

कृषि अनुसंधान

डाटा पुस्तिका

AGRICULTURAL RESEARCH

DATA BOOK

2018



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

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



भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान
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ICAR-Indian Agricultural Statistics Research Institute
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AGRICULTURAL RESEARCH
DATA BOOK
2018

The contents of AGRICULTURAL RESEARCH
DATA BOOK 2018 are also available at the
ICAR-Indian Agricultural Statistics Research Institute
Website: <http://www.iasri.res.in/>



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सचिव एवं महानिदेशक

TRILOCHAN MOHAPATRA, Ph.D.

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SECRETARY & DIRECTOR GENERAL

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कृषि अनुसंधान और शिक्षा विभाग एवं
भारतीय कृषि अनुसंधान परिषद
कृषि एवं किसान कल्याण मंत्रालय, कृषि भवन, नई दिल्ली 110 001

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प्राक्कथन

कृषि अनुसंधान देश में कृषि के समग्र एवं स्थायी विकास के लिए महत्वपूर्ण है। भारतीय कृषि अनुसंधान परिषद, राष्ट्रीय स्तर पर कृषि अनुसंधान के क्षेत्र में एक शीर्ष संगठन है जो देश में कृषि के क्षेत्र में कृषि अनुसंधान, शिक्षा, प्रसार और सहायता की नई प्रौद्योगिकियों के उपयोग को बढ़ाने एवं समर्थन करने में महत्वपूर्ण भूमिका निभाता है।

भारतीय कृषि अनुसंधान परिषद नीति निर्माताओं, वैज्ञानिकों, प्रसार पदाधिकारियों, छात्रों, शोधकर्ताओं, उद्यमियों, उद्योगपतियों, प्रगतिशील किसानों आदि के उपयोगार्थ कृषि के विभिन्न पहलुओं पर जानकारी एकत्रित एवं समेकित करती है। कृषि प्रौद्योगिकी का व्यापक प्रसार सुनिश्चित करने के लिए भारतीय कृषि अनुसंधान परिषद इन मूल्यवान जानकारीयों को कृषि अनुसंधान डाटा पुस्तिका के रूप में प्रति वर्ष प्रकाशित करती है। कृषि एवं उसके संबंधित क्षेत्रों के विभिन्न पहलुओं पर आंकड़ों के लिये इस प्रकाशन को संदर्भ पुस्तिका के रूप में व्यापक रूप से उपयोग किया जाता है। कृषि अनुसंधान डाटा पुस्तिका क्षेत्र, उत्पादन, उत्पादकता, भूमि उपयोग, बागवानी, पशुपालन, मत्स्य पालन आदि पर आंकड़ों का एक समृद्ध स्रोत है।

कृषि अनुसंधान डाटा पुस्तिका 2018 के वर्तमान अंक में नवीनतम उपलब्ध आंकड़ों का समावेश किया गया है। यह अपेक्षा की जाती है कि यह प्रकाशन कृषि पर जानकारी का एक विश्वसनीय आधार बना रहेगा। मैं पाठकों से उनकी टिप्पणियां/सुझाव देने का आग्रह करता हूँ, ताकि प्रकाशन की गुणवत्ता को बढ़ाया जा सके। मैं भारतीय कृषि अनुसंधान परिषद के शिक्षा प्रभाग विशेषकर भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान को इस कृषि अनुसंधान डाटा पुस्तिका 2018 को प्रकाशित करने के लिए बधाई देता हूँ व उनके इस सफल प्रयास की प्रशंसा करता हूँ।

fnukd %03 जुलाई, 2018

त्रि. महापात्र
(त्रिलोचन महापात्र)



त्रिलोचन महापात्र, पीएच.डी.

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FOREWORD

Agricultural research is a pivot for planned growth and sustainable development of agriculture in the country. Indian Council of Agricultural Research (ICAR) is an apex organization in the field of agricultural research at national level which plays a crucial role in promoting and accelerating agricultural research, education, extension and support in demonstrating the use of new technologies in agriculture.

The data generated by ICAR on various aspects of agriculture and allied disciplines is being used by various stakeholders such as policy makers, statisticians, economists, researchers, students, extension workers, entrepreneurs, industrialists, progressive farmers and the general public. Agricultural Research Data Book (ARDB) is an important ICAR publication which provides valuable information in the form of comprehensive compendium regularly on annual basis. This publication is widely used as a reference book for data on various aspects of agriculture and its allied sector. The ARDB is a rich source of data on area, production, productivity, land-use statistics, horticulture, animal husbandry, fishery etc.

The present issue of Agricultural Research Data Book 2018 has been updated with the latest available data. It is anticipated that this publication will continue to serve as a reliable source of information on various aspects of agriculture. I welcome the comments/suggestions from users to improve the quality of this publication. I compliment the Education Division of ICAR especially the ICAR-Indian Agricultural Statistics Research Institute (ICAR-IASRI) for their efforts in bringing out this Agricultural Research Data Book 2018.

Date: 03 July, 2018

(T. MOHAPATRA)

आमुख

देश में भारतीय कृषि अनुसंधान परिषद (भाकृअनुप) कृषि अनुसंधान और शिक्षा के संगठन एवं प्रबंधन के लिए एक सक्रिय संस्था है और देश की आजादी के बाद से कृषि के समग्र विकास की दिशा में एक महत्वपूर्ण और प्रभावी भूमिका निभा रही है।

विभिन्न स्रोतों से उपलब्ध कृषि अनुसंधान, शिक्षा और सम्बद्ध पहलुओं से सम्बंधित सूचना अनेक प्रकार के प्रकाशित एवं अप्रकाशित रिकार्डों में अलग अलग जगहों पर उपलब्ध हैं। इन अलग अलग जगहों पर उपलब्ध सूचनाओं को 1995 से कृषि अनुसंधान डाटा पुस्तिका में भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान (भाकृअनुप-भा.कृ.सां.अ.सं.) एवं भारतीय कृषि अनुसंधान परिषद के संयुक्त प्रयासों के माध्यम से संकलित किया जा रहा है। यह कृषि अनुसंधान डाटा पुस्तिका 2018 अपने प्रकाशन की श्रंखला में इक्किसवाँ संस्करण है। डाटा पुस्तिका को प्रयोक्ता की सुविधा के उद्देश्य से 10 भागों में विभाजित किया गया है। यह प्राकृतिक संसाधन, कृषि निविष्टि, पशुपालन, डेरी उद्योग, मत्स्यिकी, बागवानी, उत्पादन, उत्पादकता, कृषि अभियांत्रिकी, निर्यात, आयात, विश्व कृषि में भारत का स्थान और मानव संसाधन पर नतीनतम सूचनाएँ उपलब्ध कराती है। कृषि के विभिन्न पहलुओं पर इसमें 173 तालिकाएं हैं। कृषि अनुसंधान डाटा पुस्तिका में भारत में उपलब्ध जून 2018 के अंत तक के नतीनतम आंकड़े हैं।

कृषि अनुसंधान डाटा पुस्तिका का प्रथम संस्करण वर्ष 1995 के अन्त तक की सूचनाओं के आधार पर वर्ष 1996 में प्रकाशित किया गया था। इसके बाद से इसका प्रकाशन नियमित रूप से उपलब्ध नतीनतम आंकड़ों को अद्यतन करके प्रतिवर्ष किया जा रहा है। कृषि अनुसंधान डाटा पुस्तिका 2018 में लिये गये 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 एवं विभिन्न प्रकार के राज्यवार आंकड़ों का भौगोलिक सूचनातंत्र पद्धति द्वारा मानचित्र बनाकर मूल्य वर्धन किया गया है। उपयोगकर्ताओं के बीच व्यापक स्वीकार्यता होने के कारण कृषि अनुसंधान डाटा पुस्तिका की एक सॉफ्ट कॉपी हमारी संस्थान की वेबसाइट www.iasri.res.in पर अपलोड की गई है। हम आशावान हैं कि कृषि अनुसंधान डाटा पुस्तिका 2018 में प्रस्तुत सूचना पाठकों के लिए लाभप्रद होगी। इस डाटा पुस्तिका 2018 में विभिन्न प्रयोक्ताओं से प्राप्त टिप्पणियों और सुझावों को शामिल करने का प्रयास किया गया है। हम डाटा पुस्तिका के प्रस्तुतीकरण पर रचनात्मक सुझाव का स्वागत करते हैं जो इसके भावी अंकों में सुधार लाने के लिए लाभदायक होंगे। अतः अपने सुझाव कृपया इस पते पर भेजें:

डॉ. लाल मोहन भर, निदेशक

भाकृअनुप-भारतीय कृषि सांख्यिकी अनुसंधान संस्थान

लाईब्रेरी एवेन्यू, पूसा, नई दिल्ली-110 012

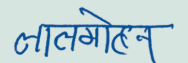
फ़ैक्स: 011-25841564, दूरभाष: 011-25841479, ई-मेल: director.iasri@icar.gov.in

इस डाटा पुस्तिका को तैयार करने के लिए भाकृअनुप-भा.कृ.सां.अ.सं., परिषद के विभिन्न प्रभागों विशेषतः कृषि शिक्षा प्रभाग एवं परिषद के सम्बन्धित अधिकारियों द्वारा किए गए प्रयास भी सराहनीय हैं।



(नरेन्द्र सिंह राठौर)

उप-महानिदेशक (कृषि शिक्षा), भा.कृ.अनु.प.



(लाल मोहन भर)

निदेशक, भाकृअनुप-भा.कृ.सां.अ.सं.

PREFACE

Indian Council of Agricultural Research (ICAR) is an apex body for organization and management of agricultural research and education in the country which plays an important and effective role towards overall growth of agriculture since Independence.

Information pertaining to agricultural research, education and related aspects available from different sources is scattered over various types of published and unpublished records. These scattered information are being compiled since 1995 in Agricultural Research Data Book (ARDB) through joint efforts of the ICAR-Indian Agricultural Statistics Research Institute (ICAR-IASRI) and Indian Council of Agricultural Research (ICAR). This ARDB 2018 is twenty first edition in the series. It is divided into 10 sections for the purpose of convenience of the users. It provides information on natural resources, agricultural inputs, animal husbandry, dairying, fisheries, horticulture, production, productivity, agricultural engineering, export, import, place of India in world agriculture and human resources. It has 173 tables on different aspects of agriculture. The ARDB 2018 contains the latest information/data as available by the end of June 2018 in the country.

The first edition of the ARDB was published in 1996 consisting of the information up to the end of 1995. Subsequently, an updated version of ARDB is being brought out every year regularly. The

ARDB 2018 has some value additions like predicting the future year production of foodgrains, pictorial/graphical representations of data, depicting state-wise data and thematic maps using Geographical Information System (GIS). This issue of the publication has been enriched with latest available information on emerging areas in agriculture sectors. Being a wider acceptability among the users, a soft copy of the ARDB has also been uploaded at our Institute website: [www:iasri.res.in](http://www.iasri.res.in). We are very confident that the information presented in this ARDB 2018 will be useful for the users. Efforts have been made to incorporate the comments and suggestions received from various users in this ARDB 2018. Further, we welcome suggestions of the users on the content and presentation of the material in ARDB 2018 which will help to enrich the future issues. Suggestions may please be sent to:

Dr. L.M. Bhar, Director

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The contributions made in compilation of ARDB 2018 by officials of various SMDs of the Council particularly Education Division, ICAR, compilation team of ICAR-IASRI and various organizations for supplying requisite information are highly acknowledged.



(Narendra Singh Rathore)

Dy. Director General (Agril. Edn), ICAR



(L.M. BHAR)

Director, ICAR-IASRI

विषय-सूची

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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 जूल	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	बोरॉन	Boron
Fe	आयरन	Iron
Zn	ज़िंक	Zinc
Cu	कॉपर	Copper
Mn	मैंगनीज़	Manganese
Mo	मॉलिबडीनम	Molybdenum
SPM	सॉलिड पार्टिकुलेट मैटर	Solid Particulate Matter
CWC	केन्द्रीय जल आयोग	Central Water Commission
DAP	लद्दू पशु शक्ति	Draught Animal Power
HSD	उच्च श्रेणी का डीज़ल	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

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

Kardi Seed	
Oil to Seeds Crushed	40 per cent
Cake to Seeds Crushed	60 per cent
Mahua Seed	
Oil to Seeds Crushed	36 per cent
Cake to Seeds Crushed	64 per cent
Neem Seed	
Oil to Kernels Crushed	45 to 50 per cent
Cake to Kernels Crushed	50 to 55 per cent
Soybean Seed	
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
Sugar	
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
Lac	
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
Cashewnut	
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* 2016, Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, 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
1 acre	=	0.40468 ha		=	1.10231 short ton
	=	4840 sq yd		=	1000 kg
	=	43560 sq ft	=	10 q	
	=	0.00156 sq miles	1 q	=	100 kg
1 sq mile	=	640 acres	1 long ton	=	2.240 pounds
	=	259 ha	=	1.01605 metric tons	
	=	2.59 sq km	1 short ton	=	2.000 pounds
1 sq kilometer	=	0.3861 sq miles	1 kg	=	0.90781 metric ton
100 sq ft	=	9.290 sq m	1 pound	=	2.20462 pounds
10 Marlas	=	0.0253 ha	1 ounce	=	0.45359 kg
10 Bighas	=	0.8440 ha	16 ounce	=	1 pound
	=	2.0830 acre	10 pounds	=	4.54 kg
10 Biswas	=	0.0420 ha	1 mound	=	81.2857 pounds
20 Biswas	=	1 Bigha	=	37.32410 kg	
20 Biswani	=	1 Biswa	Distance		
4.8 Bighas	=	1 acre	1 mile	=	8 furlongs or 1760 yards or 5280 ft
640 acre	=	1 sq mile		=	1.609344 km
10 Kanals	=	0.5058 ha	1 furlong	=	1609.344 m
1 Kanal	=	20 Marla		=	220 yards
Yield				=	660 ft
100 kg per ha	=	1.4869 bushels (60 lb) per acre		=	0.201168 km
1 bushel (60 lb) per acre	=	67.253 kg per ha	1 km	=	201.168 m
1 kg per ha	=	0.892169 lb per acre		=	0.125 mile
1 lb per acre	=	1.120864 kg per ha		=	5/8 mile = 0.6213712 mile = 4.97097 furlong
Energy				=	3280.83 ft
1 BTU	=	251.9958 calorie	1 meter	=	1000 m
	=	0.0003930148 horse power-hour		=	1093.613 yards
	=	1055.056 Joule	1 inch	=	1.0936 yards
	=	0.0002930711 kilo watt-hour		=	3.28089 ft
1 calorie	=	0.2930711 watt hour	1 foot	=	100 cm
	=	0.003968321 BTU	=	25.4 mm	
	=	4.1868 Joule	1 yard	=	2.54 cm
	=	0.001163 watt-hour	=	30.48 cm	
			=	0.3048 m	
			=	91.44 cm	
			=	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 2016-17*, The Fertiliser Association of India, New Delhi.



भाग-I
प्राकृतिक संसाधन

SECTION-I
Natural Resources

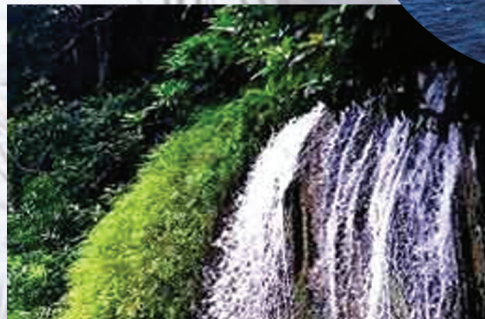


Table 1.1: Land use classification in India

Classification	(million ha)													
	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11#	2011-12#	2012-13#	2013-14#	2014-15#	2014-15#	2014-15#	2014-15#
I. Geographical area	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73	328.73
II. Reporting area for land utilisation statistics (1 to 5)	284.32	298.46	303.75	304.16	304.86	305.19	307.48	307.39	307.49	307.80	307.80	307.82	307.82	307.82
I. Forests	40.48 (14.2)	54.05 (18.1)	63.83 (21.0)	67.46 (22.2)	67.81 (22.2)	69.84 (22.9)	71.59 (23.3)	71.60 (23.3)	71.57 (23.3)	71.83 (23.3)	71.83 (23.3)	71.79 (23.3)	71.79 (23.3)	71.79 (23.3)
2. Not available for cultivation (a+b)	47.52	50.75	44.61	39.55	40.48	41.23	43.58	43.53	43.58	43.86	43.86	43.88	43.88	43.88
(a) Non-agricultural uses	9.36 (3.3)	14.84 (5.0)	16.48 (5.4)	19.60 (6.4)	21.09 (6.9)	23.75 (7.8)	26.40 (8.6)	26.31 (8.6)	26.50 (8.6)	26.91 (8.7)	26.91 (8.7)	26.88 (8.7)	26.88 (8.7)	26.88 (8.7)
(b) Barren and uncultivable land	38.16 (13.4)	35.91 (12.0)	28.13 (9.3)	19.96 (6.6)	19.39 (6.4)	17.48 (5.7)	17.18 (5.6)	17.22 (5.6)	17.07 (5.6)	16.95 (5.5)	16.95 (5.5)	17.00 (5.5)	17.00 (5.5)	17.00 (5.5)
3. Other uncultivated land excluding fallow land (a+b+c)	49.45	37.64	35.13	32.31	30.22	27.74	26.15	26.11	26.08	25.83	25.83	25.83	25.83	25.83
(a) Permanent pastures and other grazing land	6.68 (2.3)	13.97 (4.7)	13.26 (4.4)	11.99 (3.9)	11.40 (3.7)	10.66 (3.5)	10.31 (3.4)	10.31 (3.4)	10.26 (3.3)	10.26 (3.3)	10.26 (3.3)	10.26 (3.3)	10.26 (3.3)	10.26 (3.3)
(b) Miscellaneous tree crops and groves	19.83 (7.0)	4.46 (1.5)	4.37 (1.4)	3.58 (1.2)	3.82 (1.3)	3.44 (1.1)	3.20 (1.0)	3.16 (1.0)	3.18 (1.0)	3.19 (1.0)	3.19 (1.0)	3.10 (1.0)	3.10 (1.0)	3.10 (1.0)
(c) Culturable waste land	22.94 (8.1)	19.21 (6.4)	17.50 (5.8)	16.74 (5.5)	15.00 (4.9)	13.63 (4.5)	12.65 (4.1)	12.64 (4.1)	12.64 (4.1)	12.39 (4.0)	12.39 (4.0)	12.47 (4.1)	12.47 (4.1)	12.47 (4.1)
4. Fallow land (a+b)	28.12	22.82	19.33	24.55	23.37	25.04	24.60	25.18	26.32	24.85	24.85	26.18	26.18	26.18
(a) Fallow land other than current fallow	17.45 (6.1)	11.18 (3.7)	8.73 (2.9)	9.72 (3.2)	9.66 (3.2)	10.27 (3.4)	10.32 (3.4)	10.67 (3.5)	11.04 (3.6)	10.69 (3.5)	10.69 (3.5)	11.09 (3.6)	11.09 (3.6)	11.09 (3.6)
(b) Current fallow	10.68 (3.8)	11.64 (3.9)	10.60 (3.5)	14.83 (4.9)	13.70 (4.5)	14.78 (4.8)	14.28 (4.6)	14.51 (4.7)	15.29 (5.0)	14.15 (4.6)	14.15 (4.6)	15.09 (4.9)	15.09 (4.9)	15.09 (4.9)
5. Net area sown	118.75 (41.8)	133.20 (44.6)	140.86 (46.4)	140.29 (46.1)	143.00 (46.9)	141.34 (46.3)	141.56 (46.0)	140.98 (45.9)	139.94 (45.5)	141.43 (45.9)	141.43 (45.9)	140.13 (45.5)	140.13 (45.5)	140.13 (45.5)
6. Area sown more than once	13.15	19.57	24.93	34.63	42.74	44.00	56.12	54.82	54.31	59.52	58.23	58.23	58.23	58.23
7. Gross cropped area (5+6)	131.89	152.77	165.79	172.63	185.74	185.34	197.68	195.80	194.25	200.95	200.95	198.36	198.36	198.36
8. Cropping intensity*	111.07	114.69	117.70	123.05	129.89	131.13	139.64	138.88	138.81	142.09	141.55	141.55	141.55	141.55
III. Net irrigated area	20.85	24.66	31.10	38.72	48.02	55.20	63.67	65.71	66.29	68.12	68.12	68.38	68.38	68.38
IV. Gross irrigated area	22.56	27.98	38.20	49.78	63.20	76.19	88.94	91.79	92.25	95.77	95.77	96.46	96.46	96.46

Note : 1. #: Provisional, 2. *: Cropping intensity is percentage of the gross cropped area to the net area sown, 3. Figure in parentheses indicate percentage share to the reporting area.

Source : 1. *Land Use Statistics at a Glance 2005-06 to 2014-15*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dae.net.in>)

2. *EnviStats India 2018*, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India. (Website: <http://mospi.nic.in/publication/envi-stats-india-2018>)

3. *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

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, Lakshadweep

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

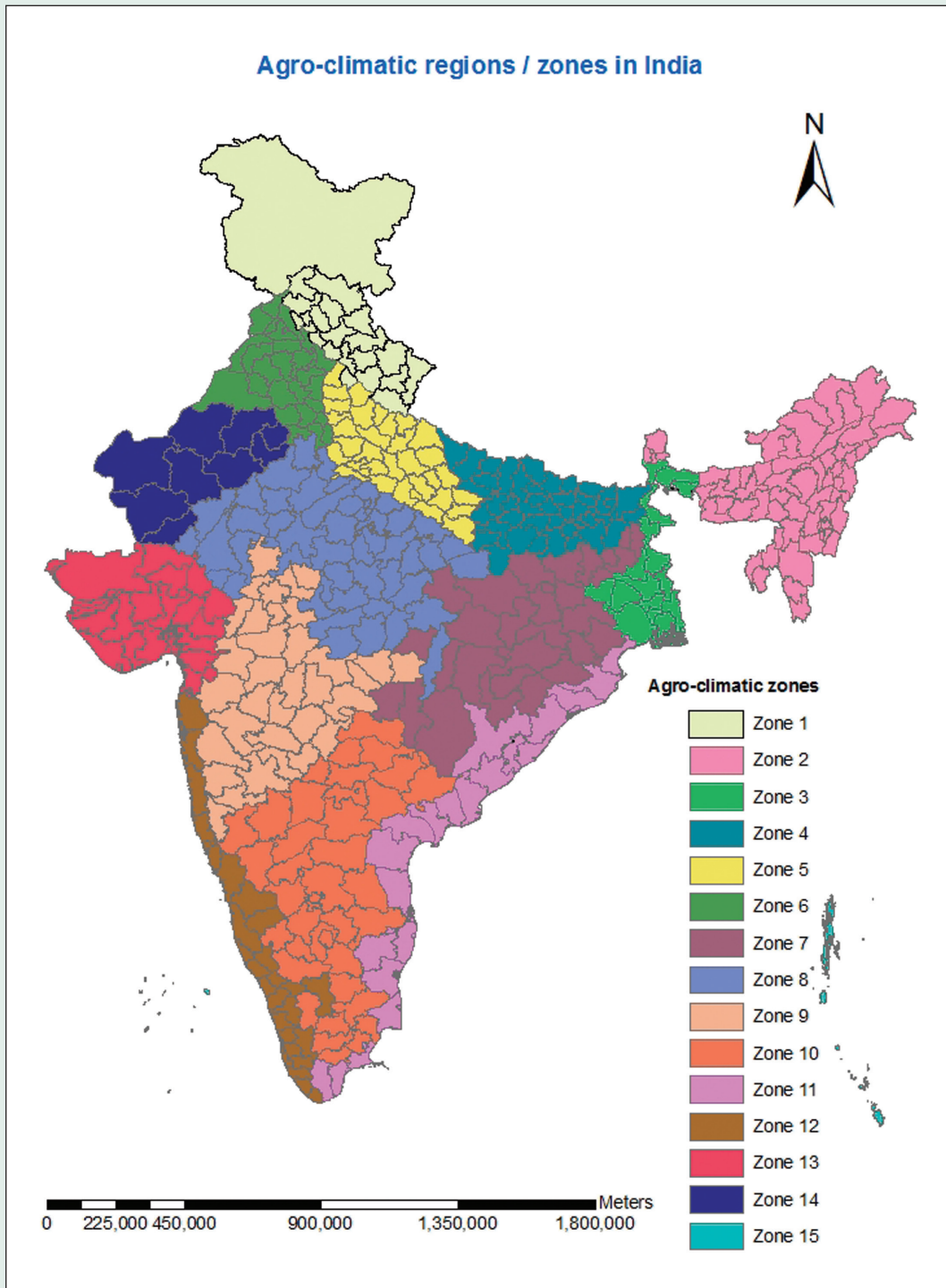


Table 1.3: Agro-ecological regions in India

Eco-system	Region	States represented	Eco-region	Soil type	Growing period (no. of days)
Arid	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
Semi-arid	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
	Sub-humid	9. Northern plain	Bihar, UP, Punjab	Hot sub-humid (dry)	Alluvium-derived
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, West 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		Jammu & Kashmir, HP, UP	Warm sub-humid (to humid with inclusion of per humid)	Brown forest and Podzolic	180-210+
Humid-Per humid	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, West Bengal	Warm per humid	Brown and red hill	210+
	17. North Eastern Hills (Purvanchal)	Tripura, Mizoram, Meghalaya	Warm per humid	Red and Lateritic	210+
Coastal	18. Eastern Coastal Plain	TN, Puducherry, AP, Odisha, West 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+
Island	20. Island of Andaman-Nicobar and Lakshadweep	Andaman-Nicobar and Lakshadweep	Hot humid-Per humid	Red loamy and sandy	210+

Source : Fertiliser Statistics 2016-17, The Fertiliser Association of India, New Delhi.

Table 1.4: 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-mountain	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
Total geographical area	328.7	100.00

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

Source : 1. *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.
2. *Indian Agriculture in Brief-23rd Edition*, Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Govt. of India.

Table 1.5: 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
Marginal	below 1 ha	0.40	0.39	0.39	0.40	0.40	0.38	0.39
Small	1 to 2 ha	1.44	1.44	1.43	1.42	1.42	1.38	1.42
Semi-medium	2 to 4 ha	2.81	2.78	2.76	2.73	2.72	2.68	2.71
Medium	4 to 10 ha	6.08	6.02	5.90	5.84	5.81	5.74	5.76
Large	10 ha and above	18.10	17.41	17.33	17.20	17.12	17.08	17.38
All size classes		2.28	1.84	1.55	1.41	1.33	1.23	1.15

Note : *: Excluding Jharkhand.

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

Table 1.6: 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
Marginal (Below 1 ha)	36200 (51.0)	50122 (56.4)	63389 (59.4)	71179 (61.6)	75408 (62.9)	83694 (64.8)	92826 (67.0)	14599 (9.0)	19735 (12.1)	24894 (15.0)	28121 (17.2)	29814 (18.7)	32026 (22.2)	35908 (22.3)
Small (1 to 2 ha)	13432 (18.9)	16072 (18.1)	20092 (18.8)	21643 (18.7)	22695 (18.9)	23930 (18.6)	24779 (17.9)	19282 (11.9)	23169 (14.1)	28827 (17.4)	30722 (18.8)	32139 (20.1)	33101 (20.9)	35244 (22.1)
Semi-medium (2 to 4 ha)	10681 (15.0)	12455 (14.0)	13923 (13.1)	14261 (12.4)	14021 (11.7)	14127 (10.9)	13896 (10.0)	29999 (18.5)	34645 (21.2)	38375 (23.2)	38953 (23.8)	38193 (24.0)	37898 (23.9)	37705 (23.7)
Medium (4 to 10 ha)	7932 (11.2)	8068 (9.1)	7580 (7.1)	7092 (6.1)	6577 (5.5)	6375 (4.9)	5877 (4.2)	48234 (29.7)	48543 (29.6)	44752 (27.1)	41398 (25.4)	38217 (24.0)	36583 (23.1)	33828 (21.2)
Large (10 ha and above)	2766 (3.9)	2166 (2.4)	1654 (1.6)	1404 (1.2)	1230 (1.0)	1096 (0.8)	973 (0.7)	50064 (30.9)	37705 (23.0)	28659 (17.3)	24160 (14.8)	21072 (13.2)	18715 (11.9)	16907 (10.6)
All size classes	71011 (100)	88883 (100)	106637 (100)	115580 (100)	119031 (100)	129222 (100)	138348 (100)	162318 (100)	163797 (100)	165507 (100)	163355 (100)	159436 (100)	158323 (100)	159592 (100)

Note : 1. Figures in parentheses indicate per cent contribution, 2. *: Excluding Jharkhand.

Source : *Agriculture Census 2010-II*, Agriculture Census Division, Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt. of India.

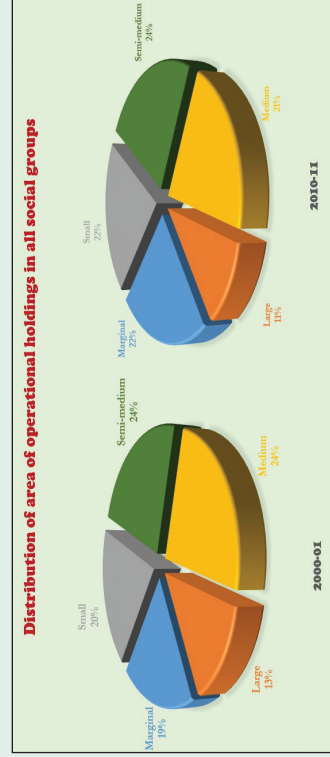
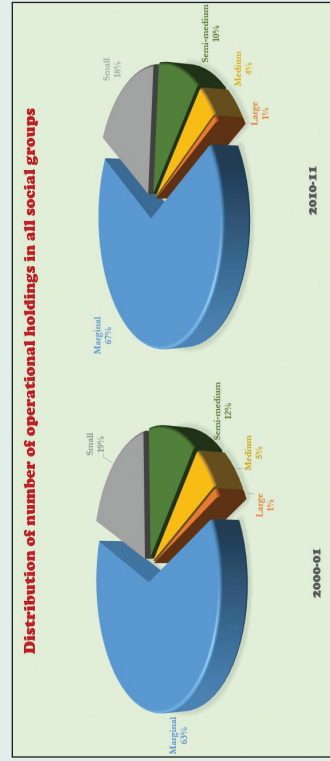


Table 1.7: State-wise distribution of number of operational holdings and area operated-all social groups

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

States/ Union Territories	Agriculture Census	Marginal		Small		Semi-medium		Medium		Large		All Holdings	
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Andhra Pradesh	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
Arunachal Pradesh	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
Assam	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
Bihar	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
Chhattisgarh	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
Goa	2005-06	43	12	6	7	3	7	1	7	Neg.	28	53	61
	2010-11	60	28	10	18	6	17	2	12	1	14	78	89
Gujarat	2005-06	1585	792	1345	1959	1081	3004	582	3380	68	1133	4661	10269
	2010-11	1816	885	1429	2075	1080	2989	513	2930	49	1020	4886	9898
Haryana	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
Himachal Pradesh	2005-06	637	258	176	245	88	240	29	165	4	60	933	968
	2010-11	670	273	175	244	85	230	28	156	3	51	961	955
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

Natural Resources

States/ Union Territories	Agriculture Census	Marginal		Small		Semi-medium		Medium		Large		All Holdings	
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
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	4052	5739	2159	5765	711	3993	68	1084	13699	19767
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	103	46	58	77	41	113	8	47	Neg.	4	210	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	6	3	20	23	48	125	78	481	25	442	178	1074
Odisha	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
Punjab	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
Rajasthan	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
Sikkim	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
Tamil Nadu	2005-06	6228	2286	1234	1721	542	1468	170	958	20	391	8193	6824
	2010-11	6267	2292	1181	1644	502	1356	151	848	17	350	8118	6488

States/ Union Territories	Agriculture Census	Marginal		Small		Semi-medium		Medium		Large		All Holdings	
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Tripura	2005-06	491	139	54	75	18	46	2	10	Neg.	10	565	280
	2010-11	499	140	55	76	22	54	3	14	Neg.	1	578	285
	2005-06	658	260	163	226	78	210	21	117	1	33	922	847
Uttarakhand	2010-11	672	296	157	225	65	175	17	94	1	25	913	816
	2005-06	17507	6972	3103	4341	1392	3796	428	2374	28	424	22458	17906
Uttar Pradesh	2010-11	18532	7171	3035	4243	1334	3629	398	2199	25	380	23325	17622
	2005-06	5675	2799	1006	1595	283	772	28	138	1	221	6992	5526
West Bengal	2010-11	5853	2891	980	1557	267	731	23	110	1	222	7123	5510
	2005-06	5	2	2	3	3	8	2	7	Neg.	2	12	22
Andaman & Nicobar Islands	2010-11	5	2	2	3	3	8	2	7	Neg.	1	12	22
	2005-06	1	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	1	1
Chandigarh	2010-11	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	1	1
	2005-06	8	4	4	5	2	5	1	4	Neg.	2	14	21
Dadra & Nagar Haveli	2010-11	8	4	4	5	2	5	1	4	Neg.	2	15	20
	2005-06	7	2	1	1	Neg.	1	Neg.	Neg.	Neg.	2	8	4
Daman & Diu	2010-11	8	2	Neg.	1	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	8	3
	2005-06	14	6	6	8	3	10	2	11	Neg.	3	25	38
Delhi	2010-11	11	5	5	6	3	8	2	9	Neg.	2	20	30
	2005-06	10	2	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	10	3
Lakshadweep	2010-11	10	2	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	10	3
	2005-06	25	7	4	5	2	5	1	4	Neg.	2	31	24
Puducherry	2010-11	28	10	3	4	1	4	Neg.	3	Neg.	1	33	22
	2005-06	83694	32026	23930	33101	14127	37898	6375	36583	1096	18715	129222	158323
All India Total	2010-11	92826	35908	24779	35224	13896	37705	5875	33828	973	16907	138348	159592
	2005-06	83694	32026	23930	33101	14127	37898	6375	36583	1096	18715	129222	158323

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 and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt. of India.

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

States/ Union Territories	Agriculture 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
Jharkhand	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
Karnataka	2005-06	48.23	13.33	26.56	23.22	16.86	28.00	7.31	25.88	1.05	9.56

States/ Union Territories	Agriculture Census	Marginal		Small		Semi-medium		Medium		Large	
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Kerala	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
Madhya Pradesh	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
Maharashtra	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
Meghalaya	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
Mizoram	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
Odisha	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
Punjab	2010-11	15.62	2.55	18.57	6.78	30.83	21.56	28.35	43.18	6.62	25.93
	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
Sikkim	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
	2005-06	76.01	35.51	15.06	25.22	6.62	21.51	2.07	14.03	2.24	5.73
Tamil Nadu	2010-11	77.19	35.33	14.56	25.34	6.19	20.89	1.85	13.06	0.21	5.39
	2005-06	86.77	49.71	9.63	26.59	3.23	16.39	0.34	3.67	0.03	3.64

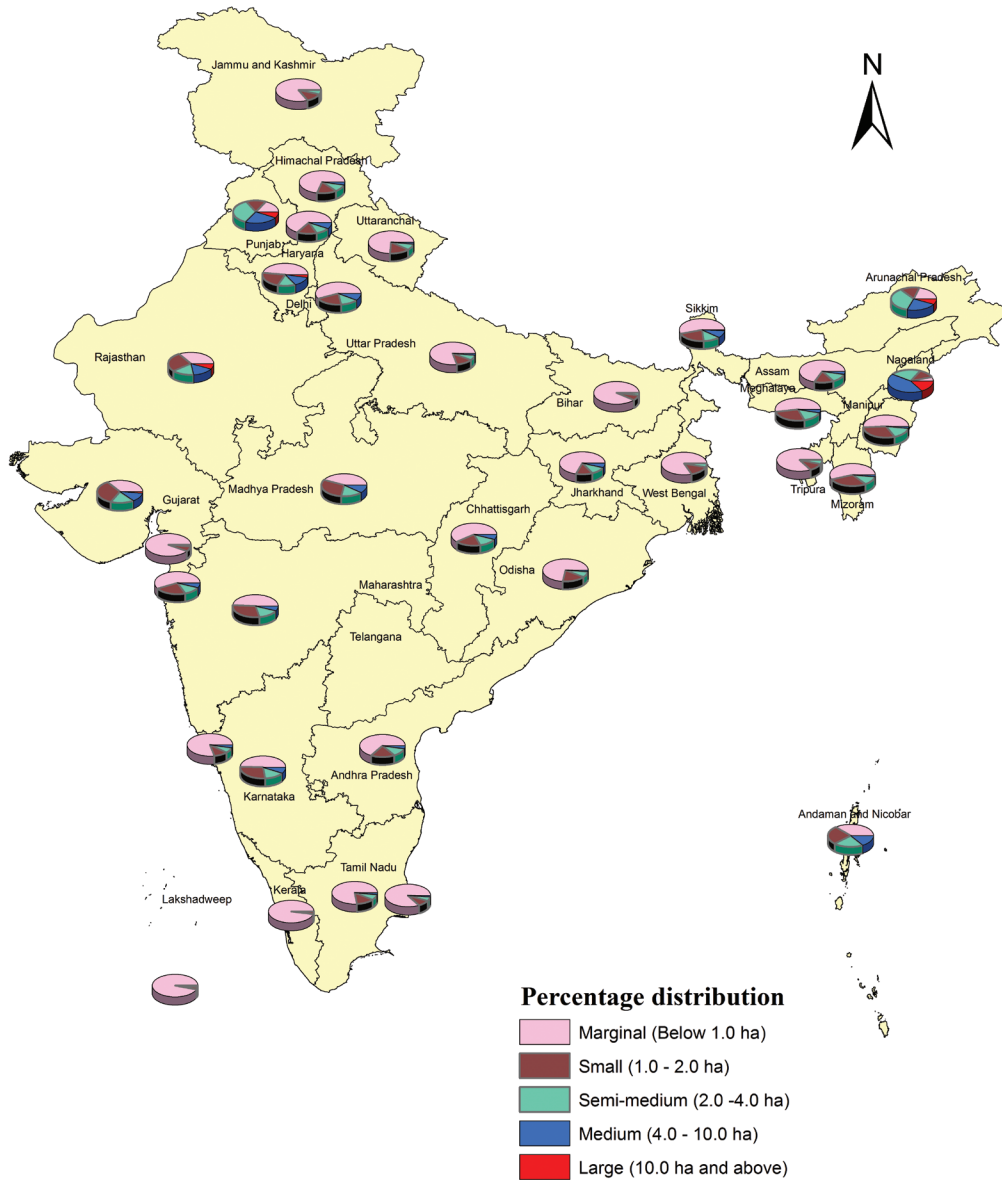
Natural Resources

States/ Union Territories	Agriculture Census	Marginal		Small		Semi-medium		Medium		Large	
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Uttarakhand	2010-11	85.17	44.93	9.75	26.20	4.36	21.85	0.71	6.58	0.02	0.43
	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
Uttar Pradesh	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
	2005-06	81.17	50.65	14.38	28.87	4.04	13.98	0.40	2.49	0.01	4.00
West Bengal	2010-11	82.16	52.47	13.76	28.26	3.75	13.26	0.32	1.99	0.01	4.02
	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
Andaman & Nicobar Islands	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
	2005-06	53.34	19.18	27.62	25.54	12.95	24.75	5.27	21.61	0.82	8.92
Dadra & Nagar Haveli	2010-11	55.54	20.38	26.51	26.33	12.27	24.63	4.98	20.73	0.71	7.92
	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
Daman & Diu	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
	2005-06	95.79	62.61	2.61	13.10	1.27	11.67	0.25	5.72	0.08	6.91
Lakshadweep	2010-11	95.81	62.22	2.60	13.23	1.26	11.79	0.25	5.78	0.08	6.98
	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
Puducherry	2005-06	64.77	20.23	18.52	20.91	10.93	23.94	4.93	23.11	0.85	11.82
	2010-11	67.04	22.24	17.93	22.07	10.05	23.59	4.25	21.18	0.73	10.92

Note : 1. Data for the year 2005-06 for Jharkhand not collected, 2. N.A.: Not available, 3. Total may not tally due to rounding off figures.

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

State-wise percentage distribution of number of operational holdings during 2010-11



0 135,000 270,000 540,000 810,000 1,080,000 Meters

Table 1.9: India's major natural disasters since 1990

Year	Type	Affected population location	Loss (no. of human life)	Loss to crops & property
1990	Cyclone	Andhra Pradesh and Tamil Nadu	928	₹ 22.47 billion
1991	Earthquake	Uttar Kashi, Uttar Pradesh	768	₹ 0.89 billion
1992	Drought	Maharashtra		
1993	Floods	Arunachal Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Mizoram, Punjab, Rajasthan, Tripura and Uttar Pradesh	1643	₹ 28.23 billion ₹ 21.06 billion
1993	Earthquake	Maharashtra	N.A.	N.A.
1994	Cyclone	Andhra Pradesh and Tamil Nadu	226	Loss to property estimated at ₹ 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 ₹ 17.7 billion and 2.35 million hectare crop damaged.
1996	Floods	Large parts of the country	1700	Property worth ₹ 22.0 billion and 20.0 million hectare crop damaged.
1996	Cyclone	Andhra Pradesh	1058	0.3 million houses fully and a similar number partially damaged. 0.1 million hectare crop damaged. Loss to property worth ₹ 61.26 billion.
1997	Earthquake	Jabalpur	39	N.A.
1998	Earthquake	Chamoli	100	N.A.
1999	Cyclone	Odisha	9887	1.8 million hectare crop area and 1.6 million houses damaged.
1999	Cyclone	West Bengal	N.A.	₹ 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 ₹ 1957.82 crores.
2001	Earthquake	Gujarat	N.A.	Estimated value of public properties ₹ 21,262 crores. Over 20,000 people killed, 1,50,000 injured and 1,59,00,000 affected, 12.54 lakh house damaged.
2004	Tsunami/ 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 the referred places.
2005	Earthquake	Pakistan & Kashmir	N.A.	Over 87,000 people killed.

Year	Type	Affected population location	Loss (no. of human life)	Loss to crops & property
2008	Kosi floods	North Bihar	527	19323 livestock perished, 3.3 million persons affected.
	Cyclone Nisha	Tamil Nadu	204	
2009	Floods	Andhra Pradesh, Karnataka	300	N.A.
	Drought	252 districts in 10 States	N.A.	N.A.
2010	Cloud-burst	Leh, Ladakh in Jammu & Kashmir	N.A.	N.A.
2011	Earthquake	North Eastern India with epicenter near Nepal Border and Sikkim	97	N.A.
	Floods	19 districts of Odisha	45	N.A.
	Earthquake	Sikkim, West Bengal, Bihar	60	N.A.
	Cyclone Thane	Tamil Nadu, Puducherry	47	N.A.
2012	Floods	Assam	N.A.	N.A.
	Floods	Uttarkashi, Rudraprayag and Bageshwar district & of Uttarakhand	52	N.A.
	Cyclone Nilam	Tamil Nadu	65	N.A.
2013	Cyclone Mahasen	Tamil Nadu	8	N.A.
	Floods/Land-slides	Uttarakhand and Himachal Pradesh	4094	N.A.
	Cyclone Phailin	Odisha and Andhra Pradesh	23	N.A.
	Floods	Andhra Pradesh	53	N.A.
	Floods	Odisha	21	N.A.
2014	Cyclone Hud Hud	Andhra Pradesh & Odisha	N.A.	N.A.
	Floods	Jammu & Kashmir	N.A.	N.A.
2015	Cyclonic Storms	West Bengal	N.A.	N.A.
	Floods and Heavy Rains	Tamil Nadu, Rajasthan, Andhra Pradesh, Gujarat	N.A.	N.A.
2016	Cyclonic Storm	Tamil Nadu	N.A.	N.A.

Note : N.A.: Not available.

Source : EnviStats India 2018, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India.
(Website: <http://mospi.nic.in/publication/envistats-india-2018>)

Table 1.10: Year-wise damage due to natural extreme events in India

Year	Live Lost human (in No.)	Cattle Lost (in No.)	Houses damaged (in No.)	Cropped areas affected (in Lakh hectares)
2001-02	834	21269	346878	18.72
2002-03	898	3729	462700	21.00
2003-04	1992	25393	682209	31.98
2004-05	1995	12389	1603300	32.53
2005-06	2698	110997	2120012	35.52
2006-07	2402	455619	1934680	70.87
2007-08	3764	119218	3527041	85.13
2008-09	3405	53833	1646905	35.56
2009-10	1677	128452	1359726	47.13
2010-11	2310	48778	1338619	46.25
2011-12	1600	9126	876168	18.87
2012-13	946	24293	667319	14.44
2013-14	5677*	102998	1210227	63.75
2014-15	1674	92180	725390	26.85
2015-16	1460	59057	1313371	31.09
2016-17 ^(P)	1487	41965	546518	25.49

Note : 1. *: Includes person missing in the natural disaster, 2. P: Provisional.

Source : EnviStats India 2018, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India. (Website: <http://mospi.nic.in/publication/envistats-india-2018>)

Table 1.11: Drought years in India

Year	Area affected (million sq. km.)	% area of the country affected	Category
1876	0.49	15.8	Slight
1877	2.03	64.7	Calamitous
1883	1.03	32.8	Moderate
1884	0.70	22.2	Slight
1885	0.48	15.4	Slight
1891	1.15	36.7	Moderate
1896	0.68	21.7	Slight
1899	1.99	63.4	Calamitous
1901	0.89	28.5	Moderate
1902	0.54	17.1	Slight
1904	0.98	31.1	Moderate
1905	1.09	34.7	Moderate
1907	0.85	27.2	Slight
1911	0.97	30.8	Moderate
1913	0.70	22.3	Slight
1915	0.63	20.2	Slight
1918	2.16	68.7	Calamitous
1920	1.22	38.8	Moderate
1925	0.80	25.5	Slight
1928	0.67	21.4	Slight
1936	0.86	27.6	Slight
1941	1.01	32.3	Moderate
1951	1.04	33.2	Moderate
1952	0.81	25.8	Slight
1965	1.35	42.9	Moderate
1966	1.01	32.3	Moderate
1968	0.45	20.6	Slight
1969	0.62	19.9	Slight
1971	0.42	13.3	Slight
1972	1.39	44.4	Severe
1974	0.92	29.3	Moderate
1979	1.24	39.4	Moderate
1982	1.04	33.1	Moderate
1985	0.95	30.1	Moderate
1986	0.60	19.0	Slight
1987	1.55	49.2	Severe
2002	N.A.	N.A.	Severe
2009	N.A.	N.A.	Severe

Note : N.A.: Not available.

Source : *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.

Table 1.12: 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 (₹ million)	Total damages to crops, houses & public utilities (₹ million)
			Area (million ha)	Value (₹ million)	Nos. ('000)	Value (₹ 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

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 (₹ million)	Total damages to crops, houses & public utilities (₹ million)
			Area (million ha)	Value (₹ million)	Nos. ('000)	Value (₹ million)				
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
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*	3.64	21.15	3.64	3214.99	662	526.12	157	2137	3938.12	11094.96
2014*	10.24	9.25	5.09	1439.15	169	459.22	17	1402	4740.34	6638.27
2015*	0.26	22.70	2.42	12693.08	870	7998.93	26	963	8343.79	29099.93
Total	442.53	1981.17	236.67	84890.97	75918	42598.16	5930	102986	136395.50	268551.11
Average	7.02	31.45	3.76	1347.48	1205.05	676.16	94.12	1634.70	2165.01	4262.72
Maximum (Year)	17.05 (1978)	70.45 (1978)	12.30 (2005)	12693.08 (2003)	3507.54 (1978)	10809.80 (2009)	618 (1979)	11316 (1977)	17509.35 (2009)	32551.76 (2009)

Note : *: Tentative.

Source : Compendium of Environment Statistics India 2016, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India. (Website: <http://www.mospi.gov.in>)

Table 1.13: All India rainfall distribution

Year	Monsoon Season (June-September)			Post-Monsoon (October-December)			Winter Season (January-February)			Pre-Monsoon Season (March-May)			Over all Rainfall (June-May)		
	Actual	Normal	% Departure	Actual	Normal	% Departure	Actual	Normal	% Departure	Actual	Normal	% Departure	Actual	Normal	% Departure
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
2014-15	777.5	886.9	-12.3	85.2	127.2	-33.0	37.6	41.4	-9.2	181.5	131.5	38.0	1081.8	1187.0	-8.9
2015-16	760.6	887.5	-14.3	97.8	127.2	-23.1	17.9	41.4	-56.8	131.0	131.5	-0.40	1007.3	1187.6	-15.2
2016-17	862.0	887.5	-2.9	69.7	127.2	-45.2	39.3	41.4	-5.1	128.4	131.5	-2.4	1099.4	1187.6	-7.4
2017-18*	841.3	887.5	-5.2	112.7	127.2	-11.4	1.0	5.3	-81.1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Note : 1. *: Position is up to 10th January, 2018 (Winter season is under progress), 2. N.A.: Not available.

