          | 84                  | 6                     | 3                                     | 13                            |
| Uttar Pradesh    | 22450               | 978                   | 497                                   | 349                           |
| West Bengal      | 3045                | 215                   | 219                                   | 37                            |
| <b>Total</b>     | <b>148965</b>       | <b>14782</b>          | <b>28706</b>                          | <b>20485</b>                  |

**Note** : 1. Chhattisgarh and Jharkhand started reporting separately from 2003-04, 2. DCS: Dairy Cooperative Societies, 3. N.A.: Not available.

**Source** : *Basic Animal Husbandry Statistics, 2013*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).

**Table 3.9: Trend of growth of fish production in India**

(000' t)

| Year     | Fish production |        |       | Annual growth rate (%) |        |       |
|----------|-----------------|--------|-------|------------------------|--------|-------|
|          | Marine          | Inland | Total | Marine                 | Inland | Total |
| 1970-71  | 1086            | 670    | 1756  | 31.80                  | 32.15  | 31.93 |
| 1973-74  | 1210            | 748    | 1958  | 11.42                  | 11.64  | 11.50 |
| 1978-79  | 1490            | 816    | 2306  | 23.14                  | 9.09   | 17.77 |
| 1979-80  | 1492            | 848    | 2340  | 0.13                   | 3.92   | 1.47  |
| 1982-83  | 1427            | 940    | 2367  | -1.25                  | -5.91  | -3.15 |
| 1983-84  | 1519            | 987    | 2506  | 6.45                   | 5.00   | 5.87  |
| 1984-85  | 1698            | 1103   | 2801  | 11.78                  | 11.75  | 11.77 |
| 1985-86  | 1716            | 1160   | 2876  | 1.06                   | 5.17   | 2.68  |
| 1986-87  | 1713            | 1229   | 2942  | -0.17                  | 5.95   | 2.29  |
| 1987-88  | 1658            | 1301   | 2959  | -3.21                  | 5.86   | 0.58  |
| 1988-89  | 1817            | 1335   | 3152  | 9.95                   | 2.61   | 6.52  |
| 1989-90  | 2275            | 1402   | 3677  | 25.21                  | 5.02   | 16.66 |
| 1990-91  | 2300            | 1536   | 3836  | 1.10                   | 9.56   | 4.32  |
| 1991-92  | 2447            | 1710   | 4157  | 6.39                   | 11.33  | 8.37  |
| 1992-93  | 2576            | 1789   | 4365  | 5.27                   | 4.62   | 5.00  |
| 1993-94  | 2649            | 1995   | 4644  | 2.83                   | 11.51  | 6.39  |
| 1994-95  | 2692            | 2097   | 4789  | 1.62                   | 5.11   | 3.12  |
| 1995-96  | 2707            | 2242   | 4949  | 0.56                   | 6.91   | 3.34  |
| 1996-97  | 2967            | 2381   | 5348  | 9.60                   | 6.20   | 8.06  |
| 1997-98  | 2950            | 2438   | 5388  | -0.57                  | 2.39   | 0.75  |
| 1998-99  | 2696            | 2602   | 5298  | -8.61                  | 6.73   | -1.67 |
| 1999-00  | 2852            | 2823   | 5675  | 5.79                   | 8.49   | 7.12  |
| 2000-01  | 2811            | 2845   | 5656  | -1.44                  | 0.78   | -0.33 |
| 2001-02  | 2830            | 3126   | 5956  | 0.68                   | 9.88   | 5.30  |
| 2002-03  | 2990            | 3210   | 6200  | 5.65                   | 2.69   | 4.10  |
| 2003-04  | 2941            | 3458   | 6399  | -1.64                  | 7.73   | 3.21  |
| 2004-05  | 2779            | 3526   | 6305  | -5.51                  | 1.97   | -1.47 |
| 2005-06  | 2816            | 3756   | 6572  | 1.33                   | 6.52   | 4.23  |
| 2006-07  | 3024            | 3845   | 6869  | 7.39                   | 2.37   | 4.52  |
| 2007-08  | 2920            | 4207   | 7127  | -3.44                  | 9.41   | 3.76  |
| 2008-09  | 2978            | 4638   | 7616  | 1.99                   | 10.24  | 6.86  |
| 2009-10  | 3104            | 4894   | 7998  | 4.23                   | 5.52   | 5.02  |
| 2010-11  | 3250            | 4981   | 8231  | 4.70                   | 1.78   | 2.91  |
| 2011-12  | 3372            | 5294   | 8666  | 3.75                   | 6.28   | 5.28  |
| 2012-13  | 3321            | 5720   | 9040  | -1.51                  | 8.05   | 4.32  |
| 2013-14* | 3444            | 6132   | 9576  | 3.70                   | 7.20   | 5.93  |
| 2014-15* | 3502            | 6929   | 10431 | 1.68                   | 13.00  | 8.93  |

Note : 1. N.A.: Not applicable, 2. \* : Provisional.

Source : 1. *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).

2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: [eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf](http://eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf)).

**Table 3.10: State-wise marine and inland fish production**

| States/<br>Union Territories | 2011-12  |         |         | 2012-13 |         |         | 2013-14 |         |         | 2014-15* |         |         |
|------------------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|
|                              | Marine   | Inland  | Total   | Marine  | Inland  | Total   | Marine  | Inland  | Total   | Marine   | Inland  | Total   |
|                              | (000' t) |         |         |         |         |         |         |         |         |          |         |         |
| Andhra Pradesh               | 433.28   | 1169.89 | 1603.32 | 414.35  | 1393.73 | 1808.08 | 438.25  | 1580.17 | 2018.42 | 475.40   | 1489.03 | 1964.43 |
| Arunachal Pradesh            | 0        | 3.30    | 3.30    | 0       | 3.71    | 3.71    | 0       | 0.61    | 0.61    | 0        | 4.00    | 4.00    |
| Assam                        | 0        | 228.62  | 228.62  | 0       | 254.27  | 254.27  | 0       | 266.70  | 266.70  | 0        | 282.70  | 282.70  |
| Bihar                        | 0        | 344.47  | 344.47  | 0       | 400.14  | 400.14  | 0       | 432.30  | 432.30  | 0        | 479.80  | 479.80  |
| Goa                          | 86.21    | 3.75    | 89.96   | 73.71   | 4.17    | 77.88   | 109.57  | 4.49    | 114.06  | 114.57   | 3.28    | 117.85  |
| Gujarat                      | 692.49   | 91.23   | 783.72  | 693.56  | 94.93   | 788.49  | 695.58  | 97.84   | 793.42  | 698.45   | 111.48  | 809.93  |
| Chhattisgarh                 | 0        | 250.69  | 250.69  | 0       | 255.61  | 255.61  | 0       | 284.96  | 284.96  | 0        | 314.16  | 314.16  |
| Haryana                      | 0        | 106.00  | 106.00  | 0       | 111.48  | 111.48  | 0       | 116.90  | 116.90  | 0        | 111.20  | 111.20  |
| Himachal Pradesh             | 0        | 8.05    | 8.05    | 0       | 8.56    | 8.56    | 0       | 9.83    | 9.83    | 0        | 10.74   | 10.74   |
| Jammu & Kashmir              | 0        | 19.85   | 19.85   | 0       | 19.95   | 19.95   | 0       | 19.98   | 19.98   | 0        | 20.30   | 20.30   |
| Jharkhand                    | 0        | 91.68   | 91.68   | 0       | 96.60   | 96.60   | 0       | 104.82  | 104.82  | 0        | 106.43  | 106.43  |
| Karnataka                    | 347.38   | 199.05  | 546.44  | 357.32  | 168.24  | 525.57  | 357.36  | 197.95  | 555.31  | 389.82   | 223.42  | 613.24  |
| Kerala                       | 553.18   | 140.03  | 693.21  | 530.64  | 149.10  | 679.74  | 522.31  | 186.34  | 708.65  | 472.74   | 159.51  | 632.26  |
| Madhya Pradesh               | 0        | 75.41   | 75.41   | 0       | 86.73   | 86.73   | 0       | 96.26   | 96.26   | 0        | 109.12  | 109.12  |
| Maharashtra                  | 433.68   | 145.11  | 578.79  | 448.91  | 137.46  | 586.37  | 467.46  | 135.22  | 602.68  | 423.79   | 124.95  | 548.75  |
| Manipur                      | 0        | 22.22   | 22.22   | 0       | 24.50   | 24.50   | 0       | 28.54   | 28.54   | 0        | 30.50   | 30.50   |
| Meghalaya                    | 0        | 4.77    | 4.77    | 0       | 5.42    | 5.42    | 0       | 5.75    | 5.75    | 0        | 5.89    | 5.89    |
| Mizoram                      | 0        | 2.93    | 2.93    | 0       | 5.43    | 5.43    | 0       | 5.94    | 5.94    | 0        | 6.39    | 6.39    |
| Nagaland                     | 0        | 6.84    | 6.84    | 0       | 7.13    | 7.13    | 0       | 7.47    | 7.47    | 0        | 7.84    | 7.84    |
| Odisha                       | 114.30   | 267.53  | 381.83  | 118.31  | 291.83  | 410.14  | 120.02  | 293.76  | 413.79  | 133.21   | 306.65  | 439.86  |
| Punjab                       | 0        | 97.62   | 97.62   | 0       | 99.13   | 99.13   | 0       | 104.02  | 104.02  | 0        | 114.77  | 114.77  |
| Rajasthan                    | 0        | 47.85   | 47.85   | 0       | 55.16   | 55.16   | 0       | 35.10   | 35.10   | 0        | 46.31   | 46.31   |
| Telangana                    | -        | -       | -       | -       | -       | -       | -       | -       | -       | -        | 265.38  | 265.38  |

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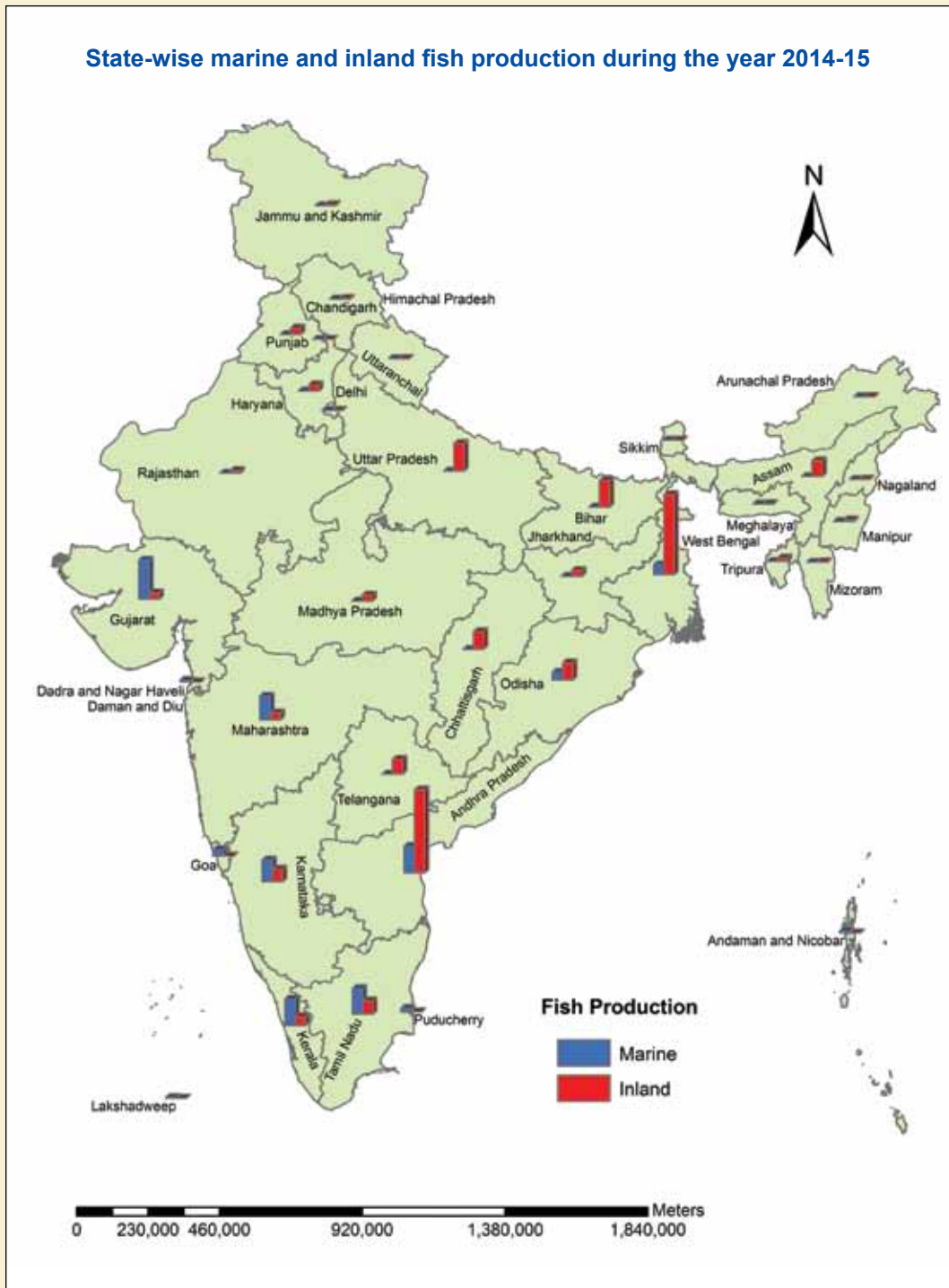
| States/<br>Union Territories | 2011-12        |                |                | 2012-13        |                |                | 2013-14        |                |                | 2014-15*       |                |                 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
|                              | Marine         | Inland         | Total          | Marine         | Inland         | Total          | Marine         | Inland         | Total          | Marine         | Inland         | Total           |
| Sikkim                       | 0              | 0.28           | 0.28           | 0              | 0.49           | 0.49           | 0              | 0.42           | 0.42           | 0              | 0.44           | 0.44            |
| Tamil Nadu                   | 426.73         | 184.75         | 611.49         | 428.44         | 191.96         | 620.40         | 432.27         | 192.03         | 624.30         | 457.45         | 240.16         | 697.61          |
| Tripura                      | 0              | 53.34          | 53.34          | 0              | 57.46          | 57.46          | 0              | 61.95          | 61.95          | 0              | 63.56          | 63.56           |
| Uttarakhand                  | 0              | 3.83           | 3.83           | 0              | 3.85           | 3.85           | 0              | 3.89           | 3.89           | 0              | 3.94           | 3.94            |
| Uttar Pradesh                | 0              | 429.72         | 429.72         | 0              | 449.75         | 449.75         | 0              | 464.48         | 464.48         | 0              | 494.27         | 494.27          |
| West Bengal                  | 182.02         | 1290.03        | 1472.05        | 152.35         | 1337.66        | 1490.01        | 188.24         | 1392.40        | 1580.65        | 178.85         | 1438.47        | 1617.32         |
| Andman & Nicobar Islands     | 35.07          | 0.19           | 35.26          | 36.43          | 0.19           | 36.62          | 36.75          | 0.20           | 36.95          | 36.98          | 0.197          | 37.18           |
| Chandigarh                   | 0              | 0.09           | .09            | 0              | 0.05           | 0.05           | 0              | 0.11           | 0.11           | 0              | 0.12           | 0.12            |
| Dadra & Nagar Haveli         | 0              | 0.05           | 0.05           | 0              | 0.05           | 0.05           | 0              | 0.05           | 0.05           | 0              | 0              | 0               |
| Daman & Diu                  | 17.43          | 0              | 17.43          | 18.78          | 0.23           | 19.01          | 18.78          | 0.23           | 19.01          | 28.77          | 0              | 28.77           |
| Delhi                        | 0              | 0.74           | 0.74           | 0              | 0.69           | 0.69           | 0              | 0.88           | 0.88           | 0              | 0.675          | 0.675           |
| Lakshadweep                  | 12.37          | 0              | 12.37          | 12.37          | 0              | 12.37          | 18.72          | 0              | 18.72          | 13.19          | 0              | 13.19           |
| Puducherry                   | 37.61          | 4.790          | 42.40          | 35.61          | 5.46           | 41.07          | 37.81          | 4.27           | 42.08          | 68.05          | 5.45           | 73.51           |
| <b>All India</b>             | <b>3371.75</b> | <b>5294.70</b> | <b>8666.71</b> | <b>3320.78</b> | <b>5719.56</b> | <b>9040.34</b> | <b>3443.11</b> | <b>6135.85</b> | <b>9578.97</b> | <b>3491.29</b> | <b>6581.12</b> | <b>10072.41</b> |

Note : 1. \*: Provisional, 2. Total may not tally due to rounding of the figures, -: Not available.

Source : 1. *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India. (Website: <http://www.dahd.nic.in>).

2. *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

State-wise marine and inland fish production during the year 2014-15



**Table 3.11: State-wise trend of prawn production in India**

| Year    | P/NP/T | Andhra Pradesh | Goa   | Gujarat | Karnataka | Kerala | Maha-rashtra | Odisha | Tamil Nadu | West Bengal | A & N Islands | Daman & Diu | Puducherry | All India |
|---------|--------|----------------|-------|---------|-----------|--------|--------------|--------|------------|-------------|---------------|-------------|------------|-----------|
| 2000-01 | P      | 17162          | 2284  | 53983   | 2913      | 58275  | 28206        | 14585  | 20257      | 11760       | 298           | 196         | 3316       | 213235    |
|         | NP     | 8181           | -     | -       | 8951      | 10892  | 70051        | 3887   | 4594       | 5900        | 53            | 395         | 1177       | 114081    |
|         | T      | 25343          | 2284  | 53983   | 11864     | 69167  | 98257        | 18472  | 24851      | 17660       | 351           | 591         | 4493       | 327316    |
| 2001-02 | P      | 16450          | 2483  | 48773   | 2248      | 49151  | 33654        | 15105  | 21079      | 11700       | 434           | 135         | 3312       | 204524    |
|         | NP     | 7729           | -     | -       | 6496      | 3615   | 75875        | 4064   | 4671       | 6000        | 100           | 379         | -          | 108929    |
|         | T      | 24179          | 2483  | 48773   | 8744      | 52766  | 109529       | 19169  | 25750      | 17700       | 534           | 514         | 3312       | 313453    |
| 2002-03 | P      | 1160           | 2284  | 6710    | 15251     | 53490  | 45442        | 18398  | 13151      | 12730       | 418           | 89          | 3430       | 171553    |
|         | NP     | 1061           | -     | 42794   | 318       | 3342   | 56965        | 2213   | 10875      | 6110        | 71            | 302         | 1560       | 125611    |
|         | T      | 2221           | 2284  | 49504   | 15569     | 56832  | 102407       | 20611  | 24026      | 18840       | 489           | 391         | 4990       | 298164    |
| 2003-04 | P      | 1160           | 2284  | 46330   | 10826     | 53437  | 45442        | 21228  | 16848      | 13050       | 560           | 46          | 2398       | 213609    |
|         | NP     | 1061           | -     | 9150    | 464       | 3364   | 56965        | 3023   | 11755      | 7950        | 128           | 126         | 1072       | 95058     |
|         | T      | 2221           | 2284  | 55480   | 11290     | 56801  | 102407       | 24251  | 28603      | 21000       | 688           | 172         | 3470       | 308667    |
| 2004-05 | P      | 21507          | 7703  | 9302    | 11841     | 57252  | 31537        | 23398  | 18636      | 23780       | 560           | 33          | 2348       | 207897    |
|         | NP     | 12185          | -     | 53303   | -         | 12655  | 68634        | 2031   | 4263       | 20000       | 128           | 89          | 1435       | 174723    |
|         | T      | 33692          | 7703  | 62605   | 11841     | 69907  | 100171       | 25429  | 22899      | 43780       | 688           | 122         | 3783       | 382620    |
| 2005-06 | P      | 157094         | 5837  | 15683   | 11690     | 47752  | 58670        | 22790  | 42096      | 63297       | 568           | 127         | 1386       | 426990    |
|         | NP     | 28769          | -     | 57378   | 1398      | 11713  | 67696        | 2429   | 1250       | 57000       | 128           | 207         | 270        | 228238    |
|         | T      | 185863         | 5837  | 73061   | 13088     | 59465  | 126366       | 25219  | 43346      | 120297      | 696           | 334         | 1656       | 655228    |
| 2006-07 | P      | 22160          | 10250 | 18449   | 7500      | 58008  | 42519        | 24968  | 44454      | 52,001      | 407           | 103         | 79         | 280898    |
|         | NP     | 9834           | -     | 58217   | 351       | 11592  | 51801        | 3161   | 1342       | 27,967      | 158           | 107         | 255        | 164785    |
|         | T      | 31994          | 10250 | 76666   | 7,851     | 69600  | 94320        | 28129  | 45796      | 79,968      | 565           | 210         | 334        | 445683    |

| Year    | P/NP/T | Andhra Pradesh | Goa   | Gujarat | Karnataka | Kerala | Maharashtra | Odisha | Tamil Nadu | West Bengal | A & N Islands | Daman & Diu | Puducherry | All India |
|---------|--------|----------------|-------|---------|-----------|--------|-------------|--------|------------|-------------|---------------|-------------|------------|-----------|
| 2007-08 | P      | 24987          | 9545  | 19088   | 8251      | 55619  | 45352       | 26255  | 21701      | 54044       | 412           | 103         | 1674       | 267031    |
|         | NP     | 11745          | -     | 54980   | 549       | 11582  | 53869       | 2820   | 949        | 32851       | 173           | 107         | 609        | 170234    |
|         | T      | 36732          | 9545  | 74068   | 8800      | 67201  | 99221       | 29075  | 22650      | 86895       | 585           | 210         | 2283       | 437265    |
| 2008-09 | P      | 27742          | 8693  | 13509   | 9071      | 68016  | 55956       | 28879  | 29863      | 43452       | 416           | 113         | 1578       | 287288    |
|         | NP     | 18494          | -     | 27591   | 741       | -      | 36231       | 2774   | 7982       | 25596       | 172           | 117         | 648        | 120346    |
|         | T      | 46236          | 8693  | 41100   | 9812      | 68016  | 92187       | 31653  | 37845      | 69048       | 588           | 230         | 2226       | 407634    |
| 2009-10 | P      | 24329          | 11029 | 17488   | 16443     | 67573  | 38657       | 25603  | 30085      | 49734       | 349           | 139         | 1743       | 283172    |
|         | NP     | 19860          | -     | 30383   | 166       | -      | 68743       | 3974   | 8062       | 20988       | 150           | 34          | 717        | 153077    |
|         | T      | 44189          | 11029 | 47871   | 16609     | 67573  | 107400      | 29577  | 38147      | 70722       | 499           | 173         | 2460       | 436249    |
| 2010-11 | P      | 28324          | 8584  | 22223   | 19873     | 70677  | 35091       | 27095  | 31947      | 67194       | 468           | 367         | 1018       | 312861    |
|         | NP     | 18884          | -     | 37182   | 3366      | -      | 67936       | 5281   | 8539       | 25105       | 184           | 110         | 467        | 167054    |
|         | T      | 47208          | 8584  | 59405   | 23239     | 70677  | 103027      | 32376  | 40486      | 92299       | 652           | 477         | 1485       | 479915    |
| 2011-12 | P      | 36795          | 9179  | 16122   | 25088     | NR     | 37561       | 27391  | 96272      | 79795       | 492           | NR          | 2074       | 330769    |
|         | NP     | 16150          | -     | 41806   | 2557      | NR     | 63186       | 4235   | 21443      | 27091       | 188           | NR          | 680        | 177336    |
|         | T      | 52945          | 9179  | 57928   | 27645     | 0      | 100747      | 31626  | 117715     | 106886      | 680           | 0           | 2754       | 508105    |
| 2012-13 | P      | 41922          | 8614  | 16605   | NR        | 68399  | 42297       | 33199  | 32309      | 80122       | 520           | 466         | 2061       | 326514    |
|         | NP     | 20842          | -     | 42228   | NR        | 1659   | 55964       | 4657   | 8636       | 31532       | 193           | 101         | 610        | 166422    |
|         | T      | 62764          | 8614  | 58833   | 0         | 70058  | 98261       | 37856  | 40945      | 111654      | 713           | 567         | 2671       | 492936    |
| 2013-14 | P      | 43537          | 10230 | 16705   | NR        | 60403  | 45373       | 28513  | 32314      | 85334       | 518           | NR          | 2144       | 325071    |
|         | NP     | 21566          | -     | 42365   | NR        | 1652   | 64263       | 5492   | 8686       | 34700       | 192           | NR          | 847        | 179763    |
|         | T      | 65103          | 10230 | 59070   | 0         | 62055  | 109636      | 34005  | 41000      | 120034      | 710           | 0           | 2991       | 504834    |

Note : 1. P: Peneaid, 2. NP: Non-Peneaid, 3. T: Total, 4. NR: Not Reported, 5. -: Not available.

Source : Handbook on Fisheries Statistics, 2014, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India. (Website: <http://www.dahd.mic.in>).

**Table 3.12: Disposition of fish catch and percentage distribution in India**

| Year | Marketing fresh | %     | Frozen | %     | Curing | %     | Canning | %    | Reduction | %    | Offal for reduction | %     | Miscellaneous * | %    | Total   | %   |
|------|-----------------|-------|--------|-------|--------|-------|---------|------|-----------|------|---------------------|-------|-----------------|------|---------|-----|
| 1981 | 1668.00         | 68.25 | 118.10 | 4.83  | 441.70 | 18.07 | 5.50    | 0.23 | 162.00    | 6.63 | 21.40               | 0.88  | 27.20           | 1.11 | 2443.90 | 100 |
| 1982 | 1701.20         | 71.87 | 130.20 | 5.50  | 358.00 | 15.12 | 5.70    | 0.24 | 126.10    | 5.33 | 18.30               | 0.77  | 27.60           | 1.17 | 2367.10 | 100 |
| 1983 | 1784.60         | 71.19 | 145.00 | 5.78  | 423.90 | 16.91 | 7.30    | 0.29 | 110.60    | 4.41 | 12.90               | 0.52  | 22.40           | 0.89 | 2506.70 | 100 |
| 1984 | 1978.90         | 69.14 | 207.00 | 7.23  | 424.10 | 14.82 | 13.60   | 0.48 | 194.80    | 6.81 | 9.40                | 0.33  | 34.30           | 1.20 | 2862.10 | 100 |
| 1985 | 1843.30         | 65.27 | 196.40 | 6.95  | 562.20 | 19.91 | 9.80    | 0.35 | 170.00    | 6.02 | 14.00               | 0.50  | 28.60           | 1.01 | 2824.30 | 100 |
| 1986 | 1964.00         | 67.22 | 209.70 | 7.18  | 460.40 | 15.76 | 12.10   | 0.41 | 158.30    | 5.42 | 11.50               | 0.39  | 105.80          | 3.62 | 2921.80 | 100 |
| 1987 | 1968.30         | 67.72 | 179.00 | 6.16  | 526.40 | 18.11 | 4.90    | 0.17 | 190.60    | 6.56 | 18.40               | 0.63  | 19.00           | 0.65 | 2906.60 | 100 |
| 1988 | 2075.10         | 67.32 | 233.70 | 7.58  | 529.00 | 17.16 | 20.60   | 0.67 | 174.60    | 5.66 | 24.20               | 0.79  | 25.20           | 0.82 | 3082.40 | 100 |
| 1989 | 2301.40         | 64.20 | 261.20 | 7.29  | 590.90 | 16.48 | 28.70   | 0.80 | 315.20    | 8.79 | 25.10               | 0.70  | 62.00           | 1.73 | 3584.50 | 100 |
| 1990 | 2497.20         | 65.18 | 285.70 | 7.46  | 598.80 | 15.63 | 29.30   | 0.76 | 322.30    | 8.41 | 34.80               | 0.91  | 63.40           | 1.65 | 3831.50 | 100 |
| 1991 | 2706.00         | 66.91 | 265.90 | 6.58  | 613.80 | 15.18 | 30.10   | 0.74 | 333.40    | 8.24 | 47.70               | 1.18  | 47.10           | 1.16 | 4044.00 | 100 |
| 1992 | 2798.40         | 67.06 | 284.80 | 6.82  | 590.20 | 14.14 | 25.90   | 0.62 | 355.80    | 8.53 | 70.60               | 1.69  | 47.40           | 1.14 | 4173.10 | 100 |
| 1993 | 3105.20         | 68.31 | 309.50 | 6.81  | 644.50 | 14.18 | 9.80    | 0.22 | 372.80    | 8.20 | 16.30               | 0.36  | 87.60           | 1.93 | 4545.70 | 100 |
| 1994 | 3250.60         | 68.64 | 310.40 | 6.55  | 651.90 | 13.76 | 12.20   | 0.26 | 397.30    | 8.39 | 39.30               | 0.83  | 74.30           | 1.57 | 4736.00 | 100 |
| 1995 | 3427.00         | 70.94 | 320.60 | 6.64  | 632.50 | 13.09 | 13.20   | 0.27 | 358.20    | 7.41 | 38.70               | 0.80  | 40.60           | 0.84 | 4830.80 | 100 |
| 1996 | 3784.10         | 72.74 | 392.70 | 7.55  | 639.20 | 12.29 | 11.00   | 0.21 | 313.20    | 6.02 | 22.60               | 0.43  | 39.40           | 0.76 | 5202.20 | 100 |
| 1997 | 3874.70         | 72.03 | 421.90 | 7.84  | 602.30 | 11.20 | 14.10   | 0.26 | 345.50    | 6.42 | 18.00               | 0.33  | 102.80          | 1.91 | 5379.30 | 100 |
| 1998 | 3866.60         | 73.73 | 390.70 | 7.45  | 568.50 | 10.84 | 12.00   | 0.23 | 303.70    | 5.79 | 19.50               | 0.37  | 83.30           | 1.59 | 5244.30 | 100 |
| 1999 | 4206.07         | 78.05 | 284.21 | 5.27  | 421.60 | 7.82  | 17.39   | 0.32 | 296.53    | 5.50 | 53.50               | 0.99  | 109.75          | 2.04 | 5389.05 | 100 |
| 2000 | 4287.83         | 76.38 | 276.60 | 4.93  | 339.91 | 6.05  | 50.03   | 0.89 | 317.91    | 5.66 | 1.32                | 0.02  | 340.24          | 6.07 | 5613.84 | 100 |
| 2001 | 4777.14         | 80.56 | 264.88 | 4.47  | 346.00 | 5.83  | 53.17   | 0.90 | 308.27    | 5.20 | 16.16               | 0.27  | 164.43          | 2.78 | 5930.05 | 100 |
| 2002 | 4789.52         | 81.50 | 332.68 | 5.66  | 388.69 | 6.61  | 23.07   | 0.39 | 265.96    | 4.53 | 42.86               | 0.73  | 34.20           | 0.58 | 5876.98 | 100 |
| 2003 | 4828.36         | 82.04 | 307.59 | 5.22  | 363.60 | 6.18  | 36.36   | 0.62 | 277.87    | 4.72 | 40.81               | 0.69  | 31.36           | 0.53 | 5885.75 | 100 |
| 2004 | 5283.61         | 82.67 | 385.16 | 6.03  | 330.50 | 5.17  | 45.03   | 0.70 | 269.89    | 4.22 | 9.96                | 0.16  | 67.07           | 1.05 | 6391.22 | 100 |
| 2005 | 5468.23         | 83.13 | 390.23 | 5.93  | 330.27 | 5.02  | 24.69   | 0.38 | 284.56    | 4.33 | 34.88               | 0.53  | 44.69           | 0.68 | 6577.55 | 100 |
| 2006 | 5559.60         | 83.13 | 396.12 | 5.92  | 344.76 | 5.16  | 24.29   | 0.36 | 295.37    | 4.42 | 36.24               | 0.54  | 31.37           | 0.47 | 6687.75 | 100 |
| 2007 | 6037.80         | 83.41 | 424.26 | 5.86  | 367.50 | 5.08  | 25.51   | 0.35 | 334.45    | 4.62 | 14.65               | 0.20  | 34.43           | 0.48 | 7238.60 | 100 |
| 2008 | 5804.72         | 83.60 | 378.63 | 5.15  | 335.44 | 4.83  | 31.11   | 0.45 | 313.13    | 4.51 | 45.20               | 0.65  | 35.06           | 0.50 | 6943.29 | 100 |
| 2009 | 5955.48         | 82.82 | 435.35 | 6.05  | 347.71 | 4.84  | 33.22   | 0.46 | 291.27    | 4.05 | 61.69               | 0.86  | 66.43           | 0.92 | 7191.15 | 100 |
| 2010 | 6118.89         | 76.58 | 733.43 | 9.18  | 411.86 | 5.15  | 47.46   | 0.59 | 283.64    | 3.55 | 74.30               | 0.93  | 320.58          | 4.01 | 7990.16 | 100 |
| 2011 | 5364.19         | 73.03 | 761.13 | 10.36 | 472.59 | 6.43  | 39.28   | 0.53 | 298.80    | 4.07 | 0.20                | 0.003 | 408.76          | 5.57 | 7344.95 | 100 |
| 2012 | 5811.58         | 74.24 | 948.95 | 12.12 | 332.67 | 4.25  | 42.43   | 0.54 | 301.59    | 3.85 | 0.06                | 0.001 | 391.28          | 5.00 | 7828.56 | 100 |

Note : \* Includes unspecified and others.

Source : *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
(Website: <http://www.dahd.mtc.in>).



Table 3.13: State-wise disposition of fish catch- 2012

| States/<br>Union Territories | Marketing | Freezing | Curing | Canning | Reduction | Offal for<br>reduction | Miscellaneous<br>Purposes | Unspecified | Others | Total   |
|------------------------------|-----------|----------|--------|---------|-----------|------------------------|---------------------------|-------------|--------|---------|
| Andhra Pradesh               | 842202    | 486634   | 44982  | 11308   | 1200      | 0                      | 37723                     | 22832       | 75116  | 1521997 |
| Arunachal Pradesh            | 3375      | -        | -      | -       | -         | -                      | 100                       | -           | -      | 3475    |
| Assam                        | 247010    | -        | -      | -       | -         | -                      | -                         | -           | 3190   | 250200  |
| Bihar                        | 277815    | -        | -      | -       | -         | -                      | -                         | -           | 66655  | 344470  |
| Chhattisgarh                 | 260482    | -        | -      | -       | -         | -                      | -                         | -           | -      | 260482  |
| Goa                          | 77965     | -        | 2599   | 4331    | -         | -                      | 1733                      | -           | -      | 86628   |
| Gujarat                      | 245426    | 173650   | 141504 | -       | 227304    | -                      | -                         | -           | -      | 787884  |
| Haryana                      | 89251     | -        | -      | -       | -         | -                      | -                         | 22229       | -      | 111480  |
| Himachal Pradesh             | 7305      | 76       | -      | -       | -         | -                      | -                         | -           | -      | 7381    |
| Jammu & Kashmir              | 19010     | 32       | -      | -       | -         | -                      | -                         | -           | -      | 19042   |
| Jharkhand                    | 107920    | -        | -      | -       | -         | -                      | -                         | -           | -      | 107920  |
| Karnataka                    | 257528    | 56696    | 70951  | 26790   | 27162     | 21                     | 36790                     | 26000       | 23629  | 5255567 |
| Kerala                       | -         | -        | -      | -       | -         | -                      | -                         | -           | -      | -       |
| Madhya Pradesh               | 84855     | -        | -      | -       | -         | -                      | -                         | -           | -      | 84855   |
| Maharashtra                  | 460477    | -        | 32733  | -       | 502       | -                      | -                         | -           | -      | 493712  |
| Manipur                      | 22640     | -        | 2350   | 2       | -         | -                      | -                         | -           | -      | 24992   |
| Meghalaya                    | 5389      | -        | -      | -       | -         | -                      | -                         | -           | -      | 5389    |
| Mizoram                      | 5340      | -        | -      | -       | -         | -                      | -                         | -           | -      | 5340    |
| Nagaland                     | 5823      | -        | 907    | -       | -         | -                      | -                         | 110         | -      | 6840    |
| Odisha                       | 284755    | 15883    | 24498  | -       | -         | -                      | -                         | -           | -      | 325136  |

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| States/<br>Union Territories | Marketing      | Freezing      | Curing        | Canning      | Reduction     | Offal for<br>reduction | Miscellaneo-<br>us Purposes | Unspecified  | Others        | Total          |
|------------------------------|----------------|---------------|---------------|--------------|---------------|------------------------|-----------------------------|--------------|---------------|----------------|
| Punjab                       | 99131          | -             | -             | -            | -             | -                      | -                           | -            | -             | 99131          |
| Rajasthan                    | 32760          | -             | -             | -            | -             | -                      | -                           | -            | -             | 32760          |
| Sikkim                       | 180            | -             | -             | -            | -             | -                      | -                           | -            | -             | 180            |
| Tamil Nadu                   | 399848         | 174387        | -             | -            | -             | -                      | 60864                       | -            | -             | 635099         |
| Tripura                      | 50507          | -             | -             | -            | -             | -                      | 6953                        | -            | -             | 57460          |
| Uttarakhand                  | 3847           | -             | -             | -            | -             | -                      | -                           | -            | -             | 3847           |
| Uttar Pradesh                | 449750         | -             | -             | -            | -             | -                      | -                           | -            | -             | 449750         |
| West Bengal                  | 1390360        | 33000         | -             | -            | 45420         | -                      | 5150                        | -            | -             | 1473930        |
| Andaman &<br>Nicobar Islands | 23698          | 5468          | 7292          | -            | -             | -                      | -                           | -            | -             | 36458          |
| Chandigarh                   | 90             | -             | -             | -            | -             | -                      | -                           | -            | -             | 90             |
| Dadra & Nagar<br>Haveli      | -              | -             | -             | -            | -             | -                      | -                           | 108          | -             | 108            |
| Daman & Diu                  | 12302          | 2493          | -             | -            | -             | 43                     | 2095                        | -            | -             | 16933          |
| Delhi                        | 690            | -             | -             | -            | -             | -                      | -                           | -            | -             | 690            |
| Lakshadweep                  | 13177          | -             | 79            | -            | -             | -                      | -                           | -            | -             | 13256          |
| Puducherry                   | 30667          | 631           | 4780          | -            | -             | -                      | -                           | -            | -             | 36078          |
| <b>India</b>                 | <b>5811575</b> | <b>948950</b> | <b>332675</b> | <b>42431</b> | <b>301588</b> | <b>64</b>              | <b>151408</b>               | <b>71279</b> | <b>168590</b> | <b>7990104</b> |

Note : - : Not Available.

Source : *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
(Website: <http://www.dahd.nic.in>).

Table 3.14: State-wise preserved and processed fish commodities -2012

| States /<br>Union<br>Territories | Tuna<br>frozen | Marine<br>fish<br>frozen | Fish dried<br>unsalted | Fish<br>dried &<br>salted or<br>smoked | Shark fins,<br>dried,<br>salted etc. | Crab<br>meat<br>frozen | Frozen<br>whole<br>cooked<br>lobster | Frozen<br>lobster<br>tails | Shrimp<br>& prawn<br>frozen | Freeze<br>dried<br>shrimp | Dried<br>prawn/<br>shrimp | Frozen<br>cuttlefish<br>fillets |
|----------------------------------|----------------|--------------------------|------------------------|--|--------------------------------------|------------------------|--------------------------------------|----------------------------|-----------------------------|---------------------------|---------------------------|---------------------------------|
| Andhra Pradesh                   | 24364          | 24814                    | 39559                  | 62504                                  | 45                                   | 1890                   | 1000                                 | 15910                      | 79546                       | 7724                      | 855                       | 38723                           |
| Assam                            | -              | -                        | 638                    | -                                      | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Bihar                            | -              | -                        | -                      | 6917                                   | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Chhattisgarh                     | -              | -                        | -                      | 470                                    | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Goa                              | 27             | 27549                    | -                      | -                                      | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Gujarat                          | -              | 130594                   | 217865                 | 1342681                                | -                                    | -                      | -                                    | -                          | 6031                        | -                         | -                         | -                               |
| Haryana                          | -              | -                        | -                      | 22229                                  | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Jammu &<br>Kashmir               | -              | -                        | 508                    | 150                                    | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Karnataka                        | -              | 42959                    | 7088                   | -                                      | -                                    | -                      | -                                    | -                          | 11352                       | -                         | -                         | -                               |
| Kerala                           | -              | 66531                    | 17015                  | 50336                                  | -                                    | -                      | -                                    | -                          | 65447                       | -                         | 878                       | -                               |
| Maharashtra                      | -              | 99627                    | 13300                  | 4819                                   | -                                    | -                      | 21471                                | -                          | -                           | -                         | 7260                      | 11589                           |
| Manipur                          | -              | -                        | 112                    | 1136                                   | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Nagaland                         | -              | -                        | -                      | 732                                    | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Odisha                           | -              | 1380                     | 11645                  | 5404                                   | -                                    | 370                    | -                                    | -                          | 14469                       | -                         | 565                       | 445                             |
| Tamil Nadu                       | -              | 54680                    | -                      | -                                      | -                                    | -                      | -                                    | -                          | 6491                        | -                         | -                         | 4413                            |
| Tirpura                          | -              | -                        | -                      | -                                      | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| West Bengal                      | -              | 8958                     | 12198                  | -                                      | 32                                   | -                      | -                                    | -                          | 29964                       | -                         | -                         | 3343                            |
| Andaman &<br>Nicobar Islands     | 382            | 5282                     | 1276                   | 191                                    | 39                                   | -                      | -                                    | -                          | 256                         | -                         | -                         | -                               |
| Daman & Diu                      | 84             | 2361                     | -                      | -                                      | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Lakshadweep                      | -              | -                        | 3                      | 72                                     | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| Puducherry                       | -              | 631                      | 830                    | 3951                                   | -                                    | -                      | -                                    | -                          | -                           | -                         | -                         | -                               |
| India                            | 24857          | 465366                   | 322037                 | 293179                                 | 116                                  | 2260                   | 22471                                | 15910                      | 213556                      | 7724                      | 9558                      | 58513                           |

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| States /<br>Union<br>Territories | Frozen<br>squids | Dried<br>squids | Canned<br>fish | Canned<br>shrimp<br>prawn | Fish /<br>body<br>oil | Fish meals<br>soluble or<br>similar<br>feedings<br>Frozen | Pomfret<br>frozen | Tunas<br>frozen | Mackerels,<br>frozen | Jelly/Fish,<br>salted &<br>dried or in<br>brine | Miscell-<br>aneous | Total          |
|----------------------------------|------------------|-----------------|----------------|---------------------------|-----------------------|---|-------------------|-----------------|----------------------|---|--------------------|----------------|
| Andhra Pradesh                   | 285              | -               | 250            | 1570                      | -                     | 1000  | 9965              | 18308           | 6630                 | -   | 70598              | 405540         |
| Assam                            | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | -                  | 638            |
| Bihar                            | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 6917               | 13834          |
| Chhattisgarh                     | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | -                  | 470            |
| Goa                              | 2289             | -               | 48             | -                         | -                     | -   | 129               | -               | 9252                 | -   | 3380               | 42674          |
| Gujarat                          | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 55246              | 544004         |
| Haryana                          | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | -                  | 22229          |
| Jammu &<br>Kashmir               | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | -                  | 658            |
| Karnataka                        | 11830            | -               | 27152          | -                         | -                     | -   | 82                | -               | 10180                | -   | 56591              | 167234         |
| Kerala                           | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 480469             | 680676         |
| Maharashtra                      | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | -                  | 158066         |
| Manipur                          | -                | -               | 2              | -                         | -                     | -   | -                 | -               | -                    | -   | 170                | 1420           |
| Nagaland                         | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 175                | 907            |
| Odisha                           | -                | -               | -              | -                         | -                     | -   | 89                | -               | -                    | -   | 40                 | 34407          |
| Tamil Nadu                       | 3227             | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 17774              | 86585          |
| Tripura                          | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 1724               | 1724           |
| West Bengal                      | 136              | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 13370              | 68001          |
| Andaman &<br>Nicobar Islands     | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 5334               | 12760          |
| Daman & Diu                      | 31               | -               | -              | -                         | -                     | -   | 25                | 2               | -                    | -   | -                  | 2503           |
| Lakshadweep                      | -                | -               | -              | -                         | -                     | -   | -                 | -               | -                    | -   | 4                  | 79             |
| Puducherry                       | -                | -               | -              | -                         | 102                   | -   | -                 | -               | -                    | -   | -                  | 5412           |
| <b>India</b>                     | <b>17798</b>     | <b>-</b>        | <b>27452</b>   | <b>1570</b>               | <b>-</b>              | <b>1000</b>   | <b>10290</b>      | <b>18310</b>    | <b>26062</b>         | <b>-</b>  | <b>711792</b>      | <b>2249821</b> |

Note : - : Not Available.

Source : *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
(Website: <http://www.dahd.nic.in>).

**Table 3.15: Fish seed production over different plan periods in India**

(million fry)

| Plan period                  | Year     | Production |
|------------------------------|----------|------------|
| End of IV <sup>th</sup> Plan | 1973-74  | 409        |
| End of V <sup>th</sup> Plan  | 1978-79  | 912        |
| End of VI <sup>th</sup> Plan | 1984-85  | 9,639      |
| VII <sup>th</sup> Plan       | 1985-86  | 6,322      |
|                              | 1986-87  | 7,601      |
|                              | 1987-88  | 8,608      |
|                              | 1988-89  | 9,325      |
|                              | 1989-90  | 9,691      |
| Annual Plan                  | 1990-91  | 10,332     |
|                              | 1991-92  | 12,203     |
| VIII <sup>th</sup> Plan      | 1992-93  | 12,500     |
|                              | 1993-94  | 14,239     |
|                              | 1994-95  | 14,544     |
|                              | 1995-96  | 15,007     |
|                              | 1996-97  | 15,852     |
| IX <sup>th</sup> Plan        | 1997-98  | 15,904     |
|                              | 1998-99  | 15,156     |
|                              | 1999-00  | 16,589     |
|                              | 2000-01  | 15,608     |
|                              | 2001-02  | 15,758     |
| X <sup>th</sup> Plan         | 2002-03  | 16,333     |
|                              | 2003-04  | 19,231     |
|                              | 2004-05  | 20,791     |
|                              | 2005-06  | 21,988     |
|                              | 2006-07  | 23,648     |
| XI <sup>th</sup> Plan        | 2007-08  | 24,144     |
|                              | 2008-09  | 32,177     |
|                              | 2009-10  | 29,313     |
|                              | 2010-11  | 34,111     |
|                              | 2011-12  | 36,566     |
| XII <sup>th</sup> Plan       | 2012-13  | 34,922     |
|                              | 2013-14* | 41,450     |

**Note** : \*: Provisional.

**Source** : *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).

**Table 3.16: Number of fishing crafts in maritime States / Union Territories**

(number)

| States / Union Territories | Traditional crafts (Non-Motorised) | Motorised traditional crafts | Mechanised boats | Total         |
|----------------------------|------------------------------------|------------------------------|------------------|---------------|
| Andhra Pradesh             | 15366                              | 14902                        | 1916             | 32184         |
| Goa                        | 394                                | N.A                          | 2290             | 2684          |
| Gujarat                    | 102                                | 10620                        | 14330            | 25052         |
| Karnataka                  | 8362                               | 6995                         | 2576             | 17933         |
| Kerala                     | 2384                               | 28252                        | 4165             | 34801         |
| Maharashtra                | 7362                               | N.A.                         | 16297            | 23659         |
| Odisha                     | 11400                              | 7853                         | 1686             | 20939         |
| Tamil Nadu                 | 5278                               | 29528                        | 5714             | 40520         |
| West Bengal                | 4994                               | 4929                         | 2534             | 12457         |
| Andaman & Nicobar Islands  | 1984                               | 1730                         | 127              | 3841          |
| Daman & Diu                | N.A.                               | 285                          | 1597             | 1882          |
| Lakshadweep                | 300                                | 1115                         | 7                | 1422          |
| Puducherry                 | 1442                               | 1800                         | 834              | 4076          |
| <b>Total</b>               | <b>59368</b>                       | <b>108009</b>                | <b>54073</b>     | <b>221450</b> |

Note : N.A. : Not available.

Source : *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi (Website: <http://www.dahd.nic.in>).

Table 3.17: State-wise fish seed production

| States /<br>Union Territories | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15* |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Andhra Pradesh                | 178.90  | 351.64  | 421.00  | 851.90  | 860.14  | 860.14  | 982.05  | 1165.46 | 1899.47 | 1899.47 | 5228.47 | 6562.63 | 6718.98  |
| Arunachal Pradesh             | 25.10   | 25.00   | 26.10   | 25.45   | 30.00   | 26.50   | 27.00   | 29.00   | 27.20   | 2.90    | 4.10    | 9.64    | 9.84     |
| Assam                         | 1902.00 | 2228.41 | 2741.47 | 3207.99 | 3062.00 | 3206.00 | 3429.00 | 3326.00 | 4263.00 | 3624.00 | 4364.00 | 4546.00 | 4585.00  |
| Bihar                         | 367.99  | 346.11  | 318.31  | 344.94  | 330.46  | 309.53  | 302.99  | 330.78  | 275.19  | 244.37  | 473.83  | 1872.48 | 505.74   |
| Chhattisgarh                  | 327.17  | 367.82  | 457.48  | 505.54  | 591.68  | 649.67  | 675.00  | 762.59  | 839.69  | 893.59  | 1043.74 | 1220.00 | 1351.42  |
| Goa                           | 0.15    | 0.50    | 0.89    | 6.95    | 0.67    | 0.67    | 0.67    | 0.67    | .05     | 0.55    | 2.30    | 0.03    | 1.40     |
| Gujarat                       | 414.40  | 114.56  | 508.93  | 611.59  | 621.89  | 610.20  | 585.78  | 689.89  | 837.35  | 837.35  | 282.48  | 387.00  | 248.40   |
| Haryana                       | 204.00  | 243.06  | 249.57  | 282.08  | 331.14  | 309.76  | 332.20  | 404.99  | 643.41  | 744.21  | 734.55  | 909.37  | 639.06   |
| Himachal Pradesh              | 16.99   | 19.47   | 19.17   | 21.27   | 16.98   | 21.92   | 21.60   | 21.75   | 20.32   | 20.32   | 22.02   | 22.22   | 25.70    |
| Jammu & Kashmir               | 14.55   | 15.62   | 16.00   | 17.07   | 17.30   | 17.12   | 18.12   | 20.10   | 26.00   | 26.00   | 34.50   | 34.95   | 40.05    |
| Jharkhand                     | 104.30  | 64.50   | 80.00   | 17.27   | 28.71   | 28.71   | 77.11   | 540.50  | 630.70  | 649.70  | 931.00  | 1071.80 | 1108.46  |
| Karnataka                     | 155.26  | 135.35  | 175.22  | 215.72  | 195.43  | 228.70  | 206.80  | 296.50  | 1158.41 | 1216.61 | 428.23  | 496.62  | 529.96   |
| Kerala                        | 12.60   | 12.70   | 12.17   | 12.48   | 12.70   | 12.70   | 12.70   | 12.70   | 12.70   | 12.70   | 18.00   | 18.00   | 0.00     |
| Madhya Pradesh                | 263.20  | 384.40  | 334.60  | 438.62  | 485.87  | 496.58  | 5235.22 | 5489.62 | 619.87  | 1500.99 | 798.01  | 963.08  | 1001.88  |
| Maharashtra                   | 187.00  | 169.04  | 47.45   | 85.40   | 549.73  | 200.61  | 149.43  | 188.90  | 190.89  | 1396.89 | 94.52   | 187.50  | 143.71   |
| Manipur                       | 117.00  | 117.00  | 118.00  | 123.00  | 129.00  | 125.00  | 125.00  | 127.00  | 134.00  | 134.00  | 139.00  | 157.00  | 170.00   |
| Meghalaya                     | 0.87    | 0.96    | 0.90    | 0.77    | 0.77    | 0.93    | 1.13    | 1.21    | 2.96    | 2.96    | 2.18    | 3.14    | 58.43    |
| Mizoram                       | 10.30   | 13.20   | 16.00   | 18.00   | 18.20   | 18.20   | 16.50   | 17.00   | 16.60   | 17.30   | 54.00   | 30.00   | 30.00    |
| Nagaland                      | 47.00   | 40.00   | 44.00   | 43.00   | 48.00   | 48.00   | 48.50   | 48.10   | 47.50   | 49.50   | 48.00   | 48.50   | 47.70    |

Animal Husbandry, Dairying and Fisheries

| States / Union Territories | 2002-03  | 2003-04  | 2004-05  | 2005-06  | 2006-07  | 2007-08  | 2008-09  | 2009-10  | 2010-11  | 2011-12  | 2012-13  | 2013-14  | 2014-15* |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Odisha                     | 439.86   | 497.39   | 604.79   | 321.40   | 546.72   | 640.00   | 2957.85  | 730.00   | 6087.04  | 6087.04  | 701.93   | 658.16   | 5557.63  |
| Punjab                     | 89.43    | 97.69    | 133.00   | 139.03   | 153.38   | 145.58   | 256.08   | 174.82   | 168.04   | 164.63   | 187.08   | 222.54   | 229.74   |
| Rajasthan                  | 423.34   | 303.00   | 255.00   | 299.00   | 342.00   | 350.38   | 350.38   | 349.57   | 455.26   | 449.69   | 1795.28  | 776.00   | 826.26   |
| Sikkim                     | 2.50     | 2.50     | 2.50     | 2.50     | 2.50     | 3.00     | 3.20     | 3.80     | 3.00     | 3.00     | 2.10     | 2.05     | 2.95     |
| Tamil Nadu                 | 686.59   | 413.05   | 529.28   | 529.28   | 529.28   | 529.28   | 529.28   | 529.28   | 291.82   | 431.84   | 188.20   | 2871.50  | 263.58   |
| Telangana                  | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | 3.30     |
| Tripura                    | 229.54   | 272.26   | 401.86   | 546.53   | 420.00   | 506.00   | 305.50   | 301.00   | 602.00   | 730.00   | 700.00   | 798.00   | 736.75   |
| Uttarakhand                | 33.30    | 29.01    | 35.82    | 31.69    | 28.21    | 37.42    | 38.32    | 34.47    | 100.44   | 100.16   | 42.98    | 44.43    | 48.57    |
| Uttar Pradesh              | 975.44   | 1053.58  | 1037.32  | 1085.75  | 1091.56  | 1182.99  | 1304.18  | 1147.48  | 1302.26  | 1476.40  | 1595.11  | 1637.76  | 1661.54  |
| West Bengal                | 9100.00  | 11910.00 | 12200.00 | 12500.00 | 13200.00 | 13572.00 | 14181.00 | 12566.00 | 13453.00 | 13846.00 | 15002.00 | 15890.00 | 16717.00 |
| Andaman & Nicobar Islands  | 0.76     | 0.55     | 1.29     | 0.72     | 0.58     | 0.51     | 1.50     | 1.00     | 0.56     | 0.56     | 1.06     | 7.22     | 1.21     |
| Chandigarh                 | 0.70     | 1.10     | 0.70     | 0.70     | 0.80     | 3.20     | 0.80     | 1.60     | 0.80     | 2.40     | 1.60     | 0.80     | 0.80     |
| Dadra & Nagar Haveli       | 0.00     | 0.00     | 0.00     | 0.00     | N.A.     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| Daman & Diu                | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| Delhi                      | 2.33     | 2.00     | 1.82     | 2.34     | 2.25     | 2.27     | 2.32     | 1.39     | 1.30     | 1.30     | 1.53     | 1.53     | 1.67     |
| Lakshadweep                | 0.00     | 0.00     | 0.00     | 0.00     | N.A.     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| Puducherry                 | 0.00     | 0.00     | 0.00     | 0.00     | N.A.     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| India                      | 16332.57 | 19231.47 | 20790.64 | 22287.98 | 23647.95 | 24143.57 | 32177.21 | 29313.17 | 34110.83 | 36566.43 | 34921.80 | 41449.95 | 43266.73 |

Note : 1. N.A.: Not Available, 2. \*: Provisional.

Source : 1. *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India. (Website: <http://www.dahd.nic.in>).

2. *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).



**Table 3.18: Details of shrimp and scampi production during 2012-13**

(Area: ha, Production: Mt, Productivity: Mt/ha/Yr)

| States                | Area under culture |                |                         | Production       |                |                         | Productivity |             |                         |
|-----------------------|--------------------|----------------|-------------------------|------------------|----------------|-------------------------|--------------|-------------|-------------------------|
|                       | Shrimp*            | Scampi**       | Total (shrimp + scampi) | Shrimp*          | Scampi**       | Total (shrimp + scampi) | Shrimp*      | Scampi**    | Total (shrimp + scampi) |
| <b>Andhra Pradesh</b> | 36123.00           | 280.00         | 36403.00                | 159083.00        | 174.00         | 159257.00               | 4.40         | 0.62        | 5.03                    |
| <b>Goa</b>            | 31.00              | 0.00           | 31.00                   | 63.00            | 0.00           | 63.00                   | 2.03         | 0.00        | 2.03                    |
| <b>Gujarat</b>        | 2359.00            | 0.00           | 2359.00                 | 9393.00          | 0.00           | 9393.00                 | 3.98         | 0.00        | 3.98                    |
| <b>Karnataka</b>      | 394.00             | 0.00           | 394.00                  | 664.00           | 0.00           | 664.00                  | 1.69         | 0.00        | 1.69                    |
| <b>Kerala</b>         | 12917.00           | 48.00          | 12965.00                | 5175.00          | 6.00           | 5181.00                 | 0.40         | 0.13        | 0.53                    |
| <b>Maharashtra</b>    | 1486.00            | 49.00          | 1535.00                 | 3513.00          | 60.00          | 3573.00                 | 2.36         | 1.22        | 3.59                    |
| <b>Odisha</b>         | 6302.00            | 886.00         | 7188.00                 | 14532.00         | 592.00         | 15124.00                | 2.31         | 0.67        | 2.97                    |
| <b>Tamil Nadu</b>     | 7804.00            | 136.00         | 7940.00                 | 25815.00         | 54.00          | 25869.00                | 3.31         | 0.40        | 3.70                    |
| <b>West Bengal</b>    | 48410.00           | 1520.00        | 49930.00                | 52581.00         | 2446.00        | 55027.00                | 1.09         | 1.61        | 2.70                    |
| <b>Total</b>          | <b>115826.00</b>   | <b>2919.00</b> | <b>118745.00</b>        | <b>270819.00</b> | <b>3332.00</b> | <b>274151.00</b>        | <b>2.34</b>  | <b>1.14</b> | <b>3.48</b>             |

**Note** : 1. N.A. : Not Available, 2. \* : Production from Aquaculture Farms 3. \*\* : Production from Aquaculture Farms. This data provides production from monoculture farms only and does not include production from village ponds, reservoirs etc.

**Source** : *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India. (Website: <http://www.dahd.mic.in>).

**Table 3.19: State-wise fishermen population as in 2003**

(hundreds)

| States /<br>Union Territories | Total number of members |         |         |         |          |       | Full time |        |       | Part time |        |        | Others |       |      |        |       |  |
|-------------------------------|-------------------------|---------|---------|---------|----------|-------|-----------|--------|-------|-----------|--------|--------|--------|-------|------|--------|-------|--|
|                               | Male                    |         | Female  |         | Children |       | Total     |        | Male  | Female    | Total  | Male   | Female | Total | Male | Female | Total |  |
|                               |                         |         |         |         |          |       |           |        |       |           |        |        |        |       |      |        |       |  |
| Andhra Pradesh                | 249386                  | 250877  | 393102  | 893365  | 91038    | 26422 | 117460    | 124967 | 25768 | 150735    | 155208 | 149685 | 304893 |       |      |        |       |  |
| Arunachal Pradesh             | 1650                    | 1376    | 1373    | 4399    | -        | -     | -         | 1099   | 843   | 1942      | -      | -      | -      |       |      |        |       |  |
| Assam                         | 131312                  | 97986   | 161082  | 390380  | 66120    | 39568 | 105688    | 42746  | 23676 | 66422     | 48814  | 12282  | 61096  |       |      |        |       |  |
| Bihar                         | 1391166                 | 1266997 | 2301353 | 4959516 | 25503    | 11576 | 37079     | 43347  | 14942 | 58289     | 32234  | 14468  | 46702  |       |      |        |       |  |
| Chhattisgarh                  | 621607                  | 529697  | 760064  | 1911368 | 4828     | 2805  | 7633      | 32905  | 13719 | 46624     | 18201  | 12206  | 30407  |       |      |        |       |  |
| Goa                           | 5521                    | 4863    | 3586    | 13970   | 1844     | 355   | 2199      | 1116   | 566   | 1682      | 923    | 1477   | 2400   |       |      |        |       |  |
| Gujarat                       | 134475                  | 129900  | 228880  | 493255  | 77653    | 6024  | 83677     | 26601  | 10383 | 36984     | 18479  | 33219  | 51698  |       |      |        |       |  |
| Haryana                       | 5910                    | 3322    | 7259    | 16491   | 2527     | 174   | 2701      | 1002   | 433   | 1435      | 108306 | 415    | 108721 |       |      |        |       |  |
| Himachal Pradesh              | 1537                    | 1372    | 2713    | 5622    | 421      | 207   | 628       | 547    | 27    | 574       | 554    | 4      | 558    |       |      |        |       |  |
| Jammu & Kashmir               | 9628                    | 7593    | 13232   | 30453   | 2876     | 467   | 3343      | 1244   | 717   | 1961      | 3480   | 1732   | 5212   |       |      |        |       |  |
| Jharkhand                     | 577908                  | 571584  | 781428  | 1930920 | 4329     | 914   | 5243      | 17100  | 4341  | 21441     | 18362  | 3913   | 22275  |       |      |        |       |  |
| Karnataka                     | 55809                   | 52898   | 50245   | 158952  | 13640    | 770   | 14410     | 8669   | 1207  | 9876      | 40948  | 13805  | 54753  |       |      |        |       |  |
| Kerala                        | 224007                  | 317758  | 206072  | 747837  | 110953   | 3803  | 114756    | 26515  | 6213  | 32728     | 36599  | 39027  | 75628  |       |      |        |       |  |
| Madhya Pradesh                | 213888                  | 200607  | 302479  | 716974  | 4699     | 751   | 5450      | 13743  | 4125  | 17868     | 8245   | 2776   | 11021  |       |      |        |       |  |
| Maharashtra                   | 63354                   | 46603   | 61873   | 171830  | 14587    | 5019  | 19606     | 38280  | 11397 | 49677     | 40029  | 9101   | 49130  |       |      |        |       |  |
| Manipur                       | 25009                   | 24091   | 21368   | 70468   | 2516     | 451   | 2967      | 2003   | 2090  | 4093      | 2225   | 2957   | 5182   |       |      |        |       |  |
| Meghalaya                     | 525                     | 504     | 1354    | 2383    | 2        | N.A.  | 2         | 346    | 148   | 494       | N.A.   | 2      | 2      |       |      |        |       |  |
| Mizoram                       | 5498                    | 5312    | 7097    | 17907   | 116      | 29    | 145       | 1150   | 201   | 1351      | 1163   | 440    | 1603   |       |      |        |       |  |
| Nagaland                      | 5762                    | 5519    | 3581    | 14862   | 43       | N.A.  | 43        | N.A.   | N.A.  | N.A.      | N.A.   | N.A.   | N.A.   |       |      |        |       |  |

Animal Husbandry, Dairying and Fisheries

| States /<br>Union Territories | Total number of members |         |          | Full time |        |        | Part time |        |        | Others  |         |        |         |
|-------------------------------|-------------------------|---------|----------|-----------|--------|--------|-----------|--------|--------|---------|---------|--------|---------|
|                               | Male                    | Female  | Children | Total     | Male   | Female | Total     | Male   | Female | Total   | Male    | Female | Total   |
| Odisha                        | 70971                   | 48334   | 60721    | 180026    | 27331  | 7973   | 35304     | 26322  | 12499  | 38821   | 40784   | 20547  | 61331   |
| Punjab                        | 2150                    | 1874    | 5061     | 9085      | 1528   | 28     | 1556      | 898    | 386    | 1284    | 3001    | 718    | 3719    |
| Rajasthan                     | 2638                    | 1693    | 2985     | 7316      | 654    | 21     | 675       | 881    | 93     | 974     | 1060    | 124    | 1184    |
| Sikkim                        | 9893                    | 8353    | 8568     | 26814     | 536    | 609    | 1145      | 87     | 207    | 294     | 182     | N.A.   | 182     |
| Tamil Nadu                    | 171992                  | 156107  | 148519   | 476618    | 63232  | 6111   | 69343     | 35280  | 7790   | 43070   | 50140   | 33071  | 83211   |
| Tripura                       | 15966                   | 13177   | 17590    | 46733     | 2934   | 541    | 3475      | 145    | 5424   | 5569    | 6160    | 2488   | 8648    |
| Uttar Pradesh                 | 70373                   | 48892   | 59799    | 179064    | 11316  | 3148   | 14464     | 12718  | 3100   | 15818   | 10571   | 6794   | 17365   |
| Uttarakhand                   | 32                      | 23      | 35       | 90        | 43     | 9      | 52        | 109    | 73     | 182     | 103     | 23     | 126     |
| West Bengal                   | 587214                  | 205198  | 119210   | 911622    | 267944 | N.A.   | 267944    | 446517 | N.A.   | 446517  | 364618  | N.A.   | 364618  |
| Andaman & Nicobar<br>Islands  | 9859                    | 7693    | N.A.     | 17552     | 2630   | N.A.   | 2630      | 7191   | N.A.   | 7191    | 746     | 429    | 1175    |
| Chandigarh                    | 198                     | 109     | 172      | 479       | 168    | 18     | 186       | 97     | 44     | 141     | 344     | 7      | 351     |
| Dadra & Nagar<br>Haveli       | N.A.                    | N.A.    | N.A.     | N.A.      | N.A.   | N.A.   | N.A.      | N.A.   | N.A.   | N.A.    | N.A.    | N.A.   | N.A.    |
| Daman & Diu                   | 7649                    | 7756    | 10080    | 25485     | 4104   | 22     | 4126      | 895    | 481    | 1376    | 291     | 1341   | 1632    |
| Delhi                         | 485                     | 475     | 1555     | 2515      | 253    | N.A.   | 253       | 262    | 8      | 270     | 184     | N.A.   | 184     |
| Lakshadweep                   | 10408                   | 2621    | N.A.     | 13029     | 4231   | 19     | 4250      | 2807   | 1003   | 3810    | 1448    | N.A.   | 1448    |
| Puducherry                    | 12378                   | 12799   | 12797    | 37974     | 4352   | 339    | 4691      | 2187   | 399    | 2586    | 3613    | 4416   | 8029    |
| Total                         | 4696158                 | 4033963 | 5755233  | 14485354  | 814951 | 118173 | 933124    | 919776 | 152303 | 1072079 | 1017015 | 367467 | 1384484 |

Note : N.A.: Not Available.

Source : 1. *Indian Livestock Census, 2003*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
(Website: <http://www.dahd.nic.in>).

2. *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
(Website: <http://www.dahd.nic.in>).

**Table 3.20: State-wise marine fisheries resources**

| States / Union Territories | Approx. length of coast line (kms) | Continental shelf (000' sq kms) | Number of landing centers | Number of fishing villages | No. of fishermen families | Fisher folk population |
|----------------------------|------------------------------------|---------------------------------|---------------------------|----------------------------|---------------------------|------------------------|
| Andhra Pradesh             | 974                                | 33                              | 353                       | 555                        | 163427                    | 605428                 |
| Goa                        | 104                                | 10                              | 33                        | 39                         | 2189                      | 10545                  |
| Gujarat                    | 1600                               | 184                             | 121                       | 247                        | 62231                     | 336181                 |
| Karnataka                  | 300                                | 27                              | 96                        | 144                        | 30713                     | 167429                 |
| Kerala                     | 590                                | 40                              | 187                       | 222                        | 118937                    | 610165                 |
| Maharashtra                | 720                                | 112                             | 152                       | 456                        | 81492                     | 386259                 |
| Odisha                     | 480                                | 26                              | 73                        | 813                        | 114238                    | 605514                 |
| Tamil Nadu                 | 1076                               | 41                              | 407                       | 573                        | 192697                    | 802912                 |
| West Bengal*               | 158                                | 17                              | 59                        | 188                        | 76981                     | 380138                 |
| A & N Islands              | 1912                               | 35                              | 16                        | 134                        | 4861                      | 22188                  |
| Daman & Diu                | 27                                 | N.A.                            | 5                         | 11                         | 7374                      | 40016                  |
| Lakshadweep                | 132                                | 4                               | 10                        | 10                         | 5338                      | 34811                  |
| Puducherry                 | 45                                 | 1                               | 25                        | 40                         | 14271                     | 54627                  |
| <b>Total</b>               | <b>8118</b>                        | <b>530</b>                      | <b>1537</b>               | <b>3432</b>                | <b>874749</b>             | <b>4056213</b>         |

**Note** : 1. N.A.: Not Available, 2. \*: Subsequent reference to villages actually means Gram Panchayat in West Bengal.

**Source** : *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

**Table 3.21: State-wise brackish water area and productivity**

| States/Union Territories  | Total brackish water area (ha) | Area under culture through BFDA (ha) | Productivity (kg/ha/annum) |
|---------------------------|--------------------------------|--------------------------------------|----------------------------|
| Andhra Pradesh            | 60,000                         | 846                                  | 680                        |
| Goa                       | Neg.                           | 574                                  | 2000                       |
| Gujarat                   | 1,00,000                       | 968                                  | 1276                       |
| Karnataka                 | 10,000                         | 3022                                 | 1826                       |
| Kerala                    | 2,40,000                       | 4589                                 | 1700                       |
| Maharashtra               | 10,000                         | 1539                                 | 600                        |
| Odisha                    | 4,30,000                       | 14670                                | 1300                       |
| Tamil Nadu                | 60,000                         | 7548                                 | 2000                       |
| West Bengal               | 2,10,000                       | 5994                                 | 1106                       |
| Puducherry                | Neg.                           | *                                    | N.A.                       |
| Andaman & Nicobar Islands | 1,20,000                       | N.A.                                 | N.A.                       |
| <b>Total</b>              | <b>12,40,000</b>               | <b>39750</b>                         | <b>12488</b>               |

**Note** : 1. N.A.: Not Available, 2. \*: No BFDA sanctioned, 3. Neg.: Negligible.

**Source** : *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).

**Table 3.22: Fish processing industries**

| Facilities  | Number           | Capacity     |
|---|------------------|--------------|
| Preservation, processing including freezing plant | 372              | 52.5 t/day*  |
| Ice making plants                                 | 148              | 1800 t/day*  |
| Cold storage                                      | 450              | 80000 t/day* |
| Fish meal plant                                   | 15               | 330 t/day*   |
| Prawn peeling sheds                               | 900 (Registered) | 2684 t/day*  |

**Note** : \*: Workshop proceeding of NCAER, March 2003.

**Source** : 1. Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.  
2. A profile of people – technological and policies and fisheries sector in India (Workshop Proceedings NCAER, March 2003).

**Table 3.23: State-wise inland fishery resources**

(lakh ha)

| States / Union Territories | Rivers & Canals (kms) | Reservoirs   | Tanks & ponds | Flood plain lakes & derelict water | Brackish water | Total water bodies |
|----------------------------|-----------------------|--------------|---------------|------------------------------------|----------------|--------------------|
| Andhra Pradesh             | 11514                 | 2.34         | 5.17          | N.A.                               | 0.60           | 8.11               |
| Arunachal                  | 2000                  | N.A.         | 2.76          | 0.42                               | N.A.           | 3.18               |
| Assam                      | 4820                  | 0.02         | 0.23          | 1.10                               | N.A.           | 1.35               |
| Bihar                      | 3200                  | 0.60         | 0.95          | 0.05                               | N.A.           | 1.60               |
| Chhattisgarh               | 3573                  | 0.84         | 0.63          | N.A.                               | N.A.           | 1.47               |
| Goa                        | 250                   | 0.03         | 0.03          | N.A.                               | Neg.           | 0.06               |
| Gujarat                    | 3865                  | 2.43         | 0.71          | 0.12                               | 1.00           | 4.26               |
| Haryana                    | 5000                  | Neg.         | 0.10          | 0.10                               | N.A.           | 0.20               |
| Himachal Pradesh           | 3000                  | 0.42         | 0.01          | N.A.                               | N.A.           | 0.43               |
| Jammu & Kashmir            | 27781                 | 0.07         | 0.17          | 0.06                               | N.A.           | 0.30               |
| Jharkhand                  | 4200                  | 0.94         | 0.29          | N.A.                               | N.A.           | 1.23               |
| Karnataka                  | 9000                  | 4.40         | 2.90          | N.A.                               | 0.10           | 7.40               |
| Kerala                     | 3092                  | 0.30         | 0.30          | 2.43                               | 2.40           | 5.43               |
| Madhya Pradesh             | 17088                 | 2.27         | 0.60          | N.A.                               | N.A.           | 2.87               |
| Maharashtra                | 16000                 | 2.99         | 0.72          | N.A.                               | 0.12           | 3.83               |
| Manipur                    | 3360                  | 0.01         | 0.05          | 0.04                               | N.A.           | 0.10               |
| Meghalaya                  | 5600                  | 0.08         | 0.02          | Neg.                               | N.A.           | 0.10               |
| Mizoram                    | 1395                  | N.A.         | 0.02          | N.A.                               | N.A.           | 0.02               |
| Nagaland                   | 1600                  | 0.17         | 0.50          | Neg.                               | N.A.           | 0.67               |
| Odisha                     | 4500                  | 2.56         | 1.23          | 1.80                               | 4.30           | 9.89               |
| Punjab                     | 15270                 | Neg.         | 0.07          | N.A.                               | N.A.           | 0.07               |
| Rajasthan                  | 5290                  | 1.20         | 1.80          | N.A.                               | N.A.           | 3.00               |
| Sikkim                     | 900                   | N.A.         | N.A.          | 0.03                               | N.A.           | 0.03               |
| Tamil Nadu                 | 7420                  | 5.70         | 0.56          | 0.07                               | 0.60           | 6.93               |
| Tripura                    | 1200                  | 0.05         | 0.13          | N.A.                               | N.A.           | 0.18               |
| Uttar Pradesh              | 28500                 | 1.38         | 1.61          | 1.33                               | N.A.           | 4.32               |
| Uttarakhand                | 2686                  | 0.20         | 0.01          | 0.00                               | N.A.           | 0.21               |
| West Bengal                | 2526                  | 0.17         | 2.76          | 0.42                               | 2.10           | 5.45               |
| Andaman & Nicobar Islands  | N.A.                  | 0.004        | 0.002         | N.A.                               | 0.33           | 0.34               |
| Chandigarh                 | 2                     | N.A.         | Neg.          | Neg.                               | N.A.           | 0.00               |
| Dadra & Nagar Haveli       | 54                    | 0.05         | N.A.          | N.A.                               | N.A.           | 0.05               |
| Daman & Diu                | 12                    | N.A.         | Neg.          | N.A.                               | Neg.           | 0.00               |
| Delhi                      | 150                   | 0.04         | N.A.          | N.A.                               | N.A.           | 0.04               |
| Lakshadweep                | N.A.                  | N.A.         | N.A.          | N.A.                               | N.A.           | 0.00               |
| Puducherry                 | 247                   | N.A.         | Neg.          | 0.01                               | Neg.           | 0.01               |
| <b>Total</b>               | <b>195095</b>         | <b>29.26</b> | <b>24.33</b>  | <b>7.98</b>                        | <b>11.55</b>   | <b>73.12</b>       |

Note : 1. N.A.: Not Available, 2. Neg.: Negligible.

Source : *Basic Animal Husbandry & Fisheries Statistics, 2015*, Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi, (Website: <http://www.dahd.nic.in>).

**Table 3.24: Outlays and expenditure for fishery development over different plan periods**

(Rs. crores)

| Plan                               | Outlay/<br>Expenditure | Central sector<br>scheme | Centrally<br>sponsored<br>schemes | State schemes | Total     |
|------------------------------------|------------------------|--------------------------|-----------------------------------|---------------|-----------|
| <b>First Plan<br/>(1951-56)</b>    | Outlay                 | 1.00                     | @                                 | 4.13          | 5.13      |
|                                    | Exp.                   | 0.38                     | @                                 | 2.40          | 2.78      |
| <b>Second Plan<br/>(1956-61)</b>   | Outlay                 | 3.73                     | @                                 | 8.53          | 12.26     |
|                                    | Exp.                   | 1.80                     | @                                 | 7.26          | 9.06      |
| <b>Third Plan<br/>(1961-66)</b>    | Outlay                 | 6.72                     | @                                 | 21.55         | 28.27     |
|                                    | Exp.                   | 3.03                     | @                                 | 20.29         | 23.32     |
| <b>Annual Plan<br/>(1966-69)</b>   | Outlay                 | 15.30                    | @                                 | 26.91         | 42.21     |
|                                    | Exp.                   | 9.04                     | @                                 | 23.63         | 32.67     |
| <b>Fourth Plan<br/>(1969-74)</b>   | Outlay                 | 28.00                    | 6.00                              | 48.68         | 82.68     |
|                                    | Exp.                   | 8.11                     | 5.17                              | 40.83         | 54.11     |
| <b>Fifth Plan<br/>(1974-79)</b>    | Outlay                 | 51.05                    | 17.00                             | 83.19         | 151.24    |
|                                    | Exp.                   | 39.93                    | 4.07                              | 71.11         | 115.11    |
| <b>Sixth Plan<br/>(1980-85)</b>    | Outlay                 | 137.10                   | 36.62                             | 197.42        | 371.14    |
|                                    | Exp.                   | 75.54                    | 28.80                             | 182.61        | 286.95    |
| <b>Seventh Plan<br/>(1985-90)</b>  | Outlay                 | 156.58                   | 60.75                             | 329.19        | 546.52    |
|                                    | Exp.                   | 116.93                   | 53.26                             | 307.40        | 477.59    |
| <b>Annual Plan<br/>(1990-92)</b>   | Outlay                 | 25.45                    | 55.16                             | 212.13        | 292.74    |
|                                    | Exp.                   | 16.48                    | 43.73                             | 211.90        | 272.11    |
| <b>Eighth Plan<br/>(1992-97)</b>   | Outlay                 | 139.00                   | 300.00                            | 766.39        | 1205.39   |
|                                    | Exp.                   | 161.01                   | 268.02                            | 689.43        | 1118.46   |
| <b>Ninth Plan<br/>(1997-02)</b>    | Outlay                 | 240.00                   | 560.00                            | 1269.78       | 2069.78   |
|                                    | Exp.                   | 124.97                   | 273.18                            | 1016.26       | 1414.41   |
| <b>Tenth Plan<br/>(2002-07)</b>    | Outlay                 | 417.36                   | 388.50                            | 1198.16       | 2004.02   |
|                                    | Exp.                   | 223.25                   | 397.17                            | 1188.51       | 1808.93   |
| <b>Eleventh Plan<br/>(2007-12)</b> | Outlay                 | 1946.00                  | 830.00                            | 419.69        | 6945.06   |
|                                    | Exp.                   | 635.92                   | 576.31                            | 2419.69       | 3631.92   |
| <b>Twelfth Plan</b>                | Outlay                 | 2483.00                  |                                   |               | 2483.00** |
|                                    | Exp.*                  | —————                    | 616.46                            | —————         | N.A.      |

**Note :** 1. Figures for Seventh Plan include the figures for Fishery Survey of India and Trawler Development Fund which were transferred to Ministry of Food Processing Industries, 2. @: Figures given under Central Sector include those of Centrally Sponsored Schemes, 3. \*\*: Includes NFDB, Database, Welfare Schemes and Fisheries Institutes., 4. \*: Exp. Up to 2013-14.

**Source :** *Handbook on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairy and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://www.dahd.nic.in>).





भाग-IV  
बागवानी

SECTION-IV  
Horticulture







**Table 4.1: All India area, production and productivity of horticulture crops**

(Area: '000 ha, Production: '000 t, Productivity: t/ha)

| Year     | Fruits |            |              | Vegetables |            |              | Flowers & Aromatics |            |              |
|----------|--------|------------|--------------|------------|------------|--------------|---------------------|------------|--------------|
|          | Area   | Production | Productivity | Area       | Production | Productivity | Area                | Production | Productivity |
| 2001-02  | 4010   | 43001      | 10.72        | 6156       | 88622      | 14.40        | 106                 | 535        | 5.05         |
| 2002-03  | 3788   | 45203      | 11.93        | 6092       | 84815      | 13.92        | 70                  | 735        | 10.50        |
| 2003-04  | 4661   | 45942      | 9.86         | 6082       | 88334      | 14.52        | 101                 | 580        | 5.74         |
| 2004-05  | 5049   | 50867      | 10.07        | 6744       | 101246     | 15.01        | 118                 | 659        | 5.58         |
| 2005-06  | 5324   | 55356      | 10.40        | 7213       | 111399     | 15.44        | 129                 | 654        | 5.07         |
| 2006-07  | 5554   | 59563      | 10.72        | 7581       | 114993     | 15.17        | 144                 | 880        | 6.11         |
| 2007-08  | 5857   | 65587      | 11.20        | 7848       | 128449     | 16.37        | 166                 | 868        | 5.23         |
| 2008-09  | 6101   | 68466      | 11.22        | 7981       | 129077     | 16.17        | 167                 | 987        | 5.91         |
| 2009-10  | 6329   | 71516      | 11.30        | 7985       | 133738     | 16.75        | 183                 | 1021       | 5.58         |
| 2010-11  | 6383   | 74878      | 11.73        | 8495       | 146554     | 17.25        | 191                 | 1031       | 5.40         |
| 2011-12  | 6705   | 76424      | 11.40        | 8989       | 156325     | 17.39        | 760                 | 2218       | 2.92         |
| 2012-13  | 6982   | 81285      | 11.64        | 9205       | 162187     | 17.62        | 790                 | 2647       | 3.35         |
| 2013-14  | 7216   | 88977      | 12.33        | 9396       | 162897     | 17.34        | 748                 | 3192       | 4.27         |
| 2014-15* | 6358   | 88819      | 13.97        | 9541       | 168300     | 17.64        | 816                 | 3233       | 3.96         |

Continued...

| Year     | Plantation crops |            |              | Spices |            |              | Total |            |              |
|----------|------------------|------------|--------------|--------|------------|--------------|-------|------------|--------------|
|          | Area             | Production | Productivity | Area   | Production | Productivity | Area  | Production | Productivity |
| 2001-02  | 2984             | 9697       | 3.25         | 3220   | 3765       | 1.17         | 16592 | 145785     | 8.79         |
| 2002-03  | 2984             | 9697       | 3.25         | 3220   | 3765       | 1.17         | 16270 | 144380     | 8.87         |
| 2003-04  | 3102             | 13161      | 4.24         | 5155   | 5113       | 0.99         | 19208 | 153302     | 7.98         |
| 2004-05  | 3147             | 9835       | 3.13         | 3150   | 4001       | 1.27         | 18445 | 166939     | 9.05         |
| 2005-06  | 3283             | 11263      | 3.43         | 2366   | 3705       | 1.57         | 18707 | 182816     | 9.77         |
| 2006-07  | 3207             | 12007      | 3.74         | 2448   | 3953       | 1.61         | 19389 | 191813     | 9.89         |
| 2007-08  | 3190             | 11300      | 3.54         | 2617   | 4357       | 1.66         | 20207 | 211235     | 10.45        |
| 2008-09  | 3217             | 11336      | 3.52         | 2629   | 4145       | 1.58         | 20662 | 214716     | 10.39        |
| 2009-10  | 3265             | 11928      | 3.65         | 2464   | 4016       | 1.63         | 20876 | 223089     | 10.69        |
| 2010-11  | 3306             | 12007      | 3.63         | 2940   | 5350       | 1.82         | 21825 | 240531     | 11.02        |
| 2011-12  | 3577             | 16359      | 4.57         | 3212   | 5951       | 1.85         | 23243 | 257277     | 11.07        |
| 2012-13  | 3641             | 16985      | 4.66         | 3076   | 5744       | 1.87         | 23694 | 268848     | 11.35        |
| 2013-14  | 3675             | 16301      | 4.44         | 3163   | 5908       | 1.87         | 24198 | 277352     | 11.46        |
| 2014-15* | 3538             | 17131      | 4.84         | 3163   | 5908       | 1.87         | 23417 | 283468     | 12.11        |

Note : 1. \* 2<sup>nd</sup> Advance estimate.Source : 1. 2001-02 to 2010-11: *Indian Horticulture Database*, National Horticulture Board.2. 2011-12 to 2014-15: Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

**Table 4.2: State-wise area and production of fruit crops**

(Area: 000' ha, Production: 000't)

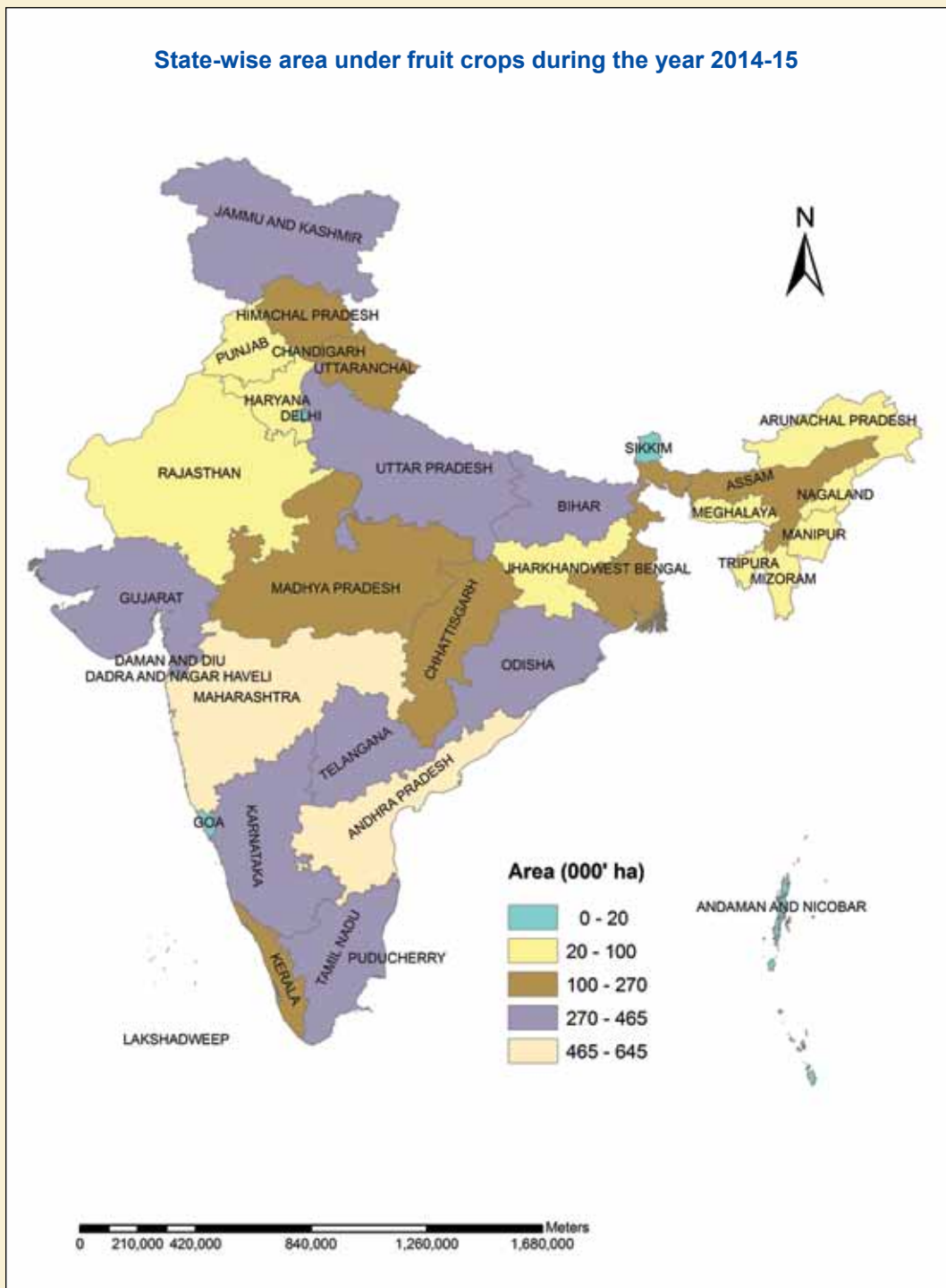
| States/<br>Union Territories | 2012-13        |                 | 2013-14        |                 | 2014-15*       |                 |
|------------------------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
|                              | Area           | Production      | Area           | Production      | Area           | Production      |
| Andaman & Nicobar            | 3.25           | 30.73           | 3.55           | 29.73           | 3.58           | 33.88           |
| Andhra Pradesh               | 940.74         | 13939.08        | 640.05         | 10510.56        | 642.29         | 10114.15        |
| Arunachal Pradesh            | 86.86          | 312.24          | 89.09          | 321.26          | 90.00          | 331.40          |
| Assam                        | 150.71         | 2073.82         | 144.68         | 2007.80         | 155.51         | 2242.74         |
| Bihar                        | 301.45         | 4249.19         | 302.07         | 4013.58         | 303.95         | 3999.49         |
| Chhattisgarh                 | 195.61         | 1702.32         | 212.89         | 1930.18         | 226.50         | 2065.47         |
| Goa                          | 11.16          | 80.90           | 11.28          | 81.19           | 11.34          | 81.78           |
| Gujarat                      | 381.50         | 8413.17         | 370.76         | 8001.96         | 370.76         | 8001.96         |
| Haryana                      | 49.53          | 516.07          | 50.59          | 554.90          | 52.53          | 650.00          |
| Himachal Pradesh             | 218.03         | 555.71          | 220.71         | 866.34          | 220.71         | 722.98          |
| Jammu & Kashmir              | 347.22         | 1742.14         | 355.21         | 2073.94         | 359.09         | 1542.68         |
| Jharkhand                    | 93.01          | 889.74          | 94.03          | 890.04          | 94.14          | 898.08          |
| Karnataka                    | 388.20         | 6619.60         | 396.00         | 6652.42         | 407.27         | 6941.88         |
| Kerala                       | 314.56         | 2583.92         | 376.95         | 2889.50         | 263.51         | 2385.79         |
| Lakshadweep                  | 0.22           | 0.48            | 0.22           | 0.48            | 0.22           | 0.48            |
| Madhya Pradesh               | 195.36         | 5450.00         | 203.79         | 5696.00         | 214.38         | 5971.00         |
| Maharashtra                  | 1549.00        | 9785.00         | 1565.00        | 13457.92        | 606.94         | 9756.63         |
| Manipur                      | 51.93          | 440.59          | 54.05          | 515.69          | 55.61          | 532.97          |
| Meghalaya                    | 33.15          | 316.57          | 35.30          | 348.00          | 36.01          | 375.83          |
| Mizoram                      | 49.68          | 292.95          | 57.55          | 343.90          | 66.14          | 386.62          |
| Nagaland                     | 37.23          | 275.95          | 40.56          | 411.00          | 40.56          | 411.00          |
| Odisha                       | 329.38         | 2210.42         | 325.86         | 2148.27         | 325.76         | 2134.60         |
| Puducherry                   | 0.48           | 9.34            | 0.64           | 12.58           | 0.56           | 14.17           |
| Punjab                       | 74.89          | 1502.52         | 76.59          | 1541.24         | 78.70          | 1742.97         |
| Rajasthan                    | 46.52          | 716.82          | 37.40          | 581.78          | 38.61          | 618.98          |
| Sikkim                       | 14.65          | 24.02           | 16.02          | 24.05           | 17.59          | 26.42           |
| Tamil Nadu                   | 309.94         | 6699.88         | 328.55         | 7369.86         | 344.97         | 8107.39         |
| Telangana**                  | -              | -               | 364.48         | 4440.98         | 370.56         | 5565.84         |
| Tripura                      | 60.12          | 697.87          | 68.38          | 786.35          | 67.27          | 563.50          |
| Uttar Pradesh                | 326.18         | 5176.14         | 378.97         | 6887.45         | 462.76         | 8541.60         |
| Uttarakhand                  | 200.85         | 805.67          | 171.62         | 678.49          | 202.22         | 758.31          |
| West Bengal                  | 220.60         | 3172.50         | 223.50         | 2909.71         | 228.25         | 3298.70         |
| <b>Total</b>                 | <b>6982.02</b> | <b>81285.33</b> | <b>7216.31</b> | <b>88977.14</b> | <b>6358.27</b> | <b>88819.26</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

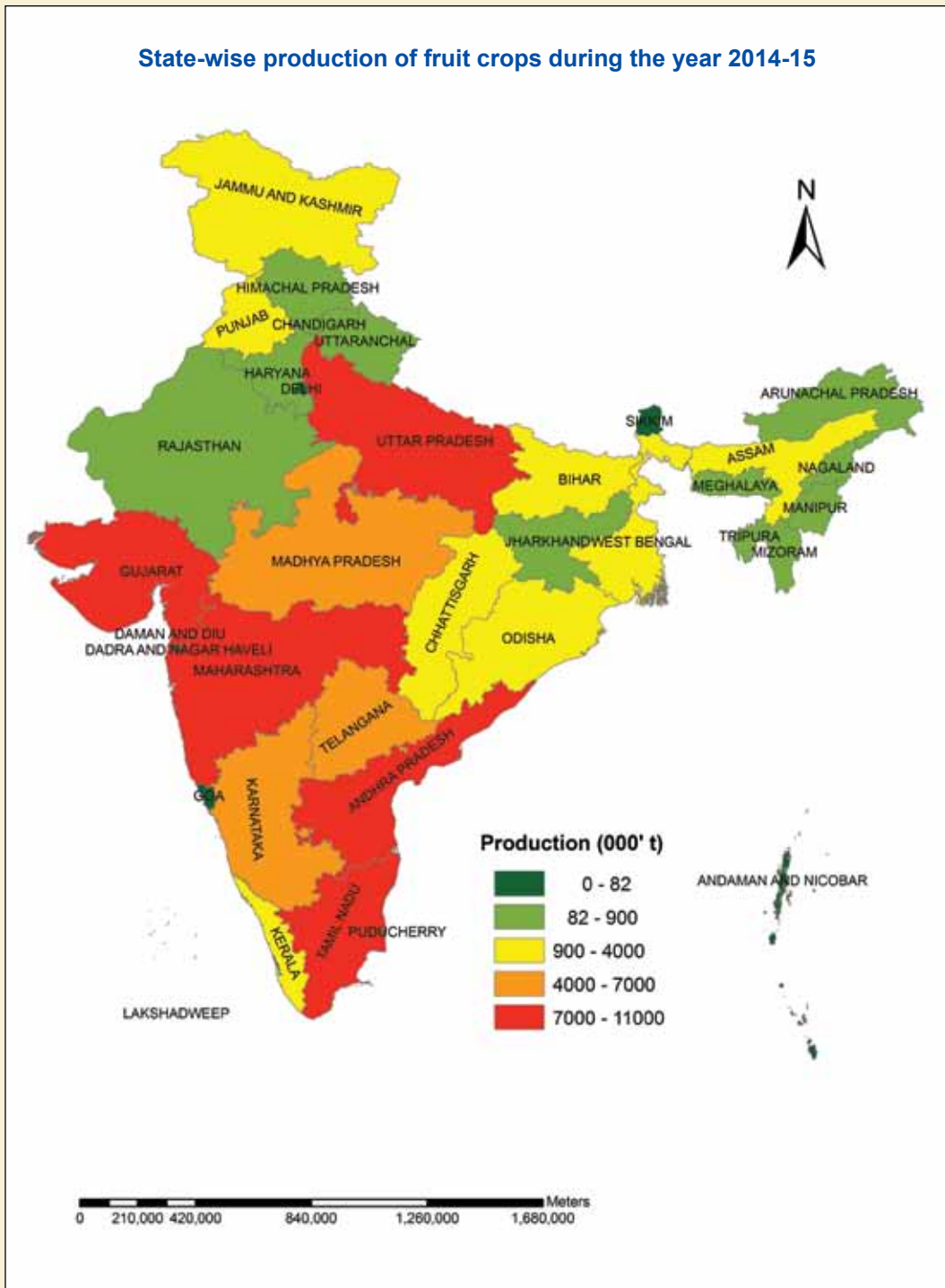
\*\* Estimates for Telangana for 2013-14, although it was part of Andhra Pradesh for majority of the period.

Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

State-wise area under fruit crops during the year 2014-15



State-wise production of fruit crops during the year 2014-15



**Table 4.3: State-wise area and production of vegetables**

(Area: 000' ha, Production: 000't)

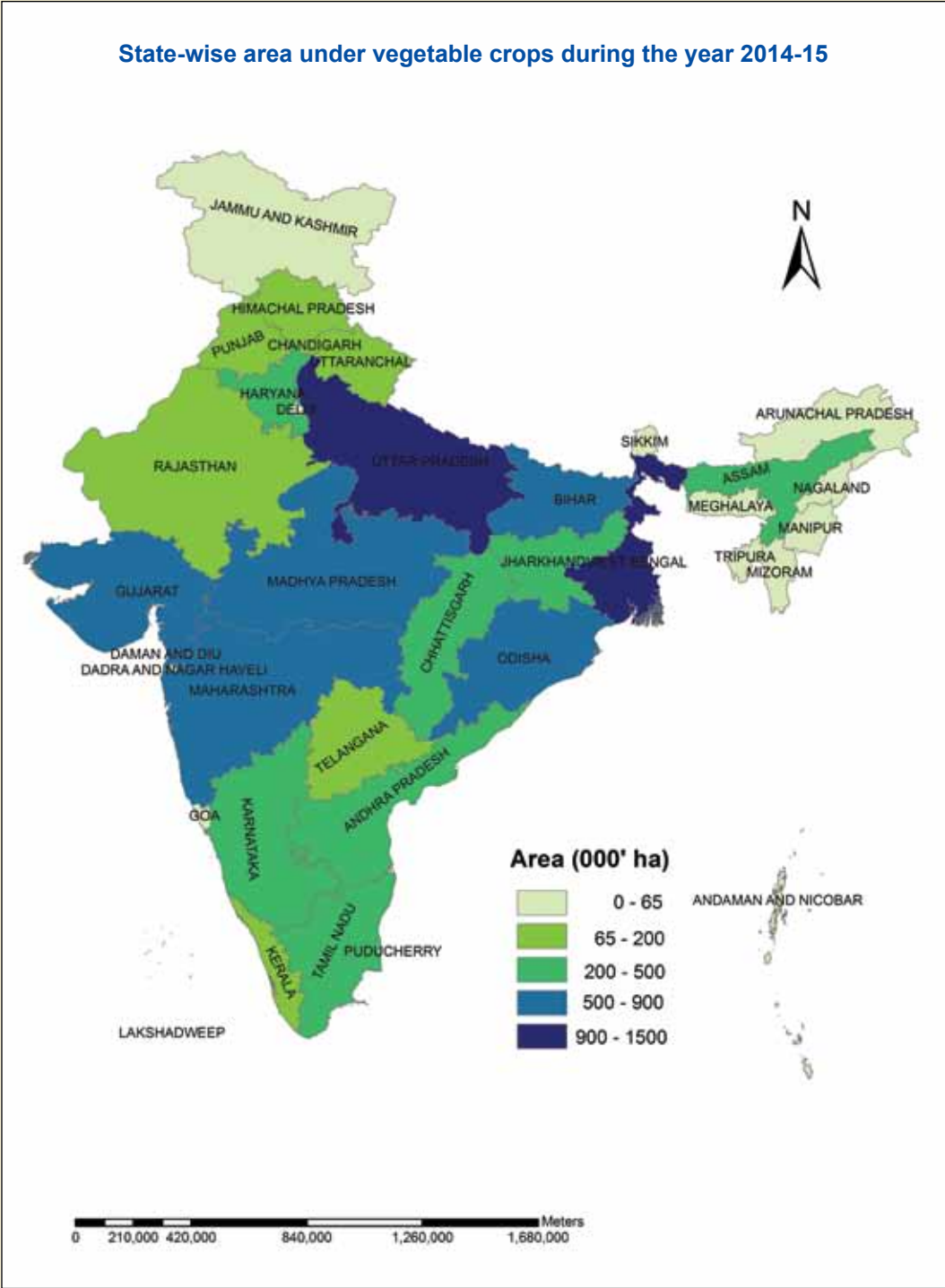
| States/<br>Union Territories | 2012-13        |                  | 2013-14        |                  | 2014-15*       |                  |
|------------------------------|----------------|------------------|----------------|------------------|----------------|------------------|
|                              | Area           | Production       | Area           | Production       | Area           | Production       |
| Andaman & Nicobar            | 6.36           | 44.16            | 6.89           | 51.79            | 6.91           | 51.83            |
| Andhra Pradesh               | 686.08         | 12104.65         | 439.64         | 8149.76          | 294.07         | 5458.44          |
| Arunachal Pradesh            | 1.52           | 37.56            | 1.40           | 35.00            | 1.70           | 41.00            |
| Assam                        | 278.74         | 3415.07          | 281.40         | 3031.90          | 337.94         | 4647.79          |
| Bihar                        | 861.79         | 16325.68         | 809.80         | 15097.77         | 842.00         | 14467.15         |
| Chhattisgarh                 | 380.66         | 4993.85          | 403.43         | 5465.92          | 425.07         | 5812.32          |
| Dadra & Nagar Haveli         | 1.10           | 5.50             | 1.10           | 5.50             | 1.10           | 5.50             |
| Delhi                        | 27.92          | 439.32           | 27.30          | 436.95           | 22.50          | 392.65           |
| Goa                          | 6.65           | 80.51            | 7.00           | 79.92            | 7.20           | 81.94            |
| Gujarat                      | 537.64         | 10520.69         | 582.28         | 11571.24         | 578.35         | 11543.29         |
| Haryana                      | 360.33         | 5011.31          | 373.17         | 5565.90          | 375.00         | 5805.80          |
| Himachal Pradesh             | 79.46          | 1521.13          | 86.60          | 1635.88          | 86.60          | 1638.47          |
| Jammu & Kashmir              | 63.06          | 1395.47          | 63.06          | 1395.47          | 63.06          | 1395.47          |
| Jharkhand                    | 321.46         | 4325.38          | 313.61         | 4238.13          | 316.67         | 4279.28          |
| Karnataka                    | 436.60         | 7841.90          | 418.69         | 7500.69          | 462.86         | 8564.77          |
| Kerala                       | 146.05         | 3446.91          | 147.69         | 3572.67          | 115.43         | 2882.51          |
| Lakshadweep                  | 0.25           | 0.33             | 0.25           | 0.33             | 0.25           | 0.33             |
| Madhya Pradesh               | 612.77         | 12574.00         | 628.72         | 13019.31         | 649.82         | 13479.30         |
| Maharashtra                  | 474.00         | 8008.00          | 726.00         | 10161.83         | 599.86         | 8289.01          |
| Manipur                      | 21.73          | 219.82           | 25.19          | 271.04           | 27.58          | 288.44           |
| Meghalaya                    | 40.45          | 403.37           | 43.60          | 515.34           | 44.60          | 534.00           |
| Mizoram                      | 39.33          | 236.68           | 41.10          | 254.14           | 45.78          | 284.81           |
| Nagaland                     | 26.01          | 207.74           | 38.55          | 492.37           | 38.55          | 492.37           |
| Odisha                       | 688.14         | 9463.99          | 677.33         | 9433.66          | 670.35         | 9372.13          |
| Puducherry                   | 1.46           | 25.00            | 0.90           | 16.26            | 2.08           | 18.84            |
| Punjab                       | 184.10         | 3782.61          | 191.02         | 3936.19          | 196.52         | 4054.08          |
| Rajasthan                    | 224.43         | 873.50           | 148.88         | 1114.07          | 163.76         | 1237.49          |
| Sikkim                       | 25.56          | 132.51           | 26.11          | 134.53           | 26.12          | 134.92           |
| Tamil Nadu                   | 277.78         | 7897.93          | 289.74         | 8678.82          | 305.29         | 9584.29          |
| Telangana**                  | -              | -                | 220.94         | 3647.28          | 165.35         | 2740.80          |
| Tripura                      | 45.10          | 754.05           | 46.69          | 780.52           | 35.57          | 606.08           |
| Uttar Pradesh                | 912.66         | 19571.56         | 859.38         | 18544.96         | 1097.05        | 24515.36         |
| Uttarakhand                  | 88.03          | 1059.57          | 88.28          | 1016.83          | 90.98          | 1082.97          |
| West Bengal                  | 1347.96        | 25466.81         | 1380.30        | 23044.95         | 1445.50        | 24516.95         |
| <b>Total</b>                 | <b>9205.19</b> | <b>162186.57</b> | <b>9396.05</b> | <b>162896.91</b> | <b>9541.43</b> | <b>168300.38</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

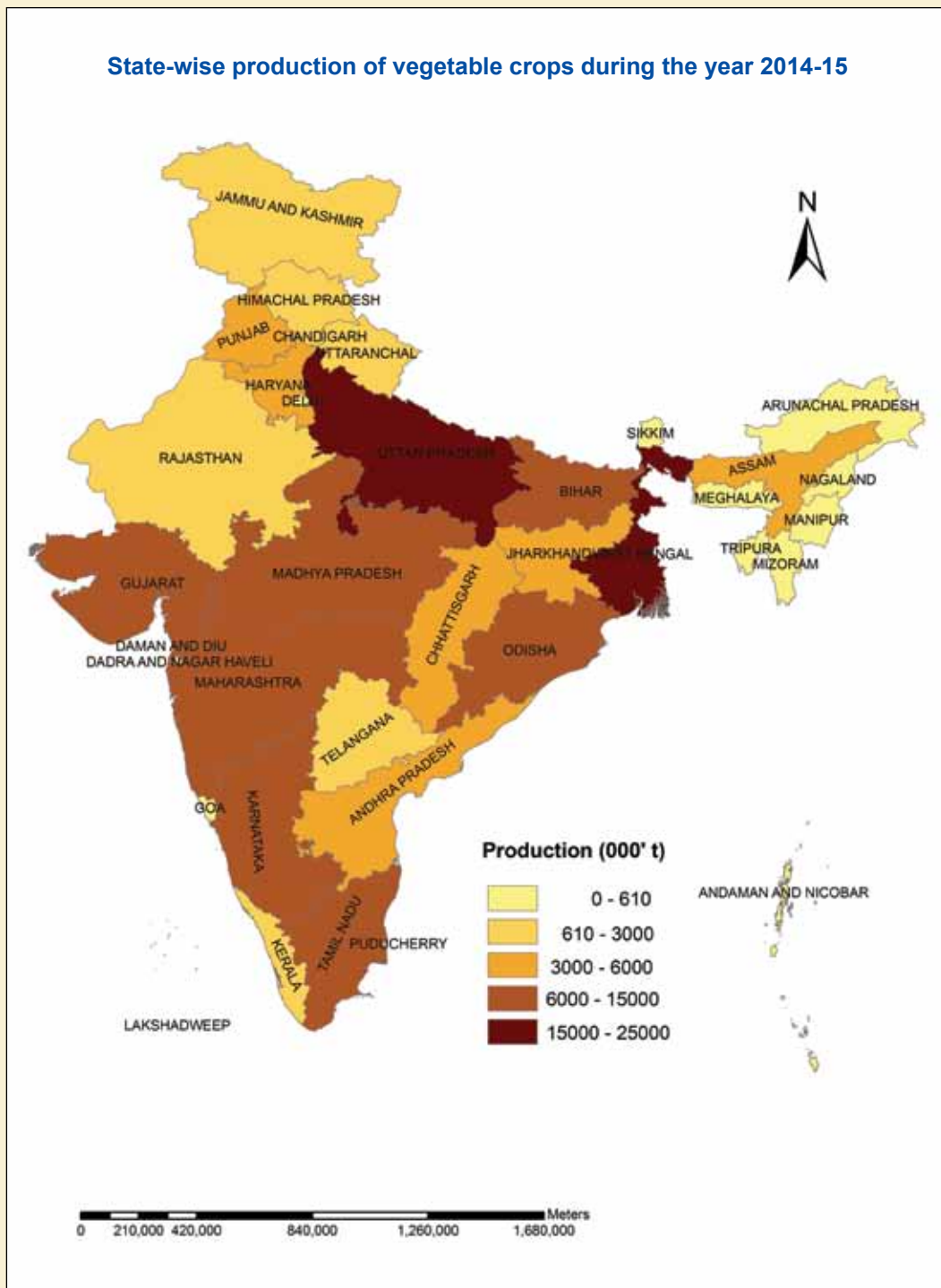
\*\* Estimates for Telangana for 2013-14, although it was part of Andhra Pradesh for majority of the period.

Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

State-wise area under vegetable crops during the year 2014-15



State-wise production of vegetable crops during the year 2014-15





**Table 4.4: State-wise area and production of Flowers (Loose)**(Area: 000<sup>2</sup> ha, Production: 000<sup>3</sup>t)

| States/<br>Union Territories | 2012-13       |                | 2013-14       |                | 2014-15*      |                |
|------------------------------|---------------|----------------|---------------|----------------|---------------|----------------|
|                              | Area          | Production     | Area          | Production     | Area          | Production     |
| Andaman & Nicobar            | 0.04          | 0.35           | 0.13          | 0.29           | 0.13          | 0.29           |
| Andhra Pradesh               | 34.85         | 224.41         | 20.37         | 136.27         | 21.83         | 159.11         |
| Arunachal Pradesh            | 0.02          | 0.01           | 0.02          | 0.01           | 0.02          | 0.01           |
| Assam                        | 1.80          | 11.70          | 3.00          | 20.00          | 3.03          | 20.20          |
| Bihar                        | 1.02          | 10.15          | 0.82          | 7.63           | 1.43          | 13.68          |
| Chhattisgarh                 | 9.79          | 37.75          | 10.13         | 45.73          | 10.96         | 50.03          |
| Delhi                        | 5.50          | 5.70           | 5.50          | 5.70           | 5.50          | 5.70           |
| Goa                          | 0.00          | 0.00           | 0.01          | 0.02           | 0.01          | 0.03           |
| Gujarat                      | 17.27         | 149.27         | 17.30         | 163.60         | 17.30         | 163.60         |
| Haryana                      | 6.47          | 64.72          | 6.48          | 65.45          | 6.70          | 70.00          |
| Himachal Pradesh             | 0.91          | 37.71          | 0.82          | 28.14          | 0.82          | 28.14          |
| Jammu & Kashmir              | 0.85          | 0.40           | 0.75          | 0.42           | 0.46          | 0.34           |
| Jharkhand                    | 1.60          | 22.03          | 1.60          | 22.03          | 1.60          | 22.03          |
| Karnataka                    | 29.70         | 207.50         | 30.60         | 211.50         | 30.90         | 220.00         |
| Kerala                       | 0.00          | 0.00           | 0.00          | 0.00           | 13.37         | 0.05           |
| Madhya Pradesh               | 16.52         | 193.00         | 17.06         | 200.39         | 17.75         | 206.00         |
| Maharashtra                  | 22.00         | 119.00         | 23.00         | 122.65         | 23.00         | 122.65         |
| Manipur                      | 0.00          | 0.00           | 0.76          | 0.28           | 0.81          | 0.30           |
| Meghalaya                    | 0.00          | 0.00           | 0.05          | 0.00           | 0.06          | 0.00           |
| Mizoram                      | 0.16          | 166.83         | 0.20          | 171.57         | 0.30          | 180.00         |
| Nagaland                     | 0.01          | 0.00           | 0.01          | 0.00           | 0.01          | 0.00           |
| Odisha                       | 7.52          | 26.16          | 7.44          | 37.40          | 7.50          | 25.86          |
| Puducherry                   | 0.08          | 0.43           | 0.14          | 1.20           | 0.18          | 1.49           |
| Punjab                       | 2.11          | 10.45          | 1.35          | 10.46          | 1.37          | 10.65          |
| Rajasthan                    | 3.43          | 3.72           | 2.53          | 2.73           | 2.71          | 2.91           |
| Sikkim                       | 0.22          | 26.50          | 0.24          | 16.00          | 0.24          | 0.00           |
| Tamil Nadu                   | 28.71         | 312.97         | 55.03         | 343.65         | 97.78         | 377.93         |
| Telangana**                  | -             | -              | 6.89          | 40.68          | 7.46          | 18.82          |
| Uttar Pradesh                | 16.19         | 31.49          | 16.58         | 32.16          | 17.04         | 33.98          |
| Uttarakhand                  | 1.56          | 1.82           | 1.35          | 2.02           | 1.62          | 2.56           |
| West Bengal                  | 24.41         | 65.14          | 24.85         | 66.50          | 25.32         | 68.15          |
| <b>Total</b>                 | <b>232.74</b> | <b>1729.21</b> | <b>255.02</b> | <b>1754.49</b> | <b>317.21</b> | <b>1804.52</b> |

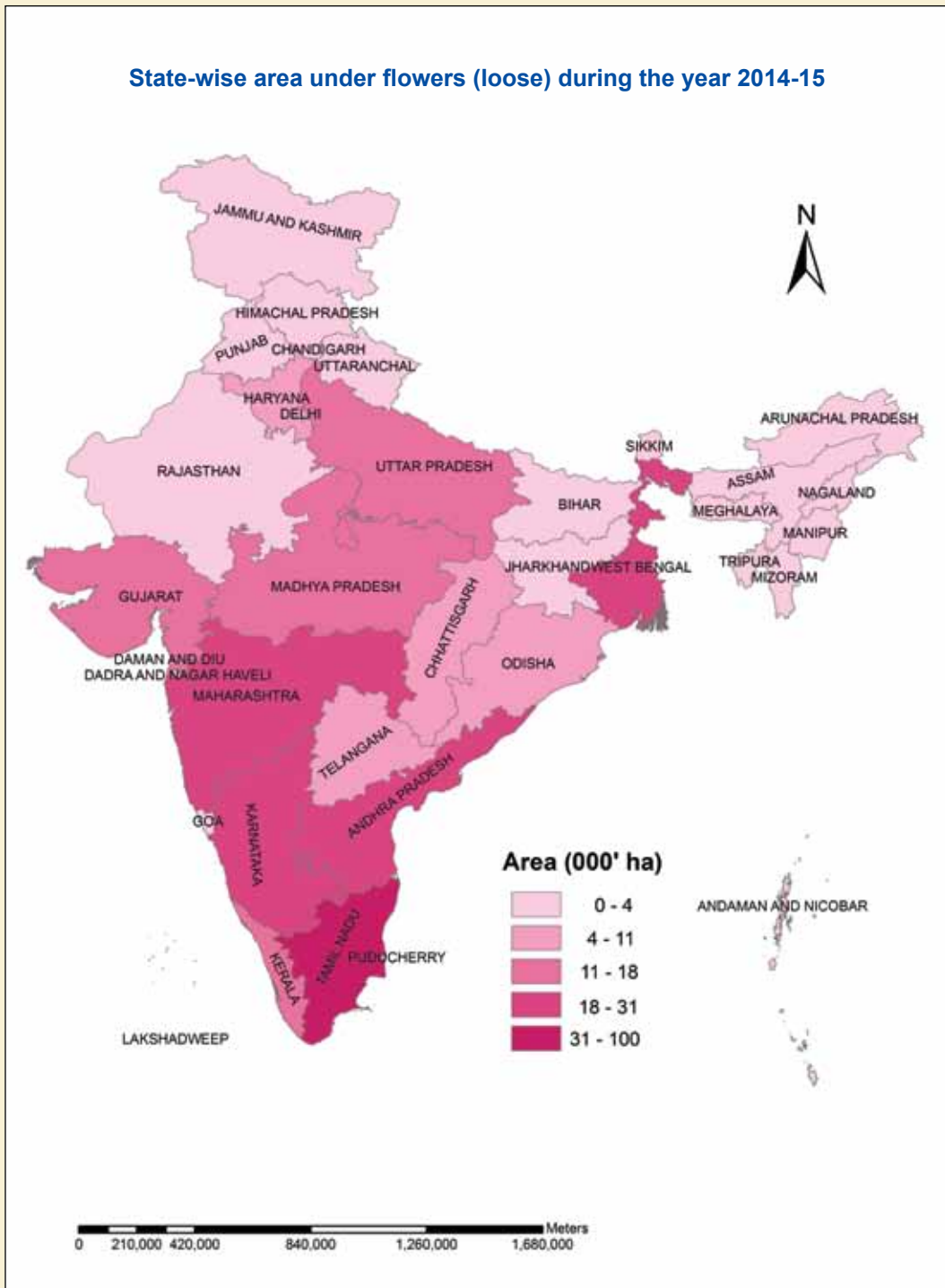
Note : \* 2<sup>nd</sup> Advance Estimate.

\*\* Estimates for Telangana for 2013-14, although it was part of Andhra Pradesh for majority of the period.

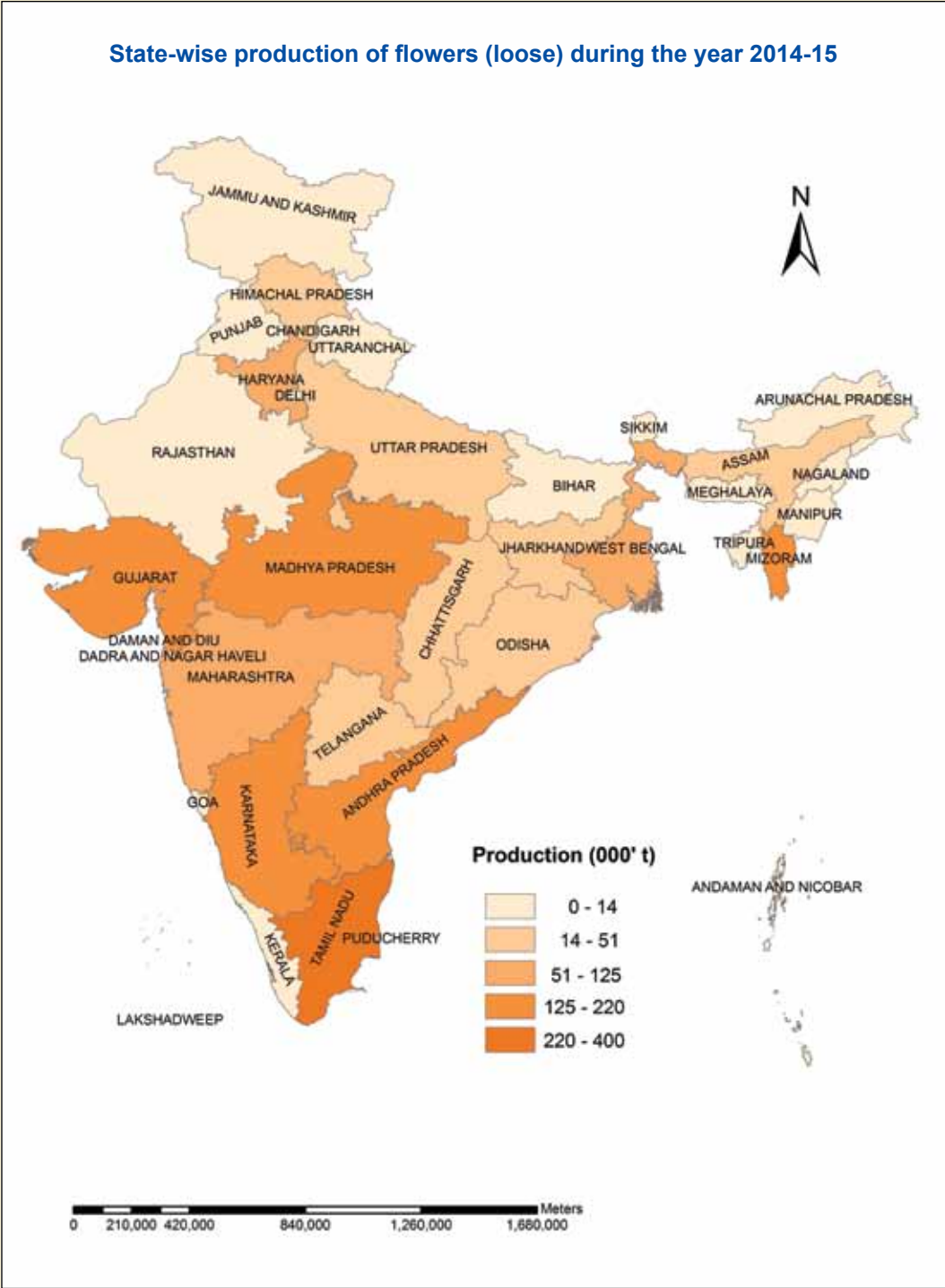
Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).



State-wise area under flowers (loose) during the year 2014-15



State-wise production of flowers (loose) during the year 2014-15



**Table 4.5: State-wise area and production of major Spices in India**

(Area: 000' ha, Production: 000't)

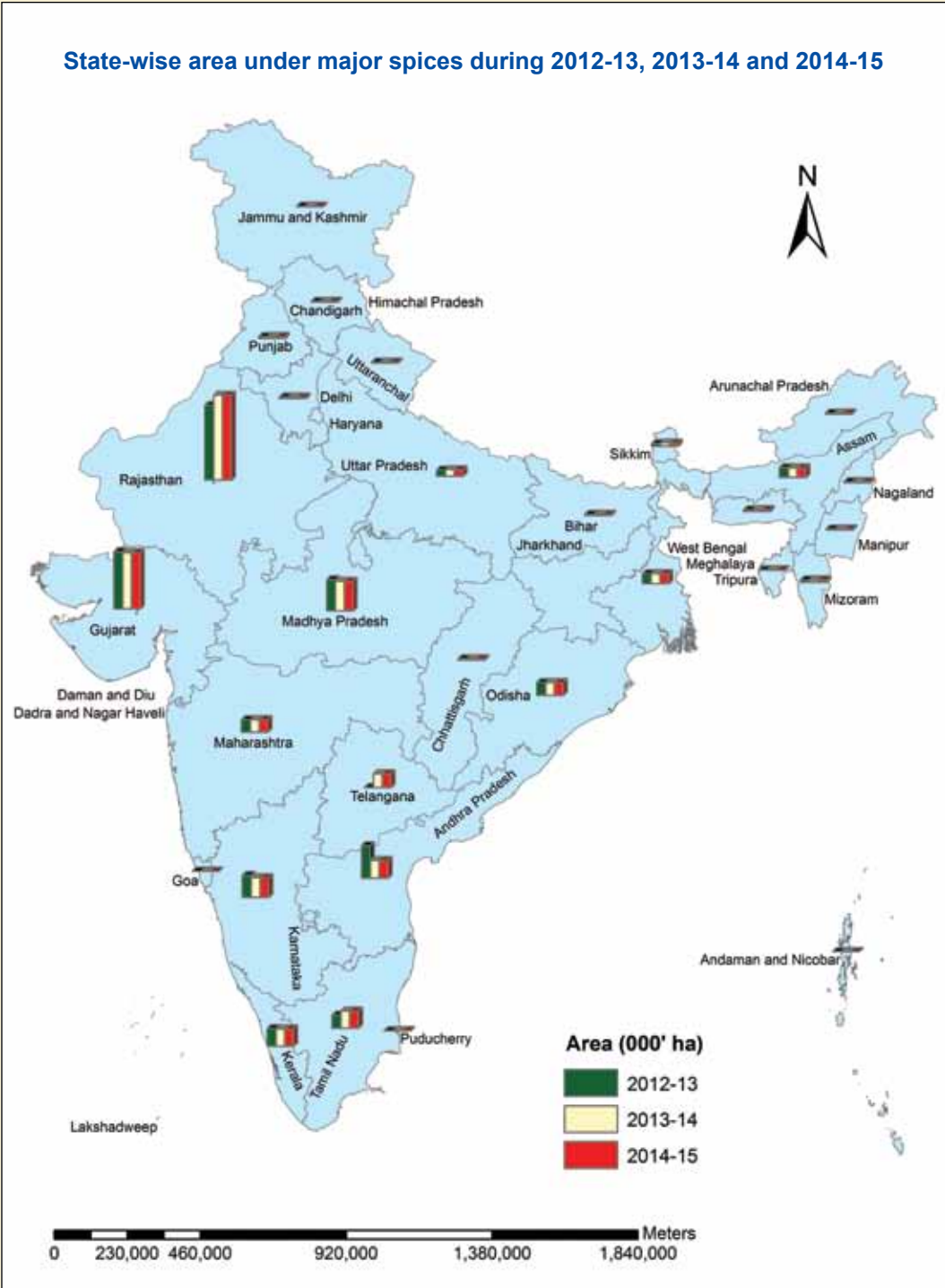
| States/<br>Union Territories | 2012-13        |                | 2013-14        |                | 2014-15*       |                |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                              | Area           | Production     | Area           | Production     | Area           | Production     |
| Andaman & Nicobar            | 1.74           | 3.57           | 1.68           | 3.22           | 1.68           | 3.22           |
| Andhra Pradesh               | 312.62         | 1187.68        | 169.36         | 775.82         | 169.36         | 775.82         |
| Arunachal Pradesh            | 10.17          | 64.27          | 10.17          | 64.27          | 10.17          | 64.27          |
| Assam                        | 96.66          | 287.50         | 93.08          | 279.14         | 93.08          | 279.14         |
| Bihar                        | 13.01          | 12.54          | 13.01          | 12.54          | 13.01          | 12.54          |
| Chhattisgarh                 | 12.31          | 15.37          | 11.80          | 8.30           | 11.80          | 8.30           |
| Goa                          | 0.73           | 0.23           | 0.91           | 0.28           | 0.91           | 0.28           |
| Gujarat                      | 551.68         | 882.14         | 541.82         | 848.48         | 541.82         | 848.48         |
| Haryana                      | 16.13          | 82.82          | 16.13          | 82.82          | 16.13          | 82.82          |
| Himachal Pradesh             | 7.30           | 10.26          | 8.43           | 14.16          | 8.43           | 14.16          |
| Jammu & Kashmir              | 4.14           | 1.07           | 4.94           | 1.07           | 4.94           | 1.07           |
| Karnataka                    | 213.75         | 369.85         | 191.79         | 333.83         | 191.79         | 333.83         |
| Kerala                       | 170.01         | 128.86         | 166.96         | 114.06         | 166.96         | 114.06         |
| Madhya Pradesh               | 299.91         | 461.17         | 284.91         | 454.17         | 284.91         | 454.17         |
| Maharashtra                  | 120.76         | 109.04         | 120.76         | 109.04         | 120.76         | 109.04         |
| Manipur                      | 10.47          | 24.14          | 10.47          | 24.14          | 10.47          | 24.14          |
| Meghalaya                    | 16.85          | 74.81          | 17.50          | 83.88          | 17.50          | 83.88          |
| Mizoram                      | 22.47          | 59.62          | 22.47          | 59.62          | 22.47          | 59.62          |
| Nagaland                     | 9.77           | 39.16          | 9.77           | 39.16          | 9.77           | 39.16          |
| Odisha                       | 123.92         | 181.50         | 123.32         | 181.50         | 123.32         | 181.50         |
| Puducherry                   | 0.03           | 0.03           | 0.09           | 0.38           | 0.09           | 0.38           |
| Punjab                       | 18.37          | 68.21          | 19.13          | 70.92          | 19.13          | 70.92          |
| Rajasthan                    | 720.64         | 860.89         | 819.51         | 674.84         | 819.51         | 674.84         |
| Sikkim                       | 26.56          | 60.08          | 32.06          | 55.80          | 32.06          | 55.80          |
| Tamil Nadu                   | 124.39         | 279.61         | 166.00         | 554.52         | 166.00         | 554.52         |
| Telangana**                  | -              | -              | 134.18         | 551.47         | 134.18         | 551.47         |
| Tripura                      | 5.69           | 18.04          | 5.69           | 18.04          | 5.69           | 18.04          |
| Uttar Pradesh                | 60.18          | 212.32         | 61.66          | 244.02         | 61.66          | 244.02         |
| Uttarakhand                  | 8.09           | 41.08          | 8.09           | 41.08          | 8.09           | 41.08          |
| West Bengal                  | 97.56          | 207.66         | 97.56          | 207.72         | 97.56          | 207.72         |
| <b>Total</b>                 | <b>3075.90</b> | <b>5743.52</b> | <b>3163.24</b> | <b>5908.29</b> | <b>3163.24</b> | <b>5908.29</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

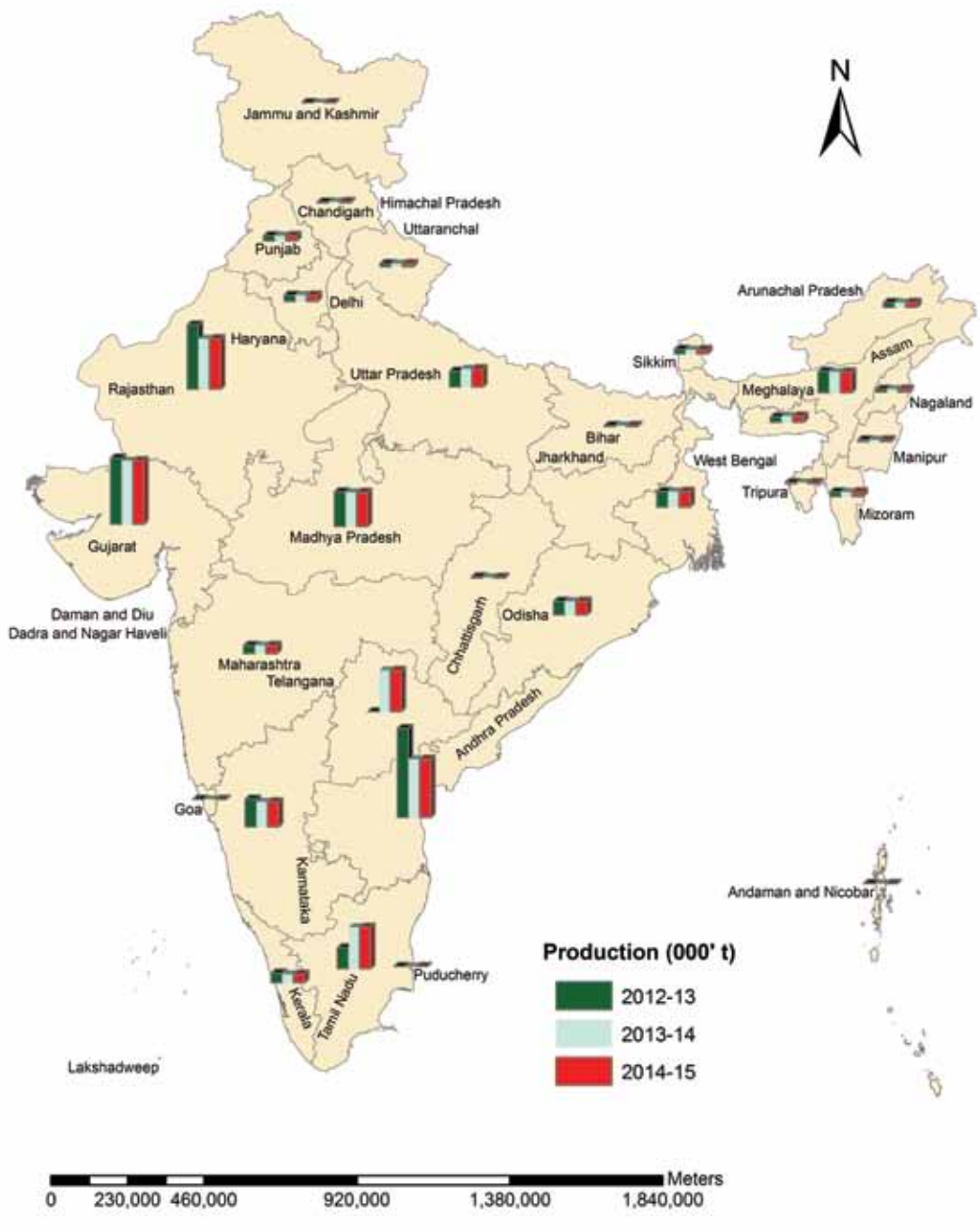
\*\* Estimates for Telangana for 2013-14, although it was part of Andhra Pradesh for majority of the period.

Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

State-wise area under major spices during 2012-13, 2013-14 and 2014-15



State-wise production of major spices during 2012-13, 2013-14 and 2014-15



**Table 4.6: State-wise area and production of Plantation Crops**

(Area: 000' ha, Production: 000't)

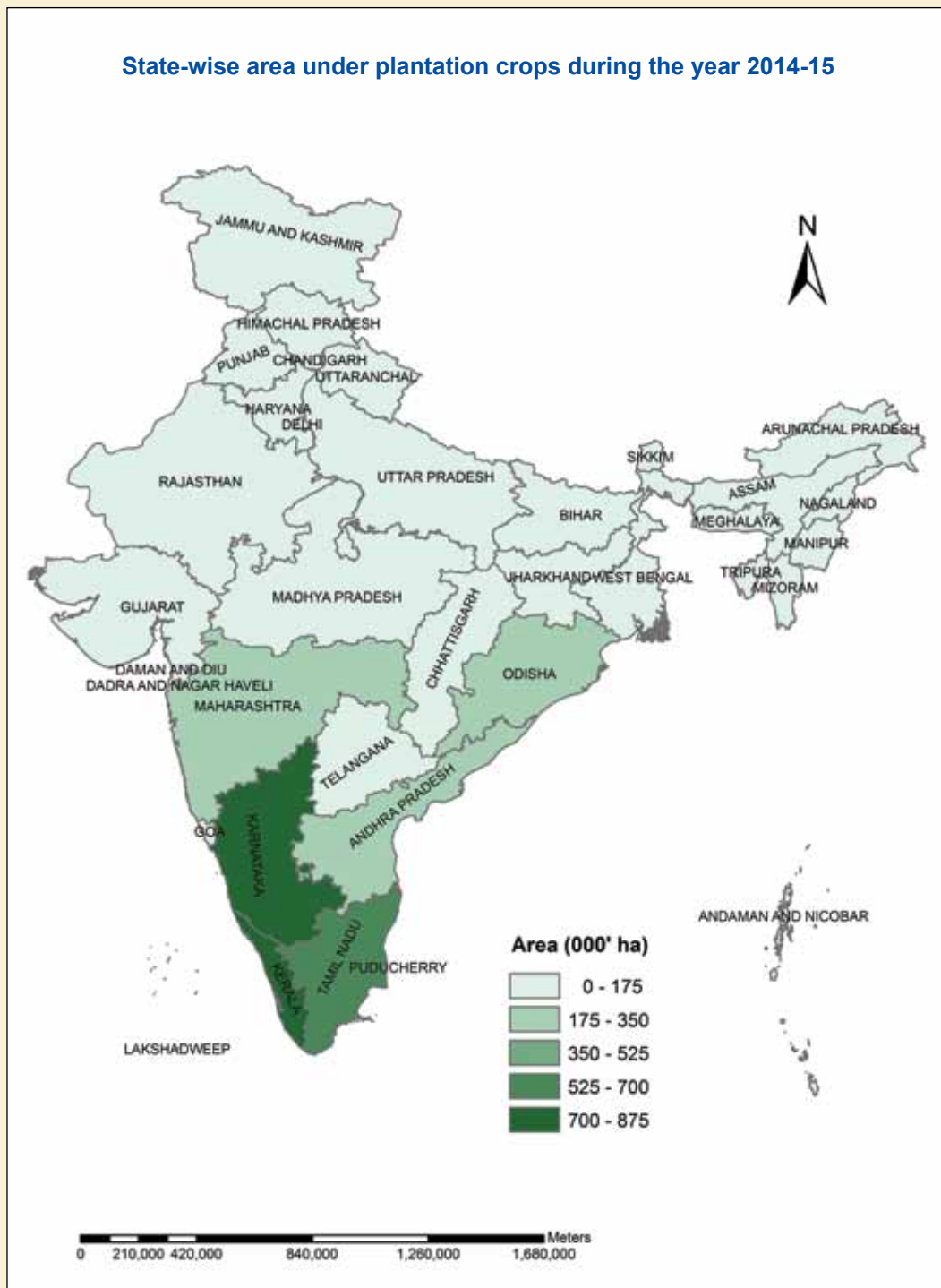
| States/<br>Union Territories | 2012-13        |                 | 2013-14        |                 | 2014-15*       |                 |
|------------------------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
|                              | Area           | Production      | Area           | Production      | Area           | Production      |
| Andaman & Nicobar            | 27.31          | 95.71           | 27.33          | 95.71           | 27.35          | 95.73           |
| Andhra Pradesh               | 334.14         | 1452.97         | 329.59         | 1364.68         | 317.05         | 1148.85         |
| Assam                        | 98.11          | 183.36          | 97.80          | 174.56          | 100.22         | 244.06          |
| Bihar                        | 15.25          | 97.14           | 15.25          | 97.33           | 14.90          | 97.33           |
| Chhattisgarh                 | 14.91          | 17.47           | 15.12          | 23.96           | 15.33          | 26.00           |
| Goa                          | 84.91          | 117.27          | 85.46          | 123.43          | 85.68          | 125.53          |
| Gujarat                      | 29.09          | 246.40          | 39.60          | 227.57          | 39.60          | 227.57          |
| Jharkhand                    | 11.50          | 4.64            | 13.83          | 4.60            | 14.83          | 4.83            |
| Karnataka                    | 867.46         | 4605.23         | 870.56         | 3901.00         | 870.13         | 5594.91         |
| Kerala                       | 992.13         | 4169.79         | 997.71         | 4307.17         | 851.12         | 3573.49         |
| Lakshadweep                  | 2.57           | 48.80           | 2.57           | 48.80           | 2.57           | 48.80           |
| Maharashtra                  | 214.48         | 357.24          | 214.48         | 368.80          | 216.48         | 380.61          |
| Manipur                      | 0.00           | 0.00            | 0.90           | 1.50            | 0.90           | 1.65            |
| Meghalaya                    | 23.12          | 29.19           | 25.61          | 29.40           | 25.61          | 29.78           |
| Mizoram                      | 7.59           | 4.38            | 7.60           | 4.40            | 7.61           | 4.43            |
| Nagaland                     | 1.52           | 10.52           | 1.67           | 11.35           | 2.17           | 11.55           |
| Odisha                       | 218.20         | 363.01          | 217.69         | 309.34          | 231.09         | 313.62          |
| Puducherry                   | 2.01           | 23.26           | 7.02           | 26.54           | 6.79           | 17.91           |
| Tamil Nadu                   | 629.98         | 4837.31         | 634.55         | 4842.33         | 638.55         | 4846.38         |
| Telangana**                  | -              | -               | 1.61           | 16.58           | 1.69           | 17.40           |
| Tripura                      | 15.27          | 33.53           | 15.81          | 32.20           | 15.86          | 28.92           |
| West Bengal                  | 51.59          | 287.39          | 51.85          | 289.41          | 52.25          | 292.11          |
| <b>Total</b>                 | <b>3641.14</b> | <b>16984.60</b> | <b>3674.60</b> | <b>16301.22</b> | <b>3537.77</b> | <b>17131.47</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

\*\* Estimates for Telangana for 2013-14, although it was part of Andhra Pradesh for majority of the period.