Source : Agricultural Statistics at a Glance 2017, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 1.14: State-wise consumption of electricity for agricultural purpose during 2014-15 and 2015-16(1 Giga Watt hour = 10⁶ Kilo Watt hour)

Zones/States/UTs	Consumption for agricultural purposes		Total consumption		% Share of consumption for agricultural purposes	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
NORTHERN	51703.49	54188.51	236648.26	249815.94	21.85	21.69
Haryana	9654.38	9506.00	32197.33	35092.26	29.99	27.09
Himachal Pradesh	547.72	51.65	7841.52	7957.79	6.98	0.65
Jammu & Kashmir	310.86	305.00	6372.00	7143.92	4.88	4.27
Punjab	10223.57	11513.88	39383.82	40843.00	25.96	28.19
Rajasthan	19088.87	19968.35	49920.12	50358.78	38.24	39.65
Uttar Pradesh	11755.28	12671.19	64706.68	70966.90	18.17	17.86
Uttarakhand	108.10	141.03	9980.11	10298.14	1.08	1.37
Chandigarh	1.67	1.83	1471.66	1496.98	0.11	0.12
Delhi	13.04	29.58	24775.02	25658.17	0.05	0.12
WESTERN	60793.30	62523.59	251154.19	268286.23	24.21	23.30
Gujarat	15942.82	11204.49	73889.76	77027.77	21.58	14.55
Madhya Pradesh	15068.90	18868.19	41757.01	46384.45	36.09	40.68
Chhattisgarh	3112.28	4025.24	17101.55	18886.90	18.20	21.31
Maharashtra	26632.69	28396.58	108496.08	115355.69	24.55	24.62
Goa	30.00	18.00	3151.20	3391.20	0.95	0.53
Daman & Diu	2.30	2.46	1594.96	1691.98	0.14	0.15
Dadra & Nagar Haveli	4.31	8.63	5163.63	5548.24	0.08	0.16
SOUTHERN	54228.66	54171.15	235607.85	245290.74	23.02	22.08
Andhra Pradesh	10899.60	10970.00	41913.67	44352.74	26.00	24.73
Telangana	12569.14	11991.48	39638.88	41288.97	31.71	29.04
Karnataka	17988.64	19318.48	55165.52	57223.18	32.61	33.76
Kerala	298.28	288.16	18785.92	19828.92	1.59	1.45
Tamil Nadu	12406.00	11548.33	77617.76	80083.19	15.98	14.42
Puducherry	67.00	54.70	2441.47	2468.14	2.74	2.22
Lakshadweep	0.00	0.00	44.63	45.60	0.00	0.00
EASTERN	2110.12	2232.40	81472.75	89937.75	2.59	2.48
Bihar	313.22	344.33	9807.30	13249.63	3.19	2.60
Jharkhand	89.03	97.98	16532.88	17541.57	0.54	0.56
Odisha	215.80	265.83	15439.85	16053.22	1.40	1.66
West Bengal	1492.07	1524.26	39058.55	42496.61	3.82	3.59
Andaman & Nicobar Islands	0.00	0.00	229.46	242.27	0.00	0.00
Sikkim	0.00	0.00	404.71	354.46	0.00	0.00
NORTH EASTERN	77.89	69.72	9366.96	10033.36	0.83	0.69
Assam	39.00	34.00	5484.00	6199.00	0.71	0.55
Manipur	6.06	1.79	465.10	474.98	1.30	0.38
Meghalaya	0.10	0.00	1232.52	1283.18	0.01	0.00
Nagaland	0.00	0.00	529.34	549.47	0.00	0.00
Tripura	32.62	33.91	786.13	813.06	4.15	4.17
Arunachal Pradesh	0.07	0.00	542.65	375.17	0.01	0.00
Mizoram	0.04	0.02	327.22	338.50	0.01	0.01
All-India	168913.46	173185.37	814250.01	863364.02	20.74	20.06

Source : 1. *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)
2. Central Electricity Authority, New Delhi. (Website: <http://www.cea.nic.in>)

Table 1.15: Sector-wise electricity consumption in India(1 Giga Watt hour = 10⁶ Kilo Watt hour)

Year	Industry	Agriculture	Domestic	Commercial	Traction and Railways	Others	Total energy consumed
1980-81	48069 (58.36)	14489 (17.59)	9246 (11.23)	4682 (5.68)	2266 (2.75)	3615 (4.39)	82367 (100.00)
1985-86	66,980 (54.41)	23,422 (19.03)	17,258 (14.02)	7,290 (5.92)	3,182 (2.58)	4,967 (4.03)	123,099 (100.00)
1990-91	84209 (44.24)	50321 (26.44)	31982 (16.80)	11181 (5.87)	4112 (2.16)	8552 (4.49)	190357 (100.00)
1995-96	104693 (37.79)	85732 (30.95)	51733 (18.67)	16996 (6.14)	6223 (2.25)	11652 (4.21)	277029 (100.00)
2000-01	107622 (33.99)	84729 (26.76)	75629 (23.89)	22545 (7.12)	8213 (2.59)	17862 (5.64)	316600 (100.00)
2005-06	151557 (36.80)	90292 (21.92)	100090 (24.30)	35965 (8.73)	9944 (2.41)	24039 (5.84)	411887 (100.00)
2007-08	189424 (37.74)	104182 (20.75)	120918 (24.09)	46685 (9.30)	11108 (2.21)	29660 (5.91)	501977 (100.00)
2008-09	209474 (37.81)	109610 (19.79)	131720 (23.78)	54189 (9.78)	11425 (2.06)	37577 (6.78)	553995 (100.00)
2009-10	236752 (38.64)	120209 (19.62)	146080 (23.85)	60600 (9.89)	12408 (2.03)	36595 (5.97)	612645 (100.00)
2010-11	272589 (39.25)	131967 (19.00)	169326 (24.39)	67289 (9.69)	14003 (2.02)	39218 (5.65)	694392 (100.00)
2011-12	352291 (44.87)	140960 (17.95)	171104 (21.79)	65381 (8.33)	14206 (1.81)	41252 (5.25)	785194 (100.00)
2012-13	365989 (44.40)	147462 (17.89)	183700 (22.29)	72794 (8.83)	14100 (1.71)	40256 (4.88)	824301 (100.00)
2013-14	384418 (43.97)	152744 (17.47)	199842 (22.86)	74247 (8.49)	15540 (1.78)	47418 (5.42)	874209 (100.00)
2014-15	418346 (44.11)	168913 (17.81)	217405 (22.92)	78391 (8.22)	16177 (1.71)	49289 (5.20)	948522 (100.00)
2015-16	423523 (42.30)	173185 (17.30)	238876 (23.86)	86037 (8.59)	16594 (1.66)	62976 (6.29)	1001191 (100.00)
2016-17*	426665 (40.01)	195473 (18.33)	259311 (24.32)	98333 (9.22)	17217 (1.61)	69269 (6.50)	1066268 (100.00)
Growth rate of 2016-17 over 2015-16 (%)	0.74	12.87	8.55	14.29	3.75	9.99	6.50
CAGR 2007-08 to 2016-17 (%)	8.46	6.50	7.93	7.73	4.48	8.85	7.82

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

Source : *Energy Statistics 2018*, Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India. (Website: <http://www.mospi.gov.in>)

Table 1.16: Gross cropped area percentage distribution

Crop	2011-12*	2012-13*	2013-14*	2014-15*
Rice	22.33	22.00	22.12	22.30
Jowar	3.16	3.25	2.86	3.15
Bajra	4.51	3.95	4.03	3.96
Maize	4.39	4.42	4.49	4.43
Ragi	0.60	0.58	0.60	0.60
Wheat	15.41	15.70	15.62	16.17
Barley	0.34	0.36	0.34	0.37
Other Cereals & Millets	0.44	0.41	0.36	0.35
Coarse Cereals	13.44	12.96	12.69	12.86
Total Cereals	51.18	50.66	50.43	51.33
Gram	3.97	4.11	4.68	3.86
Tur	1.92	1.80	1.76	1.71
Other Pulses	6.07	5.41	5.40	5.37
Total Pulses	11.97	11.32	11.83	10.94
Total Food-grains	63.14	61.97	62.26	62.27
Sugarcane	2.76	2.80	2.75	2.81
Condiments & Spices	1.86	1.69	1.65	1.74
Total Fruits	2.06	2.12	2.07	2.11
Potatoes	0.82	0.85	0.84	0.89
Onions	0.32	0.27	0.30	0.33
Total Vegetables	2.78	2.82	2.81	2.92
Groundnut	2.66	2.68	2.70	2.57
Sesamum	0.97	0.92	0.84	0.93
Rapeseed & Mustard	2.80	3.07	3.01	2.72
Linseed	0.12	0.12	0.11	0.11
Other Oil Seeds	7.80	8.15	8.31	7.99
Total Oil Seeds	14.35	14.94	14.98	14.33
Cotton	6.22	6.12	5.93	6.38
Jute	0.41	0.40	0.38	0.38
Mesta	0.04	0.04	0.03	0.04
Total Fibres	6.71	6.58	6.37	6.82
Tobacco	0.20	0.22	0.23	0.24
Other Crops	6.14	6.85	6.89	6.76
Gross Cropped Area	100.00	100.00	100.00	100.00

Note : *: Provisional.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

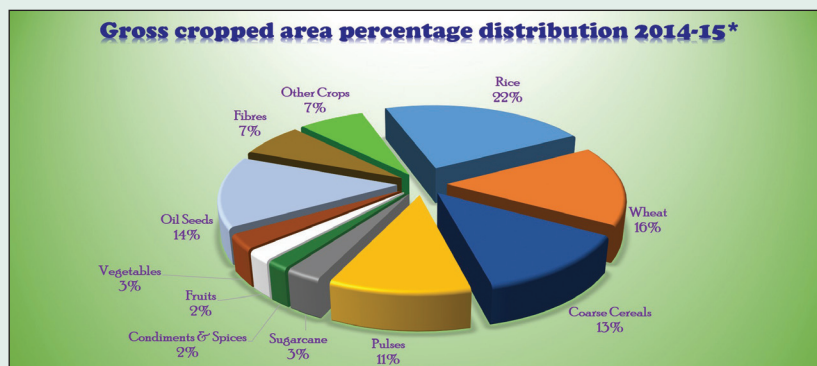


Table 1.17: Crop-wise irrigated area

(million ha)

Crops	2005-06	2006-07	2007-08	2008-09*	2009-10*	2010-11*	2011-12*	2012-13*	2013-14*	2014-15*
Rice	24.96 (56.8)	25.26 (58)	25.22 (57.7)	26.58 (58.8)	24.20 (56.9)	25.49 (58.8)	25.58 (58.6)	24.99 (58.5)	26.52 (59.7)	26.58 (60.1)
Wheat	24.16 (90.5)	25.73 (90.9)	26.09 (91.3)	25.69 (91.7)	26.20 (91.8)	27.65 (92.2)	28.06 (93)	28.50 (93.5)	29.37 (93.6)	30.21 (94.2)
Total foodgrains	56.49 (45.7)	58.55 (47.2)	59.51 (47.3)	60.41 (48.5)	58.11 (47.8)	61.00 (48.1)	61.55 (49.8)	61.74 (51.3)	64.97 (51.9)	65.53 (53.1)
Total pulses	3.44 (14.5)	3.63 (15.4)	3.95 (15.9)	3.92 (16.5)	3.66 (16.2)	3.78 (14.9)	3.78 (16.1)	4.07 (18.5)	4.69 (19.7)	4.31 (19.9)
Fruits & Vegetables	6.05 (61)	5.92 (60.9)	6.22 (61.6)	6.35 (62.0)	5.86 (62.1)	6.02 (63.7)	6.17 (64.9)	6.24 (65.1)	6.38 (65.1)	6.55 (65.6)
Total oil seeds	8.67 (28.4)	8.27 (29)	7.79 (27.2)	8.04 (27.1)	7.23 (25.9)	7.20 (24.9)	7.73 (27.5)	8.17 (28.2)	8.22 (27.3)	7.78 (27.4)
Sugarcane	4.33 (93.3)	4.86 (93.8)	4.88 (93.8)	4.56 (93.5)	4.27 (93.8)	4.82 (92.7)	5.11 (94.8)	5.18 (95.2)	5.27 (95.3)	5.02 (90.2)
Total gross irrigated area	84.28 (43.7)	86.75 (45.1)	88.06 (45.1)	88.90 (45.5)	85.09 (45.0)	88.94 (45.0)	91.79 (46.9)	92.25 (47.5)	95.77 (47.7)	96.46 (48.6)

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

Source : 1. *Land Use Statistics at a Glance 2005-06 to 2014-15*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)

2. *Agricultural Statistics at a Glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)

Table 1.18: Source-wise irrigated area

(million ha)

Source	2005-06	2006-07	2007-08	2008-09*	2009-10*	2010-11*	2011-12*	2012-13*	2013-14*	2014-15*
Govt. canals	16.49 (27.1)	16.80 (26.8)	16.53 (26.2)	16.69 (26.2)	14.79 (23.9)	15.48 (24.3)	15.84 (24.1)	15.51 (23.4)	16.12 (23.7)	16.02 (23.4)
Private canals	0.23 (0.4)	0.22 (0.4)	0.22 (0.3)	0.20 (0.3)	0.19 (0.3)	0.17 (0.3)	0.17 (0.3)	0.17 (0.2)	0.16 (0.2)	0.16 (0.2)
Tanks	2.08 (3.4)	2.08 (3.3)	1.97 (3.1)	1.98 (3.1)	1.59 (2.6)	1.98 (3.1)	1.92 (2.9)	1.75 (2.6)	1.84 (2.7)	1.72 (2.5)
Tube wells	26.03 (42.8)	26.94 (42.9)	28.50 (45.1)	28.37 (44.6)	28.37 (45.8)	28.54 (44.8)	29.94 (45.6)	30.54 (46.1)	31.13 (45.7)	31.61 (46.2)
Other wells	10.04 (16.5)	10.70 (17.1)	9.86 (15.6)	10.39 (16.3)	9.99 (16.1)	10.63 (16.7)	10.59 (16.1)	10.76 (16.2)	11.31 (16.6)	11.35 (16.6)
Other sources	5.97 (9.8)	6.00 (9.6)	6.11 (9.7)	6.02 (9.5)	7.02 (11.3)	6.87 (10.8)	7.25 (11.0)	7.55 (11.4)	7.56 (11.1)	7.52 (11.0)
Net irrigated area	60.84 (100)	62.74 (100)	63.19 (100)	63.64 (100)	61.95 (100)	63.67 (100)	65.71 (100)	66.29 (100)	68.12 (100)	68.38 (100)

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

Source : *Land Use Statistics at a Glance 2005-06 to 2014-15*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)

Table 1.19: State-wise net area irrigated by source during 2014-15*

(000' ha)

Zones/States/UTs	Canals			Tanks	Wells		Other sources	Total net irrigated area	
	Govt.	Private	Total		Tube wells	Others			
NORTH	5071	113	5184	192	15177	1525	197	22277	
Haryana	1151	N.A.	1151	N.A.	1818	4	0	2974	
Himachal Pradesh**	4	N.A.	4	0	23	2	83	113	
Jammu & Kashmir**	179	112	291	8	4	6	22	331	
Punjab	1175	N.A.	1175	N.A.	2943	N.A.	N.A.	4118	
Uttar Pradesh**	2482	N.A.	2482	184	10183	1474	67	14389	
Uttarakhand	78	1	79	0	188	39	24	330	
Chandigarh **	N.A.	N.A.	N.A.	N.A.	0	N.A.	N.A.	0	
Delhi**	2	N.A.	2	N.A.	18	0	1	22	
SOUTH	3539	1	3540	963	3892	2238	762	11395	
Andhra Pradesh	1429	N.A.	1429	293	1010	70	125	2927	
Karnataka	1177	N.A.	1177	158	1402	379	473	3589	
Kerala	86	1	87	47	30	133	117	414	
Tamil Nadu	669	0	669	368	493	1191	4	2726	
Telengana	174	N.A.	174	97	948	465	43	1726	
A & N Islands**	N.A.	N.A.	N.A.	0	N.A.	0	0	0	
Puducherry	4	N.A.	4	N.A.	9	N.A.	0	13	
Lakshadweep**	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
EAST	1073	48	1121	117	1978	87	4957	8216	
Arunachal Pradesh	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	56	56	
Assam	77	N.A.	77	10	74	1	134	296	
Bihar	934	N.A.	934	57	1860	20	115	2987	
Jharkhand	7	N.A.	7	49	38	63	50	207	
Odisha	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1259	1259	
West Bengal **	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3102	3102	
Manipur **	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	69	69	
Meghalaya	47	34	81	N.A.	N.A.	N.A.	N.A.	81	
Mizoram	2	14	16	N.A.	N.A.	N.A.	N.A.	16	
Nagaland	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	97	97	
Sikkim**	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	12	12	
Tripura**	6	N.A.	6	1	6	3	63	79	
WEST	6338	0	6338	452	10557	7503	1603	26452	
Chhattisgarh	902	N.A.	902	43	428	20	73	1466	
Gujarat **	771	N.A.	771	45	1122	2181	114	4233	
Madhya Pradesh	1646	0	1646	273	3281	3122	1262	9584	
Maharashtra **	1080	N.A.	1080	N.A.	2164	N.A.	N.A.	3244	
Rajasthan	1929	N.A.	1929	70	3557	2176	150	7882	
Goa	9	N.A.	9	21	5	3	2	39	
Daman & Diu	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
Dadra & Nagar Haveli	1	N.A.	1	N.A.	N.A.	1	2	4	
All India	2014-15*	16020	163	16182	1723	31606	11354	7519	68383
	2013-14*	16120	160	16278	1840	31130	11310	7560	68120
	2012-13*	15510	170	15677	1750	30540	10760	7550	66290

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 or no reporting of data from the States/UTs, 4. '0' means area is less than 500 ha, 5. Totals may not tally due to rounding off figures.

Source : *Land Use Statistics at a Glance 2005-06 to 2014-15*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)

Table 1.20: 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 Gross area sown	% Share of irrigated area under food grains to Gross irrigated area	Land man ratio
	Cultivated	Irrigated			
1950-51	101196	18317	76.7	81.2	N.A.
1955-56	111325	20626	75.6	80.4	0.35
1960-61	115564	22065	75.6	78.9	0.32
1965-66	114887	24032	74.0	77.8	0.29
1970-71	124910	30117	75.3	78.9	0.28
1975-76	128538	34093	75.0	78.6	0.26
1980-81	127608	37851	73.9	76.0	0.24
1985-86	128756	40407	72.1	74.4	0.22
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	63.1	67.1	0.14
2012-13*	120402	61748	62.0	66.9	0.14
2013-14*	125136	64976	62.3	67.8	0.14

Note : 1. *: Provisional, 2. Land man ratio = Arable land & land under permanent crops/population, 3. N.A.: Not available.

Source : *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.

Table 1.21: All India cultivated and irrigated area—gross and net along with cropping intensity

(million ha)

Year	Area sown			Irrigated area			Intensity of gross irrigated area to gross sown area (%)	Cropping intensity (%)
	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	61.93	23.15	45.0	135.8
2010-11*	197.56	141.56	56.00	88.93	63.66	25.23	45.0	139.0
2011-12*	195.69	140.98	54.72	91.78	65.70	26.08	46.9	138.8
2012-13*	194.14	139.94	54.20	92.25	66.27	25.98	47.5	138.7
2013-14*	200.86	141.43	59.43	95.77	68.10	27.67	47.7	142.0
2014-15*	198.36	140.13	58.23	96.46	68.38	28.07	48.6	141.6

Note : 1. *: Provisional, 2. Cropping intensity = Gross/Net sown area x 100.

Source : Fertiliser Statistics 2016-17, The Fertiliser Association of India, New Delhi.

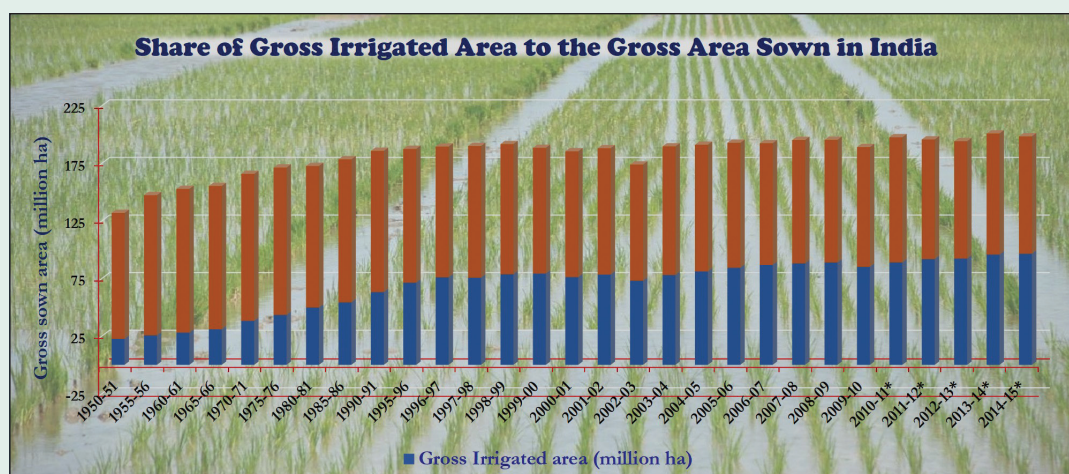


Table 1.22: Distribution of land use, number and area of holdings in India by irrigation status and size classes for all social groups as per Agriculture Census 2010-11*

(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.	Total Area	Irrigated 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
	Marginal	92826	35908	39266	14764	36662	13729	9987	3695	2067	32188	2749	34936	204	177	104	485	487
3	(1.0-2.0)	24779	35244	8643	11675	11669	15512	3516	4795	2598	31982	2267	34249	197	286	157	641	354
	Small	24779	35244	8643	11675	11669	15512	3516	4795	2598	31982	2267	34249	197	286	157	641	354
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
	Semi-medium	13896	37705	4526	11626	6358	15742	2546	6412	3378	33781	2511	36291	263	459	241	963	450
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
	Medium	5875	33828	1811	9719	2543	12821	1344	6926	3575	29466	2444	31910	313	787	347	1446	471
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
	Large	973	16907	246	3756	484	7028	218	3092	1467	13876	1512	15388	197	780	217	1194	324
	All Classes	138348	159592	54492	51540	57715	64832	17611	24920	13085	141292	11483	152775	1173	2490	1067	4729	2087

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 and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt. of India.

Table 1.23: Rural population and agricultural workers

(million)

Year	Total population	Average annual exponential growth rate (%)	Rural population	Total Workers	Agricultural Workers		
					Cultivators	Agricultural labourers	Total
1	2	3	4	5	6	7	8
1951	361.1	1.25	298.6 (82.7)	139.5	69.9 (71.9)	27.3 (28.1)	97.2 (69.7)
1961	439.2	1.96	360.3 (82.0)	188.7	99.6 (76.0)	31.5 (24.0)	131.1 (69.5)
1971	548.2	2.22	439.0 (80.1)	180.4	78.2 (62.2)	47.5 (37.8)	125.7 (69.7)
1981	683.3	2.20	523.9 (76.7)	244.6	92.5 (62.5)	55.5 (37.5)	148.0 (60.5)
1991	846.4	2.14	628.9 (74.3)	314.1	110.7 (59.7)	74.6 (40.3)	185.3 (59.0)
2001	1028.7	1.97	742.6 (72.2)	402.2	127.3 (54.4)	106.8 (45.6)	234.1 (58.2)
2011	1210.8	1.50	833.5 (68.9)	481.9	118.8 (45.1)	144.3 (54.9)	263.1 (54.6)

Note : 1. For 2001, 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 6 and 7 are percentages to column 8, 6. Figures within parentheses in column 8 is percentage share of Agricultural Workers in Total Workers.

Source : *Agricultural Statistics at a Glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)

Table 1.24: Dynamics of agricultural workers in India

(million)

Item	1991	2001	2011
Total population	846.3	1028.7	1210.8
Total workers	313.7	402.2	481.7
Total no. of workers as % of population	37.1	39.1	39.8
No. of agricultural workers	210.5	234.0	263.0
% of agricultural workers to total workers	67.1	58.2	54.6
Male	136.6	142.8	165.4
Female	73.9	91.2	97.6
% of females in agricultural work force	35.1	39.0	37.1

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

Table 1.25: Forest cover in States/UT's in India in 2017

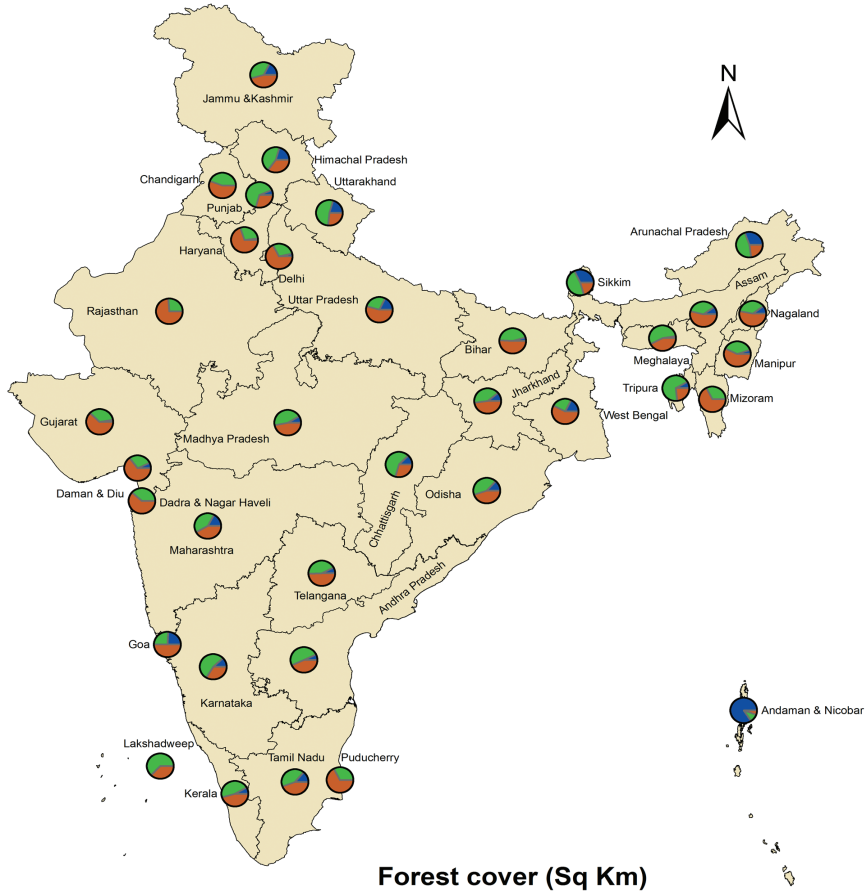
(sq km)

States/UT's	Geographical area (G.A.)	Forest cover area				Percent of G.A.	Percent change wrt 2015
		Very dense forest	Moderate dense forest	Open forest	Total forest		
Andhra Pradesh	162968	1957	14051	12139	28147	17.27	1.31
Arunachal Pradesh	83743	20271	30955	15288	66964	79.96	-0.23
Assam	78438	2797	10192	15116	28105	35.83	0.72
Bihar	94163	332	3260	3707	7299	7.75	0.05
Chhattisgarh	135192	7064	32215	16268	55547	41.09	-0.01
Delhi	1483	6.72	56.24	129.45	192.41	12.97	0.25
Goa	3702	538	576	1115	2229	60.21	0.51
Gujarat	196224	378	5200	9179	14757	7.52	0.02
Haryana	44212	28	452	1108	1588	3.59	0.02
Himachal Pradesh	55673	3110	6705	5285	15100	27.12	0.71
Jammu & Kashmir*	222236	4075	8579	10587	23241	10.46	0.11
Jharkhand	79716	2598	9686	11269	23553	29.55	0.04
Karnataka	191791	4502	20244	12604	37550	19.58	0.57
Kerala	38852	1663	9407	9251	20321	52.30	2.68
Madhya Pradesh	308252	6563	34571	36280	77414	25.11	0.00
Maharashtra	307713	8736	20652	21294	50682	16.47	-0.01
Manipur	22327	908	6510	9928	17346	77.69	1.18
Meghalaya	22429	453	9386	7307	17146	76.45	-0.52
Mizoram	21081	131	5861	12194	18186	86.27	-2.52
Nagaland	16579	1279	4587	6623	12489	75.33	-2.71
Odisha	155707	6976	21370	23008	51345	32.98	0.57
Punjab	50632	8	806	1023	1837	3.65	0.13
Rajasthan	342239	78	4340	12154	16572	4.84	0.14
Sikkim	7096	1081	1575	688	3344	47.13	-0.13
Tamil Nadu	130060	3672	10979	11630	26281	20.21	0.06
Telangana	112077	1596	8738	10085	20419	18.22	0.50
Tripura	10486	656	5246	1824	7726	73.68	-1.56
Uttar Pradesh	240928	2617	4069	7993	14679	6.09	0.12
Uttarakhand	53483	4969	12884	6442	24295	45.43	0.04
West Bengal	88752	2994	4147	9702	16847	18.98	0.02
A & N Islands	8249	5678	684	380	6742	81.73	-0.11
Chandigarh	114	1.36	13.82	6.38	21.56	18.91	-0.09
Dadra & Nagar Haveli	491	0	80	127	207	42.16	0.20
Daman & Diu	111	1.40	5.82	13.27	20.49	18.46	0.79
Lakshadweep	30	0	17.04	10.06	27.10	90.33	0.13
Puducherry	490	0	17.60	36.07	53.67	10.95	-0.67
Total	3287469	98158	308318	301797	708273	21.54	0.21

Note : 1. G.A.: Geographical Area, 2. *: Includes area outside LOC under illegal occupation of Pakistan and China.

Source : *India State of Forest Report 2017*, Forest Survey of India, Ministry of Environment & Forests, Govt. of India.

State-wise Forest cover in India



Forest cover (Sq Km)

- Very Dense Forest
- Moderate Dense Forest
- Open Forest

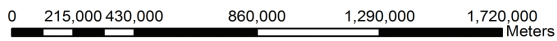


Table 1.26: Potential availability of agriculture-based biomass

(million t)

Biomass	1980-81	1990-91	2000-01	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
Rice husk	26.8	37.1	42.5	48.0	52.7	52.6	53.3	52.7	52.2	55.1
Wheat straw	48.4	73.5	92.7	115.5	126.2	124.4	127.5	115.1	122.7	130.8
Maize cobs	2.1	2.7	3.6	6.5	6.5	6.7	7.3	7.3	6.8	7.9
Pearl millet straw	8.9	11.4	11.2	17.2	17.1	14.5	15.4	15.2	13.4	16.3
Sugarcane bagasse	51.4	80.4	97.7	113.0	119.1	112.6	116.2	119.6	115.0	101.2
Groundnut shell	1.7	2.5	2.1	2.7	2.3	1.6	3.2	2.4	2.2	2.5
Cotton stalks	23.5	22.3	25.6	33.7	36.5	35.9	35.9	38.5	36.9	32.6
Jute sticks	3.9	3.1	3.1	2.6	2.7	2.6	2.5	2.4	2.3	2.3

- Note** :
1. *: Provisional,
 2. 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 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

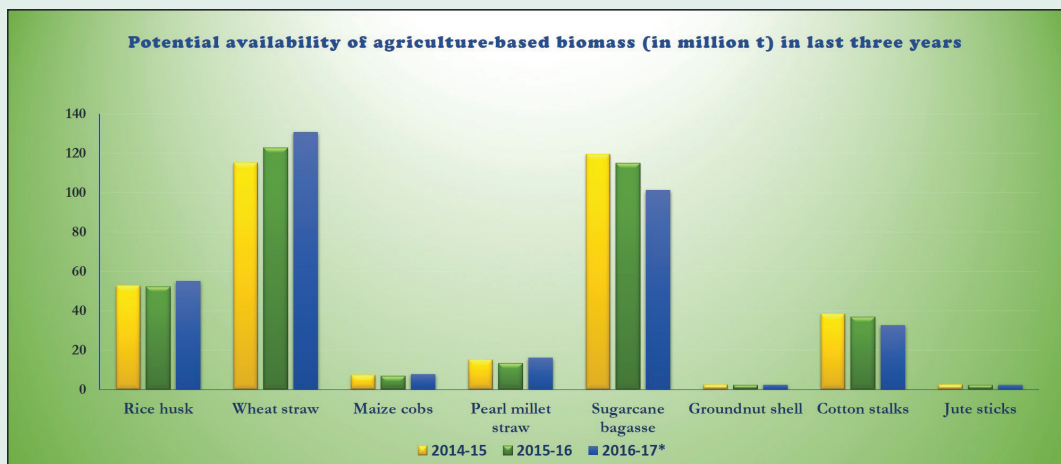


Table 1.27: State-wise potential availability of agriculture-based biomass during 2016-17*

(million t)

States	Rice husk	Wheat straw	Maize cobs	Pearl millet straw	Sugarcane bagasse ^s	Groundnut shell ^s	Cotton stalks ^s
Andhra Pradesh	3.73	N.A.	0.49	0.12	3.07	0.26	2.01
Assam	2.62	0.04	N.A.	N.A.	0.34	N.A.	N.A.
Bihar	3.74	6.77	0.77	N.A.	4.84	N.A.	N.A.
Chattisgarh	4.03	0.21	N.A.	N.A.	N.A.	N.A.	N.A.
Gujarat	0.97	3.64	0.24	1.54	4.28	0.78	8.16
Haryana	2.23	15.32	N.A.	1.59	2.15	N.A.	1.80
Himachal Pradesh	N.A.	0.93	0.23	N.A.	N.A.	N.A.	N.A.
Jammu & Kashmir	N.A.	0.63	0.15	0.02	N.A.	N.A.	N.A.
Jharkhand	1.78	0.57	0.18	N.A.	N.A.	N.A.	N.A.
Karnataka	1.27	0.23	0.98	0.42	12.70	0.16	1.89
Madhya Pradesh	2.12	23.86	0.95	1.13	1.66	0.12	1.65
Maharashtra	1.68	2.22	1.14	1.39	23.85	0.08	11.49
Odisha	4.19	N.A.	N.A.	N.A.	0.19	0.02	N.A.
Punjab	5.52	21.87	0.14	N.A.	2.17	N.A.	1.02
Rajasthan	N.A.	11.97	0.44	6.91	N.A.	0.35	1.35
Tamil Nadu	2.02	N.A.	0.38	0.20	8.75	0.29	0.42
Telangana	2.59	0.01	0.78	0.03	0.80	0.07	5.31
Uttar Pradesh	6.48	39.98	0.47	2.89	47.98	0.02	N.A.
Uttarakhand	0.32	1.17	N.A.	N.A.	1.97	N.A.	N.A.
West Bengal	7.55	1.24	0.21	N.A.	0.69	N.A.	N.A.
All India	55.08	130.85	7.88	16.27	116.21	2.23	35.61

Note : 1. N.A.: Not available, 2. *: 4th Advance estimates, 3. \$: Figures relates to 2015-16.

4. 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 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 1.28: Selected economic and social indicators

Indicator	1970-71	1980-81	1990-91	2000-01	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (PE)
ECONOMIC INDICATORS											
GVA at factor cost^a (at current prices ₹ Crore)	44382	136838	531814	2000743	7248860	8106946	9202692	10363153	11504279	12566646#	13841591@
GVA at factor cost^a (at constant prices ₹ Crore)	589787	798506	1347899	2348481	4918533	8106946	8546275	9063649	9712133	10503348#	11247629@
Per capita Net National Product at factor cost (at constant prices ₹ Crore)	10016	10712	15996	22491	39270	63462	65538	68572	72805	77826#	82229@
Gross Domestic Capital Formation (as percentage of GDP at current market prices)	15.1	19.2	26.0	24.3	36.5	39.0	38.7	33.8	33.5	32.3	30.6
Gross Domestic Saving (as percentage of GDP at current market prices)	14.3	17.8	22.9	23.8	33.7	34.6	33.9	32.1	32.2	31.3	30.0
Index of agricultural production (base: triennium ending 1981-82) for data given till 2000-01 and base i.e. ending 2007-08 from 2009-10 onwards	85.9	102.1	148.4	165.7	121.1	124.5	124.2	129.8	124	120.8	130.6
Index of industrial production^b (base: 2004-05=100)	28.1	43.1	91.6	162.6	165.5	170.3	103.3	106.7	111.0	114.7	120.0
Wholesale Price Index average^c	14.3	36.8	73.7	155.6	143.3	156.1	106.9	112.5	113.9	109.7	111.6
Consumer Price Index^d for industrial workers	38.0	81.0	193.0	444.0	180.0	195.0	215.0	236.0	251.0	265.0	276.0
OUTPUT											
(a) Foodgrains (million tonnes)	108.0	129.6	176.4	196.8	244.5	259.3	257.1	265.0	252.0	251.6	275.68e
(c) Coal and lignite^e (million tonnes)	76.3	119.0	225.5	332.6	570.4	582.3	602.9	610.0	657.4	683	704.4(P)
(d) Crude oil (million tonnes)	6.8	10.5	33.0	32.4	37.7	38.1	37.9	37.8	37.4	36.9	36.0
(e) Electricity generator (utilities only) (billion kWh)	56.0	111.0	264.0	500.0	844.8	922.5	964.5	1026.6	1105.1	1167.6	1236.4
Plan outlay (₹ Crore)	2524	15023	58369	185737	826268	936292	971951	1281022(RE)	420882 ^f	582707(RE) ^f	706248.4(BE)
FOREIGN TRADE											
(i) Export	₹ Crore	1535	6711	32553	203571	1136964	1634318	1905011	1896348	1716378	1849429
	US\$ million	2031	8486	18143	44076	251136	300401	314405	310338	262290	275852
(ii) Import	₹ Crore	1634	12549	43198	230873	1683467	2669162	2715434	2737087	2490298	2577666
	US\$ million	2162	15869	24075	49975	369769	489320	490737	448033	381007	384356
Foreign exchange reserves^f (excluding gold, SDRs and Reserve Tranche Position at IMF)	₹ Crore	438	4822	4388	184482	1224883	1412631	1660910	1985458	2219061	2244939
	US\$ million	584	5850	2236	39554	274330	259726	276359	295947	336104	346319

Indicator		1970-71	1980-81	1990-91	2000-01	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (PE)
SOCIAL INDICATORS												
Population(Million)^b		548.2	683.3	846.4	1028.7	1186.0	1220.0	1235.0	1251.0	1267.0	1283.0	1299.0
Birth rate ^c		36.9	33.9	29.5	25.4	21.8 ^k	21.6 ^k	21.4 ^k	21.0 ^k	20.8	20.4	N.A.
Death rate ^c		14.9	12.5	9.8	8.4	7.1 ^k	7.0 ^k	7.0 ^k	6.7 ^k	6.5	6.4	N.A.
Life Expectation at birth (In years)		45.6	50.4	58.7	62.5	67.0	67.5	67.9	68.3	N.A.	N.A.	N.A.
(a) Male		46.4	50.9	58.6	61.6	65.4	65.8	66.4	66.9	N.A.	N.A.	N.A.
(b) Female		44.7	50.0	59.0	63.3	68.8	69.3	69.6	70.0	N.A.	N.A.	N.A.
Education literacy rate (%)^j		34.4	43.6	52.2	64.8	73.0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
(a) Male		46.0	56.4	64.1	75.3	82.1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
(b) Female		22.0	29.8	39.3	53.7	65.5	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Note : 1. RE: Revised Estimate, 2. PE: Provisional Estimate, 3. N.A.: Not available, 4. #: 1st Revised estimates (New Series), 5. *: 2nd Revised Estimates (New Series), 6. a: GVA at factor cost estimates prior to 2011-12 are based on 2004-05 series. Estimates from Year 2011-12 onwards (with Base 2011-12) are available at basic prices only, 7. b: The index of industrial production has been revised since 2012-13 on base 2011-12=100. The figures for the year 2012-13 onwards are based on current series (2011-12=100) and earlier data are based on old base years, 8. c: The figures from 2012-13 are based on current series 2011-12=100 and earlier data are based on old base years, 9. d: The figures from 2009-10 are based on current series 2001=100 and earlier data are based on old years, 10. e: 4th Advance Estimates, 11. f: Outlays are only of the Centre as Outlays of State & UTs are not available from 2014-15 onwards, 12. g: As on end-March, 13. h: Relates to mid-financial year (as on October 1) based on population figures of C.S.O., 14. i: For calendar year. Figure shown against 1990-91 is for calendar year 1991 and so on. Source: Office of Registrar General of India, 15. j: Data for 1970-71 and 1980-81 relate to the decades 1961-70 and 1971-80 respectively, centred at midpoints of the decade, i.e., 1966 and 1976. The estimates for 1990-91 refer to the period 1988-92 and so on. Estimates for 2010-11 refers to abridged life table of period 2008-12, 2011-12 refers to 2009-13, 2012-13 refers to 2010-14 and 2013-14 refers to 2011-15. Source: Office of R.G.I., 16. k: Estimates from Sample Registration System and SRS Statistical Report, Office of R.G.I., 17. l: Data for 1970-71, 1980-81, 1990-91 and 2000-01 are as per Census of India 1971, 1981, 1991 and 2001. The figures for 1971 relate to population aged 5 years and above and those for 1981, 1991, 2001 and 2011 to population aged 7 years and above. All India literacy rates exclude Assam for 1981 and J&K for 1991.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)



भाग-II
कृषि निविष्टि

SECTION-II
Agricultural Inputs

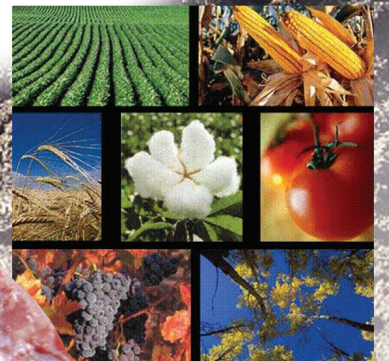


Table 2.1: Crop-wise distribution of certified/quality seeds

(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	203.20	24.77	43.03	3.86	28.12	0.14	303.12
2015-16	194.95	22.71	47.44	2.49	33.88	2.57	304.04

Source : 1. *Agricultural Statistics at a Glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)
 2. Department of Agriculture, Cooperation & Farmers Welfare, Seeds Division.

Table 2.2: Commodity-wise indent and production of breeder seeds under AICRP-NSP (Crops) and ICAR Seed Project during 2012-13 to 2016-17

(q)

Crops	2012-13		2013-14		2014-15		2015-16		2016-17	
	Indent	Production	Indent	Production	Indent	Production	Indent	Production	Indent	Production
Cereals	44814.40	52731.20	45620.60	52099.90	45587.36	63127.78	64505.15	81996.86	57677.87	67911.95
Pulses	11200.00	11662.40	9746.70	9384.30	10781.25	11242.37	10252.12	11244.96	20230.74	23798.42
Oilseeds	41893.70	29261.20	28534.40	26569.10	28664.46	24239.43	45941.89	32963.50	34797.95	30977.80
Fibre crops	61.50	94.00	67.30	170.70	162.53	183.48	117.58	181.68	149.33	210.17
Forage crops	828.90	1262.90	819.70	1042.30	1096.64	1281.71	1342.87	1436.36	1011.15	1141.86
Total	98798.50	95011.70	84788.70	89266.30	86292.24	100074.77	122159.61	127823.36	113867.04	124040.20

Source : ICAR-Indian Institute of Seed Science, Mau, Uttar Pradesh.

Table 2.3: List of field crop varieties/hybrids released and notified in 2017

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
CEREALS					
Rice	HR1-183 (Arize Swift Gold) (IET 24082)	Bayer Bio Science Pvt. Ltd	61	Haryana, Uttarakhand, Uttar Pradesh and Gujarat	Early duration irrigated, bacterial leaf blight (BLB) resistant hybrid, medium slender grain
	HR1-180 (Arize Tej Gold) (IET 24120)	Bayer Bio Science Pvt. Ltd	61	Punjab, Haryana and Uttarakhand	Early duration irrigated, resistant to bacterial leaf blight (BLB) and tolerant to blast, brown spot (BS) and false smut
	PAC 129 (Arize 6129)	Bayer Bio Science Pvt. Ltd	-	Madhya Pradesh	Suitable for Direct Seeded Rice (DSR) system, short duration hybrid 115-120 days
	BS 129G (Arize 6129 Gold)	Bayer Bio Science Pvt. Ltd	-	Chhattisgarh	Early duration hybrid 115-120 days, BLB resistant
	28P09 (IET 24156)	Pioneer Hybrid Seeds Pvt. Ltd	58.3	Odisha, West Bengal, Uttar Pradesh, Assam, Chhattisgarh, Gujarat, Maharashtra, TamilNadu and Andhra Pradesh	Irrigated, medium slender grain, moderately resistant to BLB, tolerant to neck blast NB, BS, LF
	CO 51	TNAU, Coimbatore	66.2	Haryana, Uttarakhand, Odisha, Bihar, West Bengal, Uttar Pradesh, Madhya Pradesh, Maharashtra, Gujarat, Andhra Pradesh, Kerala, Karnataka & TamilNadu	Moderately resistant to <i>green leaf hopper</i> (GLH), <i>brown plant hopper</i> (BPH). Early maturing variety
	27P36 (IET 24103) Hybrid	Pioneer Hybrid Seeds Pvt. Ltd	72.0-75.0	Bihar, Madhya Pradesh, Jharkhand, Chhattisgarh and Odisha	Long slender grain. Tolerant to BLB, Maturity 128-132 days
	VL Dhan 158 (8657) (IET 22982)	ICAR-VPKAS, Almora, Uttarakhand	27.5	Himachal Pradesh and Uttarakhand	Developed for hill ecology, resistant to leaf and NB under field and controlled condition
	Jalkunwari (TTB 202-4)	R.A.R.S., (Assam Agricultural University) Titabar	40	Assam	Irrigated lowland (IRL), moderately resistant to blast
	Jalashree (TTB 202-3)	R.A.R.S., (Assam Agricultural University) Titabar	43	Assam	Irrigated lowland (IRL), moderately resistant to blast and stem borer

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Rice	Kanaklata (TTB 103-3-1)	R.A.R.S., (Assam Agricultural University) Titabar	60	Assam	Suitable for irrigated transplanted in boro ecology, responsive to fertilizer
	Gitesh (TTB 283-1-26)	R.A.R.S., (Assam Agricultural University) Titabar	53	Assam	Irrigated lowland (IRL), resistant to sheath rot, moderately resistant to blast, brown spot and stem borer
	Malviya Sugandha Dhan HUR-917 (IET 21838)	BHU, Varanasi	33.5	Uttar Pradesh	Scented rice, tolerant to NB, moderately tolerant to bacterial leaf blight and stem borer
	Sabour Surbhit (RAU 3036) (IET 19806)	BAC, Birsa Agril. University, Sabour	40.0-45.0	Bihar	Irrigated medium maturity for upland, grain type slender, moderately resistant to major pests and diseases
	SHIATS Dhan-2 (AAIR 203) (IET 22576)	SHIATS, Allahabad, UP	50.6	Uttar Pradesh	Ecosystem irrigated mid-early (IRME), long slender grains, moderately resistant to sheath blight, brown spot (BS)
	SHIATS Dhan-3 (AAIR 205) (IET 22522)	SHIATS, Allahabad, UP	48.3	Uttar Pradesh	Ecology irrigated mid (IRM), long slender grains, moderately resistant to BS, sheath blight
	Dhruba (BNKR-2) (IET 20761)	Rice Research Station, Natunchati, Bankura	50.0-55.0	West Bengal	Irrigated lowland, short bold grain, moderately resistant to leaf & NB, BS, leaf folder (LF)
	JKRH-3333 Hybrid	JK Agri Genetics Ltd., Telangana	-	Madhya Pradesh, West Bengal, Bihar, Gujarat, Chhattisgarh and AP	Suitable for Direct Seeded Rice (DSR) system and machine sowing, medium slender grain, medium duration with 135-140 days maturity
	CR Dhan 508 (CR3835-1-7-2-1-1) (IET 23601)	NRRI, Cuttack	40.5	Assam, West Bengal and Odisha	Ecology - deep water, grain long bold, moderately resistant to NB, brown spot and sheath rot
	27P22 (IET 24122)	PHI Seeds Pvt. Ltd., Hyderabad	64.8	Punjab and Haryana	Hybrid, irrigated mid-early maturity, medium-slender grain, moderately resistant to BLB
	NPH 8899 (IET 23494)	Nuziveedu Seeds Ltd	56.7	Uttar Pradesh, Bihar and Assam	Suitable for Boro ecology, short bold, moderately resistant to leaf blast, NB, BPH
	GK 5022 (IET 23445)	Ganga Kaveri Seeds Pvt.Ltd, Hyderabad	42.3	Bihar and Chhattisgarh	Suitable for aerobic ecology, long-slender grain, moderately resistant to leaf blast, NB, BPH
	PAN-2423 (IET 21395)	PAN Seeds	55	West Bengal	Hybrid

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Rice	Gujarat Anand Rice-3 (GAR-3) (NWGR-4005)	Anand Agril. University, Nawagam	50-55	Gujarat	Irrigated, long bold grain, resistant to BLB, NB and LB, moderately resistant to stem borer (SB), LF, Mid early duration
	Pant Dhan-23 (UPR 2962-6-2-1)	GBPUA&T, Pantnagar	44.5	Uttarakhand	Irrigated eco-system, Moderately resistant to leaf blight, sheath blight and stem borer. Mid early maturity
	Pant Dhan-26 (UPR 3425-14-3-1)	GBPUA&T, Pantnagar	45.3	Uttarakhand	Irrigated eco-system, Moderately tolerant to stem borer, BLB, sheath blight, <i>Rice Tungro Disease</i> (RTD), NB and sheath rot
	Chhattisgarh Sugandhit Bhog	IGKV, Raipur	-	Chhattisgarh	Resistant to gall midge biotype 1 and 5, moderately resistant to LB, sheath rot (SR), BS and RTD
	Tarangini (MTU 1156) (IET 23300)	APRRI & RARS, Andhra Pradesh	75	Andhra Pradesh	Irrigated ecology, resistant to leaf blast (LB), BPH, long slender grains, Maturity 115-125 days
	Bheema (Dheera) (MTU 1140) (IET 23933)	Manuteru rice research station, Andhra Pradesh	60	Andhra Pradesh	Tolerates flash floods for 10 days at vegetative stage, resistant to BPH, moderately resistant to BS
	Rajdeep CN 1039-9 (IET 17713) (CNR 4)	RRS, Chinsurah	45-50	West Bengal	Tolerant to sheath blight and sheath rot, maturity 160-162 days
	Sabour Deep (RAU 3055) (IET 21098)	BAC, Birsa Agril. University, Sabour	35-40	Bihar	Irrigated medium upland ecology, tolerant to BLB, SB, LB, BS, yellow stem borer, green leaf hoppers (GLH) and gundhi bug
	Sabour Ardhal (BRR 0007) (IET 24036)	BAC, Birsa Agril. University, Sabour	45-55	Bihar	Irrigated, medium upland and aerobic, moderately resistant to BLB
	CARI Dhan 1 (IET 25029)	CARI, Port Blair	48	Andaman & Nicobar	Selection from Quinglivan 1, grain medium slender
	CARI Dhan 5 (IET 16885) (BTS 24)	CARI, Port Blair	45-55	Andaman & Nicobar	Short-bold grain
	Hybrid Indam 200-022 (IET 20710)	Rice R&D Farm, Indo American Hybrid Seeds (India) Pvt. Ltd.	-	Madhya Pradesh	Suitable for upland cultivation, early duration (110 days from seeding), moderately resistant to LB, NB, BS and white backed plant hopper (WBPH)
	Dehangi AAUDR 9313-14-3 IET 18243	Assam Agricultural University, Jorhat	28	Assam	Rainfed, upland rice, maturity 120 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Rice	Inglongkiri (AAUDR 9301-14-1) IET 17452	Assam Agricultural University, Jorhat	28	Assam	Rainfed, upland rice, maturity 120 days
	Rongkhang (AAUDR 9312-13-1) IET 18242	Assam Agricultural University, Jorhat	28	Assam	Rainfed, upland rice, maturity 120 days
	Bauna Kalanamak 102	Participatory Rural Development Foundation (PRDF), Gorakhpur, (U.P.)	59	Uttar Pradesh	Aromatic rice, maturity 125-130 days
	CR Dhan 506 (IET 23053)	ICAR-NRRI, Cuttack	-	Assam, Andhra Pradesh and Karnataka under semi deep water	High yielding variety for the rainfed ecology, tolerant to water logging
	CR Sugandh Dhan 908 (IET 23189)	ICAR-NRRI, Cuttack	-	Odisha, West Bengal and Uttar Pradesh	Scented rice, shallow low line area, non-lodging, semi dwarf plant type
	Pusa Basmati 1718 (IET 24565 – Pusa 1718-14-2-150)	IARI, New Delhi	50-60	Punjab, Haryana and Delhi	Recommended for irrigated transplanted conditions. Maturity are 140 to 145 days
	Gangavati Ageti (IET 19251)	UAS, Raichur, Karnataka	65-70	Karnataka	Suitable for normal, early and late conditions, resistant to shattering, good for Idli and Dosa preparation, medium slender grain type
	Rajendra Nilam (RAU-1484-Aer-04) (IET 24010)	RAU, Samastipur, Bihar	-	Bihar	Resistant to lodging and non-shattering, tolerant to LF, SB and Gundhi bug, adapted to aerobic condition
	Purna (IET-18654)	Navsari Agril. Univ., Gujarat	25-30	Gujarat	Rainfed area of south Gujarat, Maturity 93-97 days
	PAN 802 (IET-23498) (Hybrid)	PAN Seeds Pvt. Ltd., Kolkata, WB	-	West Bengal	Resistant to grain dis-coloration (GD) and sheath rot, tolerant to SB and LF
	Karjat 8 (KIT-13-4-53-19-12)	Maharashtra State Seeds Corp. Ltd. Akola, MH	35-40	Maharashtra	Rainfed and irrigated areas in transplanted conditions during kharif season

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Rice	Karjat 9	Maharashtra State Seeds Corp. Ltd. Akola, MH	45-50	Maharashtra	Recommended for cultivation in Konkan and Vidarbha region of Maharashtra. Moderately resistant to neck blast, BLB and resistant to leaf blast, BPH, WBPH and moderately resistant to stem borer. Maturity duration 120-125 days
	RCM-30, IET-24200 (RC Maniphou-13)	UAS, Raichur, Karnataka	70-80	Manipur	It is photo-insensitive. Resistant to Gall Midge (GM), tolerant to neck blast diseases, Maturity duration 125 to 135 days
	CN 1272-55-105 (IET 19886)	RAU, Samastipur, Bihar	-	WB, Bihar, Odisha, AP, Maharashtra and Karnataka under irrigated condition.	Late duration, grain-short bold, resistant to neck blast, brown spot and sheath rot
	CR Dhan 408 (IET 20265) Chakaakhi	Navsari Agril. Univ, Gujarat	48	Odisha	Suitable for shallow lowland, grain - long bold, medium tolerance to LB, NB, BLB, SR, SB, LF and WBPH
	Surabhi (IET 24760)	PAN Seeds Pvt. Ltd., Kolkata, WB	-	Maharashtra and Gujarat,	Suitable for irrigated kharif & rabi, medium slender super fine grain, moderately resistant to BLB, SBL, BS, Maturity kharif 125-135 days
	KPH-459 (IET 24888)	Maharashtra State Seeds Corp. Ltd. Akola, MH	-	Gujarat and Maharashtra	Mid duration hybrid, grain type medium slender, moderately resistant to BLB, suitable for late sown condition
	TKM 13 (IET 22565)	Maharashtra State Seeds Corp. Ltd. Akola, MH	59.4	Gujarat and Maharashtra	Irrigated mid-early, moderately resistant to BL, RTD, BS, SR, SB, LF, GLH
	KPH 473 (IET 24825)	ICAR- RC for NEH Region	-	Chhattishgarh, Madhya Pradesh and Maharashtra	Mid early duration, long bold grains, moderately resistant to LB
	BIO 799 (IET 22919) Hybrid	RRS Chinsurah	-	Odisha, Bihar, West Bengal, Uttar Pradesh, Jharkhand,	Long bold grain with multiple disease resistance to BLB, LBL, RTD and field tolerance to BPH
	MRP 5408 (MEPH 114) IET 24143	ICAR-NRRI, Cuttaack	-	Andhra Pradesh, Karnataka and Puducherry	Long slender grains with moderately resistance to LB, NB, BS, RTD, and false smut
	CR Dhan 909 (IET 23193)	Nuziveedu Seeds Limited	-	Assam, Bihar, Uttar Pradesh and Maharashtra	Irrigated, aromatic, short grain, tolerant to LB, NB, SR, RTD, SB

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Rice	Nandyala Sona (NDLR 7) (IET 23715)	RARS, ANGRAU Nandyal	65-70	Andhra Pradesh	Suitable for late sown conditions, recommended for scarce rainfall zone, maturity 135-140 days, fertilizer responsive, non-shattering, short slender grain, highly tolerant to BPH, LF and moderately tolerant to blast
	Srimati CR Dhan 207 (IET 23448)	ICAR-NRRI, Cuttack	37	Odisha	Non-lodging, intermediate grain shattering, Moderately resistant to LBL, NBL, BS, ShR, SB, LF, GLH, GM 1 & 4, fertilizer responsive, Early maturing 110-115 days
	Priya (CR Dhan 209)	ICAR-NRRI, Cuttack	35.7	Odisha	Non-lodging, intermediate grain shattering, fertilizer responsive, grain long slender. Moderately tolerant to LB, NB, BS, RTD, SB, LF, WBPH, GLH, Early maturing 110-115 days
	CR Dhan 507 (IET 22986)	ICAR-NRRI, Cuttack	47.5	Odisha	One week submergence tolerance. Tall plant type, intermediate grain shattering, fertilizer responsive, late maturity 160 days, Moderately resistant to NB, BS, SB, SR, SB, LF
	CR Dhan 409 (IET 23110)	ICAR-NRRI, Cuttack		Odisha	One week, submergence tolerance, Moderately resistant to NBL, LB, SR, SR, SB, LF
	CR Dhan 800 (IET 20672)	ICAR-NRRI, Cuttack	57.5	Odisha	Developed through Marker Assisted Selection (MAS), rainfed shallow lowlands, maturity 140 days, tolerant to BLB, medium slender grain
	CR Sugandh Dhan 910 (IET 22649)	ICAR-NRRI, Cuttack	-	Odisha	Irrigated late and favourable lowlands for kharif/wet season, maturity 142-145 days, moderately resistant to blast, BL, NB, SR, RTD, SB, LF, WBPH, excellent grain quality traits
	WB-02	IIWBR, Kamal	-	Punjab, Haryana, Delhi, Rajasthan, Uttar Pradesh, Jammu & Kashmir, Himachal Pradesh, Uttarakhand	Bread wheat, High zinc (42 PPM) variety, timely sown, irrigated condition, good level of yellow (stripe) rust resistance
Wheat	Pusa Tejas (HI 8759)	IARI, Regional Station, Indore	57	Madhya Pradesh, Chhattisgarh, Gujarat, Rajasthan and Uttar Pradesh	Suitable for timely sown irrigated conditions, high protein content (12%), and essential micro nutrients like iron (42.1 ppm) and zinc (42.8 ppm)

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Wheat	Pusa Ujala (HI 1605)	IARI, Regional Station, Indore	30	Maharashtra, Karnataka and Tamil Nadu	Suitable for timely sown, restricted irrigation conditions, high levels of resistance to black and brown rust diseases, excellent chapatti making quality, high protein (around 13%) and rich in micronutrients like iron (43 ppm) and zinc (35 ppm)
	HD 3171	IARI, New Delhi	-	Uttar Pradesh, Bihar, West Bengal and Assam	Rainfed, timely sown condition, resistance to leaf rust (LR) and leaf blight (LB)
	Ummat PBW 343 (PBW 723) (Bread Wheat)	PAU, Ludhiana, Punjab	54.8	Punjab, Haryana, Delhi, Rajasthan, UP, J&K, HP and Uttarakhand	Suitable for timely sown, irrigated condition. Bread wheat, developed through MAS, carrying five rust resistance genes, possesses resistance to yellow rust (YR) and brown rust (BR) diseases, maturity 155 days
	PBW 1Zn (HPBW 01)	PAU, Ludhiana, Punjab	56	Punjab, Haryana, Delhi, Rajasthan, Uttar Pradesh, Jammu & Kashmir, HP and Uttarakhand	Suitable for timely sown, irrigated condition, high zinc, resistant to BR and moderately resistant to YR, maturity 151 days
	MACS 3949	Agharkar Research Institute, Pune	44	Maharashtra and Karnataka	Suitable for timely sown, irrigated condition. Durum wheat, resistance to stem rust and LR and having good pasta quality (7.25/9), maturity 110-115 days
	Chhattisgarh Genhu 4 (CG 1015)	IGKV Regional Station, Bilaspur	-	Chhattisgarh	Suitable for late sown, irrigated condition, heat tolerant
	Sabour Samriddhi	Bihar Agril. Univ. Sabour, Bihar	40-50	Bihar	Suitable for timely sown, irrigated condition, semi dwarf, erect type, strong waxiness on leaf sheath, maturity 120-125 days
	Sabour Shreshtha (BRW 934)	Bihar Agril. Univ. Sabour, Bihar	43	Bihar	Suitable for late sown, irrigated condition, resistant to important diseases and insect pests, good chapatti making quality, high protein and zinc content, highly responsive to nitrogen up to 120 kg N/ha