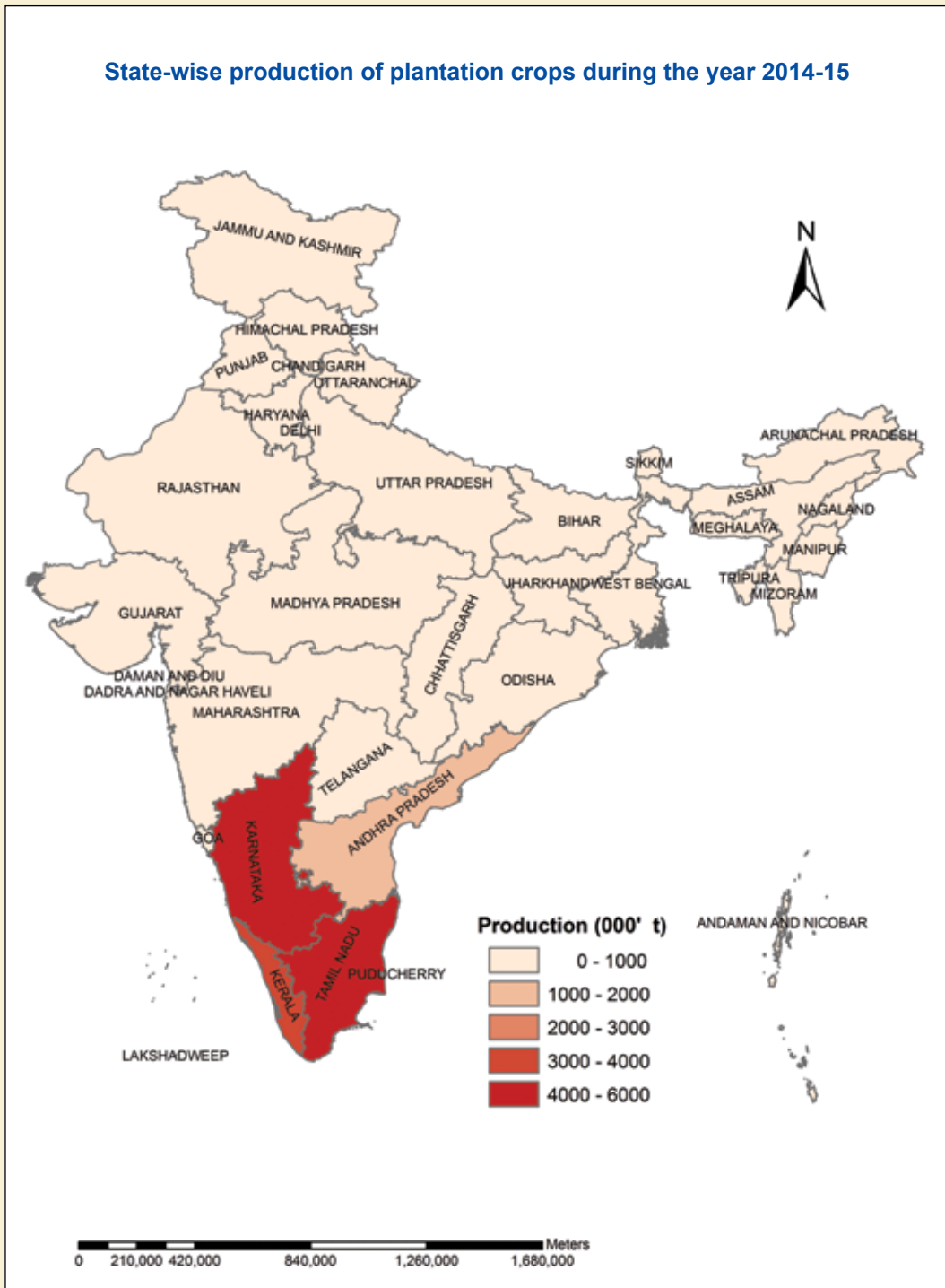
Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

State-wise area under plantation crops during the year 2014-15





State-wise production of plantation crops during the year 2014-15





**Table 4.7: State-wise area and production of Aromatics & Medicinal Plants**

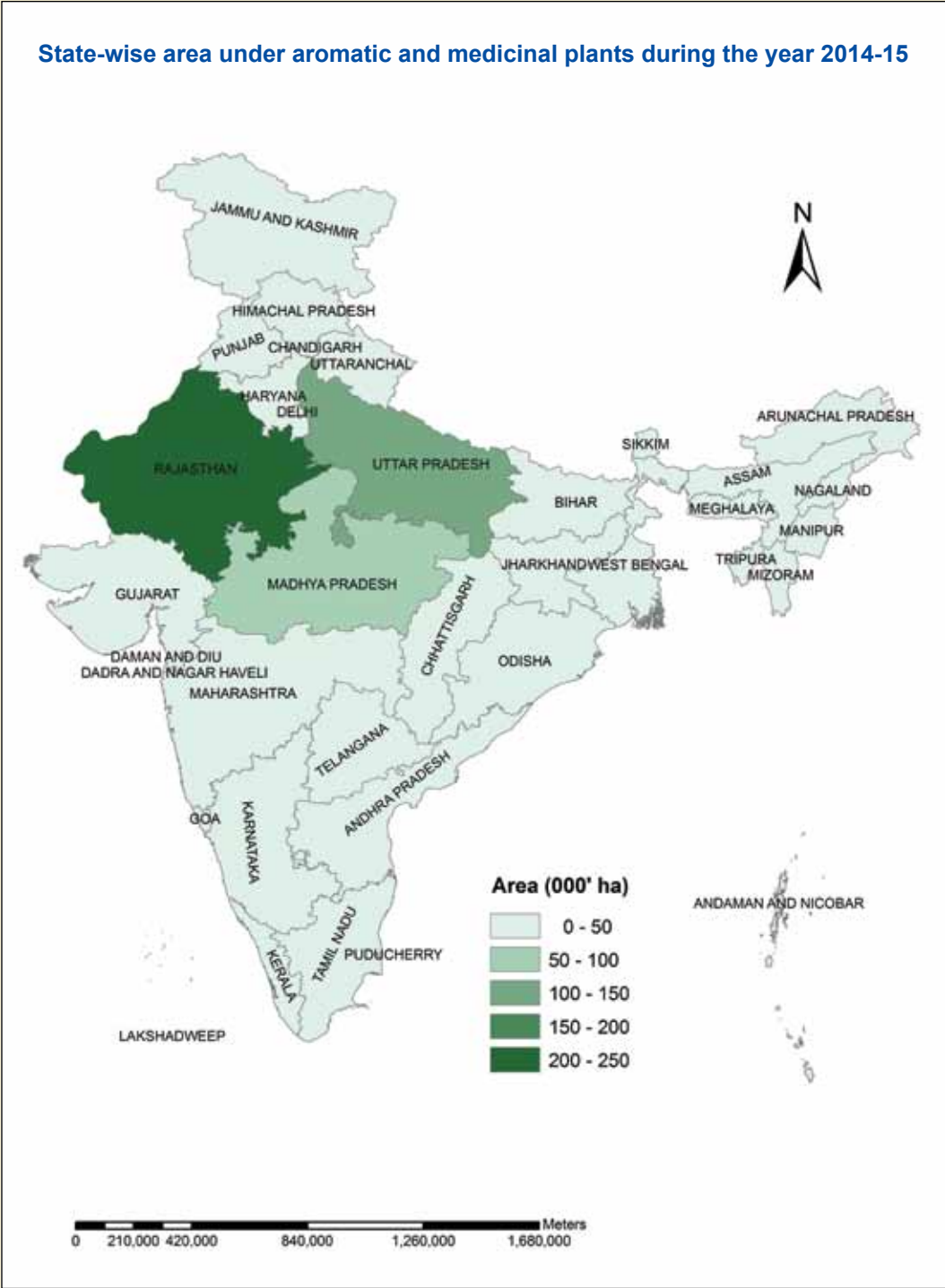
(Area: 000' ha, Production: 000't)

| States/<br>Union Territories | 2012-13       |               | 2013-14       |               | 2014-15*      |               |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                              | Area          | Production    | Area          | Production    | Area          | Production    |
| Andhra Pradesh               | 0.29          | 4.36          | 1.88          | 3.51          | 1.88          | 3.51          |
| Arunachal Pradesh            | 5.15          | 109.18        | 5.15          | 109.18        | 5.15          | 109.18        |
| Assam                        | 0.00          | 0.00          | 4.35          | 0.16          | 4.39          | 0.16          |
| Bihar                        | 3.82          | 0.50          | 4.56          | 0.59          | 4.40          | 0.69          |
| Chhattisgarh                 | 10.27         | 60.28         | 8.44          | 50.25         | 8.99          | 53.53         |
| Haryana                      | 1.75          | 1.14          | 1.76          | 1.14          | 0.55          | 1.23          |
| Himachal Pradesh             | 0.00          | 0.00          | 1.11          | 0.90          | 1.11          | 0.90          |
| Karnataka                    | 3.71          | 21.66         | 3.70          | 21.10         | 3.75          | 21.33         |
| Lakshadweep                  | 0.00          | 0.00          | -             | -             | 0.01          | 0.00          |
| Madhya Pradesh               | 62.63         | 393.00        | 63.95         | 404.60        | 65.62         | 414.00        |
| Mizoram                      | 1.02          | 0.71          | 1.11          | 0.90          | 1.11          | 0.90          |
| Odisha                       | 1.92          | 0.64          | 1.92          | 0.64          | 1.92          | 0.64          |
| Punjab                       | 8.97          | 1.43          | 14.01         | 2.51          | 15.10         | 2.90          |
| Rajasthan                    | 308.68        | 164.53        | 231.24        | 124.30        | 234.53        | 125.11        |
| Tamil Nadu                   | 15.15         | 147.41        | 16.37         | 162.12        | 17.18         | 178.33        |
| Uttar Pradesh                | 133.70        | 13.40         | 133.70        | 13.40         | 133.70        | 13.40         |
| <b>Total</b>                 | <b>557.06</b> | <b>918.22</b> | <b>493.25</b> | <b>895.30</b> | <b>499.40</b> | <b>925.81</b> |

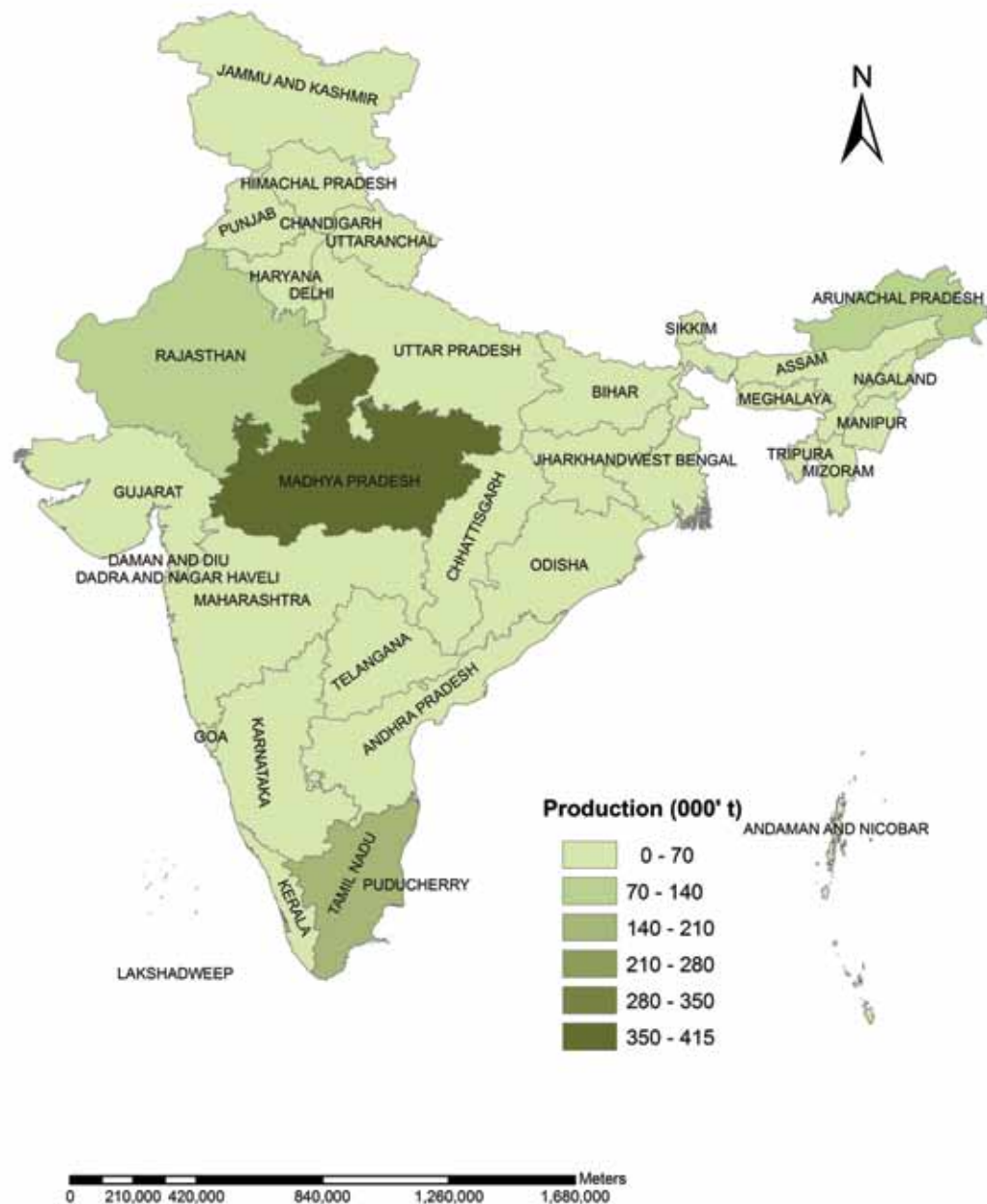
Note : \* 2<sup>nd</sup> Advance Estimate.

Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

State-wise area under aromatic and medicinal plants during the year 2014-15



State-wise production of aromatic and medicinal plants during the year 2014-15



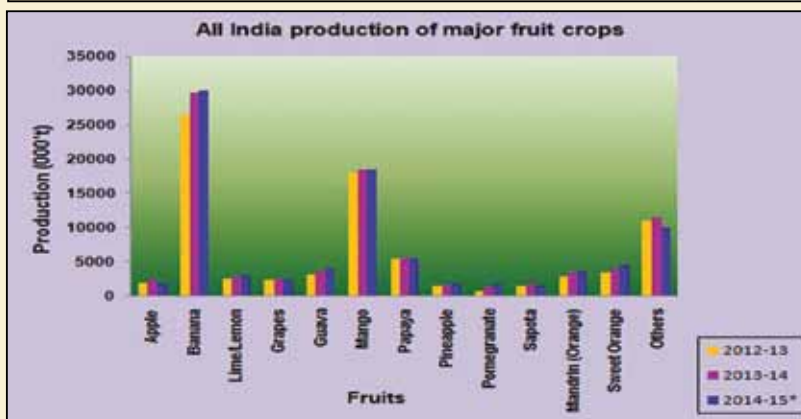
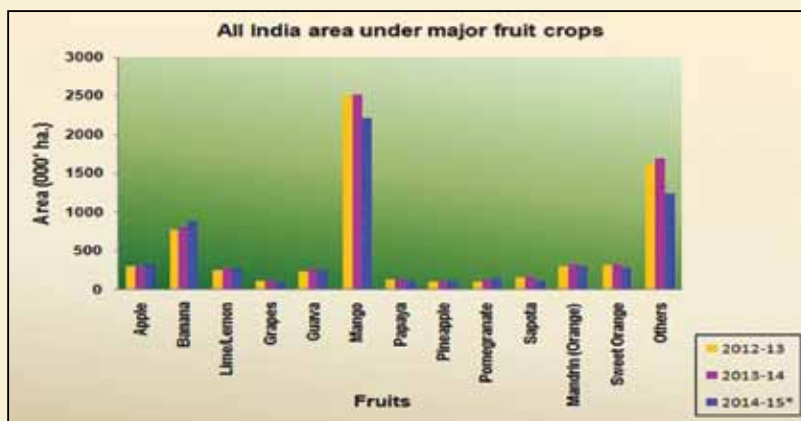
**Table 4.8: All India area and production of major fruit crops**

(Area: 000<sup>th</sup> ha, Production: 000<sup>th</sup> t)

| Crops            | 2012-13        |                 | 2013-14        |                 | 2014-15*       |                 |
|------------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
|                  | Area           | Production      | Area           | Production      | Area           | Production      |
| Apple            | 311.50         | 1915.38         | 313.04         | 2497.68         | 319.77         | 1884.73         |
| Banana           | 776.00         | 26509.10        | 802.57         | 29724.55        | 879.88         | 30008.16        |
| Lime/Lemon       | 255.21         | 2523.51         | 286.41         | 2835.02         | 268.51         | 3019.75         |
| Grapes           | 117.63         | 2483.09         | 118.74         | 2585.34         | 88.16          | 2453.68         |
| Guava            | 235.61         | 3198.28         | 268.22         | 3667.89         | 251.02         | 4083.26         |
| Mango            | 2500.02        | 18002.38        | 2515.97        | 18431.33        | 2216.65        | 18505.86        |
| Papaya           | 132.18         | 5381.73         | 133.36         | 5639.30         | 125.86         | 5508.08         |
| Pineapple        | 105.17         | 1570.59         | 109.88         | 1736.74         | 113.34         | 1892.07         |
| Pomegranate      | 113.25         | 744.96          | 130.77         | 1345.72         | 143.14         | 1773.66         |
| Sapota           | 163.88         | 1495.04         | 176.97         | 1744.30         | 120.74         | 1457.04         |
| Mandrin (Orange) | 311.18         | 2906.31         | 329.97         | 3431.41         | 309.82         | 3704.21         |
| Sweet Orange     | 323.15         | 3519.91         | 334.94         | 3886.20         | 278.07         | 4525.66         |
| Others           | 1637.22        | 11034.72        | 1695.16        | 11451.52        | 1243.04        | 10002.84        |
| <b>Total</b>     | <b>6982.00</b> | <b>81285.00</b> | <b>7216.00</b> | <b>88977.00</b> | <b>6358.00</b> | <b>88819.00</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

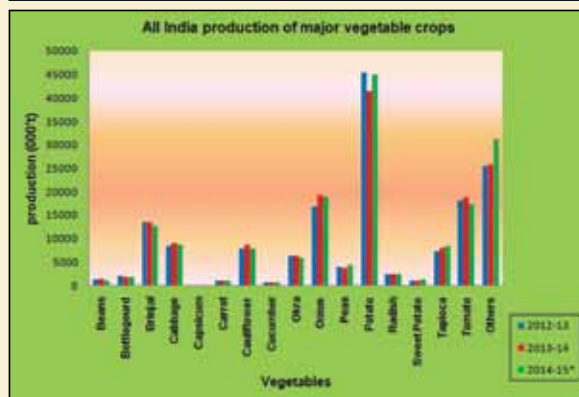
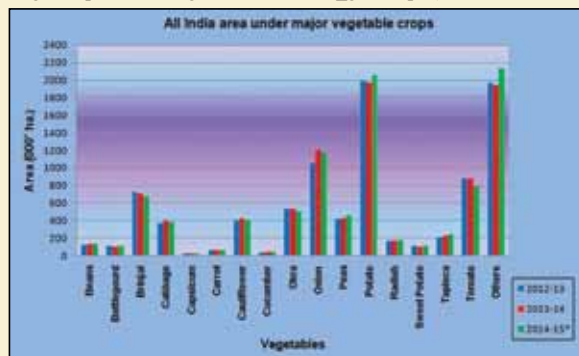
Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagdefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagdefault/hortstat_glance.pdf)).



**Table 4.9: All India area and production of major vegetable crops**

(Area: 000' ha, Production: 000' t)

| Crops        | 2012-13        |                  | 2013-14        |                  | 2014-15*       |                  |
|--------------|----------------|------------------|----------------|------------------|----------------|------------------|
|              | Area           | Production       | Area           | Production       | Area           | Production       |
| Beans        | 123.51         | 1268.90          | 137.54         | 1370.21          | 134.07         | 1164.88          |
| Bottlegourd  | 113.92         | 2089.89          | 103.23         | 1818.86          | 110.55         | 1835.65          |
| Brinjal      | 722.07         | 13443.59         | 711.31         | 13557.82         | 679.80         | 12705.65         |
| Cabbage      | 372.36         | 8534.23          | 400.14         | 9039.22          | 379.28         | 8596.72          |
| Capsicum     | 29.14          | 153.35           | 29.72          | 166.88           | 30.44          | 172.20           |
| Carrot       | 64.27          | 1144.54          | 62.41          | 1073.71          | 68.05          | 1092.63          |
| Cauliflower  | 402.20         | 7886.73          | 433.87         | 8573.28          | 413.51         | 7896.88          |
| Cucumber     | 40.90          | 640.99           | 43.28          | 678.15           | 43.88          | 684.75           |
| Okra         | 530.79         | 6350.27          | 532.66         | 6346.37          | 507.45         | 5853.02          |
| Onion        | 1051.53        | 16813.01         | 1203.57        | 19401.68         | 1180.63        | 18923.98         |
| Peas         | 420.90         | 4006.17          | 433.56         | 3868.63          | 458.98         | 4329.10          |
| Potato       | 1992.21        | 45343.59         | 1973.19        | 41555.38         | 2060.30        | 44892.88         |
| Radish       | 170.30         | 2410.78          | 173.33         | 2484.85          | 183.26         | 2489.74          |
| Sweet Potato | 111.76         | 1132.36          | 105.87         | 1087.88          | 110.63         | 1338.17          |
| Tapioca      | 206.96         | 7236.59          | 228.28         | 8139.43          | 252.56         | 8541.65          |
| Tomato       | 879.63         | 18226.64         | 882.03         | 18735.91         | 791.09         | 17397.69         |
| Others       | 1972.55        | 25505.37         | 1942.01        | 24998.74         | 2136.52        | 30384.41         |
| <b>Total</b> | <b>9205.00</b> | <b>162187.00</b> | <b>9396.00</b> | <b>162897.00</b> | <b>9541.00</b> | <b>168300.00</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

**Table 4.10: Percent share of production of major horticulture crops**

| Crops                       | Percent share of production |               |               |               |               |
|-----------------------------|-----------------------------|---------------|---------------|---------------|---------------|
|                             | 2010-11                     | 2011-12       | 2012-13       | 2013-14       | 2014-15*      |
| Vegetables                  | 60.93                       | 60.76         | 60.33         | 58.73         | 59.37         |
| Fruits                      | 31.13                       | 29.70         | 30.23         | 32.08         | 31.33         |
| Plantation crops            | 4.99                        | 6.36          | 6.32          | 5.88          | 6.04          |
| Spices                      | 2.22                        | 2.31          | 2.14          | 2.13          | 2.08          |
| Flowers                     | 0.43                        | 0.86          | 0.98          | 1.15          | 1.14          |
| Others                      | 0.30                        | 0.00          | 0.00          | 0.03          | 0.03          |
| <b>Total (Horticulture)</b> | <b>100.00</b>               | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

Source : 1. 2010-11: Indian Horticulture Database, National Horticulture Board (NHB).  
2. 2011-12 to 2014-15: Horticulture Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

**Table 4.11: Percent share of major horticulture crops' export**

| Produce / Products                               | Percent share of export |               |               |               |               |               |
|--|-------------------------|---------------|---------------|---------------|---------------|---------------|
|  | 2012-13                 |               | 2013-14       |               | 2014-15*      |               |
|  | Quantity                | Value         | Quantity      | Value         | Quantity      | Value         |
| Floriculture                                     | 1.08                    | 8.56          | 0.89          | 6.17          | 1.07          | 7.67          |
| Fresh Onions                                     | 66.13                   | 39.77         | 58.89         | 42.87         | 57.71         | 38.27         |
| Walnuts  | 0.21                    | 4.04          | 0.27          | 4.39          | 0.12          | 2.27          |
| Fresh Mango                                      | 2.21                    | 5.35          | 1.64          | 3.86          | 2.00          | 5.03          |
| Grapes   | 6.85                    | 25.47         | 7.65          | 22.54         | 5.00          | 18.08         |
| Fresh Apple                                      | 0.94                    | 1.04          | 1.43          | 1.17          | 0.95          | 0.88          |
| Fresh Banana                                     | 0.00                    | 0.00          | 1.38          | 2.08          | 2.95          | 4.03          |
| Oranges (Fresh/Dried)                            | 1.33                    | 0.71          | 1.12          | 0.75          | 0.80          | 0.53          |
| Guavas (Fresh/Dried)                             | 0.05                    | 0.07          | 0.04          | 0.06          | 0.04          | 0.06          |
| Litchi   | 0.03                    | 0.02          | 0.00          | 0.00          | 0.04          | 0.04          |
| Papaya (Fresh/Dried)                             | 0.65                    | 0.67          | 0.39          | 0.47          | 0.54          | 0.64          |
| Pineapples (Fresh/Dried)                         | 0.11                    | 0.17          | 0.14          | 0.20          | 0.17          | 0.28          |
| Fresh Sapota                                     | 0.10                    | 0.12          | 0.06          | 0.10          | 0.06          | 0.14          |
| Cabbage Lettuce (Fresh/Chilled)                  | 0.02                    | 0.01          | 0.02          | 0.01          | 0.01          | 0.01          |
| Cauliflowers and Headed Broccoli (Fresh/Chilled) | 0.01                    | 0.01          | 0.00          | 0.00          | 0.00          | 0.00          |
| Peas   | 0.12                    | 0.15          | 0.34          | 0.27          | 0.90          | 0.77          |
| Tomatoes (Fresh/Chilled)                         | 13.64                   | 10.78         | 16.94         | 11.64         | 10.16         | 7.40          |
| Potato (Other than seeds)                        | 6.47                    | 3.01          | 8.78          | 3.40          | 17.43         | 13.89         |
| Sweet Potato                                     | 0.03                    | 0.02          | 0.02          | 0.01          | 0.02          | 0.02          |
| <b>Total</b>                                     | <b>100.00</b>           | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

Note : \* 2<sup>nd</sup> Advance Estimate.

Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture & Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).





भाग-V  
उत्पादन एवं उत्पादकता

SECTION-V  
Production and Productivity





**Table 5.1: Production and productivity in Indian agriculture during past 60 years**

(Area: million ha, Production & Consumption: million t, Yield: kg/ha)

| Crop                          | (Area: million ha, Production & Consumption: million t, Yield: kg/ha) |         |         |         |         |         |         |         |                    |                    |                    |                   |                    |      |
|-------------------------------|---|---------|---------|---------|---------|---------|---------|---------|--------------------|--------------------|--------------------|-------------------|--------------------|------|
|                               | 1950-51   | 1960-61 | 1970-71 | 1980-81 | 1990-91 | 2000-01 | 2005-06 | 2009-10 | 2010-11            | 2011-12            | 2012-13            | 2013-14           | 2014-15*           |      |
| All food grains               | Area  | 115.58  | 124.32  | 126.67  | 127.84  | 121.05  | 121.60  | 121.33  | 126.67             | 124.75             | 120.78             | 125.04            | 122.07             |      |
|                               | Production  | 50.82   | 82.02   | 108.42  | 129.59  | 176.39  | 196.81  | 208.60  | 244.49             | 259.29             | 257.13             | 265.04            | 252.68             |      |
|                               | Yield   | 522     | 710     | 872     | 1023    | 1380    | 1626    | 1715    | 1798               | 1930               | 2078               | 2129              | 2120               | 2070 |
| Rice                          | Production  | 20.58   | 34.58   | 42.22   | 53.63   | 74.29   | 84.98   | 91.79   | 89.09              | 105.30             | 105.24             | 106.54            | 104.80             |      |
|                               | Yield   | 668     | 1013    | 1123    | 1336    | 1740    | 1901    | 2102    | 2125               | 2393               | 2462               | 2416              | 2390               |      |
| Wheat                         | Production  | 6.46    | 11.00   | 23.83   | 36.31   | 55.14   | 69.68   | 69.35   | 86.87              | 94.88              | 93.51              | 95.85             | 88.94              |      |
|                               | Yield   | 663     | 851     | 1307    | 1630    | 2281    | 2708    | 2619    | 29*88              | 3177               | 3117               | 3145              | 2872               |      |
| Coarse cereals                | Production  | 15.38   | 23.74   | 30.55   | 29.02   | 32.70   | 31.08   | 34.07   | 43.40              | 42.01              | 40.04              | 43.29             | 41.75              |      |
|                               | Yield   | 408     | 528     | 665     | 695     | 900     | 1027    | 1172    | 1531               | 1590               | 1617               | 1717              | 1729               |      |
| Sugarcane                     | Production  | 57.05   | 110.00  | 126.37  | 154.25  | 241.05  | 295.96  | 281.17  | 342.38             | 361.04             | 341.20             | 352.14            | 359.33             |      |
|                               | Yield   | 33422   | 45549   | 48322   | 57844   | 65395   | 68577   | 66928   | 70020              | 71668              | 68254              | 70522             | 69860              |      |
| Pulses                        | Production  | 8.41    | 12.70   | 11.82   | 10.63   | 14.26   | 11.08   | 13.39   | 18.24              | 17.09              | 18.34              | 19.25             | 17.19              |      |
|                               | Yield   | 441     | 539     | 524     | 473     | 578     | 544     | 598     | 691                | 699                | 789                | 764               | 744                |      |
| Oilseeds                      | Production  | 5.16    | 6.98    | 9.63    | 9.37    | 18.61   | 18.44   | 27.98   | 32.48              | 29.80              | 30.94              | 32.75             | 26.67              |      |
|                               | Yield   | 481     | 507     | 579     | 532     | 771     | 810     | 1004    | 958                | 1193               | 1133               | 1168              | 1037               |      |
| Milk                          | Production  | 17.00   | 20.00   | 22.00   | 31.60   | 53.90   | 80.60   | 97.1    | 116.40             | 127.90             | 132.40             | 137.70            | 146.30             |      |
|                               | Production  | 0.75    | 1.16    | 1.76    | 2.44    | 3.84    | 5.66    | 6.57    | 8.00               | 8.42               | 9.04               | 9.58 <sup>#</sup> | 10.43 <sup>#</sup> |      |
| Fish                          | Production  | 22.56   | 27.98   | 38.20   | 49.78   | 63.20   | 76.19   | 88.28   | 88.89 <sup>#</sup> | 91.73 <sup>#</sup> | 92.58 <sup>#</sup> | N.A.              | N.A.               |      |
|                               | Gross irrigated area  | 0.07    | 0.29    | 2.18    | 5.52    | 12.55   | 16.70   | 20.34   | 26.49              | 27.79              | 25.54              | 24.48             | 25.58              |      |
| <b>Fertiliser consumption</b> |   |         |         |         |         |         |         |         |                    |                    |                    |                   |                    |      |

Note : 1. N.A.: Not available, 2. Provisional, 3. \* 4<sup>th</sup> Advance estimates.

Source : 1. Agricultural Statistics at a Glance, 2014, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India

2. Pocket Book of Agricultural Statistics, 2015, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India  
(Website: eands.dacnet.mic.in/PDF/Pocket-Book2015.pdf).

**Table 5.2: Season-wise area, production and yield of food grains**

(Area: million ha, Production: million t, Yield: kg/ha)

| Crop                       | Area         |              |               | Production    |               |               | Yield       |             |             |
|----------------------------|--------------|--------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|
|                            | Kharif       | Rabi         | Total         | Kharif        | Rabi          | Total         | Kharif      | Rabi        | Total       |
| <b>Foodgrains</b>          |              |              |               |               |               |               |             |             |             |
| Rice                       | 39.11        | 4.31         | 43.42         | 85.34         | 13.61         | 98.95         | 2182        | 3158        | 2279        |
| Wheat                      | N.A.         | 29.04        | 29.04         | N.A.          | 87.39         | 87.39         | N.A.        | 3009        | 3009        |
| Jowar                      | 2.85         | 4.18         | 7.03          | 3.08          | 3.36          | 6.44          | 1080        | 804         | 916         |
| Bajra                      | 8.67         | N.A.         | 8.67          | 8.96          | N.A.          | 8.96          | 1033        | N.A.        | 1033        |
| Maize                      | 7.17         | 1.32         | 8.49          | 15.15         | 5.29          | 20.43         | 2113        | 4005        | 2408        |
| <b>Total Coarse Cereal</b> | <b>20.75</b> | <b>6.18</b>  | <b>26.93</b>  | <b>29.54</b>  | <b>10.27</b>  | <b>39.80</b>  | <b>1423</b> | <b>1662</b> | <b>1478</b> |
| Tur                        | 3.82         | N.A.         | 3.82          | 2.65          | N.A.          | 2.65          | 694         | N.A.        | 694         |
| Gram                       | N.A.         | 8.41         | 8.41          | N.A.          | 7.86          | 7.86          | N.A.        | 934         | 934         |
| <b>Total Pulses</b>        | <b>10.77</b> | <b>13.13</b> | <b>23.90</b>  | <b>5.60</b>   | <b>10.98</b>  | <b>16.58</b>  | <b>520</b>  | <b>837</b>  | <b>694</b>  |
| <b>Total Foodgrains</b>    | <b>70.63</b> | <b>52.66</b> | <b>123.29</b> | <b>120.48</b> | <b>122.25</b> | <b>242.73</b> | <b>1706</b> | <b>2322</b> | <b>1969</b> |
| <b>Oilseeds</b>            |              |              |               |               |               |               |             |             |             |
| Ground nut                 | N.A.         | N.A.         | 5.50          | N.A.          | N.A.          | 6.50          | N.A.        | N.A.        | 1183        |
| Rapeseed & Mustard         | N.A.         | 6.21         | 6.21          | N.A.          | 7.32          | 7.32          | N.A.        | 1180        | 1180        |
| Soya bean                  | 9.96         | N.A.         | 9.96          | 11.90         | N.A.          | 11.90         | 1195        | N.A.        | 1195        |
| Sunflower                  | N.A.         | N.A.         | 1.16          | N.A.          | N.A.          | 0.74          | N.A.        | N.A.        | 644         |
| <b>Nine Oilseeds</b>       | <b>N.A.</b>  | <b>N.A.</b>  | <b>26.71</b>  | <b>N.A.</b>   | <b>N.A.</b>   | <b>29.16</b>  | <b>N.A.</b> | <b>N.A.</b> | <b>1092</b> |
| <b>Others Cash Crops</b>   |              |              |               |               |               |               |             |             |             |
| Sugarcane                  | N.A.         | N.A.         | 4.70          | N.A.          | N.A.          | 324.39        | N.A.        | N.A.        | 68986       |
| Cotton <sup>@</sup>        | N.A.         | N.A.         | 10.98         | N.A.          | N.A.          | 29.55         | N.A.        | N.A.        | 458         |
| Jute & Mesta <sup>§</sup>  | N.A.         | N.A.         | 0.89          | N.A.          | N.A.          | 11.03         | N.A.        | N.A.        | 2232        |

**Note** : 1. @: Production in million bales of 170 kg each, 2. \$: Production in million bales of 180 kg each, 3. N.A.: Not available.

**Source** : *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India

Table 5.3: Targets and achievements of production of major crops

| Crop                      | 2011-12 |              | XI <sup>th</sup> Plan |              | 2012-13 |              | 2013-14 |              | 2014-2015* |              |
|---------------------------|---------|--------------|-----------------------|--------------|---------|--------------|---------|--------------|------------|--------------|
|                           | Targets | Achievements | Targets               | Achievements | Targets | Achievements | Targets | Achievements | Targets    | Achievements |
| Rice                      | 102.00  | 105.30       | 494.50                | 486.24       | 104.00  | 105.24       | 105.00  | 106.65       | 106.00     | 104.80       |
| Wheat                     | 84.00   | 94.88        | 399.00                | 421.80       | 88.00   | 93.51        | 92.50   | 95.85        | 94.00      | 88.94        |
| Coarse Cereals            | 42.00   | 42.01        | 208.60                | 200.03       | 44.00   | 40.04        | 42.50   | 43.29        | 41.50      | 41.75        |
| Pulses                    | 17.00   | 17.09        | 81.00                 | 79.32        | 18.24   | 18.34        | 19.00   | 19.25        | 19.50      | 17.20        |
| Food grains               | 245.00  | 259.29       | 1183.10               | 1187.43      | 254.24  | 257.13       | 259.00  | 265.04       | 261.00     | 252.68       |
| Oilseeds                  | 33.60   | 30.01        | 160.15                | 144.85       | 33.50   | 30.94        | 31.00   | 32.75        | 33.00      | 26.68        |
| Sugarcane                 | 350.00  | 361.04       | 1655.00               | 1628.94      | 352.00  | 341.20       | 340.00  | 352.14       | 345.00     | 359.33       |
| Cotton <sup>#</sup>       | 34.00   | 35.20        | 134.00                | 140.38       | 35.00   | 34.22        | 35.00   | 35.90        | 35.00      | 35.48        |
| Jute & Mesta <sup>@</sup> | 12.30   | 11.40        | 57.00                 | 55.42        | 12.00   | 10.93        | 12.00   | 11.69        | 11.20      | 11.45        |

Note : 1. \* 4<sup>th</sup> Advance estimates, 2. # Million Bales of 170 Kg. each, 3. @ Million Bales of 180 Kg each.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India  
 2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India  
 (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 5.4: All India estimates of yield of major crops**

| Crops                   | (Quintal/hectare) |              |              |              |              |              |              |              |  |  |
|-------------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|
|                         | 1950-51           | 1990-91      | 2000-01      | 2010-11      | 2011-12      | 2012-13      | 2013-14      | 2014-2015*   |  |  |
| Rice                    | 6.68              | 17.40        | 19.01        | 22.39        | 23.93        | 24.61        | 24.16        | 23.90        |  |  |
| Jowar                   | 3.53              | 8.14         | 7.64         | 9.49         | 9.57         | 8.50         | 9.57         | 9.53         |  |  |
| Bajra                   | 2.88              | 6.58         | 6.88         | 10.79        | 11.71        | 11.98        | 11.84        | 12.72        |  |  |
| Maize                   | 5.47              | 15.18        | 18.22        | 25.40        | 24.78        | 25.66        | 26.76        | 25.57        |  |  |
| Wheat                   | 6.63              | 22.81        | 27.08        | 29.88        | 31.77        | 31.17        | 31.45        | 28.72        |  |  |
| Coarse Cereal           | 4.08              | 9.00         | 10.27        | 15.31        | 15.90        | 16.17        | 17.17        | 17.29        |  |  |
| Gram                    | 4.82              | 7.12         | 7.44         | 8.95         | 9.28         | 10.36        | 9.60         | 8.75         |  |  |
| Tur or Arhar            | 7.88              | 6.73         | 6.18         | 6.55         | 6.62         | 7.76         | 8.13         | 7.50         |  |  |
| <b>Total Pulses</b>     | <b>4.41</b>       | <b>5.78</b>  | <b>5.44</b>  | <b>6.91</b>  | <b>6.99</b>  | <b>7.89</b>  | <b>7.64</b>  | <b>7.44</b>  |  |  |
| <b>Total Foodgrains</b> | <b>5.22</b>       | <b>13.80</b> | <b>16.26</b> | <b>19.30</b> | <b>20.78</b> | <b>21.29</b> | <b>21.20</b> | <b>20.70</b> |  |  |
| Sugarcane               | 334.22            | 653.95       | 685.78       | 700.91       | 703.17       | 682.54       | 705.22       | 698.60       |  |  |
| Groundnut               | 7.75              | 9.04         | 9.77         | 14.11        | 13.05        | 9.95         | 17.64        | 14.00        |  |  |
| Rapeseed & Mustard      | 3.68              | 9.04         | 9.36         | 11.85        | 11.45        | 12.62        | 11.85        | 10.89        |  |  |
| Soyabean                | 4.26              | 10.15        | 8.23         | 13.27        | 12.07        | 13.53        | 10.12        | 9.50         |  |  |
| Sunflower               | 6.53              | 5.35         | 6.05         | 7.01         | 6.92         | 6.55         | 7.50         | 7.52         |  |  |
| <b>Total oilseeds</b>   | <b>4.81</b>       | <b>7.71</b>  | <b>8.10</b>  | <b>11.93</b> | <b>11.35</b> | <b>11.68</b> | <b>11.68</b> | <b>10.37</b> |  |  |
| Cotton                  | 0.88              | 2.25         | 1.90         | 4.99         | 4.91         | 4.86         | 5.10         | 4.61         |  |  |
| Tobacco                 | 7.31              | 13.53        | 13.18        | 16.87        | 16.13        | 15.42        | 16.12        | N.A.         |  |  |

**Note** : 1. N.A.: Not available, 2. \* 4<sup>th</sup> Advance Estimate.

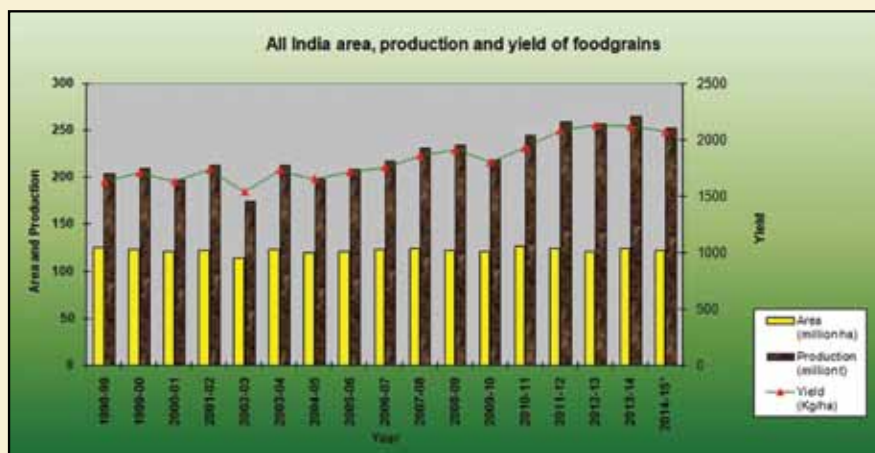
**Source** : *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India  
(Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 5.5: All India area, production and yield of total foodgrains**

| Year                 | Area         |                 | Production                       |                 | Yield   |                 | % Coverage under irrigation |
|----------------------|--------------|-----------------|----------------------------------|-----------------|---------|-----------------|-----------------------------|
|                      | (million ha) | Growth rate (%) | (million t)                      | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98              | 124.07       | 0.4             | 192.26                           | -3.6            | 1552    | -3.8            | 40.8                        |
| 1998-99              | 125.17       | 0.9             | 203.61                           | 5.9             | 1627    | 4.8             | 42.4                        |
| 1999-00              | 123.10       | -1.7            | 209.80                           | 3.0             | 1704    | 4.7             | 43.9                        |
| 2000-01              | 121.05       | -1.7            | 196.81                           | -6.2            | 1626    | -4.6            | 43.4                        |
| 2001-02              | 122.78       | 1.4             | 212.85                           | 8.1             | 1734    | 6.6             | 43.0                        |
| 2002-03              | 113.86       | -7.3            | 174.77                           | -17.9           | 1535    | -11.5           | 42.8                        |
| 2003-04              | 123.45       | 8.4             | 213.19                           | 22.0            | 1727    | 12.5            | 42.2                        |
| 2004-05              | 120.08       | -2.7            | 198.36                           | -7.0            | 1652    | -4.3            | 44.2                        |
| 2005-06              | 121.60       | 1.3             | 208.60                           | 5.2             | 1715    | 3.8             | 45.5                        |
| 2006-07              | 123.71       | 1.7             | 217.28                           | 4.2             | 1756    | 2.4             | 46.3                        |
| 2007-08              | 124.07       | 0.3             | 230.78                           | 6.2             | 1860    | 5.9             | 46.8                        |
| 2008-09              | 122.83       | -1.0            | 234.47                           | 1.6             | 1909    | 2.6             | 48.3                        |
| 2009-10              | 121.33       | -1.2            | 218.11                           | -7.0            | 1798    | -5.8            | 47.8                        |
| 2010-11              | 126.67       | 4.4             | 244.49                           | 12.1            | 1930    | 7.3             | 47.8                        |
| 2011-12              | 124.75       | -1.5            | 259.29                           | 6.1             | 2078    | 7.7             | 49.8 <sup>#</sup>           |
| 2012-13              | 120.78       | -3.2            | 257.13                           | -0.8            | 2129    | 2.5             | 51.2 <sup>#</sup>           |
| 2013-14              | 125.04       | 3.5             | 265.04                           | 3.1             | 2120    | -0.4            | N.A.                        |
| 2014-15 <sup>*</sup> | 122.07       | -2.4            | 252.68                           | -4.7            | 2070    | -2.4            | N.A.                        |
| 2015-16 <sup>§</sup> |              |                 | <b>244.86-287.06<sup>§</sup></b> |                 |         |                 |                             |

Note : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. # Provisional.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

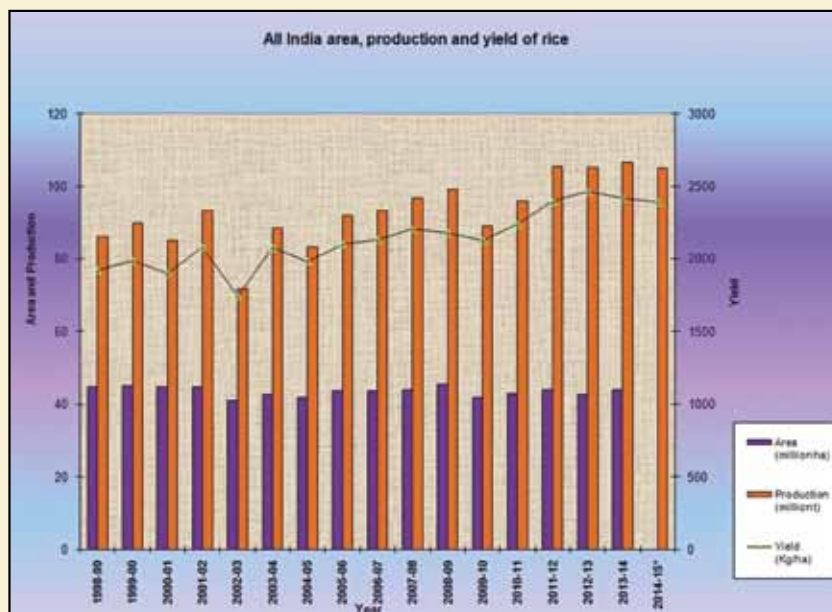


**Table 5.6: All India area, production and yield of rice**

| Year                  | Area         |                 | Production                 |                 | Yield   |                 | % Coverage under irrigation |
|-----------------------|--------------|-----------------|----------------------------|-----------------|---------|-----------------|-----------------------------|
|                       | (million ha) | Growth rate (%) | (million t)                | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98               | 43.45        | 0.1             | 82.53                      | 1.0             | 1900    | 1.0             | 50.8                        |
| 1998-99               | 44.80        | 3.1             | 86.08                      | 4.3             | 1921    | 1.1             | 52.3                        |
| 1999-00               | 45.16        | 0.8             | 89.68                      | 4.2             | 1986    | 3.4             | 53.9                        |
| 2000-01               | 44.71        | - 1.0           | 84.98                      | -5.2            | 1901    | - 4.3           | 53.6                        |
| 2001-02               | 44.90        | 0.4             | 93.34                      | 9.8             | 2079    | 9.4             | 53.2                        |
| 2002-03               | 41.18        | -8.3            | 71.82                      | -23.1           | 1744    | -16.1           | 50.2                        |
| 2003-04               | 42.59        | 3.4             | 88.53                      | 23.3            | 2077    | 19.1            | 52.6                        |
| 2004-05               | 41.91        | -1.6            | 83.13                      | -6.1            | 1984    | -4.5            | 54.7                        |
| 2005-06               | 43.66        | 4.2             | 91.79                      | 10.4            | 2102    | 5.9             | 56.0                        |
| 2006-07               | 43.81        | 0.3             | 93.36                      | 1.7             | 2131    | 1.4             | 56.7                        |
| 2007-08               | 43.91        | 0.2             | 96.69                      | 3.6             | 2202    | 3.3             | 56.9                        |
| 2008-09               | 45.54        | 3.7             | 99.18                      | 2.6             | 2178    | -1.1            | 58.7                        |
| 2009-10               | 41.92        | -7.9            | 89.09                      | -10.2           | 2125    | -2.4            | 58.0                        |
| 2010-11               | 42.86        | 2.2             | 95.98                      | 7.7             | 2239    | 5.4             | 58.6                        |
| 2011-12               | 44.01        | 2.7             | 105.30                     | 9.7             | 2393    | 6.9             | 58.7 <sup>#</sup>           |
| 2012-13               | 42.75        | -2.9            | 105.24                     | -0.1            | 2462    | 2.9             | 58.3 <sup>#</sup>           |
| 2013-14               | 43.95        | 2.8             | 106.54                     | 1.2             | 2416    | -1.9            | N.A.                        |
| 2014-15*              | N.A.         | N.A.            | 104.80                     | -1.6            | 2390    | -1.1            | N.A.                        |
| 2015-16 <sup>\$</sup> |              |                 | 97.08-116.41 <sup>\$</sup> |                 |         |                 |                             |

**Note** : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. # Provisional.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
 2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

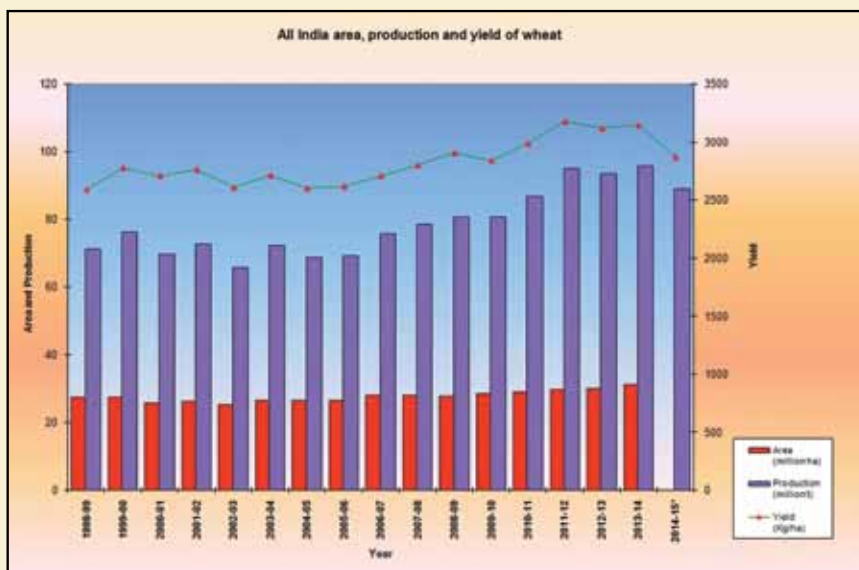


**Table 5.7: All India area, production and yield of wheat**

| Year                  | Area         |                 | Production                |                 | Yield   |                 | % Coverage under irrigation |
|-----------------------|--------------|-----------------|---------------------------|-----------------|---------|-----------------|-----------------------------|
|                       | (million ha) | Growth rate (%) | (million t)               | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98               | 26.70        | 3.1             | 66.35                     | - 4.3           | 2485    | - 7.2           | 85.8                        |
| 1998-99               | 27.52        | 3.1             | 71.29                     | 7.4             | 2590    | 4.2             | 85.8                        |
| 1999-00               | 27.49        | - 0.1           | 76.37                     | 7.1             | 2778    | 7.3             | 87.2                        |
| 2000-01               | 25.73        | - 6.4           | 69.68                     | - 8.8           | 2708    | - 2.5           | 88.1                        |
| 2001-02               | 26.34        | 2.4             | 72.77                     | 4.4             | 2762    | 2.0             | 87.4                        |
| 2002-03               | 25.20        | - 4.3           | 65.76                     | - 9.6           | 2610    | - 5.5           | 88.0                        |
| 2003-04               | 26.60        | 5.6             | 72.16                     | 9.7             | 2713    | 3.9             | 88.4                        |
| 2004-05               | 26.38        | - 0.8           | 68.64                     | - 4.9           | 2602    | - 4.1           | 89.4                        |
| 2005-06               | 26.48        | 0.4             | 69.35                     | 1.0             | 2619    | 0.7             | 89.6                        |
| 2006-07               | 27.99        | 5.7             | 75.81                     | 9.3             | 2708    | 3.4             | 90.2                        |
| 2007-08               | 28.04        | 0.2             | 78.57                     | 3.6             | 2802    | 3.5             | 90.9                        |
| 2008-09               | 27.75        | - 1.03          | 80.68                     | 2.7             | 2907    | 3.7             | 91.3                        |
| 2009-10               | 28.46        | 2.6             | 80.80                     | 0.2             | 2839    | -2.3            | 91.7                        |
| 2010-11               | 29.07        | 2.1             | 86.87                     | 7.5             | 2988    | 5.2             | 92.1                        |
| 2011-12               | 29.86        | 2.7             | 94.88                     | 9.2             | 3177    | 6.3             | 92.9 <sup>#</sup>           |
| 2012-13               | 30.00        | 0.5             | 93.51                     | -1.4            | 3117    | -1.9            | 93.4 <sup>#</sup>           |
| 2013-14               | 31.19        | 4.0             | 95.85                     | 2.5             | 3145    | 0.9             | N.A.                        |
| 2014-15*              | N.A.         | N.A.            | 88.94                     | -7.2            | 2872    | -8.7            | N.A.                        |
| 2015-16 <sup>\$</sup> |              |                 | 87.12-99.90 <sup>\$</sup> |                 |         |                 |                             |

Note : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. <sup>#</sup> Provisional

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

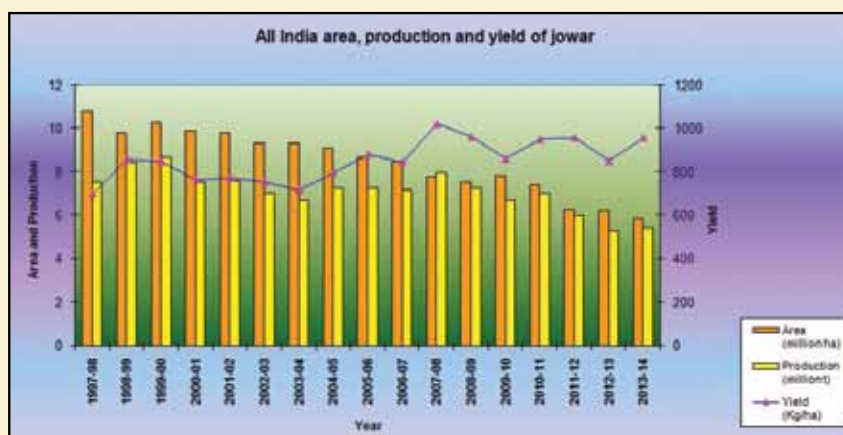


**Table 5.8: All India area, production and yield of jowar**

| Year                 | Area         |                 | Production                   |                 | Yield   |                 | % Coverage under irrigation |
|----------------------|--------------|-----------------|------------------------------|-----------------|---------|-----------------|-----------------------------|
|                      | (million ha) | Growth rate (%) | (million t)                  | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98              | 10.80        | - 5.5           | 7.53                         | - 31.1          | 697     | - 27.1          | 7.3                         |
| 1998-99              | 9.79         | - 9.4           | 8.42                         | 11.8            | 859     | 23.2            | 8.1                         |
| 1999-00              | 10.25        | 4.7             | 8.68                         | 3.1             | 847     | - 1.4           | 7.7                         |
| 2000-01              | 9.86         | - 3.8           | 7.53                         | - 13.2          | 764     | - 9.8           | 7.9                         |
| 2001-02              | 9.80         | - 0.6           | 7.56                         | 0.4             | 771     | 0.9             | 8.3                         |
| 2002-03              | 9.30         | - 5.1           | 7.01                         | - 7.3           | 754     | - 2.2           | 8.5                         |
| 2003-04              | 9.33         | 0.3             | 6.68                         | - 4.7           | 716     | - 5.0           | 7.5                         |
| 2004-05              | 9.09         | - 2.6           | 7.24                         | 8.4             | 797     | 11.3            | 9.1                         |
| 2005-06              | 8.67         | - 4.6           | 7.24                         | 0.0             | 880     | 10.4            | 9.0                         |
| 2006-07              | 8.47         | -2.3            | 7.15                         | -1.2            | 844     | -4.1            | 8.6                         |
| 2007-08              | 7.76         | - 8.4           | 7.93                         | 10.9            | 1021    | 21.0            | 8.5                         |
| 2008-09              | 7.53         | - 3.0           | 7.25                         | -8.6            | 962     | - 5.8           | 8.9                         |
| 2009-10              | 7.79         | 3.5             | 6.70                         | -7.6            | 860     | -10.6           | 8.7                         |
| 2010-11              | 7.38         | -5.3            | 7.00                         | 4.5             | 949     | 10.3            | 8.7                         |
| 2011-12              | 6.25         | -15.3           | 5.98                         | -14.6           | 957     | 0.8             | 9.7 <sup>#</sup>            |
| 2012-13              | 6.21         | -0.6            | 5.28                         | -11.7           | 850     | -11.2           | 9.7 <sup>#</sup>            |
| 2013-14              | 5.82         | -6.3            | 5.39                         | 2.1             | 957     | 12.6            | N.A.                        |
| 2014-15 <sup>#</sup> | N.A.         | N.A.            | <b>3.03-8.08<sup>s</sup></b> | N.A.            | 953     | 0.4             | N.A.                        |
| 2015-16 <sup>s</sup> |              |                 | <b>2.65-8.16<sup>s</sup></b> |                 |         |                 |                             |

Note : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. # Provisional

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
 2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



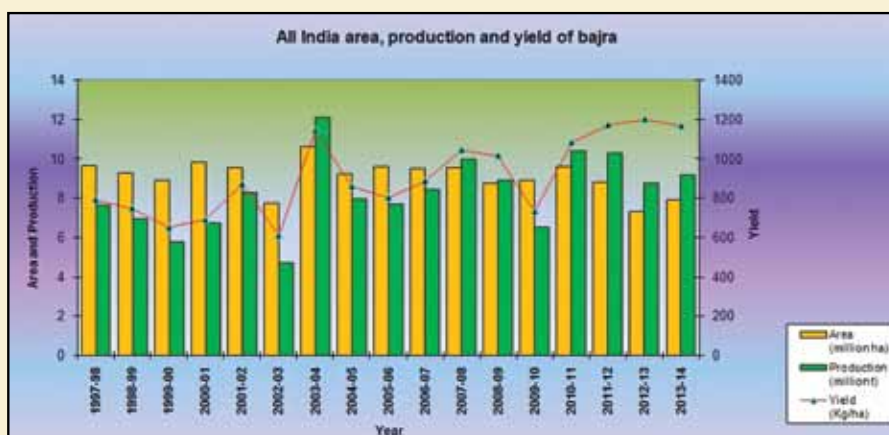


**Table 5.9: All India area, production and yield of bajra**

| Year                 | Area              |                 | Production                     |                 | Yield   |                 | % Coverage under irrigation |
|----------------------|-------------------|-----------------|--------------------------------|-----------------|---------|-----------------|-----------------------------|
|                      | (million ha)      | Growth rate (%) | (million t)                    | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98              | 9.67              | - 3.1           | 7.64                           | - 2.9           | 791     | 0.4             | 5.9                         |
| 1998-99              | 9.30              | - 3.8           | 6.96                           | - 8.9           | 748     | - 5.4           | 7.0                         |
| 1999-00              | 8.90              | - 4.3           | 5.78                           | - 17.0          | 650     | - 13.1          | 8.3                         |
| 2000-01              | 9.83              | 10.4            | 6.76                           | 17.0            | 688     | 5.8             | 8.0                         |
| 2001-02              | 9.53              | - 3.1           | 8.28                           | 22.5            | 869     | 26.3            | 6.3                         |
| 2002-03              | 7.74              | - 18.8          | 4.72                           | - 43.0          | 610     | - 29.8          | 9.0                         |
| 2003-04              | 10.61             | 37.1            | 12.11                          | 156.6           | 1141    | 87.0            | 6.3                         |
| 2004-05              | 9.23              | - 13.0          | 7.93                           | - 34.5          | 859     | - 24.7          | 8.3                         |
| 2005-06              | 9.58              | 3.8             | 7.68                           | - 3.2           | 802     | - 6.6           | 8.9                         |
| 2006-07              | 9.51              | -0.7            | 8.42                           | 9.6             | 886     | 10.5            | 9.0                         |
| 2007-08              | 9.57              | 0.6             | 9.97                           | 18.4            | 1042    | 17.6            | 9.5                         |
| 2008-09              | 8.75              | - 8.6           | 8.89                           | - 10.8          | 1015    | - 2.6           | 9.4                         |
| 2009-10              | 8.90              | 1.7             | 6.51                           | - 26.8          | 731     | -28.0           | 8.6                         |
| 2010-11              | 9.61              | 8.0             | 10.37                          | 59.3            | 1079    | 47.6            | 8.3                         |
| 2011-12              | 8.78              | -8.6            | 10.28                          | -0.9            | 1171    | 8.5             | 8.5 <sup>#</sup>            |
| 2012-13              | 7.30              | -16.9           | 8.74                           | -15.0           | 1198    | 2.3             | 9.1 <sup>#</sup>            |
| 2013-14              | 7.89 <sup>*</sup> | 8.1             | 9.18 <sup>*</sup>              | 5.0             | 1184    | -1.2            | N.A.                        |
| 2014-15 <sup>†</sup> | N.A.              | N.A.            | <b>6.06-11.46<sup>\$</sup></b> | N.A.            | 1272    | 7.4             | N.A.                        |
| 2015-16 <sup>‡</sup> |                   |                 | <b>6.15-11.56<sup>\$</sup></b> |                 |         |                 |                             |

Note : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not Available, 3. \* 4th Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. # Provisional.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

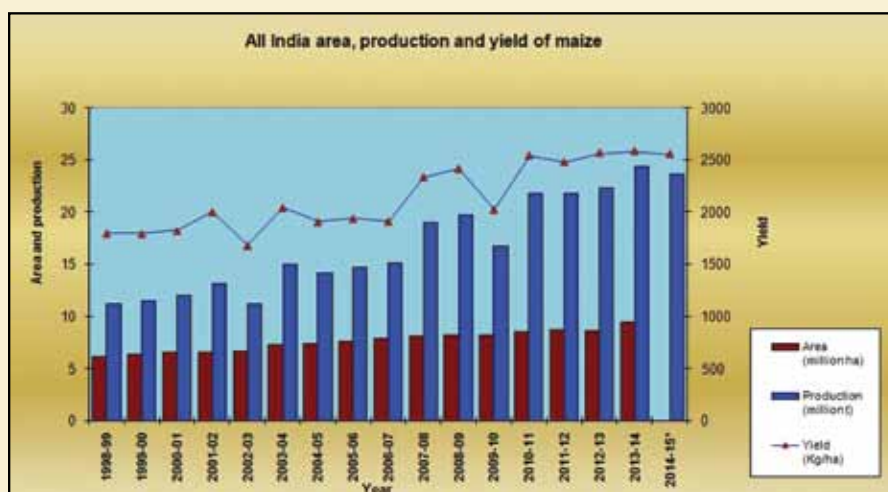


**Table 5.10: All India area, production and yield of maize**

| Year                 | Area              |                 | Production                     |                 | Yield   |                 | % Coverage under irrigation |
|----------------------|-------------------|-----------------|--------------------------------|-----------------|---------|-----------------|-----------------------------|
|                      | (million ha)      | Growth rate (%) | (million t)                    | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98              | 6.32              | 1.0             | 10.82                          | 0.5             | 1711    | - 0.5           | 20.6                        |
| 1998-99              | 6.20              | - 1.9           | 11.15                          | 3.0             | 1797    | 5.0             | 21.7                        |
| 1999-00              | 6.42              | 3.5             | 11.51                          | 3.2             | 1792    | - 0.3           | 22.9                        |
| 2000-01              | 6.61              | 3.0             | 12.04                          | 4.6             | 1822    | 1.7             | 22.4                        |
| 2001-02              | 6.58              | - 0.5           | 13.16                          | 9.3             | 2000    | 9.8             | 20.5                        |
| 2002-03              | 6.64              | 0.9             | 11.15                          | - 15.3          | 1681    | - 16.0          | 19.5                        |
| 2003-04              | 7.34              | 10.5            | 14.98                          | 34.3            | 2041    | 21.4            | 19.1                        |
| 2004-05              | 7.43              | 1.2             | 14.17                          | - 5.4           | 1907    | - 6.6           | 20.5                        |
| 2005-06              | 7.59              | 2.2             | 14.71                          | 3.8             | 1938    | 1.6             | 21.1                        |
| 2006-07              | 7.89              | 4.0             | 15.10                          | 2.6             | 1912    | -1.3            | 21.5                        |
| 2007-08              | 8.12              | 2.9             | 18.96                          | 25.6            | 2335    | 22.1            | 23.5                        |
| 2008-09              | 8.17              | 0.6             | 19.73                          | 4.1             | 2414    | 3.4             | 25.2                        |
| 2009-10              | 8.26              | 1.1             | 16.72                          | -15.3           | 2024    | -16.2           | 23.8                        |
| 2010-11              | 8.55              | 3.5             | 21.73                          | 30.0            | 2542    | 25.5            | 24.3                        |
| 2011-12              | 8.78              | 2.7             | 21.76                          | 0.1             | 2478    | -2.5            | 25.3 <sup>#</sup>           |
| 2012-13              | 8.67              | -1.3            | 22.26                          | 2.3             | 2566    | 3.6             | 25.4 <sup>#</sup>           |
| 2013-14              | 9.43 <sup>*</sup> | 8.8             | 24.26 <sup>*</sup>             | 9.0             | 2676    | 4.3             | N.A.                        |
| 2014-15 <sup>*</sup> | N.A.              | N.A.            | 23.67                          | -2.4            | 2557    | -4.4            | N.A.                        |
| 2015-16 <sup>s</sup> |                   |                 | <b>21.67-26.38<sup>s</sup></b> |                 |         |                 |                             |

**Note** : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. # Provisional.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
 2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

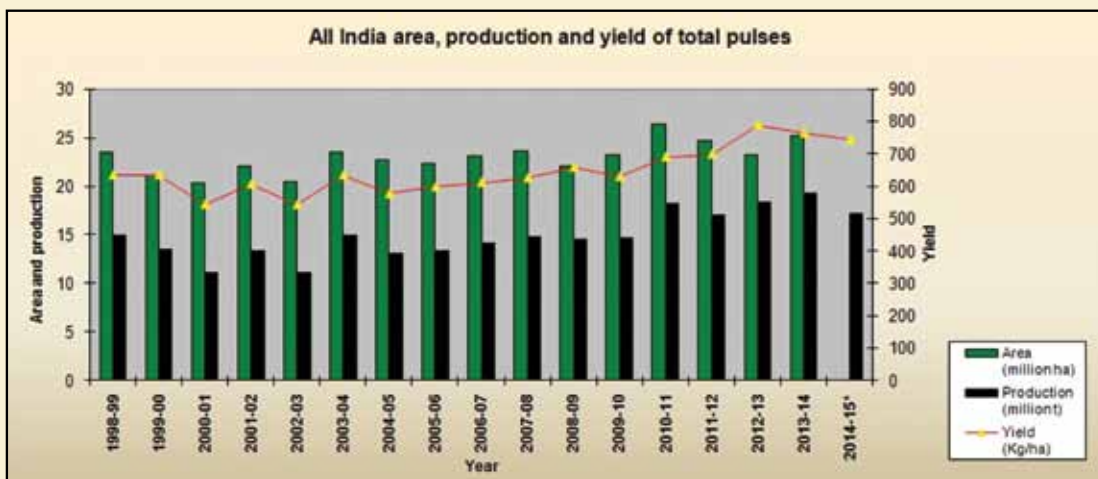


**Table 5.11: All India area, production and yield of total pulses**

| Year                  | Area         |                 | Production                |                 | Yield   |                 | % Coverage under irrigation |
|-----------------------|--------------|-----------------|---------------------------|-----------------|---------|-----------------|-----------------------------|
|                       | (million ha) | Growth rate (%) | (million t)               | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98               | 22.87        | 1.9             | 12.98                     | - 8.8           | 567     | - 10.7          | 11.3                        |
| 1998-99               | 23.50        | 2.8             | 14.91                     | 14.9            | 634     | 11.8            | 12.1                        |
| 1999-00               | 21.12        | - 10.1          | 13.42                     | - 10.0          | 635     | 0.2             | 16.1                        |
| 2000-01               | 20.35        | - 3.6           | 11.08                     | - 17.4          | 544     | - 14.3          | 12.5                        |
| 2001-02               | 22.01        | 8.2             | 13.37                     | 20.7            | 607     | 11.6            | 13.3                        |
| 2002-03               | 20.50        | - 6.9           | 11.13                     | - 16.8          | 543     | - 10.5          | 14.4                        |
| 2003-04               | 23.46        | 14.4            | 14.91                     | 34.0            | 635     | 16.9            | 13.6                        |
| 2004-05               | 22.76        | - 3.0           | 13.13                     | - 11.9          | 577     | - 9.1           | 13.9                        |
| 2005-06               | 22.39        | - 1.6           | 13.39                     | 2.0             | 598     | 3.6             | 15.0                        |
| 2006-07               | 23.19        | 3.6             | 14.20                     | 6.0             | 612     | 2.3             | 15.4                        |
| 2007-08               | 23.63        | 1.9             | 14.76                     | 3.9             | 625     | 2.1             | 16.2                        |
| 2008-09               | 22.09        | - 6.5           | 14.57                     | -1.3            | 659     | 5.4             | 16.0                        |
| 2009-10               | 23.28        | 5.4             | 14.66                     | 0.6             | 630     | -4.4            | 16.2                        |
| 2010-11               | 26.40        | 13.4            | 18.24                     | 24.4            | 691     | 9.7             | 14.8                        |
| 2011-12               | 24.46        | -7.3            | 17.09                     | -6.3            | 699     | 1.2             | 16.1 <sup>#</sup>           |
| 2012-13               | 23.26        | -4.9            | 18.34                     | 7.3             | 789     | 12.9            | 18.6 <sup>#</sup>           |
| 2013-14               | 25.23        | 8.5             | 19.25                     | 5.0             | 764     | -3.2            | N.A.                        |
| 2014-15*              | N.A.         | N.A.            | 17.19                     | -10.7           | 744     | -2.6            | N.A.                        |
| 2015-16 <sup>\$</sup> |              |                 | 15.87-21.42 <sup>\$</sup> |                 |         |                 |                             |

Note : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. <sup>#</sup> Provisional.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

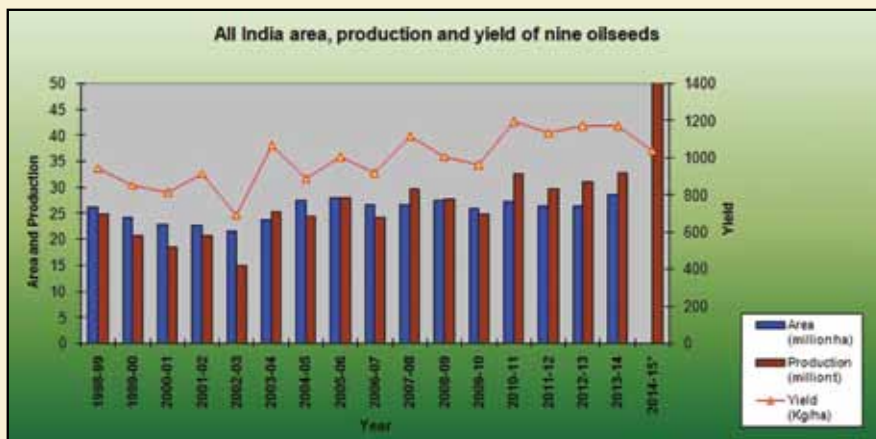


**Table 5.12: All India area, production and yield of nine oilseeds**

| Year                  | Area         |                 | Production                     |                 | Yield   |                 | % Coverage under irrigation |
|-----------------------|--------------|-----------------|--------------------------------|-----------------|---------|-----------------|-----------------------------|
|                       | (million ha) | Growth rate (%) | (million t)                    | Growth rate (%) | (kg/ha) | Growth rate (%) |                             |
| 1997-98               | 26.12        | - 0.8           | 21.32                          | - 12.6          | 816     | - 11.9          | 24.3                        |
| 1998-99               | 26.23        | 0.4             | 24.75                          | 16.1            | 944     | 15.7            | 23.2                        |
| 1999-00               | 24.28        | - 7.4           | 20.72                          | - 16.3          | 853     | - 9.6           | 25.2                        |
| 2000-01               | 22.77        | - 6.2           | 18.44                          | - 11.0          | 810     | - 5.0           | 23.0                        |
| 2001-02               | 22.64        | - 0.6           | 20.66                          | 12.0            | 913     | 12.7            | 24.3                        |
| 2002-03               | 21.49        | - 5.1           | 14.84                          | - 28.2          | 691     | - 24.3          | 22.7                        |
| 2003-04               | 23.66        | 10.1            | 25.19                          | 69.7            | 1064    | 54.0            | 24.5                        |
| 2004-05               | 27.52        | 16.3            | 24.35                          | - 3.3           | 885     | - 16.8          | 26.6                        |
| 2005-06               | 27.86        | 1.2             | 27.98                          | 14.9            | 1004    | 13.4            | 28.0                        |
| 2006-07               | 26.51        | -4.8            | 24.29                          | -13.2           | 916     | -8.8            | 28.3                        |
| 2007-08               | 26.69        | 0.7             | 29.76                          | 22.5            | 1115    | 21.7            | 27.1                        |
| 2008-09               | 27.56        | 3.3             | 27.72                          | -6.9            | 1006    | -9.8            | 27.1                        |
| 2009-10               | 25.96        | -5.8            | 24.88                          | -10.2           | 959     | -4.8            | 25.9                        |
| 2010-11               | 27.22        | 4.9             | 32.48                          | 30.5            | 1193    | 24.5            | 25.1                        |
| 2011-12               | 26.31        | -3.3            | 29.80                          | -8.3            | 1135    | -4.9            | 27.6 <sup>#</sup>           |
| 2012-13               | 26.48        | 0.6             | 30.94                          | 3.8             | 1168    | 3.1             | 28.3 <sup>#</sup>           |
| 2013-14               | 28.53        | 7.7             | 32.75                          | 5.9             | 1168    | 0.0             | N.A.                        |
| 2014-15*              | N.A.         | N.A.            | 26.67                          | -18.6           | 1037    | -11.2           | N.A.                        |
| 2015-16 <sup>\$</sup> |              |                 | <b>26.1-35.16<sup>\$</sup></b> |                 |         |                 |                             |

**Note** : 1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units, 2. N.A.: Not Available, 3. \* 4<sup>th</sup> Advance estimates, 4. \$ Projections are based on statistical models using past years data since 1950-51, 5. # Provisional.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



**Table 5.13: Production of oilseeds/oils and net domestic availability of edible oils**

| Vegetable oils   | 2008-09       |              | 2009-10       |               | 2010-11       |               | 2011-12       |               | 2012-13       |               | 2013-14       |               | 2014-15*      |                       |
|--|---------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
|  | Oilseeds      | Oils         | Oilseeds      | Oils          | Oilseeds      | Oils          | Oilseeds      | Oils          | Oilseeds      | Oils          | Oilseeds      | Oils          | Oilseeds      | Oils                  |
| <b>A. Primary source</b>                                 |               |              |               |               |               |               |               |               |               |               |               |               |               |                       |
| Groundnut  | 71.68         | 16.48        | 54.29         | 12.49         | 82.65         | 19.01         | 69.64         | 16.02         | 46.95         | 10.80         | 97.14         | 22.34         | 65.57         | 15.08                 |
| Rapeseed/ Mustard  | 72.01         | 22.32        | 66.08         | 20.48         | 81.79         | 25.35         | 66.04         | 20.47         | 80.29         | 24.89         | 78.77         | 24.42         | 63.09         | 19.56                 |
| Soybean  | 99.05         | 15.85        | 99.65         | 15.94         | 127.36        | 20.38         | 122.14        | 19.54         | 146.66        | 23.47         | 118.60        | 18.97         | 105.28        | 16.84                 |
| Sunflower  | 11.58         | 3.82         | 8.51          | 2.81          | 6.51          | 2.15          | 5.16          | 1.70          | 5.44          | 1.80          | 5.04          | 1.66          | 4.15          | 1.37                  |
| Sesamum  | 6.4           | 1.98         | 5.88          | 1.82          | 8.93          | 2.77          | 8.10          | 2.51          | 6.85          | 2.12          | 7.15          | 2.21          | 8.11          | 2.51                  |
| Nigerseed  | 1.17          | 0.35         | 1.00          | 0.30          | 1.08          | 0.32          | 0.98          | 0.29          | 1.02          | 0.31          | 0.98          | 0.29          | 0.73          | 0.22                  |
| Safflower  | 1.89          | 0.57         | 1.79          | 0.54          | 1.50          | 0.45          | 1.45          | 0.44          | 1.09          | 0.33          | 1.13          | 0.31          | 0.96          | 0.29                  |
| Castor   | 11.71         | 4.68         | 10.09         | 4.04          | 13.50         | 5.40          | 22.95         | 9.18          | 19.64         | 7.86          | 17.27         | 6.91          | 17.33         | 6.93                  |
| Linseed  | 1.69          | 0.51         | 1.54          | 0.46          | 1.47          | 0.44          | 1.52          | 0.46          | 1.49          | 0.45          | 1.41          | 0.41          | 1.53          | 0.46                  |
| <b>Sub Total</b>   | <b>297.55</b> | <b>69.64</b> | <b>277.18</b> | <b>66.56</b>  | <b>248.83</b> | <b>58.88</b>  | <b>324.79</b> | <b>76.27</b>  | <b>297.98</b> | <b>70.61</b>  | <b>327.49</b> | <b>77.52</b>  | <b>266.75</b> | <b>63.26</b>          |
| <b>B. Secondary source</b>                               |               |              |               |               |               |               |               |               |               |               |               |               |               |                       |
| Coconut  | 4.50          |              |               | 4.50          |               | 4.00          |               | 4.00          |               | 3.90          |               | 4.30          |               | 3.80                  |
| Cotton seed  | 7.60          |              |               | 8.00          |               | 10.89         |               | 11.62         |               | 11.57         |               | 12.40         |               | 12.15                 |
| Rice bran  | 7.70          |              |               | 7.20          |               | 7.20          |               | 7.50          |               | 7.80          |               | 8.10          |               | 9.20                  |
| Solvent extracted oils                                   | 4.00          |              |               | 4.20          |               | 4.20          |               | 4.10          |               | 4.10          |               | 4.10          |               | 4.00                  |
| Tree & forest origin                                     | 1.20          |              |               | 1.20          |               | 1.20          |               | 1.20          |               | 1.20          |               | 1.20          |               | 1.60                  |
| Sub Total  | 25.20         |              |               | 25.10         |               | 27.49         |               | 28.42         |               | 28.57         |               | 30.10         |               | 30.75                 |
| <b>Total (A+B)</b>                                       | <b>91.56</b>  |              |               | <b>83.98</b>  |               | <b>103.76</b> |               | <b>99.03</b>  |               | <b>100.60</b> |               | <b>107.62</b> |               | <b>94.01</b>          |
| <b>C. Less exports &amp; Industrial use</b>              | <b>7.00</b>   |              |               | <b>4.52</b>   |               | <b>5.94</b>   |               | <b>9.46</b>   |               | <b>8.41</b>   |               | <b>7.10</b>   |               | <b>5.94</b>           |
| <b>D. Net domestic availability of edible oils</b>       | <b>84.56</b>  |              |               | <b>79.46</b>  |               | <b>97.82</b>  |               | <b>89.57</b>  |               | <b>92.19</b>  |               | <b>101.90</b> |               | <b>89.78</b>          |
| <b>E. Import of edible oils<sup>s</sup></b>              | <b>81.83</b>  |              |               | <b>88.23</b>  |               | <b>72.42</b>  |               | <b>99.81</b>  |               | <b>106.05</b> |               | <b>109.76</b> |               | <b>83.24</b>          |
| <b>F. Total availability/ consumption of edible oils</b> | <b>166.39</b> |              |               | <b>167.69</b> |               | <b>170.24</b> |               | <b>189.38</b> |               | <b>198.24</b> |               | <b>211.66</b> |               | <b>N.A.</b>           |
|  |               |              |               |               |               |               |               |               |               |               |               |               |               | <b>(upto June 15)</b> |

Note : 1. \* Based on 4<sup>th</sup> advance estimates, 2. \$ Directorate General of Commercial Intelligence & Statistics (Department of Commerce), 3. N.A.: Not available.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India  
(Website: eands.daonet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 5.14: All India area, production and yield of commercial crops**

(Area: million ha, Production: million t, Yield: kg/ha)

| Crops                         |            | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15*           |
|-------------------------------|------------|---------|---------|---------|---------|---------|--------------------|
| <b>Groundnut</b>              | Area       | 5.48    | 5.86    | 5.26    | 4.72    | 5.53    | N.A.               |
|                               | Production | 5.43    | 8.26    | 6.96    | 4.70    | 9.71    | 6.56               |
|                               | Yield      | 991     | 1411    | 1323    | 995     | 1764    | 1400               |
| <b>Rapeseed &amp; Mustard</b> | Area       | 5.59    | 6.90    | 5.89    | 6.36    | 6.70    | N.A.               |
|                               | Production | 6.61    | 8.18    | 6.60    | 8.03    | 7.88    | 6.31               |
|                               | Yield      | 1183    | 1185    | 1121    | 1262    | 1185    | 1089               |
| <b>Sunflower</b>              | Area       | 1.48    | 0.93    | 0.73    | 0.83    | 0.69    | N.A.               |
|                               | Production | 0.85    | 0.65    | 0.52    | 0.54    | 0.55    | 0.42               |
|                               | Yield      | 576     | 701     | 712     | 655     | 750     | 752                |
| <b>Soyabean</b>               | Area       | 9.73    | 9.60    | 10.11   | 10.84   | 12.20   | N.A.               |
|                               | Production | 9.96    | 12.74   | 12.21   | 14.67   | 11.86   | 10.53              |
|                               | Yield      | 1024    | 1327    | 1208    | 1353    | 1012    | 950                |
| <b>Nine oil seed</b>          | Area       | 25.96   | 27.22   | 26.31   | 26.48   | 28.53   | N.A.               |
|                               | Production | 24.88   | 32.48   | 29.80   | 30.94   | 32.75   | 26.67              |
|                               | Yield      | 958     | 1193    | 1133    | 1168    | 1168    | 1037               |
| <b>Cotton@</b>                | Area       | 10.13   | 11.24   | 12.18   | 11.98   | 11.69   | N.A.               |
|                               | Production | 24.02   | 33.00   | 35.20   | 34.22   | 35.90   | 35.48              |
|                               | Yield      | 403     | 499     | 491     | 486     | 510     | 461                |
| <b>Jute &amp; Mesta**</b>     | Area       | 0.91    | 0.87    | 0.90    | 0.86    | 0.85    | N.A.               |
|                               | Production | 11.82   | 10.62   | 11.40   | 10.93   | 11.68   | 11.45              |
|                               | Yield      | 2349    | 2192    | 2283    | 2281    | 2449    | N.A.               |
| <b>Sugarcane</b>              | Area       | 4.17    | 4.88    | 5.04    | 5.00    | 5.01    | N.A.               |
|                               | Production | 292.30  | 342.38  | 361.04  | 341.20  | 352.14  | 359.33             |
|                               | Yield      | 70020   | 70091   | 71668   | 68254   | 70522   | 69860              |
| <b>Potato</b>                 | Area       | 1.84    | 1.86    | 1.91    | 1.99    | 1.97    | 2.06 <sup>#</sup>  |
|                               | Production | 36.58   | 42.34   | 41.48   | 45.34   | 41.56   | 44.89 <sup>#</sup> |
|                               | Yield      | 19951   | 22724   | 21753   | 22760   | 21100   | 21800 <sup>#</sup> |
| <b>Onion</b>                  | Area       | 0.76    | 1.06    | 1.09    | 1.05    | 1.20    | N.A.               |
|                               | Production | 12.16   | 15.12   | 17.51   | 16.81   | 19.40   | N.A.               |
|                               | Yield      | 16079   | 14210   | 16109   | 15989   | 16100   | N.A.               |
| <b>Coconut</b>                | Area       | 1.90    | 1.90    | 2.07    | 2.14    | 2.14    | 1.98 <sup>#</sup>  |
|                               | Production | 15.73   | 10.84   | 14.94   | 15.61   | 14.91   | 15.70 <sup>#</sup> |
|                               | Yield      | 8300    | 5700    | 7200    | 7300    | 7000    | 7900 <sup>#</sup>  |
| <b>Tobacco</b>                | Area       | 0.44    | 0.49    | 0.47    | 0.43    | N.A.    | N.A.               |
|                               | Production | 0.69    | 0.88    | 0.75    | 0.66    | 0.74    | N.A.               |
|                               | Yield      | 1559    | 1794    | 1613    | 1542    | 1612    | N.A.               |

**Note** : 1. # Provisional, 2. @ Production in million bales of 170 kg each, 3. \*\* Production in million bales 180 kg each, 4. \* 4<sup>th</sup> Advance estimates, 5. § 2<sup>nd</sup> Advance estimates, 6. N.A.: Not available.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 5.15: Three largest producing States of important crops during 2014-15\***

(Production: million t)

| Crops                         | States         | Production | % Share of production to all India | Cumulative % share of production |
|-------------------------------|----------------|------------|------------------------------------|----------------------------------|
| <b>Foodgrains</b>             |                |            |                                    |                                  |
| <b>Rice</b>                   | West Bengal    | 14.71      | 14.04                              | 14.04                            |
|                               | Uttar Pradesh  | 12.22      | 11.66                              | 25.70                            |
|                               | Andhra Pradesh | 11.57      | 11.04                              | 36.74                            |
| <b>Wheat</b>                  | Uttar Pradesh  | 25.22      | 28.36                              | 28.36                            |
|                               | Punjab         | 15.78      | 17.74                              | 46.10                            |
|                               | Madhya Pradesh | 14.18      | 15.94                              | 62.04                            |
| <b>Maize</b>                  | Andhra Pradesh | 4.24       | 17.89                              | 17.89                            |
|                               | Karnataka      | 3.91       | 16.53                              | 34.42                            |
|                               | Maharashtra    | 2.20       | 9.31                               | 41.73                            |
| <b>Total coarse cereals</b>   | Karnataka      | 7.57       | 18.12                              | 18.12                            |
|                               | Rajasthan      | 6.68       | 16.00                              | 34.12                            |
|                               | Maharashtra    | 4.72       | 11.29                              | 45.41                            |
| <b>Total pulses</b>           | Madhya Pradesh | 4.70       | 27.36                              | 27.36                            |
|                               | Maharashtra    | 1.95       | 11.34                              | 38.70                            |
|                               | Rajasthan      | 1.74       | 10.10                              | 48.80                            |
| <b>Total foodgrains</b>       | Uttar Pradesh  | 42.47      | 16.81                              | 16.81                            |
|                               | Punjab         | 27.46      | 10.87                              | 27.68                            |
|                               | Madhya Pradesh | 25.49      | 10.09                              | 37.77                            |
| <b>Oilseeds</b>               |                |            |                                    |                                  |
| <b>Groundnut</b>              | Gujarat        | 2.22       | 33.90                              | 33.90                            |
|                               | Andhra Pradesh | 1.02       | 15.48                              | 49.38                            |
|                               | Tamil Nadu     | 0.90       | 13.79                              | 63.17                            |
| <b>Rapeseed &amp; Mustard</b> | Rajasthan      | 2.90       | 45.89                              | 45.89                            |
|                               | Madhya Pradesh | 0.72       | 11.36                              | 57.25                            |
|                               | Haryana        | 0.70       | 11.08                              | 68.33                            |
| <b>Soyabean</b>               | Madhya Pradesh | 6.35       | 60.35                              | 60.35                            |
|                               | Maharashtra    | 2.49       | 23.65                              | 84.00                            |
|                               | Rajasthan      | 0.96       | 9.08                               | 93.08                            |
| <b>Sunflower</b>              | Karnataka      | 0.21       | 51.08                              | 51.08                            |
|                               | Andhra Pradesh | 0.06       | 14.94                              | 66.02                            |
|                               | Maharashtra    | 0.03       | 7.23                               | 73.25                            |
| <b>Total oilseeds</b>         | Gujarat        | 7.72       | 28.96                              | 28.96                            |
|                               | Madhya Pradesh | 5.32       | 19.94                              | 48.90                            |
|                               | Rajasthan      | 3.98       | 14.93                              | 63.83                            |
| <b>Other Cash Crops</b>       |                |            |                                    |                                  |
| <b>Sugarcane</b>              | Uttar Pradesh  | 138.48     | 38.54                              | 38.54                            |
|                               | Maharashtra    | 81.87      | 22.78                              | 61.32                            |
|                               | Karnataka      | 41.90      | 11.66                              | 72.98                            |

## Production and productivity

| Crops           | States         | Production | % Share of production to all India | Cumulative % share of production |
|-----------------|----------------|------------|------------------------------------|----------------------------------|
| Cotton @        | Gujarat        | 11.09      | 31.26                              | 31.26                            |
|                 | Maharashtra    | 7.02       | 19.79                              | 51.05                            |
|                 | Andhra Pradesh | 6.64       | 18.72                              | 69.77                            |
| Jute & Mesta \$ | West Bengal    | 8.92       | 77.91                              | 77.91                            |
|                 | Bihar          | 1.50       | 13.10                              | 91.01                            |
|                 | Assam          | 0.80       | 6.94                               | 97.95                            |

**Note** : 1. @ Production in million bales of 170 kg each, 2. \$ Production in million bales of 180 kg each, 3. \* 4<sup>th</sup> Advance estimates.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 5.16: Area, production and yield of principal condiments and spices**

(Area: 000<sup>7</sup> ha; Production: 000<sup>7</sup> t, Yield: kg/ha)

| Crops     |            | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15* |
|-----------|------------|---------|---------|---------|---------|---------|---------|----------|
| Pepper    | Area       | 238.71  | 185.92  | 184.00  | 200.30  | 124.60  | 124.00  | 124.00   |
|           | Production | 47.40   | 51.02   | 52.00   | 40.60   | 52.60   | 51.00   | 55.00    |
|           | Yield      | 199     | 260     | 183     | 203     | 422     | 411     | 443      |
| Cardamom  | Area       | 91.99   | 90.20   | 87.00   | 89.00   | 92.40   | 93.00   | 92.00    |
|           | Production | 15.45   | 15.72   | 16.00   | 15.80   | 18.40   | 21.00   | 22.00    |
|           | Yield      | 168     | 174     | 184     | 178     | 199     | 226     | 239      |
| Coriander | Area       | 396.85  | 360.00  | 530.00  | 557.90  | 543.20  | 447.00  | 470.00   |
|           | Production | 242.13  | 236.72  | 482.00  | 532.90  | 523.90  | 314.00  | 344.00   |
|           | Yield      | 610     | 658     | 909     | 955     | 964     | 703     | 732      |
| Chillies  | Area       | 779.10  | 767.23  | 792.00  | 804.80  | 794.10  | 775.00  | 744.00   |
|           | Production | 1269.90 | 1202.94 | 1223.00 | 1276.30 | 1304.40 | 1492.00 | 1453.00  |
|           | Yield      | 1630    | 1568    | 1544    | 1586    | 1643    | 1925    | 1953     |
| Gaur Seed | Area       | 3862.50 | 2989.60 | 3382.2  | 3444.2  | 5151.70 | N.A.    | N.A.     |
|           | Production | 1935.80 | 593.10  | 1965.30 | 2217.6  | 2460.70 | N.A.    | N.A.     |
|           | Yield      | 501     | 198     | 581     | 644     | 478     | N.A.    | N.A.     |
| Tapioca   | Area       | 280.00  | 231.90  | 221.00  | 226.70  | 206.96  | 228.00  | 213.00   |
|           | Production | 9623.00 | 8059.90 | 8076.00 | 8746.50 | 7236.59 | 8139.00 | 5713.00  |
|           | Yield      | 34368   | 34756   | 36543   | 38582   | 34966   | 35697   | 26822    |
| Turmeric  | Area       | 181.10  | 180.96  | 195.00  | 218.60  | 194.20  | 233.00  | 189.00   |
|           | Production | 821.20  | 792.98  | 993.00  | 1166.80 | 971.10  | 1190.00 | 852.00   |
|           | Yield      | 4535    | 4382    | 5092    | 5337    | 5000    | 5107    | 4508     |
| Garlic    | Area       | 181.09  | 164.86  | 201.00  | 242.49  | 247.52  | 231.00  | 244.00   |
|           | Production | 821.16  | 833.97  | 1058.00 | 1228.32 | 1259.27 | 1252.00 | 1292.00  |
|           | Yield      | 4535    | 5059    | 5264    | 5065    | 5088    | 5420    | 5295     |
| Ginger    | Area       | 108.64  | 107.54  | 149.00  | 155.06  | 136.25  | 133.00  | 138.00   |
|           | Production | 380.10  | 385.33  | 702.00  | 755.62  | 682.63  | 655.00  | 704.00   |
|           | Yield      | 3499    | 3583    | 4711    | 4873    | 5010    | 4925    | 5101     |

**Note** : 1. \*: 3<sup>rd</sup> Advance Estimate, 2. N.A.: Not available.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



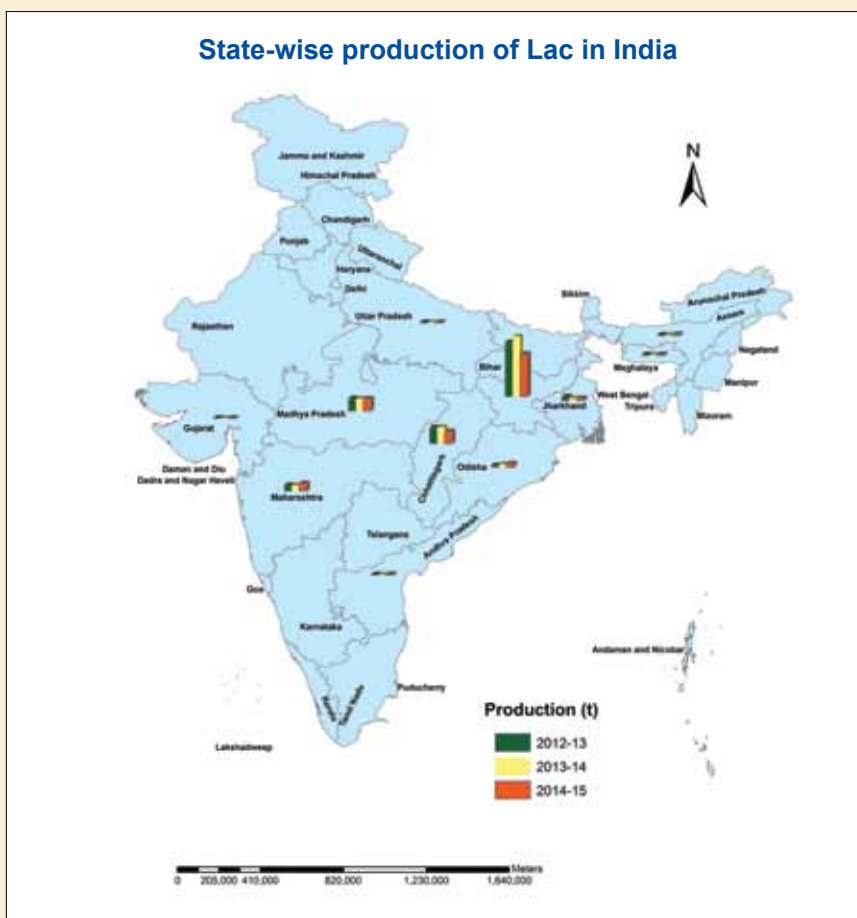
**Table 5.17: State-wise production of lac in India**

(t)

| States         | 2009-10      | 2010-11     | 2011-12      | 2012-13      | 2013-14      | 2014-15       |
|----------------|--------------|-------------|--------------|--------------|--------------|---------------|
| Andhra Pradesh | 35           | 20          | 120          | 93           | 113          | 160           |
| Assam          | 100          | 50          | 100          | 130          | 150          | 285           |
| Bihar          | N.A.         | N.A.        | N.A.         | N.A.         | N.A.         | N.A.          |
| Chhattisgarh   | 4995         | 1985        | 3200         | 3260         | 3381         | 2476          |
| Gujarat        | 65           | 35          | 35           | 55           | 47           | 45            |
| Jharkhand      | 6925         | 3980        | 10240        | 11020        | 12207        | 8630          |
| Madhya Pradesh | 2390         | 685         | 1300         | 2524         | 2497         | 2446          |
| Maharashtra    | 520          | 435         | 950          | 1155         | 1182         | 1525          |
| Meghalaya      | 10           | 05          | 05           | 150          | 168          | 170           |
| Odisha         | 400          | 230         | 350          | 310          | 673          | 715           |
| Uttar Pradesh  | 200          | 175         | 200          | 100          | 90           | 75            |
| West Bengal    | 855          | 1435        | 1400         | 780          | 500          | 451           |
| <b>Total</b>   | <b>16495</b> | <b>9035</b> | <b>17900</b> | <b>19577</b> | <b>21008</b> | <b>16978*</b> |

Note : 1. \* The lac production during 2014-15 has declined due to the rainfall (CG, JH, Etc.), 2. N.A.: Not available.

Source : Information received from Indian Institute of Natural Resins and Gums, Namkum, Ranchi.



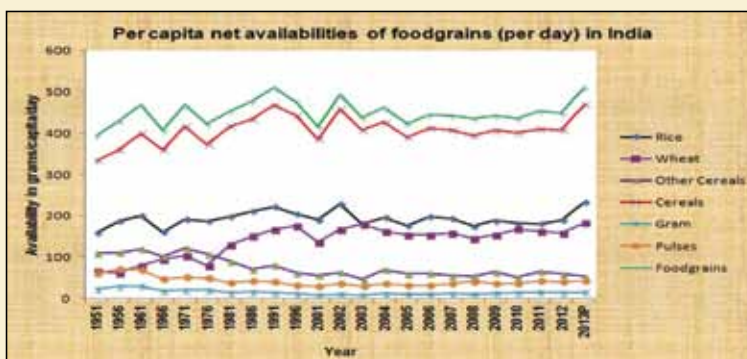
**Table 5.18: Per capita net availabilities of foodgrains (per day) in India**

(gram per day)

| Year              | Rice  | Wheat | Other Cereals | Cereals | Gram | Pulses | Food-grains |
|-------------------|-------|-------|---------------|---------|------|--------|-------------|
| 1951              | 158.9 | 65.7  | 109.6         | 334.2   | 22.5 | 60.7   | 394.9       |
| 1956              | 187.7 | 61.5  | 111.2         | 360.4   | 29.0 | 70.3   | 430.7       |
| 1961              | 201.1 | 79.1  | 119.5         | 399.7   | 30.2 | 69.0   | 468.7       |
| 1966              | 161.9 | 95.4  | 102.6         | 359.9   | 18.3 | 48.2   | 408.1       |
| 1971              | 192.6 | 103.6 | 121.4         | 417.6   | 20.0 | 51.2   | 468.8       |
| 1976              | 187.2 | 79.5  | 107.4         | 373.8   | 20.2 | 50.5   | 424.3       |
| 1981              | 197.8 | 129.6 | 89.9          | 417.3   | 13.4 | 37.5   | 454.8       |
| 1986              | 212.0 | 151.0 | 70.7          | 433.7   | 16.2 | 43.8   | 477.5       |
| 1991              | 221.7 | 166.8 | 80.0          | 468.5   | 13.4 | 41.6   | 510.1       |
| 1996              | 204.4 | 176.0 | 62.0          | 442.5   | 11.3 | 32.7   | 475.2       |
| 2001              | 190.5 | 135.8 | 56.2          | 386.2   | 8.0  | 30.0   | 416.2       |
| 2002              | 228.7 | 166.6 | 63.4          | 458.7   | 10.7 | 35.4   | 494.1       |
| 2003              | 181.4 | 180.4 | 46.7          | 408.5   | 8.5  | 29.1   | 437.6       |
| 2004              | 195.4 | 162.2 | 69.3          | 426.9   | 11.2 | 35.8   | 462.7       |
| 2005              | 177.3 | 154.3 | 59.4          | 390.9   | 10.6 | 31.5   | 422.4       |
| 2006              | 198.0 | 154.3 | 60.5          | 412.8   | 10.7 | 32.5   | 445.3       |
| 2007              | 194.0 | 157.8 | 55.5          | 407.4   | 11.9 | 35.5   | 442.8       |
| 2008              | 175.4 | 145.1 | 54.1          | 394.2   | 10.6 | 41.8   | 436.0       |
| 2009              | 188.4 | 154.7 | 63.9          | 407.0   | 12.9 | 37.0   | 444.0       |
| 2010              | 182.0 | 168.2 | 51.4          | 401.7   | 13.5 | 35.4   | 437.1       |
| 2011              | 181.5 | 163.5 | 65.6          | 410.6   | 14.6 | 43.0   | 453.6       |
| 2012              | 190.2 | 158.4 | 60.0          | 408.6   | 13.5 | 41.7   | 450.3       |
| 2013              | 159.7 | 145.8 | 52.6          | 358.1   | 15.3 | 43.3   | 401.4       |
| 2014 <sup>P</sup> | 198.9 | 183.0 | 61.9          | 444.1   | 16.4 | 47.1   | 491.2       |

**Note :** 1. The net availability of foodgrains is estimated to be Gross Production (-) seed, feed & wastage (-) export (+) import (+/-) change in stocks, 2. The net availability of foodgrains divided by the population estimates for a particular year indicates per capita availability of foodgrains in terms of kg / year. Net availability, thus worked out further divided by the number of days in a year i.e, 365 days gives us net availability of foodgrains in terms of grams/ day, 3. Figures in respect of per capita net availability given above are not strictly representative of actual level of consumption in the country especially as they do not take in to account any change in stocks in possession of traders, producers and consumers, 4. For calculation of per capita net availability the figures of net imports from 1981 to 1994 are based on imports and exports on Government of India account only. Net imports from 1995 onwards are the total exports and imports (on Government as well as private accounts), 5. Cereals include rice, wheat and other cereals, 6. Pulses include all kharif and rabi pulses, 7. Foodgrains includes rice, wheat, other cereals and all pulses, 8. P: Provisional.

**Source :** 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



**Table 5.19: Production of fish, milk, eggs, wool and meat**

| Year    | Fish<br>(lakh t)    | Milk<br>(million t) | Eggs<br>(million no.) | Wool<br>(million kg) | Meat<br>(million t) |
|---------|---------------------|---------------------|-----------------------|----------------------|---------------------|
| 1984-85 | 28.01               | 41.5                | 14,252                | 38.0                 | N.A.                |
| 1985-86 | 28.76               | 44.0                | 16,128                | 39.1                 | N.A.                |
| 1986-87 | 29.42               | 46.1                | 17,310                | 40.0                 | N.A.                |
| 1987-88 | 29.59               | 46.7                | 17,800                | 40.1                 | N.A.                |
| 1988-89 | 31.52               | 48.4                | 18,980                | 40.8                 | N.A.                |
| 1989-90 | 36.77               | 51.4                | 20,204                | 41.7                 | N.A.                |
| 1990-91 | 38.36               | 53.9                | 21,100                | 41.2                 | N.A.                |
| 1991-92 | 41.57               | 55.7                | 21,980                | 41.6                 | N.A.                |
| 1992-93 | 43.65               | 58.0                | 22,930                | 38.8                 | N.A.                |
| 1993-94 | 46.44               | 60.6                | 24,170                | 39.9                 | N.A.                |
| 1994-95 | 47.89               | 63.8                | 25,980                | 40.6                 | N.A.                |
| 1995-96 | 49.49               | 66.2                | 27,200                | 42.4                 | N.A.                |
| 1996-97 | 53.48               | 69.1                | 27,500                | 44.4                 | N.A.                |
| 1997-98 | 53.88               | 72.1                | 28,689                | 45.6                 | N.A.                |
| 1998-99 | 52.98               | 75.4                | 29,476                | 46.9                 | 1.9                 |
| 1999-00 | 56.75               | 78.3                | 30,447                | 47.9                 | 1.9                 |
| 2000-01 | 56.56               | 80.6                | 36,632                | 48.4                 | 1.9                 |
| 2001-02 | 59.56               | 84.4                | 38,729                | 49.5                 | 1.9                 |
| 2002-03 | 62.00               | 86.2                | 39,823                | 50.5                 | 2.1                 |
| 2003-04 | 63.99               | 88.1                | 40,403                | 48.5                 | 2.1                 |
| 2004-05 | 63.05               | 92.5                | 45,201                | 44.6                 | 2.2                 |
| 2005-06 | 65.72               | 97.1                | 46,235                | 44.9                 | 2.3                 |
| 2006-07 | 68.69               | 102.6               | 50,663                | 45.1                 | 2.3                 |
| 2007-08 | 71.27               | 107.9               | 53,565                | 43.9                 | 4.0                 |
| 2008-09 | 76.16               | 112.2               | 55,562                | 42.8                 | 4.3                 |
| 2009-10 | 79.98               | 116.4               | 60,267                | 43.1                 | 4.6                 |
| 2010-11 | 82.31               | 121.8               | 63,024                | 43.0                 | 4.9                 |
| 2011-12 | 86.66               | 127.9               | 66,450                | 44.7                 | 5.5                 |
| 2012-13 | 90.40               | 132.4               | 69,700                | 46.1                 | 5.9                 |
| 2013-14 | 95.76 <sup>P</sup>  | 137.7               | 74,800                | 47.9                 | 6.2                 |
| 2014-15 | 104.31 <sup>P</sup> | 146.3               | 78,500                | 48.1                 | N.A.                |

**Note** : 1. N.A.: Not available, 2. P: Provisional.

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
 2. *Basic Animal Husbandry & Fisheries Statistics, 2014*, Deptt. of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
 3. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India  
 (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 5.20: Cost of production of important crops in India 2012-13**

| Crop       | State          | Cost of Cultivation (Rs/ha) |          | Cost of Production (Rs/q) | Yield (q/ha) |
|------------|----------------|-----------------------------|----------|---------------------------|--------------|
|            |                | A2+FL                       | C2       | C2                        |              |
| Arhar      | Maharashtra    | 41968.04                    | 58795.49 | 3101.81                   | 18.35        |
|            | Karnataka      | 15564.25                    | 27012.41 | 2785.02                   | 9.04         |
|            | Madhya Pradesh | 19493.77                    | 28125.65 | 3101.50                   | 8.76         |
| Bajra      | Rajasthan      | 13722.93                    | 17937.22 | 1275.15                   | 8.39         |
|            | Uttar Pradesh  | 16242.67                    | 25507.81 | 911.61                    | 22.08        |
|            | Gujarat        | 25204.78                    | 34387.16 | 955.10                    | 25.57        |
| Cotton     | Gujarat        | 41873.40                    | 54769.45 | 4346.97                   | 12.37        |
|            | Maharashtra    | 54030.37                    | 71079.73 | 4120.27                   | 16.91        |
|            | Andhra Pradesh | 50948.24                    | 70609.51 | 4088.93                   | 17.27        |
| Groundnut  | Gujarat        | 38139.75                    | 48014.65 | 4904.58                   | 8.24         |
|            | Andhra Pradesh | 49003.18                    | 81695.27 | 3665.66                   | 21.20        |
|            | Tamil Naidu    | 49209.47                    | 60949.53 | 3892.73                   | 14.82        |
| Jowar      | Maharashtra    | 26085.14                    | 35737.68 | 2426.25                   | 9.02         |
|            | Karnataka      | 13491.81                    | 18429.00 | 2007.08                   | 7.82         |
|            | Tamil Naidu    | 14652.72                    | 21895.35 | 1556.65                   | 5.43         |
| Maize      | Andhra Pradesh | 34990.18                    | 54618.27 | 1089.54                   | 47.66        |
|            | Karnataka      | 26681.99                    | 37983.20 | 1249.37                   | 28.06        |
|            | Tamil Naidu    | 48514.15                    | 65043.54 | 1189.00                   | 53.00        |
| Moong      | Andhra Pradesh | 13694.73                    | 20890.82 | 4607.75                   | 4.52         |
|            | Maharashtra    | 26991.01                    | 35204.77 | 4761.73                   | 7.29         |
|            | Tamil Naidu    | 16621.73                    | 20852.19 | 4682.33                   | 4.41         |
| Niger seed | Odisha         | 11395.01                    | 16731.36 | 3177.04                   | 5.22         |
| Rice       | West Bengal    | 42770.22                    | 55982.79 | 1236.05                   | 39.50        |
|            | Uttar Pradesh  | 29436.98                    | 43567.86 | 1018.13                   | 40.99        |
|            | Andhra Pradesh | 42669.85                    | 68149.69 | 1135.01                   | 56.96        |
| Ragi       | Uttarakhand    | 34588.80                    | 39426.06 | 1861.13                   | 19.80        |
|            | Maharashtra    | 26769.77                    | 32901.23 | 1521.86                   | 20.78        |
|            | Karnataka      | 27245.84                    | 35938.20 | 2634.02                   | 11.78        |
| Soyabean   | Madhya Pradesh | 19021.75                    | 30941.30 | 2104.98                   | 14.06        |
|            | Maharashtra    | 29480.10                    | 40625.07 | 2336.84                   | 17.01        |
|            | Rajasthan      | 17273.89                    | 26172.15 | 1911.85                   | 13.04        |

Production and productivity

|                    |                |           |           |         |         |
|--------------------|----------------|-----------|-----------|---------|---------|
| Sunflower          | Karnataka      | 14220.58  | 19474.24  | 3493.40 | 5.50    |
|                    | Andhra Pradesh | 28381.95  | 39065.50  | 4004.39 | 9.73    |
|                    | Maharashtra    | 24058.95  | 32968.44  | 2686.30 | 12.01   |
| Lentil             | Uttar Pradesh  | 16152.69  | 26928.14  | 2481.59 | 10.30   |
|                    | Madhya Pradesh | 12618.34  | 22439.21  | 2320.21 | 9.28    |
|                    | Bihar          | 11820.13  | 20509.40  | 2660.07 | 7.33    |
| Rapeseed & Mustard | Rajasthan      | 20205.85  | 31256.29  | 2356.58 | 12.63   |
|                    | Madhya Pradesh | 16618.33  | 32520.57  | 1971.82 | 15.71   |
|                    | Haryana        | 23057.07  | 45129.34  | 2688.87 | 15.59   |
| Safflower          | Maharashtra    | 15176.87  | 21108.12  | 2073.49 | 10.00   |
| Wheat              | Uttar Pradesh  | 28062.10  | 43698.35  | 1042.66 | 34.43   |
|                    | Punjab         | 26559.35  | 49070.38  | 972.25  | 45.89   |
|                    | Madhya Pradesh | 20973.23  | 37119.94  | 958.95  | 33.42   |
| Jute               | Assam          | 49123.46  | 62695.97  | 2585.87 | 22.39   |
|                    | Odisha         | 43873.43  | 55289.55  | 2530.53 | 20.26   |
|                    | West Bengal    | 41737.62  | 58782.85  | 2089.83 | 24.71   |
| Onion              | Andhra Pradesh | 48351.28  | 77536.38  | 630.02  | 122.77  |
|                    | Gujarat        | 80561.46  | 103962.50 | 692.47  | 149.31  |
|                    | Maharashtra    | 73872.62  | 118792.30 | 485.86  | 242.33  |
| Sugarcane          | Uttar Pradesh  | 51047.90  | 88650.30  | 158.21  | 536.28  |
|                    | Maharashtra    | 113941.55 | 165962.40 | 151.64  | 1046.62 |
|                    | Karnataka      | 54027.16  | 96254.48  | 129.48  | 725.79  |
| Potato             | Bihar          | 42227.75  | 49850.43  | 405.69  | 122.88  |
|                    | Uttar Pradesh  | 58251.27  | 76262.22  | 492.52  | 154.84  |
|                    | West Bengal    | 105525.36 | 133944.60 | 469.13  | 285.52  |

- Note** : 1. Cost A2 includes all actual expenses in cash and kind incurred in production by owner and rent paid for leased in land  
 2. Cost C2 includes all actual expenses in cash and kind incurred in production by owner, interest on value of owned fixed capital assets (including land), rental value of fixed capital assets  
 3. FL: Family Labour, is imputed on the basis of statutory wage rate or the actual market rate whichever is higher.

**Source** : *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: [eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf](http://eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf)).

**Table 5.21: Cost of cultivation of principal crops**

(Rs/ ha)

| Item   | Paddy            |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2012-13          |                  |                  |                  |                  |                  |
|  | A.P.             | T. Nadu          | U.P.             | Punjab           | M.P.             | W.B.             |
| <b>I Operational cost</b>                              | <b>42,329.3</b>  | <b>50,220.87</b> | <b>28,532.37</b> | <b>30,685.46</b> | <b>22,523.66</b> | <b>41,605.26</b> |
| <b>Human labour</b>                                    | 22,664.37        | 22,361.70        | 13,576.60        | 13,320.81        | 8,964.56         | 26,644.53        |
| <b>Animal labour</b>                                   | 650.17           | 289.92           | 1,447.76         | 45.83            | 2,093.62         | 2,401.72         |
| <b>Machine labour</b>                                  | 7,113.78         | 9,167.01         | 3,334.18         | 5,098.44         | 3,711.83         | 2,355.23         |
| <b>Seed</b>  | 1,602.79         | 5,527.64         | 2,568.18         | 1,509.04         | 1,888.93         | 1,641.73         |
| <b>Fertiliser and manure</b>                           | 6,345.20         | 8,728.83         | 3,771.20         | 4,129.84         | 4,602.37         | 5,115.97         |
| <b>Fertiliser</b>                                      | 5,610.63         | 6,650.15         | 3,697.73         | 3,739.91         | 3,423.41         | 4,066.65         |
| <b>Manure</b>  | 734.57           | 2,078.68         | 73.47            | 389.93           | 1,178.96         | 1,049.32         |
| <b>Insecticide</b>                                     | 1,774.04         | 1,209.09         | 265.66           | 3,159.29         | 700.35           | 567.24           |
| <b>Irrigation charges</b>                              | 1,027.43         | 1,599.03         | 2,953.58         | 2,638.32         | 29.51            | 2,006.76         |
| <b>Interest on working capital</b>                     | 1,096.25         | 1,275.47         | 615.19           | 773.64           | 506.01           | 848.54           |
| <b>Miscellaneous</b>                                   | 5500             | 62.18            | 0.02             | 10.25            | 26.48            | 23.54            |
| <b>II Fixed cost</b>                                   | <b>25,820.66</b> | <b>15,770.15</b> | <b>15,035.49</b> | <b>34,057.78</b> | <b>13,942.42</b> | <b>14,377.53</b> |
| <b>Rental value of owned land</b>                      | 24,182.30        | 10,208.83        | 10,940.91        | 24,826.00        | 11,700.27        | 11,785.82        |
| <b>Rent paid for leased in land</b>                    | 167.32           | 556.78           | 204.06           | 6,166.85         | -                | 435.78           |
| <b>Land revenue, cesses &amp; taxes</b>                | 3.10             | 6.92             | 4.94             | -                | 2.94             | 48.32            |
| <b>Depreciation on implements &amp; farm buildings</b> | 170.41           | 372.48           | 695.61           | 251.65           | 575.49           | 680.87           |
| <b>Interest on fixed capital</b>                       | 1,297.53         | 4,625.14         | 3,189.97         | 2,813.28         | 1,663.72         | 1,426.74         |
| <b>Total I+II</b>                                      | <b>68,149.69</b> | <b>65,991.02</b> | <b>43,567.86</b> | <b>64,743.24</b> | <b>36,466.08</b> | <b>55,982.79</b> |
| <b>1 Yield per ha (q)</b>                              | 56.96            | 48.95            | 40.99            | 67.97            | 32.19            | 39.50            |
| <b>2 Value of the main-product per ha (Rs)</b>         | 76,980.27        | 73,099.79        | 48,464.60        | 91,038.93        | 43,068.62        | 42,662.78        |
| <b>3 Value of the by-product per ha (Rs)</b>           | 4,057.43         | 5,341.96         | 2,111.35         | 751.54           | 3,732.47         | 6,235.42         |
| <b>1 Seeds (kg)</b>                                    | 76.61            | -                | -                | -                | 63.76            | 64.72            |
| <b>2 Fertilisers (kg of Nutrients)</b>                 | 203.66           | 247.97           | 151.86           | 220.62           | 124.48           | 140.92           |
| <b>3 Manure (q)</b>                                    | 17.64            | 34.43            | 1.66             | 26.17            | 11.27            | 22.15            |
| <b>4 Human labour (man-hours)</b>                      | 623.67           | 637.12           | 734.75           | 380.80           | 500.82           | 1,115.64         |
| <b>5 Animal labour (pair-hours)</b>                    | 8.49             | 4.10             | 13.33            | 0.62             | 33.75            | 62.65            |

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| Item   | Wheat            |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|
|  | 2012-13          |                  |                  |                  |                  |
|  | Punjab           | Rajasthan        | M.P.             | U.P.             | Bihar            |
| <b>I Operational cost</b>                        | <b>22,032.69</b> | <b>29,256.81</b> | <b>20,620.67</b> | <b>26,527.78</b> | <b>21,315.03</b> |
| Human labour                                     | 4,829.55         | 13,143.39        | 6,398.93         | 8,361.49         | 7,041.31         |
| Bullock labour                                   | 78.41            | 293.33           | 368.12           | 578.90           | 781.79           |
| Machine labour                                   | 7,349.47         | 4,999.11         | 5,285.80         | 5,910.20         | 4,159.07         |
| Seed   | 1,898.43         | 2,868.27         | 2,281.43         | 2,664.45         | 2,525.71         |
| Fertiliser and manure                            | 5,254.22         | 3,517.75         | 2,844.75         | 4,394.49         | 3,545.64         |
| Fertiliser                                       | 5,246.99         | 3,112.77         | 2,823.91         | 4,392.54         | 3,476.23         |
| Manure   | 7.23             | 404.98           | 20.84            | 1.95             | 69.21            |
| Insecticide                                      | 1,624.12         | 56.20            | 6.22             | 152.45           | -                |
| Irrigation charges                               | 378.23           | 3,801.82         | 2,949.36         | 3,822.14         | 2,729.09         |
| Interest on working capital                      | 598.19           | 576.94           | 485.72           | 642.50           | 532.42           |
| Miscellaneous                                    | 51.07            | -                | 0.34             | 1.16             | -                |
| <b>II Fixed cost</b>                             | <b>27,037.69</b> | <b>17,312.29</b> | <b>16,499.27</b> | <b>17,170.57</b> | <b>8,268.64</b>  |
| Rental value of owned land                       | 19,114.15        | 12,066.05        | 13,853.93        | 13,059.42        | 6,463.05         |
| Rent paid for leased in land                     | 4,189.43         | 704.12           | -                | 890.10           | -                |
| Land revenue, cesses & taxes                     | -                | 10.62            | 5.20             | 21.04            | 25.18            |
| Depreciation on implements & farm buildings      | 337.23           | 374.07           | 347.36           | 623.18           | 352.70           |
| Interest on fixed capital                        | 3,369.88         | 4,157.43         | 2,292.78         | 2,576.83         | 1427.71          |
| <b>Total I+II</b>                                | <b>49,070.38</b> | <b>46,569.10</b> | <b>37,119.94</b> | <b>43,698.35</b> | <b>29,583.67</b> |
| <b>III (a) Yield and Value</b>                   |                  |                  |                  |                  |                  |
| 1 Yield per ha (q)                               | 45.89            | 41.57            | 33.42            | 34.43            | 26.64            |
| 2 Value of the main-product per ha (Rs)          | 61,942.93        | 60,773.92        | 47,786.27        | 44,596.63        | 33,374.22        |
| 3 Value of the by-product per ha (Rs)            | 6,149.12         | 13,702.09        | 7,629.44         | 9,629.80         | 9,620.63         |
| <b>III (b) Material and labour inputs per ha</b> |                  |                  |                  |                  |                  |
| 1 Seeds (kg)                                     | 106.38           | 151.39           | 115.52           | 147.02           | 111.05           |
| 2 Fertilisers (kg of Nutrients)                  | 239.97           | 120.11           | 107.54           | 167.88           | 125.04           |
| 3 Manure (q)                                     | 0.46             | 7.30             | 0.24             | 0.04             | 1.41             |
| 4 Human labour (man-hours)                       | 133.08           | 478.13           | 286.74           | 402.78           | 381.60           |
| 5 Animal labour (pair-hours)                     | 0.85             | 4.60             | 7.18             | 7.45             | 21.11            |

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Production and productivity

| Item   | Jowar            |                  | Bajra            |                  | Maize            |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2012-13          |                  | 2012-13          |                  | 2012-13          |                  |                  |
|  | A.P.             | Maharashtra      | Gujarat          | Maharashtra      | A.P.             | Bihar            | Rajasthan        |
| <b>I Operational cost</b>                        | <b>21,543.52</b> | <b>25,284.16</b> | <b>24,437.49</b> | <b>21,481.03</b> | <b>33,791.61</b> | <b>22,071.08</b> | <b>28,802.31</b> |
| Human labour                                     | 10,824.62        | 12,051.52        | 11,902.61        | 10,742.22        | 15,823.69        | 9,484.96         | 18,474.99        |
| Bullock labour                                   | 3,350.22         | 5,405.03         | 1,150.67         | 2,984.85         | 1,574.09         | 48.41            | 1,785.45         |
| Machine labour                                   | 2,503.29         | 2,608.17         | 3,690.86         | 3,448.13         | 4,343.18         | 3,048.47         | 3,644.82         |
| Seed   | 511.32           | 600.28           | 1,625.70         | 748.49           | 2,900.83         | 2,313.00         | 1,605.17         |
| Fertiliser and manure                            | 2,568.97         | 2,694.13         | 3,049.40         | 2,551.93         | 6,829.50         | 3,919.17         | 2,569.96         |
| Fertiliser                                       | 2,252.71         | 1,474.25         | 2,439.45         | 2,551.93         | 5,200.37         | 3,797.42         | 2,238.12         |
| Manure   | 316.26           | 1,219.88         | 609.95           | -                | 1,629.13         | 121.75           | 331.84           |
| Insecticide                                      | 474.31           | 18.31            | 23.68            | -                | 907.79           | 93.64            | 1.82             |
| Irrigation charges                               | 820.24           | 1,192.41         | 2,423.38         | 464.25           | 503.73           | 2,614.88         | 353.90           |
| Interest on working capital                      | 488.34           | 633.71           | 571.19           | 541.16           | 869.25           | 548.55           | 366.20           |
| Miscellaneous                                    | 2.21             | 80.60            | -                | -                | 39.55            | -                | -                |
| <b>II Fixed cost</b>                             | <b>10,640.37</b> | <b>10,453.52</b> | <b>9,949.67</b>  | <b>9,305.42</b>  | <b>20,826.66</b> | <b>7,201.34</b>  | <b>8,206.38</b>  |
| Rental value of owned land                       | 9,165.95         | 4,346.57         | 7,619.97         | 4,797.59         | 17,607.69        | 5,968.65         | 5,906.53         |
| Rent paid for leased in land                     | -                | 56.56            | 7,619.97         | -                | 994.05           | -                | 278.30           |
| Land revenue, cesses & taxes                     | 0.43             | 19.74            | 3.86             | 20.96            | 0.77             | 23.13            | 7.15             |
| Depreciation on implements & farm buildings      | 351.85           | 724.68           | 122.67           | 476.40           | 203.75           | 221.72           | 351.90           |
| Interest on fixed capital                        | 1,122.14         | 5,305.97         | 1,562.40         | 4,010.47         | 2,020.40         | 987.84           | 1,662.50         |
| <b>Total I+II</b>                                | <b>32,183.89</b> | <b>35,737.68</b> | <b>34,387.16</b> | <b>30,786.45</b> | <b>54,618.27</b> | <b>29,272.42</b> | <b>37,008.69</b> |
| <b>III (a) Yield and Value</b>                   |                  |                  |                  |                  |                  |                  |                  |
| 1 Yield per ha (q)                               | 19.56            | 9.02             | 25.57            | 16.41            | 47.66            | 32.03            | 23.46            |
| 2 Value of the main-product per ha (Rs)          | 26,355.38        | 16,390.41        | 35,706.83        | 21,598.99        | 59,193.88        | 34,810.05        | 29,213.44        |
| 3 Value of the by-product per ha (Rs)            | 4,197.80         | 9,817.53         | 14,369.33        | 7,180.79         | 2,997.29         | 6,030.84         | 6,908.71         |
| <b>III (b) Material and labour inputs per ha</b> |                  |                  |                  |                  |                  |                  |                  |
| 1 Seeds (kg)                                     | 14.52            | 13.13            | 7.72             | 3.70             | 20.91            | 21.62            | 29.25            |
| 2 Fertilisers (kg of Nutrients)                  | 77.05            | 54.36            | 111.27           | 96.28            | 192.54           | 132.84           | 107.21           |
| 3 Manure (q)                                     | 19.92            | 9.91             | 12.46            | -                | 28.14            | 2.18             | 4.66             |
| 4 Human labour (man-hours)                       | 398.11           | 531.22           | 574.23           | 485.65           | 473.99           | 569.58           | 763.04           |
| 5 Animal labour (pair-hours)                     | 49.81            | 68.19            | 13.60            | 42.69            | 26.36            | 0.81             | 30.52            |

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| Item   | Tur (Arhar)      |                  |                  | Groundnut        |                  |
|--|------------------|------------------|------------------|------------------|------------------|
|  | 2012-13          |                  |                  | 2012-13          |                  |
|  | U.P.             | Karnataka        | Gujarat          | A.P.             | Gujarat          |
| <b>I Operational cost</b>                        | <b>17,209.12</b> | <b>19,264.63</b> | <b>19,059.01</b> | <b>48,641.13</b> | <b>37,393.85</b> |
| Human labour                                     | 11,565.25        | 8,991.61         | 7,968.57         | 24,366.46        | 11,489.20        |
| Bullock labour                                   | 678.29           | 2,353.58         | 3,829.23         | 1,754.69         | 3,105.29         |
| Machine labour                                   | 2,157.98         | 1,893.85         | 2,119.89         | 3,159.47         | 3,557.79         |
| Seed   | 1,202.87         | 838.82           | 784.17           | 11,062.46        | 10,691.68        |
| Fertiliser and manure                            | 87.83            | 2,140.12         | 2,615.14         | 5,129.75         | 5,449.57         |
| Fertiliser                                       | 79.11            | 1,854.12         | 1,664.83         | 3,448.89         | 2,481.69         |
| Manure   | 8.62             | 286.00           | 950.31           | 1,680.86         | 2,967.88         |
| Insecticide                                      | -                | 2,505.52         | 585.25           | 600.06           | 659.62           |
| Irrigation charges                               | 1,268.26         | 63.60            | 683.30           | 1,323.91         | 1,507.17         |
| Interest on working capital                      | 248.74           | 477.53           | 459.27           | 1,242.41         | 930.01           |
| Miscellaneous                                    | -                | -                | 14.19            | 1.92             | 3.52             |
| <b>II Fixed cost</b>                             | <b>25,291.41</b> | <b>8,861.02</b>  | <b>6,372.36</b>  | <b>33,054.14</b> | <b>10,620.80</b> |
| Rental value of owned land                       | 12,212.66        | 7,430.79         | 4,277.65         | 30,159.27        | 7,591.90         |
| Rent paid for leased in land                     | 6,754.13         | -                | 118.09           | -                | 506.23           |
| Land revenue, cesses & taxes                     | 13.76            | 9.53             | 27.54            | 1.00             | 5.64             |
| Depreciation on implements & farm buildings      | 1,347.93         | 219.60           | 319.29           | 361.05           | 234.03           |
| Interest on fixed capital                        | 4,962.93         | 1,201.10         | 1,629.79         | 2,532.82         | 2,283.00         |
| <b>Total I+II</b>                                | <b>42,500.53</b> | <b>28,125.66</b> | <b>25,431.37</b> | <b>81,695.27</b> | <b>48,014.65</b> |
| <b>III (a) Yield and Value</b>                   |                  |                  |                  |                  |                  |
| 1 Yield per ha (q)                               | 8.78             | 8.76             | 6.35             | 21.20            | 8.24             |
| 2 Value of the main-product per ha (Rs)          | 34,732.43        | 33,660.91        | 24,528.09        | 95,632.41        | 40,946.69        |
| 3 Value of the by-product per ha (Rs)            | 6,496.80         | 1,232.62         | 1,657.73         | 4,898.50         | 7,405.71         |
| <b>III (b) Material and labour inputs per ha</b> |                  |                  |                  |                  |                  |
| 1 Seeds (kg)                                     | 16.59            | 13.70            | 9.82             | 119.11           | 128.30           |
| 2 Fertilisers (kg of Nutrients)                  | 4.60             | 58.98            | 71.02            | 119.07           | 89.75            |
| 3 Manure (q)                                     | 0.17             | 3.03             | 20.17            | 30.74            | 33.53            |
| 4 Human labour (man-hours)                       | 567.69           | 403.01           | 582.44           | 752.99           | 496.96           |
| 5 Animal labour (pair-hours)                     | 7.45             | 45.59            | 69.49            | 35.09            | 41.98            |

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Production and productivity

| Item   | Cotton           |                  |                  |
|--|------------------|------------------|------------------|
|  | 2012-13          |                  |                  |
|  | Haryana          | A.P.             | Gujarat          |
| <b>I Operational cost</b>                        | <b>43,367.47</b> | <b>49,164.10</b> | <b>40,688.94</b> |
| Human labour                                     | 25,786.12        | 26,311.08        | 19,028.98        |
| Bullock labour                                   | 1,157.23         | 2,959.68         | 2,255.91         |
| Machine labour                                   | 3,381.86         | 2,806.04         | 3,488.24         |
| Seed   | 4,522.28         | 4,120.46         | 3,456.63         |
| Fertiliser and manure                            | 2,674.63         | 8,458.47         | 7,009.96         |
| Fertiliser                                       | 2,674.63         | 7,338.36         | 3,735.67         |
| Manure   | -                | 1,120.11         | 3,274.29         |
| Insecticide                                      | 1,440.51         | 3,134.40         | 1,594.90         |
| Irrigation charges                               | 3,693.83         | 92.93            | 2,907.67         |
| Interest on working capital                      | 691.11           | 1,276.06         | 946.75           |
| Miscellaneous                                    | 19.90            | 4.98             | -                |
| <b>II Fixed cost</b>                             | <b>23,762.08</b> | <b>21,445.41</b> | <b>14,080.51</b> |
| Rental value of owned land                       | 20,205.15        | 17,272.16        | 8,546.31         |
| Rent paid for leased in land                     | -                | 1,544.46         | 873.00           |
| Land revenue, cesses & taxes                     | -                | 0.57             | 11.66            |
| Depreciation on implements & farm buildings      | 431.12           | 239.10           | 299.79           |
| Interest on fixed capital                        | 3,125.81         | 2,389.12         | 4,349.75         |
| <b>Total I+II</b>                                | <b>67,129.55</b> | <b>70,609.51</b> | <b>54,769.45</b> |
| <b>III (a) Yield and Value</b>                   |                  |                  |                  |
| 1 Yield per ha (q)                               | 16.87            | 17.27            | 12.37            |
| 2 Value of the main-product per ha (Rs)          | 70,378.23        | 63,713.95        | 54,675.60        |
| 3 Value of the by-product per ha (Rs)            | 3,425.69         | 7.54             | 1,036.71         |
| <b>III (b) Material and labour inputs per ha</b> |                  |                  |                  |
| 1 Seeds (kg)                                     | 2.05             | 1.87             | 1.77             |
| 2 Fertilisers (kg of Nutrients)                  | 127.56           | 255.44           | 158.10           |
| 3 Manure (q)                                     | -                | 32.35            | 43.47            |
| 4 Human labour (man-hours)                       | 652.29           | 761.38           | 900.84           |
| 5 Animal labour (pair-hours)                     | 9.17             | 51.81            | 30.10            |

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| Item   | Sugarcane        |                  |                   |                   |
|--|------------------|------------------|-------------------|-------------------|
|  | 2012-13          |                  |                   |                   |
|  | A.P.             | Uttar Pradesh    | Maharashtra       | Tamil Nadu        |
| <b>I Operational cost</b>                        | <b>45,402.16</b> | <b>49,843.80</b> | <b>112,826.90</b> | <b>123,142.05</b> |
| Human labour                                     | 27,357.84        | 26,214.59        | 46,279.07         | 87,397.48         |
| Bullock labour                                   | 2,206.40         | 1,582.55         | 7,317.71          | 772.07            |
| Machine labour                                   | 692.58           | 1,459.38         | 17,881.88         | 1,804.48          |
| Seed   | 946.32           | 7,610.76         | 6,141.22          | 9,068.43          |
| Fertiliser and manure                            | 7,157.07         | 4,317.99         | 19,320.80         | 13,532.81         |
| Fertiliser                                       | 6,963.07         | 3,810.88         | 17,372.80         | 10,457.70         |
| Manure   | 194.00           | 507.11           | 1,948.00          | 3,075.11          |
| Insecticide                                      | 2,524.68         | 537.83           | 507.95            | 399.79            |
| Irrigation charges                               | 2,071.27         | 5,962.80         | 9,506.41          | 3,981.81          |
| Interest on working capital                      | 2,446.00         | 2,157.90         | 5,871.86          | 6,184.73          |
| Miscellaneous                                    | -                | -                | -                 | 0.45              |
| <b>II Fixed cost</b>                             | <b>46,442.01</b> | <b>38,806.50</b> | <b>53,135.50</b>  | <b>34,457.75</b>  |
| Rental value of owned land                       | 27,738.85        | 32,156.97        | 43,508.55         | 26,631.87         |
| Rent paid for leased in land                     | 15,748.42        | 161.31           | -                 | 9.20              |
| Land revenue, cesses & taxes                     | 2.92             | 22.63            | 212.58            | 13.46             |
| Depreciation on implements & farm buildings      | 169.20           | 1,020.16         | 902.05            | 678.06            |
| Interest on fixed capital                        | 2,782.62         | 5,445.43         | 8,512.32          | 7,125.16          |
| <b>Total I+II</b>                                | <b>91,844.17</b> | <b>88,650.30</b> | <b>165,962.40</b> | <b>157,599.80</b> |
| <b>III (a) Yield and Value</b>                   |                  |                  |                   |                   |
| 1 Yield per ha (q)                               | 571.81           | 536.28           | 1,046.62          | 1,038.07          |
| 2 Value of the main-product per ha (Rs)          | 131,833.90       | 145,359.80       | 249,685.70        | 233,622.00        |
| 3 Value of the by-product per ha (Rs)            | -                | 6,518.08         | 11,313.45         | 3,549.42          |
| <b>III (b) Material and labour inputs per ha</b> |                  |                  |                   |                   |
| 1 Seeds (kg)                                     | 4.16             | 31.23            | 26.40             | 41.56             |
| 2 Fertilisers (kg of Nutrients)                  | 280.63           | 204.46           | 682.20            | 479.52            |
| 3 Manure (q)                                     | 4.64             | 11.99            | 17.52             | 44.55             |
| 4 Human labour (man-hours)                       | 836.88           | 1,321.02         | 1,850.09          | 2,163.97          |
| 5 Animal labour (pair-hours)                     | 21.80            | 20.41            | 69.82             | 17.49             |

- Source : 1. Reports of the Commission for Agricultural Costs and Prices 2015-16 , Department of Agriculture & Cooperation, Govt. of India.  
2. *Fertiliser Statistics, 2014-15*, The Fertiliser Association of India, New Delhi.

**Table 5.22: Cropping pattern according to land utilization  
2011-12 and 2012-13 (Provisional)**

| Crops     |   | 2011-12           |                                     | 2012-13           |                                     |
|-----------|---|-------------------|-------------------------------------|-------------------|-------------------------------------|
|           |   | Area<br>(000' ha) | % share to<br>total cropped<br>area | Area<br>(000' ha) | % share to<br>total cropped<br>area |
| <b>I.</b> | <b>Food crops</b>                       | <b>142,306</b>    | <b>72.74</b>                        | <b>139,174</b>    | <b>71.59</b>                        |
|           | <b>1. Total food grains</b>             | <b>123,576</b>    | <b>63.17</b>                        | <b>120,357</b>    | <b>61.91</b>                        |
|           | <b>(A) Cereals &amp; millets</b>        | <b>100,150</b>    | <b>51.19</b>                        | <b>98,398</b>     | <b>50.62</b>                        |
|           | Rice                                    | 43,698            | 22.34                               | 42,757            | 21.99                               |
|           | Jowar                                   | 6,178             | 3.16                                | 6,301             | 3.24                                |
|           | Bajra                                   | 8,831             | 4.51                                | 7,668             | 3.94                                |
|           | Maize                                   | 8,593             | 4.39                                | 8,562             | 4.40                                |
|           | Ragi                                    | 1,172             | 0.60                                | 1,117             | 0.57                                |
|           | Wheat                                   | 30,155            | 15.41                               | 30,495            | 15.69                               |
|           | Barley                                  | 661               | 0.34                                | 702               | 0.36                                |
|           | Other cereals & millets                 | 862               | 0.44                                | 795               | 0.41                                |
|           | <b>(B) Pulses</b>                       | <b>23,426</b>     | <b>11.97</b>                        | <b>21,959</b>     | <b>11.30</b>                        |
|           | Gram                                    | 7,768             | 3.97                                | 7,974             | 4.10                                |
|           | Tur (Arhar)                             | 3,765             | 1.92                                | 3,499             | 1.80                                |
|           | Other pulses                            | 11,893            | 6.08                                | 10,486            | 5.39                                |
|           | <b>2. Sugar</b>                         | <b>5,411</b>      | <b>2.77</b>                         | <b>5,488</b>      | <b>2.82</b>                         |
|           | Sugarcane                               | 5,395             | 2.76                                | 5,443             | 2.80                                |
|           | Others                                  | 16                | 0.01                                | 45                | 0.02                                |
|           | <b>3. Condiments &amp; spices</b>       | <b>3,632</b>      | <b>1.86</b>                         | <b>3,312</b>      | <b>1.70</b>                         |
|           | Pepper black                            | 117               | 0.06                                | 122               | 0.06                                |
|           | Chillies                                | 752               | 0.38                                | 672               | 0.35                                |
|           | Ginger                                  | 128               | 0.07                                | 118               | 0.06                                |
|           | Turmeric                                | 238               | 0.12                                | 205               | 0.11                                |
|           | Cardamom                                | 83                | 0.04                                | 86                | 0.04                                |
|           | Betel nuts                              | 438               | 0.22                                | 450               | 0.23                                |
|           | Others                                  | 1,877             | 0.96                                | 1,658             | 0.85                                |
|           | <b>4. Total fruits &amp; vegetables</b> | <b>9,462</b>      | <b>4.84</b>                         | <b>9,811</b>      | <b>5.05</b>                         |
|           | <b>(i) Total fruits</b>                 | <b>4,027</b>      | <b>2.06</b>                         | <b>4,306</b>      | <b>2.22</b>                         |
|           | <b>(A) Fresh fruits</b>                 | <b>3,500</b>      | <b>1.79</b>                         | <b>3,766</b>      | <b>1.94</b>                         |
|           | Mangoes                                 | 1,328             | 0.68                                | 1,462             | 0.75                                |
|           | Citrus fruits                           | 477               | 0.24                                | 478               | 0.25                                |
|           | Banana                                  | 514               | 0.26                                | 588               | 0.30                                |
|           | Grapes                                  | 69                | 0.04                                | 121               | 0.06                                |
|           | Pome fruits                             | 96                | 0.05                                | 94                | 0.05                                |
|           | Papaya                                  | 53                | 0.03                                | 69                | 0.04                                |
|           | Apple                                   | 65                | 0.03                                | 65                | 0.03                                |
|           | Others                                  | 897               | 0.46                                | 888               | 0.46                                |
|           | <b>(B) Dry fruits</b>                   | <b>527</b>        | <b>0.27</b>                         | <b>540</b>        | <b>0.28</b>                         |
|           | Cashew nut                              | 513               | 0.26                                | 525               | 0.27                                |
|           | Others                                  | 14                | 0.01                                | 15                | 0.01                                |
|           | <b>(ii) Vegetables</b>                  | <b>5,435</b>      | <b>2.78</b>                         | <b>5,505</b>      | <b>2.83</b>                         |
|           | Potato                                  | 1,617             | 0.83                                | 1,651             | 0.85                                |
|           | Tapioca                                 | 204               | 0.10                                | 175               | 0.09                                |
|           | Sweet potato                            | 53                | 0.03                                | 82                | 0.04                                |

| Crops  | 2011-12           |                                     | 2012-13           |                                     |
|--|-------------------|-------------------------------------|-------------------|-------------------------------------|
|  | Area<br>(000' ha) | % share to<br>total cropped<br>area | Area<br>(000' ha) | % share to<br>total cropped<br>area |
| Onion  | 625               | 0.32                                | 549               | 0.28                                |
| Others   | 2,937             | 1.50                                | 3,048             | 1.57                                |
| <b>5. Other food crops</b>                       | <b>225</b>        | <b>0.12</b>                         | <b>205</b>        | <b>0.11</b>                         |
| <b>II. Non-food crops</b>                        | <b>53,326</b>     | <b>27.26</b>                        | <b>55,225</b>     | <b>28.41</b>                        |
| <b>1. Oilseeds</b>                               | <b>28,083</b>     | <b>14.36</b>                        | <b>29,097</b>     | <b>14.97</b>                        |
| Groundnut  | 5,201             | 2.66                                | 5,276             | 2.71                                |
| Castor seed                                      | 1,459             | 0.75                                | 1,223             | 0.63                                |
| Sesamum (Til or Gingelly)                        | 1,902             | 0.97                                | 1,786             | 0.92                                |
| Rapeseed & Mustard                               | 5,481             | 2.80                                | 5,954             | 3.06                                |
| Linseed  | 244               | 0.12                                | 229               | 0.12                                |
| Coconut  | 1,902             | 0.97                                | 1,890             | 0.97                                |
| Niger seed                                       | 282               | 0.14                                | 273               | 0.14                                |
| Safflower  | 291               | 0.15                                | 242               | 0.12                                |
| Soyabean   | 10,209            | 5.22                                | 10,944            | 5.63                                |
| Sunflower  | 808               | 0.41                                | 932               | 0.48                                |
| Others   | 303               | 0.15                                | 348               | 0.18                                |
| <b>2. Fibres</b>                                 | <b>13,134</b>     | <b>6.71</b>                         | <b>12,793</b>     | <b>6.58</b>                         |
| Cotton   | 12,169            | 6.22                                | 11,881            | 6.11                                |
| Jute   | 809               | 0.41                                | 780               | 0.40                                |
| Mesta  | 80                | 0.04                                | 75                | 0.04                                |
| Sunhemp  | 35                | 0.02                                | 19                | 0.01                                |
| Others   | 41                | 0.02                                | 38                | 0.02                                |
| <b>3. Dyes &amp; tanning material</b>            | <b>57</b>         | <b>0.03</b>                         | <b>52</b>         | <b>0.03</b>                         |
| Indigo   | 2                 | 0.001                               | 2                 | 0.001                               |
| Others   | 56                | 0.03                                | 50                | 0.03                                |
| <b>4. Drug, narcotics &amp; plantation crops</b> | <b>2,915</b>      | <b>1.49</b>                         | <b>2,729</b>      | <b>1.40</b>                         |
| Opium  | 15                | 0.01                                | 7                 | 0.004                               |
| Tobacco  | 394               | 0.20                                | 432               | 0.22                                |
| Cinchona   | 9                 | 0.005                               | 9                 | 0.00                                |
| Indian hemp                                      | -                 | -                                   | -                 | -                                   |
| Tea  | 605               | 0.31                                | 597               | 0.31                                |
| Coffee   | 351               | 0.18                                | 355               | 0.18                                |
| Rubber   | 599               | 0.31                                | 600               | 0.31                                |
| Others   | 942               | 0.48                                | 729               | 0.38                                |
| <b>5. Fodder crops</b>                           | <b>7,738</b>      | <b>3.96</b>                         | <b>9,188</b>      | <b>4.73</b>                         |
| <b>6. Green manure crops</b>                     | <b>329</b>        | <b>0.17</b>                         | <b>378</b>        | <b>0.19</b>                         |
| <b>7. Other non-food crops</b>                   | <b>1,070</b>      | <b>0.55</b>                         | <b>988</b>        | <b>0.51</b>                         |
| <b>Total area sown under all crops (I+II)</b>    | <b>195,632</b>    | <b>100.00</b>                       | <b>194,399</b>    | <b>100.00</b>                       |

Source : Fertiliser Statistics 2014-15, The Fertiliser Association of India, New Delhi.

**Table 5.23: Minimum support prices of various agricultural commodities  
(according to crop year As on 12 November 2015)**

(Rs /q)

| Commodity                | Variety       | 2010-11           | 2011-12           | 2012-13 | 2013-14 | 2014-15 | 2015-16           |
|--------------------------|---------------|-------------------|-------------------|---------|---------|---------|-------------------|
| <b>Kharif Crops</b>      |               |                   |                   |         |         |         |                   |
| Paddy                    | Common        | 1000              | 1080              | 1250    | 1310    | 1360    | 1410              |
|                          | Grade 'A'     | 1030              | 1110              | 1280    | 1345    | 1400    | 1450              |
| Jowar                    | Hybrid        | 880               | 980               | 1500    | 1500    | 1530    | 1570              |
|                          | Maldandi      | 900               | 1000              | 1520    | 1520    | 1550    | 1590              |
| Bajra                    |               | 880               | 980               | 1175    | 1250    | 1250    | 1275              |
| Maize                    |               | 880               | 980               | 1175    | 1310    | 1310    | 1325              |
| Ragi                     |               | 965               | 1050              | 1500    | 1500    | 1550    | 1650              |
| Arhar/Tur                |               | 3000 <sup>c</sup> | 3200 <sup>c</sup> | 3850    | 4300    | 4350    | 4425 <sup>d</sup> |
| Moong                    |               | 3170 <sup>c</sup> | 3500 <sup>c</sup> | 4400    | 4500    | 4600    | 4650 <sup>d</sup> |
| Urad                     |               | 2900 <sup>c</sup> | 3300 <sup>c</sup> | 4300    | 4300    | 4350    | 4425 <sup>d</sup> |
| Cotton                   | Medium staple | 2500 <sup>a</sup> | 2800 <sup>a</sup> | 3600    | 3700    | 3750    | 3800              |
|                          | Long staple   | 3000 <sup>b</sup> | 3300 <sup>b</sup> | 3900    | 4000    | 4050    | 4100              |
| Groundnut in shell       |               | 2300              | 2700              | 3700    | 4000    | 4000    | 4030              |
| Sunflower Seed           |               | 2350              | 2800              | 3700    | 3700    | 3750    | 3800              |
| Soybean                  | Black         | 1400              | 1650              | 2200    | 2500    | 2500    | -                 |
|                          | Yellow        | 1440              | 1690              | 2240    | 2560    | 2560    | 2600 <sup>e</sup> |
| Sesamum                  |               | 2900              | 3400              | 4200    | 4500    | 4600    | 4700              |
| Nigerseed                |               | 2450              | 2900              | 3500    | 3500    | 3600    | 3650              |
| <b>Rabi Crops</b>        |               |                   |                   |         |         |         |                   |
| Wheat                    |               | 1120 <sup>5</sup> | 1285              | 1350    | 1400    | 1450    | 1525              |
| Barley                   |               | 780               | 980               | 980     | 1100    | 1150    | 1225              |
| Gram                     |               | 2100              | 2800              | 3000    | 3100    | 3175    | 3425              |
| Masur(Lentil)            |               | 2250              | 2800              | 2900    | 2950    | 3075    | 3325              |
| Rapeseed /Mustard        |               | 1850              | 2500              | 3000    | 3050    | 3100    | 3350              |
| Safflower                |               | 1800              | 2500              | 2800    | 3000    | 3050    | 3300              |
| Toria                    |               | 1780              | 2425              | 2970    | 3020    | 3020    | -                 |
| <b>Other Crop</b>        |               |                   |                   |         |         |         |                   |
| Copra<br>(calender year) | (Milling)     | 4450              | 4525              | 5100    | 5250    | 5250    | 5550              |
|                          | (Ball)        | 4700              | 4775              | 5350    | 5500    | 5500    | 5830              |
| De-husked Coconut        |               | 1200              | 1200              | 1400    | 1425    | 1425    | 1500              |
| Jute                     |               | 1575              | 1675              | 2200    | 2300    | 2400    | 2700              |
| Sugarcane*               |               | 139.12            | 145               | 170     | 210     | 220     | 230               |

**Note** : 1. \$: An additional incentive bonus of 50 per quintal was payable over the Minimum Support Price (MSP), 2. a: Staple length (mm) of 24.5-25.5 and Micronaire value of 4.3-5.1. 3. b: Staple length (mm) of 29.5-30.5 and Micronaire value of 3.5-4.3, 4. c: An additional incentive at the rate of Rs 500 per quintal of Tur, Urad and Mong sold to procurement agencies is payable during the harvest/arrival period of two months, 5. d: Bonus of 200 per quintal is payable over and above the Minimum Support Price, 6. e: Single Minimum Support Price has been fixed irrespective of the variety, 7. \*: Fair and remunerative price,

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).