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Wheat	Sabour Nirjal (BRW 3723)	Bihar Agril. Univ. Sabour, Bihar	25-30	Bihar	Rainfed, timely sown, strong waxiness on leaf sheath & ear, semi erect plant, maturity of 125-130 days
	Gujarat Junagadh Wheat 463 (GJW 463)	JAU, Junagadh, Gujarat	50.9	Gujarat	Suitable for timely sown irrigated conditions and early sown irrigated conditions, protein content 12.7% and micronutrients Fe, Zn, Mn and Cu content of 31.9, 23.8, 22.4 and 5.9 ppm, respectively, good chapatti making quality
	CoW 3 (Bread Wheat)	IARI, Wellington and TNAU, Coimbatore, TamilNadu	40.8	Tamil Nadu	Suitable for limited irrigation, timely sown, short winter conditions, maturity 95-100 days, resistant to LR, SR
	K-1317	CSAUA&T, Kanpur	-	Eastern UP, Bihar, Jharkhand, Odisha, WB (excluding hills), Assam and plains of NE States	Recommended for rainfed, timely sown conditions, resistant to BR and leaf blight, good chapatti quality (Score:8.05)
Barley	Central Barley DWRB123	IIWBR, Kamal	-	Punjab, Haryana, UP, Delhi and Rajasthan	Suitable for timely sown, irrigated condition, malt barley, resistance for YR, BR under natural field conditions
	Vivek Hybrid 27 (Central Maize VL Baby Cron 2)	VPKAS, Almor	117	J&K, Uttarakhand, HP, Delhi, Punjab, Haryana, UP, Karnataka, TN, AP, Telangana, Maharashtra, Rajasthan, Gujarat, MP and Chhattisgarh	Suitable for kharif, early duration high yielding babycorn hybrid, maturity (babycorn) in 52-54 days in hills and in 48-52 days in plains, moderately resistant to <i>H. turicum</i> and <i>H. maydis</i> leaf blight, common rust and post-flowering stalk rot. Maturity 95-97 days
Maize	P3401 (X35D601) (Hybrid)	Pioneer Hi-Bred Private Ltd, Chikkaballapur, Karnataka	94	Andhra Pradesh, Telangana, Maharashtra, Karnataka and Tamil Nadu	Suitable for kharif season, moderately tolerant to <i>Turicum leaf blight</i> (TLB), <i>Rafasihan downy mildew</i> (RDM), Brown stripe downy mildew (BSDM) and <i>Post flowering stalk rot</i> (PFSR), <i>Chilopariellus</i> and <i>Sesamianiferen</i> . Maturity 115-125 days
	P3533 Hybrid	Pioneer Hi-Bred Private Ltd, Chikkaballapur, Karnataka	89	AP, Telangana, TN, Maharashtra, Karnataka	Suitable for Rabi season, resistance to TLB and C. rot, Maturity 115-125 days

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Maize	P3544 Hybrid	Pioneer Hi-Bred Private Ltd, Chikkaballapur, Karnataka	108	Punjab, Haryana, Delhi, UP, Bihar, Jharkhand, Odisha, WB, AP, Telangana, Maharashtra, Karnataka and TN	Suitable for kharif season, orange yellow, semi flint grain; Maturity 115-125 days
	Central Maize VL 55 (FH3605) Hybrid	VPKAS, Almora	76	J&K, Uttarakhand, HP and Karnataka, TN, AP, Telangana and Maharashtra	Suitable for kharif season, moderately resistant against <i>H. turcicum</i> and <i>H. maydis</i> , common rust and PFSR. Maturity 95-97 days
	VMH 4106 Sweet Corn Hybrid	Vibha Agrotech Limited, Hyderabad	68	Bihar, UP, Jharkhand, West Bengal and Odisha	Tolerant to MLB, TLB, Banded leaf and sheath blight (BLSB), SDM, DM and rusts, tolerance to <i>Chilopareitellus</i> . Maturity 50-55 days
	HTMH 5402	Hightech Seed India Pvt. Ltd, Hyderabad	89	Andhra Pradesh, Telangana, Maharashtra, Karnataka and Tamil Nadu	Suitable for kharif season, resistant to RDM, <i>Sorghum downy mildew</i> (SDM), <i>Bacterial stalk rot</i> (BSR), <i>Curvularia leaf spot</i> (CLS), and tolerance to <i>Chilopareitellus</i> . Maturity 95-100 days
	GK 3150	Ganga Kaveri Seeds Pvt. Ltd., Hyderabad	119	Punjab, Haryana, Delhi and Uttar Pradesh	Suitable for Rabi season, resistant to TLB, SDM, PFSR and moderately resistant to <i>C. rot</i> Resistant to <i>Sesamainferens</i> and <i>Chilopareitellus</i> ; Maturity 160-165 days
	DRONA (KMH-2589)	Kaveri Seeds Company Ltd, Secunderabad	108	Punjab, Haryana, Delhi, Uttar Pradesh, Andhra Pradesh, Telangana, Maharashtra, Karnataka and Tamil Nadu	Suitable for rabi season, resistant to common rust, PFSR and <i>C. rot</i> . Maturity 143-180 days
	Hy-brix 53 (ADVSW-2) Hybrid	Advanta Ltd., Hyderabad	137	J&K, HP, Uttarakhand, North East Hills, Punjab, Haryana, Delhi, UP, Bihar, Odisha, Jharkhand, WB, TN, AP, Telangana, Maharashtra and Karnataka	Suitable for kharif, resistant to Fusarium stalk rot (FSR), RDM and moderately resistant to TLB and <i>Maydis leaf blight</i> (MLB). Maturity 90-100 days
	Hi-brix-39 (ADVSW-1) (Sweet Corn)	Advanta Ltd., Hyderabad	138	J&K, HP, Uttarakhand, North East Hills, Punjab, Haryana, Delhi, UP, Bihar, Odisha, Jharkhand, WB, TN, AP, Telangana, Maharashtra and Karnataka	Suitable for kharif, resistant to common rust, BSR, Fusarium stalk rot, RDM and moderately resistance to TLB and MLB. Maturity 90-100 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Maize	Shalimar Pop Corn-1 (KDPC-2)	SKUAS&T, J&K	39	J&K, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, Uttar Pradesh, Bihar, Odisha, Jharkhand, West Bengal, Rajasthan, Gujarat, Madhya Pradesh, Chhattisgarh, Assam, Manipur, Meghalaya, Mizoram, Arunachal Pradesh, Tripura and Nagaland	Suitable for Kharif, moderately resistant to banded leaf and sheath blight and FSR, resistant to stem borer. Maturity 95-100 days
	Pant Sankar Maakka 4 (PSM4) (DEH-153) (DH-188)	GBPAU&T Pantnagar	46	Uttarakhand	Suitable for Kharif, resistant to TLB, BLSB, BSDM and ESR. Maturity 82-84 days
	Bisco Champion 61 (Bisco 2238)	Bisco Bio Sciences Pvt. Ltd.	46	J&K, Himachal Pradesh, Hills of Uttarakhand and NE region and Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu	Suitable for Kharif season, moderately resistant to prevailing diseases (TLB, MLB, DM, BSDM, PFSR, C. Rust and tolerant to pests). Maturity 82-84 days
	Bisco Champion 61 (Bisco 2238)	Bisco Bio Sciences Pvt. Ltd.	46	J&K, Himachal Pradesh, Hills of Uttarakhand and NE region and Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu	Suitable for Kharif season, moderately resistant to prevailing diseases (TLB, MLB, DM, BSDM, PFSR, C. Rust and tolerant to pests). Maturity 82-84 days
	Bisco X 5129	Bisco Bio Sciences Pvt. Ltd.	85	Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu (Zone 4)	Suitable for Rabi, moderately resistant to prevailing diseases (TLB, MLB, DM, BSDM, PFSR, C. Rust and tolerant to pests). Maturity 115-120 days
	Karimnagar Makka (KNMH-4010141)	Telangana State Ag. Univ. (PTTSAU)	-	Telangana, Andhra Pradesh, Maharashtra, Karnataka and Tamil Nadu	Suitable for Kharif, rainfed situation, grows in both high and low fertility conditions. Maturity 90-95 days
	Pusa HM-8 Improved (AQH-8)	ICAR-IARI, New Delhi	62.6	Maharashtra, Karnataka, Telangana, Andhra Pradesh and Tamil Nadu	QPM hybrid developed through MAS, nutria-rich with enhanced tryptophan (80 %), lysine (76%) and high protein (4.18 %). Maturity 90-95 days
	Pusa HM-9 Improved (AQH-9)	ICAR-IARI, New Delhi	52	Bihar, Jharkhand, Odisha, Uttar Pradesh and West Bengal	QPM hybrid developed through MAS, nutria-rich with enhanced tryptophan, lysine and high protein. Maturity 85-90 days

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Maize	Pusa HM-4 Improved (AQH-4)	ICAR-IARI, New Delhi	64.2	Punjab, Haryana, Delhi, Uttarakhnad and Uttar Pradesh	QPM hybrid developed through MAS, nutri-rich with enhanced tryptophan, lysine, high pro-vitamin A, high protein. Maturity 90-95 days
	Pusa Vivek QPM-9 Improved (APQH-9)	ICAR-IARI, New Delhi	56	J&K, Himachal Pradesh, Uttarakhnad, Meghalaya, Sikkim, Assam, Tripura, Nagaland, Manipur, Arunachal Pradesh, Maharashtra, TamilNadu, Andhra Pradesh and Telangana	QPM hybrid developed through MAS, nutria-rich with enhanced tryptophan (74%), lysine (60%) and high protein (3.62 %). Maturity 80-85 days
	JKMH-4848 (IMR 498)	JK Agri Genetics Limited	90-100	Maharashtra, Kamataka, Andhra Pradesh, Telangana and Tamilnadu	Resistant to <i>Chillocparietellus</i> , FSR, Charcoal rot and common rust, moderately resistant to MLB, TLB, Charcoal Rot, RDM and CLS. Maturity 93-94 days
	DMRH-1301 Hybrid	ICAR-IIMR, Ludhiana	90-100 for Zone III and 100-110 for Zone V	Bihar Jharkhand, Odisha, West Bengal and Uttar Pradesh (Eastern Region), Rajasthan, Madhya Pradesh, Chhattisgharh and Gujarat	Tolerant to <i>Sesamiamiferens</i> , <i>Chillocparietellus</i> and Moderately resistant to TLB. Maturity 140 days (Rabi)
	DMRH-1402 Hybrid	ICAR-IIMR, Ludhiana	35-40 for Zone II and 25-30 for Zone V	Punjab, Haryana, Delhi, Uttarakhnad (Plain) and UP (Western Region), Rajasthan, Gujarat, MP, and Chhattisgharh	Popcorn hybrid, moderately tolerant to <i>Chillocparietellus</i> (Zone II) and (Zone V), and moderately resistant to FSR (Zone V). Maturity 84 days (Kharif)
Sorghum	DMRH-1308 Hybrid	ICAR-IIMR, Ludhiana	85-95 for Zone V	Rajasthan, Madhya Pradesh, Chhattisgharh and Gujarat	Tolerant to <i>Sesamiamiferens</i> and <i>Chillocparietellus</i> . Maturity 128 days (Rabi)
	PDKV Kalyani (AKSV -181) (SPV 2029)	Dr. Panjabrao Deshmukh KrishiVidyapeeth, Akola, Maharashtra	Green yield: 35-38 Fodder Yield: 150-153	Maharashtra	Clean foliage (no leaf diseases) and non-lodging nature. Maturing in 115-117 days
Pearl millet	PBH - 306	PrabhatAgri Biotech Limited, Hyderabad	Green Y: 38.3 Dry fodder yield : 78	Maharashtra, Karnataka, Telangana, AP and TN	Resistant to downy mildew and smut, maturity 87 days
	Mahabej 1005 (MH-1852) Hybrid	Maharashtra State Seeds Corporation Ltd., Akola	Green yield: 30-33 DFY: 68	Maharashtra	Suitable for rainfed condition in Maharashtra, non-lodging. Maturing 81 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Pearl millet	NBH 4903 (Balwan)	Nuziveedu Seeds Limited, Secunderabad	Green yield: 44.4	Maharashtra, Karnataka, AP, Telangana and TN	Tolerant to drought Late maturing, medium plant height, tolerant to major diseases (downy mildew, ergot & blast). Maturing 84-86 days
Little millet	Chhattisgarh Kutki 1 (BL-6)	AICRP on Small Millets, Jagdalpur, IGKVV, Raipur	12-14	All India	Suitable for upland cultivation, rich in zinc and calcium. Maturing duration 90-95 days
Proso millet	TNAU 202	Centre on Excellence of Millets, TNAU, Athiyandal, Tamilnadu	18-20	AP, MP, Chhattisgarh, Karnataka, Gujarat, TN and Bihar	Profuse tillering and bold grains, maturity 70-75 days
Kodo millet	TNAU 86	Centre on Excellence of Millets, TNAU, Athiyandal, Tamilnadu.	27-30	AP, MP, Chhattisgarh, Karnataka, Gujarat and TN	Early duration, high milling recovery (52-53%). Maturing duration 95-110 days
Finger Millet	Dapoli - 2 (SCN - 6)	Agricultural Research Station, Dapoli, Dr.BSKKV, Dapoli, Maharashtra	25.0-27.0	Maharashtra	High yielding, rich in iron and calcium, moderately resistant to blast, tolerant to aphids and <i>Spodopteralitura</i> ; Maturity: 118-120 days
	CO 15	Centre on Excellence of Millets, TNAU, Athiyandal, Tamilnadu.	29.0 under rainfed and 34.0 under irrigated conditions	Tamil Nadu	Highly responsive to nitrogenous fertilizer, non-lodging, resistant to leaf, neck and finger blasts and nutritionally rich grain and fodder. Maturity: 115-120 days
	KMR 340	UAS, GKVK, Bangalore	Grain: 40-55 Straw: 50-70	Karnataka	Irrigated and rainfed parts of Karnataka, Maturity: 95-100 days
	GNN 7	Navsari Agril. Univ., Gujarat	25.0	Gujarat	High mineral matter (%), crude fibre, calcium, phosphorous and good amount of protein, fat, carbohydrates and magnesium, Maturity: 123-128 days
	VL Mandua 376 (VL 376)	ICAR-VPKAS, Almora	29.0- 31.0	All Ragi growing areas of country	Responsive to fertilizer and moderately resistant to blast, Maturity: 103-109 days
Foxtail millet	Rajendra Kauni - 1 (RAU-2)	-	-	Bihar	Resistant to leaf blast, rust, smut, brown spot, downy mildew and leaf blight. High iron (15.45 mg/100g) and zinc (5.02 mg/100g) content

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
OILSEEDS					
Indian Mustard	CS-58 (CS 1100-1-2-2-3)	Central Soil Salinity Research Institute, Karnal	20.9	Haryana, Punjab and Uttar Pradesh	Salinity tolerant, Maturity: 138 days; average yield: 20.9 q/ha
	Pant Rai 21 (PRB 2008-5)	GBPUAT, Pantnagar	12.0-18.0	Uttarakhand	Alternaria blight tolerant; Maturity: 122-127 days
Yellow Sarson	Pant Sweta (PYS - 2007-10)	GBPUAT, Pantnagar	10.0 -15.0	Uttarakhand	For irrigated condition; Maturity: 110-120 days
	Pant Hill Toria-1 (PT-2006-4)	GBPUAT, Pantnagar	5.0 - 7.5	Uttarakhand	Spring type toria; Maturity: 122-134 days
Toria	Pant Toria-508 (PTE-2008-2)	GBPUAT, Pantnagar	11.2-13.7	Uttarakhand	Moderately resistant to white rust and resistant to stag head formation; Maturity: 91-96 days
	Raj VijayToria 1	Rajmata Vijaya Raje Scindia Krishivishwa Vidhyalaya, Gwalior, MP	-	Madhya Pradesh	Suitable for Rainfed and irrigated condition, Suitable for sowing in first to second week of September, Maturity: 98-105 days
	Jobner Tara (RTM-1351)	SKN College of Agriculture, SKN Agriculture University, Jobner.	12.0-13.0	Rajasthan, Haryana, Punjab, UP, Gujarat, Delhi, Uttarakhand and Maharashtra	Suitable for rainfed situation; Maturity: 137-142 days
Taramira	Jwala Tara (RTM 1355)	SKN College of Agriculture, SKN Agriculture University, Jobner.	12.0-15.0	Rajasthan, Haryana, Punjab, UP, Madhya Pradesh, Gujarat and Delhi	Suitable for rainfed situation; Maturity: 130-145 days
	Raj Soya 24 (RVS 2002-4)	RVSKW, Gwalior (MP), RAK College of Agriculture, Sehore	25.0	Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh	Tolerant to major leaf, pod & root rot diseases, Girdle beetle and semi looper attacks; Maturity: 91-94 days
Soybean	Pant Soybean 24 (PS 1477)	GBPUAT, Pantnagar, Uttarakhand	-	Uttar Pradesh and Uttarakhand	Multiple disease resistant, free from lodging and shattering, tolerant to drought to some extent; Maturity: 113-122 days
	Pant Soybean 21 (PS 1480)	GBPUAT, Pantnagar, Uttarakhand	-	Uttarakhand	Resistant to yellow Mosaic Virus (YMV) and Bacterial Pustule, tolerant to RAB, rainfed/irrigated cultivation in plains and lower hills of Uttarakhand; Maturity: 125-127 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Soybean	Pant Soybean 23 (PS 1523)	GBPUAT, Pantnagar, Uttarakhnad	40.5	Uttarakhand	Resistant to lodging and shattering, rainfed/irrigated cultivation in plains and lower hills of Uttarakhand; Maturity: 112-115 days
	Raj Soya 18 (Pragya)	R.A. K. College of Agril. Sehore Madhya Pradesh	19.1	Madhya Pradesh	Resistant to YMV and charcoal rot, erect plant type suitable for intercropping ; Maturity: 90-92 days
Groundnut	Central Groundnut ALG06-320 (ALG-06-320)	TNAU, Tindivanam	Pod: 27.41 Kernal: 19.38	Tamil Nadu and Andhra Pradesh	Suitable for irrigated situation, tolerant to rust, LLS and Peanut Bud Necrosis disease (PBND), <i>S. litura</i> , leaf miner and thrips ; Medium maturity 115 days
	Kadiri Amaravathi (K1535)	ANGRAU, Kadiri	Pod: 16.0-18.0	Andhra Pradesh	Suitable for rainfed situation, field tolerance to PBND; Medium maturity 110-115 days
	VRI 8 (VG 09220)	TNAU, Vridhachalam	Pod: 21.3-27.0 Ker: 14.9-18.9	Tamil Nadu	Suitable for rainfed and irrigated condition, moderately resistant to sucking pest (jassids and thrips), LLS and rust ; maturity 105-110 days
	GJG 32 (ICGV 03043) Gujarat Junagadh Groundnut	Junagadh Agricultural University, Junagadh	29.1	Tamil Nadu, AP, Telangana, Karnataka, Kerala and Southern Maharashtra	Tolerant to stem rot, collar rot and rust, Maturity 109 days
Linseed	Indu (LCK 1108)	CSAUA&T, Kanpur	9.6	Uttar Pradesh	Suitable for irrigated areas, resistant to rust, powdery mildew and bud fly; Maturity: 134-140 days
	Uma (LCK 1101)	CSAUA&T, Kanpur	8.7	Uttar Pradesh	Suitable for rainfed condition, tolerant to wilt <i>Alternaria</i> blight and rust; Maturity: 123-135 days
Niger	Priyam (BAU-2012-1)	Birsa Agril. Univ., Ranchi Jharkhand	12.5	Punjab, Haryana, Himachal Pradesh and Uttar Pradesh	Suitable for rainfed and moderate fertility condition during Rabi season, high yield and oil content (41.3%), highly resistant to bud fly and rust, Maturity: 174 days
	JLS-66 (SLS 66)	JNKVV, Madhya Pradesh	22.0	Madhya Pradesh	Moderately resistant to powdery mildew, alternaria blight, rust and major insect pests, oil content 40.5%; maturity 107-114 days
	Jawahar Niger Selection 28 (JNS 28)	ZARS, JNKVV, Chhindwara, M P	5.5-6	All India niger growing areas	Tolerant to <i>Cercospora</i> and <i>Alternaria</i> leaf spot; Maturity duration 100-105 days

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Niger	GNNIG 3 (NRS 1304)	Navsari Agri., Univ., Gujarat	3.98	Gujarat	It is resistant to <i>Cercospora</i> and <i>Alternaria</i> leaf spot disease; Medium maturity
Sunflower	Kaveri Champ	Kaveri Seed Company Limited, Secunderabad.	26-28	Punjab, Haryana, Bihar, West Bengal and Odisha	Tolerant to downy mildew and leaf hopper; maturity 96-117 days
	Prabhat (Hybrid NDSH 1012)	RARS, Nandyal	6.0-7.0 (rain fed) and 8.0-10.0 (irrigated)	Andhra Pradesh	Tolerant to downy mildew; Maturity in 90-95 days
	PDKVSH-952 (Hybrid)	Dr. PDKV, Akola, Maharashtra	16-18	Maharashtra	Rainfed and irrigated Area in Kharif and Rabi; MR to powdery mildew; maturity 90 days
Castor	GNCH 1	Navsari Agri. Univ., Gujarat	25-30	Gujarat	Possess high level of resistant in sick plot and through root dip method at GJ & HY; Medium maturity
	YRCH-2 (YRCH 1116)	TCRS, Yethapur, TNAU	20.9	Tamil Nadu	Resistant to wilt, tolerant to semilooper, spodoptera, leafhopper and tolerant to capsule borer, Maturity 90-210 days
PULSES					
Green gram	Pusa 1371	IARI, New Delhi	-	Tripura, Manipur, J&K and Himachal Pradesh	Multiple disease resistance (MYMV, root rot, web blight and Anthracnose)
	Pant Mung 8 (PM 09-6)	-	-	Uttarakhand	Resistant to MYMV, <i>Cercospora</i> leaf spot and powdery mildew diseases
	DGG-1	UAS, Dharwad, Karnataka	12.0-14.0	Karnataka	Resistant to powdery mildew, flaking variety. Maturity 70-74 days
Urdbean/blackgram	Tirupati Minimu-1 (TBG 104)	ARS, Trupati	-	Andhra Pradesh	Suitable for rabi cultivation, tolerance to YVMV. Maturity 75-80 days
Chickpea	Gujarat Gram 5 (GJG 0809)	JAU, Junagadh, Gujarat	14.4	J&K, HP, Uttarakhand and NEH Regions	Tolerant to wilt, stunt and collar rot; Maturity 103 days
	Meera (GNG- 2171)	ARS, (S.K.R.A.U), Sriganaganar, Rajasthan	20.1	Punjab, Haryana, UP, J&K, Delhi, Rajasthan, HP and Uttarakhand	Tolerant to wilt, stunt and root rot; Maturity 163 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Chickpea	Indira Chana-1	IGKV, Raipur, Chhattisgarh	16.0	Chhattisgarh	Resistant to wilt and moderately resistant to dry root rot; Maturity 101-116 days
	Nandyal Gram 49 (NBeG 49)	ARS, Nandyal, Andhra Pradesh	20.0-25.0	Andhra Pradesh	Tolerant to wilt and dry root rot; Maturity 90-95 days
	Pant Gram-4 (PG 065)	GBPUAT, Pantnagar, Uttarakhnad	18.0	Uttarakhand	Tolerant to wilt and BGM; Maturity 147 days
	Pant Gram-3 (PG 043)	GBPUAT, Pantnagar, Uttarakhnad	18.0	Uttarakhand	Tolerant to wilt and BGM; Maturity 145 days
	Pant Kabuli Gram-2 (PG071)	GBPUAT, Pantnagar, Uttarakhnad	17.0	Uttarakhand	Tolerant to wilt and BGM; Maturity 149 days
	Dheera (NBeG 47)	ARS, Nandyal, Andhra Pradesh	20.0-25.0	Andhra Pradesh	Tall and erect plant, suitable for mechanical harvesting; Maturity 90-105 days
	Pant Gram 5 (PG 0109)	GBPUAT, Pantnagar, Uttarakhnad	-	Rajasthan, Haryana, Punjab, UP, Uttarakhnad, and Jammu & Kashmir	Late sown rainfed/ irrigated conditions of Rabi season in NMPZ of India, Tolerant to Heliothis; Maturity 126-140 days
	Phule Vikram (Phule G-08108)	MPKV, Rahuri, Maharashtra	16.4-22.2	Maharashtra	Suitable for rainfed, optimum sown irrigated and late sown condition of MH, Resistant to Fusarium Wilt; Maturity 96-112 days
	RVL 11-6	RVSKVV, RAK College of Agri., Sehore	11.0-12.0	MP, Maharashtra, Gujarat, UP and Rajasthan	Tolerant to Wilt. Its plant type is semi erect, medium height and branches with broad leaf which is very much suitable for intercropping; Maturity 107-113 days
	L 4717 (PusaAgetiMasoor)	IARI, New Delhi	12.0-13.0	MP, UP, Rajasthan and Chhattisgarh	Semi erect, early, resistant to powdery mildew, wilt and Ascochyta blight; Maturity 96-106 days
Lentil	Pant Lentil - 9 (PL 098)	GBPUA&T, Pantnagar	15.0-16.0	Uttarakhand	Resistant to rust, wilt and <i>Ascochyta</i> blight diseases; Maturity 120-135 days
	Kota Masoor-1 (RKL 607-1)	ARS, Kota	13.0-14.0	Rajasthan	Tolerance to wilt and early growth vigour; Maturity 103-106 days
	Shekhar 4 (KLB 345)	CSAUAT, Kanpur	12.0-14.0	Uttar Pradesh	Tolerance to wilt and rust, Bold Seed; Maturity 110-112 days

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Lentil	Shekhar 5 (KLS 122)	CSAUAT, Kanpur	16.0-18.0	Uttar Pradesh	Tolerance to wilt and rust. Small Seed; Maturity 105-110 days
Pigeono pea / Red gram	Amaravathi (LRG-52)	RARS Lam, Guntur, Andhra Pradesh	15.0-16.0	Andhra Pradesh	Moderately resistant to wilt; medium maturity 165-170 days
	BDN 716 (BDN 2008-7)	Vasant Rao Naik Martathwada Krishi Vidyapeeth, ARS, Badhapur, Maharashtra	18.0-20.0	Maharashtra	Resistant to wilt and sterility mosaic, red and large seeded; medium maturity 165-170 days
	Phule Rakhumai (PCP 0306-1)	Pulses & Oilseed Research And Training Centre, Pandharpur, Maharashtra	10.0-11.0	South Zone	Moderately resistant to cercospora leaf spot; maturity 71-77 days
Cow pea	Tirupati Cowpea - 1 (TPTC-29)	RARS, Tirupati, ANGRAU, AP	10.0-11.0	Andhra Pradesh, Karnataka, TN and Odisha	Moderately resistant to dry root rot and YMV; maturity 81 days
	DC-15	UAS, Dharwad	11.0-13.0	Karnataka, Andhra Pradesh, Tamil Nadu and Kerala	Moderately resistant to dry root rot and YMV; maturity 75-78 days
	Pant Lobia 5 (PGCP 12) (Pant Grain Cowpea 12)	G.B. Pant University of Agriculture and Tech., Pantnagar	16.0-20.0	Uttar Pradesh, Uttarakhand, Rajasthan, Gujarat, Karnataka and Kerala	Resistant to YMV; maturity 65-70 days
	Central Field pea IPFD 12-2 (IPFD 12-2)	ICAR - IIPR, Kanpur, Uttar Pradesh	24.0-25.0	Madhya Pradesh, Chhattisgarh, Gujarat and Rajasthan	Resistant to Powdery mildew, pod borer and moderately resistant to aphids and leaf mimer; maturity 110-115 days
	Pant Pea-155 (Pant P-155)	GBP UA&T, Pantnagar	19.0-20.0	Uttarakhand	Resistant to rust and powdery mildew diseases and tolerant to pod borer pest; maturity 120-130 days
Horse gram	Chhattisgarh Kulthi-3 (BHG-03)	ARS, Bilaspur	5.0-6.0	Chhattisgarh	Resistant to collar rot, powdery mildew and leaf spot; maturity 85-90 days
	Chhattisgarh Kulthi-2 (BWH-1)	IGKV, Raipur	7.5	Chhattisgarh & neighbouring states	Suitable for rainfed condition, resistance to P.M., low YMV incidence; maturity 104-112 days
Rajmash/ French bean	Shalimash (SKUAR-R-132) Rajmash 2	SKUAST-K	12.0-13.0	Jammu & Kashmir	Moderately resistant to bean common mosaic virus (BCMV) and Aphids; maturity 100-110 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Faba bean	HFB-1 (HB-82)	MAP Section, Department of Genetics and Plant Breeding, CCS HAU, Hisar	22.9	Haryana, Punjab, Delhi, Uttar Pradesh, Bihar, Jharkhand and Chhattisgarh	Rich in protein (25.3 %), fibre, plant nutrients and a good source of vitamins and minerals. It contains levo-dopa, such as dopamine, epinephrine, resistant to major diseases and insect-pests and tolerant to lodging, pod shattering and climatic stresses
COMMERCIAL CROPS					
Cotton	DHB 915	UAS, Dharwad, Karnataka	17.0	Andhra Pradesh, Tamil Nadu, Gujarat, Maharashtra and MP	Extra long staple interspecific (hirsutum x barbadense) hybrid; Maturity 170-175 days
	CSH – 3129	CICR, Sirsa, Haryana	23.0	Punjab, Haryana and Rajasthan	Moderately resistant to CLCUD, More tolerant to fungal foliar diseases, more tolerant to major insect pests; Maturity 160-170 days
	MRC -7377 (Hybrid)	Maharashtra Hybrid seeds Company Pvt.Ltd, Jalna Haryana	20.1	Andhra Pradesh, Karnataka and Tamil Nadu	Tolerant to BLB, ALS; Maturity 170-180 days
	Central Cotton CSH-3075 (CSH-3075)	CICR, Regional Station, Haryana	24.7	Punjab, Haryana and Rajasthan	Suitable for HDPS; Maturity 160-165 days
	LD 949 (Desi)	PAU, Ludhiana, Punjab	24.8	Punjab, Haryana and Rajasthan	Absorbent cotton, moderately resistant to Fusarium wilt, Resistant to jassids and white fly; Maturity 160-165 days
	MR 68 (American Cotton)	M.R. Seeds, Sriganaganagar	22.7	Punjab, Haryana, Rajasthan and Uttar Pradesh	High yielding variety; Maturity 165-175 days
	Central Cotton NHH 250	Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbani, Maharashtra	-	Maharashtra, Madhya Pradesh and Gujarat	High yielding, rainfed, Tolerent to bacterial blight and alternaria leaf spot and sucking pests, Maturity 150-160 days
	Phule Asmita (RHH-0917) Hybrid	MPKV, Rahuri, Maharashtra	-	Maharashtra, Madhya Pradesh and Gujarat	Resistant to Bacterial Leaf Blight, Alternaria Leaf Blight, MLB and Grey mildew; moderately resistant to sucking pests and bollworms; Maturity 160-170 days
	Phule Prabha (RHB-0812) Hybrid	MPKV, Rahuri, Maharashtra	-	Maharashtra, MP, Karnataka, AP, Gujarat and TamilNadu	Resistance to Alternaria Leaf Blight and disease free reaction to Bacterial Leaf Blight and Gray mildew; tolerant to sucking pests and bollworms; maturity 170-180 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Cotton	DHB 1071	UAS, Dharwad, Karnataka	16.0-17.0	Karnataka	Extra long staple interspecific (hirsutum x barbadense) hybrid; maturity 180-190 days
	GN.Cot.Hy-14 (GSHH-2729)	Navsari Agril. Univ. Gujarat	22.5	Gujarat	Resistant to jassids, thrips, whitefly and aphid; tolerant to Bacterial Leaf Blight and Alternaria Leaf Blight; maturity 170-190 days
	GJ Cot 111 (GAM 162)	Junagadh Agricultural University, Amreli	15.1	Gujrat, Madhya Pradesh, Maharashtra and Odisha	Tolerant to jassids, white fly, and major diseases; maturity 160-170 days
	K-12	Agricultural Research Station, Tamil Nadu Agri. University, Kovilpatti	11.9	Tamil Nadu	Moderately resistance to bacterial blight and Alternaria Leaf spot, Resistant to leaf hopper, aphids, thrips and stem weevil; maturity 135-140 days, average yield 11.9 q/ha
Jute	NCJ-28-10 AAUCI-2 (Kkhyati)	Assam Agri. Univ., Jorhat	-	Assam and West Bengal	Suitable for cultivation in water logged area and rainfed condition
	Kisan Pat (BCCO-6)	BCKV, Kalyani Centre (WB)	28.4	Entire tossa jute growing states	Coppery red stem colour variety with better fibre quality in terms of both fibre tenacity (21.18 g/tex) and fineness (2.81 tex), Tolerant to stem rot and stem weevil; maturity 120 days
Sugarcane	DAWB-ZARSKg-Jute-KRO4	Dir. of Agri., Govt. West Bengal	28.0-30.0	West Bengal, Bihar, Odisha, Assam and Maharashtra	Tolerant to stem rot disease and less incidence of semi-looper, apton, Bihar Hairy Caterpillar (BHC) and yellow mite; maturity 120 days
	Revaathi (2000 A 225 (CoA 05323))	RARS, Vishakapatnam	1032	Coastal Areas of Andhra Pradesh and Tamil Nadu	MR to red rot & smut and tolerant to moisture stress; Maturity midlate 360 days
	Buddhi 2003 A 255 (CoA 08323)	RARS, Vishakapatnam	1063	Andhra Pradesh, Odisha and Tamil Nadu	MR to red rot, tolerant to water-logging; Maturity early 300 days
	Co 09004 (Amritha)	SBI, Coimbatore	1098	TN, Kerala, Andhra Pradesh, Telangana, Karnataka, Gujarat, Maharashtra, MP and Chhattisgarh	MR to red rot and R to smut; high yielding, suitable for peninsular zone, non lodging, smut resistant, Maturity early 300 days
	Co9022 (Karan 12)	SBI, Coimbatore	CCS = 100.6 Cane = 836	Haryana, Punjab, Rajasthan, Uttarakhnad and Uttar Pradesh	Suitable for growing under medium and high fertile soil in North West Zone under irrigated condition; MR to red rot, MS to smut and R to wilt; High sugar, high quality, Non-lodging, resistant to red rot; Mid late maturity 330-360 days

Agricultural Inputs

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Sugarcane	GNS 9 (2004 N 817) (CoN 09072)	Navsari Agril. Univ., Gujarat	1290.5	Gujarat	MR to red rot and smut; High yield potential, high sugar content, good ratooning ability and resistant to wilt red rot and whip smut; Maturity early 300 days
	SNK-632 (CoSnK 03632)	UAS, Dharwad, Kamataka	1220	Kamataka	Tolerant to moisture stress; Both normal irrigated and moisture stress prone; Maturity 360 days
	CoVSI 03102	Vasantdada Sugar Institute, Pune	Cane=1292 Sugar=195	Sugarcane growing areas of high rainfall zone of Maharashtra	Recommended for Pre-season and Suru season (Spring) planting. Resistant to smut, brown eye spot disease; Maturity mid late (14 months or more)
	CoC 25	Sugarcane Research Station, Cuddalore	Cane= 1450 CCS=127.7	East Coast Zone	High yielding, fast growing; Good ratooner; Moderately resistant to red rot and less susceptible to shoot borer; Suitable for early and special season; maturity early (10 months)
FORAGE CROPS					
Forage Pearl Millet	Phule Gunwant (RBN-2011-12)	MPKV, Rahuri, Maharashtra	500-600 green forage	Maharashtra	It is F ₁ hybrid but clonally propagated through stem cuttings or rooted slips. Non seed setting. Perennial grass multi cut
Forage Sorghum	CSV 33 MF(SPv-2242)	IIMR, Rajendranagar, Hyderabad	GFY: 1039. DFY: 280	Haryana, Punjab, Uttarakhand, Uttar Pradesh, Gujarat, Rajasthan, Tamil Nadu, Karnataka and Maharashtra	Multi cut forage sorghum, Tall 180-204 cm, pyramidal and very loose panicle, Resistant to all major diseases and pest infestation, Maturity 104-145 days
Forage Cowpea	TNFC 0926	TNAU, Coimbatore, TN	7.8	Tamil Nadu	Resistant to cowpea yellow mosaic virus and moderately resistant to root rot disease; Maturity 90-95 days
Oats	Phule Surabhi (RO-11-1)	MPKV, Rahuri, Maharashtra	-	Punjab, Haryana, Uttarakhand, Rajasthan, UP, Jharkhand, WB, Odisha, Assam, Manipur, Bihar, Gujarat, MP, Maharashtra, Chhattisgarh, Kamataka, TN, Kerala and Telangana	Moderately resistant to leaf blight, root rot; less susceptible to aphids

Crop	Variety	Developed by	Avg. Yield (q/ha)	Recommended Zone	Salient features
Oats	OL 1804 (Single cut)	PAU Ludhiana	GFY: 378.8 DMY: 77.7	West Bengal, Odisha, Jharkhand, Bihar, Eastern Uttar Pradesh, Manipur, Assam	Better nutritional quality, Moderately resistant to leaf blight in Central zone; Maturity 135 days
	OL 1802 (Multi cut)	PAU Ludhiana	GFY: 561.6 DMY: 91.8	Maharashtra, Gujarat, Madhya Pradesh, Chhattisgarh, Central Uttar Pradesh	Better nutritional quality Resistant to leaf blight, Sclerotium root rot and leaf defoliators; Maturity 136 days
Marvel Grass	Phule Govardhan (Marvel -2008-1)	MPKV, Rahuri, Maharashtra	GFY: 585.05 DMY: 168.07	Maharashtra	Perennial multi cut grass, apomictic. Perennial 50-55 days
Grain Amaranth	KBGA-1	UAS, Bangalore	10.5	Karnataka	Contains high seed protein (15.32%) , pink colour plant with white seed

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

Table 2.4: List of horticultural Crop Varieties/hybrids notified/released/identified in 2017

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
FRUITS	Pomegranate	Solapur Lal	ICAR-NRCP, Solapur	160-165 days	Arid & semi-arid regions of Maharashtra	23-27 t/ha	Early maturing variety (160-165 days), high TSS (17.51-7.7 °B), rich in anthocyanin (385-395 mg/100g), rich in iron & zinc content, red rind, dark red arils	Mrigbahar (June-July flowering)
		Solapur Anardana	ICAR-NRCP, Solapur	135-140 days	Arid & semi-arid regions of Maharashtra	22-24 t/ha	Titrate Acidity (4.7-4.9%), Anthocyanin (457-467mg/100g), red rind, red arils	Mrigbahar (June-July flowering)
		Manjri Medika	ICAR-National Research Centre for Grapes, Pune	Days taken for harvest after fruit pruning: 130 – 135 days	Maharashtra, Karnataka, Punjab	30-35 MT/ha	Hybrid of PusaNavrang x Flame Seedless, Teinturier variety (coloured pulp) suitable for juice making. The juice is naturally sweet with attractive red colour and well accepted by public. Juice recovery is 70-72%, contains exceptionally high amount of anthocyanin (4.0 g / kg) which have antioxidant and anti-cancerous properties	February-March
Grape	Manjri Kishmish	Centre	ICAR-National Research Centre for Grapes, Pune	Days taken for harvest after fruit pruning: 130 – 140 days	Northern Karnataka adjoining Maharashtra	32- 35 MT/ha	A mutant selection from KishmishRozavis. Crisp berries with tender skin and light rosy/ muscat flavor. Suitable for raisin making. (raisin recovery 9 to 10 tons /ha)	March
		Centre	ICAR-National Research Centre for Grapes, Pune	Days taken for harvest after fruit pruning: 130-135 days	Maharashtra, Karnataka, Tamil Nadu	25-28 MT/ha	Black table grape hybrid with rudimentary seeds. Moderately tolerant to mildews, a regular yielder even under poor soil conditions and suited for table purpose, black raisins and export of fresh grapes	February end-March
		A18/3	Centre	ICAR-National Research Centre for Grapes, Pune	Days taken for harvest after fruit pruning: 130-135 days	Maharashtra, Karnataka, Tamil Nadu	25-28 MT/ha	Black table grape hybrid with rudimentary seeds. Moderately tolerant to mildews, a regular yielder even under poor soil conditions and suited for table purpose, black raisins and export of fresh grapes

Name of crops	Variety	Centre/State release	Releasing centre/ Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Grape	Charak 2	Centre	ICAR-National Research Centre for Grapes, Pune	Days taken for harvest after fruit pruning: 120-125	Maharashtra	14-18 MT/ha	White wine hybrids (Chardonmay × Arkavati)	January-February
	Charak 4	Centre	ICAR-National Research Centre for Grapes, Pune	Days taken for harvest after fruit pruning: 120-125	Maharashtra	14-18 MT/ha	White wine hybrids (Chardonmay × Arkavati)	January-February
Litchi	Gandaki Sampada	Centre	ICAR-NRCL, Muzaffarpur, Bihar	80-90 days	Indo-Gangetic plain	180-200 q/ha	Bold fruit size (32-36g), pulp recovery per cent->83%, very juicy pulp with rudimentary seed	Perennial and fruits mature in June
	Gandaki Lalima	Centre	ICAR-NRCL, Muzaffarpur, Bihar	80-90 days	Indo-Gangetic plain	200-220 q/ha	Fruits are conical, attractive crimson red in colour, high yielder, TSS 18-19°B, good shelf life and perform well under water stress condition	-do-
	Gandaki Yogita	Centre	ICAR-NRCL, Muzaffarpur, Bihar	90-100 days	Indo-Gangetic plain	100-110 q/ha	Late maturing variety, dwarf stature, recommended for high density planting (5×5m), high pulp recovery(75-80%), small seeded fruit, free from fruit borer and fruit cracking	-do-
Longan	Gandaki longan 1	Centre	ICAR-NRCL, Muzaffarpur, Bihar	120-130 days	Indo-Gangetic plain and humid tropics	30-35 q/ha	Heavy bearer, good fruit size (14-18g), TSS 19-22°B, Acidity (0.23-0.31%), Pulp recovery (58-60%)	Perennial and fruits mature in August
	Namwakhom	Centre	ICAR-NRCB, Trichy	360-370	Southern, Eastern and NE region of India	550 q/ha	Dwarf stature(2.30-2.60m), Shorter duration (380 days which is 80-90 days less duration than Karpooravalli), Suitable for high density planting (1200 plants /ac)	February - March
Banana	Manoranjitham variant	Centre	ICAR-NRCB, Trichy	390-400	Up to 1400m MSL of all banana growing states of Tamil Nadu, Kerala and Karnataka and all hill tracks of North East.	520 q/ha	Highly fragrant fruits, High yield (30kg/bunch, 50% high yield), long fruits, Field tolerant to Sigatoka diseases, More suitable for higher attitudes	November-December

Agricultural Inputs

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Banana	SPL 684	Centre	ICAR-NRCB, Trichy	360-380	Southern, Eastern and NE region of India	600 q/ha	High yield (30kg/bunch, 30% higher yield), good keeping quality (up to 10 days), Starchy fruits, preferred for cooking, can be substitute for local variety Adukkumonthan	February-March
	SPL 690	Centre	ICAR-NRCB, Trichy	360-380	Southern, Eastern and NE region of India	520 q/ha	High yield (32kg/bunch, 20-25% high yield), good keeping quality (by 10 days), Starchy fruits, suitable for cooking and chips industry. A good substitute for local variety Vayalvazhai	February-March
FLOWERS/ORCHIDS								
Rose	Arka Savi	Institute Identified	ICAR-IIHR, Bengaluru	Flowering starts from 120 days onwards after transplanting. Economical yield can be obtained upto 7-10 years.	For all rose growing areas across the country	75q/ha/year	Rose hybrid identified for commercial cultivation for loose flower production in open field (floriferous nature with high yield). It is a spray category of rose belonging to floribunda group. It has Purple Pink flower (RHS colour chart Red purple group 66-A) and flowers are produced in bunches. Potential yield of flowers expected is 30 tons/acre/year. It has long shelf life (5-6 days)	Through out the year
MUSHROOM								
Button Mushroom	U3-54	All India release	ICAR-DMR, Solan	28-30 days	Entire country	22-24 kg/100 kg compost	Rounded cap, tough fruit body, late veil opening, good for fresh marketing	Through out the year under controlled conditions
VEGETABLE CROPS								
Longmelon (Kakdi)	Thar Sheetal	Institute level	ICAR-CIAH, Bikaner	45-50 days	Arid region	132-142 q/ha	Harvest stage: 45-50 days for tender fruits. Fruit weight: 79-85 g. Fruit length: 25-30 cm. Fruit colour: Light green. Fruits free from bitterness. No. of fruit/plant: 18-22. Yield: 132-142 q/ha	Spring

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Brinjal	Thar Rachit	Institute level	ICAR-CIAH, Bikaner	44-46 days	Arid region	638.85 q/ha	Early maturing. Harvest stage: 44.6-46.4 days tender fruits. Fruit weight: 39.8-46.2 g. Fruit shape: oblong-round. Fruit colour: dark purple. No. of fruit per plant: 79.5-92.3 (under high temperature and abiotic stresses of hot arid environment)	It is suitable both for rainy-winter and spring-summer crop cultivation
	Arka Anand	Central	ICAR-IIHR, Bengaluru	145-150 days	Tamilnadu, Kerala, AP, Telangana, Karnataka	550-600 q/ha	A high yielding F1 hybrid with resistant to bacterial wilt. Fruits are green, medium long with excellent cooking quality	All seasons
Brinjal Long	JBL-08-8 (AICRP VC)	Centre	AICRP (VC) (JAU, Junagadh)	identified	VI (Rajasthan, Gujarat, Haryana and Delhi)	514 q/ha	It is a long fruited brinjal variety. Average fruit length 18 cm, fruit diameter 4.75 cm is, and fruit weight 88.87g	All season
Brinjal Hybrid Round	PBHR-41	Centre	AICRP (VC) (PAU, Ludhiana)	identified	IV (Punjab, Uttar Pradesh, Bihar and Jharkhand)	547 q/ha	It is a round fruited brinjal hybrid. Average fruit length 8.83 cm, fruit diameter 8.77cm, and fruit weight 140g.	All season
Brinjal Bacterial Wilt	GB 09-05-3	Centre	AICRP (VC) (AAU, Jorhat)	identified	All zones	222 q/ha	Bacterial wilt resistant line. Average fruit length 15.24cm, fruit diameter 3.38cm, fruit weight 85g and bacterial wilt infestation 18.18%	All season
Onion	ArkaYojith	Institute Identified	ICAR-IIHR, Bengaluru	120 days	Karnataka	Bulb yield is 334 q/ha.	Onion improved variety with bigger sized white bulbs suitable for dehydration. It has been developed by single plant selection from ArkaSwadishtha. It has globe shaped bulbs with more polar diameter (5.25 cm), equatorial diameter (5.30 cm), high TSS (15-20%), dry matter content (18-20%)	Rabi season

Agricultural Inputs

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Onion	Bhima Light Red	CVRC	ICAR-DOGR	115-120 days	Karnataka and Tamil Nadu	385 q/ha	Light red globe bulbs of about 70 g with thin neck and total soluble solids of 13%. It is almost free of doubles and bolters	Rabi
	Bhima Safed	CVRC	ICAR-DOGR	110-120 days	Chhatisgarh, Gujarat, Karnataka, MP, Maharashtra, Orissa, Rajasthan, and Tamil Nadu.	185 q/ha	White, round to oval bulbs of mainly 70-80 g. It has 11-12% TSS	Kharif
Garlic	Bhima Purple	CVRC	ICAR-DOGR	120-135 days	Delhi, UP, Haryana, Bihar, Punjab, Maharashtra, Karnataka and AP	6-7 t/ha	Attractive purple skinned variety Filled tolerant to thrips and foliar diseases. Soft neck variety suitable for braiding, tropical type. TSS: 33.6%B	Rabi
Okra	Arka Nikita	Institute Identified	ICAR-IIHR, Bengaluru	115-120 days	Karnataka	200-230 q/ha	Okra GMS based hybrid for high yield. It was developed by crossing the GMS-4 with IIHR-299-14-11-585. Early flowering and flower appeared at 4 th node. It takes 33 days for the first flower appearance and 39 days for first picking of fruits. Fruits are dark green, medium long, tender, smooth. Plant green stem, one side petal base color purple, 3-4 narrow angle branches. Yields 20-23 t/ha in 115-120 days duration. It has excellent cooking quality, nutritionally rich in P, Ca, K, Mg, Zn, I, mucilage and crude fiber content	Through out the year
Tomato	Arka Meghali	State	ICAR-IIHR, Bengaluru	140 days	Karnataka	180 q/ha	Fruits medium (65g), oblate with light green shoulder. Deep red fruits Suitable for fresh market. Bred for rainfed cultivation Yield 18 t/ha	Kharif

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Tomato	Arka Ananya	Central	ICAR-IIHR, Bengaluru	140 days	Punjab, UP, Jharkhand, Chhattisgarh, Odisha, Arunachal Pradesh, Rajasthan, Gujarat, Haryana, MP, Maharashtra	650-700 q/ha	A F ₁ hybrid Fruits medium (65-70g.), having combined resistance to <i>ToLCV</i> and bacterial wilt. Deep red, firm fruits Suitable for fresh market	Rabi / Kharif
Tomato Hybrid (Determinante)	2013/TODHYB-05	Central	AICRP (VC)	identified	IV (Punjab, Uttar Pradesh, Bihar and Jharkhand)	342 q/ha	This tomato determinate hybrid has vigorous growth. Average fruit length 4.5cm, fruit diameter 4.38 cm	All season
Ridge gourd	Arka Sujat	State	ICAR-IIHR, Bengaluru	115-120	Karnataka	530 q/ha	Lush green and tender, medium long (35-45 cm) fruits with prominent ridges and delicate aroma. Good transport and cooking qualities	All seasons
Okra/Lady's Finger	2013/RIGHYB-02	Central	AICRP (VC)	identified	VIII (Karnataka, Tamil Nadu and Kerala)	287 q/ha	This hybrid has a vigorous growth habit. Average fruit length 46cm, fruit diameter 5.5cm and fruit weight 395g	-
	Arka Anamika	Central	ICAR-IIHR, Bengaluru	120-130 days	All over India	200 q/ha	Fruits lush green, tender and long. Fruits free from spines having 5-6 ridges, delicate aroma. Good keeping and cooking qualities. Field tolerant to yellow vein mosaic virus (YVMV)	Rabi / Kharif
	Arka Abhay	Central	ICAR-IIHR, Bengaluru	120-130 days	Central	180 q/ha	Fruits lush green, tender and long. Fruits free from spines having delicate aroma. Good keeping and cooking qualities. Field tolerant to YVMV	Rabi / Kharif
Vegetable Amaranth	Arka Suguna	State	ICAR-IIHR, Bengaluru	90 days	Karnataka, Andhra Pradesh, Telangana, Maharashtra, Tamil Nadu, Kerala	250-300 q/ha	Light green, succulent stem and broad leaves. First harvest in 25-30 days after sowing and 5-6 cuts in 90 days. Moderately resistant to white rust under field conditions	Through out the year

Agricultural Inputs

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Spinach beet (Palak)	Arka Anupama	State	ICAR-IIHR, Bengaluru	65-70 days	Karnataka, Andhra Pradesh, Telangana, Maharashtra, Tamil Nadu, Kerala	410 q/ha	Late bolting variety with medium large, thick, dark green leaves. It has got excellent cooking quality and is rich in vitamins and minerals. Four cuttings can be taken over a period of 65-70 days. Resistant to <i>cercospora</i> leaf spot under epiphytic conditions	Through out the year
Bottle gourd	BBOG-3-1	Central	AICRP (VC) (OUAT, Bhubaneswar)	identified	VI (Rajasthan, Gujarat, Haryana and Delhi) and VII (Madhya Pradesh & Maharashtra)	261q/ha	A bottle gourd variety green in the colours and round shape, average Fruit weight 0.8-1 kg, number of locules per fruit two, average fruit length 9 cm	-
Dolichos bean	IIHR-162-2	Central	AICRP (VC)	identified	VII (Madhya Pradesh &Maharashtra) and VIII (Karnataka, Tamil Nadu & Kerala)	250-300 q/ha	A pole type Dolichos variety suitable for growing only in Rabi season. Pods are long (average length 13 cm), flat green and borne in clusters	-
SPICES								
Turmeric	NDH-8 Narendra Saryu	Recommended for central release	ICAR-AICRPS Centre at NDUAT, Faizabad, Uttar Pradesh	260 days	All the turmeric growing regions of the country	25-30 t/ha	High curcumin content of 5-6%, more number of primaries with yield advantage of 10% over the national check	April -May
	CL -34	Recommended for central release	ICAR-AICRP S centre at TNAU, Coimbatore	250 days	Erode, Coimbatore and Salem districts of TN, Chhattisgarh and UP	32.91 t/ha	Tolerant to leaf spot and leaf blotch and with curcumin content of 3.3%	April-May
Cassia	IISR Cassia (D1)	Recommended for central release	ICAR-AICRPS centre at Dr. BSKVV, Dapoli	first harvest from 4 th year after planting	Tamilnadu, Kerala, Karnataka and Maharashtra	Dry bark yield 262.94kg/ha	Less coumarin content	June- July
	Ajmer fenugreek-5 (Afg-5)	National release	National Research Centre on Seed Spices, Tabiji, Ajmer	Medium 106-141 (Average 124.6 days)	All fenugreek growing areas of India-Rajasthan, Haryana, Bihar, UP, Gujarat, Uttarakhnad and Chhatisgarh	17.21 q/ha	The seed are bold and bigger in size. Maturity: 106-141 days. Seeds of Agf-5 showed higher antioxidant properties (66.4mg BHT/g ^{seeds}). Moderately resistant to powdery mildew and Alternaria blight	Rabi