भाग-VI  
कृषि अभियांत्रिकी एवं उत्पाद प्रबंधन

SECTION-VI  
Agricultural Engineering and  
Produce Management
















**Table 6.1: Improved selected farm implements and machines**





| SI No                             | OPERATION-WISE EQUIPMENT  |  |
|-----------------------------------|---|--|
| <b>AGRICULTURAL MECHANIZATION</b> |   |  |
| 1.                                | <p><b>Inclined Plate Planter</b><br/> <b>Suitability:</b> It is suitable for precision planting of single seed of crops like mustard, sorghum, soybean, cotton seed, pigeon pea, maize, groundnut, okra etc. at predetermined spacing.<br/>                     No. of rows : 2-6 adjustable<br/>                     Row spacing : 250 mm &amp; above</p>              |    |
| 2.                                | <p><b>Tractor Drawn Pneumatic Planter</b><br/> <b>Suitability:</b> To plant single seed at predetermined seed to seed and row to row spacing. Suitable for mustard, sorghum, soybean, cotton, pigeon pea, groundnut okra etc.<br/> <b>Field Capacity :</b> 0.5-1.0 ha/h<br/> <b>Power Source:</b> Tractor (35-45 hp)</p>  |    |
| 3.                                | <p><b>Plastic Mulch Laying Machine</b><br/> <b>Suitability:</b> For laying plastic film for mulching &amp; moisture conservation, raising soil temperature for better germination of seed and weed control.<br/> <b>Capacity :</b> 0.12-0.18 ha/h<br/> <b>Power Source:</b> Tractor (35 hp or above)</p>  |   |
| 4.                                | <p><b>Rotary Assisted Broad bed Former-cum-seeder</b><br/> <b>Suitability:</b> For seeding of soybean and wheat crops on raised bed. Provision has been made for attachment of rotavator for formation of fresh bed or sowing with reshaping of bed with bed shaper only.<br/> <b>Field Capacity:</b> 0.35 ha/h - 0.56 ha/h<br/> <b>Power Source:</b> Tractor 50 hp</p> |  |
| 5.                                | <p><b>Sugarcane Bud Chipping Machine</b><br/>                     It is used for extracting the buds from sugarcane. These buds can be used for preparation of bud-chip nursery for planting sugarcane crop. One operator can chip about 1000 sugarcane bud chips per hour.</p>   |  |

## Agricultural Engineering and Produce Management




| Sl No | OPERATION-WISE EQUIPMENT  |  |
|-------|---|--|
| 6.    | <p><b>Vegetable Transplanter</b><br/> <b>Use:</b> To planting of Chilly, Bringel, Tomato etc.<br/> <b>Work Capacity &amp; Description and Cost</b><br/> <b>Planting capacity :</b> 0.12 ha/h<br/> <b>Required Power:</b> 35 hp Tractor<br/> <b>Required Man-Power:</b> 2 (one labour for each row)<br/> <b>Required seedling Tray No.:</b> 2Kind of seedling : Seedling without soil</p>  |    |
| 7.    | <p><b>Self Propelled Multipurpose Hydraulic System For Orchard Operations</b><br/>           Self-propelled hydraulic multipurpose system for medium height fruit trees facilitates orchard management operations like harvesting, pruning, spraying and other canopy management practices in fruit trees such as mango, citrus and sapota. These operations are otherwise difficult, labour intensive and cumbersome</p>   |    |
| 8.    | <p><b>Arecanut Sheath Shredder:</b><br/>           It Shreds arecanut leaf sheath into size of 5-8mm without dust .The shredder is power operated with 3 hp electric motor and gives capacity of 100 kg/hr</p> <ul style="list-style-type: none"> <li>• The output size of arecanut sheath shred is 5 to 8 mm, free from dust</li> <li>• It can shred Arecanut leaf sheath of different moisture content</li> </ul>   |   |
| 9.    | <p><b>Power Operated Ribboner for Jute</b><br/>           It is for removal of ribbon (jute fibre) from green jute stick i.e. freshly harvested jute crop, without retting of jute sticks. This machine is operated by four persons at a time.</p> <ul style="list-style-type: none"> <li>• The machine gives output of 100 kg of ribbon per hour with 88-90 % ribbon recovery.</li> <li>• Reduces water requirement for retting by 20-25 times.</li> <li>• Retting time is also reduced to 7-8 days only as against 15-20 days with traditional method.</li> </ul> |  |
| 10.   | <p><b>Millet Thresher</b><br/>           Suitable for threshing of several minor millets like finger millet, barnyard millet, proso millet, kodo millet, foxtell millet ( kodo, kutki, ragi etc.) Can also be used for dehulling of barnyard, kodo and proso millets.</p> <p><b>Capacity:</b> 80-120 kg/h crops<br/> <b>Cost of Operation:</b> Rs. 0.20/kg grain<br/> <b>Efficiency</b> more than 98%.</p>  |  |


| Sl No | OPERATION-WISE EQUIPMENT  |  |
|-------|---|--|
| 11.   | <p><b>Laser guided land leveller:</b><br/>It is used for levelling the field. There is a control unit which guides the machine through a receiver mounted on machine itself. It saves the irrigation 20-25%.</p>  |    |
| 12    | <p><b>Tractor operated zero till drill</b><br/>Tractor operated Zero till drill is used for drilling wheat immediately after the harvest of rice to take advantage of residual moisture, thereby ensuring timeliness for the rabi crop. It forms a thin slit with the help of the inverted 'T' type furrow opener to conserve moisture. Initial land preparation is also avoided.</p> |    |
| 13    | <p><b>Tractor operated raised bed planter</b><br/>Two raised beds can be made using this machine on which planting is also carried out simultaneously. Fertilizer drilling can also be accomplished on the raised beds. It has a field capacity of 0.4 ha/h. Raised bed cultivation saves water and gives about 15% higher yield.</p>   |   |
| 14    | <p><b>Tractor operated aero blast sprayer</b><br/>Aero blast sprayer has a tank of 400 l capacity and high pressure pumps and a blower operated by pto delivering high volume of spray in orchards to cover the entire canopy.</p>  |  <p style="text-align: center;">Tractor Operated Orchard Sprayer</p> |




| Sl No | OPERATION-WISE EQUIPMENT   |  |
|-------|--|--|
| 15    | <p><b>Tractor operated peg type puddler</b></p> <p>It consists of rectangular frame, pegs and three point hitch system. The square pegs mounted on three bars are uniformly staggered to partial helical configuration for better dispersion of soil. The puddler is operated in 50-100 mm of standing water. As the puddler moves, the pegs tear the soil, uproot the weeds, disperse the soil in water and level the field.</p> <p>Working width : 2000 mm<br/>Draft : 1000 N</p>  |    |
| 16    | <p><b>Self propelled vertical conveyor reaper (walk behind type)</b></p> <p>The self-propelled vertical conveyor reaper, also known as walk behind type harvester, consists of 6 hp diesel engine, crop row dividers, star wheels, standard cutter bar having 76.2 mm pitch of knife sections, vertical conveyor belts with lugs, steel lugged wheels, power transmission system and operating controls. The engine power is transmitted to cutter bar and conveyor belts through belt and pulleys. The effective cutter bar width is about 1 m. It weighs 245 kg.</p> <p>Weight : 245 kg<br/>Power source : 6 hp diesel engine</p>  |    |
| 17    | <p><b>Tractor operated straw reaper-cum-trailer</b></p> <p>This design has the provision of trolley over the straw reaper for collecting the straw. It harvests straw of combine harvested wheat field, gathers shattered ear heads as uncut plants from the field, threshes straw into fine quality bhusa and separates collected grains. Simultaneously it blows bhusa (fine straw) in the in-built overhead trailer. Thus the work of harvesting, threshing, loading and unloading is done with only one tractor while in the existing system additional tractor and trailer is required to collect the straw.</p> <p>Power Source : 35 hp tractor or above<br/>Length of cutter bar : 1830 mm<br/>Height of cut : 60 mm<br/>Number of blowers : 1-2<br/>Fuel consumption : 5.6 l/h</p> |  |

| Sl No  | OPERATION-WISE EQUIPMENT  |  |
|--|---|--|
| <b>AGRICULTURAL PRODUCE &amp; PROCESSING</b> |   |  |
| 18.  | <p><b>Pedal Operated Potato Peeler</b><br/>                     The pedal operated potato peeler is developed for small entrepreneurs where electricity is not available. The perforated stainless steel drums during rotation remove skin of potatoes as in manual peeler.</p> <p>Its capacity is 188 kg/h with 0.53 man-h/q requirement and 30/- operating cost. The peeling efficiency is 77%.</p>   |    |
| 19.  | <p><b>Pedal Operated Potato Slicer</b><br/>                     The pedal operated potato slicer is suitable for small entrepreneurs where electricity is not available. It consists of Main frame, feeding unit, stainless steel blade etc.</p>  |    |
| 20.  | <p><b>Cottage Scale Soy Paneer Plant</b><br/>                     It is a cottage level plant to produce milk and paneer. It consists of steam generation unit, grinder cum cooker, milk filtration unit and paneer pressing device. The soysplits are grinded at 80OC in air free surroundings to produce paneer. Its capacity is 300kg milk and 50 kg paneer per day.</p>   |   |
| 21.  | <p><b>CIAE-millet</b><br/>                     CIAE-millet mill has been developed for dehusking of all minor millets. The capacity of the machine is 100-110 kg/h of millet grains at 10-12 % moisture content.</p> <ul style="list-style-type: none"> <li>• Power requirement: One hp single phase electric motor.</li> <li>• It has provisions to adjust the clearance between the dehusking surfaces to suit the different sizes of minor millets.</li> <li>• Working Principle: Gentle abrasion/attrition &amp; (aerodynamic) cyclone separator</li> </ul> |  |



| Sl No | OPERATION-WISE EQUIPMENT   |  |
|-------|--|--|
| 22.   | <p><b>Fruit Grader</b><br/>CIAE-Fruit Grader is suitable for all round fruits/ vegetables like tomato, guava, amla, apple, citrus, onion, etc.</p> <ul style="list-style-type: none"> <li>• Capacity of grading is 1.2 to 1.5 tonnes per hour.</li> <li>• Power requirement – 0.5 hp single phase. The Grader is light in weight (Approx. 138 kg).</li> <li>• Cost of operation is Rs. 51 per tonne assuming 4 hour operation per day.</li> </ul>  |    |
| 23.   | <p><b>Aloevera gel extractor</b><br/>The continuous feed aloevera whole gel extraction unit peels both top and bottom rinds in a single pass with the help of pair of stainless steel blades.</p> <ul style="list-style-type: none"> <li>• There is a set of stainless steel rods, which are provided at the outlet, for the aloevera gel to be separated from the peeled upper and lower rind.</li> <li>• The whole gel is directly collected in the food grade container, which is partially filled with clean water. The top and the bottom leaves are collected separately.</li> <li>• The equipment is unique in design and very useful in separating the aloevera gel with ease with minimal quantity of aloin.</li> </ul> |   |
| 24.   | <p><b>Various Soy-products</b></p> <ul style="list-style-type: none"> <li>• Soy milk</li> <li>• Soy flour (full fat, medium fat, defatted)</li> <li>• Tofu (soy paneer)</li> <li>• Traditional foods</li> <li>• Dairy analogs</li> <li>• Okara based products</li> </ul>   |  |

| Sl No  | OPERATION-WISE EQUIPMENT   |  |
|--|--|--|
| 25.  | <p><b>CIAE Nutri-bar- A Healthy Snack</b></p> <p>Multi-Nutrient Bar are high nutrient baked products can provide an easy way out of the dilemma of choosing between health and taste. The snack contains ingredients from almost every food group and is sweetened with healthy natural sweeteners like jaggery. It substantially contributes to our daily requirement of energy, protein and minerals and also provides added advantages of phenolics and antioxidants. Apart from this, the combination of fresh and dry fruits leaves a pleasant taste on the tongue. This snack can be used to satisfy “between the meals” hunger and also act as “quick bite” during travel.</p> <p>High in energy and proteins, good source of minerals, phenolics and antioxidants, high satiety value, healthy substitute to sweet and savory snacks</p> |    |
| <b>AGRICULTURAL ENERGY &amp; POWER</b>       |  |  |
| 26.  | <p><b>Biomass Gasification &amp; Electricity Generation Plant</b></p> <ul style="list-style-type: none"> <li>• The agro waste crop residues are converted into briquette suited for gasifier.</li> <li>• The agro waste briquettes are converted into fuel gas. These fuel gases are used in gas engine for generation of electricity.</li> </ul> <p>The electricity generation is environmental friendly as no extra carbon dioxide is introduced into the atmosphere as compared to fossil fuelled combustion systems. 1 kWh of electricity energy can be produced from 1.2 kg of biomass using developed technology.</p>  |   |
| <b>IRRIGATION &amp; DRAINAGE ENGINEERING</b> |  |  |
| 27   | <p><b>Mole Plough</b></p> <p>This Plough can be used for making moles at 600 mm depth to drain temporarily water logged vertisols. The plough can be attached to a 3-point linkage of a tractor (75 hp or more) and about 600 mm depth from the surface drains are to be constructed.</p>  |  |

| SI No                                     | OPERATION-WISE EQUIPMENT  |  |
|---|---|--|
| <b>AGRO PROCESSING MACHINERY</b>          |   |  |
| 28  | <p><b>Manually Operated Banana comb cutter</b><br/>                     Banana-Comb/hand Cutter maintains smooth cutting curve of banana-comb/hand, with no fruit damage during cutting (as in case of knife or sickle cutting, some banana-finger getting damaged). This tool is suitable for all sizes of banana bunch stems</p>                  |    |
| 29  | <p><b>Pomegranate aril separator</b><br/>                     This is extremely useful for small scale fruit juice processors and fruit juice vendors for easy, hygienic and fast separation of arils. About 40-45% arils are already separated in the process of irregular breaking due to shearing action on the inner sheath and outer peel.</p> |    |
| <b>POWER OPERATED PROCESSING MACHINES</b> |   |  |
| 30  | <p><b>Automatic litchi peeler</b><br/>                     Litchi is non-climacteric fruit that possesses poor shelf life and therefore needs processing to enhance shelf life. This is used for peeling of litchi fruits with capacity of 120 kg/h, peeling efficiency of 96 % and 4 % pulp loss.</p>  |  |



| Sl No | OPERATION-WISE EQUIPMENT  |  |
|-------|---|--|
| 31    | <p><b>Pomegranate aril extractor</b><br/>                     This is used for Pomegranate arils which are not consumed mostly because of the cumbersome process of removing arils from peel. The separated arils can be further processed for juice, dried arils, jellies etc. The developed machine has aril extraction capacity of around 5.0 quintal per hour with aril extraction/separation efficiency of 90-94% along with mechanical damage of 2-4% to arils.</p> |    |
| 32    | <p><b>Custard apple pulper</b><br/>                     Custard apple is an underutilized crop due to lack of handling and processing machineries. For food processing industries, this machine would help them to develop new products out of custard apple and get good market value. This machine has capacity of 120 kg/h with 94 % pulp recovery efficiency and 6 % pulp wastage along with peels</p>  |   |
| 33    | <p><b>Cryogenic spice grinding system</b><br/>                     Cryogenic spice grinder is a system for grinding of spices at ultra low temperature, thereby maintaining their flavour and medicinal properties. This is Cyclone system for collection of different grades of ground spice powder with capacity of 30-50 kg/h depending on type of spice with 185 litre (self pressurised) Liquid nitrogen cylinder capacity</p>                                       |  |

| Sl No | OPERATION-WISE EQUIPMENT  |   |
|-------|---|---|
| 34    | <p><b>Makhana popping machine</b></p> <p>The developed machine has advantages such as: Mechanized process, Reduces time of processing, Reduces the drudgery of the labourers, Production of high amount of grade I kernel, High throughput, Decortication is also possible, Energy saving. This is used for the popping of makhana seeds having capacity of 35-40 kg/h (raw wet seeds) with 95 % decortication efficiency and 90-94 % popping efficiency.</p> |   |
| 35    | <p><b>Potato peeler</b></p> <p>For processing of potatoes in any form, removal of peel is an important unit operation. Hence, a power operated batch type potato peeler was developed which is suitable for small scale processor of potato chips and other products. This machine has 400 kg/h capacity with 99.5 % peeling efficiency and 0.5 % peel loss.</p>  |  |

- Source :**
1. Equipment from 1-27, Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.
  2. Equipment from 28-35, CIPHET, Ludhiana, Punjab.

**Table 6.2: Agricultural engineering inputs status in India**

(Number)

| Year    | Tractors Sold in India and Exported | Power Tillers sold in India | Villages electrified | Cumulative Irrigation pump sets energized |
|---------|-------------------------------------|-----------------------------|----------------------|---|
| 2000-01 | 251939                              | 16018                       | 508071               | 12823480                                  |
| 2001-02 | 217456                              | 13563                       | 508863               | 13141378                                  |
| 2002-03 | 168182                              | 14613                       | 492325               | 13792473                                  |
| 2003-04 | 189518                              | 15665                       | 495031               | 14115441                                  |
| 2004-05 | 246469                              | 17481                       | 498877               | 14446461                                  |
| 2005-06 | 291680                              | 22303                       | 471360               | 14843804                                  |
| 2006-07 | 352827                              | 24791                       | 487351               | 15368577                                  |
| 2007-08 | 346501                              | 26135                       | 487347               | 15674673                                  |
| 2008-09 | 347010                              | 35331                       | 492831               | 15963476                                  |
| 2009-10 | 440331                              | 43464                       | 497950               | 16193521                                  |
| 2010-11 | 545109                              | 51414                       | 537947               | 17167631                                  |
| 2011-12 | 607658                              | 57232                       | 557439               | 18178136                                  |
| 2012-13 | 590672                              | 51237                       | 560266               | 18859865                                  |
| 2013-14 | 696828                              | 53927                       | -                    | -   |
| 2014-15 | 626839                              | -                           | -                    | -   |
| 2015-16 | 571249                              | -                           | -                    | -   |

**Note :** -: Not available

- Source :**
1. Tractor Manufacturers Association, New Delhi data.
  2. Power Tiller Manufacturers Association.
  3. [http://www.cea.nic.in/reports/monthly/executive\\_rep/apr11/16.pdf](http://www.cea.nic.in/reports/monthly/executive_rep/apr11/16.pdf)
  4. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Table 6.3: Production and sale of tractors in India**

(Number)

| Year    | Tractors number |        |
|---------|-----------------|--------|
|         | Production      | Sale   |
| 1970-71 | 20099           | 33399  |
| 1971-72 | 18100           | 37839  |
| 1972-73 | 20802           | 21802  |
| 1973-74 | 24425           | 25425  |
| 1974-75 | 31088           | 31881  |
| 1975-76 | 33252           | 34352  |
| 1976-77 | 33146           | 36066  |
| 1977-78 | 40946           | 40946  |
| 1978-79 | 54322           | 54322  |
| 1979-80 | 62275           | 62275  |
| 1980-81 | 71024           | 72012  |
| 1981-82 | 84137           | 79467  |
| 1982-83 | 63054           | 63073  |
| 1983-84 | 76173           | 74318  |
| 1984-85 | 85005           | 80317  |
| 1985-86 | 75550           | 76886  |
| 1986-87 | 80369           | 80164  |
| 1987-88 | 92092           | 93157  |
| 1988-89 | 109987          | 110323 |
| 1989-90 | 121624          | 122098 |
| 1990-91 | 139233          | 139828 |
| 1991-92 | 151759          | 151121 |
| 1992-93 | 147016          | 144337 |
| 1993-94 | 136971          | 138753 |
| 1994-95 | 164029          | 164770 |
| 1995-96 | 191311          | 191329 |
| 1996-97 | 221689          | 222684 |
| 1997-98 | 255327          | 248141 |
| 1998-99 | 261609          | 262169 |
| 1999-00 | 278556          | 273182 |
| 2000-01 | 235602          | 251939 |
| 2001-02 | 207252          | 217456 |
| 2002-03 | 156613          | 168182 |
| 2003-04 | 191633          | 189518 |
| 2004-05 | 249077          | 246469 |
| 2005-06 | 296080          | 291680 |
| 2006-07 | 352368          | 352827 |
| 2007-08 | 345172          | 346501 |
| 2008-09 | 343520          | 347010 |
| 2009-10 | 436947          | 440331 |
| 2010-11 | 548397          | 545109 |
| 2011-12 | 639896          | 607658 |
| 2012-13 | 578690          | 590672 |
| 2013-14 | 707898          | 696828 |
| 2014-15 | 612994          | 626839 |
| 2015-16 | 571565          | 571249 |

**Source :** 1. Tractor Manufacturers Association, New Delhi data.  
2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Table 6.4: Horse power-wise tractor production in India**

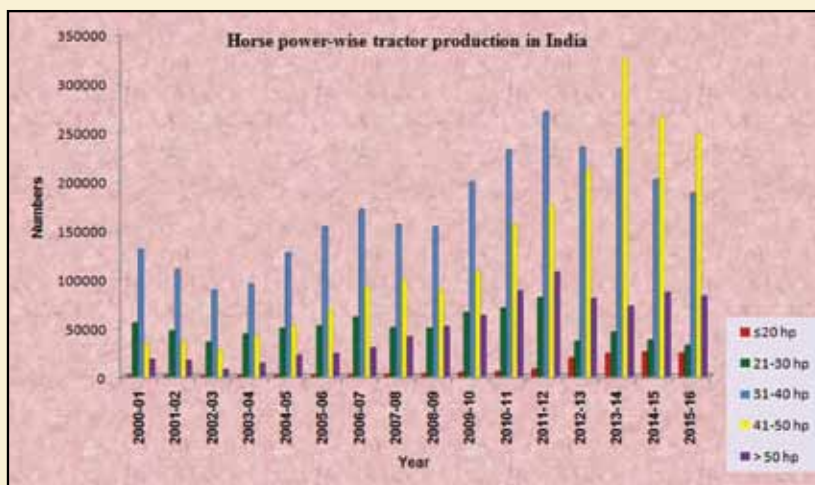
(Number)

| Year    | ≤20 hp | 21-30 hp | 31-40 hp | 41-50 hp | > 50 hp | Total  |
|---------|--------|----------|----------|----------|---------|--------|
| 2000-01 | 1251   | 54293    | 129654   | 33169    | 17235   | 235602 |
| 2001-02 | 380    | 46164    | 109416   | 35084    | 16208   | 207252 |
| 2002-03 | 216    | 34626    | 88090    | 26902    | 6779    | 156613 |
| 2003-04 | 518    | 42959    | 94450    | 40421    | 13285   | 191633 |
| 2004-05 | 975    | 48760    | 125993   | 51893    | 21456   | 249077 |
| 2005-06 | 1190   | 51392    | 152660   | 67506    | 23332   | 296080 |
| 2006-07 | 1537   | 60014    | 170417   | 91223    | 29177   | 352368 |
| 2007-08 | 1755   | 49720    | 155004   | 98291    | 40402   | 345172 |
| 2008-09 | 2451   | 49086    | 152558   | 88596    | 50829   | 343520 |
| 2009-10 | 3752   | 65098    | 198781   | 107373   | 61943   | 436947 |
| 2010-11 | 4602   | 69435    | 231488   | 155558   | 87314   | 548397 |
| 2011-12 | 7219   | 80417    | 270340   | 175482   | 106438  | 639896 |
| 2012-13 | 18728  | 35803    | 233697   | 211126   | 79336   | 578690 |
| 2013-14 | 23344  | 45159    | 232683   | 324085   | 71530   | 696801 |
| 2014-15 | 24521  | 36752    | 201130   | 264962   | 85629   | 612994 |
| 2015-16 | 23436  | 31369    | 186869   | 248093   | 81798   | 571565 |

**Note** : hp: Horse Power

**Source** : 1. Tractor Manufacturers Association, New Delhi data.

2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.



**Table 6.5: State-wise annual sale of tractors**

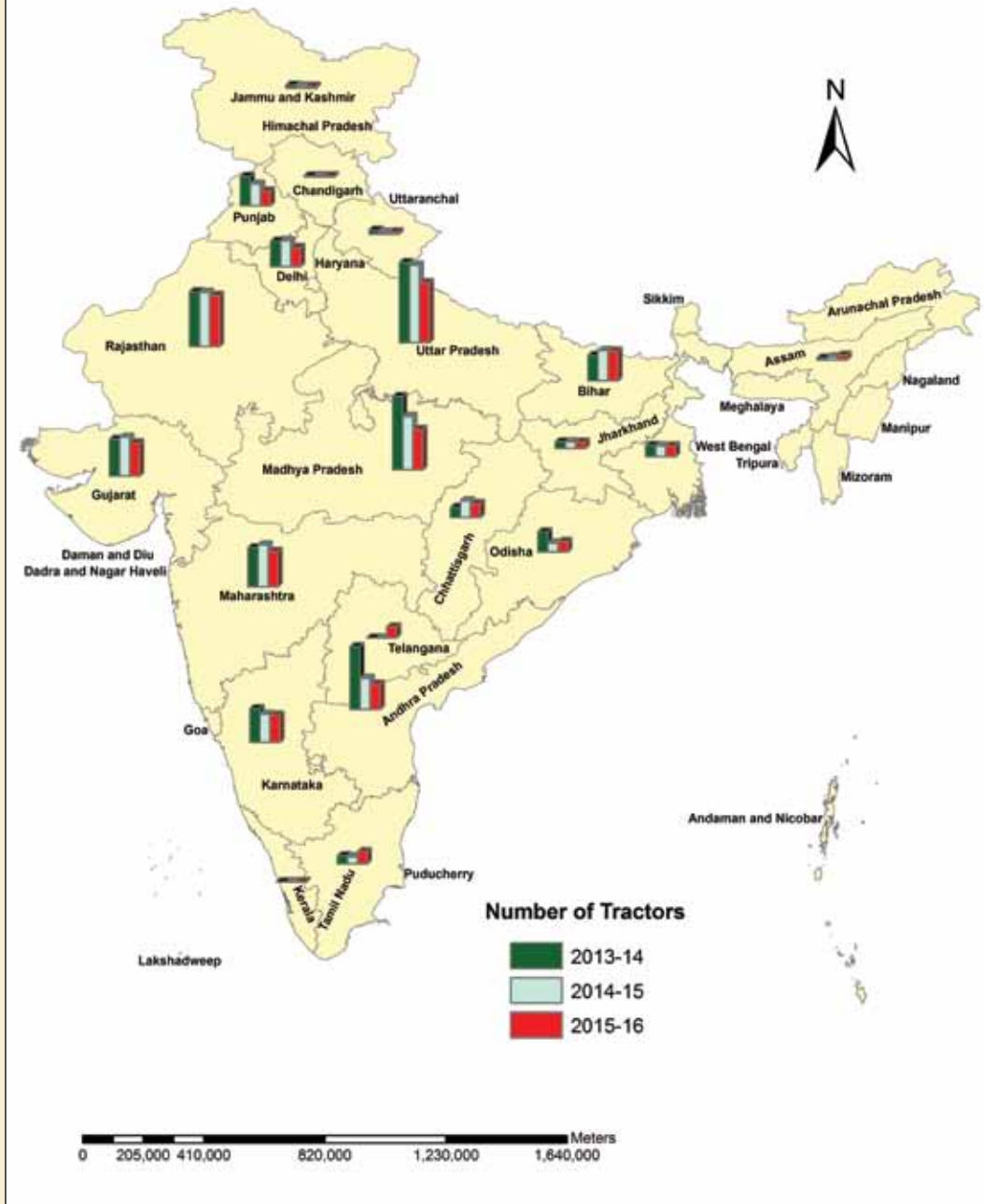
| State            | 2000-01       | 2001-02       | 2002-03       | 2003-04        | 2004-05       | 2005-06       | 2006-07       | 2007-08       | 2008-09       | 2009-10       | 2010-11       | 2011-12       | 2012-13       | 2013-14       | 2014-15       | 2015-16       |
|------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Andhra Pradesh   | 17520         | 12203         | 11263         | 10626          | 16615         | 22448         | 35613         | 43758         | 38417         | 34730         | 35173         | 53175         | 63275         | 74920         | 37028         | 30243         |
| Assam            | 540           | 571           | 499           | 493            | 385           | 771           | 1120          | 1296          | 1588          | 3583          | 2430          | 2057          | 2099          | 2408          | 3557          | 5669          |
| Bihar            | 17344         | 14028         | 13115         | 12235          | 14636         | 9946          | 11824         | 13104         | 17572         | 29050         | 26621         | 25987         | 28260         | 30187         | 36090         | 35402         |
| Chhattisgarh     | -             | 4939          | 7129          | 6570           | 8790          | 10192         | -             | -             | -             | -             | 11134         | 9254          | 9221          | 12139         | 20011         | 16861         |
| Gujarat          | 11546         | 13700         | 8434          | 10086          | 17078         | 23100         | 29651         | 25255         | 20179         | 24323         | 44099         | 41958         | 30765         | 44163         | 46411         | 39792         |
| Haryana          | 16560         | 13697         | 11504         | 11688          | 12408         | 14709         | 20385         | 23627         | 22573         | 28671         | 28403         | 31533         | 23741         | 30599         | 30626         | 22685         |
| Himachal Pradesh | 395           | 577           | 652           | 521            | 512           | 758           | 1117          | 891           | 907           | 1201          | 1404          | 1398          | 1255          | 1530          | 1519          | 1354          |
| Jharkhand        | -             | 2349          | 2961          | 2897           | 3643          | 5676          | -             | -             | -             | -             | 6524          | 6697          | 6756          | 8349          | 8169          | 8118          |
| Jammu & Kashmir  | 850           | 1071          | 1271          | 1506           | 1135          | 1296          | 1178          | 1328          | 1115          | 1608          | 2128          | 2618          | 3577          | 3794          | 2601          | 2324          |
| Karnataka        | 11261         | 8984          | 6512          | 8595           | 15560         | 25316         | 22455         | 17230         | 13835         | 23849         | 27244         | 29162         | 34861         | 40437         | 33758         | 32804         |
| Kerala           | 669           | 348           | 135           | 148            | 125           | 765           | 1848          | 493           | 374           | 582           | 671           | 631           | 570           | 385           | 268           | 332           |
| Madhya Pradesh   | 21901         | 29818         | 24344         | 29568          | 33733         | 23828         | 19378         | 18242         | 24306         | 33342         | 48435         | 50597         | 70822         | 87831         | 63744         | 48375         |
| Maharashtra      | 14420         | 8586          | 4867          | 7112           | 11545         | 17173         | 26070         | 29815         | 25610         | 34186         | 40951         | 56664         | 43245         | 46669         | 49839         | 42125         |
| Odisha           | 4970          | 2622          | 3076          | 2933           | 4957          | 6683          | 7214          | 4993          | 5099          | 7909          | 12861         | 13277         | 15831         | 24277         | 10878         | 12668         |
| Punjab           | 20879         | 19626         | 15484         | 13906          | 11715         | 12052         | 16201         | 18062         | 20027         | 28608         | 24122         | 26040         | 27900         | 35290         | 26074         | 17829         |
| Rajasthan        | 14692         | 16228         | 10914         | 18241          | 23830         | 27949         | 34583         | 29456         | 25763         | 31822         | 53604         | 57191         | 44221         | 65405         | 64565         | 61193         |
| Tamil Nadu       | 9931          | 6053          | 4896          | 6487           | 12470         | 18294         | 21880         | 16894         | 14609         | 15768         | 20638         | 26298         | 18448         | 9865          | 8072          | 14667         |
| Telangana        | -             | -             | -             | -              | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             | 13153         |
| Uttarakhand      | -             | 1345          | 2861          | 2479           | 1869          | 2321          | -             | -             | -             | -             | 3893          | 5377          | 4600          | 4969          | 2205          | 2769          |
| Uttar Pradesh    | 65253         | 48165         | 39724         | 38842          | 46326         | 44307         | 48184         | 39682         | 51513         | 73686         | 76981         | 82613         | 84559         | 95653         | 92219         | 71527         |
| West Bengal      | 3385          | 2510          | 2169          | 2001           | 3085          | 4337          | 5955          | 5354          | 6096          | 9186          | 13045         | 12187         | 12752         | 13756         | 12751         | 12934         |
| Others           | 7449          | 7263          | 12798         | 12100          | 1340          | 2418          | 1768          | 1522          | 1983          | 2315          | 1876          | 2172          | 876           | 1220          | 1078          | 945           |
| Export           | -             | -             | -             | 4567           | 20076         | 28097         | 33766         | 43553         | 41142         | 37622         | 62872         | 70772         | 62890         | 62677         | 75376         | 77485         |
| <b>Total</b>     | <b>239565</b> | <b>214683</b> | <b>184608</b> | <b>2030601</b> | <b>261833</b> | <b>302436</b> | <b>339830</b> | <b>334555</b> | <b>332708</b> | <b>422041</b> | <b>545109</b> | <b>607658</b> | <b>590524</b> | <b>696523</b> | <b>626839</b> | <b>571249</b> |

Note : - : Not available.

Source : 1. Tractor Manufacturers Association, New Delhi data.

2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

State-wise annual sale of tractors during the year 2013-14, 2014-15, and 2015-16



**Table 6.6: Cumulative deployment of various renewable energy systems/ devices in the country (as on 31.12.2015)**

| Sector   | Cumulative Achievements |
|--|-------------------------|
| <b>I. GRID-INTERACTIVE POWER (CAPACITIES IN MW)</b>            |                         |
| Wind Power   | 25088.19                |
| Small Hydro Power  | 4176.90                 |
| Bio Power (Biomass & Gasification and Bagasse Cogeneration)    | 4550.55                 |
| Waste to Power   | 127.08                  |
| Solar Power  | 4878.87                 |
| <b>Total</b>   | <b>38821.59</b>         |
| <b>II. OFF-GRID/ CAPTIVE POWER (CAPACITIES IN MWEQ)</b>        |                         |
| Waste to Energy  | 146.51                  |
| Biomass(non-bagasse) Cogeneration                              | 602.37                  |
| <b>Biomass Gasifiers</b>                                       |                         |
| -Rural   | 18.15                   |
| -Industrial  | 160.57                  |
| Aero-Generators/Hybrid systems                                 | 2.67                    |
| SPV Systems  | 289.01                  |
| Water mills/micro hydel  | 17.21                   |
| Bio-gas based energy system                                    | 0                       |
| <b>Total</b>   | <b>1236.64</b>          |
| <b>III. OTHER RENEWABLE ENERGY SYSTEMS</b>                     |                         |
| Family Biogas Plants (numbers in lakh)                         | 0                       |
| Solar Water Heating – Collector Area (million m <sup>2</sup> ) | 8.9                     |

**Source** : 1. [http://mnre.gov.in/file-manager/annual-report/2015-2016/EN/Chapter%201/chapter\\_1.htm](http://mnre.gov.in/file-manager/annual-report/2015-2016/EN/Chapter%201/chapter_1.htm)  
 2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.



**Table 6.7: Pump set energisation up to March 2016**

| Sl. No.                   | States/UTs               | Cumulative (Numbers) |
|---------------------------|--------------------------|----------------------|
| <b>States</b>             |                          |                      |
| 1                         | Andhra Pradesh           | 1569896              |
| 2                         | Arunachal Pradesh        | 0                    |
| 3                         | Assam                    | 3675                 |
| 4                         | Bihar                    | 285501               |
| 5                         | Jharkhand                | 9453                 |
| 6                         | Goa                      | 8143                 |
| 7                         | Gujarat                  | 1402457              |
| 8                         | Haryana                  | 607897               |
| 9                         | Himachal Pradesh         | 26934                |
| 10                        | Jammu & Kashmir          | 9714                 |
| 11                        | Karnataka                | 2307024              |
| 12                        | Kerala                   | 498676               |
| 13                        | Madhya Pradesh           | 1421694              |
| 14                        | Chhattisgarh             | 350183               |
| 15                        | Maharashtra              | 4306381              |
| 16                        | Manipur                  | 45                   |
| 17                        | Meghalaya                | 24                   |
| 18                        | Mizoram                  | 0                    |
| 19                        | Nagaland                 | 194                  |
| 20                        | Orissa                   | 76562                |
| 21                        | Punjab                   | 1229531              |
| 22                        | Rajasthan                | 1282677              |
| 23                        | Sikkim                   | 0                    |
| 24                        | Tamil Nadu               | 2057593              |
| 25                        | Tripura                  | 5707                 |
| 26                        | Telangana                | 1671051              |
| 27                        | Uttar Pradesh            | 994644               |
| 28                        | Uttarakhand              | 28054                |
| 29                        | West Bengal              | 243027               |
|                           | <b>Total (States)</b>    | <b>20396737</b>      |
| <b>Union Territories*</b> |                          |                      |
| 1                         | Andaman & Nicobar Island |                      |
| 2                         | Chandigarh               | 421                  |
| 3                         | Delhi                    | 25883                |
| 4                         | Dadra & Nagar Haveli     | 953                  |
| 5                         | Daman & Diu              | 1006                 |
| 6                         | Lakshadweep              | 0                    |
| 7                         | Pondicherry #            | 9180                 |
|                           | <b>Total (UTs)</b>       | <b>37443</b>         |
|                           | <b>Total</b>             | <b>20434180</b>      |

**Note** : 1. \*Included in lump sum potential in terms of electric pump sets for UTs.i.e.50000 2. Some of the states data is based on old data as they are not furnishing regularly, -: Not available.

**Source** : 1. <http://www.cea.nic.in/monthlyothers.html> accessed on 31.05.2016  
2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Table 6.8: State-wise and source-wise installed capacity of grid interactive renewable power (as on 31.03.2013 & 30.03.2014)**

| States/ UTs       | Biomass Power |          | Waste to Energy |          | Wind Power |          | Small Hydro Power |          | Solar Power |          | Total    |          | Growth*Rate (2012-13 to 2013-14) |
|-------------------|---------------|----------|-----------------|----------|------------|----------|-------------------|----------|-------------|----------|----------|----------|----------------------------------|
|                   | 31.03.13      | 31.03.14 | 31.03.13        | 31.03.14 | 31.03.13   | 31.03.14 | 31.03.13          | 31.03.14 | 31.03.13    | 31.03.14 | 31.03.13 | 31.03.14 |                                  |
| Andhra Pradesh    | 380.75        | 380.75   | 43.16           | 50.66    | 447.65     | 746.20   | 219.03            | 221.03   | 23.35       | 131.84   | 1113.94  | 1530.48  | 37.39                            |
| Arunachal Pradesh | -             | -        | -               | -        | -          | -        | 103.91            | 103.91   | 0.03        | 0.03     | 103.93   | 103.93   | 0.00                             |
| Assam             | -             | -        | -               | -        | -          | -        | 31.11             | 34.11    | -           | -        | 31.11    | 34.11    | 9.64                             |
| Bihar             | 43.30         | 43.42    | -               | -        | -          | -        | 70.70             | 70.70    | -           | -        | 114.00   | 114.12   | 0.11                             |
| Chhattisgarh      | 249.90        | 264.90   | -               | -        | -          | -        | 52.00             | 52.00    | 4.00        | 7.10     | 305.90   | 324.00   | 5.92                             |
| Goa               | -             | -        | -               | -        | -          | -        | 0.05              | 0.05     | -           | -        | 0.05     | 0.05     | 0.00                             |
| Gujarat           | 30.50         | 43.90    | -               | -        | 3174.58    | 3454.30  | 15.60             | 15.60    | 857.90      | 916.40   | 4078.58  | 4430.20  | 8.62                             |
| Haryana           | 45.30         | 45.30    | -               | -        | -          | -        | 70.10             | 70.10    | 7.80        | 10.30    | 123.20   | 125.70   | 2.03                             |
| Himachal Pradesh  | -             | -        | -               | -        | -          | -        | 587.91            | 638.91   | -           | -        | 587.91   | 638.91   | 8.68                             |
| Jammu & Kashmir   | -             | -        | -               | -        | -          | -        | 130.53            | 147.53   | -           | -        | 130.53   | 147.53   | 13.02                            |
| Jharkhand         | -             | -        | -               | -        | -          | -        | 4.05              | 4.05     | 16.00       | 16.00    | 20.05    | 20.05    | 0.00                             |
| Karnataka         | 491.38        | 603.28   | 1.00            | 1.00     | 2135.15    | 2318.20  | 963.76            | 1031.66  | 14.00       | 31.00    | 3605.29  | 3985.14  | 10.54                            |
| Kerala            | -             | -        | -               | -        | 35.10      | 35.20    | 158.42            | 158.42   | 0.03        | 0.03     | 193.55   | 193.65   | 0.05                             |
| Madhya Pradesh    | 16.00         | 26.00    | 3.90            | 3.90     | 386.00     | 423.40   | 86.16             | 86.16    | 37.32       | 347.17   | 529.38   | 886.63   | 67.49                            |
| Maharashtra       | 756.90        | 940.40   | 9.72            | 12.72    | 3021.85    | 4100.40  | 299.93            | 327.43   | 100.00      | 249.25   | 4188.40  | 5630.20  | 34.42                            |
| Manipur           | -             | -        | -               | -        | -          | -        | 5.45              | 5.45     | -           | -        | 5.45     | 5.45     | 0.00                             |
| Meghalaya         | -             | -        | -               | -        | -          | -        | 31.03             | 31.03    | -           | -        | 31.03    | 31.03    | 0.00                             |
| Mizoram           | -             | -        | -               | -        | -          | -        | 36.47             | 36.47    | -           | -        | 36.47    | 36.47    | 0.00                             |
| Nagaland          | -             | -        | -               | -        | -          | -        | 28.67             | 29.67    | -           | -        | 28.67    | 29.67    | 3.49                             |
| Odisha            | 20.00         | 20.00    | -               | -        | -          | -        | 64.30             | 64.63    | 13.00       | 30.50    | 97.30    | 115.13   | 18.32                            |
| Punjab            | 124.50        | 140.50   | 9.25            | 9.25     | -          | -        | 154.50            | 156.20   | 9.33        | 16.85    | 297.58   | 322.80   | 8.48                             |

| States/UTs              | Biomass Power  |                | Waste to Energy |               | Wind Power      |                 | Small Hydro Power |                | Solar Power    |                | Total           |                 | Growth*Rate<br>(2012-13 to<br>2013-14) |
|-------------------------|----------------|----------------|-----------------|---------------|-----------------|-----------------|-------------------|----------------|----------------|----------------|-----------------|-----------------|--|
|                         | 31.03.13       | 31.03.14       | 31.03.13        | 31.03.14      | 31.03.13        | 31.03.14        | 31.03.13          | 31.03.14       | 31.03.13       | 31.03.14       | 31.03.13        | 31.03.14        |  |
| Rajasthan               | 91.30          | 101.30         | -               | -             | 2684.65         | 2784.90         | 23.85             | 23.85          | 552.90         | 730.10         | 3352.70         | 3640.15         | 8.57                                   |
| Sikkim                  | -              | -              | -               | -             | -               | -               | 52.11             | 52.11          | -              | -              | 52.11           | 52.11           | 0.00                                   |
| Tamil Nadu              | 538.70         | 571.30         | 8.05            | 8.05          | 7162.18         | 7269.50         | 123.05            | 123.05         | 17.11          | 98.36          | 7849.09         | 8070.26         | 2.82                                   |
| Tripura                 | -              | -              | -               | -             | -               | -               | 16.01             | 16.01          | -              | -              | 16.01           | 16.01           | 0.00                                   |
| Uttar Pradesh           | 776.50         | 776.50         | 5.00            | 5.00          | -               | -               | 25.10             | 25.10          | 17.38          | 21.08          | 823.98          | 827.68          | 0.45                                   |
| Uttarakhand             | 10.00          | 30.00          | -               | -             | -               | -               | 174.82            | 174.82         | 5.05           | 5.05           | 189.87          | 209.87          | 10.53                                  |
| West Bengal             | 26.00          | 26.00          | -               | -             | -               | -               | 98.40             | 98.40          | 2.05           | 7.05           | 126.45          | 131.45          | 3.95                                   |
| Andaman & Nicobar       | -              | -              | -               | -             | -               | -               | 5.25              | 5.25           | 5.10           | 5.10           | 10.35           | 10.35           | 0.00                                   |
| Chandigarh              | -              | -              | -               | -             | -               | -               | -                 | -              | -              | 2.00           | -               | 2.00            | -                                      |
| Dadar & Nagar Haveli    | -              | -              | -               | -             | -               | -               | -                 | -              | -              | -              | -               | -               | -                                      |
| Daman & Diu             | -              | -              | -               | -             | -               | -               | -                 | -              | -              | -              | -               | -               | -                                      |
| Delhi                   | -              | -              | 16.00           | 16.00         | -               | -               | -                 | -              | 2.56           | 5.15           | 18.56           | 21.15           | 13.98                                  |
| Lakshadweep             | -              | -              | -               | -             | -               | -               | -                 | -              | 0.75           | 0.75           | 0.75            | 0.75            | 0.00                                   |
| Puducherry              | -              | -              | -               | -             | -               | -               | -                 | -              | 0.03           | 0.03           | 0.03            | 0.03            | 20.00                                  |
| Others                  | -              | -              | -               | -             | 4.30            | 4.30            | -                 | -              | 0.79           | 0.82           | 5.09            | 5.12            | -                                      |
| <b>All India Total</b>  | <b>3601.03</b> | <b>4013.55</b> | <b>96.08</b>    | <b>106.58</b> | <b>19051.46</b> | <b>21136.40</b> | <b>3632.25</b>    | <b>3803.70</b> | <b>1686.44</b> | <b>2631.96</b> | <b>28067.26</b> | <b>31692.18</b> | <b>12.92</b>                           |
| <b>Distribution (%)</b> | <b>12.83</b>   | <b>12.66</b>   | <b>0.34</b>     | <b>0.34</b>   | <b>67.88</b>    | <b>66.69</b>    | <b>12.94</b>      | <b>12.00</b>   | <b>6.01</b>    | <b>8.30</b>    | <b>100.00</b>   | <b>100.00</b>   |  |

Note : -: Not available

Source : 1. Energy Statistics 2015, Ministry of New and Renewable Energy, Govt. of India, New Delhi.

2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Table 6.9: Installation of off-grid / decentralised renewable energy systems/ devices (as on 31.03.2014)**

| State/UT          | Biogas Plants (Nos. in lakh) | Biomass Gasifiers (Rural+ Industrial) (KW) | Biomass (non- bagasse) (MW) | Water Pumping/ Wind Mills# (Nos.) | SPV Pumps (Nos.) | Solar Photovoltaic |                   |                   |          |
|-------------------|------------------------------|--|-----------------------------|-----------------------------------|------------------|--------------------|-------------------|-------------------|----------|
|                   |                              |  |                             |                                   |                  | SLS (Nos. in lakh) | HLS (Nos.in lakh) | SL (Nos. in lakh) | PP (KWP) |
| Andhra Pradesh    | 5.2                          | 22914                                      | 75.4                        | 6                                 | 613              | 0.1                | 0.2               | 0.4               | 1263.6   |
| Arunachal Pradesh | 0.0                          | 750  | 0.0                         | 0                                 | 18               | 0.0                | 0.2               | 0.1               | 217.1    |
| Assam             | 1.1                          | 2933                                       | 0.0                         | 3                                 | 45               | 0.0                | 0.1               | 0.0               | 910.0    |
| Bihar             | 1.3                          | 10924                                      | 8.2                         | 46                                | 139              | 0.0                | 0.1               | 0.5               | 775.6    |
| Chhattisgarh      | 0.5                          | 1210                                       | 2.5                         | 1                                 | 240              | 0.0                | 0.1               | 0.0               | 14616.7  |
| Goa               | 0.0                          | 0  | 0.0                         | 0                                 | 15               | 0.0                | 0.0               | 0.0               | 1.7      |
| Gujarat           | 4.3                          | 21530                                      | 0.0                         | 945                               | 85               | 0.0                | 0.1               | 0.3               | 9452.6   |
| Haryana           | 0.6                          | 2503                                       | 35.9                        | 0                                 | 469              | 0.2                | 0.6               | 0.9               | 864.3    |
| Himachal Pradesh  | 0.5                          | 0  | 7.2                         | 0                                 | 6                | 0.1                | 0.2               | 0.2               | 1208.5   |
| Jammu & Kashmir   | 0.0                          | 200  | 0.0                         | 0                                 | 39               | 0.1                | 0.7               | 0.4               | 3430.9   |
| Jharkhand         | 0.1                          | 500  | 1.2                         | 0                                 | 0                | 0.0                | 0.1               | 0.2               | 480.9    |
| Karnataka         | 4.7                          | 7447                                       | 15.2                        | 28                                | 551              | 0.0                | 0.5               | 0.1               | 1596.4   |
| Kerala            | 1.4                          | 0  | 0.7                         | 79                                | 810              | 0.0                | 0.3               | 0.5               | 214.4    |
| Madhya Pradesh    | 3.5                          | 10258                                      | 12.4                        | 0                                 | 87               | 0.1                | 0.0               | 0.1               | 1983.0   |
| Maharashtra       | 8.6                          | 7150                                       | 16.4                        | 26                                | 239              | 0.1                | 0.0               | 0.7               | 913.7    |
| Manipur           | 0.0                          | 0  | 0.0                         | 0                                 | 40               | 0.0                | 0.0               | 0.0               | 456.0    |
| Meghalaya         | 0.1                          | 250  | 13.8                        | 0                                 | 19               | 0.1                | 0.1               | 0.2               | 173.5    |
| Mizoram           | 0.0                          | 250  | 0.0                         | 0                                 | 37               | 0.0                | 0.1               | 0.1               | 241.0    |
| Nagaland          | 0.1                          | 2100                                       | 0.0                         | 0                                 | 3                | 0.0                | 0.0               | 0.1               | 1050.0   |
| Odisha            | 2.6                          | 270  | 2.9                         | 0                                 | 56               | 0.1                | 0.1               | 0.1               | 84.5     |
| Punjab            | 1.6                          | 0  | 110.7                       | 0                                 | 1857             | 0.1                | 0.1               | 0.2               | 663.0    |
| Rajasthan         | 0.7                          | 2464                                       | 2.0                         | 222                               | 4501             | 0.1                | 1.4               | 0.0               | 8625.0   |
| Sikkim            | 0.1                          | 0  | 0.0                         | 0                                 | 0                | 0.0                | 0.2               | 0.2               | 680.0    |
| Tamil Nadu        | 2.2                          | 16262                                      | 16.6                        | 60                                | 829              | 0.3                | 0.6               | 0.2               | 4006.6   |
| Tripura           | 0.0                          | 1050                                       | 0.0                         | 0                                 | 151              | 0.0                | 0.3               | 0.6               | 365.0    |

| State/UT             | Biogas Plants<br>(Nos. in lakh) | Biomass Gasifiers<br>(Rural+ Industrial) (KW) | Biomass (non- bagasse) (MW) | Water Pumping/<br>Wind Mills#<br>(Nos.) | SPV Pumps<br>(Nos.) | Solar Photovoltaic    |                       |                      |                |
|----------------------|---------------------------------|---|-----------------------------|---|---------------------|-----------------------|-----------------------|----------------------|----------------|
|                      |                                 |   |                             |   |                     | SLS<br>(Nos. in lakh) | HLS<br>(Nos. in lakh) | SL<br>(Nos. in lakh) | PP<br>(KWP)    |
| Uttar Pradesh        | 4.4                             | 23702   | 150.9                       | 0                                       | 575                 | 1.2                   | 2.4                   | 0.6                  | 3491.5         |
| Uttarakhand          | 0.2                             | 2150  | 42.5                        | 0                                       | 26                  | 0.1                   | 0.9                   | 0.8                  | 280.0          |
| West Bengal          | 3.7                             | 26168   | 17.4                        | 0                                       | 48                  | 0.1                   | 1.5                   | 0.2                  | 889.0          |
| Andaman & Nicobar    | 0.0                             | 0   | 0.0                         | 2                                       | 5                   | 0.0                   | 0.0                   | 0.1                  | 167.0          |
| Chandigarh           | 0.0                             | 0   | 0.0                         | 0                                       | 12                  | 0.0                   | 0.0                   | 0.0                  | 730.0          |
| Dadar & Nagar Haveli | 0.0                             | 0   | 0.0                         | 0                                       | 0                   | 0.0                   | 0.0                   | 0.0                  | 0.0            |
| Daman & Diu          | 0.0                             | 0   | 0.0                         | 0                                       | 0                   | 0.0                   | 0.0                   | 0.0                  | 0.0            |
| Delhi                | 0.0                             | 0   | 0.0                         | 0                                       | 90                  | 0.0                   | 0.0                   | 0.0                  | 332.0          |
| Lakshadweep          | 0.0                             | 250   | 0.0                         | 0                                       | 0                   | 0.0                   | 0.0                   | 0.1                  | 1090.0         |
| Puducherry           | 0.0                             | 0   | 0.0                         | 0                                       | 21                  | 0.0                   | 0.0                   | 0.0                  | 0.0            |
| Others*              | 0.1                             | 0   | 0.0                         | 0                                       | 0                   | 0.1                   | 0.2                   | 1.3                  | 23885.0        |
| <b>Total</b>         | <b>47.5</b>                     | <b>163235</b>                                 | <b>531.8</b>                | <b>1418</b>                             | <b>11626</b>        | <b>2.7</b>            | <b>11.0</b>           | <b>9.6</b>           | <b>85138.4</b> |

Note : \* Others include installations through NGOs/IREDA in different states  
SLS = Street Lighting System; HLS = Home Lighting System; SL = Solar Lantern; PP = Power Plants; SPV = Solar, Photovoltaic; SHP = Small Hydro Power;  
MW = Mega Watt; KWP = Kilowatt peak;

Source : 1. Energy Statistics 2015, Ministry of New and Renewable Energy, Govt. of India, New Delhi.  
2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

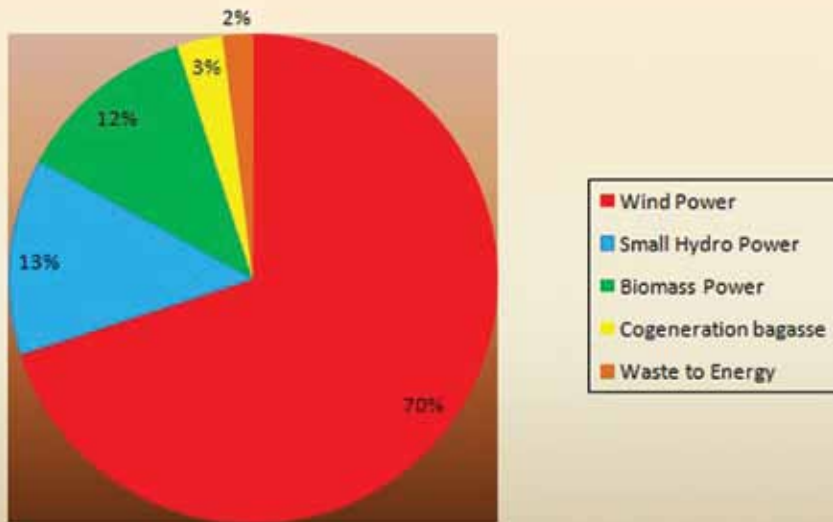
**Table 6.10: Source-wise and state-wise estimated potential of renewable power in India (as on 31.03.2014)**

| State/UT                | Wind Power    | Small Hydro Power | Biomass Power | Cogeneration bagasse | Waste to Energy | Total               |                  |
|-------------------------|---------------|-------------------|---------------|----------------------|-----------------|---------------------|------------------|
|                         |               |                   |               |                      |                 | Estimated Potential | Distribution (%) |
| Andhra Pradesh          | 14497         | 938               | 578           | 300                  | 123             | 1647                | 11.16            |
| Arunachal Pradesh       | 236           | 1341              | 8             | 0                    | 0               | 1585                | 1.07             |
| Assam                   | 112           | 239               | 212           | 0                    | 8               | 571                 | 0.39             |
| Bihar                   | 144           | 223               | 619           | 300                  | 73              | 1359                | 0.92             |
| Chhattisgarh            | 314           | 1107              | 236           | 0                    | 24              | 1681                | 1.14             |
| Goa                     | 0             | 7                 | 26            | 0                    | 0               | 33                  | 0.02             |
| Gujarat                 | 35071         | 202               | 1221          | 350                  | 112             | 36956               | 25.04            |
| Haryana                 | 93            | 110               | 1333          | 350                  | 24              | 1910                | 1.29             |
| Himachal Pradesh        | 64            | 2398              | 142           | 0                    | 2               | 2606                | 1.77             |
| Jammu & Kashmir         | 5685          | 1431              | 43            | 0                    | 0               | 7159                | 4.85             |
| Jharkhand               | 91            | 209               | 90            | 0                    | 10              | 400                 | 0.27             |
| Karnataka               | 13593         | 4141              | 1131          | 450                  | 0               | 19315               | 13.08            |
| Kerala                  | 837           | 704               | 1044          | 0                    | 36              | 2621                | 1.78             |
| Madhya Pradesh          | 2931          | 820               | 1364          | 0                    | 78              | 5193                | 3.52             |
| Maharashtra             | 5961          | 794               | 1887          | 1250                 | 287             | 10179               | 6.90             |
| Manipur                 | 56            | 109               | 13            | 0                    | 2               | 180                 | 0.12             |
| Meghalaya               | 82            | 230               | 11            | 0                    | 2               | 325                 | 0.22             |
| Mizoram                 | 0             | 169               | 1             | 0                    | 2               | 172                 | 0.12             |
| Nagaland                | 16            | 197               | 10            | 0                    | 0               | 223                 | 0.15             |
| Odisha                  | 1384          | 295               | 246           | 0                    | 22              | 1947                | 1.32             |
| Punjab                  | 0             | 441               | 3172          | 300                  | 45              | 3958                | 2.68             |
| Rajasthan               | 5050          | 57                | 1039          | 0                    | 62              | 6208                | 4.21             |
| Sikkim                  | 98            | 267               | 2             | 0                    | 0               | 367                 | 0.25             |
| Tamil Nadu              | 14152         | 660               | 1070          | 450                  | 151             | 16483               | 11.17            |
| Tripura                 | 0             | 47                | 3             | 0                    | 2               | 52                  | 0.04             |
| Uttar Pradesh           | 1260          | 461               | 1617          | 1250                 | 176             | 4764                | 3.23             |
| Uttarakhand             | 534           | 1708              | 24            | 0                    | 5               | 2271                | 1.54             |
| West Bengal             | 22            | 396               | 396           | 0                    | 148             | 962                 | 0.65             |
| Andaman & Nicobar       | 365           | 8                 | 0             | 0                    | 0               | 373                 | 0.25             |
| Chandigarh              | 0             | 0                 | 0             | 0                    | 6               | 6                   | 0.00             |
| Dadar & Nagar Haveli    | 0             | 0                 | 0             | 0                    | 0               | 0                   | 0.00             |
| Daman & Diu             | 4             | 0                 | 0             | 0                    | 0               | 4                   | 0.00             |
| Delhi                   | 0             | 0                 | 0             | 0                    | 131             | 131                 | 0.09             |
| Lakshadweep             | 0             | 0                 | 0             | 0                    | 0               | 0                   | 0.00             |
| Puducherry              | 120           | 0                 | 0             | 0                    | 3               | 123                 | 0.08             |
| Others*                 | 0             | 0                 | 0             | 0                    | 1022            | 1022                | 0.69             |
| <b>Total</b>            | <b>102772</b> | <b>19749</b>      | <b>17538</b>  | <b>5000</b>          | <b>2556</b>     | <b>147615</b>       | <b>100.00</b>    |
| <b>Distribution (%)</b> | <b>69.62</b>  | <b>013.38</b>     | <b>11.88</b>  | <b>3.39</b>          | <b>1.73</b>     | <b>100.00</b>       |                  |

Note : \* Industrial waste

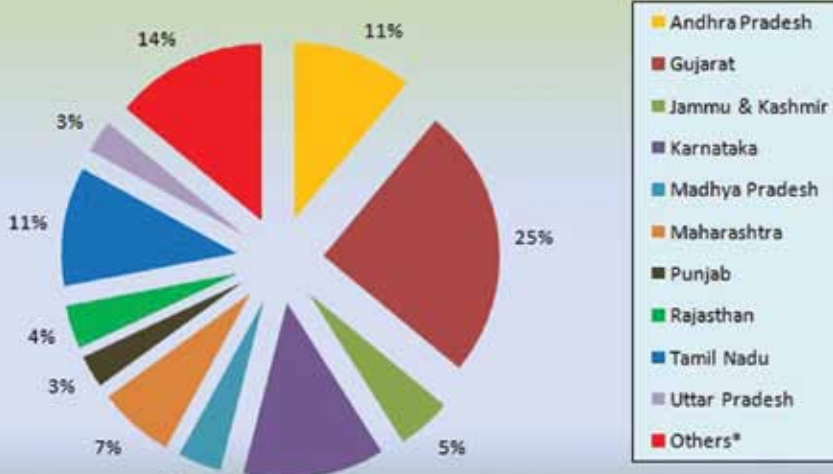
- Source :
1. Ministry of New and Renewable Energy
  2. Energy Statistics 2015. Central Statistics Office, National Statistical Organisation, Ministry of Statistics and Programme Implementation, Government of India (www.mospi.gov.in)
  3. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Percentage distribution of source-wise estimated potential of renewable power in India as on 31.03.14**



Total reserves = 147615 Mega Wat

**Percentage distribution of state-wise estimated potential of renewable power in India as on 31.03.2014**



Total reserves = 147615 Mega Watt

**Table 6.11: Consumption of electricity by sectors in India**(in Giga Watt Hour) = (10<sup>6</sup> x Kilo Watt Hour)

| Year   | Industry     | Agriculture  | Domestic     | Commercial  | Traction & Railways | Others       | Total Electricity Consumed |
|--|--------------|--------------|--------------|-------------|---------------------|--------------|----------------------------|
| 2005-06  | 151,557      | 90,292       | 100,090      | 35,965      | 9,944               | 24,039       | 411,887                    |
| 2006-07  | 171,293      | 99,023       | 111,002      | 40,220      | 10,800              | 23,411       | 455,749                    |
| 2007-08  | 189,424      | 104,182      | 120,918      | 46,685      | 11,108              | 29,660       | 501,977                    |
| 2008-09  | 209,474      | 109,610      | 131,720      | 54,189      | 11,425              | 37,577       | 553,995                    |
| 2009-10  | 236,752      | 120,209      | 146,080      | 60,600      | 12,408              | 36,595       | 612,645                    |
| 2010-11  | 272,589      | 131,967      | 169,326      | 67,289      | 14,003              | 39,218       | 694,392                    |
| 2011-12  | 352,291      | 140,960      | 171,104      | 65,381      | 14,206              | 41,252       | 785,194                    |
| 2012-13  | 365,989      | 147,462      | 183,700      | 72,794      | 14,100              | 40,256       | 824,301                    |
| 2013-14 (p)                                    | 386,872      | 159,144      | 198,246      | 76,968      | 15,182              | 46,180       | 882,592                    |
| <b>Distribution (%)</b>                        | <b>43.83</b> | <b>18.03</b> | <b>22.46</b> | <b>8.72</b> | <b>1.72</b>         | <b>5.23</b>  | <b>100.00</b>              |
| <b>Growth rate of 2013-14 over 2012-13 (%)</b> | <b>5.71</b>  | <b>7.92</b>  | <b>7.92</b>  | <b>5.73</b> | <b>7.67</b>         | <b>14.72</b> | <b>7.07</b>                |
| <b>CAGR 2005-06 to 2013-14 (%)</b>             | <b>10.97</b> | <b>6.50</b>  | <b>7.89</b>  | <b>8.82</b> | <b>4.81</b>         | <b>7.52</b>  | <b>8.84</b>                |

**Source :** 1. Central Electricity Authority.  
 2. Energy Statistics 2015, Ministry of New and Renewable Energy, Govt. of India, New Delhi.  
 3. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Table 6.12: State-wise processing of lac in India**

(t)

| Name of State         | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15            |
|-----------------------|---------|---------|---------|---------|---------|--------------------|
| <b>West Bengal</b>    | 7900    | 5800    | 5962    | 4404    | 6810    | 6000               |
| <b>Chhattisgarh</b>   | 5450    | 3600    | 5435    | 5630    | 6900    | 7000               |
| <b>Jharkhand</b>      | 4000    | 3500    | 3370    | 3580    | 6865    | 5500               |
| <b>Maharashtra</b>    | 900     | 700     | 1000    | 900     | 1500    | 1000               |
| <b>Madhya Pradesh</b> | 150     | 100     | 125     | 80      | 74      | 100                |
| <b>Total</b>          | 18400*  | 13600   | 15892   | 14594   | 22149*  | 19600 <sup>@</sup> |

**Note :** \* included the quantity of imported and carry over lac in India, @: 2<sup>nd</sup> Advance Estimates.

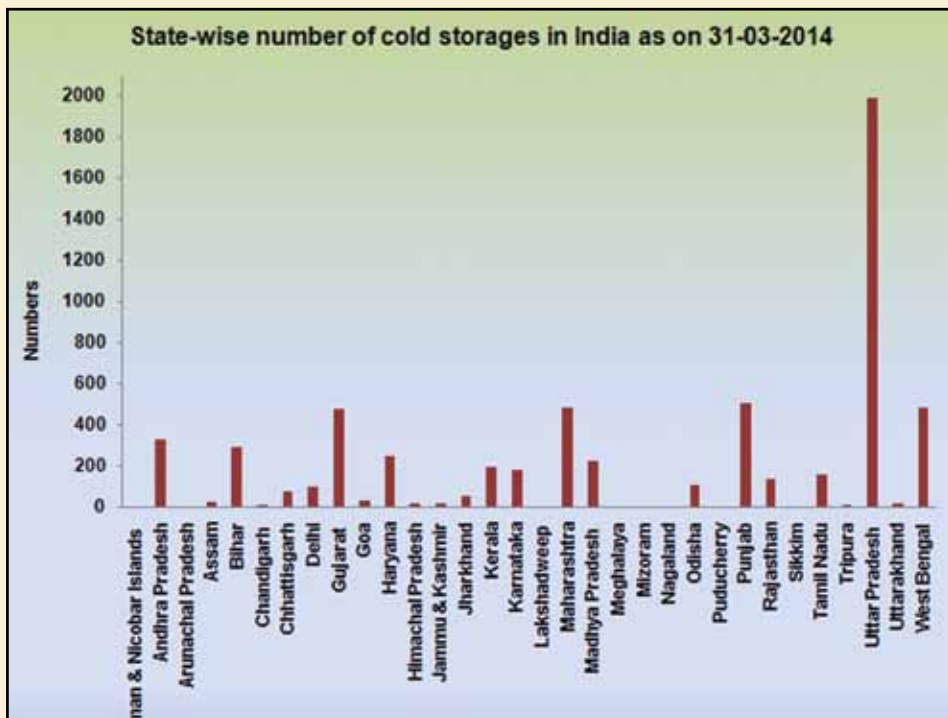
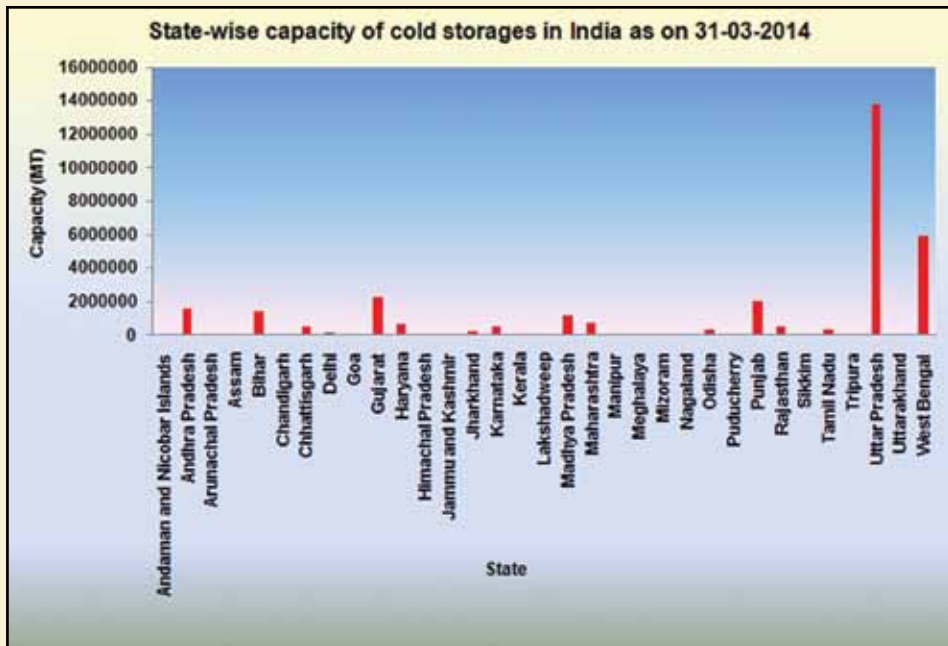
**Source :** Information received from ICAR-Indian Institute of Natural Resins and Gums, Namkum, Ranchi.



**Table 6.13: State-wise number of cold storage and capacity in India  
(as on 31.03.2014)**

| States / UTs             | Number of cold storages            | Capacity (MT)   |
|--------------------------|------------------------------------|-----------------|
|                          | <b>Andaman and Nicobar Islands</b> | 2               |
| <b>Andhra Pradesh</b>    | 413                                | 1622320         |
| <b>Arunachal Pradesh</b> | 2                                  | 5000            |
| <b>Assam</b>             | 35                                 | 126179          |
| <b>Bihar</b>             | 304                                | 1411395         |
| <b>Chandigarh</b>        | 7                                  | 12462           |
| <b>Chhattisgarh</b>      | 97                                 | 470546          |
| <b>Delhi</b>             | 97                                 | 129857          |
| <b>Goa</b>               | 29                                 | 7705            |
| <b>Gujarat</b>           | 625                                | 2323175         |
| <b>Haryana</b>           | 307                                | 638601          |
| <b>Himachal Pradesh</b>  | 34                                 | 53009           |
| <b>Jammu and Kashmir</b> | 29                                 | 69769           |
| <b>Jharkhand</b>         | 56                                 | 221680          |
| <b>Karnataka</b>         | 192                                | 536333          |
| <b>Kerala</b>            | 197                                | 78355           |
| <b>Lakshadweep</b>       | 1                                  | 15              |
| <b>Madhya Pradesh</b>    | 275                                | 1168321         |
| <b>Maharashtra</b>       | 555                                | 762798          |
| <b>Manipur</b>           | 1                                  | 2175            |
| <b>Meghalaya</b>         | 4                                  | 8200            |
| <b>Mizoram</b>           | 3                                  | 3931            |
| <b>Nagaland</b>          | 2                                  | 6150            |
| <b>Odisha</b>            | 120                                | 366699          |
| <b>Puducherry</b>        | 3                                  | 85              |
| <b>Punjab</b>            | 617                                | 2051377         |
| <b>Rajasthan</b>         | 157                                | 490888          |
| <b>Sikkim</b>            | 3                                  | 2100            |
| <b>Tamil Nadu</b>        | 165                                | 304771          |
| <b>Tripura</b>           | 14                                 | 45477           |
| <b>Uttar Pradesh</b>     | 2209                               | 13807762        |
| <b>Uttarakhand</b>       | 30                                 | 89689           |
| <b>West Bengal</b>       | 506                                | 5912237         |
| <b>India</b>             | <b>7091</b>                        | <b>32729271</b> |

- Source :
1. Lok Sabha Unstarred Question No. 3892, dated on 22.12.2015.
  2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal



**Table 6.14: Power from renewable sources of energy in India (2015-16)**

| <b>Programme/ Scheme wise Physical Progress in 2015-16<br/>(and during the month of March, 2016)</b> |  |
|--|--|
| <b>Sector</b>  | <b>FY- 2015-16<br/>Cumulative Achievements</b> |
| <b>I. GRID-INTERACTIVE POWER (CAPACITIES IN MW)</b>  |  |
| Wind Power   | 26769.05                                       |
| Solar Power  | 6762.85  |
| Small Hydro Power  | 4273.90  |
| BioPower (Biomass & Gasification and Bagasse Cogeneration)   | 4831.33  |
| Waste to Power   | 115.08   |
| <b>Total</b>   | <b>42752.21</b>                                |
| <b>II. OFF-GRID/ CAPTIVE POWER (CAPACITIES IN MW<sub>EO</sub>)</b>                                   |  |
| Waste to Energy  | 160.16   |
| Biomass(non-bagasse) Cogeneration  | 651.91   |
| Biomass Gasifiers  | 18.15  |
| -Rural   | 164.24   |
| -Industrial  |  |
| Aero-Generators/Hybrid systems   | 2.69   |
| SPV Systems  | 313.88   |
| Water mills/micro hydel  | 18.71  |
| <b>Total</b>   | <b>1329.74</b>                                 |
| <b>III. OTHER RENEWABLE ENERGY SYSTEMS</b>   |  |
| Family Biogas Plants (in Lakhs)  | 48.55  |
| Solar Water Heating – Coll. Areas(million m <sup>2</sup> )   | 8.90   |

**Source** : 1. <http://mnre.gov.in/mission-and-vision-2/achievements/>.  
2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

**Table 6.15: Horse power-wise models of tractors and power tillers available in India (as on March 2016)**

| S.No.      | Tractor company / model   | Horse power (hp) |
|------------|---|------------------|
| <b>1.0</b> | <b>New Holland Tractors, Gautam Budh Nagar, Uttar Pradesh</b>                   |                  |
| 1.1        | Tractor Model-3030 NX   | 35               |
| 1.2        | Tractor Model-3037 NX   | 39               |
| 1.3        | Tractor Model-3230 NX   | 45               |
| 1.4        | Tractor Model-3600 NX   | 50               |
| 1.5        | Tractor Model-3630 NX   | 55               |
| 1.6        | Tractor Model-5500  | 55               |
| 1.7        | Tractor Model-7500  | 75               |
| 1.8        | 3032  | 35               |
| 1.9        | 3510  | 35               |
| 1.10       | 4010  | 39               |
| 1.11       | 4510  | 42               |
| 1.12       | 4710  | 47               |
| 1.13       | 3630 TX Super   | 50               |
| 1.14       | 3630 TX Turbo Super   | 55               |
| 1.15       | 6500 Turbo Super  | 65               |
| 1.16       | 7500 Turbo Super  | 75               |
| 1.17       | TD 5.90   | 90               |
| <b>2.0</b> | <b>Tractors &amp; Farm Equipment Ltd (Massey Ferguson), Chennai, Tamil Nadu</b> |                  |
| 2.1        | MF1035 DI (Mahashakti)  | 39               |
| 2.2        | MF241 (Mahashakti PM)   | 42               |
| 2.3        | MF245 DI  | 50               |
| 2.4        | MF5245 Planetary drive  | 50               |
| 2.5        | MF9500  | 58               |
| 2.6        | MF245DI Mahashakti  | 47               |
| 2.7        | MF 9000 Planetary plus  | 50               |
| 2.8        | MF 7250 DI Planetary plus   | 42               |
| 2.9        | MF1035 DI (Shakti)  | 35               |
| 2.10       | MF1035 DI   | 35               |
| 2.11       | MF1030 DI (Mahashakti)  | 30               |
| 2.12       | TAFE 1002 4WD   | 100              |
| 2.13       | TAFE 9502 4WD   | 90               |
| 2.14       | TAFE 8502 DI 2WD  | 81-85            |
| 2.15       | TAFE 8502 DI 4WD  | 81-85            |
| 2.16       | TAFE 5900 DI 2WD  | 56-60            |
| 2.17       | TAFE 5450 DI  | 51-55            |
| 2.18       | TAFE 45 DI  | 45               |
| 2.19       | TAFE2 41 DI   | 41               |
| 2.20       | TAFE 35 DI  | 35               |
| 2.21       | TAFE 30 DI Orchard Plus   | 30               |
| <b>3.0</b> | <b>Mahindra Gujarat Tractors, Vadodara, Gujarat</b>                             |                  |
| 3.1        | NBP Series245 DI  | 27               |
| 3.2        | Mahindra Yuvraj 215 NXT   | 15               |
| 3.3        | 255 DI Power Plus   | 25               |
| 3.4        | Mahindra Yuvo 265 Di  | 32               |
| 3.5        | Mahindra Yuvo 275 Di  | 35               |
| 3.6        | Mahindra Yuvo 415 Di  | 40               |

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| S.No.      | Tractor company / model                           | Horse power (hp) |
|------------|---|------------------|
| 3.7        | Mahindra 265 DI Power Plus                        | 35               |
| 3.8        | Mahindra 275 DI Eco                               | 35               |
| 3.9        | Mahindra 275 DI TU                                | 39               |
| 3.10       | Mahindra 295 DI                                   | 39               |
| 3.11       | Mahindra 415 DI                                   | 40               |
| 3.12       | Mahindra Yuvo 475 DI                              | 42               |
| 3.13       | Mahindra Yuvo 575 DI                              | 45               |
| 3.14       | Mahindra 475 DI                                   |                  |
| 3.15       | Mahindra 575 DI                                   |                  |
| 3.16       | Mahindra 595 DI                                   |                  |
| 3.17       | Arjun Novo 605 DI-I                               | 57               |
| 3.18       | Arjun Novo 605 DI-PS                              | 52               |
| 3.19       | Arjun International                               |                  |
| 3.20       | Arjun Novo 605 DI-PS                              |                  |
| 3.21       | ARJUN Novo 4WD                                    | 57               |
| 3.22       | ARJUN 555 DI                                      |                  |
| <b>4.0</b> | <b>Escort Tractors, Faridabad, Haryana</b>        |                  |
| 4.1        | Farmtrac 30 HERO                                  | 30               |
| 4.2        | Farmtrac Champion                                 | 39               |
| 4.3        | Farmtrac 45                                       | 45               |
| 4.4        | Farmtrac 60                                       | 50               |
| 4.5        | Farmtrac 60 DX                                    | 60               |
| 4.6        | Farmtrac 60 DT                                    |                  |
| 4.7        | Farmtrac 65 EPI                                   | 55               |
| 4.8        | Farmtrac 70                                       | 60               |
| 4.9        | Farmtrac 70DT                                     |                  |
| 4.10       | Farmtrac 40                                       | 42               |
| 4.11       | Farmtrac 6050                                     | 50               |
| 4.12       | Farmtrac 6055                                     | 55               |
| 4.13       | Powertrac 434                                     | 34               |
| 4.14       | Powertrac 439                                     | 39               |
| 4.15       | Powertrac 445                                     |                  |
| 4.16       | Powertrac 455                                     | 55               |
| 4.17       | Powertrac 434                                     | 36               |
| 4.18       | Powertrac 4455                                    | 55               |
| <b>5.0</b> | <b>EICHER Tractors, Mandideep, Madhya Pradesh</b> |                  |
| 5.1        | Eicher 241 XTRAC                                  | 24               |
| 5.2        | Eicher 242 XTRAC                                  | 24               |
| 5.3        | Eicher 312 SUPER DI                               | 30               |
| 5.4        | Eicher 333 SUPER DI                               | 35               |
| 5.5        | Eicher 368 SUPER DI                               | 35               |
| 5.6        | Eicher 380 SUPER DI                               | 35               |
| 5.7        | Eicher 480 SUPER DI                               | 45               |
| 5.8        | Eicher 485 SUPER DI                               | 41.1             |
| 5.9        | Eicher 5560 SUPER DI                              | 24               |
| 5.10       | Eicher 5150                                       | 50               |
| 5.11       | Eicher 364  | 35               |
| <b>6.0</b> | <b>HMT Tractors, Panchkula, Haryana</b>           |                  |
| 6.1        | HMT 2522 Orchard Special (OS)                     | 25               |

## Agricultural Engineering and Produce Management

| S.No.      | Tractor company / model                                     | Horse power (hp) |
|------------|---|------------------|
| 6.2        | HMT Tractor 2522 FX   | 25               |
| 6.3        | HMT Tractor 3522 FX   | 39               |
| 6.4        | HMT Tractor 3522 DX   | 39               |
| 6.5        | HMT Tractor 3522 CS   | 39               |
| 6.6        | HMT Tractor 4022  | 40               |
| 6.7        | HMT Tractor 4922  | 50               |
| 6.8        | HMT Tractor 4922 DX   | 50               |
| 6.9        | HMT Tractor 6522  | 60               |
| 6.10       | HMT Tractor 7511  | 75               |
| 6.11       | HMT Tractor 4511  | 45               |
| 6.12       | HMT Tractor 5022  | 50               |
| 6.13       | HMT Tractor 5911  | 59               |
| <b>7.0</b> | <b>John Deere (India) Tractors, Pune, Maharashtra</b>       |                  |
| 7.1        | 5038 D  | 38               |
| 7.2        | 5310  | 55               |
| 7.3        | 5036 C  | 35               |
| 7.4        | 5039 C  | 39               |
| 7.5        | 5041 C  | 41               |
| 7.6        | 5042 C  | 42               |
| 7.7        | 5039 D  | 39               |
| 7.8        | 5042 D  | 42               |
| 7.9        | 5045 D  | 45               |
| 7.10       | 5050 D  | 50               |
| 7.11       | 5050 E  | 50               |
| 7.12       | 5055 E  | 55               |
| 7.13       | 5060 E  | 60               |
| 7.14       | 5065 E  | 65               |
| <b>8.0</b> | <b>Punjab Tractors Limited (Swaraj ), SAS Nagar, Punjab</b> |                  |
| 8.1        | Swaraj Tractors 735FE                                       | 39               |
| 8.2        | Swaraj Tractors 855FE                                       | 55               |
| 8.3        | Swaraj Tractors 744FE                                       | 48               |
| 8.4        | Swaraj Tractors 735FE(old)                                  | 39               |
| 8.5        | Swaraj Tractors 834FE                                       | 34               |
| 8.6        | Swaraj Tractors 724FE                                       | 26.5             |
| 8.7        | Swaraj Tractors 722 Super                                   | 24.5             |
| 8.8        | Swaraj Tractors 841 XM                                      | 41               |
| 8.9        | Swaraj Tractors 843 XM                                      | 43               |
| <b>9.0</b> | <b>Sonalika international Tractors, Hoshiarpur, Punjab</b>  |                  |
| 9.1        | Sonalika Tractors DI-60                                     | 60               |
| 9.2        | Sonalika Tractors DI-730 II                                 | 30               |
| 9.3        | Sonalika Tractors DI-750 II                                 | 50               |
| 9.4        | Sonalika Tractors DI-75 4WD                                 | 75               |
| 9.5        | Sonalika Tractors DI-740III                                 | 40               |
| 9.6        | Sonalika Tractor DI-60 Senior                               | 60               |
| 9.7        | Sonalika Tractor DI-60 4WD                                  | 60               |
| 9.8        | Sonalika Tractor DI-35                                      | 35               |
| 9.9        | Sonalika Tractor DI-745III                                  | 45               |
| 9.10       | Baagban   | 30               |
| 9.11       | DI 734(S1)  | 34               |
| 9.12       | DI 734 S3   | 35               |

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| S.No.       | Tractor company / model  | Horse power (hp) |
|-------------|--|------------------|
| 9.13        | DI 35 S3   | 39               |
| 9.14        | DI 740 III S3  | 45               |
| 9.15        | DI 740 S3 Super  | 41.63            |
| 9.16        | Sonalika Tractors DI-750 III   | 55               |
| 9.17        | DI 745 III PP  | 45-50            |
| 9.18        | DI 42RX  | 45               |
| 9.19        | DI 47RX  | 50               |
| 9.20        | DI 750III RX   | 55               |
| 9.21        | DI 35 Rx   | 39               |
| 9.22        | DI 745 III Rx PP   | 45-50            |
| 9.23        | Worldtrac 75 RX 2W / 4W  | 75               |
| 9.24        | Worldtrac 90 RX 2W / 4W  | 90               |
| <b>10.0</b> | <b>Force Tractors, Pune, Maharashtra</b>                             |                  |
| 10.1        | OX 25 (FS)   | 27               |
| 10.2        | OX 25 (Orchard)  | 27               |
| 10.3        | Balwan 330   | 30               |
| 10.4        | Balwan 400   | 35               |
| 10.5        | Balwan 450   | 42               |
| 10.6        | Balwan 500   | 50               |
| 10.7        | Balwan 550   | 51               |
| <b>11.0</b> | <b>Indo-Farm Tractors &amp; Motors Ltd., Solan, Himachal Pradesh</b> |                  |
| 11.1        | Indo Farm 2030DI   | 30               |
| 11.2        | Indo Farm 2035DI   | 35               |
| 11.3        | Indo Farm 1026   | 26               |
| 11.4        | Indo Farm 2042 DI  | 45               |
| 11.5        | Indo Farm 3035 DI  | 38               |
| 11.6        | Indo Farm 3040 DI  | 45               |
| 11.7        | Indo Farm 3048 DI  | 50               |
| 11.8        | Indo Farm 3055 NV  | 55               |
| 11.9        | Indo Farm 3055 DI  | 60               |
| 11.10       | Indo Farm 3065 DI  | 65               |
| 11.11       | Indo Farm 4175 DI  | 75               |
| 11.12       | Indo Farm 4175 DI  | 75               |
| 11.13       | Indo Farm 4190 DI  | 90               |
| 11.14       | Indo Farm 4190 DI  | 90               |
| <b>12.0</b> | <b>Captain Tractors Pvt. Ltd, Rajkot, Gujarat</b>                    |                  |
| 12.1        | 120 DI   | 15               |
| 12.2        | 120 DI 4WD   | 15               |
| 12.3        | 200 DI   | 20               |
| 12.4        | 200 DI 4WD   | 20               |
| 12.5        | 250 DI   | 25               |
| 12.6        | 250 DI 4WD   | 25               |
| <b>13.0</b> | <b>VST Tillers Tractors LTD, Bangalore, Karnataka</b>                |                  |
| <b>14.0</b> | <b>PREET Tractors, Nabha, Punjab</b>                                 |                  |
| 14.1        | PREET 4549   | 45               |
| 14.2        | PREET 6549   | 65               |
| 14.3        | PREET 7549   | 75               |
| 14.4        | PREET 9049   | 90               |

## Agricultural Engineering and Produce Management

|   |  |      |
|---|--|------|
| <b>15.0</b>   | <b>SAS Motors Limited, New Delhi</b>   |      |
| 15.1  | Angad 240-DI   | 22   |
| <b>16.0</b>   | <b>Action Construction Equipment (Tractors Division), Faridabad, Haryana</b> |      |
| 16.1  | ACE350   |      |
| 16.2  | ACE450   |      |
| <b>17.0</b>   | <b>Amar Tractors, Ludhiana, Punjab</b>                                       |      |
| 17.1  | Amar 240DI   |      |
| <b>18.0</b>   | <b>Jayant Agro Industries, Rajkot, Gujarat</b>                               |      |
| 18.1  | Mini Tractor   | 12   |
| <b>19.0</b>   | <b>Standards Combines(Tractor Division), Barnala, Punjab</b>                 |      |
| 19.1  | Standard 335   | 35   |
| 19.2  | Standard 345   | 45   |
| 19.3  | Standard 450   | 50   |
| 19.4  | Standard 460   | 60   |
| 19.5  | Standard 475   | 75   |
| 19.6  | Standard 355   | 51   |
| 19.7  | Standard 490   | 90   |
| <b>20.0</b>   | <b>Zimidara Tractors Pvt Ltd., Barnala, Punjab</b>                           |      |
| 20.1  | Bharat Track 3035  | 35   |
| 20.2  | Bharat Track 3045  | 45   |
| <b>21.0</b>   | <b>Farmer Tractor, Rajkot, Gujarat</b>                                       |      |
| 21.1  | Mini Tractor   |      |
| <b>22.0</b>   | <b>Field Marshal, Rajkot, Gujarat</b>  |      |
| 22.1  | Mini Tractor   |      |
| <b>23.0</b>   | <b>Green Field Agro Equipment, Thane, Maharashtra (Samson)</b>               |      |
| 23.1  | Mini Tractor   |      |
| <b>24.0</b>   | <b>SAME Deutz-Fahr India (P) Ltd.</b>  |      |
| 24.1  | Agrolux 50 2WD   | 45   |
| 24.2  | Agrolux 60   | 55   |
| 24.3  | Agrolux 70   | 73   |
| 24.4  | Agromaxx 55  | 50   |
| 24.5  | Agromaxx 60  | 55   |
| 24.6  | Agrolux 80 Profiline   | 80   |
| <b>Power Tiller company (Manufacturers and Suppliers)</b> |  |      |
| 1.0   | Anusham Farm Machinery & Power Equipments Private Ltd., Erode, Tamil Nadu    | 8-15 |
| 2.0   | Bengal Tools Ltd., Kolkata, West Bengal                                      |      |
| 3.0   | Ganga Motors (Farm Equipment Division), Kolkata, West Bengal                 |      |
| 4.0   | Greeves Cotton Ltd., Mumbai, Maharashtra                                     |      |
| 5.0   | Indtec Elektro Control, Hoshiarpur, Punjab                                   |      |
| 6.0   | Jayessar Equipment Pvt. Ltd., Coimbatore, Tamil Nadu                         |      |
| 7.0   | Kavi Agro Industry, Trichy, Tamil Nadu                                       |      |
| 8.0   | Kerala Agro Machinery Corporation Athani, Ernakulam, Kerala                  |      |
| 9.0   | National Engineering Co Pvt. Ltd., Chennai, Tamil Nadu                       |      |
| 10.0  | Ratnam Engineers, Rajahmundry Andhra Pradesh                                 |      |
| 11.0  | Green Field Agro Equipment, Thane, Maharashtra (Samson)                      |      |
| 12.0  | Sarachi Agricultural Equipment Ltd., Kolkata, West Bengal                    |      |
| 13.0  | Soharr India Agro Division, Shivamogga, Karnataka                            |      |
| 14.0  | Southern Agro Engine Pvt. Ltd., Chennai, Tamil Nadu                          |      |
| 15.0  | Sunmoon Sleeves Pvt. Ltd., Aurangabad, Maharashtra                           |      |



## Agricultural Engineering and Produce Management

|      |  |      |
|------|--|------|
| 16.0 | Varsha Associates, Chitradurga, Karnataka            | 8-15 |
| 17.0 | VST Tillers Tractors Ltd., Bangalore, Karnataka      |      |
| 18.0 | Vijay Engineering & Machinery, Kolhapur, Maharashtra |      |

- Source :**
1. Internet sites of respective tractor manufacturers.
  2. Directory of tractor, power tiller, combines and farm machinery manufacturers in India, AICRP on FIM, CIAE, Bhopal.
  3. Souvenir XLII ISAE annual convention & Symposium February 1-3, 2008.
  4. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.





भाग-VII  
निर्यात एवं आयात

SECTION-VII  
Export and Import





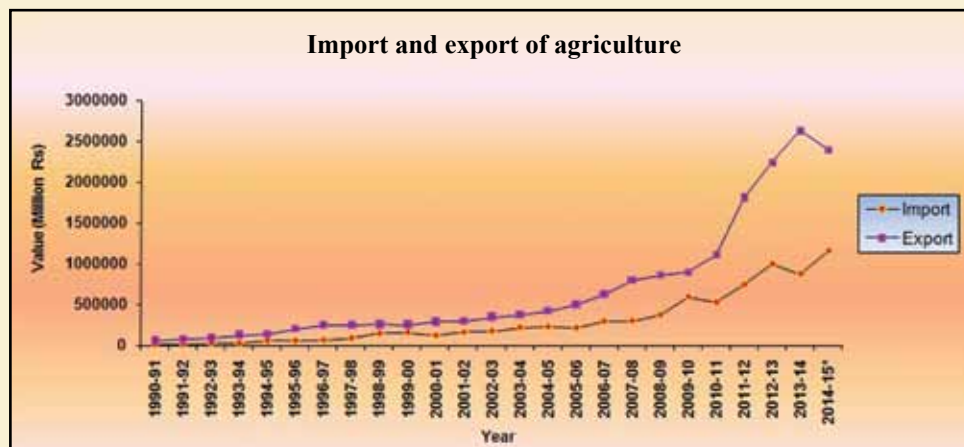
**Table 7.1: Total agriculture vis-a-vis total national import/export**

(million Rs)

| Year     | Import      |                  |                                   | Export      |                  |                                   |
|----------|-------------|------------------|-----------------------------------|-------------|------------------|-----------------------------------|
|          | Agriculture | Total (National) | % Agriculture to total (National) | Agriculture | Total (National) | % Agriculture to total (National) |
|          | Value       | Value            |                                   | Value       | Value            |                                   |
| 1990-91  | 12058.60    | 431708.20        | 2.79                              | 60127.60    | 325272.80        | 18.49                             |
| 1991-92  | 14782.70    | 478508.40        | 3.09                              | 78380.40    | 440418.10        | 17.80                             |
| 1992-93  | 28762.50    | 633745.20        | 4.54                              | 90403.00    | 536882.60        | 16.84                             |
| 1993-94  | 23273.30    | 731010.10        | 3.18                              | 125865.50   | 697488.50        | 18.05                             |
| 1994-95  | 59372.10    | 899707.00        | 6.60                              | 132227.60   | 826734.00        | 15.99                             |
| 1995-96  | 58901.00    | 1226781.40       | 4.80                              | 203977.40   | 1063533.50       | 19.18                             |
| 1996-97  | 66126.00    | 1389198.80       | 4.76                              | 241612.90   | 1188173.20       | 20.33                             |
| 1997-98  | 87841.90    | 1541762.90       | 5.70                              | 248324.50   | 1301006.40       | 19.09                             |
| 1998-99  | 145664.80   | 1783316.90       | 8.17                              | 255106.40   | 1397517.70       | 18.25                             |
| 1999-00  | 160667.30   | 2155285.30       | 7.45                              | 253136.60   | 1590952.00       | 15.91                             |
| 2000-01  | 120862.30   | 2283066.40       | 5.29                              | 286573.70   | 2013564.50       | 14.23                             |
| 2001-02  | 162566.10   | 2451997.20       | 6.63                              | 297286.10   | 2090179.70       | 14.22                             |
| 2002-03  | 176088.30   | 2972058.70       | 5.92                              | 346539.40   | 2551372.80       | 13.58                             |
| 2003-04  | 219726.80   | 3591076.60       | 6.12                              | 372665.20   | 2933667.50       | 12.70                             |
| 2004-05  | 228118.40   | 5010645.40       | 4.55                              | 416026.50   | 3753395.30       | 11.08                             |
| 2005-06  | 214992.20   | 6604089.00       | 3.26                              | 492169.60   | 4564178.60       | 10.78                             |
| 2006-07  | 296378.60   | 8405063.10       | 3.53                              | 624114.20   | 5717792.80       | 10.92                             |
| 2007-08  | 299062.40   | 10123117.00      | 2.95                              | 790397.20   | 6558635.20       | 12.05                             |
| 2008-09  | 371830.40   | 13744355.50      | 2.71                              | 855516.70   | 8407550.60       | 10.18                             |
| 2009-10  | 595283.70   | 13637355.50      | 4.37                              | 893415.00   | 8455336.40       | 10.57                             |
| 2010-11  | 526528.80   | 16834669.60      | 3.13                              | 1110189.90  | 11429219.20      | 9.71                              |
| 2011-12  | 742845.80   | 23454632.40      | 3.17                              | 1805286.00  | 14659593.90      | 12.31                             |
| 2012-13  | 993386.60   | 26691619.60      | 3.72                              | 2236182.40  | 16343188.40      | 13.68                             |
| 2013-14  | 874656.60   | 27154339.10      | 3.22                              | 2627789.60  | 19050110.90      | 13.79                             |
| 2014-15* | 1154344.90  | 27339354.10      | 4.22                              | 2394532.30  | 18916446.70      | 12.66                             |

Note : \* Provisional.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
 2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



**Table 7.2 : Quantity and value of export of major commodities in agriculture**

(Quantity: t, Value: Rs Lakh)

| Product                                 | 2012-13           |                  | 2013-14           |                  | 2014-15           |                  |
|---|-------------------|------------------|-------------------|------------------|-------------------|------------------|
|   | Quantity          | Value            | Quantity          | Value            | Quantity          | Value            |
| <b>Floriculture</b>                     |                   |                  |                   |                  |                   |                  |
| Floriculture                            | 27121.86          | 42344.6          | 22485.21          | 45590.62         | 22947.27          | 46077.23         |
| Fruits & vegetables seeds               | 17168             | 34772.39         | 17816.7           | 41053.76         | 12499.31          | 42703.80         |
| <b>Total</b>                            | <b>44289.86</b>   | <b>77116.99</b>  | <b>40301.91</b>   | <b>86644.38</b>  | <b>35446.58</b>   | <b>88781.03</b>  |
| <b>Fresh fruits &amp; vegetables</b>    |                   |                  |                   |                  |                   |                  |
| Fresh onions                            | 1666872.6         | 196662.66        | 1482498.58        | 316961.25        | 1238102.60        | 230054.14        |
| Other fresh vegetables                  | 768627.20         | 151633.56        | 953731.22         | 229332.27        | 835501.20         | 240223.60        |
| Walnuts                                 | 5295.47           | 19983.57         | 6726.36           | 32453.50         | 2665.85           | 13645.24         |
| Fresh Mangoes                           | 55584.99          | 26471.78         | 41279.97          | 28542.85         | 42998.33          | 30253.66         |
| Fresh grapes                            | 172744.42         | 125942.78        | 192616.91         | 166647.45        | 107257.81         | 108648.99        |
| Other fresh fruits                      | 263970.29         | 77975.78         | 240552.45         | 102159.21        | 274436.09         | 124588.02        |
| <b>Total</b>                            | <b>2933094.97</b> | <b>598670.13</b> | <b>2917405.49</b> | <b>876096.53</b> | <b>2500961.88</b> | <b>747413.65</b> |
| <b>Processed fruits and vegetables</b>  |                   |                  |                   |                  |                   |                  |
| Cucumber and Gherkins (Prepd. & Presvd) | 238624.89         | 85659.18         | 218749.79         | 95520.18         | 251183.01         | 120242.24        |
| Dried & preserved vegetables            | 68520.25          | 63795.76         | 56158.38          | 74271.74         | 63701.77          | 84713.55         |
| Mango Pulp                              | 147815.69         | 60855.73         | 174860.33         | 77294.76         | 154820.66         | 84138.54         |
| Other processed fruits & vegetables     | 269217.26         | 173305.54        | 287384.61         | 226660.26        | 316059.42         | 256991.89        |
| Pulses                                  | 202751.36         | 128500.32        | 345051.38         | 174637.14        | 220914.58         | 120949.67        |
| <b>Total</b>                            | <b>926929.45</b>  | <b>512116.53</b> | <b>1082204.49</b> | <b>648384.08</b> | <b>1006679.44</b> | <b>667035.89</b> |
| <b>Animal products</b>                  |                   |                  |                   |                  |                   |                  |
| Buffalo meat                            | 1107506.27        | 1741289.30       | 1449758.65        | 2645781.59       | 1475526.01        | 2928258.19       |
| Sheep/Goat meat                         | 16046.91          | 42565.86         | 22608.95          | 69411.53         | 23611.54          | 82811.34         |
| Other meat                              | 180.75            | 215.90           | 255.23            | 323.43           | 261.92            | 267.17           |
| Processed meat                          | 796.92            | 937.41           | 488.78            | 691.75           | 406.11            | 1419.71          |

| Product                      | 2012-13            |                    | 2013-14            |                    | 2014-15            |                    |
|------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                              | Quantity           | Value              | Quantity           | Value              | Quantity           | Value              |
| Animal casings               | 602.53             | 1837.08            | 352.20             | 2845.84            | 260.15             | 1933.25            |
| Poultry products             | 577864.27          | 49493.41           | 437673.53          | 56587.37           | 556698.81          | 65119.18           |
| Dairy products               | 87824.21           | 141209.83          | 159228.51          | 331857.40          | 66424.37           | 120539.56          |
| Casein                       | 13650.78           | 55625.72           | 11461.71           | 63692.84           | 8168.05            | 42853.42           |
| Natural honey                | 25780.70           | 35632.05           | 28378.40           | 44501.46           | 29578.56           | 53509.97           |
| Albumin( eggs & milk)        | 1663.83            | 9016.14            | 2025.32            | 13163.79           | 2125.02            | 16118.53           |
| <b>Total</b>                 | <b>1831917.17</b>  | <b>2077822.70</b>  | <b>2112231.28</b>  | <b>3228857.00</b>  | <b>2163060.54</b>  | <b>3312830.32</b>  |
| <b>Other processed foods</b> |                    |                    |                    |                    |                    |                    |
| Groundnuts                   | 535637.36          | 406536.09          | 509664.84          | 318773.51          | 708386.26          | 467536.90          |
| Guargum                      | 406311.81          | 2128701.08         | 601945.42          | 1173452.49         | 665177.71          | 947993.57          |
| Jaggery & Confectionery      | 246566.93          | 91759.98           | 266471.96          | 113687.91          | 258252.73          | 116181.13          |
| Cocoa Products               | 19083.34           | 29392.13           | 15962.95           | 57078.03           | 20877.70           | 84865.67           |
| Cereal Preparations          | 293124.3           | 224076.04          | 321468.07          | 285500.15          | 306328.81          | 303875.50          |
| Milled Products              | 273584.39          | 60360.8            | 418397.99          | 100576.93          | 415984.45          | 101909.43          |
| Alcoholic Beverages          | 264466.08          | 190937             | 311564.19          | 239357.58          | 264625.53          | 223162.15          |
| Miscellaneous Preparations   | 293958.19          | 171205.7           | 338972.77          | 218388.87          | 372998.36          | 243781.07          |
| <b>Total</b>                 | <b>2332732.40</b>  | <b>3302968.82</b>  | <b>2784448.19</b>  | <b>2506815.47</b>  | <b>3012631.55</b>  | <b>2489305.42</b>  |
| <b>Cereals</b>               |                    |                    |                    |                    |                    |                    |
| Basmati Rice                 | 3459898.93         | 1940939.06         | 3757271.42         | 2929995.91         | 3702260.07         | 2759789.17         |
| Non Basmati Rice             | 6687990.85         | 1444880.75         | 7133183.37         | 1774995.98         | 8274046.02         | 2042854.26         |
| Wheat                        | 6514810.60         | 1052900.15         | 5562374.74         | 926161.08          | 2924070.18         | 499183.94          |
| Maize                        | 4788328.25         | 709634.06          | 3954236.61         | 598365.81          | 2825610.60         | 403750.82          |
| Other Cereals                | 652975.53          | 108427.36          | 657700.54          | 115690.83          | 688199.92          | 122401.73          |
| <b>Total</b>                 | <b>22104004.16</b> | <b>5256781.38</b>  | <b>21064766.68</b> | <b>6345209.61</b>  | <b>18414186.79</b> | <b>5827979.92</b>  |
| <b>Grand Total</b>           | <b>30172968.01</b> | <b>11825476.55</b> | <b>30001358.04</b> | <b>13692007.07</b> | <b>27132966.78</b> | <b>13133346.23</b> |

Source : DGCIS Annual Data (<http://www.apeda.gov.in/apedawebsite/index.asp>).

**Table 7.3 : Quantity and value of import of major commodities in agriculture**

(Quantity: t, Value: Rs Lakh)

| Product                                 | 2012-13           |                   | 2013-14           |                   | 2014-15           |                   |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | Quantity          | Value             | Quantity          | Value             | Quantity          | Value             |
| <b>Floriculture</b>                     |                   |                   |                   |                   |                   |                   |
| Floriculture                            | 3728.54           | 8566.94           | 4308.80           | 11219.43          | 4813.70           | 11326.18          |
| Fruits & vegetables seeds               | 16045.49          | 47110.13          | 8198.19           | 44943.47          | 14115.24          | 61147.72          |
| <b>Total</b>                            | <b>19774.03</b>   | <b>55677.07</b>   | <b>12506.99</b>   | <b>56162.90</b>   | <b>18928.94</b>   | <b>72473.90</b>   |
| <b>Fresh fruits &amp; vegetables</b>    |                   |                   |                   |                   |                   |                   |
| Fresh onions                            | 450.00            | 30.30             | 17843.88          | 3329.51           | 386.93            | 63.88             |
| Other fresh vegetables                  | 6580.33           | 1097.53           | 7299.17           | 733.75            | 15863.45          | 4330.25           |
| Walnuts                                 | 341.35            | 784.99            | 178.00            | 431.08            | 1341.85           | 3620.67           |
| Fresh Mangoes                           | 1.20              | 0.44              | 7.52              | 2.49              | 0.00              | 0.00              |
| Fresh grapes                            | 14246.55          | 18303.71          | 14717.62          | 24493.59          | 20586.18          | 37150.46          |
| Other fresh fruits                      | 681172.79         | 321532.21         | 643546.29         | 384405.46         | 742344.91         | 496298.77         |
| <b>Total</b>                            | <b>702792.22</b>  | <b>341749.18</b>  | <b>683592.48</b>  | <b>413395.88</b>  | <b>780523.32</b>  | <b>541464.03</b>  |
| <b>Processed fruits and vegetables</b>  |                   |                   |                   |                   |                   |                   |
| Cucumber and Gherkins (prepd. & presvd) | 88.06             | 81.66             | 5.42              | 10.43             | 157.96            | 174.96            |
| Dried & preserved vegetables            | 3883.02           | 3944.83           | 3818.93           | 4538.19           | 3355.20           | 4188.75           |
| Mango Pulp                              | 0                 | 0                 | 33.00             | 12.32             | 30.00             | 1.83              |
| Other processed fruits & vegetables     | 47653.30          | 54762.20          | 48426.32          | 54305.09          | 42453.56          | 56930.81          |
| Pulses                                  | 4019695.04        | 1335744.48        | 3178264.19        | 1103815.22        | 4001965.78        | 1439551.78        |
| <b>Total</b>                            | <b>4071319.42</b> | <b>1394533.17</b> | <b>3230547.86</b> | <b>1162681.25</b> | <b>4047962.50</b> | <b>1500848.13</b> |
| <b>Animal products</b>                  |                   |                   |                   |                   |                   |                   |
| Sheep/Goat meat                         | 37.09             | 215.18            | 59.26             | 513.32            | 83.57             | 844.07            |
| Other meat                              | 411.16            | 1508.18           | 359.16            | 1580.30           | 475.19            | 2018.18           |
| Processed meat                          | 569.83            | 901.98            | 388.50            | 764.00            | 248.35            | 928.20            |
| Animal casings                          | 0.02              | 0.14              | 0.22              | 0.22              | 0.00              | 0.00              |



| Product                       | 2012-13           |                   | 2013-14           |                   | 2014-15           |                   |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                               | Quantity          | Value             | Quantity          | Value             | Quantity          | Value             |
| Poultry products              | 628.48            | 1828.62           | 463.96            | 2339.11           | 814.18            | 3648.45           |
| Dairy products                | 7417.44           | 16653.65          | 9916.42           | 21283.60          | 11901.61          | 28278.12          |
| Casein                        | 121.19            | 787.27            | 186.09            | 1225.26           | 1134.46           | 7574.46           |
| Natural honey                 | 889.00            | 983.95            | 319.42            | 669.32            | 792.62            | 1414.84           |
| Albumin<br>(eggs & milk)      | 970.20            | 5107.32           | 1031.49           | 6082.3            | 1562.10           | 9736.74           |
| <b>Total</b>                  | <b>11044.41</b>   | <b>27986.29</b>   | <b>12724.52</b>   | <b>34457.43</b>   | <b>17012.08</b>   | <b>54443.06</b>   |
| <b>Other processed foods</b>  |                   |                   |                   |                   |                   |                   |
| Groundnuts                    | 38.15             | 28.94             | 114.00            | 36.46             | 21.00             | 14.94             |
| Guargum                       | 567.60            | 3360.69           | 375.33            | 2182.75           | 147.82            | 589.00            |
| Jaggery &<br>Confectionery    | 32273.76          | 39859.47          | 40086.01          | 48042.07          | 53608.34          | 51180.66          |
| Cocoa Products                | 53331.11          | 104924.88         | 51617.98          | 107115.65         | 65309.57          | 155093.94         |
| Cereal<br>Preparations        | 50428.01          | 35997.65          | 52374.22          | 40508.07          | 63249.61          | 56892.71          |
| Milled Products               | 4522.60           | 2375.37           | 3977.44           | 2201.37           | 3466.12           | 1775.57           |
| Alcoholic<br>Beverages        | 44011.92          | 134497.83         | 101308.28         | 198395.78         | 160664.94         | 238376.80         |
| Miscellaneous<br>Preparations | 148571.69         | 114811.68         | 180681.64         | 139258.83         | 196700.86         | 179518.18         |
| <b>Total</b>                  | <b>333744.84</b>  | <b>435856.51</b>  | <b>430534.90</b>  | <b>537740.98</b>  | <b>543168.26</b>  | <b>683441.80</b>  |
| <b>Cereals</b>                |                   |                   |                   |                   |                   |                   |
| Basmati Rice                  | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| Non Basmati<br>Rice           | 717.50            | 395.65            | 1442.42           | 829.23            | 1903.43           | 1059.63           |
| Wheat                         | 2943.85           | 603.14            | 11271.39          | 2691.65           | 27973.19          | 5874.48           |
| Maize                         | 5354.28           | 2935.27           | 13866.58          | 8077.05           | 6021.20           | 2836.10           |
| Other Cereals                 | 40224.60          | 8166.15           | 8423.67           | 1722.28           | 18951.19          | 3626.04           |
| <b>Total</b>                  | <b>49240.23</b>   | <b>12100.21</b>   | <b>35004.06</b>   | <b>13320.21</b>   | <b>54849.01</b>   | <b>13396.25</b>   |
| <b>Grand Total</b>            | <b>5187915.15</b> | <b>2267902.43</b> | <b>4404910.81</b> | <b>2217758.65</b> | <b>5462444.11</b> | <b>2866067.17</b> |

Source : DGCIS Annual Data (<http://www.apeda.gov.in/apedawebsite/index.asp>).

**Table 7.4: Value of export & import of selected commodities in agriculture**

| Product description  | Value of export |           |            |           |           |           | Value of import |           |  |  |  |  |
|--|-----------------|-----------|------------|-----------|-----------|-----------|-----------------|-----------|--|--|--|--|
|  | 2012-13         | 2013-14   | 2014-15    | 2015-16   | 2012-13   | 2013-14   | 2014-15         | 2015-16   |  |  |  |  |
| Fish and crustaceans, molluscs and other aquatic invertebrates   | 180712.76       | 294511.71 | 320843.78  | 270560.43 | 3676.89   | 2705.73   | 3792.91         | 3888.16   |  |  |  |  |
| Products of animal origin not elsewhere specified or included  | 6067.60         | 7799.30   | 6083.78    | 5445.80   | 1909.13   | 2212.98   | 2269.43         | 2292.69   |  |  |  |  |
| Live trees & other plants; bulbs; roots and the like; cut flowers and ornamental foliage                 | 4234.46         | 4559.04   | 4607.97    | 4359.26   | 856.69    | 1121.94   | 1133.71         | 1042.86   |  |  |  |  |
| Edible vegetables & certain roots and tubers   | 56391.63        | 82185.37  | 72160.31   | 68410.15  | 134083.45 | 129281.47 | 173588.22       | 248155.46 |  |  |  |  |
| Edible fruits & nuts; peel or citrus fruit or melons   | 76755.68        | 97857.93  | 98591.31   | 87443.22  | 117443.80 | 124809.29 | 162877.52       | 188335.45 |  |  |  |  |
| Coffee, tea, mate & spices   | 149272.48       | 166353.12 | 175631.01  | 169951.06 | 29454.39  | 31943.75  | 44627.61        | 46177.49  |  |  |  |  |
| Cereals  | 525678.12       | 635428.50 | 582822.199 | 369751.48 | 1210.02   | 1345.50   | 1364.97         | 10047.52  |  |  |  |  |
| Products of milling industry malt; starches; inulin; wheat gluten  | 12330.34        | 18108.14  | 18670.91   | 17860.397 | 2464.32   | 3123.93   | 3757.01         | 3385.54   |  |  |  |  |
| Oilseeds & olea. fruits; misc. grains; seeds and fruit; industrial or medicinal plants; straw and fodder | 94098.36        | 103471.88 | 135608.42  | 97745.62  | 13565.21  | 21687.66  | 19658.37        | 20061.14  |  |  |  |  |
| Lac, gums, resins & other veg. saps and extracts   | 234730.18       | 143678.59 | 118954.33  | 54966.35  | 8806.15   | 9986.62   | 11181.195       | 12049.46  |  |  |  |  |
| Animal or vegetable fats & oils and their cleavage products; pre edible fats; animal or vegetable wax ex | 52158.49        | 51635.81  | 59550.23   | 52058.55  | 616301.02 | 571528.17 | 651845.44       | 633077.58 |  |  |  |  |
| Prep. of meat of fish or of crustaceans, molluscs or other aquatic invertebrates                         | 5130.47         | 7262.86   | 9519.82    | 12687.76  | 226.60    | 228.68    | 200.12          | 172.78    |  |  |  |  |
| Sugars & sugar confectionery   | 95314.52        | 82545.43  | 65747.26   | 99968.04  | 34909.72  | 27863.35  | 41887.04        | 40476.34  |  |  |  |  |
| Cocoa & cocoa preparations   | 2939.21         | 5732.17   | 8486.57    | 11189.33  | 10492.49  | 10715.50  | 15516.27        | 12835.81  |  |  |  |  |
| Preparations of cereals, flour, starch or milk; pastrycooks products                                     | 22119.89        | 28082.93  | 29964.65   | 29694.34  | 2155.11   | 2694.49   | 4000.77         | 3599.45   |  |  |  |  |
| Preparations of vegetables, fruit, nuts or other parts of plants   | 20892.32        | 27381.01  | 30894.85   | 28697.09  | 4244.79   | 4564.46   | 4592.33         | 4457.33   |  |  |  |  |

(million Rs)

| Product description   | Value of export   |                   |                   |                   |                   | Value of import   |                   |                   |                   |                   |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | 2012-13           | 2013-14           | 2014-15           | 2015-16           | 2016-17           | 2012-13           | 2013-14           | 2014-15           | 2015-16           | 2016-17           |
| Misc. edible preparations   | 27706.70          | 32669.85          | 35910.48          | 32952.61          | 7617.61           | 6637.58           | 6977.93           | 7617.61           | 8065.96           | 8065.96           |
| Beverages, spirits & vinegar  | 19693.65          | 24744.56          | 23152.27          | 19235.61          | 33224.45          | 17700.41          | 25983.93          | 33224.45          | 33339.68          | 33339.68          |
| Residues & waste from food industries; prepared animal fodder   | 175923.57         | 185973.59         | 100061.53         | 47676.00          | 21994.48          | 16775.78          | 17394.53          | 20226.06          | 21994.48          | 21994.48          |
| Tobacco & mfd. tobacco substitutes  | 50302.22          | 61344.59          | 58685.87          | 57083.42          | 2984.46           | 2469.59           | 2483.89           | 2984.46           | 3114.93           | 3114.93           |
| Fertilizers   | 4796.18           | 4921.45           | 5548.095          | 6140.93           | 452287.51         | 404124.52         | 326394.50         | 391061.48         | 452287.51         | 452287.51         |
| Tanning or dyeing extracts; tannins and their derivatives, pigments and other colouring matter; paints and var; putty and other mastics; inks | 113718.07         | 154549.03         | 172058.58         | 145234.24         | 95735.29          | 80037.55          | 92535.98          | 98205.18          | 95735.29          | 95735.29          |
| Essential oils & resins, cosmetics, perfumery or toilet preparations  | 83287.80          | 88284.67          | 89277.41          | 87922.21          | 38703.07          | 31171.64          | 34982.81          | 38566.54          | 38703.07          | 38703.07          |
| Rubber and articles thereof   | 151004.66         | 162219.60         | 166575.48         | 139298.60         | 176782.97         | 197856.94         | 207786.49         | 198637.40         | 176782.97         | 176782.97         |
| Wood & articles of wood, wood charcoal  | 14904.57          | 20129.01          | 21178.999         | 26772.28          | 142693.37         | 147432.24         | 160332.60         | 160210.62         | 142693.37         | 142693.37         |
| Cork & articles of cork   | 127.50            | 134.55            | 123.95            | 122.37            | 309.21            | 307.98            | 338.27            | 339.49            | 309.21            | 309.21            |
| Manufactures of plaiting materials, basket ware and wickerwork  | 120.60            | 163.97            | 275.96            | 428.08            | 138.17            | 183.15            | 175.34            | 165.60            | 138.17            | 138.17            |
| Pulp of wood or other fibrous cellulosic material; waste and scrap of paper or paperboard   | 69.99             | 38.34             | 495.40            | 673.75            | 97155.76          | 69905.22          | 83787.46          | 103230.82         | 97155.76          | 97155.76          |
| Paper & paperboard, articles of paper pulp, of paper or of paperboard   | 52819.43          | 63306.38          | 70369.65          | 67751.70          | 146791.27         | 124061.79         | 145178.21         | 158018.66         | 146791.27         | 146791.27         |
| Textile articles  | N.A.              | N.A.              | N.A.              | N.A.              | N.A.              | N.A.              | N.A.              | N.A.              | N.A.              | N.A.              |
| Vegetable plaiting materials, veg. products not elsewhere specified or included   | 3263.49           | 3557.51           | 3660.93           | 3576.05           | 1745.58           | 537.06            | 874.43            | 1378.18           | 1745.58           | 1745.58           |
| <b>Total</b>  | <b>2236564.94</b> | <b>2558630.89</b> | <b>2428117.72</b> | <b>2015651.31</b> | <b>2448912.31</b> | <b>2081001.23</b> | <b>2051039.89</b> | <b>2356159.46</b> | <b>2448912.31</b> | <b>2448912.31</b> |

Note : N.A.: Not Available.

Source : Department of Commerce, Ministry of Commerce & Industry, Govt. of India (Website: <http://www.commerce.nic.in/eidb/ecom.asp>).

**Table 7.5: Value of export and import of livestock products**

| Livestock Products   | Value of export  |                  |                  |                  |                  |                 | Value of import |                 |                 |                 |  |  |
|--|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|--|
|  | 2011-12          | 2012-13          | 2013-14          | 2014-15          | 2015-16          | 2011-12         | 2012-13         | 2013-14         | 2014-15         | 2015-16         |  |  |
| <b>Livestock</b>   | 616.50           | 577.20           | 692.97           | 777.53           | 4070.17          | 520.00          | 557.10          | 615.55          | 739.80          | 588.61          |  |  |
| <b>Meat and edible meat offal</b>  | 140743.90        | 178754.50        | 272128.72        | 301865.28        | 253698.07        | 79.80           | 108.70          | 118.85          | 196.62          | 120.67          |  |  |
| <b>Dairy produce, birds' eggs, natural honey, edible prod. of animal origin, not elsewhere spec. or included</b> | 9982.33          | 22261.50         | 42741.01         | 23135.81         | 19459.39         | 12191.90        | 1825.00         | 2259.22         | 3051.94         | 3176.58         |  |  |
| <b>Animal fodder and feed</b>  | 123086.90        | 175923.60        | N.A.             | N.A.             | N.A.             | 11886.50        | 16775.80        | N.A.            | N.A.            | N.A.            |  |  |
| <b>Raw hide &amp; skins (other than furskins) &amp; Leather</b>  | 23756.70         | 59595.00         | 78025.18         | 81410.44         | 62382.84         | 25888.50        | 27612.60        | 34965.08        | 44823.92        | 39011.07        |  |  |
| <b>Wool, fine or coarse animal hair, horsehair yarn and woven fabric</b>   | 10478.80         | 9483.10          | 9547.60          | 10835.93         | 10520.08         | 21361.20        | 21179.90        | 22780.19        | 24455.66        | 21498.42        |  |  |
| <b>All groups (total)</b>  | <b>308665.10</b> | <b>446594.90</b> | <b>403135.50</b> | <b>418024.99</b> | <b>350130.54</b> | <b>71928.00</b> | <b>68059.10</b> | <b>60738.89</b> | <b>73267.63</b> | <b>64395.33</b> |  |  |

Note : N.A.: Not Available.

Source : 1. *Basic Animal Husbandry Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.  
2. Department of Commerce, Ministry of Commerce & Industry, Govt. of India (Website: <http://www.commerce.nic.in/eidb/ecom.asp>).

**Table 7.6: Month-wise total imports of fruits and nuts by India**

(Rs. in Crore)

| Year    | Apr    | May    | Jun    | Jul    | Aug    | Sept   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1992-93 | -      | -      | -      | -      | -      | -      | -      | 2166   | 2038   | 2044   | 1291   | 976    |
| 1993-94 | 1029   | 1415   | 1344   | 687    | 758    | 1315   | 2925   | 2662   | 2870   | 2286   | 1687   | 1979   |
| 1994-95 | 1541   | 1348   | 1028   | 1351   | 1413   | 2858   | 2416   | 2499   | 3082   | 4792   | 2933   | 2855   |
| 1995-96 | 1713   | 2206   | 2216   | 1952   | 1847   | 1744   | 2899   | 4381   | 2928   | 3848   | 3167   | 1445   |
| 1996-97 | 1874   | 1989   | 1617   | 2114   | 2796   | 3899   | 4904   | 5049   | 4800   | 5489   | 41.24  | 64.78  |
| 1997-98 | 27.35  | 24.44  | 29.10  | 23.35  | 18.61  | 32.76  | 46.78  | 42.90  | 53.03  | 60.50  | 60.43  | 21.93  |
| 1998-99 | 37.74  | 33.23  | 30.79  | 43.06  | 54.53  | 58.35  | 57.20  | 59.57  | 66.23  | 82.82  | 64.25  | 45.11  |
| 1999-00 | 28.71  | 39.15  | 35.52  | 30.41  | 39.50  | 50.54  | 79.93  | 45.88  | 49.86  | 41.01  | 23.76  | 38.31  |
| 2000-01 | 68.24  | 64.65  | 42.53  | 27.84  | 42.71  | 71.86  | 106.80 | 113.18 | 119.07 | 60.19  | 49.81  | 36.84  |
| 2001-02 | 43.02  | 46.41  | 41.62  | 31.36  | 54.36  | 30.03  | 73.14  | 113.40 | 79.95  | 70.23  | 50.92  | 65.46  |
| 2002-03 | 34.21  | 59.06  | 42.52  | 33.64  | 26.24  | 41.10  | 91.30  | 45.03  | 86.39  | 79.98  | 32.92  | 63.37  |
| 2003-04 | 55.60  | 57.30  | 56.34  | 32.65  | 32.64  | 67.38  | 91.68  | 70.47  | 72.28  | 48.93  | 63.80  | 56.07  |
| 2004-05 | 41.27  | 63.51  | 44.32  | 29.74  | 61.27  | 68.28  | 170.43 | 181.23 | 119.49 | 98.16  | 83.52  | 100.62 |
| 2005-06 | 73.19  | 74.95  | 72.46  | 74.80  | 79.94  | 129.39 | 265.08 | 178.63 | 123.67 | 100.58 | 100.20 | 107.92 |
| 2006-07 | 124.09 | 160.34 | 113.99 | 91.90  | 100.58 | 153.74 | 268.68 | 186.00 | 184.48 | 213.43 | 148.64 | 161.20 |
| 2007-08 | 117.68 | 138.15 | 114.51 | 70.25  | 129.14 | 157.65 | 296.43 | 211.49 | 156.45 | 175.80 | 147.60 | 142.44 |
| 2008-09 | 134.32 | 205.33 | 119.85 | 142.99 | 136.38 | 262.36 | 316.24 | 247.66 | 251.18 | 186.33 | 177.13 | 193.84 |
| 2009-10 | 214.06 | 199.38 | 227.22 | 127.47 | 216.65 | 314.55 | 249.78 | 265.01 | 323.51 | 233.32 | 244.58 | 227.51 |
| 2010-11 | 244.62 | 330.90 | 187.94 | 164.57 | 183.70 | 334.95 | 473.23 | 334.28 | 335.84 | 241.65 | 284.42 | 311.18 |
| 2011-12 | 253.91 | 315.35 | 353.99 | 310.93 | 350.47 | 292.17 | 456.33 | 518.24 | 390.33 | 420.56 | 392.82 | 466.93 |
| 2012-13 | 452.81 | 546.19 | 494.43 | 325.17 | 216.63 | 237.24 | 426.33 | 459.30 | 473.07 | 595.47 | 463.54 | 558.11 |
| 2013-14 | 589.00 | 505.23 | 547.76 | -      | -      | -      | -      | -      | -      | -      | -      | -      |

**Note** : 1. Nov. 1992-93 to Jan. 1996-97 figures are in Rs. in Lakh, 2. - : Nil, Negligible or Not available.

**Source** : Website: <http://www.indiastat.com>.

**Table 7.7: Quantity and value of export of principal agricultural commodities including marine products**

(Quantity: 000 't, Value: million Rs)

| Items                                  | 2011-12     |                    | 2012-13     |                    | 2013-14     |                    | 2014-15*    |                    |
|--|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
|  | Quantity    | Value              | Quantity    | Value              | Quantity    | Value              | Quantity    | Value              |
| Tea                                    | 292.35      | 40785.30           | 268.80      | 47187.90           | 249.91      | 48733.40           | 215.21      | 41661.40           |
| Coffee                                 | 278.87      | 45346.20           | 254.02      | 47110.70           | 253.90      | 47991.00           | 221.39      | 49732.50           |
| Tobacco Unmanufactured                 | 197.17      | 40064.20           | 230.40      | 50302.30           | 237.11      | 47827.40           | 219.57      | 41627.00           |
| Tobacco manufactured                   | N.A.        | N.A.               | N.A.        | N.A.               | N.A.        | 13517.20           | N.A.        | 17058.50           |
| Spices                                 | 935.82      | 132202.30          | 1008.86     | 153649.70          | 895.91      | 151463.60          | 923.27      | 148423.60          |
| Cashew                                 | 131.76      | 43906.80           | 104.04      | 40672.10           | 120.68      | 50954.90           | 134.49      | 55657.70           |
| Cashew Shell Liquid                    | N.A.        | N.A.               | N.A.        | N.A.               | 9.48        | 386.10             | 10.94       | 558.10             |
| Sesamum and Niger seeds                | 417.38      | 27589.30           | 317.38      | 29709.80           | 278.28      | 36970.70           | 393.70      | 48260.00           |
| Other oil seeds                        | N.A.        | N.A.               | N.A.        | N.A.               | 194.46      | 9455.30            | 247.54      | 11353.60           |
| Vegetable oils                         | N.A.        | N.A.               | N.A.        | N.A.               | 23.01       | 3248.20            | 41.56       | 5795.40            |
| Oil meals                              | 7406.37     | 117964.60          | 6578.18     | 165195.30          | 9830.21     | 170701.30          | 3904.38     | 81286.00           |
| Castor oil                             | 492.63      | 45716.70           | 565.99      | 43098.20           | 544.80      | 43643.30           | 546.50      | 47101.80           |
| Shellac                                | 4.55        | 2567.90            | 3.60        | 4017.40            | 7.74        | 5139.60            | 5.24        | 2674.70            |
| Sugar and molasses                     | 3125.49     | 89711.10           | 3136.64     | 87996.60           | 2746.97     | 73257.90           | 2167.90     | 54977.00           |
| Marine products                        | 972.21      | 165847.10          | 965.10      | 188412.00          | 1192.88     | 306272.80          | 1073.27     | 336854.50          |
| Floriculture products                  | N.A.        | 3653.20            | N.A.        | 4234.50            | N.A.        | 4559.00            | N.A.        | 4607.60            |
| Fruits & vegetables seeds              | 15.21       | 2877.60            | 17.17       | 3477.20            | 19.34       | 4165.80            | 12.50       | 4270.30            |
| Processed fruits and juices            | N.A.        | 16561.90           | N.A.        | 19687.70           | N.A.        | 33320.50           | N.A.        | 36256.80           |
| Misc. processed items                  | N.A.        | 38323.30           | N.A.        | 49626.60           | N.A.        | 25314.80           | N.A.        | 27959.70           |
| Meat & meat prep.                      | N.A.        | 141109.30          | N.A.        | 179032.00          | 1389.02     | 271630.10          | 1499.80     | 301273.70          |
| Cotton raw and waste                   | 2003.58     | 216242.00          | 2056.69     | 202765.10          | 1947.68     | 223378.40          | 1142.53     | 116426.50          |
| <b>Total (Agri.)</b>                   | <b>N.A.</b> | <b>1876093.30</b>  | <b>N.A.</b> | <b>2320411.10</b>  | <b>N.A.</b> | <b>2627789.60</b>  | <b>N.A.</b> | <b>2394532.30</b>  |
| <b>Total export</b>                    | <b>N.A.</b> | <b>14659593.90</b> | <b>N.A.</b> | <b>16343188.40</b> | <b>N.A.</b> | <b>19050110.90</b> | <b>N.A.</b> | <b>18916446.70</b> |
| <b>% share of agricultural Exports</b> | <b>N.A.</b> | <b>12.80</b>       | <b>N.A.</b> | <b>14.10</b>       | <b>N.A.</b> | <b>13.79</b>       | <b>N.A.</b> | <b>12.66</b>       |

Note : 1. \* Provisional, 2. N.A.: Not Available.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 7.8: Quantity and value of import of principal agricultural commodities including marine products**

(Quantity: 000't, Value: million Rs)

| Items                                    | 2011 -12    |                    | 2012 -13    |                    | 2013 -14    |                    | 2014 -15*   |                    |
|--|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
|  | Quantity    | Value              | Quantity    | Value              | Quantity    | Value              | Quantity    | Value              |
| Tea                                      | 22.43       | 2189.10            | 22.30       | 2745.20            | 22.74       | 2916.80            | 27.44       | 3887.30            |
| Coffee                                   | N.A.        | N.A.               | N.A.        | N.A.               | 59.94       | 7290.20            | 74.88       | 9304.70            |
| Tobacco unmanufactured                   | N.A.        | N.A.               | N.A.        | N.A.               | 1.55        | 795.20             | 1.91        | 981.60             |
| Tobacco manufactured                     | N.A.        | N.A.               | N.A.        | N.A.               | N.A.        | 1688.70            | N.A.        | 2002.80            |
| Spices                                   | 128.69      | 21908.00           | 157.64      | 26151.40           | 155.58      | 34516.90           | 161.07      | 43918.40           |
| Milk & cream                             | 63.08       | 10377.20           | 5.34        | 1072.00            | N.A.        | N.A.               | N.A.        | N.A.               |
| Cashew nut                               | 809.82      | 53386.40           | 892.37      | 53317.40           | 776.34      | 46678.00           | 940.80      | 65997.40           |
| Cashew Shelled                           | N.A.        | N.A.               | N.A.        | N.A.               | 0.38        | 20.80              | 1.72        | 100.30             |
| Sesame Seeds                             | N.A.        | N.A.               | N.A.        | N.A.               | 72.93       | 8086.40            | 34.77       | 3799.90            |
| Niger Seeds                              | N.A.        | N.A.               | N.A.        | N.A.               | N.A.        | N.A.               | 0.70        | 37.30              |
| Oil seeds                                | N.A.        | 938.90             | N.A.        | 4060.70            | 54.70       | 166.79             | 51.35       | 1631.00            |
| Veg. oils fixed (Edible)                 | 8445.01     | 462553.10          | 11013.73    | 611065.90          | 7942.89     | 440380.40          | 11547.76    | 590943.30          |
| Oil Meals                                | N.A.        | N.A.               | N.A.        | N.A.               | 126.94      | 1998.70            | 165.10      | 2726.50            |
| Castor Oil                               | N.A.        | N.A.               | N.A.        | N.A.               | 0.07        | 20.40              | 0.05        | 18.10              |
| Shellac                                  | N.A.        | N.A.               | N.A.        | N.A.               | 0.68        | 458.00             | 1.77        | 595.40             |
| Sugar                                    | 99.73       | 3138.30            | 1122.26     | 30943.80           | 880.96      | 22868.60           | 1538.63     | 36682.10           |
| Mollasses                                | N.A.        | N.A.               | N.A.        | N.A.               | 15.07       | 89.30              | 59.55       | 296.00             |
| Fruits & nuts excluding cashew nut       | N.A.        | 46583.80           | N.A.        | 62979.30           | N.A.        | N.A.               | N.A.        | N.A.               |
| Marine Product                           | N.A.        | N.A.               | N.A.        | N.A.               | 31.22       | 4110.10            | 27.58       | 4517.40            |
| Veg. and animal fats                     | 0.86        | 199.90             | 1.16        | 370.40             | N.A.        | N.A.               | N.A.        | N.A.               |
| <b>Total Agri. Imports</b>               | <b>N.A.</b> | <b>828191.50</b>   | <b>N.A.</b> | <b>1096106.80</b>  | <b>N.A.</b> | <b>874656.60</b>   | <b>N.A.</b> | <b>1154344.90</b>  |
| <b>Total imports</b>                     | <b>N.A.</b> | <b>23454632.40</b> | <b>N.A.</b> | <b>26691619.60</b> | <b>N.A.</b> | <b>27154339.10</b> | <b>N.A.</b> | <b>27339354.10</b> |
| <b>Agri. imports as % of all imports</b> | <b>N.A.</b> | <b>3.53</b>        | <b>N.A.</b> | <b>4.11</b>        | <b>N.A.</b> | <b>3.22</b>        | <b>N.A.</b> | <b>4.22</b>        |

Note : 1. \* Provisional, 2. N.A.: Not Available.

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 7.9: Trend in exports of marine products**

(Quantity: t, Unit value : Rs/t, Value: million Rs)

| Year    | Quantity | Value     | Unit value | Unit value index | Annual growth rate (%) |        |
|---------|----------|-----------|------------|------------------|------------------------|--------|
|         |          |           |            |                  | Quantity               | Value  |
| 1965-66 | 15295    | 70.60     | 4615.89    | 185.25           | -27.59                 | -1.12  |
| 1966-67 | 21116    | 173.70    | 8225.99    | 330.13           | 38.06                  | 146.03 |
| 1967-68 | 21907    | 197.20    | 9001.69    | 361.26           | 3.75                   | 13.53  |
| 1968-69 | 26811    | 247.00    | 9212.64    | 369.73           | 22.39                  | 25.25  |
| 1969-70 | 31695    | 334.60    | 10556.87   | 423.68           | 18.22                  | 35.47  |
| 1970-71 | 35883    | 350.70    | 9773.43    | 392.23           | 13.21                  | 4.81   |
| 1971-72 | 35523    | 445.50    | 12541.17   | 503.31           | -1.00                  | 27.03  |
| 1972-73 | 38903    | 597.20    | 15351.00   | 616.08           | 9.51                   | 34.05  |
| 1973-74 | 52279    | 895.10    | 17121.60   | 687.14           | 34.38                  | 49.88  |
| 1974-75 | 45099    | 684.10    | 15168.85   | 608.77           | -13.73                 | -23.57 |
| 1975-76 | 54463    | 1245.30   | 22865.06   | 917.64           | 20.76                  | 82.03  |
| 1976-77 | 66750    | 1891.20   | 28332.58   | 1137.06          | 22.56                  | 51.87  |
| 1977-78 | 56967    | 1801.20   | 31618.31   | 1268.93          | -14.66                 | -4.76  |
| 1978-79 | 86894    | 2346.20   | 27000.71   | 1083.61          | 52.53                  | 30.26  |
| 1979-80 | 86401    | 2488.20   | 28798.28   | 1155.75          | -0.57                  | 6.05   |
| 1980-81 | 75591    | 2348.40   | 31067.19   | 1246.81          | -12.51                 | -5.62  |
| 1981-82 | 70105    | 2860.10   | 40797.38   | 1637.31          | -7.26                  | 21.79  |
| 1982-83 | 78175    | 3613.60   | 46224.50   | 1855.11          | 11.51                  | 26.35  |
| 1983-84 | 92187    | 3730.20   | 40463.41   | 1623.90          | 17.92                  | 3.23   |
| 1984-85 | 86187    | 3842.90   | 44587.93   | 1789.43          | -6.51                  | 3.02   |
| 1985-86 | 83651    | 3980.00   | 47578.63   | 1909.46          | -2.94                  | 3.57   |
| 1986-87 | 85843    | 4606.70   | 53664.25   | 2153.69          | 2.62                   | 15.75  |
| 1987-88 | 97179    | 5312.00   | 54662.02   | 2193.73          | 13.21                  | 15.31  |
| 1988-89 | 99777    | 5978.50   | 59918.62   | 2404.69          | 2.67                   | 12.55  |
| 1989-90 | 110843   | 6349.90   | 57287.33   | 2299.09          | 11.09                  | 6.21   |
| 1990-91 | 137667   | 8560.00   | 62179.03   | 2495.41          | 24.20                  | 34.81  |
| 1991-92 | 169875   | 13116.00  | 77209.71   | 3098.63          | 23.40                  | 53.22  |
| 1992-93 | 206673   | 17137.00  | 82918.43   | 3327.74          | 21.66                  | 30.66  |
| 1993-94 | 242505   | 24610.00  | 101482.44  | 4072.76          | 17.34                  | 43.61  |
| 1994-95 | 307337   | 35753.00  | 116331.58  | 4668.70          | 26.73                  | 45.28  |
| 1995-96 | 296277   | 34501.00  | 116448.46  | 4673.39          | -3.60                  | -3.50  |
| 1996-97 | 378198   | 40776.00  | 107816.54  | 4326.96          | 27.65                  | 18.19  |
| 1997-98 | 385818   | 46497.00  | 120515.37  | 4836.60          | 2.01                   | 14.03  |
| 1998-99 | 302934   | 46268.70  | 152735.25  | 6129.67          | -21.48                 | -0.49  |
| 1999-00 | 343031   | 51166.70  | 149160.57  | 5986.21          | 13.24                  | 10.59  |
| 2000-01 | 440473   | 64438.90  | 146294.78  | 5871.20          | 28.41                  | 25.94  |
| 2001-02 | 424470   | 59570.50  | 140340.90  | 5632.25          | -3.63                  | -7.56  |
| 2002-03 | 467297   | 68813.10  | 147257.74  | 5909.84          | 10.09                  | 15.52  |
| 2003-04 | 412017   | 60919.50  | 147856.76  | 5933.88          | -11.83                 | -11.47 |
| 2004-05 | 461329   | 66465.50  | 144073.97  | 5782.07          | 11.97                  | 9.10   |
| 2005-06 | 512163   | 72457.30  | 141473.12  | 5677.69          | 11.02                  | 9.01   |
| 2006-07 | 612643   | 83635.20  | 136515.39  | 5478.72          | 19.62                  | 15.43  |
| 2007-08 | 541701   | 76209.30  | 140685.18  | 5646.07          | -11.58                 | -8.88  |
| 2008-09 | 602834   | 86079.50  | 142791.38  | 5730.60          | 11.29                  | 12.95  |
| 2009-10 | 678436   | 100485.30 | 148113.16  | 5944.17          | 12.54                  | 16.74  |
| 2010-11 | 813091   | 129014.60 | 158671.78  | 6367.92          | 19.85                  | 28.39  |
| 2011-12 | 862021   | 165972.30 | 192538.58  | 7727.08          | 6.02                   | 28.65  |
| 2012-13 | 928215   | 188562.60 | 203145.39  | 8152.76          | 7.68                   | 13.61  |
| 2013-14 | 983756   | 302132.60 | 307121.48  | 12325.60         | 5.98                   | 60.23  |

Source : *Hand Book on Fisheries Statistics, 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India (Website: <http://eands.dacnet.nic.in>).



**Table 7.10: Quantity of marine products exported and foreign exchange earned**

(Quantity: 000' t, Value: million Rs)

| Year    | Quantity | Value    | Annual growth rate (%) |        |
|---------|----------|----------|------------------------|--------|
|         |          |          | Quantity               | Value  |
| 1990-91 | 158.45   | 9596.8   | -                      | -      |
| 1991-92 | 190.19   | 14427.2  | 20.03                  | 50.33  |
| 1992-93 | 210.79   | 17431.5  | 10.83                  | 20.82  |
| 1993-94 | 257.98   | 25518.9  | 22.39                  | 46.40  |
| 1994-95 | 320.91   | 35366.4  | 24.39                  | 38.59  |
| 1995-96 | 327.37   | 33811.3  | 2.01                   | -4.40  |
| 1996-97 | 394.55   | 40076.3  | 20.52                  | 18.53  |
| 1997-98 | 398.20   | 44867.6  | 0.93                   | 11.96  |
| 1998-99 | 311.26   | 43685.5  | -21.83                 | -2.63  |
| 1999-00 | 390.74   | 51245.6  | 25.53                  | 17.31  |
| 2000-01 | 502.60   | 63672.9  | 28.63                  | 24.25  |
| 2001-02 | 468.03   | 58983.4  | -6.88                  | -7.36  |
| 2002-03 | 527.87   | 69280.5  | 12.79                  | 17.46  |
| 2003-04 | 409.49   | 61056.3  | -22.43                 | -11.87 |
| 2004-05 | 483.52   | 64692.2  | 18.10                  | 5.96   |
| 2005-06 | 554.20   | 70359.1  | 14.60                  | 8.76   |
| 2006-07 | 611.55   | 80010.4  | 10.35                  | 13.71  |
| 2007-08 | 490.06   | 69266.7  | -19.87                 | -13.43 |
| 2008-09 | 464.90   | 70663.7  | -5.13                  | 2.02   |
| 2009-10 | 678.44   | 100485.3 | 45.93                  | 42.20  |
| 2010-11 | 813.09   | 129014.7 | 19.85                  | 28.39  |
| 2011-12 | 862.02   | 165972.3 | 6.02                   | 28.65  |
| 2012-13 | 928.22   | 188562.6 | 7.68                   | 13.61  |
| 2013-14 | 983.76   | 302132.6 | 5.98                   | 60.23  |

Source : 1. *Agricultural Statistics at a Glance, 2013*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
 2. [http://commerce.nic.in/pressrelease/pressrelease\\_detail.asp](http://commerce.nic.in/pressrelease/pressrelease_detail.asp).  
 3. <http://www.mpeda.com/publications/exportreview/trends>.

Export & Import

**Table 7.11: Quantity and value of export and import of natural resins and gums**

(Quantity: t, Value: Lakh Rs)

| S. No.                   | Name of product                       | Export           |                   |                  |                   |                  |                   | Import          |                 |                 |                 |                 |                 |
|--------------------------|---------------------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                          |                                       | 2011-12          |                   | 2012-13          |                   | 2013-14          |                   | 2011-12         |                 | 2012-13         |                 | 2013-14         |                 |
|                          |                                       | Quantity         | Value             | Quantity         | Value             | Quantity         | Value             | Quantity        | Value           | Quantity        | Value           | Quantity        | Value           |
| <b>A. Natural resins</b> |                                       |                  |                   |                  |                   |                  |                   |                 |                 |                 |                 |                 |                 |
| 1.                       | Copal                                 | 0.09             | 0.14              | 0.00             | 0.00              | 0.06             | 0.50              | 1740.07         | 476.96          | 2008.97         | 673.32          | 2034.86         | 1042.22         |
| 2.                       | Dammar batu                           | 0.00             | 0.00              | 20.39            | 11.00             | 2.08             | 5.07              | 14325.98        | 3198.26         | 14080.48        | 3891.89         | 14156.90        | 4521.26         |
| 3.                       | Mastic gum                            | 7.00             | 12.84             | 9.00             | 3.39              | 1.05             | 0.56              | 1.29            | 4.01            | 0.00            | 0.00            | 2.62            | 13.15           |
| 4.                       | Gum rosin                             | 96.33            | 64.95             | 51.53            | 41.56             | 192.14           | 262.81            | 35310.26        | 33733.50        | 47347.27        | 38271.01        | 36859.44        | 37534.29        |
| 5.                       | Lac                                   | 6858.21          | 36461.30          | 4361.30          | 48027.58          | 8158.10          | 56853.63          | N.A.            | N.A.            | N.A.            | N.A.            | N.A.            | N.A.            |
| 6.                       | Other resins                          | 1526.69          | 4671.00           | 236.89           | 1288.59           | 337.10           | 360.44            | 581.89          | 686.99          | 608.45          | 634.28          | 109.79          | 424.97          |
|                          | <b>Total</b>                          | <b>8488.31</b>   | <b>41210.23</b>   | <b>4679.12</b>   | <b>49372.12</b>   | <b>8690.52</b>   | <b>57483.01</b>   | <b>51959.50</b> | <b>38099.72</b> | <b>64045.18</b> | <b>43470.50</b> | <b>53163.60</b> | <b>43535.89</b> |
| <b>B. Gums</b>           |                                       |                  |                   |                  |                   |                  |                   |                 |                 |                 |                 |                 |                 |
| 1.                       | Gum arabic                            | 730.00           | 1536.44           | 237.15           | 457.80            | 887.33           | 2281.64           | 26031.45        | 7569.28         | 22892.14        | 8118.33         | 33132.62        | 13378.41        |
| 2.                       | Asian gum                             | 747.27           | 2866.61           | 633.50           | 3380.01           | 683.40           | 4484.65           | 20.00           | 46.81           | 11.00           | 4.56            | 36.26           | 21.46           |
| 3.                       | African gum                           | 0.61             | 1.12              | 0.10             | 0.16              | 5.70             | 12.76             | 0.00            | 0.00            | 0.00            | 0.00            | 73.00           | 20.78           |
| 4.                       | Karaya gum<br>Indian tragacanth       | 921.18           | 3902.24           | 576.40           | 2220.80           | 517.10           | 2038.93           | 66.67           | 134.60          | 71.92           | 197.86          | 421.78          | 308.07          |
| 5.                       | Tragacanth<br>(Atractanth)            | 0.94             | 2.76              | 4.68             | 6.51              | 2.73             | 4.63              | 2.00            | 1.58            | 2.05            | 4.01            | 000             | 000             |
| 6.                       | Guar gum<br>refined split             | 102423.74        | 192330.04         | 70515.24         | 339053.79         | 82689.07         | 148408.78         | 139.90          | 469.46          | 310.95          | 1955.64         | 164.18          | 1171.50         |
| 7.                       | Guar gum<br>treated and<br>pulverized | 524750.76        | 1448374.22        | 260982.34        | 1775618.61        | 387161.62        | 996136.71         | 40.50           | 66.67           | 149.40          | 618.08          | 149.98          | 602.18          |
| 8.                       | Xanthum gum                           | 1.55             | 26.82             | 0.46             | 2.47              | 9.17             | 51.49             | 278.37          | 819.76          | 497.99          | 922.54          | 364.84          | 582.07          |
| 9.                       | Other natural<br>gums                 | 2099.14          | 3444.00           | 971.13           | 2347.42           | 1139.35          | 2073.60           | 250.08          | 334.90          | 338.16          | 505.90          | 234.08          | 623.21          |
|                          | <b>Total</b>                          | <b>631675.19</b> | <b>1652484.27</b> | <b>333920.99</b> | <b>2123087.58</b> | <b>473095.46</b> | <b>1155493.19</b> | <b>26828.97</b> | <b>9443.05</b>  | <b>24273.61</b> | <b>12326.91</b> | <b>34576.74</b> | <b>16707.69</b> |
| <b>C. Gum resins</b>     |                                       |                  |                   |                  |                   |                  |                   |                 |                 |                 |                 |                 |                 |
| 1.                       | A safoetida                           | 911.91           | 2020.78           | 1584.52          | 2928.66           | 983.45           | 3448.79           | 1027.72         | 23246.10        | 940.39          | 22146.42        | 1147.11         | 35090.94        |

| S. No. | Name of product          | Export           |                   |                  |                   |                  |                   | Import          |                 |                 |                 |                 |                 |
|--------|--------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|        |                          | 2011-12          |                   | 2012-13          |                   | 2013-14          |                   | 2011-12         |                 | 2012-13         |                 | 2013-14         |                 |
|        |                          | Quantity         | Value             | Quantity         | Value             | Quantity         | Value             | Quantity        | Value           | Quantity        | Value           | Quantity        | Value           |
| 2.     | Myrrh                    | 4.06             | 10.89             | 1.71             | 6.31              | 0.60             | 4.92              | 41.06           | 48.89           | 26.70           | 38.18           | 58.40           | 180.13          |
| 3.     | Oilbanum or Frankincense | 136.34           | 380.85            | 104.92           | 119.19            | 120.90           | 195.80            | 197.00          | 102.41          | 44.50           | 31.75           | 10.60           | 25.79           |
| 4.     | Other gum resins         | 354.35           | 529.16            | 93.50            | 604.76            | 169.92           | 429.49            | 680.34          | 557.63          | 415.96          | 521.14          | 579.47          | 961.21          |
|        | <b>Total</b>             | <b>1406.65</b>   | <b>2941.67</b>    | <b>1784.65</b>   | <b>3658.92</b>    | <b>1274.86</b>   | <b>4079.00</b>    | <b>1946.13</b>  | <b>23955.04</b> | <b>1427.55</b>  | <b>22737.48</b> | <b>1795.58</b>  | <b>36258.06</b> |
|        | <b>Grand Total</b>       | <b>641570.16</b> | <b>1696636.17</b> | <b>340384.75</b> | <b>2176118.62</b> | <b>483060.85</b> | <b>1217055.20</b> | <b>80734.60</b> | <b>71497.81</b> | <b>89746.33</b> | <b>78534.90</b> | <b>89535.92</b> | <b>96501.64</b> |

Note : 1. The quantity and value of export of lac for the year 2011-12 are 6858.21 t and Rs.36461.30 lakh respectively, 2. N.A.: Not Available.