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Coriander	Gujarat Coriander -3	State release	ICAR-AICRPS centre at SDAU, Jagudan, Gujarat	114 days	Gujarat	15.01 q/ha	High yield high volatile oil (0.52 %) and high linalool (72.16%)	October- November
	Ajmer Coriander 2	Central release	ICAR-NRCSS, Ajmer	120 days	All coriander growing regions of the country	12.93q/ha	Stem gall resistance, high linalool content (71.7%) and early maturing type	October- November
	Ajmer coriander-2 (ACr-2)	National release	National Research Centre on Seed Spices, Tabiji, Ajmer	Medium 120-130 days	All coriander growing areas of India- Rajasthan, Haryana, Bihar, Uttar Pradesh, Gujarat, Uttarakhand and Chhatisgarh	12.93 q/ha	This variety suitable for leaves and seeds production, performs well under irrigation, essential oil content up to 0.50-0.60% and average yield 12-13 q seeds per hectare. The plants are semi erect, seeds are medium in size, seed shape oval and suitable for export purpose. Resistant to stem gall and tolerant to powdery mildew	Rabi
Black pepper	Panniyur 9	central release	ICAR-AICRPS centre at KAU, Panniyur	First harvest from 3rd year after planting	Kerala, Karnataka and Andhra Pradesh	3150 kg/ha	High yield and tolerant to <i>Phytophthora</i> foot rot	June- July
Small cardamom	Appangala 2	central release	ICAR-IISR, RS, Appangala	First harvest from 3rd year after planting	Karnataka and Kerala	927.29 kg dry capsules/ha	First Kattie resistant hybrid of small cardamom (Malabar type) with high oil (6.3%) and α terpinyl acetate (40.3 %) content	June- July
Ginger	Mohini	central release	ICAR-AICRPS centre at UBKV, Pundibari, West Bengal	240 days	All ginger growing areas of the country	14 t/ha	High yield potential bold rhizome, dry recovery of 21.7%	June- July
Turmeric	IISR Pragathi	central release	ICAR-IISR, Kozhikode	180 days	Kerala, Karnataka, A P, Chhattisgarh and Telangana	32 t/ha	Moderately tolerant to root-knot nematodes and curcumin content of 5%	June- July
Fennel	Ajmer fennel-2 (AF-2)	National release	National Research Centre on Seed Spices, Tabiji, Ajmer	Medium 175-180 days	All fennel growing areas of India	17.90 q/ha	The plants are erect and tall, bearing large size umbels. The seeds contain 1.9 % essential oil and 57.5% anethole and estragol combined. Tolerant to Ramularia and Alternaria blight	Early sowing and rabi season

Agricultural Inputs

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Chilli	Arka Suphal	Central	ICAR-IIHR, Bengaluru	180 days	MP & Maharashtra	250 q/ha (Green Chilli) 30 q/ha (Dry Chilli)	Fruits green, smooth, medium long (6-7 cm x 1 cm), pendent, turning deep red on maturity. Suitable for irrigated and rainfed cultivation. Tolerant to powdery mildew. Yield 25 t/ha. (Green Chilli), 3t/ha. (Dry Chilli)	Rabi / Khanif
	Arka Lohit	Central	ICAR-IIHR, Bengaluru	180 days	Chhattisgarh, MP, Arunachal Pradesh, Karnataka, Kerala, Tamilnadu, Odisha, Maharashtra	250 q/ha (Green Chilli) 30 q/ha (Dry Chilli)	Fruits dark green turning deep red on maturity (Capsanthin 0.21%); Fruits highly pungent (Capsaicin 0.71%); Suitable for irrigated and rainfed cultivation. Yield 25 t/ha. (Green Chilli) 3 t/ha. (Dry chilli)	Rabi / Khanif
	Arka Meghana	Central	ICAR-IIHR, Bengaluru	160-180 days	Punjab, Delhi, UP, Jharkhand, TN, Chhattisgarh, Arunachal Pradesh, Rajasthan, Gujarat, Haryana, Kerala	335 q/ha (Green Chilli) 50 q/ha (Dry Chilli)	F1 hybrid, Fruits light 10.6cm and width 1.2cm. Very early type, Fruits are dark green and turn to red on maturity. Resistant to powdery mildew and viruses. Yield 33.5 t/ha green chilli or 5 t/ha dry chilli	Rabi / Khanif
	Arka Harita	State	ICAR-IIHR, Bengaluru	180 days	Karnataka	382 q/ha (Green Chilli) 58.6 q/ha (Dry Chilli)	F1 hybrid, Fruits light 10cm and width 1cm. Fruits are dark green and turn to red on maturity. Resistant to powdery mildew and viruses. Yield 38.2 t/ha green chilli or 5.86 t/ha dry chilli	Rabi / Khanif
MEDICINAL PLANTS								
Isabgol	Vallabh Isabgol-1	Central	ICAR-Directorate of Medicinal and Aromatic Plants Research, Anand, Gujarat	120-130 days	Madhya Pradesh, Rajasthan, Gujarat and Uttar Pradesh	10.25 q/ha	Semi erect growth habit, leaves are dark green with medium pubescence, compact spike arrangement with compressed flower arrangement in the spike	Rabi
	Vallabh Isabgol-4	Institute release	ICAR-Directorate of Medicinal and Aromatic Plants Research, Anand, Gujarat	120-130 days	Madhya Pradesh, Rajasthan, Gujarat and Uttar Pradesh	9.31 q/ha	Erect growth habit, Yellowish green leaves, Long spike length	Rabi

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Ashwagandha	Vallabh Ashwa gandha-1	Institute Release	ICAR-Directorate of Medicinal and Aromatic Plants Research, Anand, Gujarat	150-160 days	Madhya Pradesh, Rajasthan, Gujarat and Uttar Pradesh	6.89 q/ha	Erect, medium height (70-90 cm), orange colour berry, moderate fibrous root	Kharif/late kharif
Aloe vera	GAKP-1	State	AICRP-MAP&B, Anand Agricultural University, Anand	350-540 days	Gujarat	62.79 q/ha	Green in leaf color, Small Spinous tooth size, Dark spot present on Spinous tooth. Mucilage; 23.27 kg/ha Aloin-A : 16.87	Kharif
TUBER CROPS								
Potato	Kufri Ganga	Centre	ICAR-CPRI, Shimla	75-90 days Medium	North Indian plains	350-400 q/ha	Tubers ovoid, white-cream skin, shallow eyes, cream flesh and mealy texture. Field resistance to late blight, good keeping/culinary quality. Table purpose	Autumn season (Oct/Nov to Feb/Mar)
	Kufri Neelkanth	Centre	ICAR-CPRI, Shimla	90-100 days (Medium)	North Indian plains	350-380 q/ha	Tubers ovoid, purple skin, shallow eyes, yellow flesh and mealy texture. High antioxidants (anthocyanin & carotenoids) as compared to other red skin varieties. Field resistance to late blight, good keeping/culinary quality. Table purpose	Autumn season (Oct/Nov to Feb/Mar)
	Kufri Lima	Centre	ICAR-CPRI, Shimla	90-110 days (Medium to late)	North Indian plains	300-350 q/ha (15-20 days early crop than main crop)	Tubers ovoid, white-cream skin, shallow eyes, cream flesh and mealy texture. Tolerant to hopper and mite burn, good keeping and culinary quality. Table purpose	Autumn season (Sep/Oct to Jan/Feb)
	OS/01-497	State	ICAR-CPRI, Shimla	110-120 days (Late)	The Nilgiri hills of Tamilnadu.	300-350 q/ha	Tubers ovoid, light yellow skin, shallow eyes, yellow flesh and floury texture. Good culinary quality. Table purpose. Combined resistance to late blight and cyst nematode	Spring: Jan/Feb to May/June Summer: Mar/April to Aug/ Sep Autumn: Sep to Dec

Agricultural Inputs

Name of crops	Variety	Centre/State release	Releasing centre/Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Greater yam	IGDa – 2 (Recommended for release during 2017)	Centre	IGKV, Jagdalpur, Chhattisgarh	190-210 days	Chhattisgarh and Gujarat	250 q/ha	Tolerant to Anthracnose disease. Free from storage pests. Dry matter: 40.43 %, Starch: 25.83 % and Crude Protein: 7.74 %. Cooking quality: Excellent	Suitable early (Feb-Mar) or late (May-June) planting
	Bhu Swar	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	180-210 days	Odisha	200-250 q/ha	Short duration variety with excellent cooking quality. Starch : 18-20%	May-June
	Sree Nidhi	State Kerala	ICAR-CTCRI Thiruvananthapuram	240-260 days	Kerala Odisha	350 q/ha	Field tolerant to anthracnose disease. High yielding variety with good cooking quality. Starch: 23.2% and Crude protein: 2.5% FW. Suitable for growing under non trailing condition also	Kharif
White Yam	Sree Haritha	State Kerala	ICAR-CTCRI Thiruvananthapuram	270-300 days	Kerala	460 q/ha	High yielding variety with good tuber shape and cooking quality. Starch: 24.02%, Crude protein: 3.2%	Kharif
	Sree Sree Swetha	State Kerala	ICAR-CTCRI Thiruvananthapuram	240-270 days	Kerala	340 q/ha	Non trailing dwarf variety with excellent cooking quality. Starch: 22.0%, Crude protein: 3.8%	Kharif
Taro	Bhu Kripa	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	180-210 days	Odisha, Jharkhand and North East region	120 q/ha	Tolerant to Phytophthora leaf blight, Tolerant to submergence, drought and salinity stresses, excellent cooking quality	Spring summer and Kharif
	Bhu Sree	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	180-210 days	Odisha, Jharkhand and North East region	120 q/ha	Tolerant to Phytophthora leaf blight, Tolerant to mid-season drought and salinity stress (4dSm-1)	Spring summer and Kharif
Cassava	Sree Reksha	State Kerala	ICAR-CTCRI Thiruvananthapuram	240-270 days	Kerala, Tamil Nadu	500 q/ha	Completely resistant to cassava mosaic disease Tolerant to post harvest physiological deterioration Starch: 27.0% Cyanogen: 35.01ppm	Kharif
	Bhu Sona	State Odisha	ICAR-CTCRI Thiruvananthapuram	105-110 days	Odisha, Jharkhand, Maharashtra, Karnataka, WB and North East region	200-240 q/ha	High betaotene (11.5-12.5mg/100g) Field tolerant to weevil (<10% infestation), mid season drought and salt stress (6-8dSm ⁻¹)	Kharif and Rabi

Name of crops	Variety	Centre/State release	Releasing centre/ Institute	Maturity range (days)	Area of adaptation	Average yield	Other traits/characteristics	Cropping season
Sweet Potato	Bhu Ja	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	100-110 days	Odisha	200-220 q/ha	High β-carotene (5.5-6.4mg/100g), tolerant to salt stress	Mid October
	Bhu Kanti	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	105-110 days	Odisha	220-240 q/ha	High β-carotene (6.5.g/100g), field tolerant to weevil, mid season drought and salt stress	-
	Bhu Krishna	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	110-120 days	Odisha, Jharkhand, Maharashtra, Karnataka, West Bengal and North East region	180-220 q/ha	Purple fleshed with high anthocyanin (90mg/100g), Highly tolerant to weevil (<5% infestation) and salt stress (6-8dSm ⁻¹)	October
	Bhu Swami	State Odisha	ICAR-CTCRI (RC) Bhubaneswar	105-110 days	Odisha	220-240 q/ha	High yield, good starch (20.8-21.2%) content and suitable for processing field tolerant to weevil, mid season drought and salt stresses	Rabi

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

Agricultural Inputs

Table 2.5: All India consumption of plant nutrients per unit of gross cropped area during 1963-64 to 2016-17

Year	Gross cropped area (000' ha)	Consumption (kg) per hectare			
		N	P ₂ O ₅	K ₂ O	Total
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*	200,860	83.39	30.36	10.45	121.89
2014-15*	N.A.	84.39	34.74	12.61	127.36
2015-16*	N.A.	86.49	33.38	11.96	133.19
2016-17*	N.A.	83.32	33.38	12.49	129.19

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 2013-14, 3. N.A.: Not available.

Source : *Fertiliser Statistics 2016-17*, 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	2015-16				2016-17			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
North	125.99	41.25	7.24	174.47	121.49	40.65	8.04	170.18
Haryana	169.65	47.54	3.22	220.42	163.80	47.41	6.96	218.18
Punjab	185.10	53.55	9.94	248.60	178.30	47.20	6.66	232.17
Uttar Pradesh	107.73	40.37	7.43	155.53	104.11	40.83	8.56	153.51
Uttarakhand	143.76	19.75	5.67	169.18	138.47	24.68	7.85	171.01
Himachal Pradesh	37.14	9.96	10.00	57.10	35.17	10.84	11.48	57.49
Jammu & Kashmir	42.90	14.65	6.25	63.79	38.63	15.91	8.37	62.91
Delhi	53.06	4.44	0.00	57.49	73.66	3.11	0.00	76.77
South	107.00	48.17	24.30	179.46	97.35	45.65	23.42	166.43
Andhra Pradesh	135.96	65.09	24.65	225.70	123.56	60.24	28.27	212.07
Telangana	179.23	66.97	22.71	268.91	164.36	56.90	22.19	243.46
Karnataka	96.50	52.24	26.22	174.96	87.50	51.00	24.09	162.58
Kerala	21.25	7.87	14.65	43.78	14.98	8.23	11.18	34.38
Tamil Nadu	104.52	40.81	29.86	175.19	87.36	39.39	27.72	154.48
Puducherry	190.05	37.71	34.44	262.19	209.65	41.60	37.99	289.24
East	89.38	34.04	17.48	140.90	77.00	30.26	17.82	125.07
Bihar	162.19	44.24	13.78	220.21	138.50	40.62	19.30	198.42
Jharkhand	39.59	13.22	1.74	54.54	33.53	9.35	0.73	43.62
Odisha	39.43	16.11	7.09	62.64	34.73	15.03	7.01	56.78
West Bengal	90.23	48.55	35.07	173.84	82.14	43.44	32.70	158.28
North East	26.31	6.02	6.68	39.01	25.09	6.76	6.57	38.41
Assam	31.24	6.19	7.36	44.79	27.42	6.72	7.12	41.26
Tripura	18.47	12.60	11.93	42.99	25.01	12.66	8.44	46.11
Manipur	28.94	7.79	4.89	41.62	23.74	6.52	4.42	34.67
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	2.82	1.93	1.21	5.95	16.44	11.18	7.10	34.71
Arunachal Pradesh	1.62	0.11	0.33	2.07	0.00	0.00	0.00	0.00
Mizoram	12.62	2.27	3.29	18.18	17.32	3.13	2.43	22.88
West	58.77	27.33	7.75	93.85	57.36	24.89	8.12	90.38
Gujarat	90.45	25.74	8.33	124.51	91.21	27.12	9.64	127.98
Madhya Pradesh	52.45	27.66	3.49	83.59	51.15	24.84	3.70	79.70
Chhattisgarh	61.36	29.79	8.97	100.12	58.96	33.50	9.61	102.07
Maharashtra	65.20	37.83	19.42	122.45	63.07	32.69	19.00	114.75
Rajasthan	42.99	17.83	0.74	61.56	40.48	13.82	0.64	54.93
Goa	24.04	14.71	10.34	49.09	22.21	13.64	9.66	45.51
Daman & Diu	35.99	5.14	0.00	41.13	35.90	2.56	2.56	41.03
D&N Haveli	36.31	19.75	0.00	56.05	43.13	30.00	0.00	73.13
All India	84.84	34.08	11.73	130.66	79.59	31.89	11.93	123.41

Source : *Agricultural Statistics at a glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in) (In press)

Table 2.7: All India production of straight nitrogenous fertilisers during 1971-72 to 2016-17 (April-March)

('000 t)

Year	Ammonium sulphate (20.6% N)	Ammonium sulphate nitrate (26% N)	Urea** (46%N)	Calcium ammonium nitrate (25% N)	Ammonium chloride (25% N)	Total	
						Nutrient* N (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	N.A.	3,071.8	509.3	16.7	1,659.3	4,155.1
1978-79	508.6	N.A.	3,306.0	558.3	17.9	1,769.8	4,391.3
1979-80	479.3	N.A.	3,513.5	465.3	12.7	1,834.5	4,470.8
1980-81	436.2	N.A.	3,384.2	347.4	18.9	1,758.7	4,186.7
1981-82	443.2	N.A.	5,384.3	403.8	18.9	2,673.8	6,250.3
1982-83	477.7	N.A.	6,019.9	290.0	37.2	2,938.8	6,824.8
1983-84	424.8	N.A.	6,073.8	326.4	61.6	2,973.5	6,886.6
1984-85	454.0	N.A.	6,687.9	409.2	77.2	3,291.7	7,629.0
1985-86	518.9	N.A.	7,467.3	381.1	103.8	3,663.1	8,471.1
1986-87	534.4	N.A.	9,576.6	389.5	92.3	4,635.8	10,592.8
1987-88	538.7	N.A.	9,834.8	421.3	87.2	4,763.7	10,882.0
1988-89	610.1	N.A.	11,867.1	480.2	96.7	5,728.8	13,054.1
1989-90	586.2	N.A.	12,486.0	425.2	79.9	5,990.6	13,577.3
1990-91	557.5	N.A.	12,835.9	435.9	78.8	6,148.0	13,908.1
1991-92	553.5	N.A.	12,831.3	446.3	112.5	6,156.1	13,943.6
1992-93	563.2	N.A.	13,125.9	545.5	122.2	6,320.9	14,356.8
1993-94	620.3	N.A.	13,150.2	666.2	131.4	6,376.3	14,568.1
1994-95	584.8	N.A.	14,137.1	571.9	136.5	6,800.6	15,430.3
1995-96	634.5	N.A.	15,805.6	491.1	138.9	7,558.8	17,070.1
1996-97	665.6	N.A.	15,628.7	388.5	122.1	7,454.0	16,804.9
1997-98	561.5	N.A.	18,594.5	437.7	110.4	8,806.1	19,704.1
1998-99	550.6	N.A.	19,292.2	466.4	63.4	9,120.3	20,372.6
1999-00	592.4	N.A.	19,807.7	318.2	87.5	9,335.0	20,805.8
2000-01	593.4	N.A.	19,623.8	246.5	102.4	9,236.4	20,566.1
2001-02	574.7	N.A.	19,003.1	180.7	81.5	8,925.4	19,840.0
2002-03	544.4	N.A.	18,621.2	173.3	78.9	8,740.9	19,417.8
2003-04	600.7	N.A.	19,038.3	141.2	77.8	8,936.1	19,858.0
2004-05	615.9	N.A.	20,239.2	184.4	82.4	9,503.6	21,121.9
2005-06	619.3	N.A.	20,085.1	172.8	79.8	9,429.9	20,957.0
2006-07	634.8	N.A.	20,271.2	144.3	74.4	9,510.2	21,124.7
2007-08	483.1	N.A.	19,838.8	134.6	N.A.	9,259.0	20,456.5
2008-09	554.8	N.A.	19,923.2	138.5	N.A.	9,313.6	20,616.5
2009-10	620.8	N.A.	21,120.7	102.7	N.A.	9,869.1	21,844.2
2010-11	637.0	N.A.	21,872.5	98.7	23.1	10,223.0	22,631.3
2011-12	595.4	N.A.	21,992.3	115.0	78.4	10,287.4	22,781.1
2012-13	573.2	N.A.	22,586.6	106.9	50.1	10,547.2	23,316.8
2013-14	624.1	N.A.	22,718.7	44.4	7.7	10,592.2	23,394.9
2014-15	581.5	N.A.	22,592.9	N.A.	40.4	10,522.5	23,214.8
2015-16	560.1	N.A.	24,461.3	N.A.	45.6	11,379.0	25,067.0
2016-17	632.3	N.A.	24,200.8	N.A.	40.8	11,272.8	24,873.9

Note : 1.*: For agricultural purposes only, 2. These figures are for 20.5% N grade, 3.**: Net production of saleable urea. Excludes urea used for manufacture of complex fertilisers, 4.N.A.: Not available.

Source : *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.

**Table 2.8: All India production of straight phosphates during
1967-68 to 2016-17 (April-March)**

('000 t)

Year	Single super phosphate of grade			Triple super phosphate of grade		Total	
	16 % W.S. P ₂ O ₅	Super phosphate other grades	Nutrient W.S. P ₂ O ₅	46 % W.S. P ₂ O ₅	Nutrient W.S. P ₂ O ₅	Nutrient P ₂ O ₅ (straight)	Product
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	N.A.	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)	N.A.	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	N.A.	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	N.A.	211.3	23.4	10.8	222.1	1,344.0
1983-84	1,491.7	N.A.	238.7	21.1	9.7	248.4	1,512.8
1984-85	1,898.3	N.A.	303.7	10.0	4.6	308.2	1,908.4
1985-86	2,136.1	N.A.	341.8	1.1	0.5	342.3	2,137.2
1986-87	2,006.1	N.A.	321.0	N.A.	N.A.	321.0	2,006.1
1987-88	2,483.5	N.A.	397.4	N.A.	N.A.	397.4	2,483.5
1988-89	2,944.7	N.A.	471.2	N.A.	N.A.	471.2	2,944.7
1989-90	3,137.8	N.A.	502.1	N.A.	N.A.	502.1	3,137.8
1990-91	3,650.3	N.A.	584.0	N.A.	N.A.	584.0	3,650.3
1991-92	2,984.8	N.A.	477.6	N.A.	N.A.	477.6	2,984.8
1992-93	2,329.3	N.A.	372.7	N.A.	N.A.	372.7	2,329.3
1993-94	2,257.2	N.A.	361.2	N.A.	N.A.	361.2	2,257.2
1994-95	3,010.9	13.7 #	483.7	N.A.	N.A.	483.7	3,024.6
1995-96	3,200.2	1.7 #	512.3	N.A.	N.A.	572.3	3,201.9
1996-97	3,187.0	N.A.	509.9	N.A.	N.A.	509.9	3,187.0
1997-98	3,832.5	N.A.	613.2	N.A.	N.A.	613.2	3,832.5
1998-99	3,816.1	N.A.	610.5	N.A.	N.A.	610.5	3,816.1
1999-00	3,532.7	N.A.	565.2	N.A.	N.A.	565.2	3,532.7
2000-01	2,742.2	N.A.	438.8	N.A.	N.A.	438.8	2,742.2
2001-02	2,504.6	N.A.	400.7	N.A.	N.A.	400.7	2,504.6
2002-03	2,407.7	N.A.	385.2	N.A.	N.A.	385.2	2,407.7
2003-04	2,543.4	N.A.	406.9	N.A.	N.A.	406.9	2,543.4
2004-05	2,461.1	N.A.	393.8	N.A.	N.A.	393.8	2,461.1
2005-06	2,795.2	N.A.	447.2	N.A.	N.A.	447.2	2,795.2
2006-07	2,972.0	N.A.	475.5	N.A.	N.A.	475.5	2,972.0
2007-08	2,246.3	N.A.	359.4	N.A.	N.A.	359.4	2,246.3
2008-09	2,533.6	N.A.	405.4	N.A.	N.A.	405.4	2,533.6
2009-10	3,093.0	N.A.	494.9	N.A.	N.A.	494.9	3,093.0
2010-11	3,712.8	N.A.	594.0	N.A.	N.A.	594.0	3,712.8
2011-12	4,324.0	N.A.	691.8	N.A.	N.A.	691.8	4,324.0
2012-13	4,434.9	N.A.	709.6	N.A.	N.A.	709.6	4,434.9
2013-14	4,211.6	N.A.	673.7	N.A.	N.A.	673.8	4,211.5
2014-15	4,229.6	N.A.	676.7	N.A.	N.A.	676.7	4,229.6
2015-16	4,329.6	N.A.	692.7	N.A.	N.A.	692.7	4,329.6
2016-17	4,296.8	N.A.	687.5	N.A.	N.A.	687.5	4,296.8

Note : 1.#: 14% W.S. P₂O₅, 2.(): Pelofos, 3. N.A.: Not available.

Source : *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.

Table 2.9: Production and use of agricultural inputs in India

Programme	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1. Seeds (lakh q)									
I. Production of breeder seeds	0.94	1.02	1.19	1.23	1.10	0.82	0.86	0.90	1.11
II. Production of foundation seeds	9.69	10.50	18.06	22.36	16.17	17.43	15.76	14.95	22.09
III. Distribution of certified/quality seeds	215.81	257.11	277.34	294.85	313.44	301.39	303.12	304.04	348.58
2. Consumption of chemical fertilisers (lakh t)									
I. Nitrogenous (N)	150.91	155.80	165.58	173.00	168.21	167.50	169.46	173.72	167.35
II. Phosphatic (P)	65.06	72.74	80.50	79.14	66.53	56.33	60.98	69.79	67.05
III. Potassic (K)	33.13	36.32	35.14	25.76	20.62	20.99	25.32	24.02	25.08
Total (I+II+III)	249.10	264.86	281.22	277.90	255.36	244.82	255.76	267.53	259.49
Per hectare (kg)**	127.53	140.15	142.34	142.05	131.36	125.39	128.08	130.66	123.41
3. Consumption of pesticides (technical grade material) (000' t)	43.86	41.82	55.54	52.98	45.62	60.28	56.12	50.41*	52.75*
4. Area covered under soil conservation cumulative (lakh ha)	6.90	5.32	7.49	4.72	5.46	N.A.	N.A.	N.A.	N.A.

Note : 1. *: updated on 20.11. 2017, 2. **: Per capita consumption from Gross Cropped Area upto 2016-17 is based on State Governments estimates, 3. N.A.: Not available

Source : *Agricultural Statistics at a glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in) (In press)

**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)**

(₹/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 [@] (18% N-46%P ₂ O ₅)	Single super phosphate (16% w.s. P ₂ O ₅)	Muriate of potash (60% K ₂ O)
Nutrient	(N)	(N)	(N)	(P ₂ O ₅)	(P ₂ O ₅)	(K ₂ O)
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 ^d	10.50	37.38-44.80	16.22	21.25 ^e	7.43
2009-10	50.24 ^d	10.50	39.28-44.80	16.22	21.25 ^f	7.43
2010-11	38.89-42.23 ^g	11.54	40.42-49.60	17.11-18.85 ^h	20.00 ^h	8.43 ^h
2011-12	38.89-68.45 ^h	11.54	43.56-51.60	18.85-39.61 ^h	20.00-39.29 ^h	10.00-20.13 ^h
2012-13	47.57-53.46 ^h	11.65 ^h	52.86-62.00	47.62 ^h	43.78 ^h	28.33 ^h
2013-14	53.91-56.74 ^h	11.65	N.A.	44.35 ^h	41.43 ^h	26.67 ^h
2014-15	59.93-65.78 ^h	11.65	N.A.	46.96 ^h	47.54 ^h	27.50 ^h
2015-16	58.25-61.86 ^h	11.65	N.A.	48.70 ^h	46.76 ^h	26.67 ^h
2016-17	58.25-61.86 ^h	11.65	N.A.	43.27 ^h	45.16 ^h	18.33 ^h

Note : 1. @:P₂O₅ prices of DAP worked out after deducting proportionate price of N (through urea) from prices of DAP, 2. **:Price of phosphate 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 1, 2010. Under NBS, retail prices are open and announced by the individual companies, 3. The prices shown for 2010-11 to 2014-15 are indicative average prices, 4.a: w.e.f. November 1, 2012, 5.c: Statutorily controlled w.e.f. August 21, 1984, 6. d:w.e.f. July 01, 2008, e: w.e.f. May 1, 2008, 7. f: upto September 30,w.e.f. October 1, 2009 GOI has decided to leave the selling prices of SSP open, 8.#: inclusive of all taxes, 9.*: 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 valorem plus 5% special duty on excise duty. This was also withdrawn with effect from February 28, 1983.

Source : *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.

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

States/Union Territories	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
Andaman and Nicobar Islands	14	N.A.	15	7	N.A.	N.A.	N.A.	N.A.
Andhra Pradesh	1015	8869	9289	2803	4253	3895	2713	1884
Assam	19	150	160	183	190	197	N.A.	306
Arunachal Pradesh	10	10	17	N.A.	18	18	17	18
Bihar	828	675	655	687	765	787	831	840
Chandigarh	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Chhattisgarh	205	570	600	812	1016	1020	1625	1495
Dadra and Nagar Haveli	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Daman and Diu	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Delhi	49	48	N.A.	N.A.	48	N.A.	N.A.	88
Goa	10	9	8	9	9	9	48	22
Gujarat	2750	2600	2190	1210	2330	1840	1980	1713
Haryana	4070	4060	4050	4050	4080	4070	N.A.	4050
Himachal Pradesh	328	328	310	320	344	357	450	341
Jammu and Kashmir	1640	1818	1711	1789	1723	1921	2251	2188
Jharkhand	89	84	151	151	430	650	493	541
Karnataka	1647	1858	1412	1615	1735	1709	1434	1279
Kerala	631	657	807	712	1276	919	1123	1070
Lakshadweep	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Madhya Pradesh	645	633	850	846	987	696	732	694
Maharashtra	4639	8317	6723	6618	10969	11239	11665	13496
Manipur	30	30	33	30	31	30	30	33
Meghalaya	6	10	9	N.A.	44	28	N.A.	N.A.
Mizoram	39	4	4	4	508	806	N.A.	N.A.
Nagaland	14	N.A.	15	N.A.	16	16	20	N.A.
Odisha	1588	871	555	606	1219	1680	723	770
Puducherry	39	39	38	41	41	42	43	42
Punjab	5810	5730	5625	5730	5723	5699	5743	5843
Rajasthan	3527	3623	2802	2559	2736	1457	2475	1252
Sikkim	4	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Tamil Nadu	2335	2361	1968	1766	2142	2096	2096	2000
Telangana	N.A.	N.A.	N.A.	N.A.	N.A.	2805	2950	3840
Tripura	55	12	266	272	310	307	293	298
Uttar Pradesh	9563	8460	8839	9057	10164	9867	10457	10142
Uttarakhand	222	199	206	247	174	133	217	131
West Bengal	N.A.	3515	3670	3465	3190	3060	3712	2624
Total	41822	55540	52979	45619	60282	57353	54121	57000

Note : 1. States/UTs Zonal Conferences on Inputs (Plant Protection), 2. N.A.: Not available, 3.*: Provisional.

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

Table 2.12: Zone-wise consumption of fertilisers

('000 t)

State/Zone	2012-13	2013-14	2014-15	2015-2016	2016-2017
South Zone	5519.08	6004.82	5985.38	6177.58	5788.00
	(166.33)	(164.05)	(174.68)	(179.46)	(166.43)
West Zone	7636.3	8042.24	8205.58	8382.02	8426.41
	(87.33)	(85.93)	(92.61)	(93.85)	(90.38)
North Zone	8284.48	7039.97	7634.61	7906.44	7805.66
	(191.11)	(162.67)	(173.58)	(174.47)	(170.18)
East Zone	3775.01	3078.25	3427.26	4001.47	3653.88
	(156.11)	(108.51)	(118.47)	(140.90)	(125.07)
North East Zone	321.28	317.13	323.29	285.09	275.20
	(51.42)	(67.92)	(65.97)	(39.01)	(38.41)
All India	25536.15	24482.41	25576.12	26752.61	25949.15

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

Source : *Agricultural Statistics at a glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in) (In press)

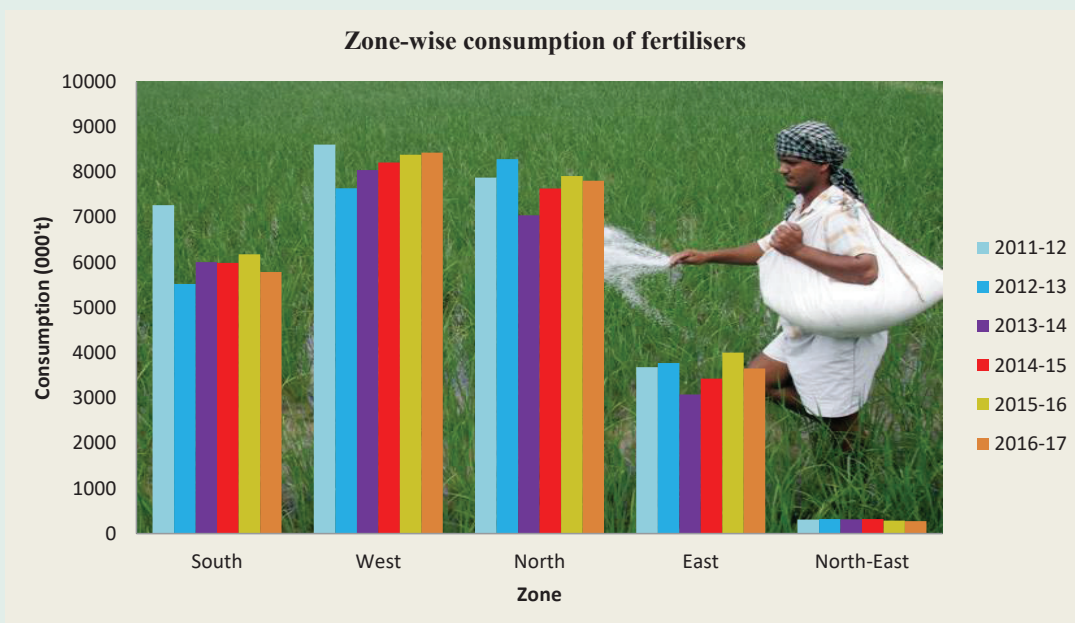


Table 2.13: State-wise area coverage under micro irrigation in India during 2016 and 2017

(Area in Ha.)

States	As on 25.12.2016			As on 31.03.2017		
	Drip	Sprinkler	Total	Drip	Sprinkler	Total
Andhra Pradesh	834865.0	328441.0	1163306.0	1012093.0	386415.0	1398508.0
Arunachal Pradesh	613.0	0.0	613.0	613.0	0.0	613.0
Assam	310.0	129.0	439.0	310.0	129.0	439.0
Bihar	4610.0	97440.0	102050.0	10309.0	101124.0	111433.0
Chattisgarh	15553.0	241420.0	256973.0	20399.0	263857.0	284256.0
Goa	965.0	899.0	1864.0	1086.0	993.0	2079.0
Gujarat	411208.0	418165.0	829373.0	557606.0	580396.0	1138002.0
Haryana	22682.0	550458.0	573140.0	28081.0	556079.0	584160.0
Himachal Pradesh	291.0	684.0	975.0	4441.0	3652.0	8093.0
Jammu & Kashmir	N.A.	N.A.	N.A.	23.0	57.0	80.0
Jharkhand	6303.0	9919.0	16222.0	16641.0	14227.0	30868.0
Karnataka	429903.0	417005.0	846908.0	514090.0	536443.0	1050533.0
Kerala	22516.0	6948.0	29464.0	22890.0	8080.0	30970.0
Madhya Pradesh	166358.0	185759.0	352117.0	265194.0	216470.0	481664.0
Maharashtra	896343.0	374783.0	1271126.0	1004175.0	408365.0	1412540.0
Manipur	47.0	30.0	77.0	288.0	30.0	318.0
Meghalaya	N.A.	N.A.	N.A.	308.0	307.0	615.0
Mizoram	1727.0	425.0	2152.0	3064.0	1364.0	4428.0
Nagaland	200.0	5005.0	5205.0	444.0	5005.0	5449.0
Odisha	18431.0	82147.0	100578.0	22575.0	87038.0	109613.0
Punjab	30805.0	12161.0	42966.0	35208.0	12473.0	47681.0
Rajasthan	170098.0	1514451.0	1684549.0	212406.0	1576139.0	1788545.0
Sikkim	5544.0	2769.0	8313.0	6044.0	3042.0	9086.0
Tamil Nadu	290009.0	30436.0	320445.0	352375.0	45136.0	397511.0
Telangana	25299.0	5293.0	30592.0	107828.0	24608.0	132436.0
Tripura	100.0	392.0	492.0	444.0	1651.0	2095.0
Uttar Pradesh	15519.0	21164.0	36683.0	20118.0	50674.0	70792.0
Uttarakhand	696.0	316.0	1012.0	3622.0	2059.0	5681.0
West Bengal	604.0	50576.0	51180.0	604.0	50576.0	51180.0
Others	15500.0	31000.0	46500.0	15169.0	30636.0	45805.0
All India	3387099.0	4388215.0	7775314.0	4238448.0	4967025.0	9205473.0

Note : N.A.: Not available.

Source : 1. *Agricultural Statistics at a glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in) (In press)
 2. *Agricultural Statistics at a glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in)

Table 2.14: Flow of institutional credit in agriculture sector

(million₹)

Item	2009-10	2010-11	2011-12	2012-13	2013-14*	2014-15*	2015-16*	2016-17*
Production (Short term) credit								
Co-operative Banks	569460	645270	818290	1025920	1135740	1303500	1438030	1318800
Regional Rural Banks	298020	378080	474010	559570	706970	893260	1015790	1050010
Commercial Banks	1899080	2167730	2669280	3149510	3641640	4157360	4199300	4525760
Other Agencies	0	0	0	0	0	0	0	0
Sub-total (A)	2766560	3191080	3961580	4735000	5484350	6354120	6653120	6894570
Medium/Long term total								
Co-operative Banks	65510	55780	61340	86110	63890	81190	94920	108780
Regional Rural Banks	54150	61600	70490	77240	119560	131570	176810	182150
Commercial Banks	958920	1159330	1016880	1175400	1633420	1886400	2230240	3472050
Other Agencies	0	0	0	0	0	0	0	0
Sub-total (B)	1078580	1276710	1148710	1338750	1816870	2099160	2501970	3762980
Short term + Medium/Long term credit								
Co-operative Banks	634970	701500	879630	1112030	1199630	1384690	1532950	1427580
Regional Rural Banks	352170	439680	544500	636810	826530	1024830	1192600	1232160
Commercial Banks	2858000	3327060	3686160	4324910	5275060	6043760	6429540	7997810
Other Agencies	0	0	0	0	0	0	0	0
Grand total (A+B)	3845140	4467790	5110290	6073750	7301220	8453280	9155090	10657550

Note : *: Figures have been revised based on the updated information from the respective agency.

Source : *Agricultural Statistics at a glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in) (In press)

Table 2.15: State-wise crop area insured under all insurance schemes

States/ Union Territories	2013-2014			2014-2015			2015-2016		
	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	81.28	34.36	42.27	81.28	6.39	7.86	81.28	23.10	28.42
Andaman & Nicobar	0.24	0.02	7.16	0.24	0.01	5.13	0.24	0.01	5.75
Arunachal Pradesh	2.96	N.A.	0.00	2.96	N.A.	0.00	2.96	N.A.	0.00
Assam	41.00	0.39	0.94	41.00	0.30	0.74	41.00	0.29	0.70
Bihar	75.80	39.81	52.52	75.80	37.33	49.25	75.80	28.06	37.02
Chandigarh	0.02	N.A.	0.00	0.02	N.A.	0.00	0.02	N.A.	0.00
Chhattisgarh	56.98	13.79	24.20	56.98	18.95	33.25	56.98	23.43	41.11
Dadra & Nagar Haveli	0.23	N.A.	0.00	0.23	N.A.	0.00	0.23	N.A.	0.00
Daman & Diu	0.03	N.A.	0.00	0.03	N.A.	0.00	0.03	N.A.	0.00
Delhi	0.35	N.A.	0.00	0.35	N.A.	0.00	0.35	N.A.	0.00
Goa	1.58	0.00	0.30	1.58	0.00	0.11	1.58	0.00	0.07
Gujarat	124.87	21.98	17.60	124.87	13.89	11.12	124.87	10.31	8.26
Haryana	64.71	4.84	7.49	64.71	0.00	0.00	64.71	0.00	0.00
Himachal Pradesh	9.43	0.30	3.16	9.43	0.54	5.68	9.43	0.54	5.74
Jammu & Kashmir	11.55	0.06	0.50	11.55	0.01	0.07	11.55	0.00	0.00
Jharkhand	16.72	4.42	26.44	16.72	2.50	14.94	16.72	4.17	24.93
Karnataka	122.67	9.15	7.46	122.67	14.40	11.74	122.67	17.18	14.00
Kerala	26.17	0.48	1.84	26.17	0.48	1.85	26.17	0.65	2.47
Lakshdweep	0.03	N.A.	0.00	0.03	N.A.	0.00	0.03	N.A.	0.00
Madhya Pradesh	240.47	103.27	42.94	240.47	108.03	44.92	240.47	120.49	50.11
Maharashtra	233.28	16.05	6.88	233.28	48.63	20.85	233.28	83.00	35.58
Manipur	3.77	0.10	2.60	3.77	0.06	1.72	3.77	0.17	4.46
Meghalaya	3.43	0.03	0.85	3.43	0.01	0.41	3.43	0.01	0.29
Mizoram	1.14	0.00	0.00	1.14	0.00	0.00	1.14	0.00	0.00
Nagaland	4.99	N.A.	0.00	4.99	N.A.	0.00	4.99	N.A.	0.00
Odisha	51.68	14.19	27.46	51.68	16.85	32.61	51.68	20.47	39.61
Puducherry	0.25	0.02	9.54	0.25	0.02	6.94	0.25	0.02	7.77
Punjab	78.48	0.00	0.00	78.48	0.00	0.00	78.48	0.00	0.00
Rajasthan	261.20	126.13	48.29	261.20	119.78	45.86	261.20	114.55	43.85
Sikkim	1.47	0.00	0.00	1.47	0.00	0.01	1.47	0.00	0.07
Tamil Nadu	58.97	9.40	15.93	58.97	8.69	14.73	58.97	12.45	21.11
Telangana	62.88	0.00	N.A.	62.88	13.63	21.68	62.88	16.07	25.55
Tripura	3.83	0.00	0.00	3.83	0.00	0.11	3.83	0.01	0.27
Uttar Pradesh	258.96	22.00	8.50	258.96	20.43	7.89	258.96	37.98	14.67
Uttarakhand	10.99	0.48	4.37	10.99	0.51	4.67	10.99	2.80	25.50
West Bengal	96.18	6.23	6.48	96.18	9.97	10.36	96.18	8.73	9.08
Total	2008.59	427.49	21.28	2008.59	441.41	21.98	2008.59	524.49	26.11

Note : 1. *: Using latest available data for gross cropped area for 2013-2014, 2. N.A.:Not available.

Source : *Pocket book of Agricultural Statistics 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: eands.dacnet.nic.in)



भाग-III
पशुपालन, डेरी उद्योग एवं मात्स्यिकी

SECTION-III
Animal Husbandry, Dairying and Fisheries



Table 3.1: 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
Total livestock	344.10	353.60	369.00	419.59	445.29	470.86	485.39	485.00	529.70	512.06
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 off the figures, 3. Total livestock: Cattle + Buffalo + Yaks + Mithun + Sheep + Goats + Horses & Ponies + Mules + Donkeys + Camels + Pigs.

Source : *Basic Animal Husbandry and Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

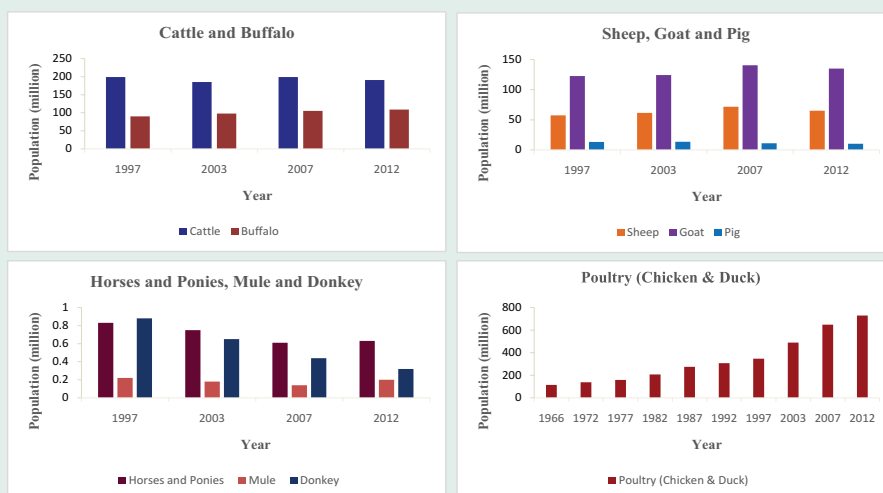


Table 3.2: Growth pattern of livestock and poultry population in India

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
Cattle	10.65	0.34	1.19	0.95	6.92	3.76	2.45	-2.79	-6.89	7.50	-4.10
Buffalo	14.03	3.52	8.30	8.01	12.55	8.87	10.85	6.78	8.90	7.58	3.19
Sheep	2.29	5.47	-5.66	2.50	18.93	-6.28	11.12	13.21	6.92	16.41	-9.07
Goat	9.93	6.08	4.49	12.00	25.99	15.71	4.60	6.45	1.34	13.01	-3.82
Horses & Ponies	-13.33	-15.38	-18.18	0.00	0.00	-11.11	2.50	1.22	-9.64	-18.60	2.12
Camel	12.50	11.11	10.00	0.00	-1.82	-7.41	3.00	-11.65	-30.77	-18.20	-22.63
Pig	6.12	-3.85	38.00	10.14	32.50	5.56	20.32	3.91	1.73	-17.66	-7.54
Mule	25.00	60.00	0.00	12.50	44.44	30.77	11.76	15.79	-18.18	-22.16	43.07
Donkey	0.00	0.00	-9.09	0.00	2.00	-5.88	1.04	-9.28	-26.14	-32.62	-27.17
Yak	N.A.	50.00	33.33	225.00	0.00	-69.23	50.00	0.00	0.00	38.33	-723
Total livestock	9.39	2.59	2.76	4.36	13.71	6.13	5.74	3.09	-0.08	9.22	-3.33
Poultry	20.46	1.05	20.02	14.95	30.49	32.53	11.53	13.20	40.68	32.68	12.39
Dog	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 : *Basic Animal Husbandry and Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.3: Results of livestock census 2007 and 2012 in India

(Number in 000')

Category	2007			Category	2012		
	Rural	Urban	Total		Rural	Urban	Total
I. CATTLE				I. CATTLE			
A. Cattle (Exotic/Crossbred)				A. Cattle (Exotic/Crossbred)			
(i) Male							
(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
Total exotic/crossbred male cattle	6287	556	6844	Total exotic/crossbred male cattle	5566	406	5971
(ii) Female							
(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
Total exotic/crossbred female cattle	23666	2551	26216	Total exotic/crossbred female cattle	31271	2489	33760
Total exotic/crossbred cattle	29953	3107	33060	Total exotic/crossbred cattle	36837	2895	39732
B. Cattle (Indigenous)							
(i) Male							
(i) under 1 year	11087	420	11507	(i) under 2 year	14767	438	15205

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Category	2007			Category	2012		
	Rural	Urban	Total		Rural	Urban	Total
(ii) 1-3 years	11785	337	12122				
(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
Total indigenous male	74991	1789	76779	Total indigenous male	60882	1067	61949
(ii) Female							
(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
Total indigenous female	85354	3882	89236	Total indigenous female	86018	3206	89224
Total indigenous cattle	160344	5669	166015	Total indigenous cattle	146900	4273	151172
Total cattle	190297	8776	199075	Total cattle	183736	7168	190
II. BUFFALOES							
(i) Male							
(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
Total male buffaloes	18775	823	19597	Total male buffaloes	15514	589	16103
(ii) Female							
(i) under 1 year	16597	909	17506	(i) under 1 year	19393	762	20155

Category	2007			Category	2012		
	Rural	Urban	Total		Rural	Urban	Total
(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
Total female buffaloes	81141	4604	85745	Total female buffaloes	88582	4018	92599
Total buffaloes	99916	5427	105343	Total buffaloes	104095	4607	108702
III. YAKS							
(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
Total yaks upto 3 years	26	0	26	Total yaks upto 3 years	25	0	25
(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
Total yaks over 3 years	57	0	58	Total yaks over 3 years	51	0	51
Total yaks	83	0	83	Total yaks	76	0	76
IV. MITHUNS							
(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
Total mithuns under 3 years	100	12	112	Total mithuns under 3 years	130	2	133
(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
Total mithuns over 3 years	134	19	153	Total mithuns over 3 years	161	4	165
Total mithuns	234	31	264	Total mithuns	291	7	298
V. BOVINE¹							
(a) male	100203	3183	103386	(a) male	82122	2065	84187
(b) female	190327	11052	201379	(b) female	206077	9717	215794

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Category	2007			Category	2012		
	Rural	Urban	Total		Rural	Urban	Total
Total bovine	290530	14235	304765	Total bovine	288200	11782	299981
VI. SHEEP							
Sheep (Exotic/Crossbred)							
(i) male	1076	67	1144	(i) male	1148	60	1207
(ii) female	2498	88	2586	(ii) female	2482	92	2574
Total exotic/crossbred sheep	3574	155	3730	Total exotic/crossbred sheep	3630	151	3781
Sheep (Indigenous)							
(i) male	16107	623	16730	(i) male	13577	339	13916
(ii) female	49919	1179	51098	(ii) female	46569	804	47372
Total indigenous sheep	66027	1802	67829	Total indigenous sheep	60146	1142	61288
Total sheep	69601	1957	71558	Total sheep	63775	1294	65069
VII. GOATS							
(i) Male							
(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
Total male goats	38526	2267	40793	Total male goats	35785	1832	37617
(ii) female							
(a) under 1 year	25664	1428	27092	(a) under 1 year	25352	1193	26545
(b) 1 year and over				(b) 1 year and over			
(a) in milk	35066	1977	37043	(a) in milk	34448	1805	36252
(b) dry	24423	1023	25446	(b) dry	24410	895	25305
(c) Not calved once	9635	529	10163	(c) Not calved once	9085	368	9453
Total female goats	94787	4957	99744	Total female goats	93295	4261	97556
Total goats	133314	7224	140537	Total goats	129081	6092	135173
VIII. HORSES and PONIES							
(i) Male							
(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
Total male horses and ponies	303	33	336	Total male horses and ponies	312	37	350
(ii) Female							

Category	2007			Category	2012		
	Rural	Urban	Total		Rural	Urban	Total
(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
Total female horses and ponies	254	22	276	Total female horses and ponies	251	24	275
Total horses and ponies	556	55	611	Total horses and ponies	563	61	625
IX. PIGS							
A. Pigs (Exotic/Crossbred)							
(i) Male							
(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
Total exotic/crossbred male pigs	1032	177	1209	Total exotic/crossbred male pigs	1112	171	1283
(ii) Female							
(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
Total exotic/crossbred female pigs	999	181	1180	Total exotic/crossbred female pigs	1015	159	1174
Total exotic/crossbred pigs	2031	358	2389	Total exotic/crossbred pigs	2126	330	2456
B. Pigs (Indigenous)							
(i) Male							
(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
Total indigenous male pigs	3778	356	4134	Total indigenous male pigs	3358	323	3681
(ii) Female							
(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
Total indigenous female pigs	4151	459	4610	Total indigenous female pigs	3741	415	4156
Total indigenous pigs	7929	816	8744	Total indigenous pigs	7100	738	7837
Total pigs	9960	1174	11134	Total pigs	9226	1068	10294
Total livestock²	504965	24733	529698	Total livestock²	491686	20371	512057
X. DOGS							

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Category	2007			Category	2012		
	Rural	Urban	Total		Rural	Urban	Total
A. Domestic							
(a) male	10701	1731	12432	(a) male	6858	1586	8444
(b) female	5812	844	6656	(b) female	2637	592	3228
Total licensed dogs	16513	2575	19087	Total licensed dogs	9495	2178	11673
XI. RABBITS							
(a) male	140	42	183	(a) male	194	61	255
(b) female	195	46	241	(b) female	269	68	337
Total	335	88	424	Total	462	129	592
XII. POULTRY							
A. Fowls	577196	40538	617734	A. Fowls	662852	29794	692646
B. Ducks	26402	1242	27643	B. ducks	22704	835	23539
C. Turkeys and others poultry	3140	312	3452	C. Turkeys and others poultry	12339	686	13025
Total poultry	606738	42092	648830	Total poultry	697895	31314	729209

Note : 1. Total may not tally due to rounding of the figures, 2. Bovines¹: Cattle + Buffalo + Yaks + Mithun,
3. Livestock²: Bovines + Sheep + Goats + Horses & Ponies + Mules + Donkeys + Camels + Pigs.

Source : *Basic Animal Husbandry and Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.4: State-wise total number of livestock and poultry in 2012

States/ Union Territories	Cattle	Buffaloes	Sheep	Goats	Pigs	Horses and Ponies	Mules	Donkeys	Camel	Yaks	Mithun	Total livestock	Total 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

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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 off the figures, 2. 0: Negligible with respect to thousands/not reported.

Source: Basic Animal Husbandry and Fisheries Statistics 2017, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India.
(Website: <http://www.dahd.nic.in>)

State-wise total number of livestock and poultry in 2012

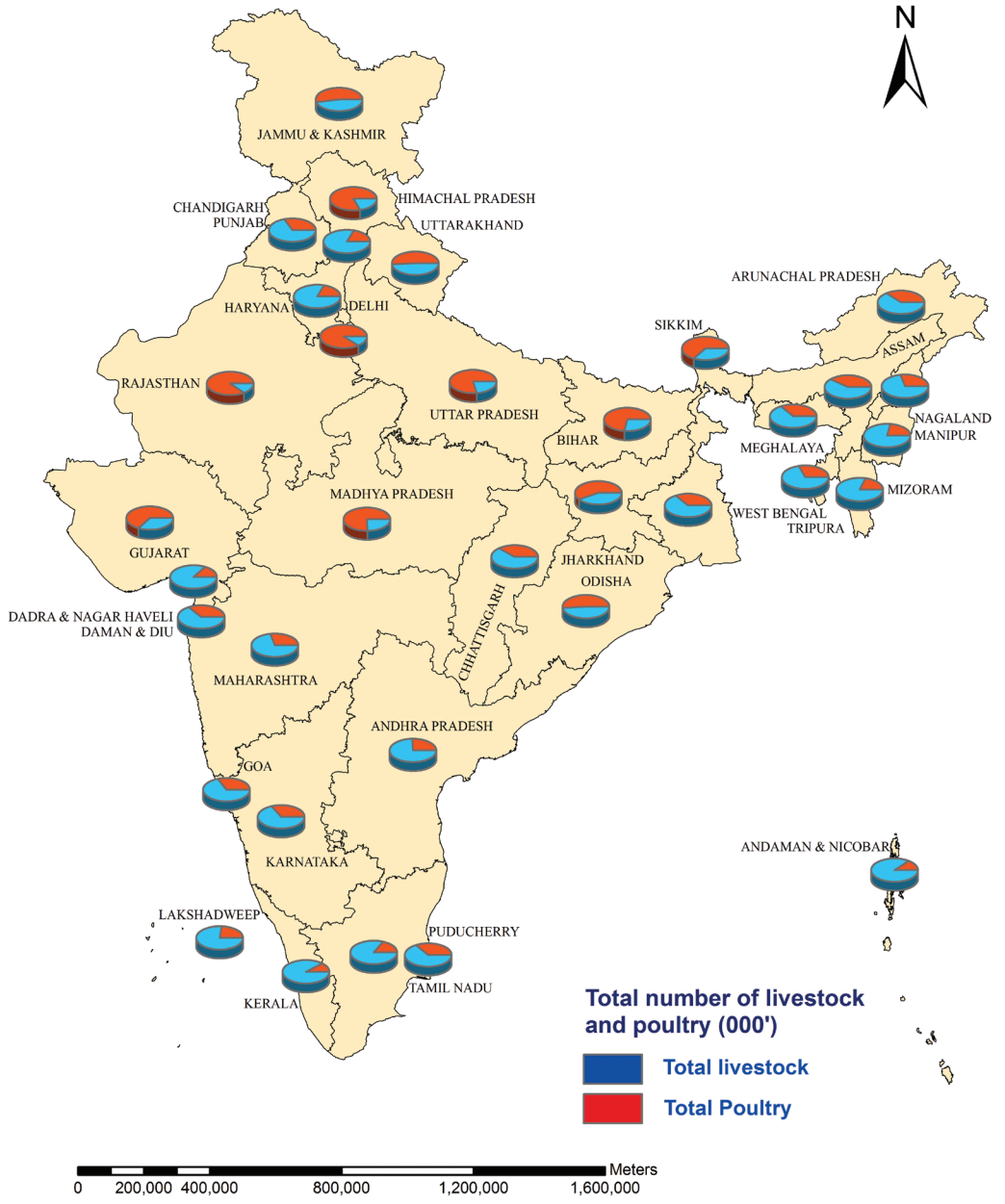


Table 3.5: State-wise number of milch animals in 2007 and 2012

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

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States/ 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 & 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 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 off the figures, 3. 0: Negligible with respect to thousands/not reported.

Source : Basic Animal Husbandry and Fisheries Statistics 2017, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India.
(Website: <http://www.dahd.nic.in>)

Table 3.6: All India production of fish, milk, eggs, wool and meat

Year	Fish (lakh t)	Milk (million t)	Eggs (million no.)	Wool (million kg)	Meat (million t)
1984-85	28.01	41.50	14,252	38.00	N.A.
1985-86	28.76	44.00	16,128	39.10	N.A.
1986-87	29.42	46.10	17,310	40.00	N.A.
1987-88	29.59	46.70	17,800	40.10	N.A.
1988-89	31.52	48.40	18,980	40.80	N.A.
1989-90	36.77	51.40	20,204	41.70	N.A.
1990-91	38.36	53.90	21,100	41.20	N.A.
1991-92	41.57	55.70	21,980	41.60	N.A.
1992-93	43.65	58.00	22,930	38.80	N.A.
1993-94	46.44	60.60	24,170	39.90	N.A.
1994-95	47.89	63.80	25,980	40.60	N.A.
1995-96	49.49	66.20	27,200	42.40	N.A.
1996-97	53.48	69.10	27,500	44.40	N.A.
1997-98	53.88	72.10	28,689	45.60	N.A.
1998-99	52.98	75.40	29,476	46.90	1.90
1999-00	56.75	78.30	30,447	47.90	1.90
2000-01	56.56	80.60	36,632	48.40	1.90
2001-02	59.56	84.40	38,729	49.50	1.90
2002-03	62.00	86.20	39,823	50.50	2.10
2003-04	63.99	88.10	40,403	48.50	2.10
2004-05	63.05	92.50	45,201	44.60	2.20
2005-06	65.72	97.10	46,235	44.90	2.30
2006-07	68.69	102.60	50,663	45.10	2.30
2007-08	71.27	107.90	53,565	43.90	4.00
2008-09	76.16	112.20	55,562	42.80	4.30
2009-10	79.98	116.40	60,267	43.10	4.60
2010-11	82.31	121.80	63,024	43.00	4.90
2011-12	86.66	127.90	66,450	44.70	5.50
2012-13	90.40	132.40	69,700	46.10	5.90
2013-14	95.72	137.70	74,800	47.90	6.20
2014-15	101.64 ^P	146.30	78,500	48.10	6.70
2015-16	107.95 ^P	155.50	82,900	43.60	7.00
2016-17	114.10 ^P	165.40	88,139	43.50	7.40

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

Source : 1. *Agricultural Statistics at a Glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.
 2. *Basic Animal Husbandry & Fisheries Statistics 2017*, Deptt. of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India.
 3. *Pocket Book of Agricultural Statistics 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)

Table 3.7: All India estimates of per capita availability of milk and egg during 1984-85 to 2016-17

Year (March to February)	Human Population (million no.)	Per capita availability of milk (g/day)	Per capita availability of egg (number/annum)
1984-85	739	154	19
1985-86	755	160	21
1986-87	771	164	22
1987-88	788	162	23
1988-89	805	165	24
1989-90	822	171	25
1990-91	839	176	25
1991-92	856	178	26
1992-93	872	182	26
1993-94	892	186	27
1994-95	910	192	29
1995-96	928	195	29
1996-97	946	200	29
1997-98	964	205	30
1998-99	983	210	30
1999-00	1001	214	30
2000-01	1019	217	36
2001-02	1040	222	37
2002-03	1056	224	38
2003-04	1072	225	38
2004-05	1089	233	42
2005-06	1106	241	42
2006-07	1122	251	45
2007-08	1138	260	47
2008-09	1154	266	48
2009-10	1170	273	51
2010-11	1186	281	53
2011-12	1210	290	55
2012-13	1212	299	58
2013-14	1228	307	61
2014-15	1244	322	63
2015-16	1260	337	66
2016-17	1275	355	69

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.8: State-wise estimates of production and per capita availability of milk during 2014-15 to 2016-17

(Production: 000' t, Per capita availability: g/day)

States/Union Territories	2014-15		2015-16		2016-17	
	Production	Per capita availability	Production	Per capita availability	Production	Per capita availability
Andhra Pradesh	9656.15	436.00	10816.99	475.00	12177.94	522.00
Arunachal Pradesh	46.07	98.00	50.13	105.00	52.53	109.00
Assam	829.47	70.00	843.46	70.00	861.27	71.00
Bihar	7774.89	208.00	8288.42	219.00	8711.07	228.00
Chhattisgarh	1231.57	130.00	1277.32	133.00	1373.55	141.00
Goa	66.60	94.00	54.34	74.00	51.36	68.00
Gujarat	11690.57	527.00	12262.35	545.00	12784.12	563.00
Haryana	7901.35	839.00	8381.33	877.00	8974.75	930.00
Himachal Pradesh	1172.16	466.00	1282.86	505.00	1329.11	521.00
Jammu & Kashmir	1950.93	352.00	2273.35	395.00	2376.09	400.00
Jharkhand	1733.72	147.00	1812.38	152.00	1893.80	157.00
Karnataka	6120.93	276.00	6344.01	282.00	6562.15	291.00
Kerala	2711.13	206.00	2649.82	200.00	2520.34	189.00
Madhya Pradesh	10779.07	386.00	12148.37	428.00	13445.32	468.00
Maharashtra	9542.29	228.00	10152.61	239.00	10402.15	243.00
Manipur	82.17	80.00	78.97	76.00	78.82	75.00
Meghalaya	82.96	84.00	83.95	83.00	83.96	83.00
Mizoram	20.49	53.00	22.00	57.00	24.16	62.00
Nagaland	75.69	88.00	77.00	89.00	79.37	91.00
Odisha	1903.14	124.00	1930.47	124.00	2003.42	128.00
Punjab	10351.41	1003.00	10774.2	1032.00	11282.06	1075.00
Rajasthan	16934.31	655.00	18500.08	704.00	20849.59	785*
Sikkim	49.99	215.00	66.74	282.00	54.35	228.00
Tamil Nadu	7132.47	282.00	7243.53	283.00	7556.35	294.00
Telangana	4207.26	N.A.	4442.45	N.A.	4681.09	N.A.
Tripura	141.23	103.00	152.23	109.00	159.59	114.00
Uttar Pradesh	25198.36	326.00	26386.81	335.00	27769.74	348.00
Uttarakhand	1565.35	416.00	1655.81	434.00	1692.42	440.00
West Bengal	4961.00	145.00	5038.47	145.00	5182.60	148.00
Andman & Nicobar Islands	15.56	90.00	15.43	87.00	16.14	89.00
Chandigarh	44.00	97.00	43.18	93.00	36.39	76.00
Dadra & Nagar Haveli	8.52	74.00	8.52	72.00	7.50	62*
Daman & Diu	0.82	10.00	0.80	10.00	0.62	5.00
Delhi	280.06	37.00	280.83	36.00	279.11	35*
Lakshadweep	4.19	147.00	3.25	113.00	3.24	110.00
Puducherry	47.64	110.00	48.04	108.00	48.31	107.00
All India	146313.55	322.00	155490.51	337.00	165404.38	355.00

Note : 1. N.A.: Not available, 2. *: Based on the projected production estimates of 2016-17.

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

State-wise production of milk during 2014-15, 2015-16 and 2016-17

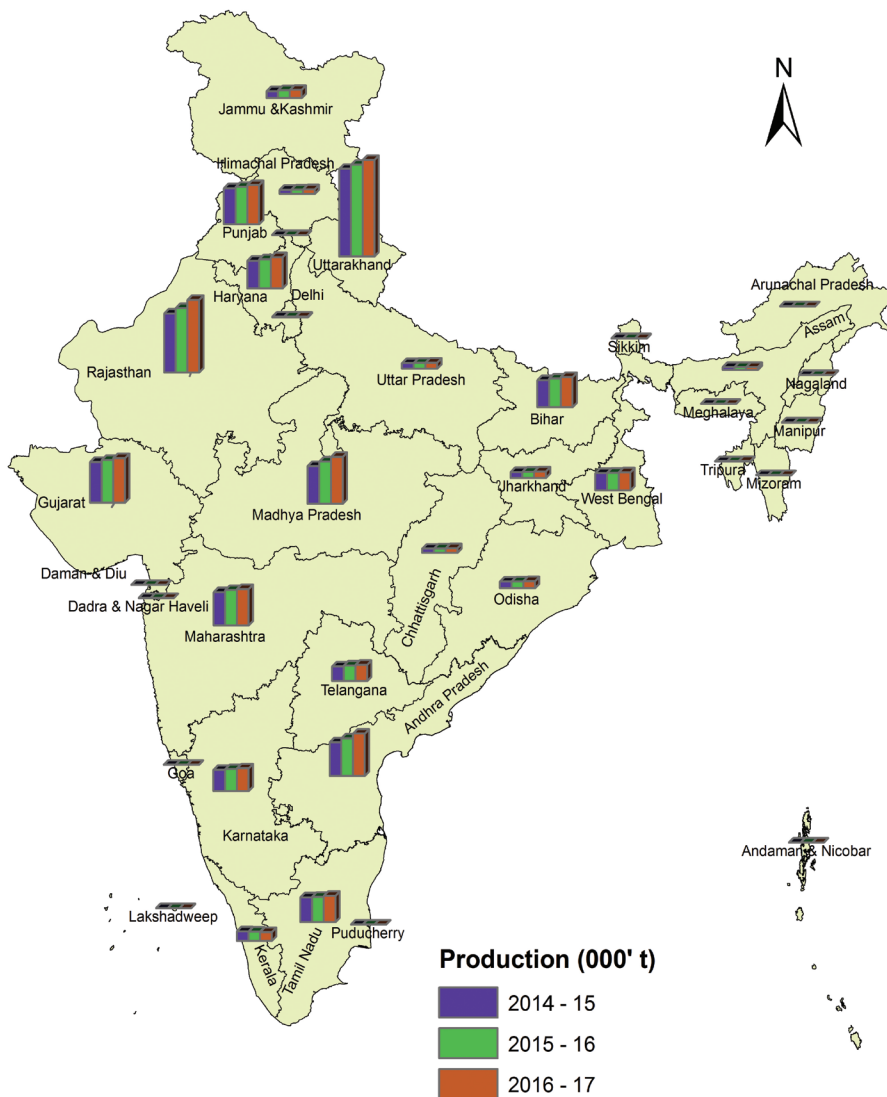


Table 3.9: State-wise estimates of production and per capita availability of eggs during 2014-15 to 2016-17

(Production: lakh number, Per capita availability: number/annum)

States/Union Territories	2014-15		2015-16		2016-17	
	Production	Per capita availability	Production	Per capita availability	Production	Per capita availability
Andhra Pradesh	130958.24	273.00	141743.16	289.00	158274.36	312.00
Arunachal Pradesh	417.26	32.00	427.31	33.00	495.21	38.00
Assam	4727.94	15.00	4740.48	14.00	4770.75	14.00
Bihar	9844.95	10.00	10021.04	10.00	11116.68	11.00
Chhattisgarh	14731.73	57.00	15028.45	57.00	16637.69	63.00
Goa	74.52	4.00	352.09	18.00	292.19	14.00
Gujarat	16564.99	27.00	17215.92	28.00	17940.34	29.00
Haryana	45789.80	177.00	49133.39	188.00	52139.05	197.00
Himachal Pradesh	1084.34	16.00	811.67	12.00	958.99	14.00
Jammu & Kashmir	4957.63	33.00	2309.47	15.00	2305.29	14.00
Jharkhand	4663.17	14.00	4832.84	15.00	5103.37	15.00
Karnataka	43968.40	72.00	47660.42	78.00	50671.45	82.00
Kerala	25036.11	70.00	24424.82	67.00	23443.83	64.00
Madhya Pradesh	11775.55	15.00	14414.28	19.00	16939.63	22.00
Maharashtra	50792.31	44.00	52858.26	46.00	54774.17	47.00
Manipur	1129.37	40.00	1037.40	36.00	992.00	34.00
Meghalaya	1056.99	39.00	1063.66	39.00	1063.90	38.00
Mizoram	377.33	36.00	391.13	37.00	408.07	38.00
Nagaland	352.77	15.00	464.52	20.00	397.35	17.00
Odisha	19245.00	46.00	19273.00	45.00	19744.74	46.00
Punjab	42642.21	151.00	44218.23	155.00	47825.57	166.00
Rajasthan	13202.01	19.00	13852.98	19.00	13632.52	19.00
Sikkim	57.53	9.00	101.57	16.00	68.49	11.00
Tamil Nadu	159253.15	229.00	161251.99	231.00	166823.99	237.00
Telangana	106185.33	N.A.	112058.23	N.A.	118186.35	N.A.
Tripura	1979.49	53.00	2160.84	57.00	2294.26	60.00
Uttar Pradesh	20775.69	10.00	21928.52	10.00	22889.49	10.00
Uttarakhand	3697.42	36.00	3906.51	37.00	4119.12	39.00
West Bengal	48135.68	51.00	60108.19	63.00	65536.49	68.00
Andman & Nicobar Islands	861.18	182.00	989.10	204.00	1032.27	209.00
Chandigarh	169.28	14.00	166.66	13.00	154.12	12.00
Dadra & Nagar Haveli	72.99	23.00	72.99	22.00	72.99	22*
Daman & Diu	19.46	9.00	17.83	8.00	17.83	8.00
Delhi	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Lakshadweep	125.53	161.00	143.91	182.00	146.88	181.00
Puducherry	113.32	10.00	113.50	9.00	116.34	9.00
All India	784838.68	63.00	829294.37	66.00	881385.77	69.00

Note : 1. N.A.: Not available, 2. *: Based on the projected production estimates of 2016-17

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

State-wise production of egg during 2014-15, 2015-16 and 2016-17

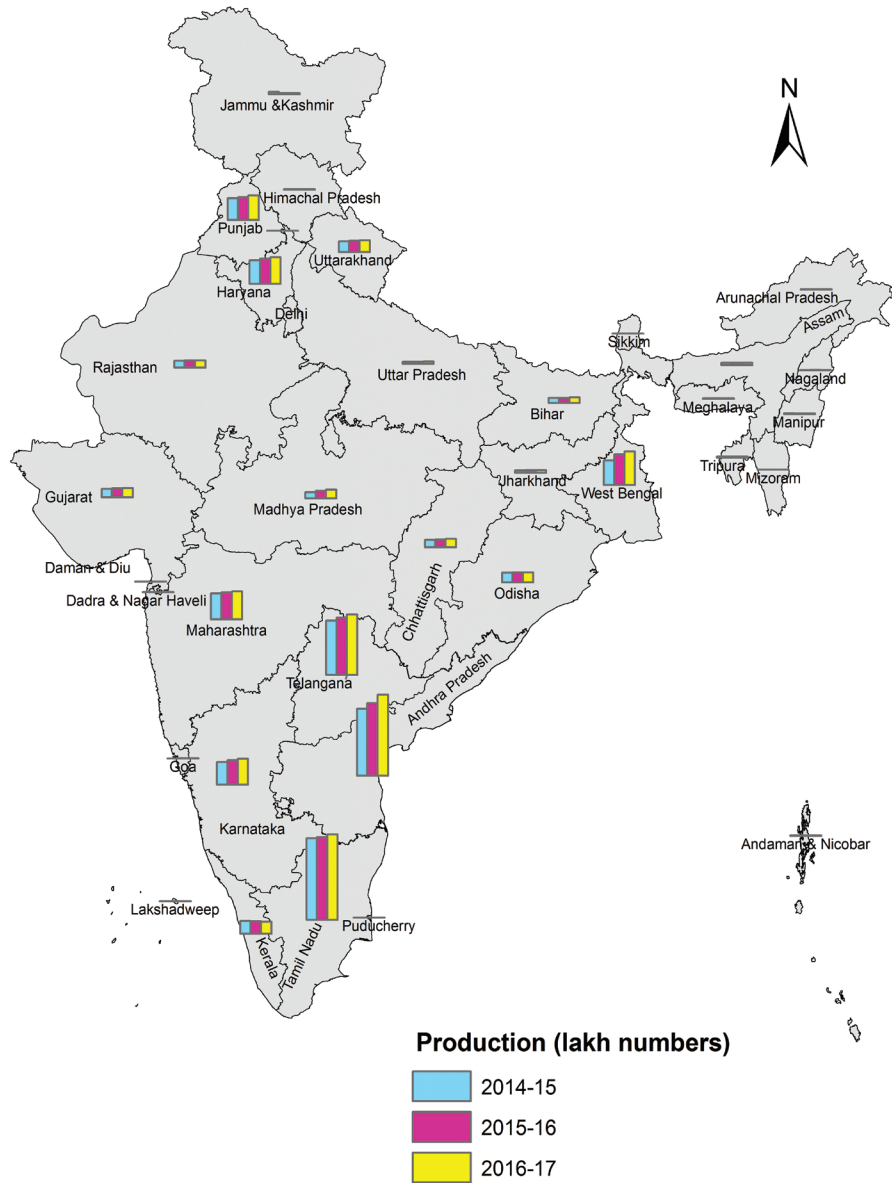


Table 3.10: State-wise estimates of meat production during 2012-13 to 2016-17

(000' t)

States/Union Territories	2012-13	2013-14	2014-15	2015-16	2016-17
Andhra Pradesh	906.23	934.75	527.68	566.28	632.51
Arunachal Pradesh	17.64	18.04	18.72	19.38	20.47
Assam	36.60	38.30	42.58	44.76	46.86
Bihar	228.28	292.28	294.33	301.74	326.26
Chhattisgarh	33.96	29.13	37.71	41.38	49.15
Goa	8.29	5.12	7.85	7.88	7.20
Gujarat	34.50	33.18	34.01	33.93	33.33
Haryana	347.61	366.61	381.40	402.80	427.48
Himachal Pradesh	4.00	3.99	4.00	4.01	4.40
Jammu & Kashmir	34.07	33.03	44.96	75.08	85.10
Jharkhand	44.52	45.45	47.84	50.71	54.73
Karnataka	166.06	169.87	181.46	196.60	209.06
Kerala	400.99	416.06	445.83	466.04	468.84
Madhya Pradesh	42.89	47.67	58.89	69.83	78.64
Maharashtra	590.68	604.63	630.62	675.10	845.01
Manipur	25.02	25.01	26.56	26.27	27.47
Meghalaya	38.52	40.34	41.32	41.13	41.00
Mizoram	12.08	12.19	12.56	13.55	14.79
Nagaland	70.64	67.48	66.98	35.93	31.37
Odisha	140.85	153.72	162.50	164.75	176.52
Punjab	212.14	235.03	236.87	249.91	248.64
Rajasthan	151.72	174.89	180.59	179.93	180.10
Sikkim	3.00	3.00	3.00	5.84	4.40
Tamil Nadu	462.34	464.51	491.93	544.47	572.84
Telangana	N.A.	N.A.	505.05	542.05	591.04
Tripura	31.79	32.39	34.25	37.35	39.69
Uttar Pradesh	1136.85	1221.25	1397.19	1417.88	1346.11
Uttarakhand	21.57	23.64	26.03	270.60	28.40
West Bengal	648.36	648.98	657.17	686.34	705.88
Andman & Nicobar	0.48	1.70	4.76	4.90	5.05
Chandigarh	0.88	0.91	1.01	0.98	0.94
D & NHaveli	0.09	0.09	0.00	0.00	0.00
Daman & Diu	0.21	0.42	0.86	0.52	0.86
Delhi	80.91	77.08	69.83	69.81	66.44
Lakshadweep	0.38	0.44	0.43	0.60	0.42
Puducherry	14.02	14.31	14.29	14.61	14.61
All India	5948.17	6235.48	6691.08	7019.96	7385.61

Note : N.A.: Not available.

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

State-wise production of meat during 2014-15, 2015-16 and 2016-17

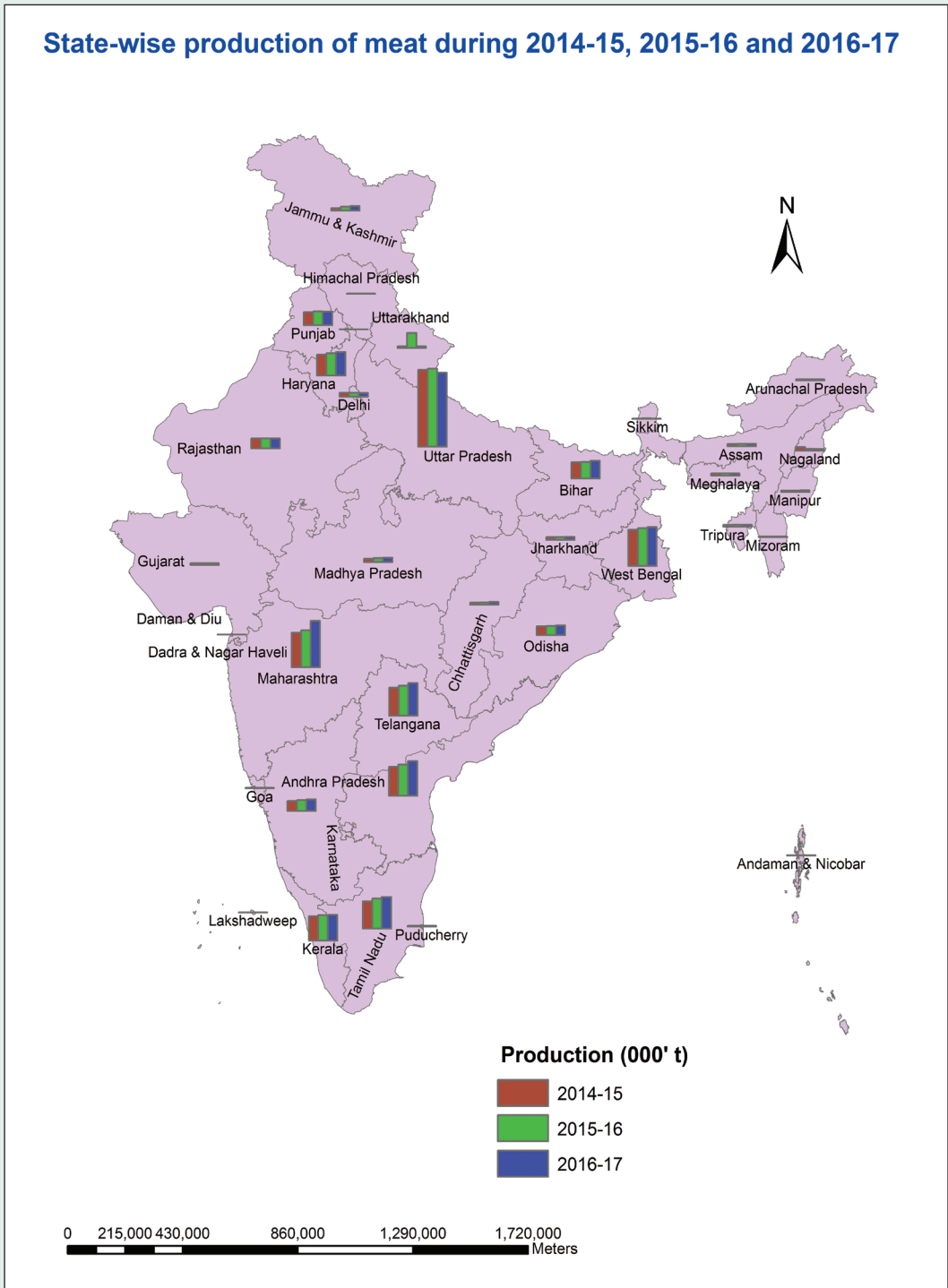


Table 3.11: State-wise estimates of wool production during 2012-13 to 2016-17

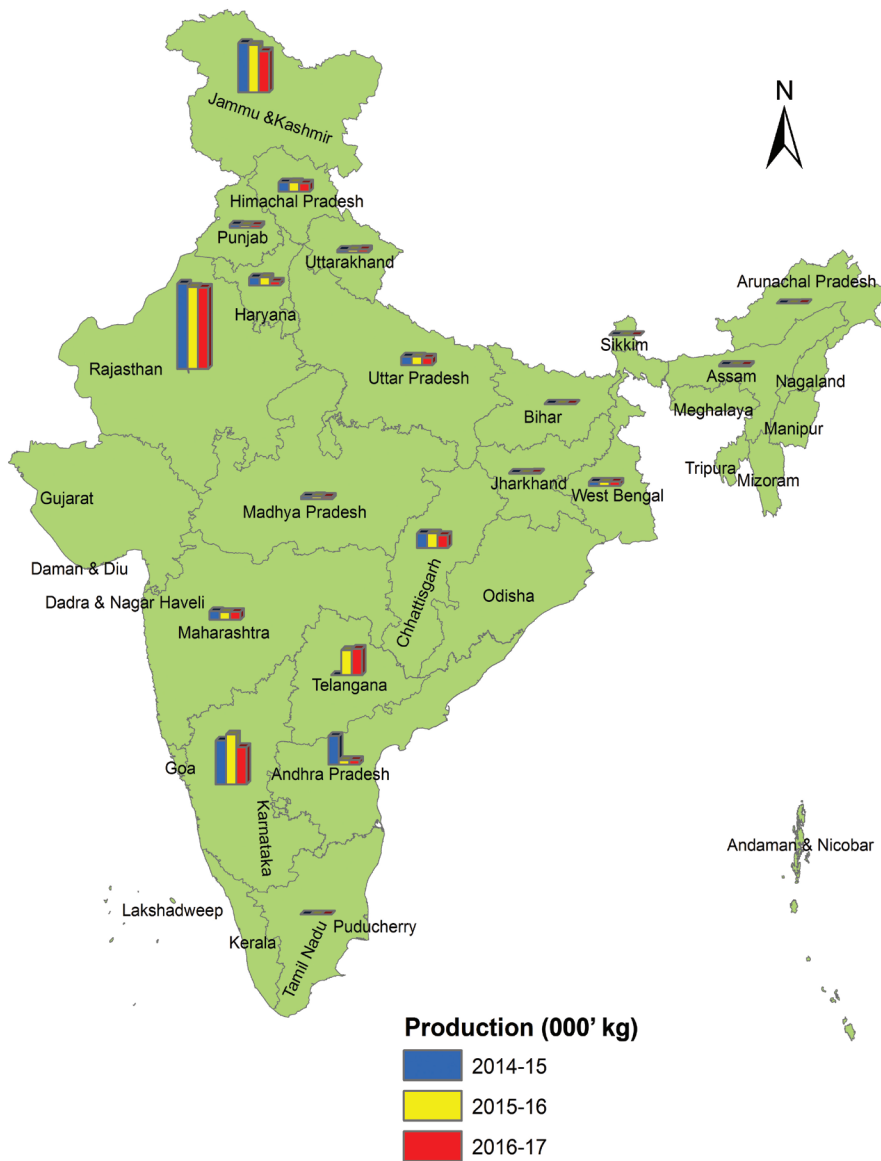
(000' kg.)

States/Union Territories	2012-13	2013-14	2014-15	2015-16	2016-17
Andhra Pradesh	4923.88	5030.50	5036.83	778.23	791.62
Arunachal Pradesh	16.72	17.78	21.55	24.23	58.25
Bihar	266.07	267.45	270.60	278.42	280.87
Chhattisgarh	104.04	106.61	105.95	115.53	87.29
Gujarat	2819.34	2663.96	2578.06	2577.41	2267.32
Haryana	1332.86	1369.96	1390.41	1428.69	691.22
Himachal Pradesh	1648.01	1649.33	1654.99	1663.07	1475.00
Jammu & Kashmir	7530.00	7680.61	8709.70	8371.01	7265.51
Jharkhand	201.68	158.89	156.13	160.76	177.65
Karnataka	7779.20	8019.89	7754.53	8821.44	6588.25
Madhya Pradesh	413.11	442.23	466.34	483.83	406.22
Maharashtra	1469.43	1502.61	1538.62	1385.78	1406.65
Punjab	531.71	557.73	557.73	460.89	489.64
Rajasthan	13192.24	14007.18	15026.77	14463.36	14321.27
Sikkim	1.00	1.00	1.00	0.00	0.00
Tamil Nadu	1.00	1.09	1.83	1.20	2.08
Telangana	N.A.	N.A.	N.A.	4422.97	4658.11
Uttar Pradesh	1420.37	1456.10	1472.55	1493.71	1286.10
Uttarakhand	370.52	399.89	440.14	468.93	538.24
West Bengal	713.29	722.08	725.17	740.40	753.07
All India	44734.47	46054.87	47908.88	48139.88	43544.37

Note : N.A.: Not available.

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

State-wise production of wool during 2014-15, 2015-16 and 2016-17



0 215,000 430,000 860,000 1,290,000 1,720,000 Meters

Table 3.12: Incidence of livestock diseases in India during 2015 and 2016

(Number)

Disease Name	Species	2015			2016		
		Outbreak	Attack	Death	Outbreak	Attack	Death
Foot and mouth disease	Bovine	88	2333	63	132	9269	380
	Buffalo	12	193	28	12	1915	69
	Ovine/Caprine	6	327	1	11	450	0
	Swine	3	15	0	3	11	0
Hemorrhagic Septicemia	Bovine	53	1192	319	43	945	150
	Buffalo	16	543	99	9	217	40
	Camel	1	21	21	N.A.	N.A.	N.A.
	Ovine/Caprine	19	379	147	28	3238	877
Black quarter	Bovine	90	782	262	76	594	213
	Buffalo	2	42	21	7	28	14
	Ovine/Caprine	6	27	18	2	2	2
Anthrax	Bovine	20	57	57	29	115	115
	Buffalo	1	1	1	3	16	16
	Ovine/Caprine	28	196	196	33	229	229
	Swine	N.A.	N.A.	N.A.	1	4	4
Distomatosis (Liver fluke)/ Fascioliasis	Bovine	60	2096	0	48	2601	0
	Buffalo	9	264	0	14	498	0
	Ovine/Caprine	11	389	0	25	1501	0
Enterotoxaemia	Ovine/Caprine	36	753	179	57	3921	1649
	Bovine	11	30	5	N.A.	N.A.	N.A.
	Buffalo	1	2	0	N.A.	N.A.	N.A.
Sheep and Goat Pox	Ovine/Caprine	114	2071	175	72	2489	678
	Bovine	3	267	0	N.A.	N.A.	N.A.
	Avian	1	1	0	N.A.	N.A.	N.A.
Blue tongue	Ovine/Caprine	23	60867	6285	40	72308	8875
Contagious caprine Pleuropneumonia	Ovine/Caprine	14	416	48	9	838	321
Amphistomiasis	Bovine	73	7645	2	85	7094	0
	Buffalo	3	9	0	7	114	0
	Ovine/Caprine	19	1499	41	35	3345	0
Swine fever	Swine	34	778	259	38	1017	200
Fowl typhoid/ Salmonellosis	Avian	36	60474	1827	45	85181	2525
	Bovine	3	48	0	N.A.	N.A.	N.A.
	Buffalo	1	2	0	N.A.	N.A.	N.A.
	Ovine/Caprine	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Swine	2	27	0	N.A.	N.A.	N.A.
Coccidiosis	Avian	206	129282	5012	130	99912	5035
	Bovine	6	4199	0	9	1251	76
	Buffalo	1	2	0	3	9	0
	Ovine/Caprine	3	47	2	11	98	0
	Swine	3	14	0	N.A.	N.A.	N.A.
Ranikhet disease	Avian	198	693840	12615	157	515233	7505
Fowl pox	Avian	141	28160	1114	84	66160	296
Fowl cholera	Avian	15	11033	6700	24	16837	332
Marek's disease	Avian	14	932000	1530	9	75451	540

Disease Name	Species	2015			2016		
		Outbreak	Attack	Death	Outbreak	Attack	Death
Infectious bursal disease (Gumboro)	Avian	116	642444	9974	124	800455	6552
Duck plague	Avian	16	332	78	11	748	205
Coryza	Avian	32	282180	1686	29	21234	758
Chronic respiratory disease	Avian	413	2644673	18785	614	3374258	15967
	Swine	1	60	12	N.A.	N.A.	N.A.
Canine distemper	Canine	37	622	1	22	264	0
Rabies	Bovine	22	94	94	24	137	137
	Buffalo	1	1	1	N.A.	N.A.	N.A.
	Canine	1	1	1	3	20	20
Bovine babesiosis	Avian	5	7	0	N.A.	N.A.	N.A.
	Bovine	62	1523	5	115	4007	0
	Buffalo	9	31	1	6	25	0
	Ovine/Caprine	6	156	0	27	303	0
	Canine	2	3	0	4	5	0
Mastitis	Bovine	158	13464	6	80	23681	0
	Buffalo	8	33	0	1	1	0
	Ovine/Caprine	11	51	0	18	61	0
Surra/ Trypanosomiasis	Bovine	30	240	1	20	186	18
	Buffalo	18	99	1	6	10	0
	Equine	1	9	3	N.A.	N.A.	N.A.
	Camel	1	2	0	N.A.	N.A.	N.A.
Mange	Bovine	29	996	0	25	699	0
	Ovine/Caprine	9	99	0	15	486	0
	Canine	3	68	0	18	116	0
	Swine	2	22	0	4	50	0
Peste des petits ruminants (PPR)	Ovine/Caprine	116	4905	1017	93	6491	1720
Bovine anaplasmosis	Bovine	14	203	10	24	325	7
	Ovine/Caprine	2	26	0	4	27	0
	Buffalo	3	7	0	3	22	0
Brucellosis	Bovine	4	13	0	4	46	0
	Ovine/Caprine	1	258	0	N.A.	N.A.	N.A.
	Swine	1	231	1	N.A.	N.A.	N.A.
Avian influenza (Domestic)	Avian	4	43982	197400	36	85957	942335
Glanders	Equine	5	20	13	22	75	63

Note : N.A.: Not available.

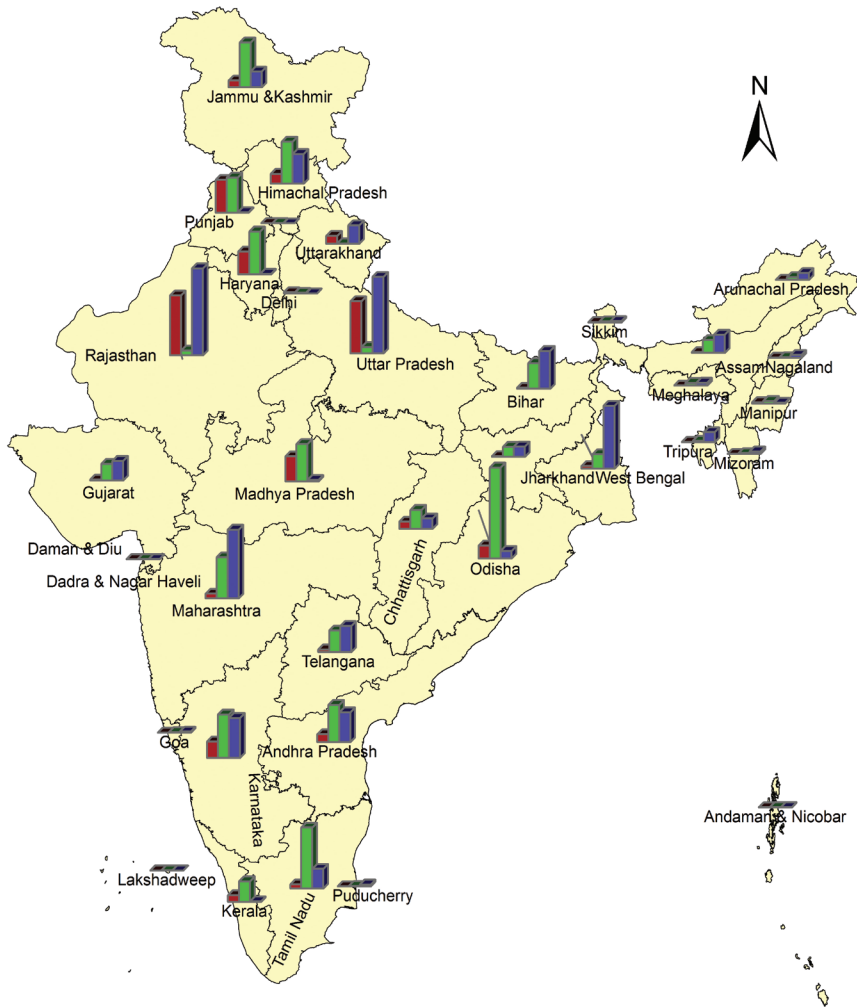
Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.13: State-wise number of Veterinary Institutions (as on 31.03.2017)

States/Union Territories	Veterinary hospitals/ Polyclinics	Veterinary dispensaries	Veterinary aid centre/ Stockmen centre/ Mobile dispensaries
Andhra Pradesh	335	1576	1262
Arunachal Pradesh	1	109	289
Assam	29	541	767
Bihar	39	1083	1595
Chhattisgarh	301	798	435
Goa	5	23	52
Gujarat	33	702	827
Haryana	964	1812	21
Himachal Pradesh	410	1772	1251
Jammu & Kashmir	293	1900	669
Jharkhand	27	424	433
Karnataka	694	1833	1688
Kerala	279	867	20
Madhya Pradesh	1063	1585	65
Maharashtra	200	1741	2906
Manipur	56	109	34
Meghalaya	4	114	122
Mizoram	5	35	103
Nagaland	11	30	130
Odisha	541	3839	314
Punjab	1389	1489	20
Rajasthan	2527	198	3672
Sikkim	17	52	63
Tamil Nadu	171	2581	831
Telangana	108	908	1101
Tripura	16	60	433
Uttarakhand	328	10	778
Uttar Pradesh	2208	267	3238
West Bengal	112	610	2659
Andman& Nicobar Islands	10	12	11
Chandigarh	5	9	-
Dadra & Nagar Haveli	-	-	-
Daman & Diu	-	2	3
Delhi	50	26	-
Lakshadweep	3	6	1
Puducherry	-	17	74
Total	12234	27140	25867

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

State-wise number of Veterinary Institutions as on 31-3-2017



Veterinary Institutions

- Veterinary hospitals/ polyclinics
- Veterinary/ dispensaries
- Veterinary aid centre/ Stockmen centre/ Mobile dispensaries

0 215,000 430,000 860,000 1,290,000 1,720,000 Meters

Table 3.14: Achievement of some of the key components of dairy development in different states under cooperative sector during 2011-12

State/Union Territories	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
Total	148965	14782	28706	20485

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 & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.15: Trend 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	3440	6132	9572	3.58	7.20	5.88
2014-15*	3655	6509	10164	6.25	6.15	6.18
2015-16*	3583	7213	10796	-1.97	10.82	6.21
2016-17*	3641	7769	11409	1.62	7.71	5.69

Note : *: Provisional.

Source : 1. *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

2. *Agricultural Statistics at a Glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.

Table 3.16: State-wise marine and inland fish production

(000' t)

States/ Union Territories	2013-14			2014-15*			2015-16*			2016-17*		
	Marine	Inland	Total	Marine	Inland	Total	Marine	Inland	Total	Marine	Inland	Total
Andhra Pradesh	438.25	1580.17	2018.42	475.40	1489.03	1964.43	517.77	1815.66	2333.43	580.24	2185.95	2766.19
Arunachal Pradesh	0.00	0.61	0.61	0.00	4.00	4.00	0.00	4.41	4.41	0.00	4.11	4.11
Assam	0.00	266.70	266.70	0.00	282.70	282.70	0.00	291.69	291.69	0.00	306.60	306.60
Bihar	0.00	432.30	432.30	0.00	479.80	479.80	0.00	494.58	494.58	0.00	510.00	510.00
Goa	109.57	4.49	114.06	114.57	3.28	117.85	0.00	317.33	317.33	0.00	376.80	376.80
Gujarat	695.58	97.84	793.42	698.45	111.48	809.93	110.85	4.25	115.10	113.56	4.34	117.89
Chhattisgarh	0.00	284.96	284.96	0.00	314.16	314.16	706.49	119.80	826.30	698.83	113.27	812.10
Haryana	0.00	116.90	116.90	0.00	111.20	111.20	0.00	111.20	111.20	0.00	144.21	144.21
Himachal Pradesh	0.00	9.83	9.83	0.00	10.74	10.74	0.00	10.89	10.89	0.00	12.48	12.48
Jammu & Kashmir	0.00	19.98	19.98	0.00	20.30	20.30	0.00	20.29	20.29	0.00	18.80	18.80
Jharkhand	0.00	104.82	104.82	0.00	106.43	106.43	0.00	117.99	117.99	0.00	145.16	145.16
Karnataka	357.36	197.95	555.31	389.82	223.42	613.24	410.68	284.97	695.65	398.93	158.56	557.49
Kerala	522.31	186.34	708.65	472.74	159.51	632.26	460.26	220.36	680.62	447.28	161.44	608.72
Madhya Pradesh	0.00	96.26	96.26	0.00	109.12	109.12	0.00	115.39	115.39	0.00	138.69	138.69
Maharashtra	467.46	135.22	602.68	423.79	124.95	548.75	471.04	149.91	620.96	462.75	200.17	662.91
Manipur	0.00	28.54	28.54	0.00	30.50	30.50	0.00	31.27	31.27	0.00	32.00	32.00
Meghalaya	0.00	5.75	5.75	0.00	5.89	5.89	0.00	6.14	6.14	0.00	0.01	0.01
Mizoram	0.00	5.94	5.94	0.00	6.39	6.39	0.00	6.54	6.54	0.00	7.63	7.63
Nagaland	0.00	7.47	7.47	0.00	7.84	7.84	0.00	7.84	7.84	0.00	8.61	8.61
Odisha	120.02	293.76	413.79	133.21	306.65	439.86	129.84	339.87	469.71	153.10	455.00	608.10
Punjab	0.00	104.02	104.02	0.00	114.77	114.77	0.00	125.34	125.34	0.00	112.13	112.13
Rajasthan	0.00	35.10	35.10	0.00	46.31	46.31	0.00	44.35	44.35	0.00	50.20	50.20
Telangana	N.A.	N.A.	N.A.	0.00	265.38	265.38	0.00	0.44	0.44	0.00	0.40	0.40

States/ Union Territories	2013-14			2014-15*			2015-16*			2016-17*		
	Marine	Inland	Total	Marine	Inland	Total	Marine	Inland	Total	Marine	Inland	Total
Sikkim	0.00	0.42	0.42	0.00	0.44	0.44	457.46	240.16	697.61	472.00	197.30	669.31
Tamil Nadu	432.27	192.03	624.30	457.45	240.16	697.61	0.00	264.23	264.23	0.00	198.92	198.92
Tripura	0.00	61.95	61.95	0.00	63.56	63.56	0.00	63.56	63.56	0.00	72.45	72.45
Uttarakhand	0.00	3.89	3.89	0.00	3.94	3.94	0.00	3.58	3.58	0.00	4.30	4.30
Uttar Pradesh	0.00	464.48	464.48	0.00	494.27	494.27	0.00	537.94	537.94	0.00	617.69	617.69
West Bengal	188.24	1392.40	1580.65	178.85	1438.47	1617.32	176.21	1455.96	1632.18	176.53	1525.29	1701.82
Andman & Nicobar Islands	36.75	0.20	36.95	36.98	0.197	37.18	38.14	0.15	38.29	38.58	0.23	38.81
Chandigarh	0.00	0.11	0.11	0.00	0.12	0.12	0.00	0.13	0.13	0.00	0.13	0.13
Dadra & Nagar Haveli	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daman & Diu	18.78	0.23	19.01	28.77	0.00	28.77	27.26	0.49	27.75	23.40	0.62	24.02
Delhi	0.00	0.88	0.88	0.00	0.675	0.675	0.00	0.78	0.78	0.00	0.72	0.72
Lakshadweep	18.72	0.00	18.72	13.19	0.00	13.19	11.95	0.00	11.95	29.80	0.00	29.80
Puducherry	37.81	4.27	42.08	68.05	5.45	73.51	64.97	5.08	70.05	45.93	4.32	50.25
All India	3443.11	6135.85	9578.97	3491.29	6581.12	10072.41	3582.93	7212.56	10795.49	3640.93	7768.52	11409.45

Note : 1. *. Provisional, 2. Total may not tally due to rounding off the figures, 3. N.A.: Not available.

Source : 1. *Agricultural Statistics at a Glance 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India

2. *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.mtc.in>)

State-wise marine and inland fish production during the year 2016-17

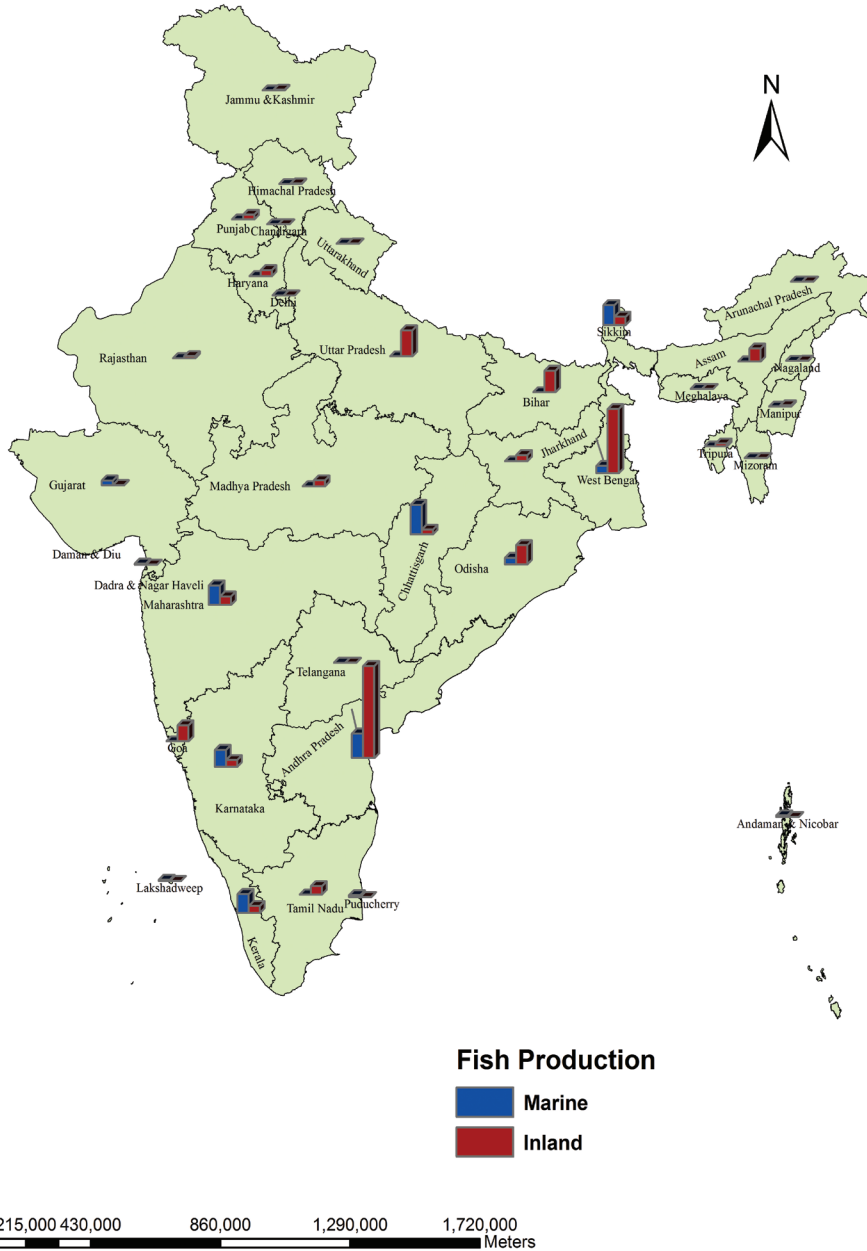


Table 3.17: State-wise trend of prawn production in India

Year	P/NP/T	Andhra Pradesh	Goa	Gujarat	Karnataka	Kerala	Maha-rashtra	Odisha	Tamil Nadu	West Bengal	A & N Islands	Daman & Diu	Puduch-erry	All India
2000-01	P	17162	2284	53983	2913	58275	28206	14585	20257	11760	298	196	3316	213235
	NP	8181	N.A.	N.A.	8951	10892	70051	3887	4594	5900	53	395	1177	114081
	T	25343	2284	53983	11864	69,167	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	N.A.	N.A.	6496	3615	75875	4064	4671	6000	100	379	N.A.	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	N.A.	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	N.A.	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	N.A.	53303	N.A.	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	N.A.	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	N.A.	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

Animal Husbandry, Dairying and Fisheries

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	N.A.	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	59556	28879	29863	43452	416	113	1578	287288
	NP	18494	N.A.	27591	741	N.A.	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	N.A.	30383	166	N.A.	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	N.A.	37182	3366	N.A.	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	N.A.	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	N.A.	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	N.A.	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: Penaacid, 2. NP: Non-penaacid, 3. T: Total, 4. NR: Not reported, 5. N.A.: Not available.

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

Table 3.18: 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	307.39	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 & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.mtc.in>)

Table 3.19: State-wise disposition of fish catch in 2012

States/ Union Territories	Marketing	Freezing	Curing	Canning	Reduction	Offial for reduction	Miscellaneo- us 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	-	141504	-	227304	-	-	-	-	787884
Haryana	89251	-	-	-	-	-	-	-	-	111480
Himachal Pradesh	7305	-	-	-	-	-	-	-	-	7381
Jammu & Kashmir	19010	-	-	-	-	-	-	-	-	19042
Jharkhand	107920	-	-	-	-	-	-	-	-	107920
Karnataka	257528	56696	70951	-	27162	21	36790	26000	23629	525567
Kerala	-	-	-	-	-	-	-	-	-	-
Madhya Pradesh	84855	-	-	-	-	-	-	-	-	84855
Maharashtra	460477	-	32733	-	502	-	-	-	-	493712
Manipur	22640	-	2350	-	-	-	-	-	-	24992
Meghalaya	5389	-	-	-	-	-	-	-	-	5389
Mizoram	5340	-	-	-	-	-	-	-	-	5340
Nagaland	5823	-	907	-	-	-	-	110	-	6840
Odisha	284755	15883	24498	-	-	-	-	-	-	325136
Punjab	99131	-	-	-	-	-	-	-	-	99131
Rajasthan	32760	-	-	-	-	-	-	-	-	32760

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States/ Union Territories	Marketing	Freezing	Curing	Canning	Reduction	Offal for reduction	Miscellaneo- us Purposes	Unspecified	Others	Total
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 & Nicobar Islands	23698	5468	7292	-	-	-	-	-	-	36458
Chandigarh	90	-	-	-	-	-	-	-	-	90
Dadra & Nagar Haveli	-	-	-	-	-	-	-	108	-	108
Daman & Diu	12302	2493	-	-	-	43	2095	-	-	16933
Delhi	690	-	-	-	-	-	-	-	-	690
Lakshadweep	13177	-	79	-	-	-	-	-	-	13256
Puducherry	30667	631	4780	-	-	-	-	-	-	36078
India	5811575	948950	332675	42431	301588	64	151408	71279	168590	7990104

Note : - : Not available.

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

Table 3.20: State-wise preserved and processed fish commodities in 2012

States/ Union Territories	Tuna frozen	Marine fish frozen	Fish dried unsalted	Fish dried & salted or smoked	Shark fins, dried, salted etc.	Crab meat frozen	Frozen whole cooked lobster	Frozen lobster tails	Shrimp & prawn frozen	Freeze dried shrimp	Dried prawn/ shrimp	Frozen cuttlefish fillets
1	2	3	4	5	6	7	8	9	10	11	12	13
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 & 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 & 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/ Union Territories	Frozen squids	Canned fish	Canned shrimp prawn	Fish / body oil	Fish meals soluble or similar feedings frozen	Pomfret frozen	Tunas frozen	Mackerels, frozen	Miscell- aneous	Total
	14	15	16	17	18	19	20	21	22	23
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 & Kashmir	-	-	-	-	-	-	-	-	-	658
Karnataka	11830	27152	-	-	-	82	-	10180	56591	167234
Kerala	-	-	-	-	-	-	-	-	480469	680676
Maharashtra	-	-	-	-	-	-	-	-	N.A.	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 & Nicobar Islands	-	-	-	-	-	-	-	-	5334	12760
Daman & Diu	31	-	-	-	-	25	2	-	-	2503
Lakshadweep	-	-	-	-	-	-	-	-	4	79
Puducherry	-	-	-	102	-	-	-	-	-	5412
India	17798	27452	1570	102	1000	10290	18310	26062	711792	2249821

Note : - : Not available.