Source : 1. Directorate General of Commercial Intelligence & Statistics, Kolkata.

2. Information received from ICAR-Indian Institute of Natural Resins and Gums, Namkum, Ranchi.

### Table 7.12: Quantity and value of export and import of Lac and its value added products

(Quantity: t, Value: Lakh Rs)

| Year    | Grade →  | Export               |          |                 |                |              |                | Import      |        |          |            |  |  |
|---------|----------|----------------------|----------|-----------------|----------------|--------------|----------------|-------------|--------|----------|------------|--|--|
|         |          | Shellac & button lac | Seedlac  | Dewaxed shellac | Aleuritic Acid | Bleached lac | Gasket shellac | Shellac wax | Other  | Total    | Import lac |  |  |
| 2008-09 | Quantity | 5088.65              | 913.66   | 391.68          | 125.00         | 398.60       | 8.68           | 42.15       | N.A.   | 6968.42  | 2102.49    |  |  |
|         | Value    | 7628.86              | 1301.22  | 1126.57         | 1315.34        | 942.64       | 14.36          | 85.51       | N.A.   | 12414.50 | 1597.30    |  |  |
| 2009-10 | Quantity | 4708.06              | 753.42   | 517.84          | 72.05          | 341.93       | 0.86           | 28.45       | N.A.   | 6422.61  | N.A.       |  |  |
|         | Value    | 7066.48              | 959.54   | 1321.80         | 746.15         | 844.90       | 1.51           | 61.95       | N.A.   | 11002.33 | N.A.       |  |  |
| 2010-11 | Quantity | 4616.18              | 1089.55  | 200.12          | 64.00          | 336.13       | 4.32           | 28.75       | N.A.   | 6339.05  | N.A.       |  |  |
|         | Value    | 13565.14             | 3659.44  | 1051.68         | 1118.13        | 1598.86      | 6.62           | 113.05      | N.A.   | 21112.92 | N.A.       |  |  |
| 2011-12 | Quantity | 4479.31              | 1657.09  | 293.64          | 64.00          | 310.06       | 5.18           | 47.86       | 0.002  | 6858.21  | N.A.       |  |  |
|         | Value    | 21565.47             | 7737.20  | 2031.08         | 1118.13        | 2454.52      | 7.43           | 290.35      | 0.06   | 36461.30 | N.A.       |  |  |
| 2012-13 | Quantity | 2865.40              | 769.39   | 227.77          | 162.40         | 164.22       | 5.18           | 43.17       | 123.81 | 4361.30  | N.A.       |  |  |
|         | Value    | 23744.40             | 8422.49  | 3066.53         | 10068.10       | 2082.03      | 9.20           | 557.53      | 77.33  | 48027.60 | N.A.       |  |  |
| 2013-14 | Quantity | 3738.61              | 3709.35  | 211.04          | 162.01         | 258.29       | 0.00           | 17.80       | 56.00  | 8153.10  | N.A.       |  |  |
|         | Value    | 22556.46             | 19803.33 | 1930.74         | 10054.42       | 2311.04      | 0.00           | 183.61      | 14.03  | 56853.63 | N.A.       |  |  |
| 2014-15 | Quantity | 3261.44              | 2690.26  | 1830.20         | 181.12         | 142.89       | -              | 15.20       | 95.22  | 6569.17  | N.A.       |  |  |
|         | Value    | 14650.36             | 8770.25  | 1250.94         | 5909.11        | 1048.13      | -              | 116.28      | 504.52 | 32249.58 | N.A.       |  |  |

Note : N.A.: Not Available.

Source : 1. Directorate General of Commercial Intelligence & Statistics, Kolkata (www.dgeiskol.nic.in).

2. Shellac and Forest Products Export Promotion Council, Kolkata

3. Information received from ICAR-Indian Institute of Natural Resins and Gums, Namkum, Ranchi.

Table 7.13: Production, imports and consumption of fertilizers

| Year  | 1970-71 | 1980-81 | 1990-91        | 2000-01 | 2007-08 | 2008-09 | 2009-10 | 2010-11        | 2011-12         | 2012-13         | 2013-14         | 2014-15         |
|---|---------|---------|----------------|---------|---------|---------|---------|----------------|-----------------|-----------------|-----------------|-----------------|
| (000't)   |         |         |                |         |         |         |         |                |                 |                 |                 |                 |
| <b>Nitrogenous fertilizers</b>                      |         |         |                |         |         |         |         |                |                 |                 |                 |                 |
| Production  | 830     | 2164    | 6993           | 10961   | 10900   | 10870   | 11900   | 12156          | 12259           | 12194           | 12378           | 12394           |
| Imports   | 477     | 1510    | 414            | 154     | 3677    | 3844    | 3447    | 4492           | 5240            | 4690            | 3808            | 4766            |
| Consumption   | 1487    | 3678    | 7997           | 10920   | 14419   | 15090   | 15580   | 16558          | 17300           | 16821           | 16750           | 16945           |
| <b>Phosphatic fertilizers</b>                       |         |         |                |         |         |         |         |                |                 |                 |                 |                 |
| Production  | 229     | 842     | 2052           | 3743    | 3807    | 3464    | 4321    | 4222           | 4101            | 3541            | 3714            | 3875            |
| Imports   | 32      | 452     | 1016           | 396     | 1253    | 2927    | 2756    | 3802           | 4427            | 2778            | 1590            | 1832            |
| Consumption   | 462     | 1214    | 3221           | 4215    | 5515    | 6506    | 7274    | 8050           | 7914            | 6653            | 5633            | 6098            |
| <b>Potassic fertilizers</b>                         |         |         |                |         |         |         |         |                |                 |                 |                 |                 |
| Production  | N.A.    | N.A.    | N.A.           | N.A.    | N.A.    | N.A.    | N.A.    | N.A.           | N.A.            | N.A.            | N.A.            | N.A.            |
| Imports   | 120     | 797     | 1328           | 1541    | 2653    | 3380    | 2944    | 4069           | 3335            | 1230            | 1333            | 2537            |
| Consumption   | 228     | 624     | 1328           | 1568    | 2636    | 3313    | 3632    | 3514           | 2576            | 2062            | 2099            | 2532            |
| <b>All fertilizers (NPK)</b>                        |         |         |                |         |         |         |         |                |                 |                 |                 |                 |
| Production  | 1059    | 3006    | 9045           | 14704   | 14707   | 14334   | 16221   | 16378          | 16360           | 15735           | 16092           | 16269           |
| Imports   | 629     | 2759    | 2758           | 2091    | 7583    | 10151   | 9148    | 12363          | 13002           | 8698            | 6731            | 9135            |
| Consumption   | 2177    | 5516    | 12546          | 16703   | 22570   | 24909   | 26486   | 28122          | 27790           | 25536           | 24482           | 25576           |
| <b>C &amp; F Values of Urea Imports (Rs. Crore)</b> | N.A.    | N.A.    | <b>1335.82</b> | #       | N.A.    | N.A.    | N.A.    | <b>8348.89</b> | <b>15442.02</b> | <b>15980.22</b> | <b>14987.95</b> | <b>12035.26</b> |

**Note :** 1. Figures relate to imports made on government account only, 2. The imports made after decanalization of phosphatic fertilizers (w.e.f. 17 september 1992) and potassic fertilizers w.e.f. 17 June 1993) include the quantities imported by private parties also. 3. N.A.: Not Available. 4. # : There was no import of Urea in 2000-01 in Government account.

**Source :** 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. Pocket Book of Agricultural Statistics, 2015, Directorate of Economics and Statistics, Ministry of Agriculture & Family Welfare, Govt. of India, (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

**Table 7.14: Import of fertilizer materials**

(Quantity: 000't)

| Year     | Ammonium sulphate (20.6% N) | Urea (46%N) | CAN (26%N) | DAP (18-46-0)                | TSP (0-46-0) | MOP (60% K <sub>2</sub> O) | SOP (50% K <sub>2</sub> O) |
|----------|-----------------------------|-------------|------------|------------------------------|--------------|----------------------------|----------------------------|
| 1997-98  | -                           | 2389.0      | -          | 1536.0<br>17.9 <sup>§</sup>  | -            | 2380.4                     | 18.1                       |
| 1998-99  | 97.0                        | 556.0       | -          | 2091.1<br>44.0 <sup>§</sup>  | -            | 2579.8                     | 20.5                       |
| 1999-00  | 79.0                        | 553.0       | -          | 3268.0<br>56.0 <sup>§</sup>  | -            | 2946.1                     | 12.5                       |
| 2000-01  | -                           | -           | -          | 861.0<br>78.1 <sup>§</sup>   | -            | 2646.0                     | 12.8                       |
| 2001-02  | -                           | 220.0       | -          | 932.7<br>125.2 <sup>§</sup>  | -            | 2810.2                     | 22.2                       |
| 2002-03  | -                           | 119.4**     | -          | 383.2<br>99.9 <sup>§</sup>   | -            | 2603.2                     | 13.0                       |
| 2003-04  | -                           | 143.1**     | -          | 734.1<br>65.0 <sup>§</sup>   | -            | 2579.3                     | 10.5                       |
| 2004-05  | -                           | 641.0       | -          | 643.6<br>21.6 <sup>§</sup>   | -            | 3409.5                     | 25.2                       |
| 2005-06  | -                           | 2056.8      | -          | 2437.7<br>45.0 <sup>§</sup>  | -            | 4577.5                     | 35.1                       |
| 2006-07  | 24.8                        | 4718.8      | -          | 2875.4<br>97.2 <sup>§</sup>  | -            | 3448.4                     | 13.1                       |
| 2007-08  | -                           | 6928.0      | 5.0        | 2723.6<br>266.0 <sup>§</sup> | -            | 4420.8                     | 31.6                       |
| 2008-09  | 23.0                        | 5667.0      | 2.5        | 6191.7<br>266.9 <sup>§</sup> | 173.1        | 5671.7                     | 27.3                       |
| 2009-10  | 35.6                        | 5210.0      | 11.5       | 5888.9<br>193.4 <sup>§</sup> | 87.0         | 5286.5                     | 37.1                       |
| 2010-11  | 26.0                        | 6610.0      | -          | 7411.0<br>188.0 <sup>§</sup> | 98.0         | 6357.0                     | 36.0                       |
| 2011-12  | 36.0                        | 7834.0      | -          | 6905.2<br>493.7 <sup>§</sup> | 159.7        | 3984.6                     | 54.0                       |
| 2012-13  | 1.4                         | 8044.0      | -          | 5702.3<br>152.2 <sup>§</sup> | -            | 2496.1                     | 29.5                       |
| 2013-14* | 2.9                         | 7088.0      | -          | 3261.1<br>38.6 <sup>§</sup>  | -            | 3180.0                     | 57.5                       |
| 2014-15* | 155.3                       | 8749.0      | -          | 3853.0<br>136.0 <sup>§</sup> | -            | 4197.0                     | 78.0                       |

**Note** : 1. §: Mono ammonium phosphate (11-52-0), 2. \*: Provisional, 3. \*\*: Used for manufacture of Complex Fertilizers, 4. CAN: Calcium ammonium nitrate, 5. DAP: Diammonium Phosphate, 6. TSP: Triple Superphosphate, 7. MOP: Muriate of Potash, 8. SOP: Sulfate of Potash.

**Source** : *Fertilizer Statistics, 2014-2015*, The Fertilizer Association of India, New Delhi.





भाग-VIII  
विश्व कृषि में भारत का स्थान

SECTION-VIII  
India's Position in World Agriculture







**Table 8.1: India's position in world agriculture 2013**

| Item  | India  | World  | India's |          | Next to   |
|---|--------|--------|---------|----------|---|
|   |        |        | % Share | Rank     |   |
| <b>1. Area (million ha)</b>                         |        |        |         |          |   |
| Total area  | 329    | 13462  | 2.4     | Seventh  | Russian Federation, Canada, USA, China, Brazil, Australia                       |
| Land area   | 297    | 13009  | 2.3     | Seventh  | Russian Federation, China, USA, Canada, Brazil, Australia                       |
| Arable land   | 156    | 1396   | 11.2    | Second   | USA   |
| <b>2. Population* (million)</b>                     |        |        |         |          |   |
| Total   | 1252   | 7162   | 17.5    | Second   | China   |
| Rural   | 852    | 3357   | 25.4    | First    |   |
| <b>3. Economically active population *(million)</b> |        |        |         |          |   |
| Total   | 516    | 3434   | 15.0    | Second   | China   |
| Agriculture   | 274    | 1330   | 20.6    | Second   | China   |
| <b>4. Crop production (million t)</b>               |        |        |         |          |   |
| <b>(A) Total Cereals</b>                            |        |        |         |          |   |
| Wheat   | 94     | 716    | 13.1    | Second   | China   |
| Rice (Paddy)  | 159    | 741    | 21.5    | Second   | China   |
| <b>(B) Total Pulses</b>                             |        |        |         |          |   |
|   | 18     | 73     | 24.7    | First    |   |
| <b>(C) Oilseed</b>                                  |        |        |         |          |   |
| Groundnut(in shell)                                 | 9      | 46     | 19.6    | Second   | China   |
| Rapeseed  | 7.8    | 72.7   | 10.7    | Third    | Canada, China   |
| <b>(D) Fruits &amp; Vegetables (million t)</b>      |        |        |         |          |   |
| Vegetables & Melons                                 | 121    | 1136   | 10.7    | Second   | China   |
| Fruits Excluding Melons                             | 83     | 677    | 12.2    | Second   | China   |
| Potatoes  | 45     | 376    | 12.0    | Second   | China   |
| Onion (Dry)   | 19     | 86     | 22.1    | Second   | China   |
| <b>(E) Commercial crops (million t)</b>             |        |        |         |          |   |
| Sugarcane   | 341    | 1911   | 17.8    | Second   | Brazil  |
| Tea   | 1.26   | 5.4    | 23.6    | Second   | China   |
| Coffee (green)                                      | 0.32   | 8.92   | 3.6     | Fifth    | Brazil, Vietnam, Indonesia, Colombia  |
| Jute & allied fibres                                | 2.05   | 3.68   | 55.7    | First    |   |
| Cotton(lint)  | 6.05   | 24.54  | 24.7    | Second   | China   |
| Tobacco leaves                                      | 0.83   | 7.44   | 11.2    | Third    | China, Brazil   |
| <b>5. Livestock (million heads)</b>                 |        |        |         |          |   |
| Cattle  | 189    | 1468   | 12.9    | Second   | Brazil  |
| Buffaloes   | 109    | 194    | 56.1    | First    |   |
| Camels  | 0.38   | 27     | 1.4     | Eleventh | Somalia, Sudan, Kenya, Niger, Chad, Mauritania, Pakistan, Mali, Ethiopia, Yemen |
| Sheep   | 69     | 1163   | 5.9     | Third    | China, Australia  |
| Goats   | 134    | 976    | 13.7    | Second   | China   |
| Chicken   | 709    | 20387  | 3.5     | Sixth    | China, USA, Indonesia, Brazil, Iran   |
| <b>6. Animal Products (000 MT)</b>                  |        |        |         |          |   |
| Total Milk  | 135600 | 746708 | 18.2    | First    |   |
| Total Eggs  | 3835   | 68262  | 5.6     | Third    | China, USA  |
| Total Meat  | 6215   | 310380 | 2.0     | Sixth    | China, USA, Brazil, Russian, Federation, Germany                                |

Source : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Fertilizer Statistics, 2014-15*, The Fertilizer Association of India, New Delhi.  
3. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).

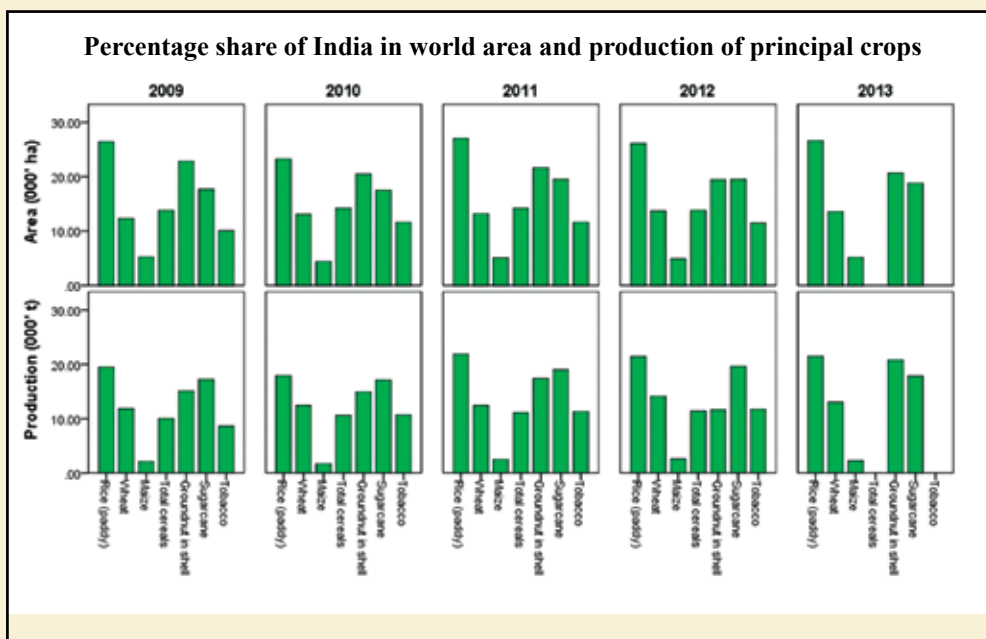
**Table 8.2: Area and production of principal crops in the World and India's share**

(Area: in 000'ha, Production: in 000't)

| Crops                     | Area                    |                         |                         |                         |                     | Production               |                          |                          |                          |                     |
|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------|
|                           | 2009                    | 2010                    | 2011                    | 2012                    | 2013                | 2009                     | 2010                     | 2011                     | 2012                     | 2013                |
| <b>Rice (paddy)</b>       | 158300<br>(26.4)        | 159417<br>(23.2)        | 163147<br>(27.0)        | 162317<br>(26.1)        | 165163<br>(26.6)    | 685240<br>(19.5)         | 672016<br>(17.9)         | 722560<br>(21.9)         | 738188<br>(21.4)         | 740903<br>(21.49)   |
| <b>Wheat</b>              | 225622<br>(12.3)        | 217219<br>(13.1)        | 220896<br>(13.2)        | 217320<br>(13.7)        | 219047<br>(13.54)   | 685614<br>(11.8)         | 653655<br>(12.4)         | 701395<br>(12.4)         | 671497<br>(14.1)         | 715909<br>(13.06)   |
| <b>Maize</b>              | 158629<br>(5.2)         | 161765<br>(4.4)         | 171784<br>(5.1)         | 178552<br>(4.9)         | 185121<br>(5.13)    | 818823<br>(2.1)          | 840308<br>(1.7)          | 885290<br>(2.5)          | 872792<br>(2.6)          | 1018112<br>(2.29)   |
| <b>Total cereals</b>      | <b>699348</b><br>(13.8) | <b>688148</b><br>(14.2) | <b>706791</b><br>(14.2) | <b>705113</b><br>(13.8) | <b>N.A.</b><br>N.A. | <b>2494173</b><br>(10.0) | <b>2457662</b><br>(10.6) | <b>2592760</b><br>(11.1) | <b>2566260</b><br>(11.4) | <b>N.A.</b><br>N.A. |
| <b>Groundnut in shell</b> | 23951<br>(22.8)         | 24012<br>(20.5)         | 24637<br>(21.6)         | 24591<br>(19.4)         | 25418<br>(20.65)    | 36457<br>(15.1)          | 37954<br>(14.9)          | 40017<br>(17.4)          | 40475<br>(11.6)          | 45654<br>(20.75)    |
| <b>Tobacco</b>            | 3876<br>(10.1)          | 3947<br>(11.6)          | 4215<br>(11.6)          | 4291<br>(11.5)          | N.A.<br>N.A.        | 7193<br>(8.6)            | 7038<br>(10.7)           | 7379<br>(11.3)           | 7491<br>(11.7)           | N.A.<br>N.A.        |
| <b>Sugarcane</b>          | 23778<br>(17.7)         | 23877<br>(17.5)         | 25394<br>(19.5)         | 26095<br>(19.5)         | 26943<br>(18.78)    | 1661251<br>(17.2)        | 1711087<br>(17.1)        | 1800378<br>(19.0)        | 1842266<br>(19.6)        | 1911180<br>(17.85)  |

**Note :** 1. Figures in parentheses denote India's share to World Area and Production of Principal Crops,  
2. N.A.: Not Available.

**Source :** 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. *Fertilizer Statistics, 2014-15*, The Fertilizer Association of India, New Delhi.  
3. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



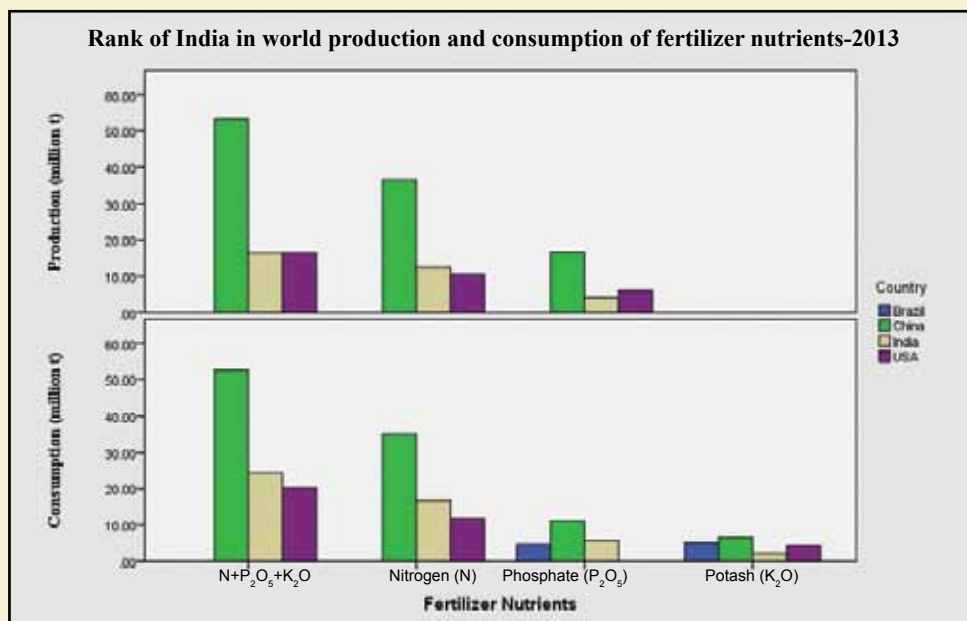
**Table 8.3: Rank of India in world production and consumption of fertilizer nutrients - 2013**

(Production & Consumption in million t)

| Fertilizer  | Country      | Production              | India's Rank in World | Country      | Consumption | India's Rank in World |
|---|--------------|-------------------------|-----------------------|--------------|-------------|-----------------------|
| Nitrogen (N)                                      | World        | 112.4                   | II                    | World        | 110.5       | II                    |
|   | China        | 36.6                    |                       | China        | 35.0        |                       |
|   | <b>India</b> | <b>12.4</b>             |                       | <b>India</b> | <b>16.8</b> |                       |
|   | USA          | 10.4                    |                       | USA          | 11.7        |                       |
| Phosphate (P <sub>2</sub> O <sub>5</sub> )        | World        | 43.5                    | III                   | World        | 40.3        | II                    |
|   | China        | 16.6                    |                       | China        | 11.2        |                       |
|   | USA          | 6.1                     |                       | <b>India</b> | <b>5.6</b>  |                       |
|   | <b>India</b> | <b>4.0</b>              |                       | Brazil       | 4.6         |                       |
| Potash (K <sub>2</sub> O)                         | <b>India</b> | -                       | *                     | World        | 30.0        | IV                    |
|   |              |                         |                       | China        | 6.5         |                       |
|   |              |                         |                       | Brazil       | 5.1         |                       |
|   |              |                         |                       | USA          | 4.4         |                       |
|   |              |                         |                       | <b>India</b> | <b>2.1</b>  |                       |
| N+P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O | World        | 165.6 <sup>S</sup>      | III                   | World        | 180.8       | II                    |
|   | China        | 53.2 <sup>S</sup>       |                       | China        | 52.7        |                       |
|   | USA          | 16.5 <sup>S</sup>       |                       | <b>India</b> | <b>24.5</b> |                       |
|   | <b>India</b> | <b>16.4<sup>S</sup></b> |                       | USA          | 20.2        |                       |

**Note** : 1. \* There is no known source of K<sub>2</sub>O in India, 2. P<sub>2</sub>O<sub>5</sub> includes ground rock phosphate, 3. \$ N+P<sub>2</sub>O<sub>5</sub>.

**Source** : *Fertilizer Statistics, 2014-15*, The Fertilizer Association of India, New Delhi.



**Table 8.4: Fertilizer consumption per hectare of agricultural land in selected countries – 2012 and 2013**

(kg/ha)

| Continent/ Country                     | 2012          |                               |                  |                | 2013          |                               |                  |                |
|--|---------------|-------------------------------|------------------|----------------|---------------|-------------------------------|------------------|----------------|
|  | N             | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | Total          | N             | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | Total          |
| <b>Africa</b>                          |               |                               |                  |                |               |                               |                  |                |
| Egypt                                  | 294.0         | 44.1                          | 16.2             | 354.4          | 296.1         | 47.1                          | 16.5             | 359.6          |
| Morocco                                | 7.1           | 7.1                           | 0.8              | 14.9           | 7.5           | 7.4                           | 1.0              | 15.9           |
| South Africa                           | 4.4           | 2.0                           | 1.3              | 7.6            | 4.4           | 1.9                           | 1.3              | 7.5            |
| <b>North America</b>                   |               |                               |                  |                |               |                               |                  |                |
| Canada                                 | 37.9          | 12.7                          | 5.4              | 56.1           | 37.7          | 13.6                          | 5.8              | 57.1           |
| USA                                    | 29.5          | 10.3                          | 10.9             | 50.7           | 28.8          | 10.1                          | 10.8             | 49.8           |
| <b>Latin America and the Caribbean</b> |               |                               |                  |                |               |                               |                  |                |
| Brazil                                 | 12.5          | 15.7                          | 17.6             | 45.7           | 13.3          | 16.6                          | 18.3             | 48.2           |
| Chile                                  | 16.7          | 8.1                           | 6.0              | 30.9           | 17.9          | 8.2                           | 6.4              | 32.5           |
| Mexico                                 | 11.3          | 2.8                           | 2.6              | 16.7           | 12.2          | 2.9                           | 2.8              | 17.9           |
| <b>Asia</b>                            |               |                               |                  |                |               |                               |                  |                |
| Bangladesh                             | 122.0         | 54.9                          | 38.6             | 215.4          | 135.2         | 62.0                          | 38.1             | 235.3          |
| China, Main                            | 66.6          | 24.1                          | 11.7             | 102.4          | 68.2          | 21.8                          | 12.6             | 102.4          |
| <b>India</b>                           | <b>93.6</b>   | <b>37.0</b>                   | <b>11.5</b>      | <b>142.2</b>   | <b>92.9</b>   | <b>31.2</b>                   | <b>11.6</b>      | <b>135.8</b>   |
|  | <b>(86.5)</b> | <b>(34.2)</b>                 | <b>(10.6)</b>    | <b>(131.4)</b> | <b>(86.2)</b> | <b>(29.0)</b>                 | <b>(10.8)</b>    | <b>(125.9)</b> |
| Indonesia                              | 55.6          | 16.7                          | 26.4             | 98.7           | 49.5          | 14.9                          | 27.7             | 92.1           |
| Japan                                  | 81.9          | 77.7                          | 71.1             | 230.7          | 81.1          | 77.1                          | 70.5             | 228.7          |
| Korea Rep.                             | 151.0         | 50.3                          | 64.3             | 265.7          | 152.7         | 50.9                          | 63.3             | 266.9          |
| Malaysia                               | 77.6          | 41.4                          | 166.8            | 285.7          | 79.1          | 40.8                          | 164.6            | 284.5          |
| Nepal                                  | 4.9           | 4.9                           | 0.2              | 9.9            | 4.9           | 4.9                           | 0.2              | 9.9            |
| Pakistan                               | 79.1          | 20.7                          | 0.6              | 100.4          | 87.8          | 24.3                          | 0.7              | 118.9          |
| Sri Lanka                              | 63.4          | 23.0                          | 29.1             | 115.5          | 65.7          | 24.2                          | 29.0             | 109.5          |
| Thailand                               | 63.2          | 18.3                          | 16.9             | 98.5           | 66.9          | 22.3                          | 20.3             | 60.2           |
| Turkey                                 | 37.3          | 13.9                          | 2.6              | 53.8           | 41.2          | 16.2                          | 2.8              | 233.3          |
| Vietnam                                | 129.6         | 64.1                          | 50.9             | 244.6          | 116.0         | 64.9                          | 52.4             |                |
| <b>Europe</b>                          |               |                               |                  |                |               |                               |                  |                |
| Belarus                                | 63.3          | 25.1                          | 81.9             | 170.3          | 61.3          | 23.8                          | 78.3             | 163.4          |
| Denmark                                | 73.9          | 4.6                           | 17.5             | 96.0           | 74.7          | 5.0                           | 17.6             | 97.4           |
| France                                 | 74.2          | 17.2                          | 17.7             | 109.0          | 76.7          | 16.4                          | 16.7             | 109.8          |
| Germany                                | 98.9          | 17.1                          | 25.3             | 141.2          | 100.3         | 17.0                          | 27.4             | 144.7          |
| Netherlands                            | 109.1         | 8.1                           | 16.3             | 133.6          | 105.5         | 7.0                           | 12.4             | 125.0          |
| Poland                                 | 82.9          | 26.6                          | 28.6             | 138.1          | 81.3          | 27.3                          | 28.0             | 136.6          |
| Russia Fed.                            | 7.4           | 2.6                           | 1.6              | 11.6           | 7.1           | 2.6                           | 1.4              | 11.1           |
| Spain                                  | 35.7          | 14.0                          | 12.5             | 62.2           | 38.5          | 15.9                          | 13.2             | 67.5           |
| United Kingdom                         | 57.9          | 11.3                          | 15.6             | 84.8           | 61.4          | 11.7                          | 16.4             | 89.5           |
| Ukraine                                | 30.4          | 6.5                           | 3.4              | 40.3           | 33.3          | 6.9                           | 2.6              | 42.7           |
| <b>Oceania</b>                         |               |                               |                  |                |               |                               |                  |                |
| Australia                              | 2.7           | 2.0                           | 0.5              | 5.2            | 3.3           | 2.1                           | 0.5              | 5.9            |
| New Zealand                            | 33.0          | 27.1                          | 9.6              | 69.6           | 40.1          | 28.5                          | 11.1             | 79.6           |
| <b>World</b>                           | <b>22.0</b>   | <b>8.4</b>                    | <b>5.9</b>       | <b>36.3</b>    | <b>22.4</b>   | <b>8.2</b>                    | <b>6.1</b>       | <b>36.7</b>    |

**Note** : Figures in parentheses indicate fertilizer consumption per hectare of gross cropped area.

**Source** : *Fertilizer Statistics, 2014-15*, The Fertilizer Association of India, New Delhi.

**Table 8.5: Fertilizer consumption per capita, per hectare and yield of principal crops– 2013 (Provisional)**

| Continent / Country                      | Fertilizer consumption (N+P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O) |   |  | Yield per ha |             |             |              |
|--|--|---|--|--------------|-------------|-------------|--------------|
|  | Per ha of  |   | Per capita of Agricultural Population* | Paddy        | Wheat       | Maize       | Potato       |
|  | Agriculture Land   | Arable land and land under permanent crop |  |              |             |             |              |
| <b>Africa</b>                            |  |   |  |              |             |             |              |
| Egypt                                    | 359.6  | 359.5                                     | 60.1                                   | 9530         | 6668        | 7733        | 26966        |
| Morocco                                  | 15.9   | 51.4                                      | 59.4                                   | 7543         | 2164        | 663         | 36357        |
| South Africa                             | 7.5  | 56.50                                     | 153.3                                  | 2609         | 3614        | 3842        | 34121        |
| <b>America</b>                           |  |   |  |              |             |             |              |
| <b>North America</b>                     |  |   |  |              |             |             |              |
| Canada                                   | 57.1   | 73.5                                      | 6014.5                                 | -            | 3594        | 9588        | 32512        |
| USA                                      | 49.8   | 130.6                                     | 4000.7                                 | 8624         | 3172        | 9970        | 46612        |
| <b>Latin America &amp; the Caribbean</b> |  |   |  |              |             |             |              |
| Brazil                                   | 48.2   | 162.2                                     | 656.5                                  | 5007         | 2749        | 5254        | 27752        |
| Chile                                    | 32.5   | 290.7                                     | 227.1                                  | 6205         | 5814        | 10632       | 23379        |
| Mexico                                   | 17.9   | 74.2                                      | 95.3                                   | 5425         | 5293        | 3194        | 26775        |
| <b>Asia</b>                              |  |   |  |              |             |             |              |
| Bangladesh                               | 253.3  | 251.9                                     | 32.1                                   | 4376         | 3014        | 6624        | 19379        |
| China Main                               | 102.4  | 433.0                                     | 63.5                                   | 6717         | 5066        | 6016        | 17088        |
| India                                    | 135.8  | 144.0                                     | 41.2                                   | 3623         | 3154        | 2452        | 22761        |
| Indonesia                                | 92.1   | 114.1                                     | 59.0                                   | 5152         | -           | 4844        | 16270        |
| Japan                                    | 228.7  | 228.7                                     | 410.7                                  | 6728         | 3862        | 2727        | 31325        |
| Rep. of Korea                            | 266.9  | 275.9                                     | 228.5                                  | 6764         | 3680        | 5059        | 26520        |
| Malaysia                                 | 284.5  | 295.2                                     | 670.7                                  | 3817         | -           | 8968        | -            |
| Nepal                                    | 9.9  | 17.6                                      | 1.4                                    | 3171         | 2290        | 2353        | 13641        |
| Pakistan                                 | 112.7  | 130.7                                     | 54.8                                   | 2437         | 2787        | 4231        | 21802        |
| Sri Lanka                                | 118.9  | 141.6                                     | 36.0                                   | 3889         | -           | 3087        | 15321        |
| Thailand                                 | 109.5  | 113.6                                     | 86.3                                   | 2915         | 1250        | 4418        | 15001        |
| Turkey                                   | 60.2   | 97.2                                      | 162.5                                  | 8138         | 2837        | 8939        | 31756        |
| Vietnam                                  | 233.3  | 248.0                                     | 45.5                                   | 5573         | -           | 4435        | 13580        |
| <b>Europe</b>                            |  |   |  |              |             |             |              |
| Belarus                                  | 163.4  | 250.5                                     | 1745.4                                 | -            | 3062        | 5566        | 19362        |
| Denmark                                  | 97.4   | 105.2                                     | 1854.0                                 | -            | 7284        | 5914        | 40000        |
| France                                   | 109.8  | 163.7                                     | 2598.7                                 | 4039         | 7254        | 8139        | 43404        |
| Germany                                  | 144.7  | 200.1                                     | 1957.9                                 | -            | 7998        | 8828        | 39826        |
| Netherlands                              | 125.0  | 215.0                                     | 581.9                                  | -            | 8719        | 11523       | 43652        |
| Poland                                   | 136.6  | 175.7                                     | 356.7                                  | -            | 4430        | 6584        | 18785        |
| Russian Fed.                             | 11.1   | 19.5                                      | 215.3                                  | 4947         | 2229        | 5011        | 14464        |
| Spain                                    | 67.5   | 103.8                                     | 931.4                                  | 7522         | 3583        | 11326       | 30937        |
| UK                                       | 89.5   | 244.6                                     | 1701.8                                 | -            | 7381        | -           | 40144        |
| Ukraine                                  | 42.7   | 52.8                                      | 351.6                                  | 5994         | 3471        | 6412        | 15995        |
| <b>Oceania</b>                           |  |   |  |              |             |             |              |
| Australia                                | 5.9  | 50.3                                      | 2699.2                                 | 10218        | 1761        | 6444        | 38543        |
| New Zealand                              | 79.6   | 1430.6                                    | 2631.3                                 | -            | 9105        | 10821       | 46667        |
| <b>World</b>                             | <b>36.7</b>  | <b>114.8</b>                              | <b>69.0</b>                            | <b>4486</b>  | <b>3268</b> | <b>5500</b> | <b>19468</b> |

**Note** : \*Based on agricultural population 2011.

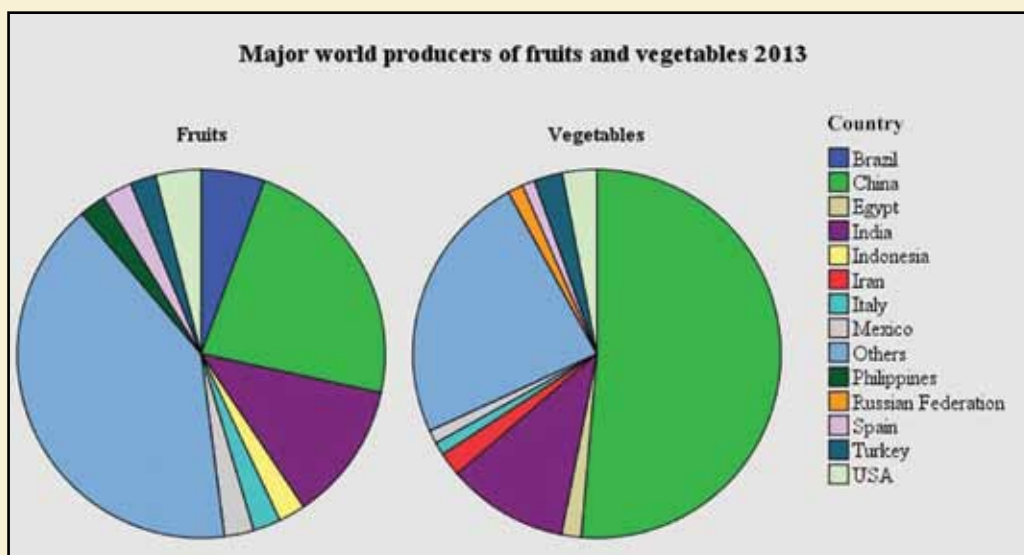
**Source** : *Fertilizer Statistics, 2014-15*, The Fertilizer Association of India, New Delhi.

**Table 8.6: Major world producers of fruits and vegetables 2013**

(Area: million ha, Production: million t, Productivity: t/ha)

| Country              | Fruits       |               |              | Country              | Vegetables   |                |              |
|----------------------|--------------|---------------|--------------|----------------------|--------------|----------------|--------------|
|                      | Area         | Production    | Productivity |                      | Area         | Production     | Productivity |
| China                | 13.86        | 154.364       | 11.14        | China                | 24.42        | 583.32         | 23.89        |
| <b>India</b>         | <b>6.94</b>  | <b>82.632</b> | <b>11.91</b> | <b>India</b>         | <b>8.65</b>  | <b>121.02</b>  | <b>13.99</b> |
| Brazil               | 2.29         | 37.774        | 16.50        | USA                  | 1.05         | 34.28          | 32.65        |
| USA                  | 1.13         | 26.986        | 23.88        | Mexico               | 0.67         | 13.24          | 19.76        |
| Spain                | 1.57         | 17.699        | 11.27        | Italy                | 0.51         | 13.05          | 25.59        |
| Mexico               | 1.28         | 17.553        | 13.71        | Spain                | 0.34         | 12.70          | 37.35        |
| Italy                | 1.15         | 16.371        | 14.24        | Turkey               | 1.12         | 28.28          | 25.25        |
| Indonesia            | 0.71         | 16.003        | 22.54        | Iran                 | 0.87         | 23.65          | 27.18        |
| Philippines          | 1.23         | 15.887        | 12.92        | Russian Federation   | 0.79         | 15.49          | 19.61        |
| Turkey               | 1.15         | 15.341        | 13.34        | Egypt                | 0.75         | 19.59          | 26.12        |
| Others               | 28.31        | 276.06        | 9.75         | Others               | 19.06        | 271.07         | 22.07        |
| <b>World+(Total)</b> | <b>59.62</b> | <b>676.67</b> | <b>11.35</b> | <b>World+(Total)</b> | <b>58.23</b> | <b>1135.69</b> | <b>19.50</b> |

Source : Horticultural Statistics at a Glance 2015, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India. (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).



**Table 8.7: Major world producers of vegetables 2013**

(Area: million ha, Production: million t, Productivity: t/ha)

| Country                   | Potato       |               |              | Country                   | Tomato      |               |              |
|---------------------------|--------------|---------------|--------------|---------------------------|-------------|---------------|--------------|
|                           | Area         | Production    | Productivity |                           | Area        | Production    | Productivity |
| China                     | 5.62         | 95.99         | 17.09        | China                     | 0.98        | 50.66         | 51.69        |
| <b>India</b>              | <b>1.99</b>  | <b>45.34</b>  | <b>22.76</b> | <b>India</b>              | <b>0.88</b> | <b>18.23</b>  | <b>20.72</b> |
| Russian Fed.              | 2.09         | 30.20         | 14.46        | USA                       | 0.15        | 12.57         | 83.80        |
| Ukraine                   | 1.39         | 22.26         | 15.99        | Turkey                    | 0.31        | 11.82         | 38.13        |
| USA                       | 0.43         | 19.84         | 46.61        | Egypt                     | 0.21        | 8.53          | 40.62        |
| Germany                   | 0.24         | 9.67          | 39.83        | Iran(IR)                  | 0.16        | 6.17          | 38.56        |
| Bangladesh                | 0.44         | 8.60          | 19.38        | Italy                     | 0.10        | 4.93          | 49.30        |
| France                    | 0.16         | 6.98          | 43.40        | Brazil                    | 0.06        | 4.19          | 69.83        |
| Netherlands               | 0.16         | 6.80          | 43.65        | Spain                     | 0.05        | 3.68          | 73.60        |
| Poland                    | 0.34         | 6.33          | 18.78        | Uzbekistan                | 0.06        | 2.25          | 37.50        |
| Others                    | 6.49         | 124.43        | 19.19        | Others                    | 1.77        | 40.93         | 69.51        |
| <b>World+<br/>(Total)</b> | <b>19.34</b> | <b>376.45</b> | <b>19.46</b> | <b>World+<br/>(Total)</b> | <b>4.73</b> | <b>163.96</b> | <b>34.66</b> |

| Country                   | Onion       |              |              | Country                   | Brinjal     |              |              |
|---------------------------|-------------|--------------|--------------|---------------------------|-------------|--------------|--------------|
|                           | Area        | Production   | Productivity |                           | Area        | Production   | Productivity |
| China                     | 1.03        | 22.35        | 21.77        | China                     | 0.79        | 28.46        | 36.11        |
| <b>India</b>              | <b>1.22</b> | <b>19.30</b> | <b>15.86</b> | <b>India</b>              | <b>0.72</b> | <b>13.44</b> | <b>18.62</b> |
| USA                       | 0.06        | 3.16         | 54.47        | Iran                      | 0.04        | 1.35         | 31.89        |
| Iran                      | 0.07        | 2.38         | 33.96        | Egypt                     | 0.04        | 1.19         | 27.85        |
| Russian Fed.              | 0.09        | 1.98         | 23.15        | Turkey                    | 0.03        | 0.83         | 31.09        |
| Turkey                    | 0.06        | 1.90         | 29.86        | Iraq                      | 0.02        | 0.51         | 21.68        |
| Egypt                     | 0.05        | 1.90         | 35.96        | Indonesia                 | 0.05        | 0.51         | 10.98        |
| Pakistan                  | 0.13        | 1.66         | 13.19        | Japan                     | 0.01        | 0.32         | 33.11        |
| Brazil                    | 0.06        | 1.54         | 26.81        | Italy                     | 0.01        | 0.22         | 21.47        |
| Algeria                   | 0.05        | 1.34         | 27.62        | Philippines               | 0.02        | 0.22         | 10.33        |
| Others                    | 1.63        | 28.28        | 17.35        | Others                    | 0.17        | 2.36         | 13.88        |
| <b>World+<br/>(Total)</b> | <b>4.44</b> | <b>85.80</b> | <b>19.32</b> | <b>World+<br/>(Total)</b> | <b>1.87</b> | <b>49.42</b> | <b>26.43</b> |

Continued ....

## India's Position in World Agriculture

(Area: million ha, Production: million t, Productivity: t/ha)

| Country                   | Cabbage and other Brassica |              |              | Country                   | Cauliflower and Broccoli |              |              |
|---------------------------|----------------------------|--------------|--------------|---------------------------|--------------------------|--------------|--------------|
|                           | Area                       | Production   | Productivity |                           | Area                     | Production   | Productivity |
| China                     | 0.96                       | 32.27        | 33.68        | China                     | 0.45                     | 9.18         | 20.25        |
| India                     | <b>0.37</b>                | <b>8.53</b>  | <b>22.94</b> | India                     | <b>0.40</b>              | <b>7.89</b>  | <b>19.62</b> |
| Russian Fed.              | 0.11                       | 3.33         | 29.92        | Spain                     | 0.03                     | 0.54         | 17.79        |
| Rep of Korea              | 0.03                       | 2.43         | 70.94        | Mexico                    | 0.03                     | 0.48         | 15.06        |
| Japan                     | 0.03                       | 2.36         | 79.34        | Italy                     | 0.02                     | 0.38         | 24.37        |
| Ukraine                   | 0.08                       | 2.08         | 26.63        | France                    | 0.02                     | 0.34         | 19.11        |
| Indonesia                 | 0.06                       | 1.41         | 22.01        | USA                       | 0.01                     | 0.29         | 20.49        |
| USA                       | 0.02                       | 1.24         | 50.90        | Poland                    | 0.01                     | 0.28         | 21.86        |
| Romania                   | 0.06                       | 1.16         | 21.05        | Pakistan                  | 0.01                     | 0.23         | 17.13        |
| Angola                    | 0.08                       | 1.14         | 13.87        | Egypt                     | 0.01                     | 0.18         | 29.00        |
| Poland                    | 0.02                       | 1.02         | 45.47        | Others                    | 0.25                     | 2.50         | 10.00        |
| Others                    | 0.61                       | 14.40        | 23.61        |                           |                          |              |              |
| <b>World+<br/>(Total)</b> | <b>2.44</b>                | <b>71.44</b> | <b>29.28</b> | <b>World+<br/>(Total)</b> | <b>1.25</b>              | <b>22.28</b> | <b>17.82</b> |

| Country              | Okra         |             |              |
|----------------------|--------------|-------------|--------------|
|                      | Area         | Production  | Productivity |
| India                | <b>0.53</b>  | <b>6.35</b> | <b>11.96</b> |
| Nigeria              | 0.39         | 1.10        | 2.86         |
| Sudan (former)       | 0.02         | 0.26        | 11.90        |
| Iraq                 | 0.02         | 0.14        | 7.76         |
| Cote d'Ivoire        | 0.05         | 0.14        | 2.78         |
| Pakistan             | 0.01         | 0.11        | 7.66         |
| Egypt                | 0.01         | 0.10        | 13.20        |
| Cameroon             | 0.02         | 0.07        | 3.03         |
| Ghana                | 0.00         | 0.06        | 20.60        |
| Saudi Arabia         | 0.00         | 0.05        | 14.20        |
| Others               | 0.04         | 0.30        | 7.50         |
| <b>World+(Total)</b> | <b>1.100</b> | <b>8.69</b> | <b>7.90</b>  |

Source : *Horticultural Statistics at a Glance 2015*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India. (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).



**Table 8.8: Major world producers of fruits 2013**

(Area: million ha, Production: million t, Productivity: t/ha)

| Country                   | Banana      |               |              | Country                   | Grapes      |              |              |
|---------------------------|-------------|---------------|--------------|---------------------------|-------------|--------------|--------------|
|                           | Area        | Production    | Productivity |                           | Area        | Production   | Productivity |
| <b>India</b>              | <b>0.80</b> | <b>27.58</b>  | <b>34.64</b> | <b>China</b>              | 0.73        | 11.65        | 15.89        |
| <b>China</b>              | 0.44        | 12.37         | 27.92        | <b>Italy</b>              | 0.70        | 8.01         | 11.41        |
| <b>Philippines</b>        | 0.45        | 8.65          | 19.39        | <b>USA</b>                | 0.39        | 7.74         | 19.62        |
| <b>Brazil</b>             | 0.49        | 6.89          | 14.21        | <b>Spain</b>              | 0.94        | 7.48         | 7.92         |
| <b>Ecuador</b>            | 0.19        | 6.00          | 31.78        | <b>France</b>             | 0.76        | 5.52         | 7.26         |
| <b>Indonesia</b>          | 0.10        | 5.36          | 56.41        | <b>Turkey</b>             | 0.47        | 4.01         | 8.56         |
| <b>Guatemala</b>          | 0.07        | 3.19          | 45.82        | <b>Chile</b>              | 0.22        | 3.30         | 15.01        |
| <b>Angola</b>             | 0.13        | 3.10          | 24.45        | <b>Argentina</b>          | 0.23        | 2.88         | 12.33        |
| <b>Tanzania</b>           | 0.47        | 2.68          | 5.70         | <b>India</b>              | <b>0.12</b> | <b>2.48</b>  | <b>21.04</b> |
| <b>Burundi</b>            | 0.18        | 2.24          | 12.74        | <b>Iran</b>               | 0.21        | 2.05         | 9.86         |
| <b>Others</b>             | 1.79        | 28.67         | 16.02        | <b>Others</b>             | 2.38        | 22.06        | 9.27         |
| <b>World+<br/>(Total)</b> | <b>5.08</b> | <b>106.71</b> | <b>21.01</b> | <b>World+<br/>(Total)</b> | <b>7.16</b> | <b>77.18</b> | <b>10.78</b> |

| Country                   | Pineapple   |              |              | Country                   | Mango & Guava |              |              |
|---------------------------|-------------|--------------|--------------|---------------------------|---------------|--------------|--------------|
|                           | Area        | Production   | Productivity |                           | Area          | Production   | Productivity |
| <b>Costa Rica</b>         | 0.05        | 2.69         | 59.67        | <b>India</b>              | <b>2.50</b>   | <b>18.00</b> | <b>7.20</b>  |
| <b>Brazil</b>             | 0.06        | 2.48         | 39.30        | <b>China</b>              | 0.48          | 4.62         | 9.60         |
| <b>Philippines</b>        | 0.06        | 2.46         | 40.47        | <b>Thailand</b>           | 0.38          | 3.14         | 8.27         |
| <b>Thailand</b>           | 0.09        | 2.21         | 24.10        | <b>Indonesia</b>          | 0.20          | 2.06         | 10.50        |
| <b>Indonesia</b>          | 0.02        | 1.84         | 114.82       | <b>Mexico</b>             | 0.20          | 1.90         | 9.56         |
| <b>China</b>              | 0.08        | 1.78         | 22.72        | <b>Pakistan</b>           | 0.17          | 1.66         | 9.68         |
| <b>India</b>              | <b>0.11</b> | <b>1.57</b>  | <b>14.96</b> | <b>Brazil</b>             | 0.07          | 1.16         | 16.53        |
| <b>Nigeria</b>            | 0.18        | 1.42         | 7.89         | <b>Bangladesh</b>         | 0.12          | 0.95         | 7.66         |
| <b>Mexico</b>             | 0.02        | 0.77         | 43.23        | <b>Nigeria</b>            | 0.13          | 0.85         | 6.54         |
| <b>Colombia</b>           | 0.01        | 0.64         | 44.78        | <b>Egypt</b>              | 0.09          | 0.83         | 9.09         |
| <b>Others</b>             | 0.35        | 6.93         | 19.80        | <b>Others</b>             | 1.10          | 8.12         | 7.41         |
| <b>World+<br/>(Total)</b> | <b>1.02</b> | <b>24.79</b> | <b>24.30</b> | <b>World+<br/>(Total)</b> | <b>5.44</b>   | <b>43.30</b> | <b>7.96</b>  |

Continued ....

## India's Position in World Agriculture

(Area: million ha, Production: million t, Productivity: t/ha)

| Country                   | Apple       |              |              | Country                   | Orange      |              |              |
|---------------------------|-------------|--------------|--------------|---------------------------|-------------|--------------|--------------|
|                           | Area        | Production   | Productivity |                           | Area        | Production   | Productivity |
| China                     | 2.41        | 39.68        | 16.47        | Brazil                    | 0.70        | 17.55        | 24.99        |
| USA                       | 0.13        | 4.08         | 31.11        | USA                       | 0.25        | 7.57         | 30.53        |
| Turkey                    | 0.17        | 3.13         | 18.07        | China                     | 0.58        | 7.47         | 12.97        |
| Poland                    | 0.19        | 3.09         | 15.95        | India                     | <b>0.63</b> | <b>6.43</b>  | <b>10.13</b> |
| Italy                     | 0.06        | 2.22         | 40.11        | Mexico                    | 0.32        | 4.41         | 13.75        |
| India                     | <b>0.31</b> | <b>1.92</b>  | <b>6.14</b>  | Spain                     | 0.15        | 3.39         | 22.51        |
| France                    | 0.04        | 1.74         | 43.98        | Egypt                     | 0.102       | 2.89         | 24.31        |
| Chile                     | 0.04        | 1.71         | 45.53        | Turkey                    | 0.05        | 1.78         | 32.53        |
| Iran                      | 0.13        | 1.69         | 13.05        | Italy                     | 0.09        | 1.71         | 19.06        |
| Russia Fed.               | 0.19        | 1.57         | 8.44         | South Africa              | 0.04        | 1.67         | 38.03        |
| Others                    | 1.55        | 20.00        | 12.90        | Others                    | 1.14        | 16.58        | 14.54        |
| <b>World+<br/>(Total)</b> | <b>5.22</b> | <b>80.82</b> | <b>15.48</b> | <b>World+<br/>(Total)</b> | <b>4.08</b> | <b>71.45</b> | <b>17.51</b> |

| Country                        | Papaya      |              |              |
|--------------------------------|-------------|--------------|--------------|
|                                | Area        | Production   | Productivity |
| India                          | <b>0.14</b> | <b>5.54</b>  | <b>41.07</b> |
| Brazil                         | 0.03        | 1.58         | 49.47        |
| Indonesia                      | 0.01        | 0.87         | 75.76        |
| Nigeria                        | 0.09        | 0.77         | 8.22         |
| Mexico                         | 0.01        | 0.76         | 51.42        |
| Dominican Republic             | 0.01        | 0.53         | 48.33        |
| Congo, Democratic Republic     | 0.01        | 0.23         | 16.67        |
| Thailand                       | 0.01        | 0.22         | 16.54        |
| Venezuela, Bolivarian Republic | 0.01        | 0.20         | 18.75        |
| Cuba                           | 0.01        | 0.20         | 31.98        |
| Others                         | 0.10        | 1.52         | 15.20        |
| <b>World+(Total)</b>           | <b>0.44</b> | <b>12.42</b> | <b>28.23</b> |

Source : *Horticultural Statistics at a Glance 2015*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India. (Website: [agricoop.nic.in/imagedefault/hortstat\\_glance.pdf](http://agricoop.nic.in/imagedefault/hortstat_glance.pdf)).

Table 8.9: Yield per hectare of different crops in selected countries-2013 (Provisional)

| Continent/Country | Paddy       | Wheat       | Maize       | Total cereals* | Total pulses* | Potato       | Soybean    | (kg / ha)      |            |
|-------------------|-------------|-------------|-------------|----------------|---------------|--------------|------------|----------------|------------|
|                   |             |             |             |                |               |              |            | Coffee (Green) |            |
| Algeria           | 1778        | 1910        | 3365        | 1678           | 998           | 30288        | N.A.       | N.A.           | N.A.       |
| Argentina         | 6719        | 2662        | 6604        | 4136           | 1216          | 28777        | 2539       | N.A.           | N.A.       |
| Australia         | 10218       | 1761        | 6444        | 2279           | 1520          | 38543        | 2234       | N.A.           | N.A.       |
| Austria           | N.A.        | 5374        | 8118        | 6205           | 1864          | 28630        | 1970       | N.A.           | N.A.       |
| Bangladesh        | 4376        | 3014        | 6624        | 4394           | 1151          | 19379        | 1550       | N.A.           | N.A.       |
| Belarus           | N.A.        | 3062        | 5566        | 3486           | 2609          | 19362        | N.A.       | N.A.           | N.A.       |
| Belgium           | N.A.        | 8935        | 11150       | 8666           | 4293          | 46149        | N.A.       | N.A.           | N.A.       |
| Brazil            | 5007        | 2749        | 5254        | 4585           | 1026          | 27752        | 2929       | 1422           | 1422       |
| Bulgaria          | 5490        | 4248        | 5476        | 3678           | 1300          | 12143        | 2000       | N.A.           | N.A.       |
| Canada            | N.A.        | 3594        | 9588        | 6230           | 1715          | 32512        | 2857       | N.A.           | N.A.       |
| Chile             | 6205        | 5814        | 10632       | 3625           | 1983          | 23379        | N.A.       | N.A.           | N.A.       |
| China, Mainland   | 6717        | 5056        | 6016        | 5824           | 1517          | 17088        | 1760       | 2355           | 2355       |
| Cuba              | 3400        | N.A.        | 2392        | 2812           | 1030          | 21595        | N.A.       | 319            | 319        |
| Denmark           | N.A.        | 7284        | 5914        | 6310           | 3897          | 40000        | N.A.       | N.A.           | N.A.       |
| Egypt             | 9530        | 6668        | 7733        | 7269           | 3042          | 26966        | 2875       | N.A.           | N.A.       |
| France            | 4039        | 7254        | 8139        | 7524           | 3949          | 43404        | 2565       | N.A.           | N.A.       |
| Germany           | N.A.        | 7998        | 8828        | 6900           | 2910          | 39826        | 2000       | N.A.           | N.A.       |
| <b>India</b>      | <b>3623</b> | <b>3154</b> | <b>2452</b> | <b>3020</b>    | <b>639</b>    | <b>22761</b> | <b>979</b> | <b>846</b>     | <b>846</b> |
| Indonesia         | 5152        | N.A.        | 4844        | 5082           | 1155          | 16270        | 1416       | 563            | 563        |
| Iran              | 5088        | 1986        | 5977        | 2296           | 902           | 29263        | 2447       | N.A.           | N.A.       |
| Israel            | N.A.        | 2372        | 22556       | 3862           | 4645          | 29526        | N.A.       | N.A.           | N.A.       |
| Italy             | 6301        | 3822        | 8699        | 5370           | 1880          | 24859        | 3387       | N.A.           | N.A.       |
| Japan             | 6728        | 3862        | 2727        | 6134           | 2133          | 31325        | 1552       | N.A.           | N.A.       |
| Korea Dem. Rep.   | 5304        | 1500        | 3799        | 3833           | 1020          | 12528        | 1115       | N.A.           | N.A.       |
| Korea Rep. of     | 6764        | 3680        | 5059        | 6720           | 1109          | 26520        | 1925       | N.A.           | N.A.       |
| Mexico            | 2425        | 2432        | 3194        | 3453           | 866           | 2420         | 2417       | 2404           | 2404       |
| Morocco           | 7543        | 2164        | 663         | 1017           | 711           | 36357        | 1000       | N.A.           | N.A.       |

## India's Position in World Agriculture

| Continent/Country | Paddy       | Wheat       | Maize       | Total cereals* | Total pulses* | Potato       | Soybean     | Coffee (Green) |
|-------------------|-------------|-------------|-------------|----------------|---------------|--------------|-------------|----------------|
| Myanmar           | 3836        | 1799        | 3617        | 3308           | 1408          | 15122        | 1228        | 660            |
| Nepal             | 3171        | 2290        | 2353        | 2714           | 956           | 13641        | 1172        | 209            |
| Netherlands       | N.A.        | 8719        | 11523       | 8545           | 3253          | 43652        | N.A.        | N.A.           |
| New Zealand       | N.A.        | 9105        | 10821       | 8012           | 3042          | 46667        | N.A.        | N.A.           |
| Pakistan          | 2437        | 2787        | 4231        | 2971           | 388           | 21802        | 722         | N.A.           |
| Peru              | 7711        | 1498        | 3269        | 4147           | 1185          | 14413        | 1790        | 641            |
| Philippines       | 3885        | N.A.        | 2878        | 3493           | 813           | 14920        | 3523        | 673            |
| Poland            | N.A.        | 4430        | 6584        | 3712           | 2341          | 18785        | N.A.        | N.A.           |
| Portugal          | 5394        | 1729        | 8306        | 4085           | 798           | 18224        | N.A.        | N.A.           |
| Russian Fed.      | 4947        | 2229        | 5011        | 1859           | 1293          | 14464        | 1360        | N.A.           |
| Senegal           | 3913        | N.A.        | 1474        | 1310           | 427           | 24561        | N.A.        | N.A.           |
| South Africa      | 2609        | 3614        | 3842        | 3689           | 1114          | 34121        | 1518        | N.A.           |
| Spain             | 7522        | 3583        | 11326       | 2970           | 859           | 30937        | 2800        | N.A.           |
| Sri Lanka         | 3889        | N.A.        | 3087        | 3843           | 1274          | 15321        | 1696        | 637            |
| Syria             | N.A.        | 126         | 3647        | 1643           | 934           | 125          | 125         | N.A.           |
| Thailand          | 2915        | 1250        | 4418        | 3140           | 960           | 15001        | 1793        | 980            |
| Tunisia           | N.A.        | 1890        | N.A.        | 1674           | 1107          | 16042        | N.A.        | N.A.           |
| Turkey            | 8138        | 2837        | 8939        | 2956           | 1491          | 31576        | 4161        | N.A.           |
| Ukraine           | 5994        | 3471        | 6412        | 3174           | 1558          | 15995        | 2054        | N.A.           |
| UK                | N.A.        | 7381        | N.A.        | 6213           | 3479          | 40144        | N.A.        | N.A.           |
| USA               | 8624        | 3172        | 9970        | 5925           | 1942          | 46612        | 2915        | 1075           |
| Venezuela         | 4233        | 633         | 3648        | 3054           | 819           | 17694        | 1156        | 374            |
| <b>World</b>      | <b>4486</b> | <b>3268</b> | <b>5500</b> | <b>3639</b>    | <b>909</b>    | <b>19468</b> | <b>2475</b> | <b>880</b>     |

Note : 1. N.A.: Not Available. 2. \*: Figures for total cereals and total pulses are given for the year 2012.

Source : 1. *Fertilizer Statistics, 2014-15*, The Fertilizer Association of India, New Delhi.  
2. Website: [www.fao.org](http://www.fao.org)

**Table 8.10: Rank of India in World production of major crops**

(Production in '000 t)

| Year                      | 2012            |               |               | 2013            |                |               |
|---------------------------|-----------------|---------------|---------------|-----------------|----------------|---------------|
| Crop                      | Country         | Production    | % Share       | Country         | Production     | % Share       |
| <b>Paddy</b>              |                 |               |               |                 |                |               |
|                           | <b>World</b>    | <b>738188</b> | <b>100.00</b> | <b>World</b>    | <b>740903</b>  | <b>100.00</b> |
|                           | 1. China        | 205936        | 27.90         | 1. China        | 205207         | 27.70         |
|                           | <b>2. India</b> | <b>157800</b> | <b>21.38</b>  | <b>2. India</b> | <b>159200</b>  | <b>21.49</b>  |
|                           | 3. Indonesia    | 69056         | 9.35          | 3. Indonesia    | 71280          | 9.62          |
|                           | 4. Bangladesh   | 50497         | 6.84          | 4. Bangladesh   | 51500          | 6.95          |
| <b>Wheat</b>              |                 |               |               |                 |                |               |
|                           | <b>World</b>    | <b>671497</b> | <b>100.00</b> | <b>World</b>    | <b>715909</b>  | <b>100.00</b> |
|                           | 1. China        | 121030        | 18.02         | 1. China        | 121931         | 17.03         |
|                           | <b>2. India</b> | <b>94880</b>  | <b>14.13</b>  | <b>2. India</b> | <b>93510</b>   | <b>13.06</b>  |
|                           | 3. USA          | 61677         | 9.19          | 3. USA          | 57967          | 8.10          |
|                           | 4. France       | 40301         | 6.00          | 4. Canada       | 37530          | 5.24          |
|                           | 5. Russian Fed. | 37720         | 5.62          | 5. Australia    | 22856          | 3.19          |
| <b>Maize</b>              |                 |               |               |                 |                |               |
|                           | <b>World</b>    | <b>872792</b> | <b>100.00</b> | <b>World</b>    | <b>1018112</b> | <b>100.00</b> |
|                           | 1. USA          | 273820        | 31.37         | 1. USA          | 353699         | 34.74         |
|                           | 2. China        | 205719        | 23.57         | 2. China        | 218624         | 21.47         |
|                           | 3. Brazil       | 71073         | 8.14          | 3. Brazil       | 80273          | 7.88          |
|                           | <b>4. India</b> | <b>22260</b>  | <b>2.55</b>   | <b>4. India</b> | <b>23290</b>   | <b>2.29</b>   |
|                           | 5. Mexico       | 22069         | 2.53          | 5. Mexico       | 22664          | 2.23          |
|                           | 6. Indonesia    | 19387         | 2.22          | 6. Indonesia    | 18512          | 1.82          |
|                           | 7. France       | 15614         | 1.79          |                 |                |               |
| <b>Groundnut in Shell</b> |                 |               |               |                 |                |               |
|                           | <b>World</b>    | <b>40475</b>  | <b>100.00</b> | <b>World</b>    | <b>45654</b>   | <b>100.00</b> |
|                           | 1. China        | 16857         | 41.65         | 1. China        | 17019          | 37.28         |
|                           | <b>2 India</b>  | <b>4695</b>   | <b>11.60</b>  | <b>2 India</b>  | <b>9472</b>    | <b>20.75</b>  |
|                           | 3. Nigeria      | 3071          | 7.59          | 3. Nigeria      | 3000           | 6.57          |
|                           | 4. USA          | 3058          | 7.55          | 4. Myanmar      | 1375           | 3.01          |
|                           | 5. Myanmar      | 1372          | 3.39          |                 |                |               |
|                           | 6. Senegal      | 673           | 1.66          |                 |                |               |

- Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.
2. *Pocket Book of Agricultural Statistics, 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India (Website: eands.dacnet.nic.in/PDF/Pocket-Book2015.pdf).



A photograph of an agricultural field with several people working. The field is filled with green crops, and there are trees in the background. A white oval is superimposed on the center of the image, containing text in Hindi and English.

भाग-IX  
कृषि अनुसंधान एवं शिक्षा में निवेश

SECTION-IX  
Investment in  
Agricultural Research and Education





**Table 9.1(a): Gross domestic product by economic activity  
(at current prices)**

(Rs in crores)

| Items  | 2008-09        | 2009 -10       | 2010-11        | 2011-12<br>(SRE) | 2012-13<br>(FRE) | 2013-14<br>(PE) |
|--|----------------|----------------|----------------|------------------|------------------|-----------------|
| <b>Agriculture</b>                               | 806646         | 928586         | 1143517        | 1300569          | 1417468          | -               |
| <b>Forestry &amp; Logging</b>                    | 92485          | 104558         | 118898         | 131667           | 149405           | -               |
| <b>Fishing</b>                                   | 44073          | 50370          | 57271          | 66862            | 78053            | -               |
| <b>Total</b>                                     | <b>943204</b>  | <b>1083514</b> | <b>1319686</b> | <b>1499098</b>   | <b>1644926</b>   | <b>1906348</b>  |
| <b>Total net domestic product at factor cost</b> | <b>4738370</b> | <b>5449104</b> | <b>6488641</b> | <b>7511795</b>   | <b>8372744</b>   | <b>9299345</b>  |
| <b>Per capita income NNP (Rs)</b>                | <b>40775</b>   | <b>46249</b>   | <b>54021</b>   | <b>61855</b>     | <b>67839</b>     | <b>74380</b>    |

**Note** : TRE: Third Revised Estimates, SRE: Second Revised Estimates, FRE: First Revised Estimates and PE: Provisional Estimates, - : Not available

**Source** : *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.

**Table 9.1 (b): Percentage share of gross domestic product (GDP)  
at 2004-05 prices**

| Industry                                      | 2006-07      | 2007-08      | 2008-09      | 2009-10      | 2010-11<br>(TRE) | 2011-12<br>(SRE) | 2012-13<br>(FRE) | 2013-14<br>(PE) |
|---|--------------|--------------|--------------|--------------|------------------|------------------|------------------|-----------------|
| <b>I. Agriculture, forestry &amp; Fishing</b> | <b>17.4</b>  | <b>16.8</b>  | <b>15.8</b>  | <b>14.6</b>  | <b>14.6</b>      | <b>14.4</b>      | <b>13.9</b>      | <b>13.9</b>     |
| Agriculture                                   | 14.7         | 14.3         | 13.4         | 12.3         | 12.4             | 12.3             | 11.8             | -               |
| Forestry & logging                            | 1.8          | 1.7          | 1.6          | 1.5          | 1.4              | 1.4              | 1.3              | -               |
| Fishing                                       | 0.9          | 0.8          | 0.8          | 0.8          | 0.7              | 0.7              | 0.8              | -               |
| <b>II. Industry</b>                           | <b>28.7</b>  | <b>28.7</b>  | <b>28.1</b>  | <b>28.3</b>  | <b>27.9</b>      | <b>28.2</b>      | <b>27.3</b>      | <b>26.1</b>     |
| Mining & quarrying                            | 2.6          | 2.5          | 2.4          | 2.3          | 2.2              | 2.1              | 2.0              | 1.9             |
| Manufacturing                                 | 16.0         | 16.1         | 15.8         | 16.2         | 16.2             | 16.3             | 15.8             | 14.9            |
| Electricity Gas & water supply                | 2.1          | 2.0          | 2.0          | 2.0          | 1.9              | 1.9              | 1.9              | 1.9             |
| Construction                                  | 8.0          | 8.1          | 8.0          | 7.8          | 7.6              | 7.9              | 7.7              | 7.4             |
| <b>III. Services</b>                          | <b>54.0</b>  | <b>54.4</b>  | <b>56.1</b>  | <b>57.1</b>  | <b>57.5</b>      | <b>57.4</b>      | <b>58.8</b>      | <b>59.9</b>     |
| <b>Gross domestic product at factor cost</b>  | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b> | <b>100.0</b>     | <b>100.0</b>     | <b>100.0</b>     | <b>100.0</b>    |

**Note** : TRE: Third Revised Estimates, SRE: Second Revised Estimates, FRE: First Revised Estimates and PE: Provisional Estimates, - : Not available

**Source** : 1. *Agricultural Statistics at a Glance, 2014*, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India.  
2. Central Statistic Office.