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

Table 3.21: Fish seed production over different plan periods in India

(million fry)

Plan period	Year	Production
End of IV th Plan	1973-74	409
End of V th Plan	1978-79	912
End of VI th Plan	1984-85	9,639
End of VII th Plan	1989-90	9,691
Annual Plan	1990-91	10,332
	1991-92	12,203
VIII th Plan	1992-93	12,500
	1993-94	14,239
	1994-95	14,544
	1995-96	15,007
	1996-97	15,852
IX th Plan	1997-98	15,904
	1998-99	15,156
	1999-00	16,589
	2000-01	15,608
	2001-02	15,758
X th Plan	2002-03	16,333
	2003-04	19,231
	2004-05	20,791
	2005-06	21,988
	2006-07	23,648
XI th Plan	2007-08	24,144
	2008-09	32,177
	2009-10	29,313
	2010-11	34,111
	2011-12	36,566
XII th Plan	2012-13	34,922
	2013-14*	41,450
	2014-15*	43,267
	2015-16	N.A.
	2016-17*	87,201

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

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

2. *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

**Table 3.22: Number of fishing crafts in maritime States/Union Territories
(as on 20.03.2018)**

(number)

States/ Union Territories	Traditional Crafts (Non-Motorized)	Motorized Crafts	Mechanical Crafts	Total
Andhra Pradesh	15,706	19,287	2,052	37,045
Goa	276	1	2,484	2,761
Gujarat	76	11,372	16,382	27,830
Karnataka	8,981	8,411	4,426	21,818
Kerala	2,621	30,115	5,682	38,418
Maharashtra	7,408	0	19,806	27,214
Odisha	14,995	9,479	1,887	26,361
Tamil Nadu	5,874	32,494	5,877	44,245
West Bengal	5,705	5,956	3,062	14,723
Andaman & Nicobar Islands	1,306	1,827	110	3,243
Daman & Diu	N.A.	301	1,814	2,115
Lakshadweep	348	1,333	32	1,713
Puducherry	1,762	1,740	1,055	4,557
Total	65,058	1,22,316	64,669	2,52,044

Note : N.A.: Not available.

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.23: State-wise fish seed production

States/ Union Territories	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15*	2015-16	2016-17*
Andhra Pradesh	421.00	851.90	860.14	860.14	982.05	1165.46	1899.47	1899.47	5228.47	6562.63	6718.98	N.A.	7923.30
Arunachal Pradesh	26.10	25.45	30.00	26.50	27.00	29.00	27.20	2.90	4.10	9.64	9.84	N.A.	6.50
Assam	2741.47	3207.99	3062.00	3206.00	3429.00	3326.00	4263.00	3624.00	4364.00	4546.00	4585.00	N.A.	6758.00
Bihar	318.31	344.94	330.46	309.53	302.99	330.78	275.19	244.37	473.83	1872.48	505.74	N.A.	43.24
Chhattisgarh	457.48	505.54	591.68	649.67	675.00	762.59	839.69	893.59	1043.74	1220.00	1351.42	N.A.	1975.04
Goa	0.89	6.95	0.67	0.67	0.67	0.67	0.05	0.55	2.30	0.03	1.40	N.A.	0.60
Gujarat	508.93	611.59	621.89	610.20	585.78	689.89	837.35	837.35	282.48	387.00	248.40	N.A.	552.93
Haryana	249.57	282.08	331.14	309.76	332.20	404.99	643.41	744.21	734.55	909.37	639.06	N.A.	704.60
Himachal Pradesh	19.17	21.27	16.98	21.92	21.60	21.75	20.32	20.32	22.02	22.22	25.70	N.A.	62.50
Jammu & Kashmir	16.00	17.07	17.30	17.12	18.12	20.10	26.00	26.00	34.50	34.95	40.05	N.A.	83.50
Jharkhand	80.00	17.27	28.71	28.71	77.11	540.50	630.70	649.70	931.00	1071.80	1108.46	N.A.	41501.08
Karnataka	175.22	215.72	195.43	228.70	206.80	296.50	1158.41	1216.61	428.23	496.62	529.96	N.A.	499.88
Kerala	12.17	12.48	12.70	12.70	12.70	12.70	12.70	12.70	18.00	18.00	0.00	N.A.	177.09
Madhya Pradesh	334.60	438.62	485.87	496.58	5235.22	5489.62	619.87	1500.99	798.01	963.08	1001.88	N.A.	1111.20
Maharashtra	47.45	85.40	549.73	200.61	149.43	188.90	190.89	1396.89	94.52	187.50	143.71	N.A.	189.55
Manipur	118.00	123.00	129.00	125.00	125.00	127.00	134.00	134.00	139.00	157.00	170.00	N.A.	215.00
Meghalaya	0.90	0.77	0.77	0.93	1.13	1.21	2.96	2.96	2.18	3.14	58.43	N.A.	7.56
Mizoram	16.00	18.00	18.20	18.20	16.50	17.00	16.60	17.30	54.00	30.00	30.00	N.A.	31.00
Nagaland	44.00	43.00	48.00	48.00	48.50	48.10	47.50	49.50	48.00	48.50	47.70	N.A.	48.00
Odisha	604.79	321.40	546.72	640.00	2957.85	730.00	6087.04	6087.04	701.93	658.16	5557.63	N.A.	909.56
Punjab	133.00	139.03	153.38	145.58	256.08	174.82	168.04	164.63	187.08	222.54	229.74	N.A.	237.50
Rajasthan	255.00	299.00	342.00	350.38	350.38	349.57	455.26	449.69	1795.28	776.00	826.26	N.A.	1098.86

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States/ Union Territories	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15*	2015-16	2016-17*
Sikkim	2.50	2.50	2.50	3.00	3.20	3.80	3.00	3.00	2.10	2.05	2.95	N.A.	2.32
Tamil Nadu	529.28	529.28	529.28	529.28	529.28	529.28	291.82	431.84	188.20	2871.50	263.58	N.A.	573.80
Telangana	-	-	-	-	-	-	-	-	-	-	3.30	N.A.	32.60
Tripura	401.86	546.53	420.00	506.00	305.50	301.00	602.00	730.00	700.00	798.00	736.75	N.A.	313.70
Uttarakhand	35.82	31.69	28.21	37.42	38.32	34.47	100.44	100.16	42.98	44.43	48.57	N.A.	74.65
Uttar Pradesh	1037.32	1085.75	1091.56	1182.99	1304.18	1147.48	1302.26	1476.40	1595.11	1637.76	1661.54	N.A.	2753.56
West Bengal	12200.00	12500.00	13200.00	13572.00	14181.00	12566.00	13453.00	13846.00	15002.00	15890.00	16717.00	N.A.	19284.00
Andaman & Nicobar Islands	1.29	0.72	0.58	0.51	1.50	1.00	0.56	0.56	1.06	7.22	1.21	N.A.	12.82
Chandigarh	0.70	0.70	0.80	3.20	0.80	1.60	0.80	2.40	1.60	0.80	0.80	N.A.	0.80
Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N.A.	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	N.A.	0.00
Delhi	1.82	2.34	2.25	2.27	2.32	1.39	1.30	1.30	1.53	1.53	1.67	N.A.	16.30
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N.A.	0.00
Puducherry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N.A.	0.00
India	20790.64	22287.98	23647.95	24143.57	32177.21	29313.17	34110.83	36566.43	34921.80	41449.95	43266.73	N.A.	87201.04

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 & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

2. *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.24: 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)
Andhra Pradesh	36123.00	280.00	36403.00	159083.00	174.00	159257.00	4.40	0.62	5.03
Goa	31.00	0.00	31.00	63.00	0.00	63.00	2.03	0.00	2.03
Gujarat	2359.00	0.00	2359.00	9393.00	0.00	9393.00	3.98	0.00	3.98
Karnataka	394.00	0.00	394.00	664.00	0.00	664.00	1.69	0.00	1.69
Kerala	12917.00	48.00	12965.00	5175.00	6.00	5181.00	0.40	0.13	0.53
Maharashtra	1486.00	49.00	1535.00	3513.00	60.00	3573.00	2.36	1.22	3.59
Odisha	6302.00	886.00	7188.00	14532.00	592.00	15124.00	2.31	0.67	2.97
Tamil Nadu	7804.00	136.00	7940.00	25815.00	54.00	25869.00	3.31	0.40	3.70
West Bengal	48410.00	1520.00	49930.00	52581.00	2446.00	55027.00	1.09	1.61	2.70
Total	115826.00	2919.00	118745.00	270819.00	3332.00	274151.00	2.34	1.14	3.48

Note : 1. * : Production from Aquaculture Farms 2. **: 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 & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.25: State-wise fishermen population in 2003

(hundred)

States/ 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	N.A.	N.A.	N.A.	1099	843	1942	N.A.	N.A.	N.A.
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.

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States/ 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 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 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 & Farmers Welfare, 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 & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.26: State-wise marine fisheries resources

States/ Union Territories	Approx. length of coast line (kms)	Continental shelf (000' sqkms)	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
Andaman & Nicobar Islands	1912	35	16	134	4861	22188
Daman & Diu	27	-	5	11	7374	40016
Lakshadweep	132	4	10	10	5338	34811
Puducherry	45	1	25	40	14271	54627
Total	8118	530	1537	3432	874749	4056213

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

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.27: State-wise brackish water area and productivity

States/Union Territories	Total brackish water area (ha)	Area under culture through BFDA's (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.
Total	12,40,000	39750	12488

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 & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.28: 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, NabiBagh, Berasia Road, Bhopal.
2. A profile of people – technological and policies and fisheries sector in India.
(Workshop proceeding of NCAER, March 2003).

Table 3.29: State-wise inland fishery resource

(lakh ha)

States/ Union Territories	Rivers & Canals (kms)	Reservoirs	Tanks & ponds	Floodplain lakes & derelict water	Brackish water	Total water bodies
Andhra Pradesh	11514	2.34	5.17	N.A.	0.60	8.11
Arunachal Pradesh	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	2686	0.20	0.01	0.00	N.A.	0.21
Uttarakhand	28500	1.38	1.61	1.33	N.A.	4.32
West Bengal	2526	0.17	2.76	0.42	2.10	5.45
Andaman & Nicobar Islands	N.A.	0.00	0.00	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
Total	195095	29.26	24.33	7.98	11.55	73.12

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

Source : *Basic Animal Husbandry & Fisheries Statistics 2017*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://www.dahd.nic.in>)

Table 3.30: Outlays and expenditure for fishery development over different plan periods

(₹ crore)

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

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, 5.N.A.: Not available.

Source : *Handbook on Fisheries Statistics 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, 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	6110	86602	14.17	9542	169478	17.76	908	3143	3.46
2015-16	6301	90183	14.31	10106	169064	16.73	912	3206	3.52
2016-17*	6480	92846	14.33	10290	175008	17.01	943	3277	3.48

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	3534	15575	4.41	3317	6108	1.84	23410	280986	12.00
2015-16	3680	16658	4.53	3474	6988	2.01	24472	286188	11.69
2016-17*	3677	16867	4.59	3535	7077	2.002	24925	295164	11.84

Note : *: Provisional.

Source : 1. 2001-02 to 2010-11: *Indian Horticulture Database*, National Horticulture Board.2. 2011-12 to 2016-17: *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

Table 4.2: All India area and production of fruit crops

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

Crop	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Almond	21.00	10.00	12.00	8.00	12.00	8.00
Aonla/ Gooseberry	95.00	1173.00	88.00	972.00	91.00	989.00
Apple	319.00	2134.0	277.00	2521.00	277.00	2242.00
Banana	822.00	29221.00	841.00	29130.00	858.00	29163.00
Ber	42.00	401.00	44.00	425.00	49.00	481.00
Citrus						
(i) Lime/ Lemon	268.00	2950.00	245.00	2438.00	259.00	2789.00
(ii) Mandlzrin	299.00	3699.00	397.00	4113.00	429.00	4754.00
(iii) Sweet Orange (Mosambi)	275.00	4229.00	244.00	3468.00	209.00	3497.00
(iv) Others	111.00	777.00	138.00	1562.00	157.00	1706.00
Citrus total (i to iv)	953.00	11655.00	1024.00	11581.00	1055.00	12746.00
Custard apple	30.00	228.00	37.00	298.00	44.00	367.00
Grapes	123.00	2823.00	122.00	2590.00	136.00	2683.00
Guava	246.00	3994.00	255.00	4048.00	262.00	3648.00
Jackfruit	118.00	2088.00	151.00	1732.00	156.00	1826.00
Kiwi	5.00	8.00	4.00	11.00	4.00	11.00
Litchi	85.00	528.00	90.00	559.00	92.00	583.00
Mango	2163.00	18527.00	2209.00	18643.00	2263.00	19687.00
Muskmelon	42.00	863.00	45.00	935.00	47.00	962.00
Papaya	115.00	4913.00	132.00	5667.00	136.00	6108.00
Passion fruit	19.00	129.00	13.00	78.00	14.00	79.00
Peach	19.00	97.00	18.00	107.00	18.00	107.00
Pear	42.00	303.00	40.00	323.00	40.00	312.00
Picanut	1.00	0.00	1.00	1.00	1.00	1.00
Pineapple	116.00	1984.00	110.00	1924.00	121.00	2038.00
Plum	23.00	72.00	22.00	82.00	22.00	76.00
Pomegranate	181.00	1789.00	197.00	2306.00	209.00	2442.00
Sapota	106.00	1339.00	107.00	1294.00	107.00	1285.00
Strawberry	1.00	8.00	1.00	5.00	1.00	5.00
Walnut	115.00	238.00	92.00	229.00	92.00	228.00
Watermelon	84.00	2049.00	95.00	2325.00	101.00	2480.00
Others	349.00	2938.00	275.00	2386.00	272.00	2289.00
Total fruits	6235.00	89514.00	6301.00	90183.00	6480.00	92846.00

Note : *: Provisional.

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

Table 4.3: All India area and production of vegetable crops

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

Crops	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Beans	218.00	2204.00	232.00	2334.00	230.00	2278.00
Bittergourd	76.00	770.00	93.00	1046.00	96.00	1083.00
Bottlegourd	108.00	1826.00	149.00	2458.00	157.00	2572.00
Brinjal	673.00	12589.00	663.00	12515.00	669.00	12400.00
Cabbage	386.00	8585.00	394.00	8806.00	407.00	8971.00
Capsicum	32.00	183.00	46.00	288.00	46.00	327.00
Carrot	64.00	968.00	82.00	1338.00	86.00	1379.00
Cauliflower	411.00	7926.00	426.00	8090.00	452.00	8499.00
Cucumber	43.00	678.00	71.00	1202.00	78.00	1142.00
Chillies (Green)	181.00	1998.00	292.00	2955.00	287.00	3406.00
Elephant Foot Yam	24.00	678.00	28.00	733.00	26.00	659.00
Mushroom	N.A.	51.00	170.00	436.00	183.00	459.00
Okra/ Ladyfinger	504.00	5709.00	511.00	5849.00	528.00	6146.00
Onion	1173.00	18927.00	1320.00	20931.00	1270.00	21564.00
Parwal/ Pointed gourd	18.00	347.00	18.00	264.00	18.00	252.00
Peas	476.00	4652.00	498.00	4811.00	546.00	5452.00
Potato	2076.00	48009.00	2117.00	43417.00	2164.00	46546.00
Radish	168.00	2307.00	199.00	2844.00	206.00	2927.00
Pumpkin/ Kaddu	49.00	1122.00	68.00	1509.00	72.00	1582.00
Sweet Potato	107.00	1228.00	126.00	1454.00	135.00	1639.00
Tapioca	208.00	4373.00	204.00	4344.00	196.00	4096.00
Tomato	767.00	16385.00	774.00	18732.00	809.00	19697.00
Others	1654.00	25053.00	1625.00	22707.00	1628.00	21932.00
Total vegetables	9417.00	166566.00	10106.00	169064.00	10290.00	175008.00

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

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

Table 4.4: State-wise area and production of fruit crops

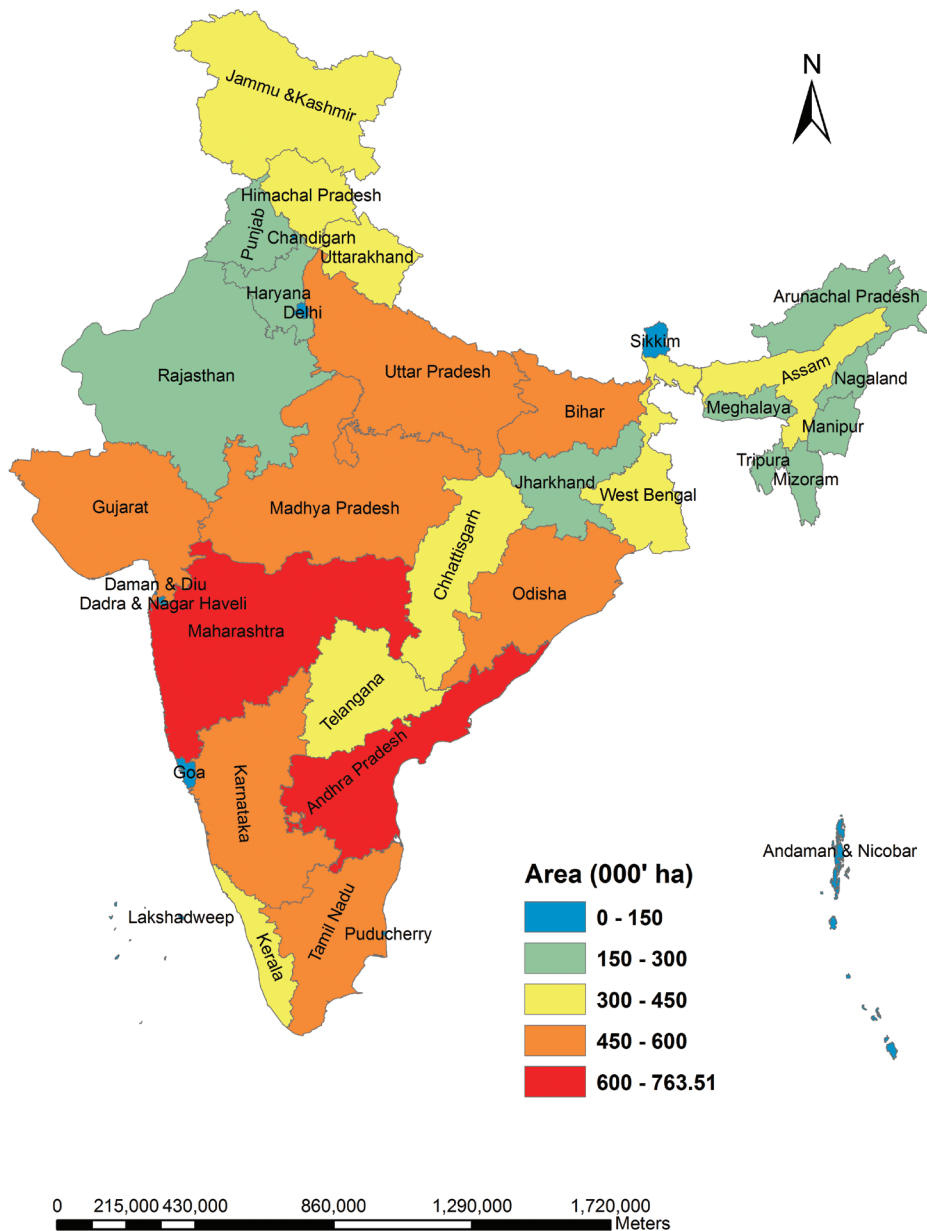
(Area: 000' ha, Production: 000't)

States/ Union Territories	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Andhra Pradesh	545.86	9121.62	577.03	10088.82	604.76	12098.60
Arunachal Pradesh	90.00	331.40	66.21	306.27	67.31	311.53
Assam	145.21	2030.14	145.71	2077.77	163.29	2391.19
Bihar	301.00	3990.00	306.18	4230.63	309.24	4272.94
Chhattisgarh	192.09	2071.14	209.87	2294.73	216.99	2393.51
Gujarat	384.42	8300.60	392.52	8477.17	392.95	8482.80
Haryana	60.45	703.68	60.92	737.82	64.00	900.00
Himachal Pradesh	224.35	751.94	226.80	928.83	226.56	639.01
Jammu & Kashmir	336.45	1779.44	286.23	2115.72	286.38	2116.06
Jharkhand	94.14	898.08	96.54	961.19	98.01	1026.31
Karnataka	400.17	6799.89	415.37	7023.69	439.01	7425.11
Kerala	194.66	2554.12	243.15	2532.94	244.72	2467.92
Madhya Pradesh	219.96	6119.00	276.82	5783.06	330.62	5037.04
Maharashtra	742.28	11089.53	736.69	9749.80	763.51	10378.43
Manipur	55.62	521.57	51.12	467.76	49.32	454.08
Meghalaya	36.33	377.25	36.59	395.40	37.97	447.27
Mizoram	60.27	350.91	55.01	330.28	62.32	339.05
Nagaland	40.56	411.00	37.05	374.13	38.75	393.53
Odisha	327.29	2156.49	340.80	2386.94	340.86	2430.10
Punjab	77.75	1644.64	85.46	1790.94	88.56	1856.92
Rajasthan	39.44	735.60	43.27	681.57	48.24	718.48
Sikkim	0.02	0.03	17.53	23.48	18.21	26.86
Tamil Nadu	285.69	5963.93	274.85	6635.10	311.25	6079.95
Telangana	361.78	5287.70	331.49	4319.87	284.87	3636.74
Tripura	71.77	819.12	75.74	854.05	74.99	845.51
Uttar Pradesh	372.34	7558.99	468.89	10296.14	470.91	10353.49
Uttarakhand	204.96	785.97	175.33	659.10	175.49	664.92
West Bengal	228.25	3313.70	249.22	3516.71	252.66	3708.45
Others	16.58	134.23	18.28	143.16	18.37	150.21
Total	6109.67	86601.68	6300.67	90183.04	6480.11	92845.98

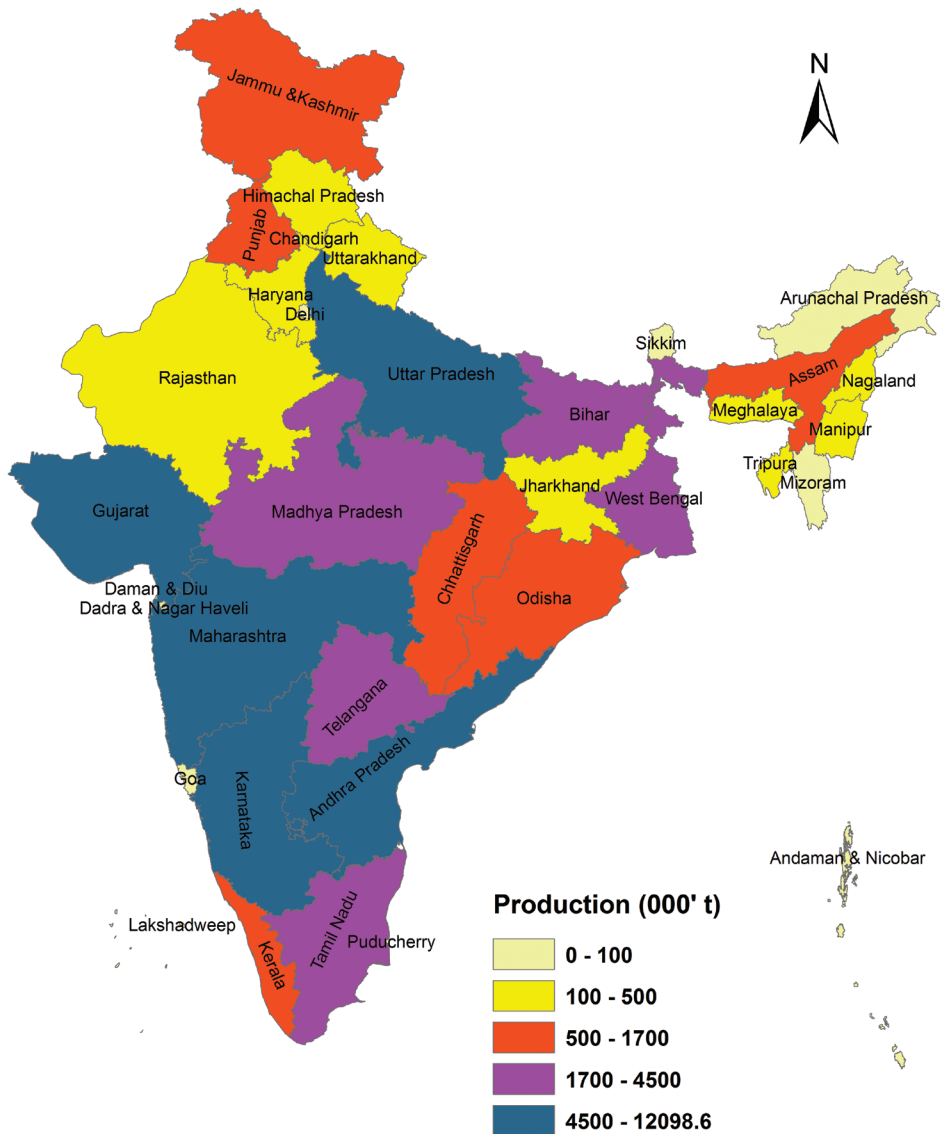
Note : *: Provisional.

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area under fruit crops during the year 2016-17



State-wise production of fruit crops during the year 2016-17



0 215,000 430,000 860,000 1,290,000 1,720,000 Meters

Table 4.5: State-wise area, production and productivity of Mango

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

States/ Union Territories	2014-15			2015-16			2016-17*		
	Area	Production	Producti- vity	Area	Production	Producti- vity	Area	Production	Producti- vity
Andhra Pradesh	315.42	2822.08	8.95	327.31	2803.66	8.57	332.97	3163.32	9.50
Assam	4.59	45.69	9.95	4.62	46.15	9.99	5.58	58.49	10.48
Arunachal Pradesh	N.A.	N.A.	N.A.	0.05	0.03	0.60	0.05	0.03	0.60
Bihar	148.00	1272.00	8.59	149.14	1464.93	9.82	150.64	1479.58	9.82
Chhattisgarh	67.12	386.67	5.76	71.52	420.61	5.88	73.99	437.58	5.91
Gujarat	150.05	1219.71	8.13	153.18	1241.59	8.11	153.18	1241.59	8.11
Haryana	9.22	88.72	9.62	9.26	89.97	9.72	9.42	109.74	11.65
Himachal Pradesh	41.11	47.61	1.16	41.52	37.63	0.91	41.52	47.40	1.14
Jammu & Kashmir	12.46	20.93	1.68	12.67	23.74	1.87	12.67	23.74	1.87
Jharkhand	51.84	523.14	10.09	50.41	393.67	7.81	52.24	430.22	8.24
Karnataka	175.41	1646.51	9.39	181.70	1725.67	9.50	192.61	1829.21	9.50
Kerala	44.85	252.86	5.64	70.12	382.52	5.46	69.11	382.38	5.53
Madhya Pradesh	26.71	396.00	14.83	27.89	371.48	13.32	40.08	494.36	12.33
Maharashtra	157.77	758.84	4.81	162.08	463.17	2.86	157.07	514.87	3.28
Mizoram	0.89	4.18	4.70	0.87	4.18	4.80	0.89	4.18	4.70
Nagaland	0.51	3.57	7.00	0.57	3.74	6.56	0.64	4.19	6.55
Odisha	197.74	769.93	3.89	199.29	778.72	3.91	199.30	816.20	4.10
Punjab	6.75	113.44	16.81	6.74	113.50	16.84	6.85	115.35	16.84
Rajasthan	5.45	78.68	14.44	5.00	82.27	16.45	5.00	82.50	16.50
Tamil Nadu	147.48	896.78	6.08	125.98	975.11	7.74	160.94	1156.99	7.19
Telangana	196.44	1801.75	9.17	14.05	1778.32	126.57	180.62	1681.60	9.31
Tripura	11.18	62.56	5.60	11.75	59.06	5.03	11.64	58.47	5.02
Uttar Pradesh	250.74	4347.50	17.34	263.28	4512.71	17.14	264.93	4540.23	17.14
Uttarakhand	40.70	150.62	3.70	35.91	149.73	4.17	35.93	149.76	4.17
West Bengal	95.43	799.65	8.38	96.74	693.39	7.17	97.93	836.07	8.54
Others	5.62	17.58	3.13	6.91	27.00	3.91	6.98	28.87	4.14
Total	2163.47	18526.98	8.56	2208.56	18642.53	8.44	2262.77	19686.93	8.70

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

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Mango during 2016-17

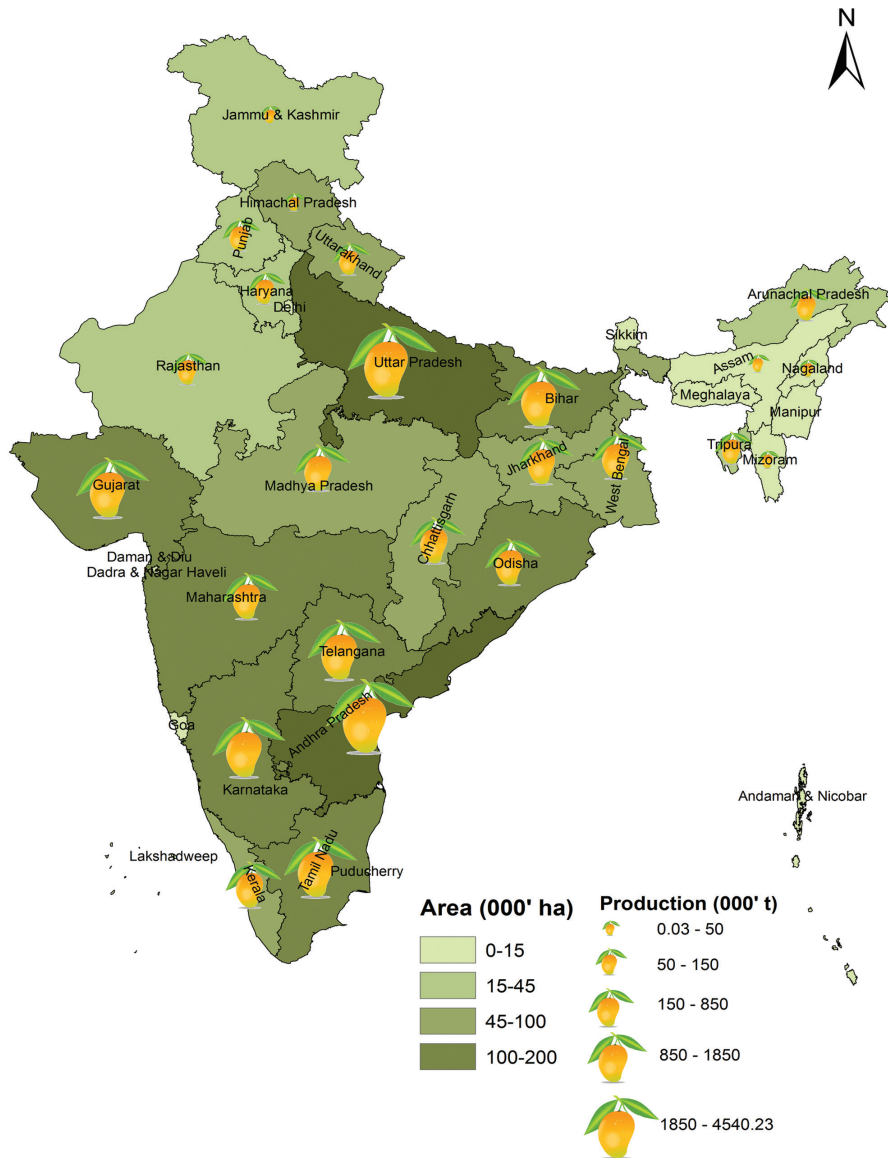


Table 4.6: State-wise area, production and productivity of Banana(Area: 000³ ha, Production: 000³t, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17 [*]		
	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity
Arunachal Pradesh	6.50	20.00	3.08	5.42	31.64	5.84	5.48	31.96	5.83
Andhra Pradesh	79.36	3487.31	43.94	75.72	3570.62	47.16	86.32	4143.55	48.00
Assam	51.28	865.67	16.88	51.10	882.71	17.27	55.42	979.34	17.67
Bihar	35.00	1535.00	43.86	34.80	1535.30	44.12	35.15	1550.65	44.12
Chhattisgarh	23.87	564.43	23.65	25.76	587.42	22.80	27.06	618.92	22.87
Gujarat	67.02	4324.36	64.53	64.69	4185.52	64.70	64.69	4185.52	64.70
Himachal Pradesh	0.09	0.29	3.25	0.09	0.42	4.67	0.09	0.35	3.89
Jharkhand	0.54	1.30	2.39	12.53	33.28	2.66	9.02	31.47	3.49
Karnataka	102.89	2593.33	25.21	96.63	2370.95	24.54	101.53	2489.50	24.52
Kerala	83.98	1270.57	15.13	84.56	1292.41	15.28	81.51	1224.13	15.02
Madhya Pradesh	27.80	1836.00	66.06	28.35	1758.05	62.01	24.31	1646.89	67.75
Maharashtra	74.03	4030.58	54.44	69.55	3025.15	43.50	74.68	3072.49	41.14
Meghalaya	7.06	88.70	12.57	7.11	88.71	12.48	7.24	94.32	13.03
Manipur	6.99	94.22	13.47	6.95	93.95	13.52	6.65	89.86	13.51
Mizoram	10.87	141.00	12.97	10.91	141.03	12.93	10.94	141.04	12.89
Nagaland	7.32	109.80	15.00	7.25	108.51	14.97	7.34	116.72	15.90
Odisha	24.76	469.25	18.95	24.47	462.71	18.91	24.49	466.62	19.05
Punjab	0.13	7.51	57.35	0.11	6.43	58.45	0.12	6.72	56.00
Rajasthan	0.03	0.25	8.48	0.03	0.41	13.67	0.04	0.41	10.25
Sikkim	0.00	0.00	0.00	1.15	3.56	3.10	1.20	3.87	3.23
Tamil Nadu	95.24	4147.18	43.55	94.61	4331.65	45.78	94.99	3640.73	38.33
Telangana	8.95	325.52	36.37	4.65	183.70	39.51	3.88	143.88	37.08
Tripura	13.99	141.31	10.10	14.62	153.62	10.51	14.47	152.08	10.51
Uttar Pradesh	42.59	1990.58	46.74	67.00	3061.21	45.69	67.40	3078.73	45.68
West Bengal	46.60	1124.00	24.12	48.07	1172.34	24.39	49.00	1195.60	24.40
Others	4.92	53.31	10.84	5.03	53.55	10.65	5.08	57.19	11.26
Total	821.80	29221.47	35.56	841.91	29134.82	34.61	858.10	29162.55	33.99

Note : *: Provisional.

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Banana

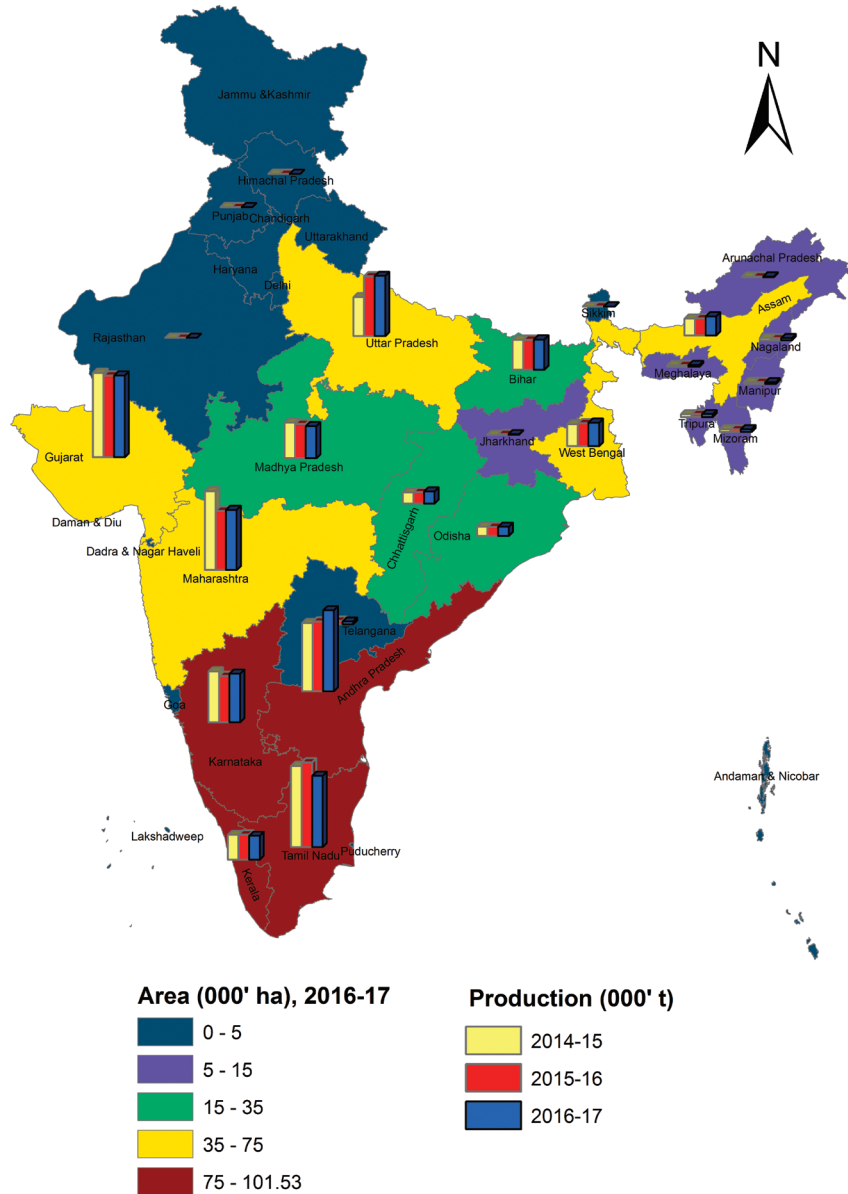


Table 4.7: State-wise area, production and productivity of Sweet orange

(Area: 000` ha, Production: 000`t, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17*		
	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity
Andhra Pradesh	72.86	1217.45	16.71	77.94	1265.16	16.23	70.11	1752.63	25.00
Assam	0.14	1.85	13.21	0.46	4.76	13.99	0.14	2.02	14.43
Bihar	N.A.	N.A.	N.A.	0.50	5.50	11.00	0.51	5.56	10.90
Chhatisgarh	0.35	2.01	5.74	0.41	2.19	5.38	0.42	2.28	5.43
Himachal Pradesh	1.67	2.10	1.26	1.69	2.22	1.31	1.68	2.67	1.59
Jammu & Kashmir	1.74	2.48	1.43	1.77	2.60	1.47	1.79	2.63	1.47
Karnataka	2.01	32.16	16.00	1.70	27.43	16.14	1.70	27.43	16.14
Kerala	0.04	1.75	43.75	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Madhya Pradesh	8.70	111.00	12.76	3.04	43.48	14.30	11.31	182.06	16.10
Maharashtra	61.82	543.00	8.78	54.26	659.15	12.15	54.89	656.89	11.97
Mizoram	1.59	4.94	3.11	1.96	4.55	2.32	1.59	4.94	3.11
Nagaland	0.26	2.08	8.00	0.27	2.06	7.63	0.29	2.23	7.69
Punjab	2.67	21.91	8.21	2.72	22.42	8.24	2.86	23.60	8.25
Rajasthan	1.37	3.84	2.80	0.19	2.35	12.37	0.20	2.50	12.50
Tamilnadu	0.09	1.75	19.44	0.13	2.20	16.92	0.13	2.26	17.38
Telangana	118.10	2278.70	19.29	95.30	1420.30	14.90	60.12	825.09	13.72
Tripura	1.21	1.81	1.50	1.33	1.64	1.23	1.31	1.63	1.24
Others	0.08	0.17	2.13	0.08	0.13	1.63	0.08	0.13	1.63
Total	274.68	4228.99	15.40	243.76	3468.14	14.23	209.19	3497.35	16.72

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

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

Table 4.8: State-wise area, production and productivity of Apple

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

States/ Union Territories	2014-15			2015-16			2016-17 [*]		
	Area	Production	Producti- vity	Area	Production	Producti- vity	Area	Production	Producti- vity
Jammu & Kashmir	160.25	1368.63	8.54	136.54	1672.72	12.25	136.54	1672.72	12.25
Himachal Pradesh	109.55	625.20	5.71	110.68	777.13	7.02	110.68	492.10	4.45
Uttarakhand	34.69	106.10	3.06	24.98	61.94	2.48	25.00	67.48	2.70
Arunachal Pradesh	14.50	32.00	2.21	4.68	7.28	1.56	4.73	7.35	1.55
Nagaland	0.21	1.89	9.00	0.27	2.01	7.44	0.27	2.00	7.41
Tamil Nadu	0.00	0.02	N.A.	0.00	0.02	N.A.	0.00	0.02	N.A.
Sikkim	N.A.	N.A.	N.A.	0.00	N.A.	N.A.	0.05	0.03	0.60
Telangana	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.00	0.00	N.A.
Total	319.20	2133.84	6.68	277.16	2521.09	9.10	277.27	2241.71	8.08

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

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Apple during 2016-17

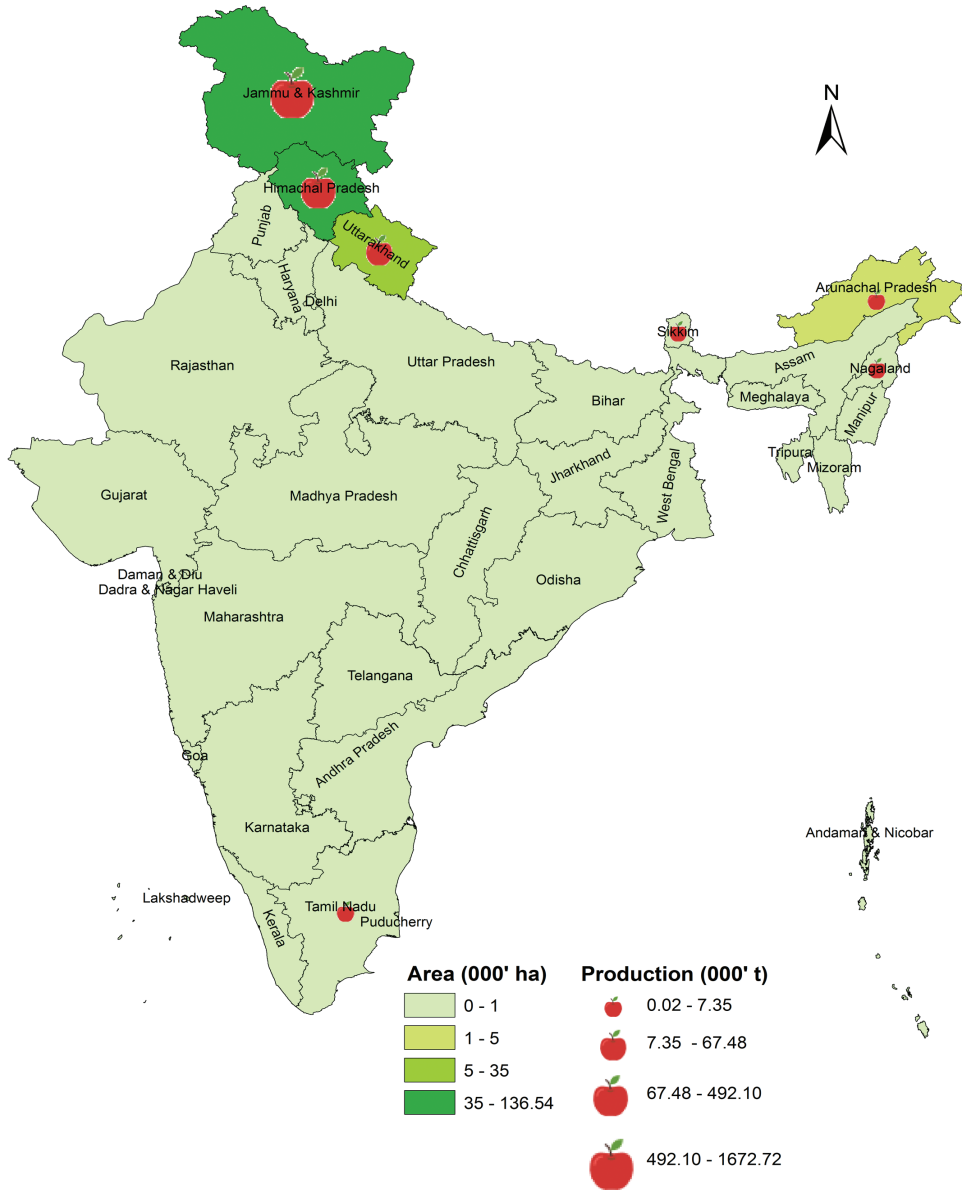


Table 4.9: State-wise area, production and productivity of Papaya(Area: 000³ ha, Production: 000³t, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17*		
	Area	Production	Producti- vity	Area	Production	Producti- vity	Area	Production	Producti- vity
Andhra Pradesh	8.74	688.27	78.75	10.93	987.94	90.39	13.56	1288.58	95.03
Arunachal Pradesh	N.A.	N.A.	N.A.	0.06	0.19	3.17	0.06	0.19	3.17
Assam	7.42	148.86	20.06	7.22	145.48	20.15	9.58	192.76	20.12
Bihar	2.00	44.00	22.00	1.60	43.60	27.25	1.62	44.04	27.19
Chhattisgarh	12.41	275.79	22.22	13.72	341.93	24.92	14.12	352.84	24.99
Gujarat	19.13	1170.64	61.19	20.17	1241.27	61.54	20.17	1241.27	61.54
Himachal Pradesh	0.21	1.11	5.29	0.23	1.30	5.65	0.23	1.11	4.83
Jharkhand	0.52	5.21	10.02	1.78	106.69	59.94	1.48	108.86	73.55
Karnataka	7.56	528.30	69.88	7.39	507.56	68.68	7.70	527.86	68.55
Kerala	8.79	55.00	6.26	11.94	79.06	6.62	13.24	83.89	6.34
Madhya Pradesh	13.82	455.00	32.92	14.51	464.67	32.02	10.25	454.71	44.36
Maharashtra	7.64	542.01	70.94	10.30	316.83	30.76	11.45	424.22	37.05
Meghalaya	0.82	6.51	7.94	0.83	6.59	7.94	0.96	7.78	8.10
Mizoram	1.25	26.50	21.20	1.24	26.49	21.36	1.25	26.50	21.20
Nagaland	1.36	16.32	12.00	1.35	16.57	12.27	1.44	17.70	12.29
Odisha	3.01	69.88	23.22	3.03	70.18	23.16	3.05	70.97	23.27
Rajasthan	0.46	5.68	12.35	0.72	10.72	14.89	0.72	10.75	14.93
Sikkim	0.00	0.00	0.00	0.79	0.60	0.76	0.82	0.60	0.73
Tamil Nadu	1.07	252.93	236.38	1.86	428.01	230.11	1.76	403.19	229.09
Telangana	2.92	234.43	80.28	4.79	393.40	82.13	4.58	364.92	79.68
Tripura	3.72	37.25	10.01	3.81	37.93	9.96	3.77	37.55	9.96
Uttar Pradesh	N.A.	N.A.	N.A.	1.78	85.47	48.02	1.79	85.99	48.04
West Bengal	11.76	345.50	29.38	11.96	350.77	29.33	12.17	357.65	29.39
Others	0.35	3.50	10.00	0.39	3.80	9.74	0.40	3.89	9.73
Total	114.97	4912.67	42.73	132.41	5667.06	42.80	136.14	6107.83	44.86

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

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Papaya

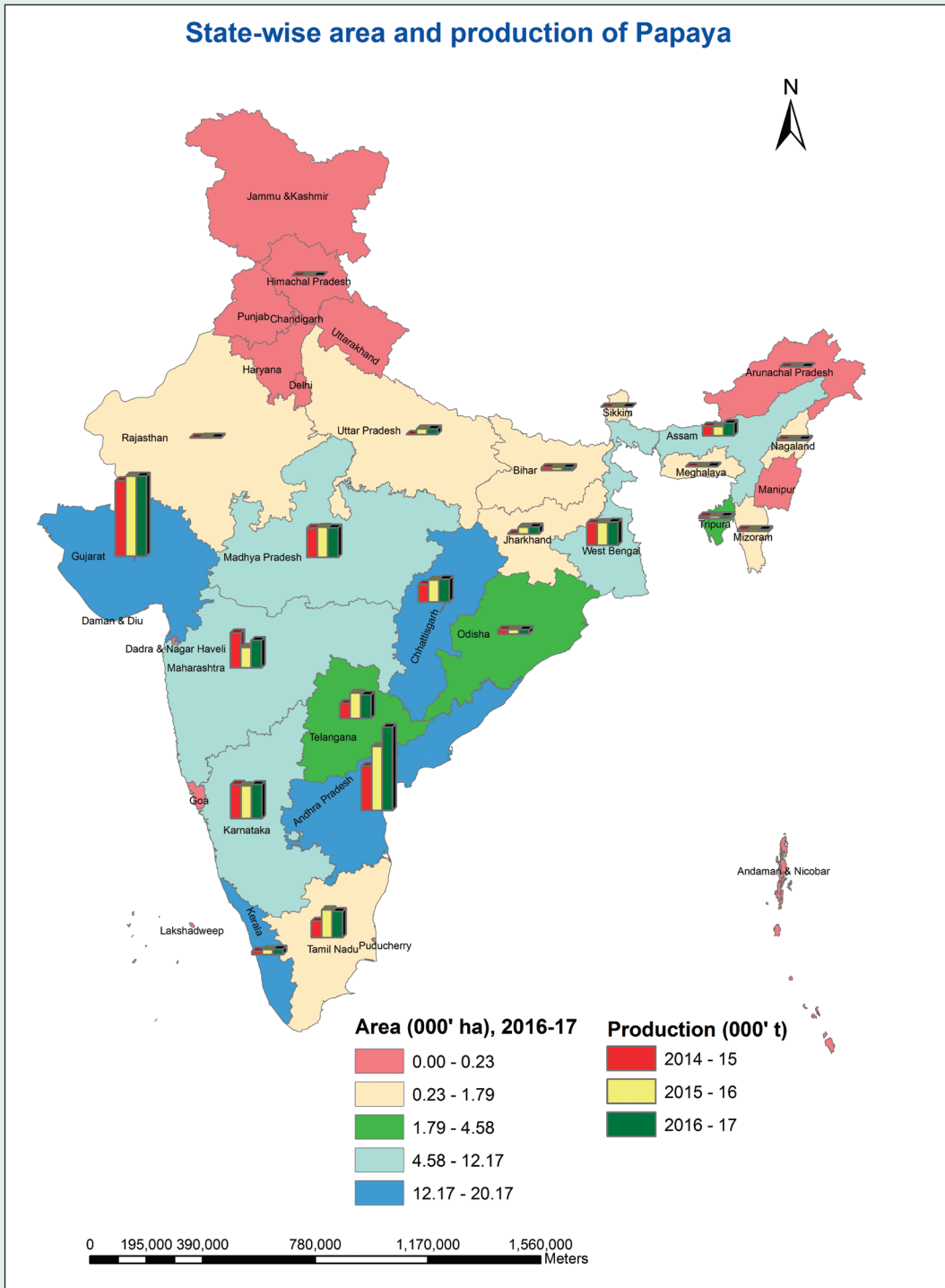


Table 4.10: State-wise area and production of vegetables

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

States/ Union Territories	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Andhra Pradesh	242.18	4592.58	238.40	5442.77	223.73	5355.64
Arunachal Pradesh	1.70	41.00	4.00	33.01	4.04	33.34
Assam	289.26	4469.73	317.59	3821.71	312.01	3874.50
Bihar	842.00	14467.15	837.51	14400.12	844.04	14225.04
Chhattisgarh	425.07	5812.32	475.23	6318.41	491.31	6700.96
Gujarat	603.11	11861.23	695.84	13401.39	695.84	13401.39
Haryana	359.40	5305.59	410.30	6129.36	435.00	6960.00
Himachal Pradesh	83.75	1585.37	88.28	1715.16	85.76	1743.31
Jammu & Kashmir	63.06	1395.47	62.63	1386.37	62.63	1386.37
Jharkhand	316.67	4279.28	264.22	3373.82	286.40	3714.25
Karnataka	485.88	8828.37	460.35	7804.57	486.12	8207.18
Kerala	142.29	1645.06	144.99	2088.66	137.68	1907.72
Madhya Pradesh	672.30	14199.00	757.67	15568.26	884.05	16664.66
Maharashtra	595.21	8783.01	713.38	9452.07	693.15	10360.76
Manipur	29.33	268.01	34.36	316.51	44.34	331.97
Meghalaya	44.60	534.00	47.50	494.88	49.92	541.89
Mizoram	44.03	273.76	45.21	179.02	35.09	168.18
Nagaland	38.55	492.37	43.53	494.61	46.33	534.24
Odisha	668.53	9413.54	652.05	8755.51	639.34	8760.09
Punjab	208.03	4167.65	213.90	4301.63	230.26	4640.52
Rajasthan	153.92	1433.23	190.73	1986.73	197.90	1928.60
Sikkim	29.15	130.06	20.25	106.94	24.30	128.32
Tamil Nadu	284.81	7521.02	271.28	6976.15	256.78	6304.84
Telangana	179.66	3005.33	171.80	3195.44	162.10	2992.40
Tripura	48.61	811.09	46.48	793.24	46.02	785.31
Uttar Pradesh	1163.55	26120.18	1379.11	26251.00	1400.13	26407.34
Uttarakhand	100.70	1109.65	89.84	945.36	90.00	945.60
West Bengal	1387.20	26354.61	1391.42	22825.45	1387.49	25500.61
Others	39.70	578.57	38.44	505.81	38.06	502.83
Total	9542.23	169478.23	10106.29	169063.93	10289.84	175007.87

Note : *: Provisional.

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise production of vegetables during the year 2016-17

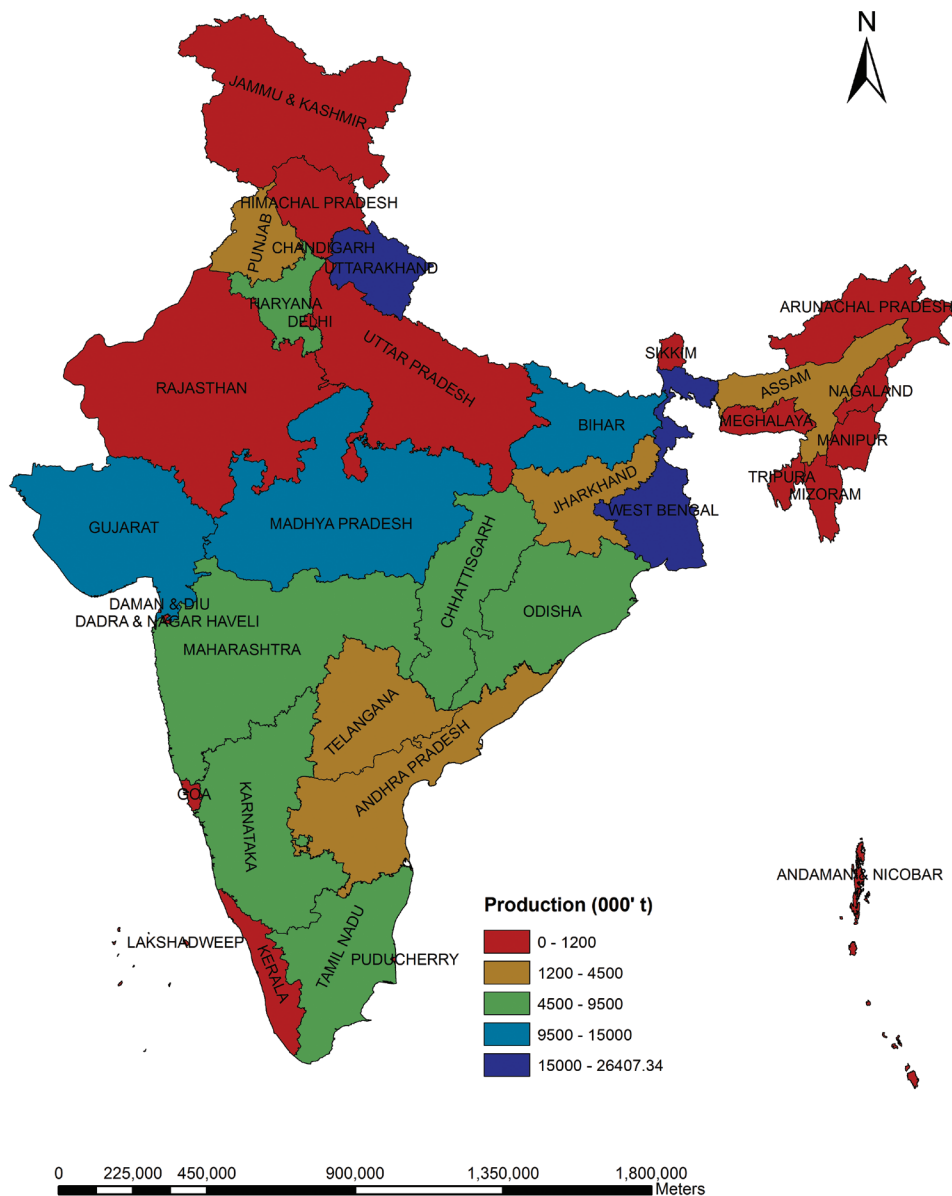


Table 4.11: State-wise area, production and productivity of Potato

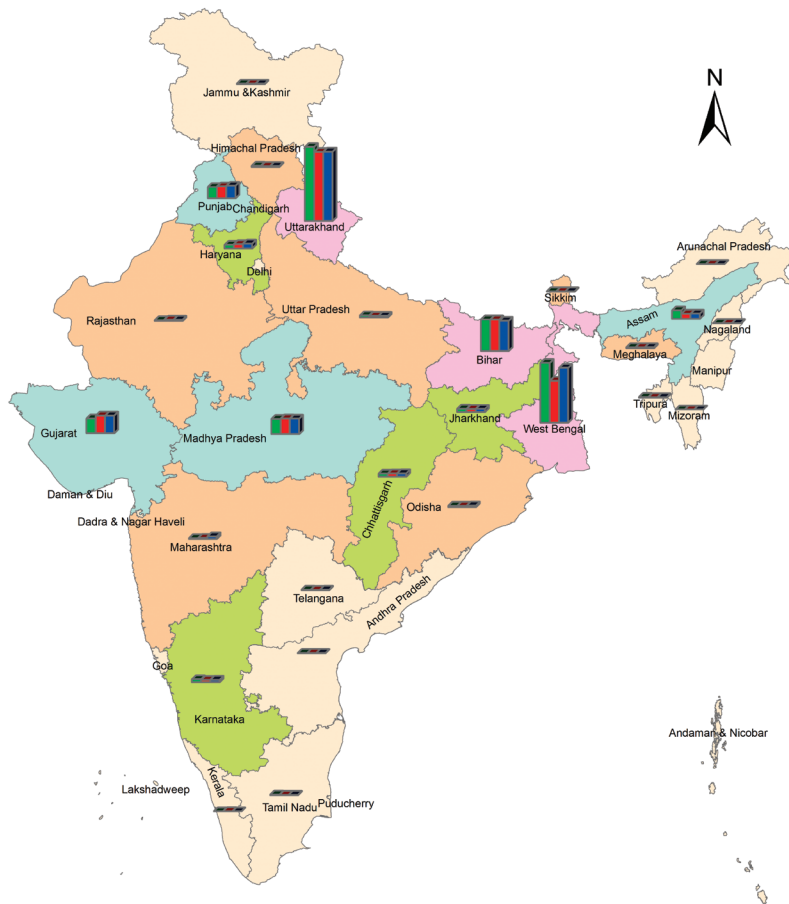
(Area: 000' ha, Production: 000't, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17 ¹		
	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity
Andhra Pradesh	2.64	43.93	16.64	2.61	38.86	14.89	2.63	39.18	14.90
Arunachal Pradesh	N.A.	N.A.	N.A.	0.76	5.65	7.43	0.77	5.71	7.42
Assam	99.18	1706.04	17.20	104.83	1037.26	9.89	105.88	1058.22	9.99
Bihar	318.99	6345.56	19.89	319.13	6345.52	19.88	320.47	6089.90	19.00
Chhattisgarh	38.92	600.93	15.44	41.95	644.83	15.37	43.50	660.24	15.18
Gujarat	98.20	2964.10	30.18	112.40	3549.38	31.58	112.40	3549.38	31.58
Haryana	30.13	722.58	23.98	34.27	853.81	24.91	36.29	964.80	26.59
Himachal Pradesh	19.20	243.26	12.67	18.02	183.25	10.17	15.00	195.00	13.00
Jammu & Kashmir	6.91	127.24	18.41	6.91	127.24	18.41	6.91	127.24	18.41
Jharkhand	49.55	659.65	13.31	44.93	627.01	13.96	55.73	651.85	11.70
Karnataka	44.16	589.12	13.34	33.15	455.45	13.74	34.37	472.17	13.74
Kerala	0.09	1.80	20.00	1.34	17.92	13.37	0.35	5.25	15.00
Madhya Pradesh	136.01	3048.00	22.41	141.05	3161.00	22.41	156.20	3134.46	20.07
Maharashtra	11.07	200.75	18.13	12.50	251.46	20.12	22.80	540.61	23.71
Meghalaya	18.80	191.50	10.19	18.56	183.82	9.90	19.45	214.62	11.03
Mizoram	0.13	1.44	11.08	0.13	1.44	11.08	0.10	1.00	10.00
Nagaland	4.82	65.10	13.51	4.67	60.94	13.05	4.93	65.66	13.32
Odisha	15.81	268.85	17.01	25.18	278.75	15.44	25.19	302.22	12.00
Punjab	89.99	2262.40	25.14	92.36	2385.26	25.83	96.57	2518.95	26.08
Rajasthan	12.51	149.81	11.98	14.32	229.83	16.05	15.00	240.00	16.00
Sikkim	10.24	49.87	4.87	10.94	53.55	4.89	13.13	64.26	4.89
Tamil Nadu	6.10	130.56	21.40	3.98	72.23	18.15	4.24	64.71	15.26
Telangana	5.09	106.11	20.85	4.29	71.63	16.70	4.27	110.88	25.97
Tripura	9.04	159.47	17.64	7.68	128.51	16.73	7.61	127.23	16.72
Uttarakhand	28.36	452.50	15.96	25.89	358.24	13.84	25.90	358.27	13.83
Uttar Pradesh	607.32	14879.34	24.50	607.32	13851.76	22.81	611.15	13916.00	22.77
West Bengal	412.20	12027.00	29.18	427.00	8427.00	19.74	422.50	11052.60	26.16
Others	0.44	12.28	27.91	0.74	15.45	20.88	0.73	15.23	20.86
Total	2075.88	48009.19	23.13	2116.93	43417.05	20.51	2164.05	46545.62	21.51

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

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Potato



Area (000' ha), 2016-17



Production (000' t)

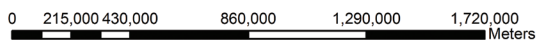
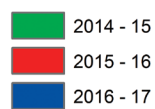


Table 4.12: State-wise area, production and productivity of Onion

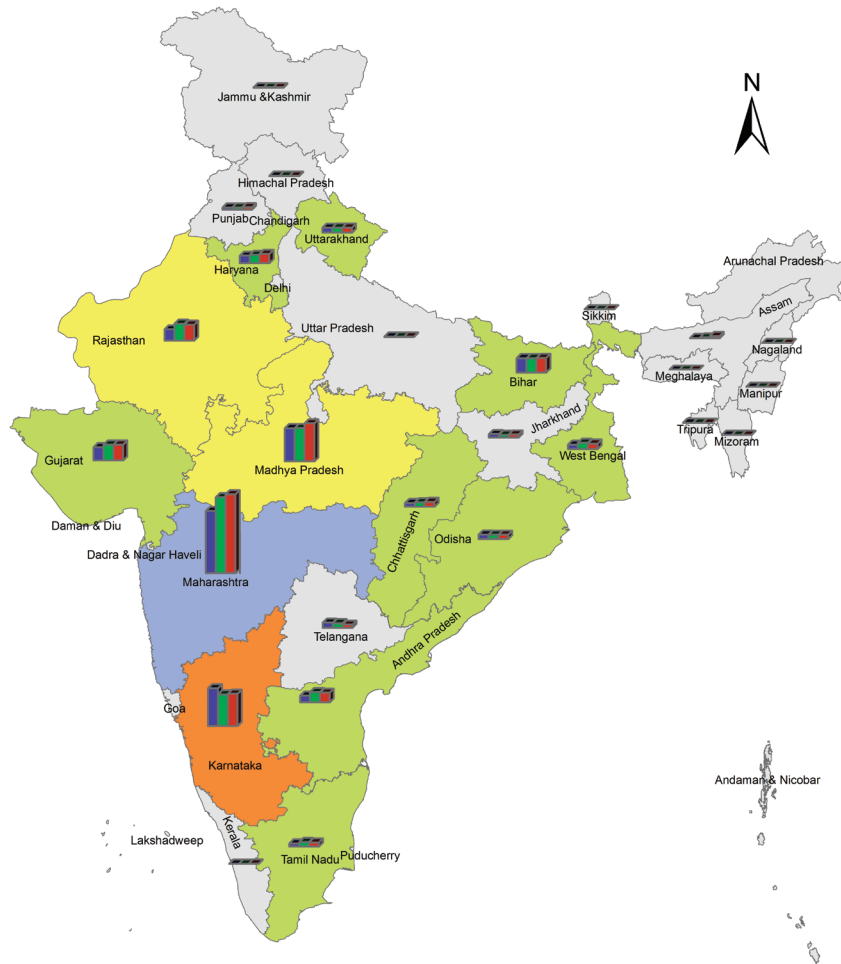
(Area: 000' ha, Production: 000't, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17*		
	Area	Product- ion	Producti- vity	Area	Product- ion	Product- vity	Area	Production	Producti- vity
Andhra Pradesh	38.37	575.58	15.00	45.02	885.42	19.67	37.80	831.64	22.00
Assam	8.28	32.42	3.92	8.47	80.31	9.48	16.75	195.05	11.64
Bihar	54.30	1247.31	22.97	54.03	1247.43	23.09	54.57	1259.81	23.09
Chhattisgarh	20.06	308.10	15.36	23.49	375.99	16.01	25.28	410.86	16.25
Gujarat	44.30	1126.55	25.43	53.20	1355.78	25.48	53.20	1355.78	25.48
Haryana	28.69	640.22	22.32	30.65	705.80	23.03	32.46	797.45	24.57
Himachal Pradesh	2.27	39.36	17.34	2.53	47.96	18.96	2.56	48.53	18.96
Jammu & Kashmir	2.85	65.27	22.90	2.85	65.27	22.90	2.85	65.27	22.90
Jharkhand	16.39	322.73	19.69	14.86	254.63	17.14	17.12	279.10	16.30
Karnataka	186.99	3227.04	17.26	190.21	2695.99	14.17	195.54	2767.98	14.16
Kerala	0.06	0.18	3.00	0.14	0.28	2.00	0.79	15.66	19.82
Madhya Pradesh	117.88	2842.00	24.11	118.20	2848.00	24.09	120.14	3254.52	27.09
Maharashtra	441.90	5361.00	12.13	522.35	6529.34	12.50	471.66	6773.08	14.36
Manipur	0.34	5.09	14.97	0.42	5.17	12.31	0.46	5.74	12.48
Meghalaya	0.50	4.30	8.60	0.52	4.60	8.85	0.55	4.82	8.76
Mizoram	1.27	10.00	7.87	2.22	8.43	3.80	2.21	8.44	3.82
Nagaland	0.70	7.70	11.00	0.68	7.14	10.50	0.73	7.47	10.23
Odisha	33.19	395.96	11.93	33.45	378.58	11.32	33.44	378.67	11.32
Punjab	8.38	188.18	22.46	8.50	193.71	22.79	8.84	202.31	22.89
Rajasthan	61.36	960.78	15.66	86.31	1435.11	16.63	85.00	1350.00	15.88
Sikkim	0.32	1.72	5.38	0.32	1.73	5.41	0.38	2.08	5.47
Tamil Nadu	25.74	259.63	10.09	36.73	380.95	10.37	34.08	347.03	10.18
Telangana	23.85	450.54	18.89	20.87	395.96	18.97	15.25	270.38	17.73
Tripura	0.38	2.59	6.82	0.23	1.38	6.00	0.22	1.37	6.23
Uttarakhand	4.38	41.28	9.42	4.07	41.59	10.22	4.08	41.61	10.20
Uttar Pradesh	24.47	413.60	16.90	24.96	422.75	16.94	25.41	423.80	16.68
West Bengal	25.31	380.15	15.02	33.98	544.55	16.03	29.00	465.45	16.05
Others	0.83	18.15	21.87	0.82	17.49	21.33	0.79	15.66	19.82
Total	1173.35	18927.41	16.13	1320.04	20931.21	15.86	1270.36	21563.90	16.97

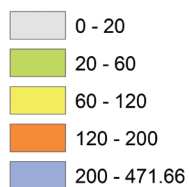
Note : *: Provisional.

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Onion



Area (000' ha), 2016-17



Production (000' t)

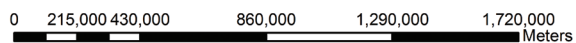
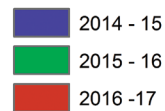


Table 4.13: State-wise area, production and productivity of Tomato

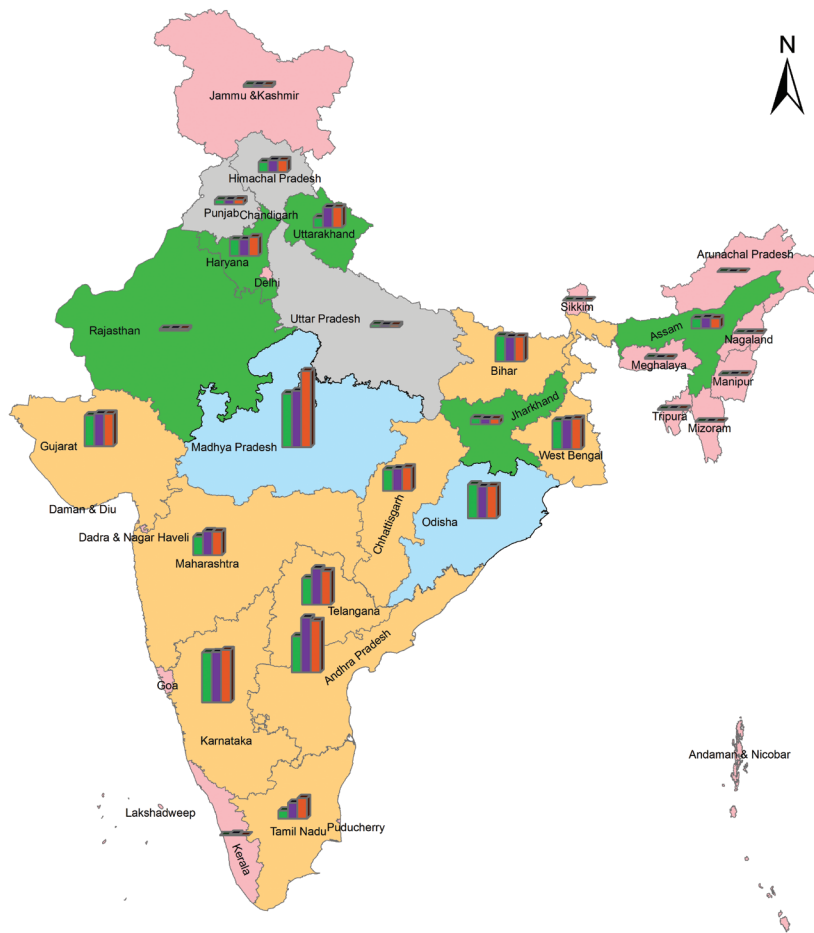
(Area: 000' ha, Production: 000't, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17*		
	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity
Andhra Pradesh	54.22	1473.54	27.18	59.08	2236.56	37.86	55.50	2100.95	37.85
Arunachal Pradesh	0.50	14.00	28.00	0.23	3.32	14.43	0.24	3.35	13.96
Assam	17.82	418.03	23.46	17.66	445.02	25.20	18.18	415.41	22.85
Bihar	47.73	1046.44	21.92	45.81	1001.01	21.85	46.26	1011.02	21.86
Chhattisgarh	52.89	868.60	16.42	54.91	908.98	16.55	56.63	953.16	16.83
Gujarat	44.57	1259.01	28.25	46.40	1319.11	28.43	46.40	1319.11	28.43
Haryana	27.25	666.56	24.46	29.03	675.38	23.26	31.49	763.74	24.25
Himachal Pradesh	9.93	413.71	41.66	11.04	485.54	43.98	11.08	489.96	44.22
Jammu & Kashmir	3.58	88.09	24.61	3.58	88.09	24.61	3.58	88.09	24.61
Jharkhand	26.65	253.95	9.53	18.16	230.19	12.68	19.46	226.20	11.62
Karnataka	64.25	2034.37	31.66	60.98	2046.14	33.55	63.73	2138.13	33.55
Kerala	23.35	8.23	0.35	3.12	58.80	18.85	0.23	3.28	14.26
Madhya Pradesh	70.23	2177.00	31.00	73.70	2285.90	31.02	100.00	3102.00	31.02
Maharashtra	35.45	762.16	21.50	44.24	976.58	22.07	43.64	957.17	21.93
Manipur	2.54	25.67	10.11	3.06	31.61	10.33	3.04	31.40	10.33
Meghalaya	2.20	52.00	23.64	2.15	34.02	15.82	2.12	33.95	16.01
Mizoram	1.07	10.12	9.46	1.09	10.20	9.36	1.09	10.20	9.36
Nagaland	2.72	20.00	7.35	2.87	20.10	7.00	3.05	21.85	7.16
Odisha	96.56	1374.94	14.24	90.91	1290.99	14.20	91.03	1311.72	14.41
Punjab	7.58	185.90	24.53	7.69	191.18	24.86	8.06	200.15	24.83
Rajasthan	16.52	75.23	4.55	20.51	83.29	4.06	21.00	85.00	4.05
Sikkim	1.01	9.08	8.99	0.55	4.25	7.73	0.66	5.10	7.73
Tamil Nadu	25.37	328.20	12.94	29.80	645.70	21.67	38.78	840.21	21.67
Telangana	53.19	1080.61	20.32	57.97	1475.00	25.44	53.64	1364.93	25.45
Tripura	1.83	44.03	24.06	1.81	53.81	29.73	1.79	53.27	29.76
Uttarakhand	9.46	115.41	12.20	8.55	93.22	10.90	8.57	93.25	10.88
Uttar Pradesh	10.48	413.83	39.49	20.75	819.37	39.49	20.88	826.32	39.57
West Bengal	56.90	1149.59	20.20	57.17	1204.43	21.07	57.35	1233.16	21.50
Others	1.49	16.70	11.21	1.08	14.20	13.15	1.06	14.85	14.01
Total	767.32	16384.98	21.35	773.88	18731.97	24.21	808.54	19696.92	24.36

Note : *: Provisional..

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area and production of Tomato



Area (000' ha), 2016-17

Production (000' t)

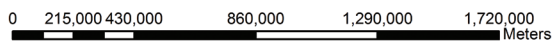
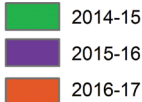
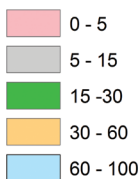


Table 4.14: State-wise area and production of flowers (loose)

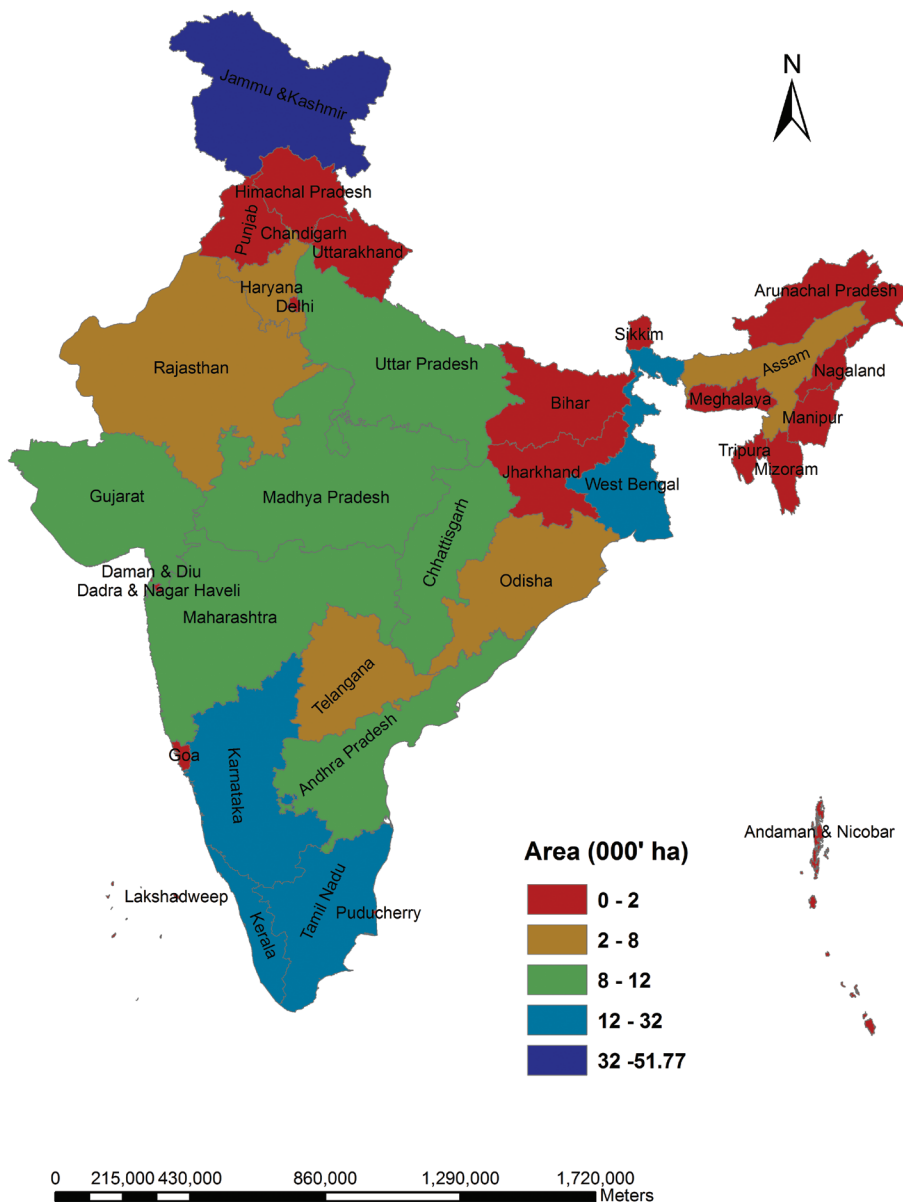
(Area: 000' ha, Production: 000' t)

States/ Union Territories	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Andhra Pradesh	15.68	134.44	18.25	147.28	16.59	140.34
Arunachal Pradesh	0.02	1.87	0.02	0.08	0.02	0.08
Assam	3.53	55.84	5.05	80.27	5.15	91.47
Bihar	1.43	16.44	0.66	7.88	0.66	7.96
Chhattisgarh	10.96	50.03	11.43	106.17	11.31	105.11
Gujarat	18.79	177.63	19.50	184.16	19.69	186.00
Haryana	6.07	67.77	6.02	68.42	6.20	72.40
Himachal Pradesh	0.80	38.76	0.72	33.84	0.71	33.50
Jammu & Kashmir	0.46	0.35	49.09	29.80	51.77	29.97
Jharkhand	1.60	74.84	0.32	16.40	0.32	16.57
Karnataka	30.90	290.77	31.68	294.65	32.92	280.92
Kerala	13.37	32.92	12.88	0.61	26.56	0.70
Madhya Pradesh	17.75	208.00	18.42	216.00	18.42	216.00
Maharashtra	7.25	38.53	12.00	131.62	12.23	106.77
Manipur	0.81	0.30	0.17	0.21	0.12	0.25
Meghalaya	0.06	2.61	0.06	2.13	0.06	2.64
Mizoram	0.20	183.37	0.13	0.56	0.20	0.48
Nagaland	0.01	0.00	0.07	1.48	0.07	1.48
Odisha	7.50	83.02	6.56	54.20	6.57	72.88
Punjab	1.37	10.65	2.00	12.46	2.05	12.82
Rajasthan	2.71	2.91	3.33	5.85	3.35	5.90
Sikkim	0.24	18.42	0.24	16.59	0.24	16.59
Tamil Nadu	55.03	356.52	30.59	437.74	32.29	416.63
Telangana	7.44	27.72	3.71	17.35	6.02	22.97
Uttar Pradesh	17.21	34.37	17.20	34.31	21.59	118.29
Uttarakhand	1.63	16.77	1.54	15.27	1.34	13.19
West Bengal	25.32	216.18	25.63	266.73	26.04	272.76
Others	0.38	1.86	0.34	1.83	6.77	1.73
Total	248.51	2142.89	277.57	2183.91	309.26	2246.40

Note : *: Provisional.

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area under flowers (loose) during the year 2016-17



State-wise production of flowers (loose) during the year 2016-17

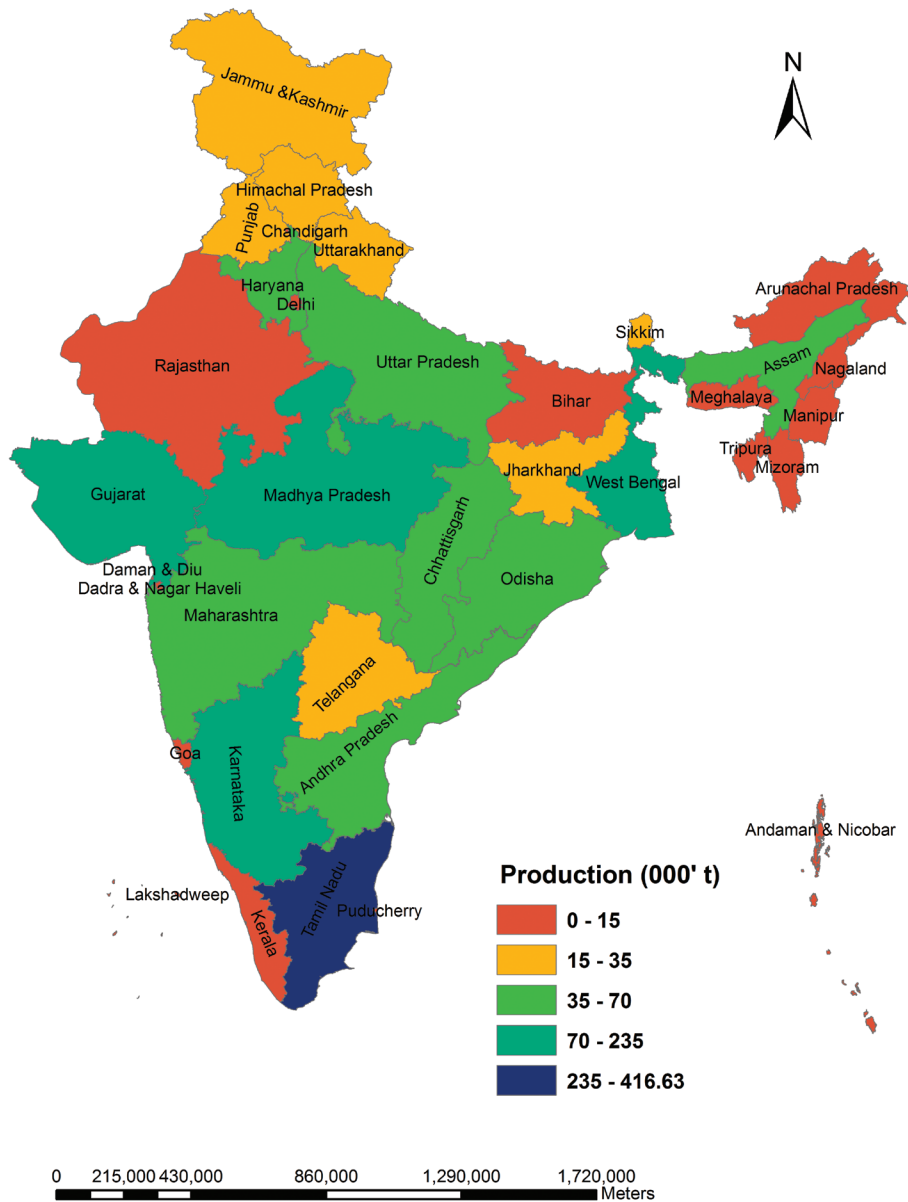


Table 4.15: State-wise area and production of major spices in India

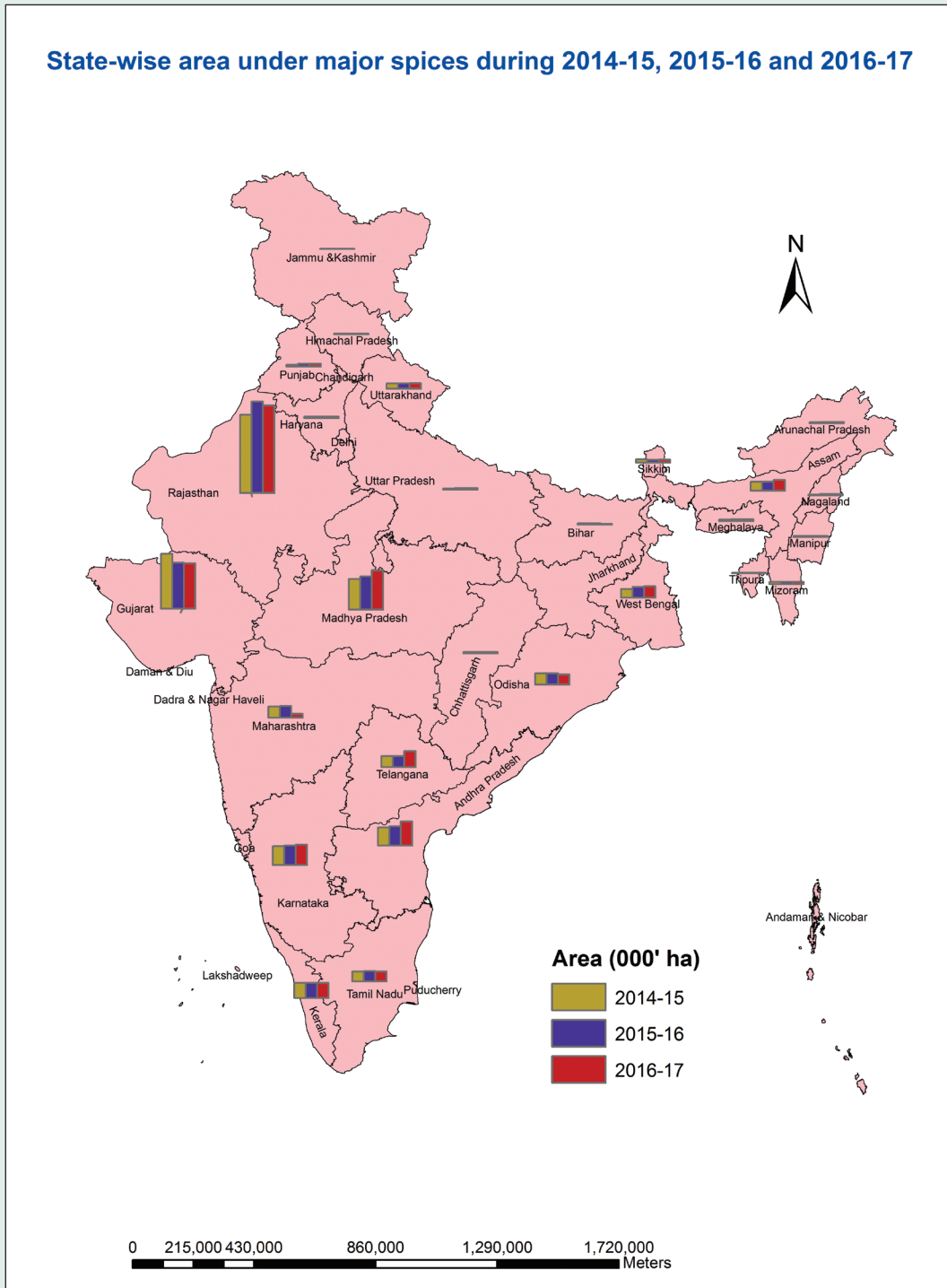
(Area: 000' ha, Production: 000' t)

States/ Union Territories	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Andhra Pradesh	200.67	918.01	212.74	766.16	267.50	1050.30
Arunachal Pradesh	10.17	64.27	11.44	68.72	11.50	68.70
Assam	98.60	321.03	100.53	333.69	120.00	291.30
Bihar	13.01	12.54	13.01	12.54	8.90	10.60
Chhattisgarh	11.69	11.65	11.75	11.85	12.10	12.30
Gujarat	608.86	1019.96	508.74	1077.57	502.30	868.10
Haryana	16.13	82.82	16.13	82.82	17.00	77.80
Himachal Pradesh	7.39	22.29	7.90	24.93	8.10	25.50
Jammu & Kashmir	4.94	1.07	4.92	0.96	4.90	1.00
Karnataka	206.51	345.52	215.96	387.62	225.50	399.50
Kerala	167.29	140.23	166.82	128.40	166.70	140.70
Madhya Pradesh	340.21	699.12	366.04	710.90	435.80	690.80
Maharashtra	123.24	130.09	128.70	416.20	41.70	371.80
Manipur	10.47	24.14	10.47	24.14	10.50	24.10
Meghalaya	17.50	83.88	18.37	90.26	18.50	92.20
Mizoram	23.30	65.72	24.57	68.89	24.80	97.20
Nagaland	9.77	39.16	15.00	119.25	15.00	109.30
Odisha	123.32	181.50	123.32	181.50	112.90	181.00
Punjab	21.34	91.52	31.33	98.88	31.41	98.90
Rajasthan	866.86	618.32	1014.55	1056.17	970.60	937.60
Sikkim	34.08	61.14	29.46	64.78	32.30	66.60
Tamil Nadu	107.50	187.91	113.11	212.51	107.60	192.50
Telangana	122.36	493.93	122.89	443.41	177.40	623.90
Tripura	5.69	18.04	5.69	18.04	5.70	623.90
Uttar Pradesh	58.04	221.71	58.59	217.67	60.60	227.50
Uttarakhand	8.09	41.08	14.55	36.89	14.60	36.80
West Bengal	97.56	207.78	118.25	329.90	128.10	356.60
Others	2.71	3.85	2.72	3.82	3.40	6.70
Total	3317.28	6108.28	3473.53	6988.47	3535.40	7077.30

Note : *: Provisional.

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area under major spices during 2014-15, 2015-16 and 2016-17



State-wise production of major spices during 2014-15, 2015-16 and 2016-17

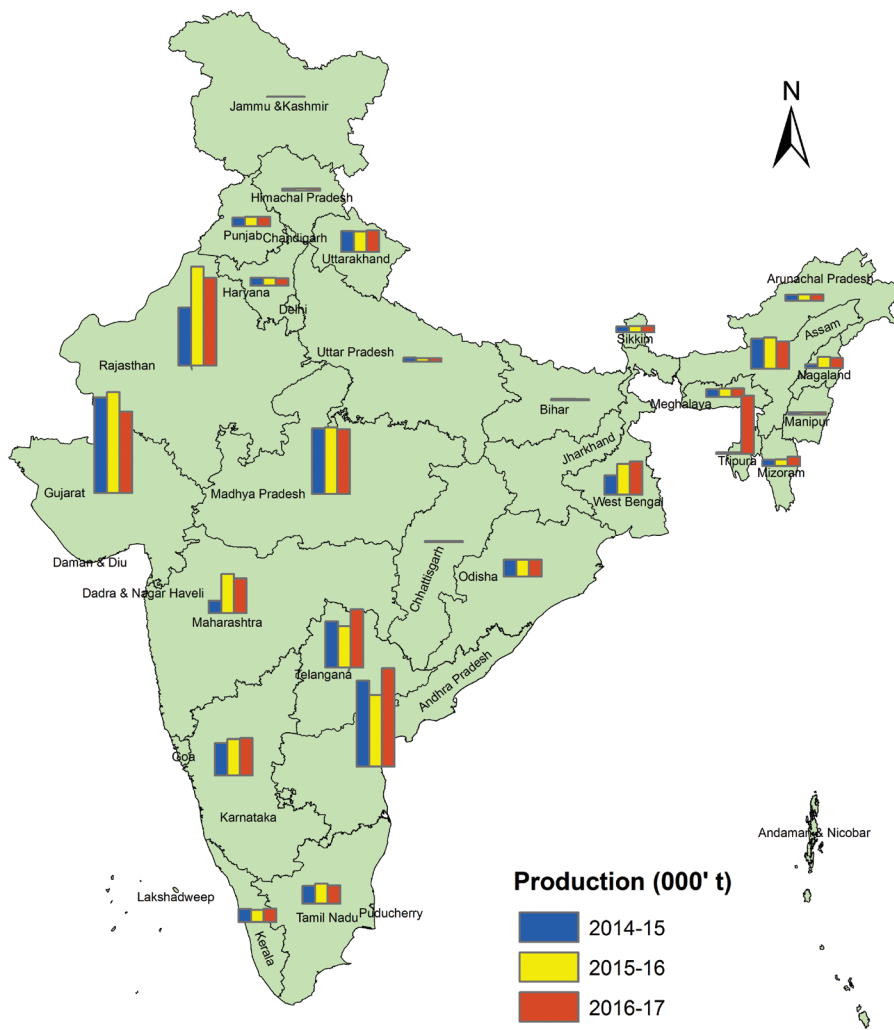


Table 4.16: State-wise area, production and productivity of plantation crops

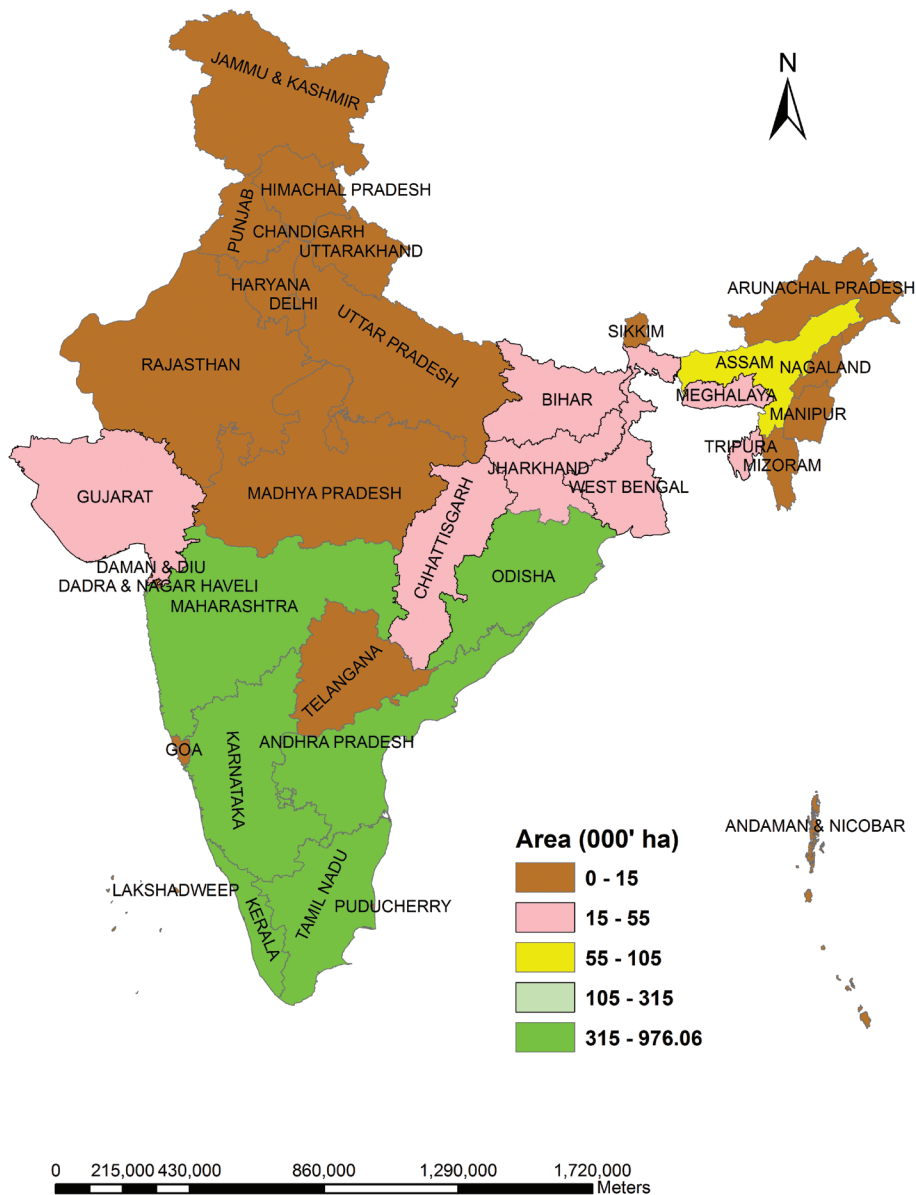
(Area: 000' ha, Production: 000't, Productivity: t/ha)

States/ Union Territories	2014-15			2015-16			2016-17*		
	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity	Area	Product- ion	Producti- vity
Andhra Pradesh	315.40	1113.91	3.53	314.19	1086.73	3.46	313.78	1188.51	3.79
Arunachal Pradesh	0.00	0.00	0.00	1.09	8.33	7.64	1.09	8.33	7.64
Assam	98.76	238.06	2.41	98.40	167.03	1.70	102.61	193.38	1.88
Bihar	14.90	97.33	6.53	14.90	97.30	6.53	15.05	98.27	6.53
Chhattisgarh	15.41	27.67	1.80	15.55	29.02	1.87	15.57	30.56	1.96
Gujarat	40.05	230.74	5.76	30.03	221.70	7.38	30.26	223.85	7.40
Jharkhand	14.83	4.50	0.30	14.83	5.00	0.34	14.83	5.83	0.39
Haryana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Karnataka	870.65	4078.36	4.68	901.57	4041.32	4.48	907.53	4142.32	4.56
Kerala	845.72	3581.93	4.24	973.07	5293.84	5.44	976.06	5347.87	5.48
Madhya Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	216.50	367.58	1.70	216.30	410.15	1.90	216.31	450.86	2.08
Manipur	0.90	0.15	0.17	0.90	0.32	0.36	0.90	0.32	0.36
Meghalaya	25.61	29.18	1.14	25.37	31.20	1.23	25.50	32.93	1.29
Mizoram	10.78	7.38	0.68	10.77	7.38	0.69	10.74	7.45	0.69
Nagaland	2.17	11.55	5.32	1.22	4.68	3.84	1.33	6.01	4.52
Odisha	231.09	309.10	1.34	233.82	306.50	1.31	233.81	319.39	1.37
Punjab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rajasthan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	638.55	4842.76	7.58	635.97	4316.41	6.79	620.76	4176.33	6.73
Telangana	1.69	17.44	10.32	0.48	0.01	0.02	0.50	1.45	2.90
Tripura	15.88	31.97	2.01	16.15	33.23	2.06	16.08	33.46	2.08
Uttar Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttarakhand	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Bengal	52.16	290.34	5.57	52.39	291.77	5.57	52.49	293.48	5.59
Others	122.49	294.90	2.41	122.66	306.37	2.50	121.56	306.72	2.52
Total	3533.54	15574.83	4.41	3679.67	16658.30	4.53	3676.77	16867.32	4.59

Note : *: Provisional.

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area under plantation crops during the year 2016-17



State-wise production of plantation crops during the year 2016-17

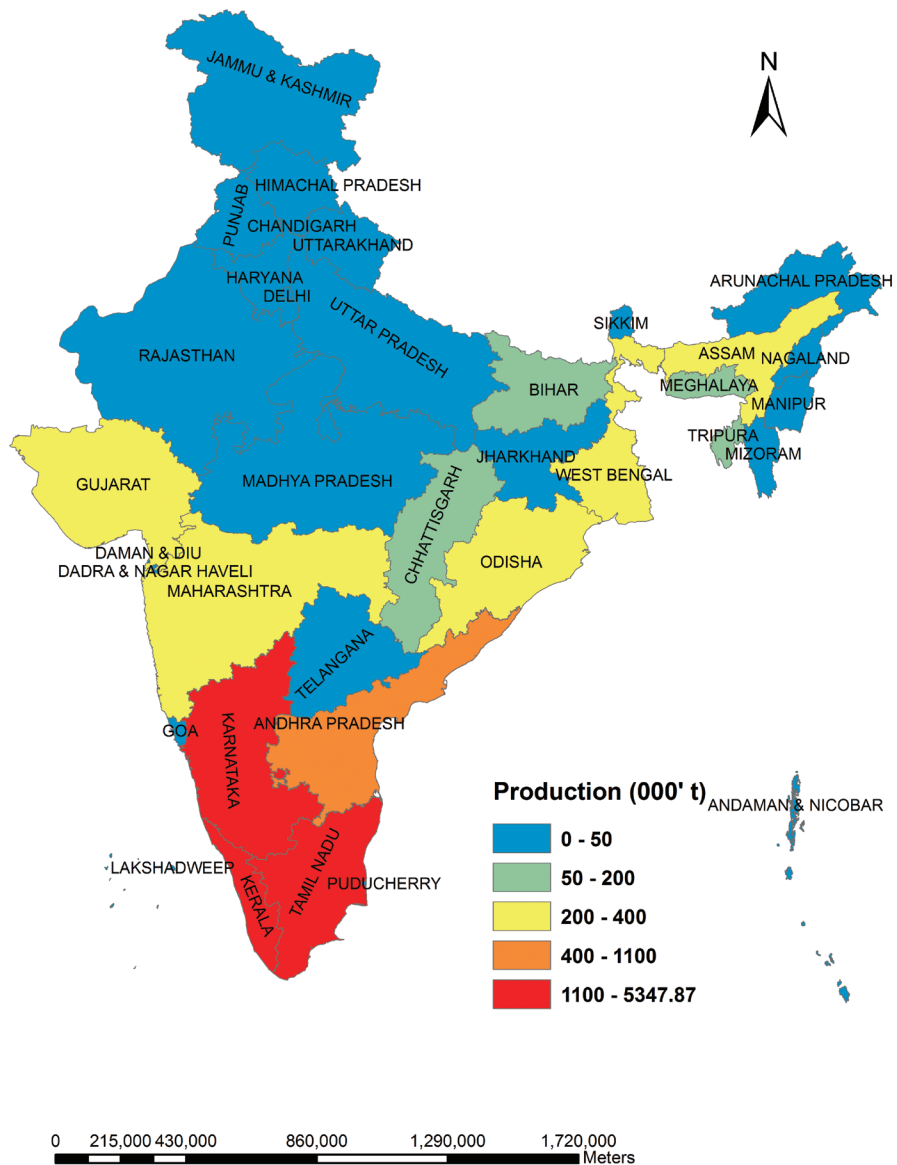


Table 4.17: State-wise area and production of aromatics & medicinal plants

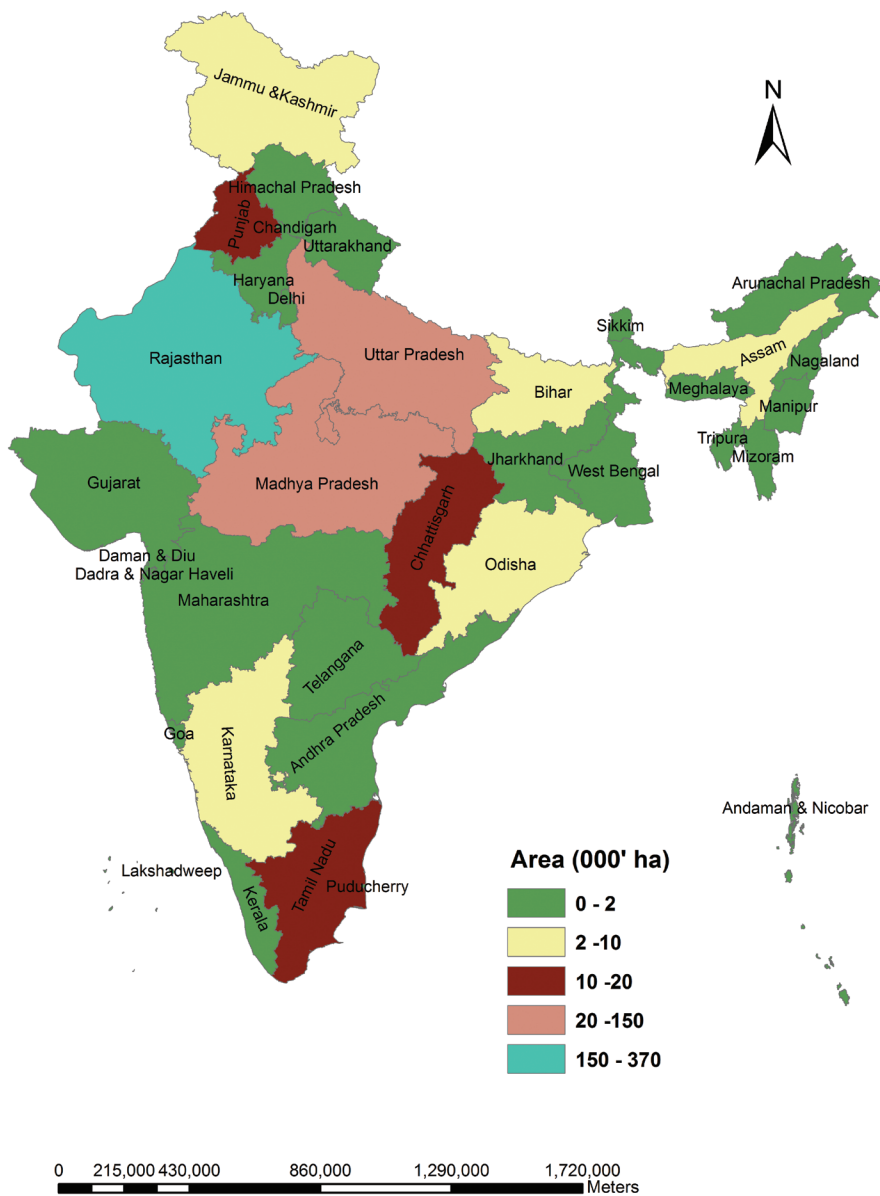
(Area: 000' ha, Production: 000' t)

States/ Union Territories	2014-15		2015-16		2016-17*	
	Area	Production	Area	Production	Area	Production
Andhra Pradesh	0.45	1.19	1.18	0.83	1.26	47.65
Arunachal Pradesh	5.15	109.18	0.46	0.99	0.46	0.99
Assam	4.39	0.16	4.40	0.17	4.49	0.17
Bihar	4.00	1.00	4.40	0.60	4.44	0.61
Chhattisgarh	7.95	55.19	8.53	59.97	8.56	60.4
Haryana	0.15	0.27	0.29	1.06	0.35	1.29
Himachal Pradesh	1.07	0.62	1.11	0.90	1.12	0.91
Jammu & Kashmir	N.A.	N.A.	3.79	0.01	3.83	0.01
Karnataka	3.77	26.38	2.24	16.35	2.2	16.19
Kerala	0.01	0.00	0.01	0.00	0.01	0.00
Madhya Pradesh	65.62	416.00	72.18	497.10	72.90	502.07
Maharashtra	0.32	0.26	0.80	0.02	0.02	0.03
Mizoram	1.10	0.95	1.75	0.69	0.93	0.90
Nagaland	N.A.	N.A.	0.11	0.47	0.11	0.47
Odisha	1.90	0.60	1.90	0.60	1.92	0.61
Punjab	15.10	2.90	12.46	2.36	12.52	2.43
Rajasthan	400.10	151.82	369.61	186.78	370.00	190.00
Tamil Nadu	13.98	219.76	15.01	240.11	13.83	192.54
Uttar Pradesh	133.37	13.40	133.70	13.40	135.04	13.53
Total	658.77	999.67	633.94	1022.50	634.00	1030.85

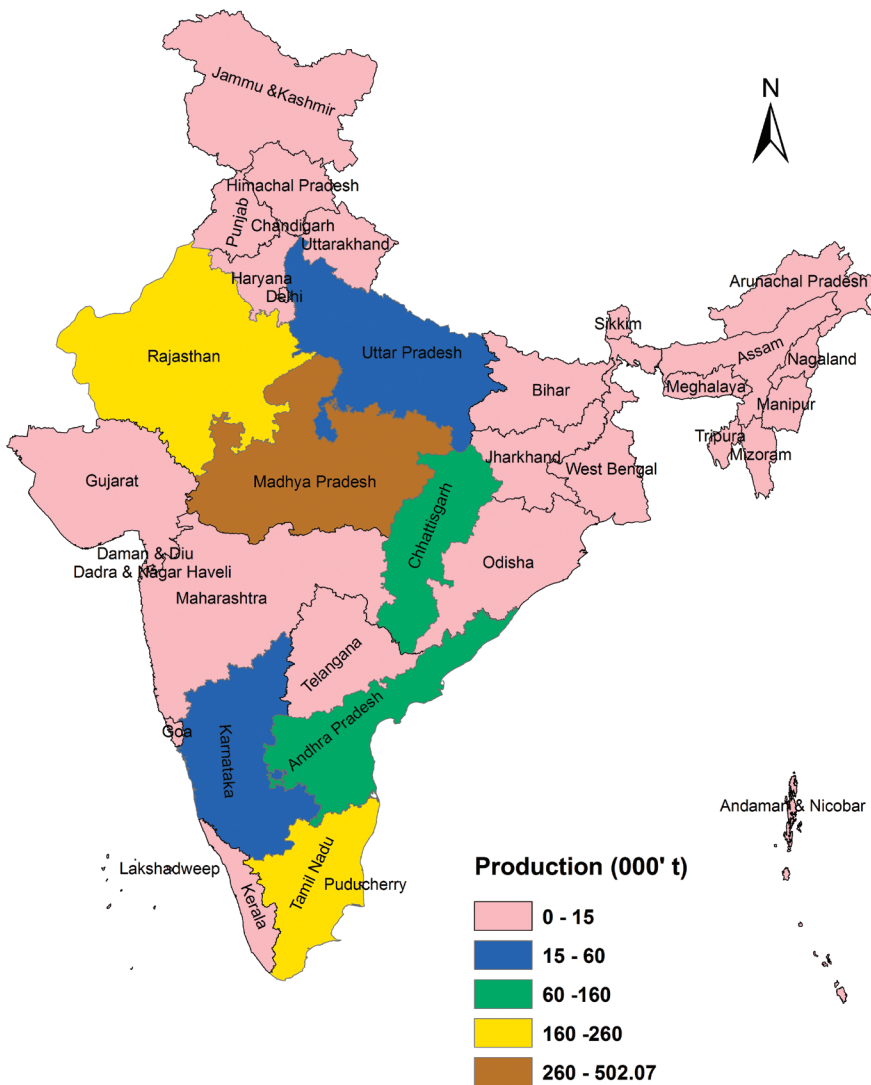
Note : 1. *: Provisional, 2. N.A.: Not available.