**Table 9.2: National expenditure on research and development (R&D) and in relation to Gross National Product (GNP)**

(million Rs)

| Year    | R&D expenditure at current prices | GNP at current prices | GDP at current prices | R&D as % of GNP | R&D as % of GDP |
|---------|-----------------------------------|-----------------------|-----------------------|-----------------|-----------------|
| 1996-97 | 89136.1                           | 12887060              | 13017880              | 0.69            | 0.68            |
| 1997-98 | 106113.4                          | 14344080              | 14476130              | 0.74            | 0.73            |
| 1998-99 | 124731.7                          | 16537710              | 16687390              | 0.75            | 0.75            |
| 1999-00 | 143976.0                          | 18318420              | 18472730              | 0.79            | 0.78            |
| 2000-01 | 161988.0                          | 19692490              | 19919820              | 0.82            | 0.81            |
| 2001-02 | 170381.5                          | 21476770              | 21677450              | 0.79            | 0.79            |
| 2002-03 | 180881.6                          | 23215100              | 23382000              | 0.78            | 0.77            |
| 2003-04 | 200863.4                          | 26015080              | 26222160              | 0.77            | 0.77            |
| 2004-05 | 241172.4                          | 29490890              | 29714640              | 0.82            | 0.81            |
| 2005-06 | 299325.8                          | 33643870              | 33905030              | 0.89            | 0.88            |
| 2006-07 | 342383.9                          | 39200420              | 39532760              | 0.87            | 0.87            |
| 2007-08 | 394377.7                          | 45615740              | 45820860              | 0.86            | 0.86            |
| 2008-09 | 473533.8                          | 52706440              | 53035670              | 0.90            | 0.89            |
| 2009-10 | 530413.0                          | 60535850              | 60914850              | 0.88            | 0.87            |
| 2010-11 | 620534.7*                         | 70785120@             | 71574120@             | 0.88            | 0.87            |
| 2011-12 | 726204.4                          | 81982760#             | 82799750#             | 0.89            | 0.88            |

**Note** : GNP: Gross National Product, GDP: Gross Domestic Product, R&D: Research and Development, GNP / GDP figures are based on 2004-05 Series, R&D / GNP & R&D / GDP ratio have been revised as per the New Series GNP/GDP figures, \*: Estimated, @: Quick estimates, #: Advance estimates.

**Source** : 1. *Research and Development Statistics, 2011-12*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.  
 2. Data on R&D expenditure collected and compiled by DST.  
 3. Data on GNP/GDP- Economic Survey, 2011-12

**Table 9.3: National expenditure on research & development at current and constant prices**

(million Rs)

| Year    | National research and development expenditure |                                 |
|---------|---|---------------------------------|
|         | Current prices                                | Constant prices (base: 2004-05) |
| 1985-86 | 20687.8                                       | 79809.6                         |
| 1986-87 | 24354.0                                       | 87928.9                         |
| 1987-88 | 28530.7                                       | 94067.1                         |
| 1988-89 | 33472.6                                       | 101981.2                        |
| 1989-90 | 37257.4                                       | 104692.8                        |
| 1990-91 | 39741.7                                       | 100898.4                        |
| 1991-92 | 45128.1                                       | 100923.2                        |
| 1992-93 | 50046.0                                       | 102878.6                        |
| 1993-94 | 60730.2                                       | 113500.7                        |
| 1994-95 | 66224.4                                       | 112676.4                        |
| 1995-96 | 74838.8                                       | 116485.1                        |
| 1996-97 | 89136.1                                       | 128607.3                        |
| 1997-98 | 106113.4                                      | 143753.0                        |
| 1998-99 | 124731.7                                      | 156361.6                        |
| 1999-00 | 143976.0                                      | 175261.9                        |
| 2000-01 | 161988.0                                      | 190755.9                        |
| 2001-02 | 170381.5                                      | 194419.7                        |
| 2002-03 | 180881.6                                      | 198819.3                        |
| 2003-04 | 200863.4                                      | 212878.3                        |
| 2004-05 | 241172.4                                      | 241172.4                        |
| 2005-06 | 299325.8                                      | 287207.3                        |
| 2006-07 | 342383.9                                      | 308740.4                        |
| 2007-08 | 394377.7                                      | 335404.3                        |
| 2008-09 | 473533.8                                      | 371350.0                        |
| 2009-10 | 530413.0                                      | 392533.7                        |
| 2010-11 | 620534.7*                                     | 423698.5 <sup>@</sup>           |
| 2011-12 | 726204.4*                                     | 458095.5 <sup>#</sup>           |

**Note** : 1. For working out research and development expenditure at constant prices (Base year 2004-05), Economic Survey 2011-12 has been used. 2.\* Estimated.3.@ Quick estimates.4.# Advance estimates.

**Source** : *Research and Development Statistics, 2011-12*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

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**Table 9.4: Expenditure on research and development by major scientific agencies under the Central Government**

(million Rs)

| Agency  | Research and Development Expenditure |                 |                 |                 |                 |                 |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|   | 2000-01                              | 2005-06         | 2006-07         | 2007-08         | 2008-09         | 2009-10         |
| <b>Council of Scientific &amp; Industrial Research</b>        | 8641.20                              | 14270.4         | 14574.6         | 18637.0         | 23552.0         | 26664.4         |
| <b>Defence Research &amp; Development Organisation</b>        | 33593.20                             | 52833.5         | 53628.2         | 61045.5         | 76990.7         | 84753.8         |
| <b>Department of Atomic Energy</b>                            | 10055.15                             | 17525.0         | 20600.9         | 21385.7         | 29825.0         | 38582.1         |
| <b>Department of Bio-technology</b>                           | 1205.79                              | 3258.5          | 4323.2          | 4915.9          | 6352.3          | 7273.8          |
| <b>Ministry of Communication &amp; Information technology</b> | 510.70                               | 1678.5          | 1991.8          | 2362.2          | 2430.4          | 3279.6          |
| <b>Ministry of New &amp; Renewable Energy</b>                 | 122.70                               | 96.2            | 161.2           | 235.3           | 168.3           | 265.1           |
| <b>Ministry of Earth Sciences*</b>                            | 842.26                               | 2354.8          | 2565.5          | 2929.8          | 2717.6          | 4482.4          |
| <b>Department of Science &amp; Technology</b>                 | 3114.63                              | 12370.5         | 13594.6         | 16760.1         | 19911.6         | 22229.0         |
| <b>Department of Space</b>                                    | 19053.99                             | 26676.0         | 29886.7         | 32780.0         | 34935.7         | 41629.6         |
| <b>Indian Council of Agricultural Research</b>                | 11617.40                             | 17172.7         | 20141.6         | 19923.8         | 25838.0         | 28813.0         |
| <b>Indian Council of Medical Research</b>                     | 1491.20                              | 3310.0          | 3940.0          | 2666.5          | 5641.8          | 5835.0          |
| <b>Ministry of Environment &amp; Forest</b>                   | 2728.60                              | 2353.1          | 2757.1          | 3112.1          | 3761.3          | 4155.7          |
| <b>Total</b>  | <b>92976.82</b>                      | <b>153899.4</b> | <b>168165.4</b> | <b>186754.0</b> | <b>232124.6</b> | <b>267963.5</b> |

**Note** : 1. Not including Public Sector Research and Development Expenditure. 2.\*: Formerly Department of Ocean Development 3. Data includes both Plan and Non Plan R&D Expenditure.

**Source** : *Research and Development Statistics, 2011-12*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

**Table 9.5: Percentage expenditure on research and development by major scientific agencies under the central sector to the total research and development expenditure**

| Agency   | Research and Development Expenditure<br>(as % of total R & D Expenditure ) |                 |                 |                 |                 |                 |
|--|--|-----------------|-----------------|-----------------|-----------------|-----------------|
|  | 2000-01  | 2005-06         | 2006-07         | 2007-08         | 2008-09         | 2009-10         |
| Council of Scientific & Industrial Research        | 9.29   | 9.27            | 8.67            | 9.98            | 10.15           | 9.95            |
| Defence Research & Development Organisation        | 36.13  | 34.33           | 31.89           | 32.69           | 33.17           | 31.63           |
| Department of Atomic Energy                        | 10.81  | 11.39           | 12.25           | 11.45           | 12.85           | 14.40           |
| Department of Biotechnology                        | 1.30   | 2.12            | 2.57            | 2.63            | 2.74            | 2.71            |
| Ministry of Communication & Information technology | 0.55   | 1.09            | 1.18            | 1.26            | 1.05            | 1.22            |
| Ministry of New & Renewable Energy                 | 0.13   | 0.06            | 0.10            | 0.13            | 0.07            | 0.10            |
| Ministry of Earth Sciences*                        | 0.91   | 1.53            | 1.53            | 1.57            | 1.17            | 1.67            |
| Department of Science & Technology                 | 3.35   | 8.04            | 8.08            | 8.97            | 8.58            | 8.30            |
| Department of Space                                | 20.49  | 17.33           | 17.77           | 17.55           | 15.05           | 15.54           |
| Indian Council of Agricultural Research            | 12.49  | 11.16           | 11.98           | 10.67           | 11.13           | 10.75           |
| Indian Council of Medical Research                 | 1.60   | 2.15            | 2.34            | 1.43            | 2.43            | 2.18            |
| Ministry of Environment & Forest                   | 2.93   | 1.53            | 1.64            | 1.67            | 1.62            | 1.55            |
| <b>Total</b>                                       | <b>100.00</b>  | <b>100.00</b>   | <b>100.00</b>   | <b>100.00</b>   | <b>100.00</b>   | <b>100.00</b>   |
| <b>Total R &amp; D Expenditure (million Rs)</b>    | <b>92976.82</b>  | <b>153899.4</b> | <b>168165.4</b> | <b>186754.0</b> | <b>232124.6</b> | <b>267963.5</b> |

Source : *Research and Development Statistics, 2011-12*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

**Table 9.6: Summary of division - wise break up of revenue receipt targets and actual achievement**

(Rs lakh)

| S. No. | Name of the Division                                | Revenue Receipts   |                       |                    |
|--------|---|--------------------|-----------------------|--------------------|
|        |   | Target for 2014-15 | Achievements 2014-15* | Target for 2015-16 |
| 01     | <b>Crop Science</b>                                 | 2268.00            | 1275.74               | 2618.17            |
| 02     | <b>Horticulture Science</b>                         | 1454.70            | 992.54                | 2194.27            |
| 03     | <b>Animal Science</b>                               | 3875.60            | 1868.67               | 4076.03            |
| 04     | <b>Natural Resource Management</b>                  | 1680.10            | 839.38                | 1839.33            |
| 05     | <b>Fisheries</b>                                    | 373.40             | 356.76                | 677.77             |
| 06     | <b>Agricultural Engineering</b>                     | 535.40             | 246.31                | 544.44             |
| 07     | <b>Agricultural Economics &amp; Statistics</b>      | 26.00              | 33.07                 | 73.87              |
| 08     | <b>Agricultural Education</b>                       | 82.20              | 108.38                | 127.88             |
| 09     | <b>Agricultural Extension</b>                       | 0.50               | 0.23                  | 0.53               |
| 10     | <b>Agricultural Scientists Recruitment Board</b>    | 450.60             | 264.03                | 277.24             |
| 11     | <b>Publication &amp; Information Division</b>       | 28.10              | 14.19                 | 15.66              |
| 12     | <b>ICAR Headquarters, New Delhi</b>                 | 189.50             | 44.96                 | 101.16             |
|        | <b>Total Revenue Receipts and Targeted Receipts</b> | <b>10964.10</b>    | <b>6044.98</b>        | <b>12546.35</b>    |

**Note** : \* This does not including the sale proceeds of land, building and vehicles, interest earned on short-term deposits ; and recovery of loans and advances.

**Source** : Indian Council of Agricultural Research, New Delhi (Website [http:// www.icar.org.in](http://www.icar.org.in)).

**Table 9.7: Total budget and expenditure of State Agricultural Universities**  
(million Rs)

| State Agricultural University  | Year                    | State   |              | ICAR        |              | Other Sources |              | Total       |              |
|--|-------------------------|---|--------------|-------------|--------------|---------------|--------------|-------------|--------------|
|  |                         | Alloca-tion   | Expendi-ture | Alloca-tion | Expendi-ture | Alloca-tion   | Expendi-ture | Alloca-tion | Expendi-ture |
| <b>Andhra Pradesh</b>  |                         |   |              |             |              |               |              |             |              |
| <b>Acharya N.G. Ranga Agricultural University, Hyderabad</b>   |                         |   |              |             |              |               |              |             |              |
|  | 2013-14 <sup>(p1)</sup> | 3240.00   | 3408.65      | 416.76      | 416.76       | 107.73        | 107.73       | 3764.49     | 3933.14      |
|  | 2014-15 <sup>(p2)</sup> | 2496.52   | 2517.88      | 165.27      | 165.27       | 13.12         | 13.12        | 2674.90     | 2696.26      |
|  | 2015-16 <sup>(p3)</sup> | 2677.34   | 2677.34      | 227.72      | 227.72       | 13.65         | 13.65        | 2918.71     | 2918.71      |
| <b>Sri Venkateswara Veterinary University, Tirupati</b>  |                         |   |              |             |              |               |              |             |              |
|  | 2013-14                 | 15.00   | 8.30         | 91.37       | 94.30        | 5.64          | -            | 112.02      | 102.60       |
|  | 2014-15                 | 6.13  | 4.43         | 72.81       | 74.62        | 4.38          | -            | 83.32       | 79.05        |
|  | 2015-16                 | 3.97  | 2.60         | 58.30       | 60.76        | 2.80          | -            | 65.07       | 63.36        |
| <b>Professor Jayashankar Telangana State Agricultural University, Administrative Office, Hyderabad</b> |                         |   |              |             |              |               |              |             |              |
|  | 2012-13                 | The University was not in existence w.e.f. 02.06.2014 |              |             |              |               |              |             |              |
|  | 2013-14                 |   |              |             |              |               |              |             |              |
|  | 2014-15                 | 198.27  | **           | 20.49       | **           | 29.58         | **           | 248.34      | **           |
| <b>Sri Konda Laxman Telangana State Horticultural University</b>                                       |                         |   |              |             |              |               |              |             |              |
|  | 2014-15                 | 121.7   | 121.7        | 2.07        | 2.07         | 3.2           | 3.2          | 126.97      | 126.97       |
|  | 2015-16                 | 131.86  | 131.86       | 32.96       | 32.96        | 9.98          | 9.98         | 174.80      | 174.80       |
| <b>Dr YSR Horticultural University, Venkataramannagudem, Tadepalligudem</b>                            |                         |   |              |             |              |               |              |             |              |
|  | 2012-13                 | 546.80  | 504.57       | 95.50       | 91.87        | 163.61        | 209.46       | 805.91      | 805.91       |
|  | 2013-14                 | 534.00  | 550.67       | 74.49       | 74.71        | 89.81         | 72.92        | 698.30      | 698.30       |
|  | 2014-15                 | 432.96  | 432.96       | 104.51      | 104.51       | 132.43        | 132.43       | 669.90      | 669.90       |
| <b>Assam</b>   |                         |   |              |             |              |               |              |             |              |
| <b>Assam Agricultural University, Jorhat</b>   |                         |   |              |             |              |               |              |             |              |
|  | 2013-14                 | 1779.38   | 1784.36      | 659.70      | 657.84       | 251.30        | 256.25       | 2690.38     | 2698.45      |
|  | 2014-15                 | 2239.80   | 2238.56      | 592.13      | 594.12       | 317.02        | 319.05       | 3148.95     | 3151.73      |
|  | 2015-16                 | 1932.90   | 1942.26      | 622.36      | 623.01       | 329.77        | 338.46       | 2885.03     | 2903.73      |
| <b>Bihar</b>   |                         |   |              |             |              |               |              |             |              |
| <b>Birsa Agricultural University, Kanke, Ranchi</b>  |                         |   |              |             |              |               |              |             |              |
|  | 2009-10*                | 449.37  | 449.37       | 205.01      | 205.16       | 13.37         | 13.33        | 667.75      | 667.86       |
|  | 2010-11*                | 509.47  | 469.47       | 422.16      | 299.16       | 20.39         | 20.36        | 952.02      | 788.99       |
|  | 2011-12*                | 803.82  | 670.82       | 313.36      | 436.36       | 28.30         | 28.09        | 1145.48     | 1135.27      |
| <b>Rajendra Agricultural University, Pusa, Samastipur</b>  |                         |   |              |             |              |               |              |             |              |
|  | 2011-12                 | 701.55  | 700.04       | 659.28      | 652.86       | -             | -            | 1360.83     | 1352.90      |
|  | 2012-13                 | 745.88  | 816.12       | 224.31      | 224.08       | 3.79          | 194.20       | 973.99      | 1234.40      |
|  | 2013-14                 | 815.37  | 815.04       | 179.90      | 179.90       | -             | -            | 995.28      | 994.95       |
| <b>Bihar Agricultural University, Sabour, Bhagalpur</b>  |                         |   |              |             |              |               |              |             |              |
|  | 2012-13                 | 229.50  | 229.50       | 9.67        | 9.67         | 0.72          | 0.24         | 239.90      | 239.41       |
|  | 2013-14**               | 346.73  | 346.73       | 5.78        | 5.78         | 1.00          | 0.70         | 353.51      | 353.21       |
|  | 2014-15**               | 306.94  | 306.94       | 22.36       | 22.36        | 1.34          | 1.34         | 330.63      | 330.63       |
| <b>Chhattisgarh</b>  |                         |   |              |             |              |               |              |             |              |
| <b>Indira Gandhi Krishi Vishwa Vidyalaya, Raipur</b>   |                         |   |              |             |              |               |              |             |              |
|  | 2011-12                 | 747.00  | 669.60       | 290.20      | 248.90       | 113.80        | 174.80       | 115.10      | 1093.30      |
|  | 2012-13                 | 630.92  | 550.32       | 301.28      | 247.49       | 11.20         | 12.30        | 943.40      | 610.12       |
|  | 2013-14**               | 833.90  | 1053.20      | 449.90      | 451.40       | 210.20        | 210.20       | 1494.00     | 1714.80      |
| <b>Chhattisgarh Kamdhenu Vishwavidyalaya, Anjora, Durg (Established on 16 April, 2012)</b>             |                         |   |              |             |              |               |              |             |              |
|  | 2012-13                 | 364.15  | 222.63       | 17.09       | 15.83        | 8.76          | 3.87         | 390.00      | 242.34       |
|  | 2013-14                 | 305.78  | 263.26       | 30.79       | 27.93        | 7.37          | 3.37         | 343.93      | 294.55       |
| <b>Gujarat</b>   |                         |   |              |             |              |               |              |             |              |
| <b>Sardar Krushinagar Dantiwada Agricultural University, Dantiwada</b>                                 |                         |   |              |             |              |               |              |             |              |
|  | 2012-13                 | 1381.89   | 1182.03      | 170.48      | 209.89       | 170.07        | 257.14       | 1722.44     | 1649.06      |
|  | 2013-14                 | 1460.63   | 1357.78      | 135.62      | 160.45       | 111.46        | 118.42       | 1707.70     | 1636.65      |
|  | 2014-15                 | 1507.08   | 1245.60      | 131.30      | 149.27       | 60.27         | 59.99        | 1698.65     | 1454.76      |
| <b>Anand Agricultural University, Anand</b>  |                         |   |              |             |              |               |              |             |              |
|  | 2013-14                 | 1679.04   | 1757.51      | 182.01      | 187.35       | 372.22        | 362.13       | 2233.27     | 2306.99      |
|  | 2014-15                 | 1696.40   | 1665.79      | 163.66      | 159.53       | 179.12        | 189.14       | 2039.18     | 2014.46      |
|  | 2015-16                 | 1727.29   | 1694.81      | 167.00      | 170.81       | 209.82        | 164.93       | 2104.11     | 2030.55      |

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| State<br>Agricultural<br>University   | Year     | State                 |                     | ICAR                |                    | Other Sources   |                  | Total           |                  |
|---|----------|-----------------------|---------------------|---------------------|--------------------|-----------------|------------------|-----------------|------------------|
|   |          | Alloca-<br>tion       | Expendi-<br>ture    | Alloca-<br>tion     | Expendi-<br>ture   | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture |
| <b>Navsari Agricultural University, Gujarat</b>   |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 1327.30               | 1181.50             | 300.50              | 262.20             | 248.90          | 83.00            | 1876.70         | 1526.70          |
|   | 2014-15  | 1335.50               | 1295.90             | 124.20              | 107.20             | 154.80          | 84.40            | 1614.50         | 1487.50          |
|   | 2015-16  | 1376.1                | 1451.2              | 179.00 <sup>k</sup> | 149.8 <sup>k</sup> | 85.9            | 51.2             | 1641.0          | 1652.2           |
| <b>Junagadh Agricultural University, Junagadh , Gujarat</b>                                   |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 1412.87               | 1206.31             | 131.71              | 117.66             | 206.94          | 285.66           | 1751.52         | 1609.63          |
|   | 2014-15  | 1611.28               | 1486.80             | 151.22              | 191.79             | 96.67           | 111.60           | 1859.17         | 1790.19          |
|   | 2015-16* | 1697.92               | 1697.78             | 197.98              | 154.21             | 95.21           | 71.67            | 1991.11         | 1923.66          |
| <b>Haryana</b>  |          |                       |                     |                     |                    |                 |                  |                 |                  |
| <b>CCS Haryana Agriculture University, Hisar</b>  |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 2882.92               | 2795.36             | 382.54              | 355.03             | 119.90          | 99.33            | 3385.36         | 3249.72          |
|   | 2014-15  | 3058.48               | 3034.61             | 402.87              | 389.55             | 162.39          | 106.21           | 3623.74         | 3530.37          |
|   | 2015-16* | 3403.22               | 3021.69             | 400.49              | 398.27             | 195.07          | 123.61           | 3998.78         | 3543.57          |
| <b>Lala Lajpat Rai University of Veterinary &amp; Animal Sciences , Hisar</b>                 |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 654.84                | 553.84              | 37.24               | 28.85              | 64.09           | 51.91            | 756.17          | 634.60           |
|   | 2014-15  | 952.87                | 656.02              | 40.32               | 38.51              | 56.40           | 46.11            | 1049.59         | 740.59           |
|   | 2015-16* | 705.05                | 662.06              | 50.82               | 45.15              | 79.50           | 57.09            | 835.37          | 764.30           |
| <b>Himachal Pradesh</b>   |          |                       |                     |                     |                    |                 |                  |                 |                  |
| <b>CSK Himachal Pradesh Krishi Vishwa Vidyalaya, Palampur</b>                                 |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 571.70                | 693.70              | 342.30              | 342.10             | 48.50           | 47.60            | 962.50          | 1083.40          |
|   | 2014-15  | 604.20                | 724.80              | 204.90              | 273.00             | 49.40           | 49.20            | 858.50          | 1047.00          |
|   | 2015-16  | 694.20                | 904.60              | 240.00              | 278.90             | 50.20           | 49.80            | 984.40          | 1233.30          |
| <b>Dr. Y.S. Parmar University of Horticulture &amp; Forestry, Solan</b>                       |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 754.02 <sup>11</sup>  | 686.91              | 140.97              | 167.28             | 87.27           | 93.90            | 982.26          | 948.09           |
|   | 2014-15  | 821.00 <sup>12</sup>  | 802.50              | 139.68              | 173.61             | 73.20           | 85.63            | 1033.88         | 1061.74          |
|   | 2015-16  | 1168.70 <sup>13</sup> | 1023.50*            | 112.36              | 95.09              | 86.83           | 53.07            | 1367.89*        | 1171.66*         |
| <b>Jammu &amp; Kashmir</b>  |          |                       |                     |                     |                    |                 |                  |                 |                  |
| <b>Sher-e-Kashmir University of Agricultural Science &amp; Technology of Jammu, Jammu</b>     |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 655.20                | 728.37 <sup>a</sup> | 91.70               | 77.94              | 93.25           | 84.83            | 840.15          | 891.04           |
|   | 2014-15  | 738.01                | 691.62              | 85.00               | 84.82              | 187.16          | 146.89           | 1010.17         | 923.33           |
|   | 2015-16  | 810.00                | 801.90              | 30.00               | 30.00              | 239.10          | 230.70           | 1079.10         | 1062.60          |
| <b>Sher-e-Kashmir University of Agricultural Science &amp; Technology of Kashmir, Kashmir</b> |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 1315.80               | 1253.83             | 386.52              | 389.64             | 76.44           | 85.44            | 1778.76         | 1728.91          |
|   | 2014-15  | 1431.80               | 1398.12             | 469.74              | 471.95             | 67.55           | 66.12            | 1969.09         | 1936.18          |
|   | 2015-16  | 1511.10               | 1497.73             | 325.12              | 307.10             | 77.65           | 70.12            | 1913.87         | 1874.95          |
| <b>Karnataka</b>  |          |                       |                     |                     |                    |                 |                  |                 |                  |
| <b>University of Agricultural Sciences, Bangalore</b>   |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 2715.66               | 2055.39             | 511.95              | 391.84             | 369.51          | 286.06           | 3597.12         | 2733.29          |
|   | 2014-15  | 2857.58               | 2317.23             | 453.08              | 346.66             | 254.65          | 190.39           | 3565.32         | 2854.27          |
|   | 2015-16* | 3058.28               | 2292.84             | 449.08              | 365.93             | 266.53          | 164.38           | 3773.88         | 2823.13          |
| <b>University of Agricultural Sciences, Dharwad</b>   |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2012-13  | 960.00                | 1107.42             | 257.93              | 242.54             | 234.99          | 204.79           | 1452.92         | 1154.75          |
|   | 2013-14  | 1001.72               | 1194.54             | 277.73              | 329.18             | 121.28          | 119.86           | 1400.73         | 1643.58          |
|   | 2014-15  | 1477.60               | 1551.02             | 202.55              | 224.66             | 193.21          | 101.46           | 1873.36         | 1877.14          |
| <b>Karnataka Veterinary, Animal &amp; Fisheries Sciences University , Bidar</b>               |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2013-14  | 1606.61               | 1457.25             | 80.10               | 89.84              | 24.09           | 23.69            | 1711.69         | 1568.86          |
|   | 2014-15  | 1613.93               | 1508.18             | 63.06               | 52.15              | 21.80           | 20.32            | 1698.79         | 1579.15          |
|   | 2015-16* | 1393.63               | 2445.80             | 91.47               | 98.24              | 22.49           | 26.84            | 1507.59         | 2570.87          |
| <b>University of Horticultural Sciences, Bagalkot</b>   |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2011-12  | 743.60                | 743.60              | 87.88               | 87.88              | 211.10          | 211.10           | 1042.57         | 1042.57          |
|   | 2012-13  | 790.00                | 790.00              | 92.46               | 92.46              | 377.34          | 377.34           | 1259.79         | 1259.79          |
|   | 2013-14  | 670.56                | 670.56              | 61.20               | 61.20              | 586.76          | 586.76           | 1318.53         | 1318.53          |
| <b>University of Agricultural Sciences, Raichur</b>   |          |                       |                     |                     |                    |                 |                  |                 |                  |
|   | 2009-10  | 2364.00               | 2330.00             | 369.25              | 124.82             | 11.87           | 1.44             | 2735.12         | 2456.26          |
|   | 2010-11  | -                     | -                   | -                   | -                  | -               | -                | -               | -                |
|   | 2011-12  | -                     | -                   | -                   | -                  | -               | -                | -               | -                |



Investment in Agricultural Research & Education

| State<br>Agricultural<br>University  | Year     | State           |                  | ICAR            |                  | Other Sources   |                  | Total              |                     |
|--|----------|-----------------|------------------|-----------------|------------------|-----------------|------------------|--------------------|---------------------|
|  |          | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion    | Expendi-<br>ture    |
| <b>Kerala</b>  |          |                 |                  |                 |                  |                 |                  |                    |                     |
| <b>Kerala Agricultural University, Vellanikkara, Thrissur</b>              |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2012-13  | 2360.50         | 1920.80          | 742.60          | 297.60           | 1000.00         | 565.50           | 4103.10            | 2783.90             |
|  | 2013-14  | 2441.00         | 2322.60          | 698.10          | 378.90           | 1033.10         | 731.00           | 4172.30            | 3432.60             |
|  | 2014-15* | 2517.90         | 2336.60          | 430.60          | 338.40           | 832.30          | 500.90           | 3780.80            | 3175.80             |
| <b>Kerala Veterinary and Animal Sciences University, Pookode, Wayanad</b>  |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2012-13  | 661.90          | 661.90           | 519.87          | 393.82           | 36.17           | 130.77           | 1217.94            | 1186.49             |
|  | 2013-14  | 772.20          | 772.20           | 230.88          | 105.20           | 154.33          | 130.75           | 1157.41            | 1008.15             |
|  | 2014-15  | 862.25          | 862.25           | 22.12           | 27.10            | 238.54          | 61.08            | 1123.18            | 950.68              |
| <b>Kerala University of Fisheries &amp; Ocean Studies, Papangad, Kochi</b> |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 218.76          | 172.77           | 16.15           | 16.06            | 12.63           | 10.30            | 247.55             | 199.13              |
|  | 2014-15  | 219.40          | 214.90           | 16.00           | 16.00            | 8.52            | 7.18             | 243.92             | 238.08              |
|  | 2015-16  | 337.48          | 283.35           | 18.74           | 18.74            | 3.37            | 2.52             | 359.59             | 304.61              |
| <b>Madhya Pradesh</b>  |          |                 |                  |                 |                  |                 |                  |                    |                     |
| <b>Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur</b>                  |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 628.83          | 682.44           | 544.18          | 403.06           | 2.10            | 0.77             | 1175.10            | 1086.07             |
|  | 2014-15  | 896.50          | 895.95           | 512.93          | 471.24           | 1.12            | 2.26             | 1410.54            | 1369.45             |
|  | 2015-16  | 868.27          | 916.55           | 594.04          | 530.33           | 2.20            | 6.31             | 1464.51            | 1453.19             |
| <b>Nanaji Deshmukh Pashu chikitsa Vigyan Vishwa Vidyalaya, Jabalpur</b>    |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 2501.40         | 2954.59          | 661.77          | 569.13           | 219.44          | 101.85           | 3382.61            | 3625.57             |
|  | 2014-15  | 2602.39         | 3168.69          | 576.92          | 476.71           | 632.12          | 186.91           | 3811.43            | 3832.31             |
|  | 2015-16  | 2948.07         | 3262.31          | 426.15          | 400.00           | 445.21          | 441.91           | 3819.43            | 4104.22             |
| <b>Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior</b>         |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 490.00          | 446.98           | 268.19          | 315.87           | 191.81          | 120.73           | 950.00             | 883.59              |
|  | 2014-15  | 488.60          | 502.38           | 270.89          | 331.18           | 274.05          | 188.69           | 1033.54            | 1022.24             |
|  | 2015-16  | 591.90          | 602.21           | 384.18          | 364.31           | 143.18          | 60.87            | 1119.26            | 1027.39             |
| <b>Maharashtra</b>   |          |                 |                  |                 |                  |                 |                  |                    |                     |
| <b>Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli</b>               |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 987.85          | 904.03           | 168.62          | 173.32           | 8.33            | 4.98             | 1164.80            | 1082.33             |
|  | 2014-15  | 962.75          | 919.50           | 167.29          | 149.48           | 15.59           | 9.30             | 1145.63            | 1078.28             |
|  | 2015-16* | 1048.75         | 975.43           | 139.04          | 133.68           | 6.40            | 2.82             | 1194.19            | 1111.93             |
| <b>Mahatma Phule Krishi Vidyapeeth Rahuri, Maharashtra</b>                 |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 2441.86         | 2213.83          | 357.42          | 331.24           | 138.06          | 123.11           | 2937.34            | 2668.18             |
|  | 2014-15  | 2535.96         | 2461.30          | 321.23          | 333.40           | 40.42           | 42.89            | 2897.61            | 2837.59             |
|  | 2015-16  | 1818.36         | 2620.63          | 408.89          | 324.77           | 256.52          | 236.52           | 3483.77            | 3181.91             |
| <b>Marathwada Agricultural University, Parbhani</b>                        |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2007-08  | 6717.95         | 7376.35          | 1270.94         | 1224.25          | 259.77          | 266.56           | 8248.66            | 8867.16             |
|  | 2008-09  | 8128.64         | 8367.00          | 1729.44         | 1547.93          | 273.62          | 503.62           | 10131.70           | 10418.55            |
|  | 2009-10  | 9620.16         | 9445.25          | 1480.47         | 1450.49          | 51.30           | 223.16           | 11151.93           | 11118.90            |
| <b>Dr. Punjabrao Deshmukh Krishi Vidyapeeth, Akola</b>                     |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2011-12  | 1.64            | 1.69             | 0.23            | 0.23             | 0.16            | 0.12             | 2.03               | 2.04                |
|  | 2012-13  | 1.94            | 1.84             | 0.25            | 0.21             | 0.09            | 0.12             | 2.28               | 2.17                |
|  | 2013-14  | 1.99            | 1.98*            | 0.26            | 0.22*            | 0.10            | 0.10*            | 2.35               | 2.34*               |
| <b>Maharashtra Animal &amp; Fishery Sciences University, Nagpur</b>        |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2005-06  | 366.52          | 338.46           | 34.77           | 34.10            | 2.09            | 2.09             | 403.38             | 374.66              |
|  | 2006-07  | 431.27          | 354.63           | 75.38           | 75.38            | 3.84            | 3.84             | 510.50             | 433.86              |
|  | 2007-08  | 351.96          | 248.87           | 53.59           | 53.59            | 6.80            | 6.80             | 412.34             | 309.26              |
| <b>Manipur</b>   |          |                 |                  |                 |                  |                 |                  |                    |                     |
| <b>Central Agricultural University, Imphal</b>                             |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | -               | -                | -               | -                | 1199.90         | 1168.40          | 1199.90            | 1168.40             |
|  | 2014-15  | -               | -                | -               | -                | 1190.00         | 1229.90          | 1190.00            | 1229.90             |
|  | 2015-16  | -               | -                | -               | -                | 1659.90         | 1567.10          | 1659.90            | 1567.10             |
| <b>Nagaland</b>  |          |                 |                  |                 |                  |                 |                  |                    |                     |
| <b>Nagaland University, Nagaland</b>                                       |          |                 |                  |                 |                  |                 |                  |                    |                     |
|  | 2013-14  | 0.00            | 0.00             | 32.91           | 32.58            | 0.00            | 0.00             | 32.91              | 32.58               |
|  | 2014-15  | 0.00            | 0.00             | 21.52           | 15.00            | 0.00            | 0.00             | 21.52 <sup>S</sup> | 15.00 <sup>SS</sup> |
|  | 2015-16  | 0.00            | 0.00             | 34.44           | 28.41            | 0.00            | 0.00             | 34.44              | 28.41               |

## Investment in Agricultural Research & Education

| State<br>Agricultural<br>University   | Year                 | State           |                  | ICAR   |                  | Other Sources   |                  | Total           |                  |
|---|----------------------|-----------------|------------------|--|------------------|-----------------|------------------|-----------------|------------------|
|   |                      | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion                                      | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture |
| <b>Odisha</b>   |                      |                 |                  |  |                  |                 |                  |                 |                  |
| <b>Odisha University of Agriculture &amp; Technology, Bhubaneswar</b>       |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 1110.30         | 1148.10          | 727.54   | 401.78           | 313.96          | 209.14           | 2151.80         | 1759.02          |
|   | 2014-15              | 1145.49         | 1247.23          | 508.14   | 462.00           | 548.86          | 347.30           | 2202.49         | 2056.53          |
|   | 2015-16*             | 1273.39         | 1406.56          | 564.80   | 564.80           | 337.58          | 277.58           | 2175.77         | 2248.94          |
| <b>Punjab</b>   |                      |                 |                  |  |                  |                 |                  |                 |                  |
| <b>Punjab Agricultural University, Ludhiana</b>                             |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 2799.60         | 3309.41          | 563.67   | 581.83           | 455.99          | 373.19           | 3819.26         | 4264.43          |
|   | 2014-15              | 3237.14         | 3827.60          | 551.85   | 602.97           | 344.58          | 392.31           | 4133.57         | 4822.88          |
|   | 2015-16              | 2926.53         | 3792.06          | 719.86   | 713.32           | 415.09          | 382.93           | 4061.48         | 4888.41          |
| <b>Guru Angad Dev Veterinary &amp; Animal Sciences University, Ludhiana</b> |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 738.69          | 910.93           | 94.26  | 94.58            | 26.63           | 38.36            | 859.58          | 1043.87          |
|   | 2014-15              | 621.01          | 754.12           | 82.78  | 90.56            | 33.72           | 27.80            | 737.51          | 872.48           |
|   | 2015-16              | 917.72          | 998.72           | 109.10   | 104.85           | 33.69           | 34.50            | 1060.50         | 1138.08          |
| <b>Rajasthan</b>  |                      |                 |                  |  |                  |                 |                  |                 |                  |
| <b>Swami Keshwanand Rajasthan Agricultural University, Bikaner</b>          |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 766.94          | 766.94           | 389.53   | 389.53           | 162.00          | 162.00           | 1318.47         | 1318.47          |
|   | 2014-15              | 250.07          | 250.07           | 133.95   | 133.95           | 43.72           | 43.72            | 427.74          | 427.74           |
|   | 2015-16              | 274.87          | 274.87           | 145.03   | 145.03           | 68.55           | 68.55            | 488.45          | 488.45           |
| <b>Maharana Pratap University of Agriculture and Technology, Udaipur</b>    |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2011-12              | 587.04          | 614.30           | 391.95   | 751.05           | 242.89          | 194.10           | 1221.88         | 1559.46          |
|   | 2012-13              | 625.64          | 642.12           | 329.95   | 340.83           | 234.74          | 247.84           | 1190.33         | 1230.78          |
|   | 2013-14**            | 691.24          | 797.72           | 404.58   | 385.14           | 289.84          | 149.19           | 1385.66         | 1332.05          |
| <b>Rajasthan University of Veterinary &amp; Animal Sciences, Bikaner</b>    |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 638.96          | 638.96           | 50.10  | 50.10            | 22.23           | 21.91            | 711.29          | 710.97           |
|   | 2014-15              | 962.29          | 957.79           | 43.50  | 43.50            | 24.07           | 20.47            | 1029.86         | 1021.76          |
|   | 2015-16              | 883.17          | 883.16           | 53.80  | 53.80            | 48.15           | 48.15            | 985.12          | 985.12           |
| <b>Agricultural University, Kota (Established in September, 2013)</b>       |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 37.00           | 30.18            | 0  | 0                | 0               | 0                | 37.00           | 30.18            |
|   | 2014-15              | 179.00          | 170.67           | 542.77   | 453.02           | 88.75           | 49.06            | 810.52          | 672.75           |
| <b>Agriculture University, Jodhpur (Established in 21 September, 2013)</b>  |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 6.72            | 4.97             | Allocated and incurred expenditure by SKRAU, Bikaner |                  |                 |                  |                 |                  |
| <b>Sri Karan Narendra Agricultural University, Jobner, Jaipur</b>           |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2011-12 <sup>3</sup> | 715.55          | 644.75           | 387.15   | 416.03           | 61.38           | 151.12           | 1164.07         | 1211.89          |
|   | 2012-13 <sup>3</sup> | 834.23          | 754.71           | 400.32   | 453.71           | 155.56          | 93.35            | 1390.11         | 1306.72          |
|   | 2013-14              | 29.00           | 29.00            | \$\$   | \$\$             | -               | -                | -               | -                |
| <b>Tamil Nadu</b>   |                      |                 |                  |  |                  |                 |                  |                 |                  |
| <b>Tamil Nadu Agricultural University, Coimbatore</b>                       |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 2790.76         | 3023.60          | 554.36   | 590.25           | 337.20          | 332.66           | 3682.32         | 3946.51          |
|   | 2014-15*             | 2934.21         | 3388.33          | 504.90   | 591.52           | 315.16          | 297.19           | 3754.27         | 4277.04          |
|   | 2015-16**            | 3895.11         | 3895.11          | 581.15   | 581.15           | 173.59          | 173.59           | 4649.85         | 4649.85          |
| <b>Tamil Nadu Veterinary &amp; Animal Sciences University, Chennai</b>      |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 2060.76         | 2060.12          | 136.51   | 163.33           | 168.90          | 50.61            | 2366.17         | 2276.06          |
|   | 2014-15              | 1995.44         | 2198.69          | 122.34   | 128.93           | 180.80          | 224.50           | 2298.58         | 2552.13          |
|   | 2015-16              | 1954.01         | ***              | 89.60  | ***              | 134.73          | ***              | 2178.35         | ***              |
| <b>Tamil Nadu Fisheries University, Nagapattinam</b>                        |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2013-14              | 115.50          | 102.20           | 13.00  | 13.00            | 16.80           | 5.30             | 145.30          | 120.50           |
|   | 2014-15              | 354.40          | 297.60           | 19.00  | 19.00            | 61.90           | 53.80            | 435.30          | 370.40           |
|   | 2015-16              | 465.80          | C                | 22.60  | 22.60            | 35.10           | C                | 523.50          | C                |
| <b>Uttarakhand</b>  |                      |                 |                  |  |                  |                 |                  |                 |                  |
| <b>G.B. Pant University of Agriculture &amp; Technology, Pantnagar</b>      |                      |                 |                  |  |                  |                 |                  |                 |                  |
|   | 2012-13              | 1702.59         | 1701.96          | 226.72   | 214.95           | 351.89          | 363.48           | 2281.20         | 2280.39          |
|   | 2013-14              | 1891.80         | 1748.25          | 250.51   | 225.82           | 318.58          | 304.21           | 2460.89         | 2278.28          |
|   | 2014-15              | 1945.32         | 1794.70          | 241.08   | 266.27           | 303.54          | 287.88           | 2489.94         | 2348.85          |

## Investment in Agricultural Research & Education

| State<br>Agricultural<br>University  | Year                 | State           |                  | ICAR            |                  | Other Sources   |                  | Total           |                  |
|--|----------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|
|  |                      | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture | Alloca-<br>tion | Expendi-<br>ture |
| <b>Uttar Pradesh</b>   |                      |                 |                  |                 |                  |                 |                  |                 |                  |
| <b>C.S. Azad University of Agriculture &amp; Technology, Kanpur</b>                                      |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2012-13              | 5550.51         | 5834.55          | 1727.55         | 9359.96          | -               | -                | 7278.06         | 15194.51         |
|  | 2013-14              | 5289.67         | 6508.99          | 2761.73         | 2670.43          | -               | -                | 8051.40         | 9179.42          |
|  | 2014-15              | -               | -                | -               | -                | -               | -                | -               | -                |
| <b>Narendra Dev University of Agriculture &amp; Technology, Faizabad</b>                                 |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2007-08              | 513.50          | 407.89           | 229.07          | 170.35           | 43.64           | 25.44            | 786.21          | 603.68           |
|  | 2008-09              | 757.12          | 923.75           | 243.47          | 202.47           | 88.98           | 73.23            | 1089.57         | 1199.45          |
|  | 2009-10              | 709.45          | 762.83           | 232.80          | 175.51           | 85.80           | 40.47            | 1028.05         | 978.81           |
| <b>Sam Higginbottom Institute of Agriculture, Technology &amp; Sciences (Deemed University)</b>          |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2011-12              | 162.23          | 162.23           | 139.87          | 144.10           | 878.88          | 880.94           | 1180.98         | 1187.27          |
|  | 2012-13              | 135.47          | 135.47           | 74.59           | 74.60            | 992.03          | 1077.50          | 1202.09         | 1287.57          |
|  | 2013-14 <sup>†</sup> | 160.09          | 160.09           | 46.26           | 46.26            | 1009.29         | 1009.29          | 1215.64         | 1215.64          |
| <b>Sardar Vallabh Bhai Patel University of Agriculture &amp; Technology, Meerut</b>                      |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2011-12              | 780.29          | 780.66           | 130.73          | 131.02           | 74.73           | 47.91            | 985.75          | 959.59           |
|  | 2012-13              | 416.87          | 410.73           | 132.63          | 120.33           | 105.15          | 45.29            | 654.65          | 576.35           |
|  | 2013-14              | 572.23          | 570.51           | 185.22          | 173.13           | 118.38          | 95.80            | 875.84          | 839.44           |
| <b>U.P Pandit Deen Dayal Upadhaya Pasu Chikitsa Vigyan Vishwavidyalaya Evam-Gau Anushandhan Sansthan</b> |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2013-14              | 255.96          | 221.01           | 47.30           | 46.94            | 14.04           | 12.45            | 317.30          | 280.40           |
|  | 2014-15              | 280.19          | 258.42           | 37.00           | 36.66            | 20.74           | 18.86            | 337.93          | 313.94           |
|  | 2015-16              | 317.35          | 314.18           | 39.37           | 39.24            | 30.63           | 27.90            | 387.35          | 381.32           |
| <b>Banda University of Agriculture &amp; Technology, Banda</b>   |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2013-14 <sup>#</sup> | 65.00           | 30.2             | Nil             | Nil              | Nil             | Nil              | 65.00           | 30.2             |
|  | 2014-15 <sup>#</sup> | 40.00           | 36.00            | Nil             | Nil              | Nil             | Nil              | 40.00           | 36.00            |
|  | 2015-16 <sup>#</sup> | 44.00           | 44.00            | Nil             | Nil              | Nil             | Nil              | 44.00           | 44.00            |
| <b>West Bengal</b>   |                      |                 |                  |                 |                  |                 |                  |                 |                  |
| <b>Bidhan Chandra Krishi Vishwa Vidyalaya, Haringhatta</b>   |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2005-06              | 385.45          | 356.85           | 31.53           | 38.01            | 20.69           | 15.23            | 437.68          | 410.10           |
|  | 2006-07              | 395.71          | 398.13           | 392.08          | 150.20           | 21.91           | 68.52            | 809.71          | 616.86           |
|  | 2007-08              | 522.95          | 522.95           | 72.21           | 72.21            | 67.22           | 67.22            | 662.38          | 662.38           |
| <b>Uttar Banga Krishi Viswavidyalaya, Pundibari</b>  |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2004-05              | 68.98           | 68.98            | 11.41           | 11.41            | 38.25           | 25.25            | 118.64          | 105.64           |
|  | 2005-06              | 86.64           | 82.95            | 48.01           | 48.01            | 75.89           | 66.80            | 210.54          | 197.76           |
|  | 2006-07              | 87.39           | 83.03            | 53.04           | 53.04            | 83.53           | 75.30            | 223.96          | 211.37           |
| <b>W.B. University of Animal &amp; Fishery Sciences, Kolkata</b>   |                      |                 |                  |                 |                  |                 |                  |                 |                  |
|  | 2012-13              | 258.81          | 258.81           | 30.00           | 26.60            | 51.16           | 51.16            | 339.97          | 336.57           |
|  | 2013-14              | 280.43          | 280.43           | 47.50           | 47.46            | 48.20           | 48.20            | 376.13          | 376.09           |
|  | 2014-15              | 362.21          | **               | 29.00           | **               | **              | **               | **              | **               |

**Note :** Totals may slightly differ due to rounding of figures.

- 1.\* Un-audited/Tentative/Provisional, 2. \*\*: The budget accounts are yet to be finalized,
3. \*\*\* It will be furnished after the compilation of accounts for all schemes and audit, 4. \$\$: SKN Agricultural University, Jobner was created by bifurcating SK Rajasthan Agricultural University, Bikaner in September 2013. Presently, it is funded by the State Government under State Plan only. Non-plan expenditures are continued to be incurred through SKRAU, Bikaner as previously done by it, 5. a: Inclusive of unspent and revalidated amount of the previous year 6. t1: including domestic incomer Rs. 120.82 (in million), t2: including domestic incomer Rs. 82.10 (in million) and t3: including domestic incomer Rs. 1168.70 (in million). 7. Tamil Nadu agricultural university expenditure includes carry over from previous year allocation. 8. p1: Unified Budget of ANGRAU (Andhra Pradesh State), p2: Unified Budget up to 31.08.2014 and p3: Unified Budget only for ANGRAU. 9. k: Including KVK 10. C: will be furnished shortly. 11. Other resources of Tamil Nadu Fisheries University, Nagapattinam includes GOI, ICAR and other agency schemes. 11. S: An amount of Rs. 19.00 million was sanctioned under the scheme "Strengthening & Development of Higher Education in Agricultural universities" during 2014-15, however an amount of Rs. 13.00 million only has been released. 12. SS: An amount of Rs. 2.00 million was sanctioned under the scheme "Library Strengthening" during 2014-15, however an amount of Rs. 1.48 million only has been released. 13. # Sum of Head- salary and non-salary.

**Source :** This information is collected from respective State Agricultural Universities through Dy. Director General (Engg), Indian Council of Agricultural Research, New Delhi.

**Table 9.8: Details of financial outlay Department of Agricultural Research and Education**

(crore Rs.)

| Particulars   | Major Head | 2014-2015 Budget |                | 2014-2015 Revised |                | 2015-2016 Budget |                |                |
|---|------------|------------------|----------------|-------------------|----------------|------------------|----------------|----------------|
|   |            | Plan             | Non-Plan       | Plan              | Non-Plan       | Plan             | Non-Plan       | Total          |
| <b>The Gross provision for demand No. 2- DARE, excluding</b>                                |            |                  |                |                   |                |                  |                |                |
| Revenue   |            | 3715.00          | 2429.39        | 6144.39           | 2500.00        | 2384.00          | 4884.00        | 6320.00        |
| Capital   |            | 0.00             | 0.00           | 0.00              | 0.00           | 0.00             | 0.00           | 0.00           |
| <b>Total</b>  |            | <b>3715.00</b>   | <b>2429.39</b> | <b>6144.39</b>    | <b>2500.00</b> | <b>2384.00</b>   | <b>4884.00</b> | <b>6320.00</b> |
| <b>Group/Sub Group/Sub Sub Group/Scheme/Sub Programme/Sub Programme</b>                     |            |                  |                |                   |                |                  |                |                |
| Revenue   |            | 3715.00          | 2429.39        | 6144.39           | 2500.00        | 2384.00          | 4884.00        | 6320.00        |
| Capital   |            | 0.00             | 0.00           | 0.00              | 0.00           | 0.00             | 0.00           | 0.00           |
| <b>Total</b>  |            | <b>3415.00</b>   | <b>2314.17</b> | <b>5729.17</b>    | <b>2600.00</b> | <b>2281.08</b>   | <b>4881.08</b> | <b>6144.39</b> |
| 1. Secretariat -Economic Service  | 3451       | 0.00             | 5.81           | 5.81              | 0.00           | 4.78             | 4.78           | 6.11           |
| <b>Agricultural Research and Education Payments to ICAR</b>                                 |            |                  |                |                   |                |                  |                |                |
| <b>2. Crop Husbandry</b>  |            |                  |                |                   |                |                  |                |                |
| 2.01 Payments of net proceeds of cess under Agricultural Produce Cess Act, 1940             | 2415       | 0.00             | 0.50           | 0.50              | 0.00           | 0.25             | 0.25           | 0.25           |
| <b>2.02 Other Programmes of Crop Husbandry</b>  |            |                  |                |                   |                |                  |                |                |
| 2.02.01 Crop Science  | 2415       | 458.00           | 737.04         | 1195.04           | 369.35         | 712.11           | 1081.46        | 1334.59        |
| 2.02.02 Horticulture  | 2415       | 200.00           | 290.96         | 490.96            | 139.35         | 287.48           | 426.83         | 538.80         |
| 2.02.03 Agricultural Extension  | 2415       | 522.00           | 3.75           | 525.75            | 459.00         | 3.76             | 462.76         | 573.91         |
| 2.02.04 Agricultural Education  | 2415       | 530.00           | 54.12          | 584.12            | 390.00         | 48.39            | 438.39         | 607.81         |
| 2.02.05 Economic Statistics and Management  | 2415       | 30.00            | 37.28          | 67.28             | 15.50          | 35.03            | 50.53          | 57.68          |
| 2.02.06 Agricultural Engg.  | 2415       | 82.00            | 96.01          | 178.01            | 62.50          | 95.36            | 157.86         | 196.57         |
| 2.02.07 ICAR Headquarter Administration   | 2415       | 400.00           | 130.30         | 530.30            | 161.00         | 123.11           | 284.11         | 452.27         |
| 2.02.08 National Fund for Basic, Strategic and Frontier Application Research in Agriculture | 2415       | 121.00           | 0.00           | 121.00            | 58.90          | 0.00             | 58.90          | 130.00         |
| 2.02.09 National Agricultural Innovation Project/Externally Aided Project                   | 2415       | 99.00            | 0.00           | 99.00             | 84.65          | 0.00             | 84.65          | 0.00           |

| Particulars  | Major Head | 2014-2015 Budget |                |                | 2014-2015 Revised |                |                | 2015-2016 Budget |                |                |
|--|------------|------------------|----------------|----------------|-------------------|----------------|----------------|------------------|----------------|----------------|
|  |            | Plan             | Non-Plan       | Total          | Plan              | Non-Plan       | Total          | Plan             | Non-Plan       | Total          |
| 2.02.10 Agriculture University, Andhra Pradesh   | 2415       | 100.00           | 0.00           | 100.00         | 10.00             | 0.00           | 10.00          | 75.00            | 0.00           | 75.00          |
| 2.02.11 Horticulture University, Telengana   | 2415       | 100.00           | 0.00           | 100.00         | 10.00             | 0.00           | 10.00          | 75.00            | 0.00           | 75.00          |
| 2.02.12 Agriculture University, Rajasthan  | 2415       | 0.00             | 0.00           | 0.00           | 5.00              | 0.00           | 5.00           | 25.00            | 0.00           | 25.00          |
| 2.02.13 Agriculture University, Haryana  | 2415       | 0.00             | 0.00           | 0.00           | 5.00              | 0.00           | 5.00           | 25.00            | 0.00           | 25.00          |
| 2.02.14 IARI type Deemed University, Assam   | 2415       | 0.00             | 0.00           | 0.00           | 0.10              | 0.00           | 0.10           | 0.00             | 0.00           | 0.00           |
| 2.02.15 IARI type Deemed University, Jharkhand   | 2415       | 0.00             | 0.00           | 0.00           | 0.10              | 0.00           | 0.10           | 0.00             | 0.00           | 0.00           |
| <b>Total-Other Programmes of Crop Husbandry</b>  |            | <b>2642.00</b>   | <b>1349.46</b> | <b>3991.46</b> | <b>1770.45</b>    | <b>1305.24</b> | <b>3075.69</b> | <b>2642.00</b>   | <b>1449.63</b> | <b>4091.63</b> |
| <b>Total- Crop Husbandry</b>   |            | <b>2642.00</b>   | <b>1349.96</b> | <b>3991.96</b> | <b>1770.45</b>    | <b>1305.49</b> | <b>3075.94</b> | <b>2642.00</b>   | <b>1449.88</b> | <b>4091.88</b> |
| <b>3. Soil and Water Conservation</b>  |            |                  |                |                |                   |                |                |                  |                |                |
| 3.01 National Resource Management Institutes including Agro- Forestry Research   | 2415       | 200              | 347.64         | 547.64         | 157.50            | 346.57         | 507.07         | 220.00           | 383.83         | 603.83         |
| 3.02 Climate Resilient Agriculture Initiative  | 2415       | 95.00            | 0.00           | 95.00          | 62.50             | 0.00           | 62.50          | 103.00           | 0.00           | 103.00         |
| 3.03 National Adaptation Fund  | 2415       | 90.00            | 0.00           | 90.00          | 0.19              | 0.00           | 0.19           | 0.00             | 0.00           | 0.00           |
| <b>Total-Soil &amp; Water Conservation</b>   |            | <b>385.00</b>    | <b>347.64</b>  | <b>732.64</b>  | <b>220.19</b>     | <b>346.57</b>  | <b>566.76</b>  | <b>323.00</b>    | <b>383.83</b>  | <b>706.83</b>  |
| 4. Animal Husbandry  | 2415       | 215.00           | 477.73         | 692.73         | 152.50            | 482.41         | 634.91         | 233.00           | 515.50         | 748.50         |
| 5. Fisheries   | 2415       | 92.00            | 242.82         | 334.82         | 63.50             | 239.14         | 302.64         | 97.00            | 268.00         | 365.00         |
| <b>Total-Payments to ICAR</b>  |            | <b>3334.00</b>   | <b>2418.15</b> | <b>5752.15</b> | <b>2206.64</b>    | <b>2373.61</b> | <b>4580.25</b> | <b>3295.00</b>   | <b>2617.21</b> | <b>5912.21</b> |
| 6. Grant in Aid to national Academy of Agricultural science and Indian Agricultural Universities Association   | 2415       | 0.00             | 0.00           | 0.00           | 2.00              | 0.00           | 2.00           | 6.00             | 0.00           | 6.00           |
| 7. Contributions to Commonwealth Agricultural Bureau, Consultative Group on International Agricultural Research and Association of Asia Pacific Agricultural Research Institutions | 2415       | 0.00             | 5.43           | 5.43           | 0.00              | 5.61           | 5.61           | 0.00             | 5.68           | 5.68           |
| 8. Central Agricultural University, Bundelkhand  | 2415       | 10.00            | 0.00           | 10.00          | 2.00              | 0.00           | 2.00           | 10.00            | 0.00           | 10.00          |
| 9. Central Agricultural University, Bihar  | 2415       | 10.00            | 0.00           | 10.00          | 0.01              | 0.00           | 0.01           | 10.00            | 0.00           | 10.00          |

Investment in Agricultural Research & Education

| Particulars  | Major Head | 2014-2015 Budget        |                 |                | 2014-2015 Revised        |                 |                | 2015-2016 Budget        |                 |                |
|--|------------|-------------------------|-----------------|----------------|--------------------------|-----------------|----------------|-------------------------|-----------------|----------------|
|  |            | Plan                    | Non-Plan        | Total          | Plan                     | Non-Plan        | Total          | Plan                    | Non-Plan        | Total          |
| 10. Lumpsum provision for projects/ schemes for the benefit of North-Eastern Region and Sikkim | 2552       | 361.00                  | 0.00            | 361.00         | 289.35                   | 0.00            | 289.35         | 370.00                  | 0.00            | 370.00         |
| <b>Total-Agricultural Research and Education</b>   |            | <b>3715.00</b>          | <b>2423.58</b>  | <b>6138.58</b> | <b>2500.00</b>           | <b>2379.22</b>  | <b>4879.22</b> | <b>3691.00</b>          | <b>2622.89</b>  | <b>6313.89</b> |
| 11. Actual Recoveries  |            | 0.00                    | 0.00            | 0.00           | 0.00                     | 0.00            | 0.00           | 0.00                    | 0.00            | 0.00           |
| <b>Grand Total</b>   |            | <b>3715.00</b>          | <b>2429.39</b>  | <b>6144.39</b> | <b>2500.00</b>           | <b>2384.00</b>  | <b>4884.00</b> | <b>3691.00</b>          | <b>2629.00</b>  | <b>6320.00</b> |
| <b>Major Head-wise Totals</b>  |            |                         |                 |                |                          |                 |                |                         |                 |                |
|  |            | <b>2014-2015 Budget</b> |                 |                | <b>2014-2015 Revised</b> |                 |                | <b>2015-2016 Budget</b> |                 |                |
|  |            | <b>Plan</b>             | <b>Non-Plan</b> | <b>Total</b>   | <b>Plan</b>              | <b>Non-Plan</b> | <b>Total</b>   | <b>Plan</b>             | <b>Non-Plan</b> | <b>Total</b>   |
| 2415   |            | 3354.00                 | 2423.58         | 5777.58        | 2210.65                  | 2379.22         | 4589.87        | 3321.00                 | 2622.89         | 5943.89        |
| 2552   |            | 361.00                  | 0.00            | 361.00         | 289.35                   | 0.00            | 289.35         | 370.00                  | 0.00            | 370.00         |
| 3451   |            | 0.00                    | 5.81            | 5.81           | 0.00                     | 4.78            | 4.78           | 0.00                    | 6.11            | 6.11           |
| <b>Total</b>   |            | <b>3715.00</b>          | <b>2429.39</b>  | <b>6144.39</b> | <b>2500.00</b>           | <b>2384.00</b>  | <b>4884.00</b> | <b>3691.00</b>          | <b>2629.00</b>  | <b>6320.00</b> |

Source : DARE / ICAR, Annual Report, 2015-2016, Ministry of Agriculture & Farmers Welfare, Govt. of India.



भाग-X  
मानव संसाधन

SECTION-X  
Human Resources



Human Resources





**Table 10.1: Enrolment in Science/Engineering and other disciplines**

(in 000')

| Enrolment                                     | 2005-06                  | 2006-07                  | 2007-08                  | 2008-09                  | 2009-10                  | 2010-11                   | 2011-12                   |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| <b>Science and Technology Disciplines (A)</b> |                          |                          |                          |                          |                          |                           |                           |
| <b>Science</b>                                | 2255.2<br>(20.45)        | 2374.8<br>(20.45)        | 2543.4<br>(20.55)        | 2612.4<br>(19.15)        | 2822.6<br>(19.3)         | 3127.0<br>(18.42)         | 3789.9<br>(18.64)         |
| <b>Engineering /<br/>Technology</b>           | 795.1<br>(7.21)          | 837.3<br>(7.21)          | 914.6<br>(7.39)          | 1313.7<br>(9.63)         | 1510.8<br>(10.33)        | 2862.4<br>(16.86)         | 3261.6<br>(16.05)         |
| <b>Medicine</b>                               | 348.5<br>(3.16)          | 367.0<br>(3.16)          | 404.7<br>(3.27)          | 446.1<br>(3.27)          | 509.0<br>(3.48)          | 652.5<br>(3.84)           | 715.7<br>(3.52)           |
| <b>Agricultural Sciences</b>                  | 64.0<br>(0.58)           | 67.4<br>(0.58)           | 73.0<br>(0.59)           | 80.5<br>(0.59)           | 80.4<br>(0.55)           | 93.2<br>(0.55)            | 97.3<br>(0.48)            |
| <b>Veterinary Science</b>                     | 16.5<br>(0.15)           | 17.4<br>(0.15)           | 19.8<br>(0.16)           | 21.8<br>(0.16)           | 20.5<br>(0.14)           | 27.4<br>(0.16)            | 28.5<br>(0.14)            |
| <b>Total</b>                                  | <b>3479.3</b><br>(31.55) | <b>3663.7</b><br>(31.55) | <b>3955.6</b><br>(31.96) | <b>4474.5</b><br>(32.80) | <b>4943.2</b><br>(33.80) | <b>6762.6</b><br>(39.84)  | <b>7893.0</b><br>(38.83)  |
| <b>Other Disciplines (B)</b>                  |                          |                          |                          |                          |                          |                           |                           |
| <b>Arts (including Oriental<br/>Learning)</b> | 4976.9<br>(45.13)        | 5240.7<br>(45.13)        | 5508.9<br>(44.51)        | 5875.5<br>(43.07)        | 6144.0<br>(42.01)        | 6177.7<br>(36.39)         | 7539.5<br>(37.09)         |
| <b>Commerce/Management</b>                    | 1986.1<br>(18.01)        | 2091.4<br>(18.01)        | 2243.9<br>(18.13)        | 2486.9<br>(18.23)        | 2607.6<br>(17.83)        | 2904.8<br>(17.11)         | 3571.1<br>(17.57)         |
| <b>Law</b>                                    | 336.4<br>(3.05)          | 354.2<br>(3.05)          | 380.0<br>(3.07)          | 382.0<br>(2.80)          | 343.7<br>(2.35)          | 327.1<br>(1.93)           | 373.2<br>(1.84)           |
| <b>Education</b>                              | 161.0<br>(1.46)          | 169.5<br>(1.46)          | 188.1<br>(1.52)          | 286.5<br>(2.10)          | 365.6<br>(2.50)          | 570.0<br>(3.36)           | 732.6<br>(3.60)           |
| <b>Others</b>                                 | 88.2<br>(0.80)           | 92.9<br>(0.80)           | 100.3<br>(0.81)          | 136.4<br>(1.00)          | 220.8<br>(1.51)          | 232.7<br>(1.37)           | 217.9<br>(1.07)           |
| <b>Total (B)</b>                              | <b>7548.7</b><br>(68.45) | <b>7948.8</b><br>(68.45) | <b>8421.1</b><br>(68.04) | <b>9167.3</b><br>(67.20) | <b>9681.7</b><br>(66.20) | <b>10212.3</b><br>(60.16) | <b>12434.4</b><br>(61.17) |
| <b>Total (A+B)</b>                            | <b>11028.0</b><br>(100)  | <b>11612.5</b><br>(100)  | <b>12376.7</b><br>(100)  | <b>13641.8</b><br>(100)  | <b>14625.0</b><br>(100)  | <b>16974.9</b><br>(100)   | <b>20327.4</b><br>(100)   |

**Note** : Figures in parentheses indicate percentage.

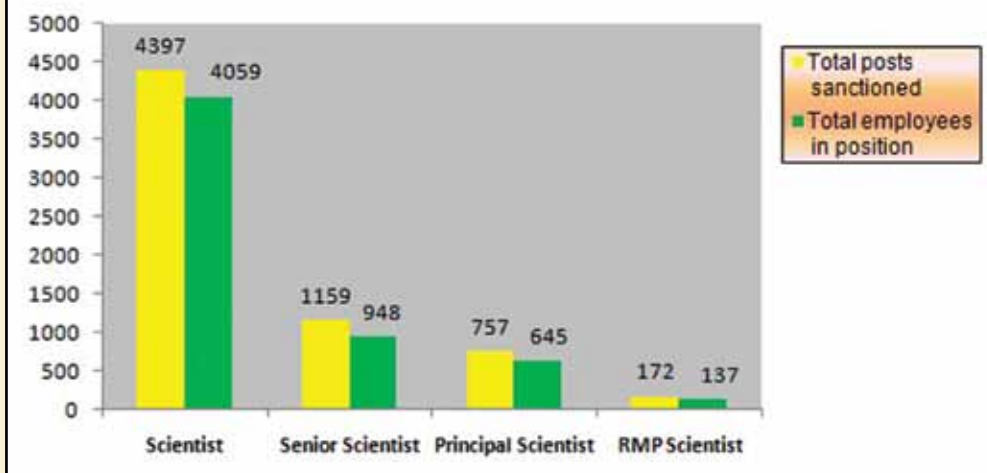
**Source** : *Research and Development Statistics 2011-12*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

**Table 10.2: Total number of employees in the ICAR and its research institutes and number of Scheduled Castes, Scheduled Tribes and Other Backward Classes**

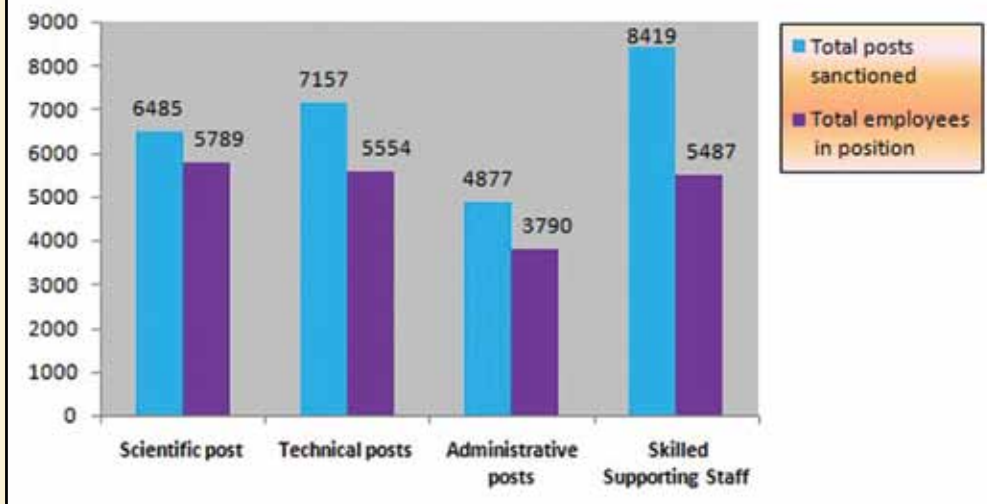
| Sl. No.                            | Class of posts   | Total posts sanctioned | Total employees in position | Scheduled castes employees |                      | Scheduled tribes employees |                      | OBC employees |                      |
|------------------------------------|--|------------------------|-----------------------------|----------------------------|----------------------|----------------------------|----------------------|---------------|----------------------|
|                                    |  |                        |                             | Number                     | % to total employees | Number                     | % to total employees | Number        | % to total employees |
| <b>1. Scientific posts</b>         |  |                        |                             |                            |                      |                            |                      |               |                      |
|                                    | Scientist  | 4397                   | 4059                        | 531                        | 13.08                | 213                        | 5.25                 | 721           | 17.76                |
|                                    | Senior Scientist   | 1159                   | 948                         | 88                         | 9.28                 | 17                         | 1.79                 | 152           | 16.03                |
|                                    | Principal Scientist  | 757                    | 645                         | 61                         | 9.45                 | 5                          | 0.78                 | 50            | 7.75                 |
|                                    | RMP Scientist  | 172                    | 137                         | 3                          | 2.19                 | 1                          | 0.73                 | 2             | 1.45                 |
|                                    | <b>Total</b>   | <b>6485</b>            | <b>5789</b>                 | <b>683</b>                 | <b>11.79</b>         | <b>236</b>                 | <b>4.08</b>          | <b>925</b>    | <b>15.98</b>         |
| <b>2. Technical posts</b>          |  |                        |                             |                            |                      |                            |                      |               |                      |
|                                    | Category-I   | 3993                   | 2870                        | 540                        | 18.82                | 282                        | 9.83                 | 393           | 13.69                |
|                                    | Category-II  | 2650                   | 2205                        | 357                        | 16.19                | 146                        | 6.62                 | 312           | 14.15                |
|                                    | Category-III   | 514                    | 479                         | 97                         | 20.25                | 24                         | 5.01                 | 65            | 13.57                |
|                                    | <b>Total</b>   | <b>7157</b>            | <b>5554</b>                 | <b>994</b>                 | <b>17.90</b>         | <b>452</b>                 | <b>8.14</b>          | <b>770</b>    | <b>13.86</b>         |
| <b>3. Administrative posts</b>     |  |                        |                             |                            |                      |                            |                      |               |                      |
| (a)                                | Category "A" Post<br>Senior Registrar/Director/Deputy Secretary/ Under Secretary/<br>CAOs/SAOs/AOs/CF&AO/ F&AO/<br>Legal Advisor/ Director(OL)/<br>DD(OL)/AD(OL)/PPS<br>Category "B" Post<br>AF/AO/AO/PS/SO/AD(OL) /<br>ALA/Assistant/PA/Senior Sales<br>Assistant/JAO/ALA<br>Category "C" Post<br>UDC/Steno/LDC | 336                    | 281                         | 1                          | 18.15                | 15                         | 5.34                 | 14            | 4.98                 |
| (b)                                |  | 1239                   | 919                         | 188                        | 20.45                | 81                         | 8.81                 | 75            | 13.57                |
| (c)                                |  | 3302                   | 2590                        | 445                        | 17.18                | 195                        | 7.53                 | 318           | 12.28                |
|                                    | <b>Total</b>   | <b>4877</b>            | <b>3790</b>                 | <b>684</b>                 | <b>18.04</b>         | <b>291</b>                 | <b>7.68</b>          | <b>407</b>    | <b>10.74</b>         |
| <b>4. Supporting Skilled Staff</b> |  |                        |                             |                            |                      |                            |                      |               |                      |
|                                    |  | <b>8419</b>            | <b>5487</b>                 | <b>1574</b>                | <b>28.69</b>         | <b>458</b>                 | <b>8.34</b>          | <b>729</b>    | <b>13.29</b>         |

Source : DARE / ICAR, Annual Report, 2015-2016, Ministry of Agriculture & Farmers Welfare, Govt. of India.

**Scientific cadre strength in ICAR and its Research Institute**



**Staff position in ICAR and its Research Institutes**





## FEEDBACK PROFORMA

Users of the Agricultural Research Data Book (ARDB 2015) are requested to comment on the organization and content of the ARDB for its further improvement by answering the following questions:

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