Source : Horticultural Statistics at a Glance 2017, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

State-wise area under aromatic and medicinal plants during the year 2016-17



State-wise production of aromatic and medicinal plants during the year 2016-17



0 215,000 430,000 860,000 1,290,000 1,720,000 Meters

Table 4.18: Percent share of production of major horticulture crops

Crops	Percent share of production				
	2012-13	2013-14	2014-15	2015-16	2016-17*
Vegetables	60.30	58.70	60.30	59.10	59.30
Fruits	30.20	32.10	30.80	31.50	31.50
Plantation crops	6.30	5.90	5.50	5.80	5.70
Spices	2.10	2.10	2.20	2.40	2.40
Flowers & Aromatics	1.00	1.00	1.10	1.10	1.10
Total (Horticulture)	100.00	100.00	100.00	100.00	100.00

Note : *: 3rd Advance Estimate.

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

Table 4.19: 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
Total	100.00	100.00	100.00	100.00	100.00	100.00

Note : *: 2nd Advance Estimate.

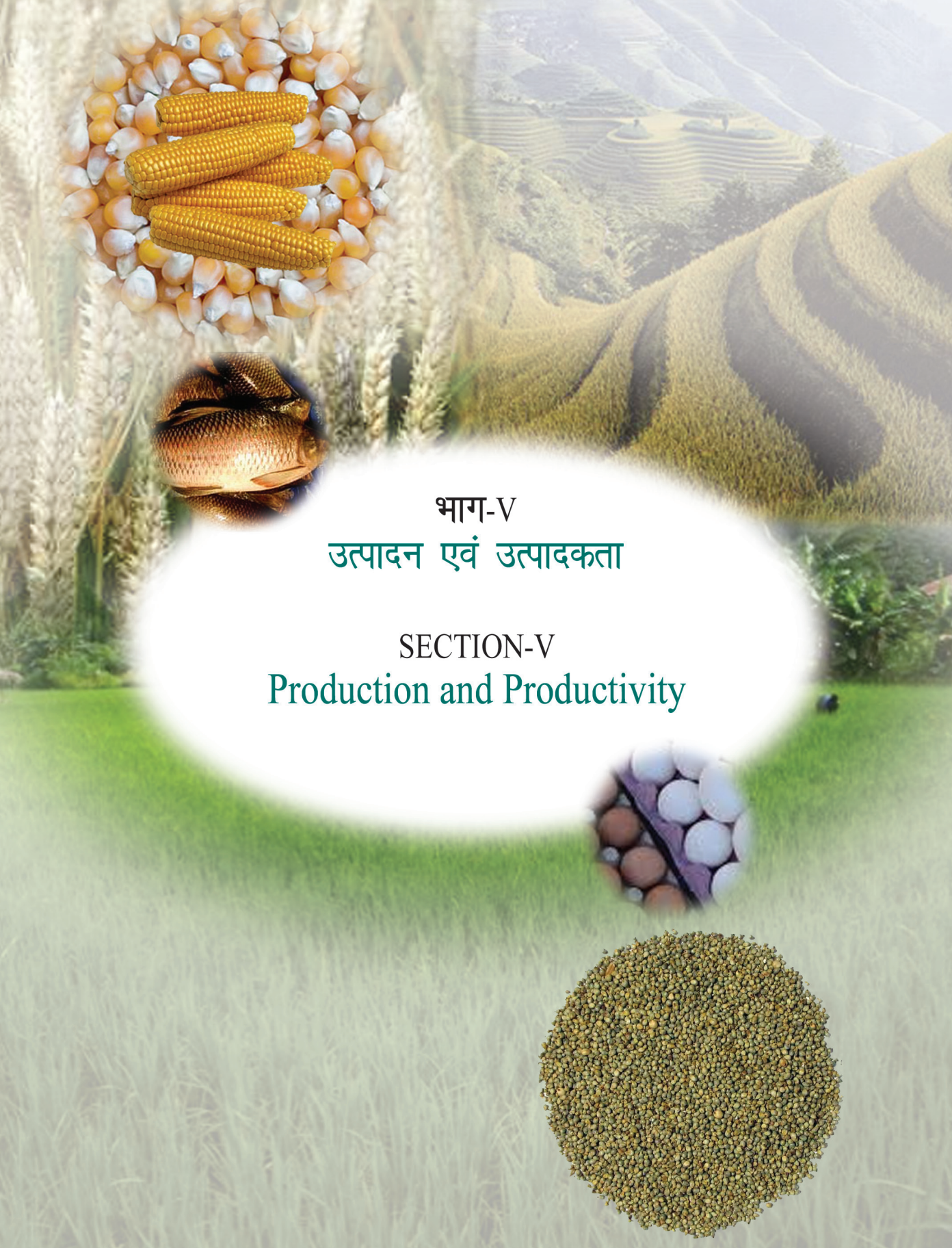
Source : *Horticultural Statistics at a Glance 2016*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: agricoop.nic.in/imagedefault/hortstat_glance.pdf)

Table 4.20: Production of Horticulture vis-à-vis Foodgrains

Year	Production (In Million Tonnes)	
	Total Horticulture	Total Food grains
2001-02	145.79	212.85
2002-03	144.38	174.77
2003-04	153.30	213.19
2004-05	166.94	198.36
2005-06	182.82	208.60
2006-07	191.81	217.28
2007-08	211.24	230.78
2008-09	214.72	234.47
2009-10	223.09	218.11
2010-11	240.53	244.49
2011-12	257.28	259.29
2012-13	268.85	257.13
2013-14	277.35	265.57
2014-15	280.99	252.02
2015-16	286.19	251.57
2016-17*	295.16	273.38

Note : *: 2nd Advance Estimates for Horticulture and 3rd Advance Estimates for Foodgrains.

Source : *Horticultural Statistics at a Glance 2017*, Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare, Government of India. (Website: 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)

Crops	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
	All foodgrains													
Area	97.32	115.58	124.32	126.67	127.84	121.05	121.33	126.67	124.75	120.78	125.04	124.30	123.22	128.03
Production	50.82	82.02	108.42	129.59	176.39	196.81	218.11	244.49	259.29	257.13	265.04	252.02	251.57	275.68
Yield	522	710	872	1023	1380	1626	1798	1930	2078	2129	2120	2028	2042	2153
Rice														
Production	20.58	34.58	42.22	53.63	74.29	84.98	89.09	95.98	105.30	105.24	106.54	105.48	104.41	110.15
Yield	668	1013	1123	1336	1740	1901	2125	2239	2393	2461	2416	2391	2400	2550
Wheat														
Production	6.46	11.00	23.83	36.31	55.14	69.68	80.80	86.87	94.88	93.51	95.85	86.53	93.29	98.38
Yield	663	851	1307	1630	2281	2708	2839	2988	3177	3117	3145	2750	3034	3216
Coarse cereals														
Production	15.38	23.74	30.55	29.02	32.70	31.08	33.55	43.40	42.01	40.04	43.29	42.86	37.94	44.19
Yield	408	528	665	695	900	1027	1212	1531	1590	1617	1717	1703	1579	1784
Sugarcane														
Production	57.05	110.00	126.37	154.25	241.05	295.96	292.30	342.38	361.04	341.20	352.14	362.33	348.45	306.72
Yield	33422	45549	48322	57844	65395	68577	70020	70091	71668	68254	70522	71512	71720	69886
Pulses														
Production	8.41	12.70	11.82	10.63	14.26	11.08	14.66	18.24	17.09	18.34	19.25	17.15	16.35	22.95
Yield	441	539	524	473	578	544	630	691	699	789	764	728	656	779
Oilseeds														
Production	5.16	6.98	9.63	9.37	18.61	18.44	24.88	32.48	29.80	30.94	32.75	27.51	25.25	32.10
Yield	481	507	579	532	771	810	958	1193	1133	1168	1168	1075	968	1225
Milk														
Production	17.00	20.00	22.00	31.60	53.90	80.60	116.40	121.80	127.90	132.40	137.70	146.30	155.50	165.40
Fish														
Production	0.75	1.16	1.76	2.44	3.84	5.66	8.00	8.42	8.67	9.04	9.58	10.26	10.76	11.41 [#]
Gross irrigated area	22.56	27.98	38.20	49.78	63.20	76.19	85.08	88.94 [#]	91.79 [#]	92.25 [#]	95.77 [#]	94.46 [#]	N.A.	N.A.
Fertiliser consumption	0.07	0.29	2.18	5.52	12.55	16.70	26.49	28.12	27.79	25.54	24.48	25.58	26.75	25.95

Note : 1. N.A.: Not available, 2. #: Provisional, 3. *: 4th Advance estimates.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.2: Season-wise normal estimates of area, production and yield of major crops

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

Crop	Area			Production			Yield		
	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total
Foodgrains									
Rice	39.59	4.11	43.70	91.88	13.53	105.42	2321	3296	2412
Wheat	N.A.	30.44	30.44	N.A.	92.61	92.61	N.A.	3042	3042
Jowar	2.35	3.75	6.10	2.53	2.77	5.30	1078	738	869
Bajra	7.67	N.A.	7.67	9.10	N.A.	9.10	1188	N.A.	1188
Ragi	1.17	N.A.	1.17	1.87	N.A.	1.87	1602	N.A.	1602
Maize	7.33	1.57	8.90	16.58	6.42	23.00	2262	4084	2584
Coarse Cereals	19.21	5.99	25.19	30.51	10.84	41.35	1588	1811	1641
Total Cereals	58.80	40.54	99.34	122.39	116.99	239.37	2081	2886	2410
Tur or Arhar	3.92	N.A.	3.92	2.84	N.A.	2.84	725	N.A.	725
Gram	8.68	N.A.	8.68	N.A.	8.09	8.09	932	N.A.	932
Total Pulses	10.56	13.72	24.28	5.85	11.79	17.64	554	859	726
Total Foodgrains	69.36	54.26	123.62	128.23	128.78	257.01	1849	2373	2079
Oilseeds									
Groundnut	4.15	0.82	4.97	5.53	1.57	7.10	1334	1906	1429
Rapeseed & Mustard	N.A.	6.09	6.09	N.A.	7.12	7.12	N.A.	1169	1169
Soybean	11.04	N.A.	11.04	11.54	N.A.	11.54	1045	N.A.	1045
Sunflower	0.23	0.43	0.66	0.13	0.33	0.46	546	771	693
Castor seed	1.18	N.A.	1.18	1.92	N.A.	1.92	1623	N.A.	1623
Total Nine Oilseeds	18.69	7.82	26.51	19.98	9.27	29.25	1069	1185	1104
Others Cash Crops									
Sugarcane	5.00	N.A.	5.00	353.03	N.A.	353.03	70539	N.A.	70539
Cotton [@]	12.25	N.A.	12.25	34.03	N.A.	34.03	472	N.A.	472
Jute & Mesta [§]	0.84	N.A.	0.84	11.13	N.A.	11.13	2388	N.A.	2388

Note : 1. @: Production in million bales of 170 kg each, 2. \$: Production in million bales of 180 kg each, 3. N.A.: Not available, 4. Normal estimates = Average of estimates from 2011-12 to 2015-16.

Source : Normal Estimates of Area, Production and Yield of Selected Principal Crop 2017, Agricultural Statistics Division, Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Govt. of India, (Website: <http://eands.dacnet.nc.in>)

Table 5.3: Targets and achievements of production of major crops

Crop	XI th Plan		2012-13		2013-14		2014-2015		2015-16		2016-17*	
	Targets	Achievements	Targets	Achievements	Targets	Achievements	Targets	Achievements	Targets	Achievements	Targets	Achievements
Rice	494.50	486.24	104.00	105.24	105.00	106.65	106.00	105.48	106.10	104.41	108.50	110.15
Wheat	399.00	421.80	88.00	93.51	92.50	95.85	94.00	86.53	94.75	92.29	96.50	98.38
Coarse Cereals	208.60	200.03	44.00	40.04	42.50	43.29	41.50	42.86	43.20	38.52	44.35	44.19
Pulses	81.00	79.32	18.24	18.34	19.00	19.25	19.50	17.15	20.05	16.35	20.75	22.95
Foodgrains	1183.10	1187.43	254.24	257.13	259.00	265.04	261.00	252.02	264.10	251.57	270.10	275.68
Oilseeds	160.15	144.85	33.50	30.94	31.00	32.75	33.00	27.51	33.00	25.25	35.00	32.10
Sugarcane	1655.00	1628.94	352.00	341.20	340.00	352.14	345.00	362.33	355.00	348.45	355.00	306.72
Cotton [#]	134.00	140.38	35.00	34.22	35.00	35.90	35.00	34.80	35.15	30.01	36.00	33.09
Jute & Mesta [@]	57.00	55.42	12.00	10.93	12.00	11.69	11.20	11.13	11.70	10.52	11.70	10.60

Note : 1. *: 4th Advance estimates, 2. #: Million Bales of 170 kg each, 3. @: Million Bales of 180 kg each.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.4: All India estimates of yield of major crops

Crop	(q/ha)												
	1950-51	1990-91	2000-01	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*			
Rice	6.68	17.40	19.01	22.39	23.93	24.61	24.16	23.91	24.00	25.50			
Wheat	6.63	22.81	27.08	29.88	31.77	31.17	31.45	27.50	30.34	32.16			
Jowar	3.53	8.14	7.64	9.49	9.57	8.50	9.57	8.84	6.97	8.89			
Bajra	2.88	6.58	6.88	10.79	11.71	11.98	11.84	12.55	11.32	13.11			
Maize	5.47	15.18	18.22	25.40	24.78	25.66	26.76	26.32	25.63	26.64			
Coarse Cereals	4.08	9.00	10.27	15.31	15.90	16.17	17.17	17.03	15.79	17.84			
Gram	4.82	7.12	7.44	8.95	9.28	10.36	9.60	8.89	8.40	9.73			
Tur or Arhar	7.88	6.73	6.18	6.55	6.62	7.76	8.13	7.29	6.46	8.85			
Total Pulses	4.41	5.78	5.44	6.91	6.99	7.89	7.64	7.28	6.56	7.79			
Total Foodgrains	5.22	13.80	16.26	19.30	20.78	21.29	21.20	20.28	20.42	21.53			
Sugarcane	334.22	653.95	685.78	700.91	703.17	682.54	705.22	715.12	707.95	698.86			
Groundnut	7.75	9.04	9.77	14.11	13.05	9.95	17.64	15.52	14.65	14.24			
Rapeseed & Mustard	3.68	9.04	9.36	11.85	11.45	12.62	11.85	10.83	11.83	13.24			
Soybean	4.26	10.15	8.23	13.27	12.07	13.53	10.12	9.51	7.38	12.19			
Sunflower	6.53	5.35	6.05	7.01	6.92	6.55	7.50	7.36	6.08	6.99			
Total oilseeds	4.81	7.71	8.10	11.93	11.35	11.68	11.68	10.75	9.68	12.25			
Cotton	0.88	2.25	1.90	4.99	4.91	4.86	5.10	4.62	4.15	5.19			
Tobacco	7.31	13.53	13.18	16.87	16.13	15.42	16.12	18.42	17.81	N.A.			

Note : 1. N.A.: Not available, 2. *, 4th Advance Estimate.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

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	8.2	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
2012-13	120.78	-3.2	257.13	-0.8	2129	2.5	51.2
2013-14	125.04	3.5	265.04	3.1	2120	-0.4	51.9
2014-15	124.30	-0.6	252.02	-4.9	2028	-4.3	53.1
2015-16	123.22	-0.9	251.57	-0.2	2042	0.7	N.A.
2016-17*	128.03	3.9	275.68	9.6	2153	5.4	N.A.
2017-18 ^s			247.57-288.80				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

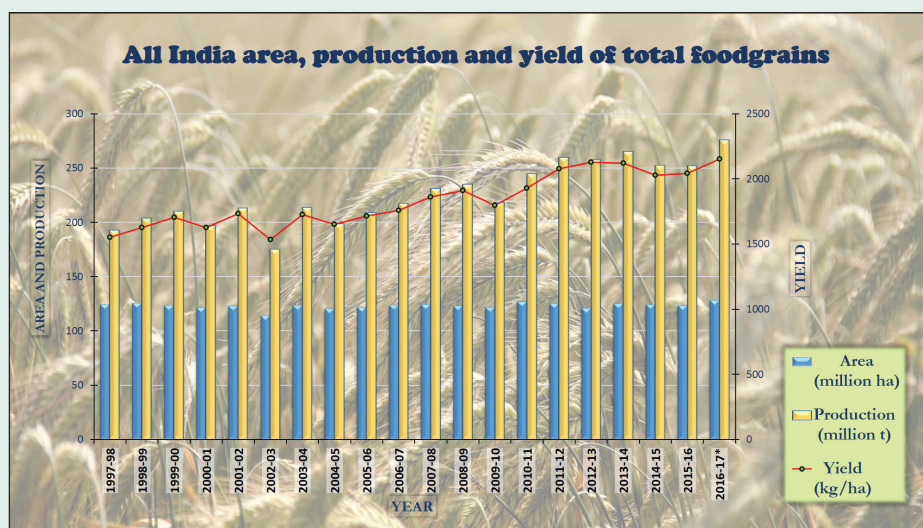


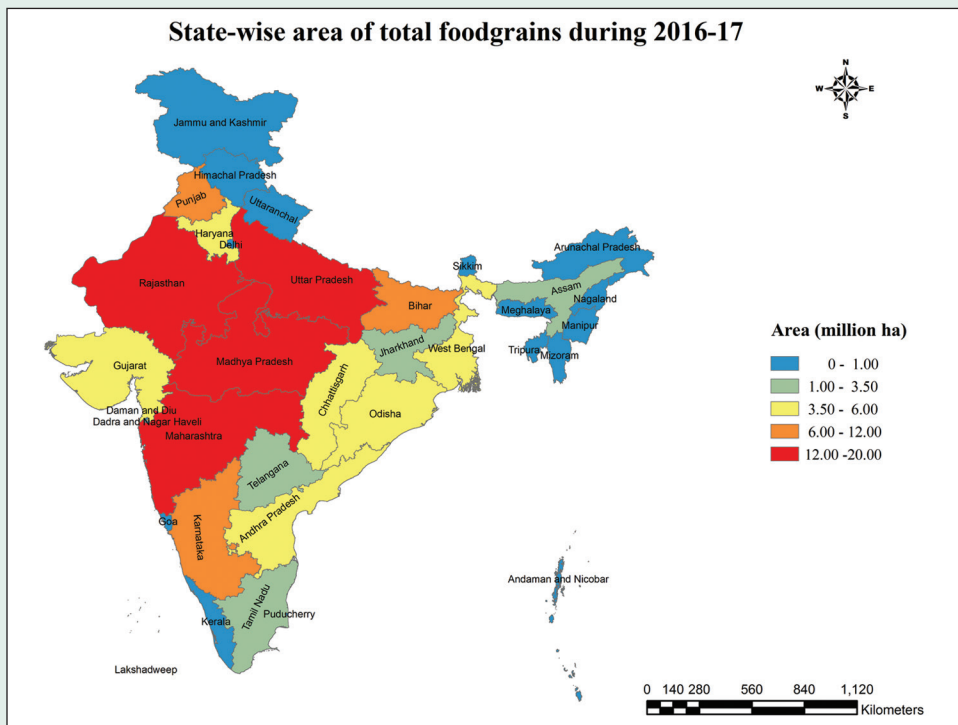
Table 5.6: State-wise area, production and yield of total foodgrains during 2015-16 and 2016-17 along with coverage under irrigation

State	2016-17 [#]					2015-16					Area under irrigation (%) 2014-15*
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production	% to all India	Yield	
Uttar Pradesh	19.92	15.56	49.14	17.83	2467	19.36	15.71	42.55	16.91	2198	80.4
Madhya Pradesh	17.03	13.30	32.98	11.96	1937	15.66	12.71	30.39	12.08	1941	59.7
Punjab	6.42	5.02	27.99	10.15	4360	6.65	5.40	28.40	11.29	4269	99.0
Rajasthan	14.11	11.02	19.28	7.00	1367	12.98	10.53	18.04	7.17	1390	35.9
Haryana	4.59	3.59	17.16	6.22	3735	4.48	3.64	16.36	6.50	3648	92.7
West Bengal	5.98	4.67	17.06	6.19	2853	6.38	5.18	18.01	7.16	2823	48.4
Maharashtra	12.16	9.50	15.79	5.73	1298	11.21	9.10	8.75	3.48	781	18.0
Bihar	6.61	5.17	15.58	5.65	2355	6.57	5.33	14.51	5.77	2208	69.8
Andhra Pradesh	3.97	3.10	10.37	3.76	2610	4.14	3.36	10.63	4.23	2571	66.5
Karnataka	7.29	5.69	9.64	3.50	1323	7.33	5.95	9.92	3.94	1354	27.3
Chhattisgarh	5.05	3.95	9.23	3.35	1827	4.99	4.05	6.65	2.65	1334	31.6
Odisha	4.80	3.75	9.06	3.29	1887	4.82	3.91	6.41	2.55	1330	29.0
Telangana	3.29	2.57	8.37	3.03	2545	2.18	1.77	5.13	2.04	2353	64.3
Gujarat	3.80	2.97	7.42	2.69	1953	3.14	2.55	6.28	2.50	2000	45.4
Tamil Nadu	2.99	2.33	6.22	2.26	2084	3.75	3.04	11.48	4.56	3063	56.8
Assam	2.67	2.08	5.47	1.98	2049	2.68	2.18	5.36	2.13	1997	10.4
Jharkhand	2.89	2.25	5.37	1.95	1860	2.65	2.15	4.09	1.63	1546	8.8
Uttarakhand	0.88	0.69	1.87	0.68	2131	0.88	0.71	1.75	0.69	1989	44.8
Others	3.59	2.81	7.69	2.79	@	3.38	2.74	6.86	2.73	@	-
All India	128.03	100.00	275.68	100.00	2153	123.22	100.00	251.57	100.00	2042	53.1

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *: Provisional, 3. #: Fourth Advance Estimates, 4. @: Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

State-wise area of total foodgrains during 2016-17



State-wise production of total foodgrains during 2016-17

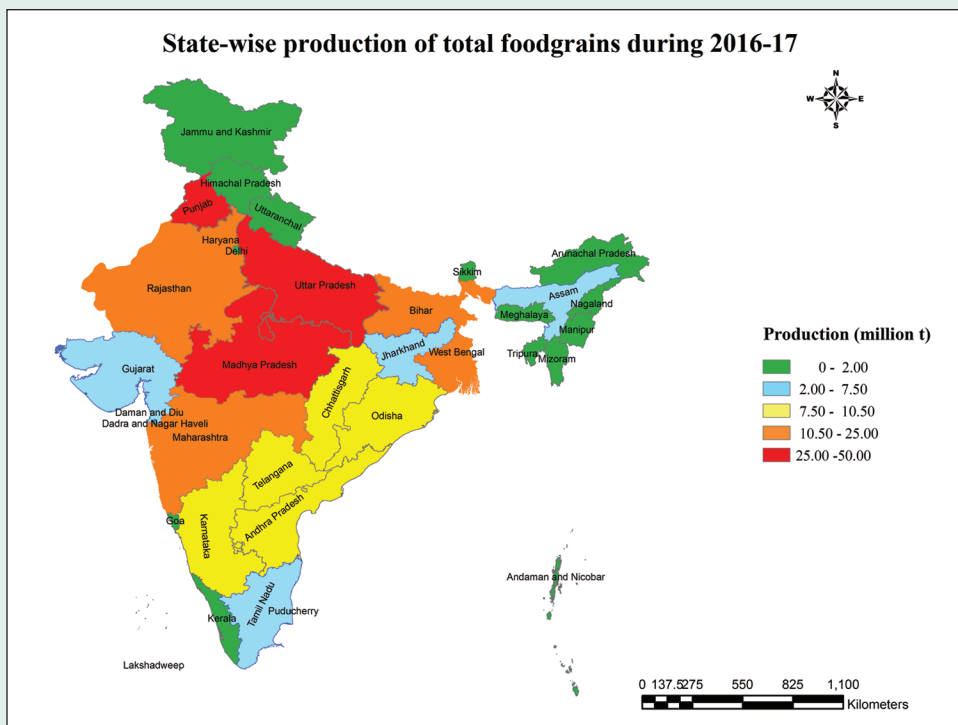


Table 5.7: All India area, production and yield of Rice

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	1.1	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
2012-13	42.75	-2.9	105.23	-0.1	2461	2.8	58.5
2013-14	44.14	3.3	106.65	1.3	2416	-1.8	59.6
2014-15	44.11	-0.1	105.48	-1.1	2391	-1.0	60.1
2015-16	43.50	-1.4	104.41	-1.0	2400	0.4	N.A.
2016-17*	43.19	-0.7	110.15	5.5	2550	6.3	N.A.
2017-18 ^s			99.91-119.07				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

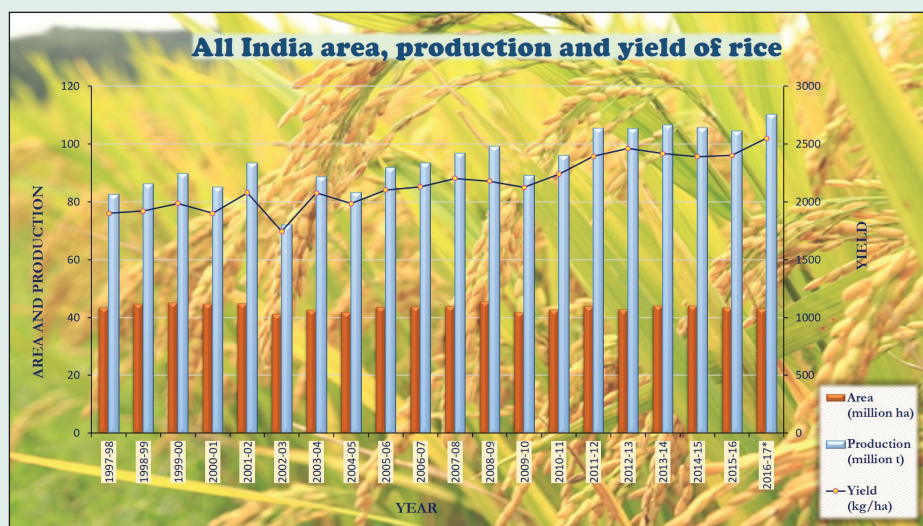


Table 5.8: State-wise area, production and yield of Rice during 2015-16 and 2016-17 along with coverage under irrigation

State	2016-17 [#]				2015-16				Area under irrigation (%) 2014-15*		
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production		% to all India	Yield
West Bengal	5.15	11.91	15.09	13.70	2933	5.52	12.70	15.95	15.28	2888	46.9
Uttar Pradesh	5.65	13.07	12.95	11.76	2295	5.86	13.48	12.50	11.97	2133	86.7
Punjab	2.76	6.39	11.03	10.02	3998	2.98	6.84	11.82	11.32	3974	99.7
Odisha	3.88	8.98	8.38	7.61	2162	3.94	9.06	5.88	5.63	1491	33.3
Chattisgarh	3.83	8.87	8.05	7.31	2101	3.82	8.77	5.79	5.54	1517	35.7
Bihar	3.29	7.63	7.48	6.79	2270	3.23	7.43	6.80	6.52	2104	65.0
Andhra Pradesh	2.11	4.87	7.45	6.76	3539	2.16	4.97	7.49	7.17	3465	97.1
Assam	2.45	5.67	5.23	4.75	2134	2.49	5.71	5.13	4.91	2062	11.0
Telangana	1.68	3.89	5.17	4.70	3075	1.05	2.40	3.05	2.92	2913	98.1
Haryana	1.39	3.21	4.45	4.04	3213	1.35	3.11	4.15	3.97	3061	99.9
Madhya Pradesh	2.29	5.30	4.23	3.84	1847	2.02	4.65	3.55	3.40	1752	34.2
Tamil Nadu	1.44	3.34	4.04	3.67	2796	2.00	4.60	7.52	7.20	3758	94.4
Jharkhand	1.59	3.68	3.56	3.23	2238	1.59	3.65	2.88	2.76	1814	5.0
Maharashtra	1.63	3.76	3.35	3.04	2059	1.50	3.46	2.59	2.48	1725	26.1
Karnataka	1.01	2.33	2.54	2.30	2522	1.11	2.55	3.02	2.89	2722	76.0
Gujarat	0.84	1.94	1.93	1.75	2306	0.77	1.77	1.70	1.63	2205	61.5
Uttarakhand	0.26	0.60	0.63	0.57	2418	0.26	0.61	0.64	0.61	2420	70.0
Others	1.97	4.55	4.59	4.17	@	1.84	4.23	3.96	3.79	@	-
All India	43.19	100.00	110.15	100.00	2550	43.50	100.00	104.41	100.00	2400	60.1

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *, Provisional, 3. #, Fourth Advance Estimates, 4. @: Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Production and productivity

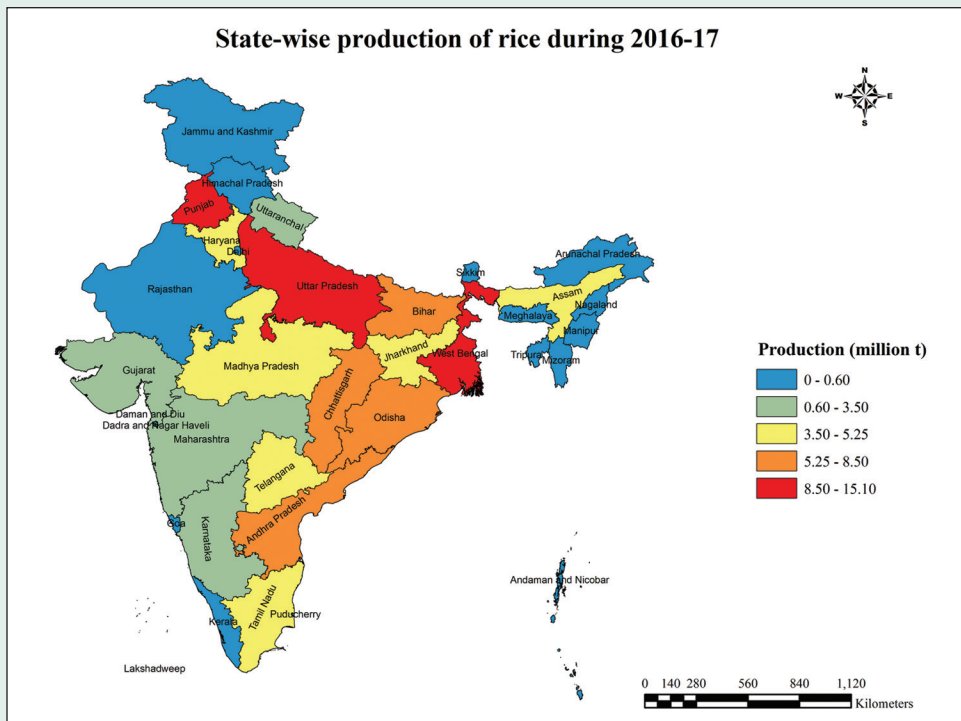
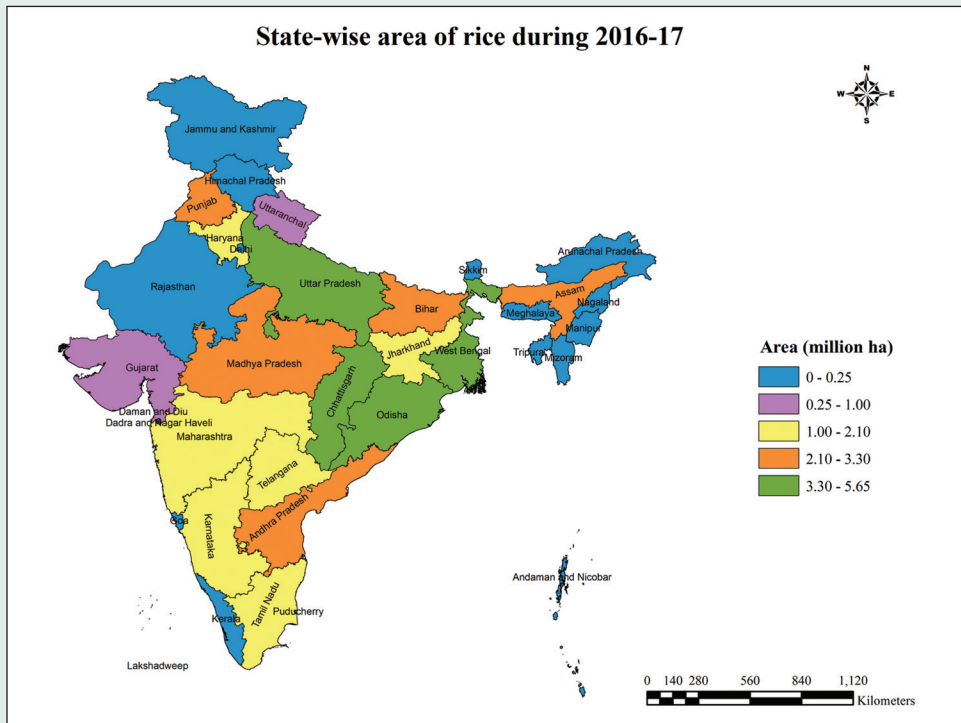


Table 5.9: All India area, production and yield of Wheat

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	89.9
2005-06	26.48	0.4	69.35	1.0	2619	0.7	90.6
2006-07	27.99	5.7	75.81	9.3	2708	3.4	90.9
2007-08	28.04	0.2	78.57	3.6	2802	3.5	91.3
2008-09	27.75	-1.0	80.68	2.7	2907	3.7	91.7
2009-10	28.46	2.6	80.80	0.1	2839	-2.3	91.8
2010-11	29.07	2.1	86.87	7.5	2988	5.2	92.2
2011-12	29.86	2.7	94.88	9.2	3177	6.3	93.0
2012-13	30.00	0.5	93.51	-1.4	3117	-1.9	93.5
2013-14	30.47	1.6	95.85	2.5	3146	0.9	93.6
2014-15	31.47	3.3	86.53	-9.7	2750	-12.6	94.2
2015-16	30.42	-3.3	92.29	6.7	3034	10.3	N.A.
2016-17*	30.60	0.6	98.38	6.6	3216	6.0	N.A.
2017-18 [§]			91.00-104.44				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

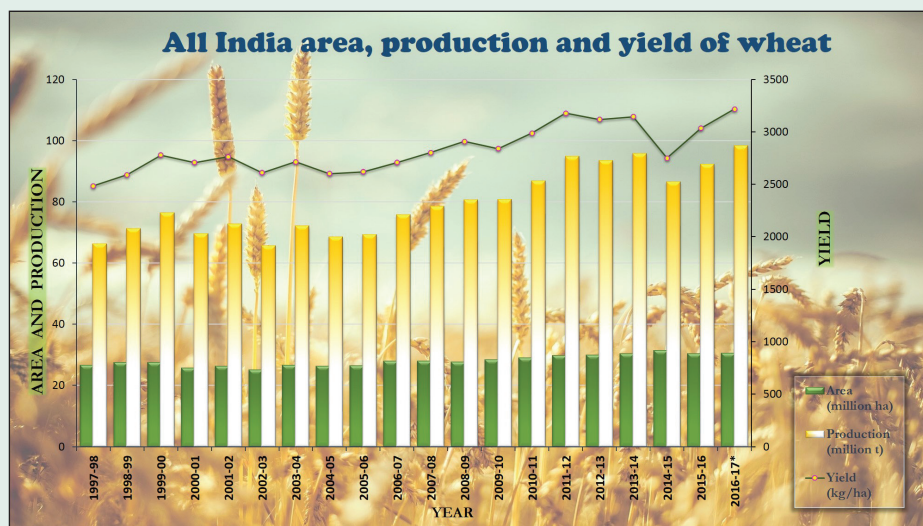


Table 5.10: State-wise area, production and yield of Wheat during 2015-16 and 2016-17 along with coverage under irrigation

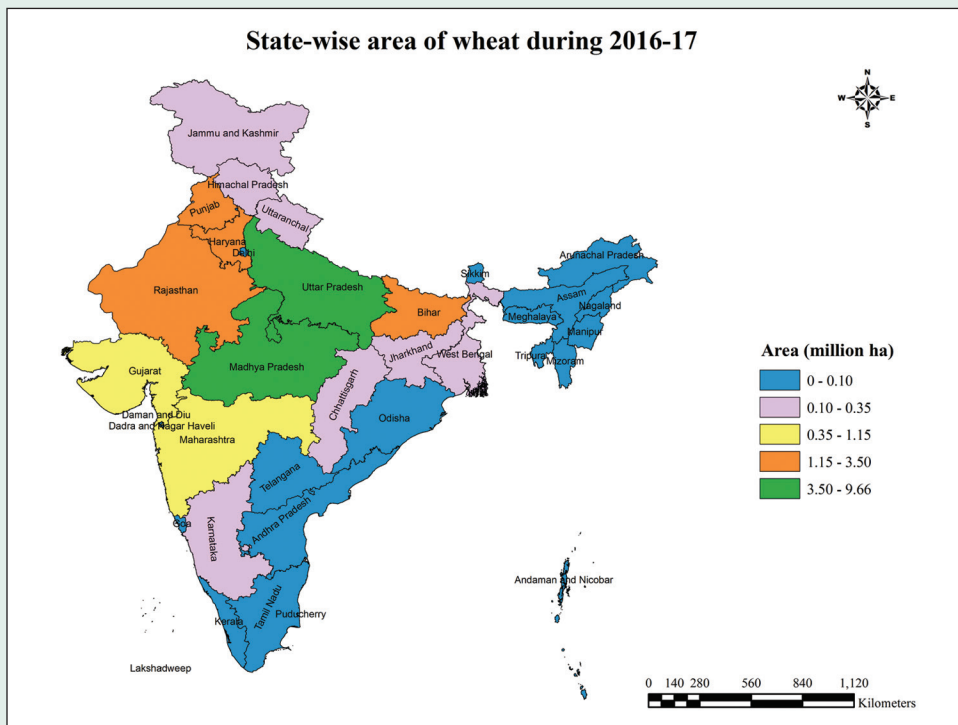
(Area: million ha, Production: million t, Yield: kg/ha)

State	2016-17 [#]				2015-16				Area under irrigation (%) 2014-15 [*]		
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production		% to all India	Yield
Uttar Pradesh	9.66	31.56	30.06	30.55	3113	9.65	31.71	25.43	27.55	2636	98.8
Madhya Pradesh	6.03	19.70	17.94	18.23	2976	5.91	19.43	17.69	19.17	2993	93.4
Punjab	3.50	11.42	16.44	16.71	4704	3.51	11.53	16.08	17.42	4583	99.1
Haryana	2.55	8.34	11.52	11.71	4514	2.58	8.47	11.35	12.30	4407	99.5
Rajasthan	2.83	9.26	9.00	9.15	3175	3.11	10.22	9.87	10.70	3175	99.6
Bihar	2.10	6.85	5.09	5.17	2427	2.11	6.94	4.74	5.13	2244	94.9
Gujarat	1.00	3.26	2.74	2.79	2751	0.85	2.80	2.48	2.69	2919	90.8
Maharashtra	1.07	3.51	1.67	1.70	1558	0.91	2.99	0.98	1.06	1077	73.9
West Bengal	0.33	1.08	0.93	0.95	2818	0.34	1.12	0.96	1.04	2824	98.7
Uttarakhand	0.34	1.12	0.88	0.89	2564	0.34	1.12	0.77	0.84	2258	59.5
Himachal Pradesh	0.35	1.13	0.70	0.72	2033	0.34	1.12	0.67	0.72	1958	21.8
Jammu & Kashmir	0.29	0.96	0.47	0.48	1615	0.28	0.91	0.54	0.59	1947	28.5
Jharkhand	0.21	0.69	0.43	0.44	2027	0.16	0.51	0.29	0.31	1835	90.9
Karnataka	0.17	0.54	0.17	0.17	1018	0.17	0.57	0.16	0.17	897	60.9
Chhattisgarh	0.11	0.37	0.16	0.16	1391	0.11	0.11	0.14	0.15	1270	75.7
Assam	0.03	0.08	0.03	0.03	1192	0.02	0.07	0.03	0.04	1633	10.9
Telangana	0.01	0.02	0.01	0.01	1600	0.01	0.02	0.01	0.01	1700	99.2
Others	0.03	0.11	0.14	0.15	@	0.03	0.10	0.11	0.12	@	-
All India	30.60	100.00	98.38	100.00	3216	30.42	99.75	92.29	100.00	3034	94.2

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *: Provisional, 3. #: Fourth Advance Estimates, 4. @: Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

State-wise area of wheat during 2016-17



State-wise production of wheat during 2016-17

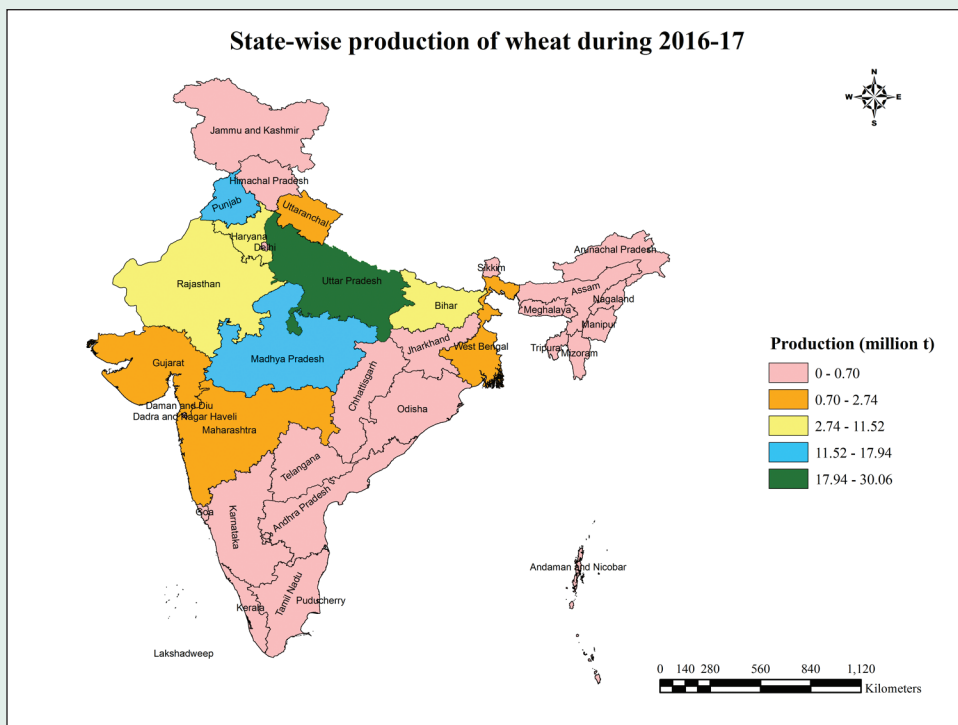


Table 5.11: All India area, production and yield of Jowar

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
2012-13	6.21	-0.6	5.28	-11.7	850	-11.2	9.7
2013-14	5.79	-6.8	5.54	4.9	957	12.6	9.6
2014-15	6.16	6.4	5.45	-1.6	884	-7.6	9.9
2015-16	6.08	-1.3	4.24	-22.2	697	-21.2	N.A.
2016-17*	5.14	-15.5	4.57	7.8	889	27.5	N.A.
2017-18 [§]			2.18-7.24				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

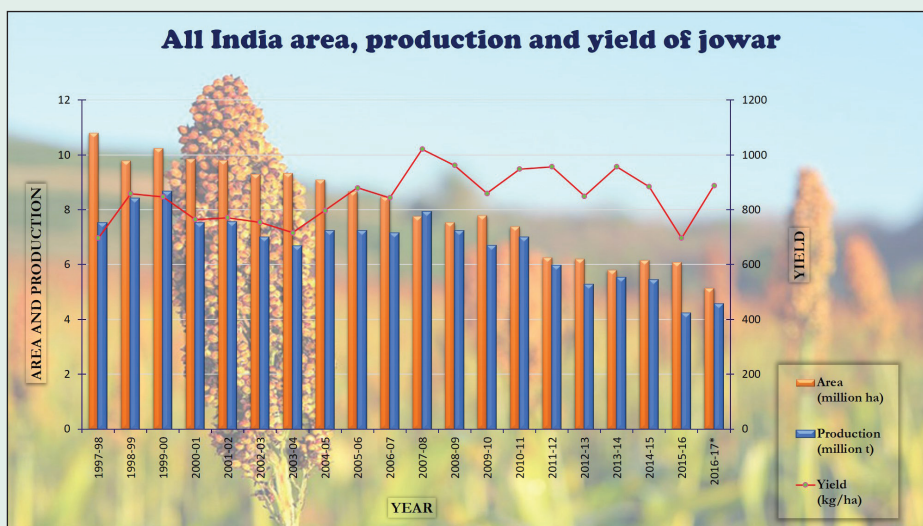


Table 5.12: State-wise area, production and yield of Jowar during 2015-16 and 2016-17 along with coverage under irrigation

State	2016-17 [#]					2015-16					Area under irrigation (%) 2014-15*
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production	% to all India	Yield	
Maharashtra	2.59	50.25	2.16	47.29	837	3.22	52.95	1.35	31.91	420	9.5
Karnataka	0.95	18.39	0.84	18.39	889	1.10	18.17	0.96	22.53	865	10.4
Madhya Pradesh	0.22	4.28	0.36	7.89	1641	0.21	3.37	0.40	9.44	1951	0.8
Rajasthan	0.58	11.26	0.35	7.64	603	0.63	10.39	0.34	8.12	545	0.1
Tamil Nadu	0.26	5.09	0.22	4.87	851	0.34	5.58	0.47	11.04	1380	13.8
Uttar Pradesh	0.18	3.56	0.18	4.00	1000	0.16	2.55	0.11	2.48	677	3.5
Andhra Pradesh	0.10	1.89	0.18	3.85	1814	0.17	2.86	0.36	8.42	2052	30.4
Gujarat	0.10	2.00	0.15	3.17	1408	0.10	1.69	0.14	3.26	1340	19.8
Telangana	0.09	1.75	0.09	1.86	944	0.08	1.25	0.08	1.79	1000	16.1
Haryana	0.06	1.21	0.03	0.73	532	0.05	0.87	0.03	0.66	528	80.0
Others	0.02	0.34	0.01	0.31	@	0.02	0.31	0.01	0.34	@	-
All India	5.14	100.00	4.57	100.00	889	6.08	100.00	4.24	100.00	697	9.9

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *: Provisional, 3. #: Fourth Advance Estimates, 4. @: Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Production and productivity

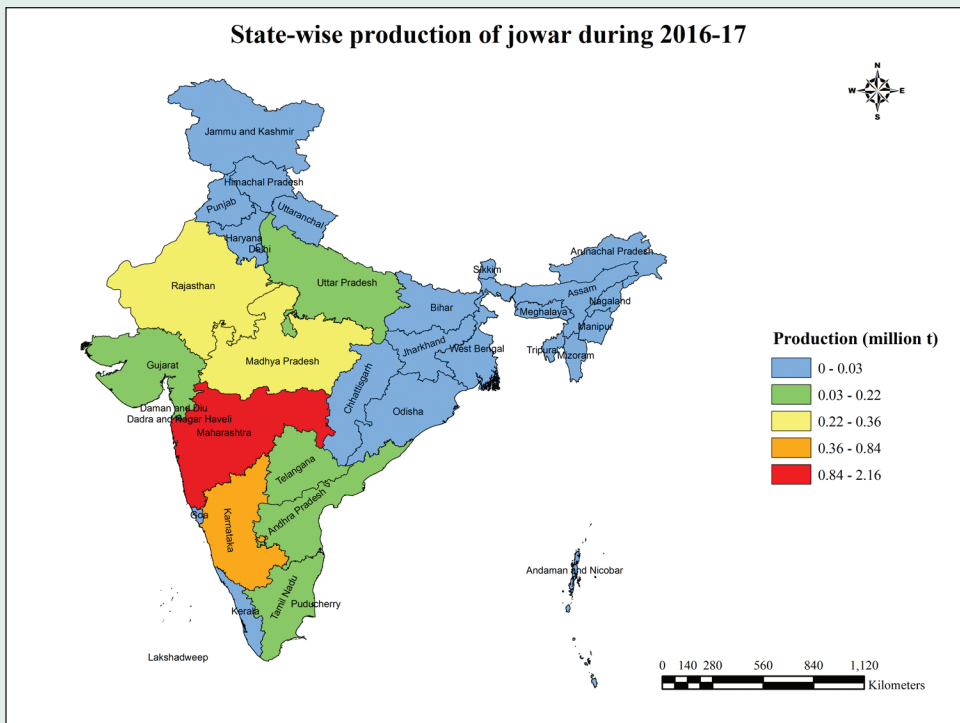
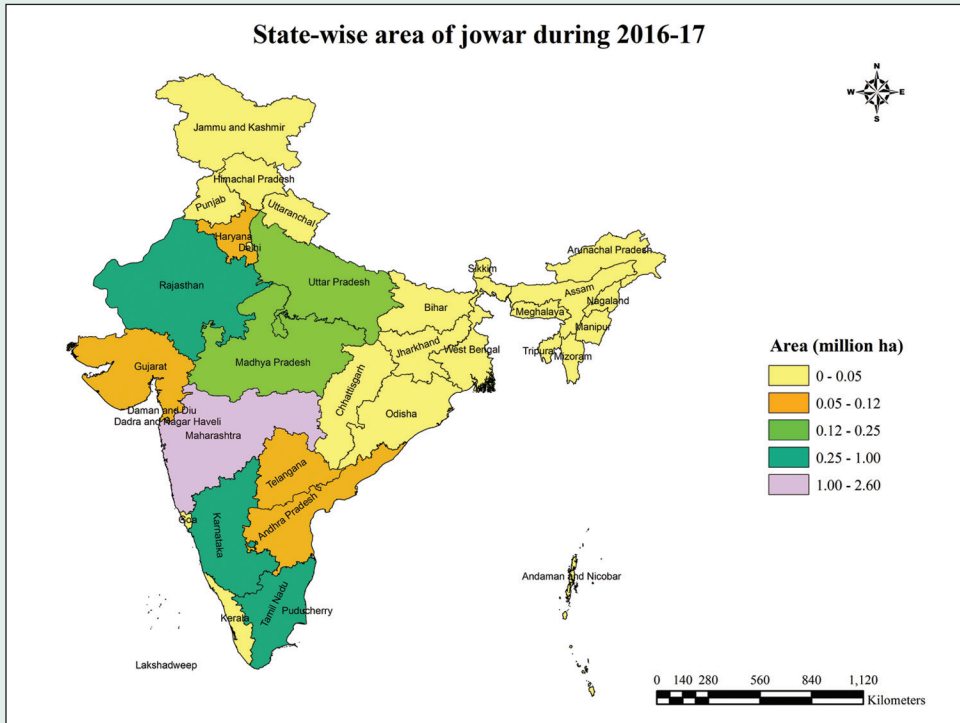


Table 5.13: All India area, production and yield of Bajra

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	8.2
2005-06	9.58	3.8	7.68	-3.2	802	-6.6	9.1
2006-07	9.51	-0.7	8.42	9.6	886	10.5	9.6
2007-08	9.57	0.6	9.97	18.4	1042	17.6	10.2
2008-09	8.75	-8.6	8.89	-10.8	1015	-2.6	9.3
2009-10	8.90	1.7	6.51	-26.8	731	-28.0	9.2
2010-11	9.61	8.0	10.37	59.3	1079	47.6	8.0
2011-12	8.78	-8.6	10.28	-0.9	1171	8.5	8.1
2012-13	7.30	-16.9	8.74	-15.0	1198	2.3	9.1
2013-14	7.81	7.0	9.25	5.8	1184	-1.2	9.1
2014-15	7.32	-6.3	9.18	-0.8	1255	6.0	9.5
2015-16	7.13	-2.6	8.07	-12.1	1132	-9.8	N.A.
2016-17*	7.47	4.8	9.80	21.4	1112	-1.8	N.A.
2017-18 ^s			6.62-11.87				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

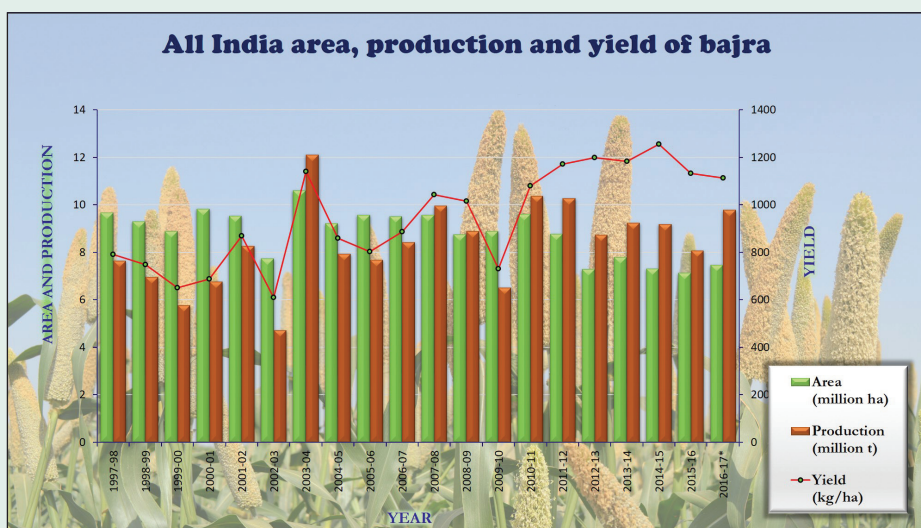


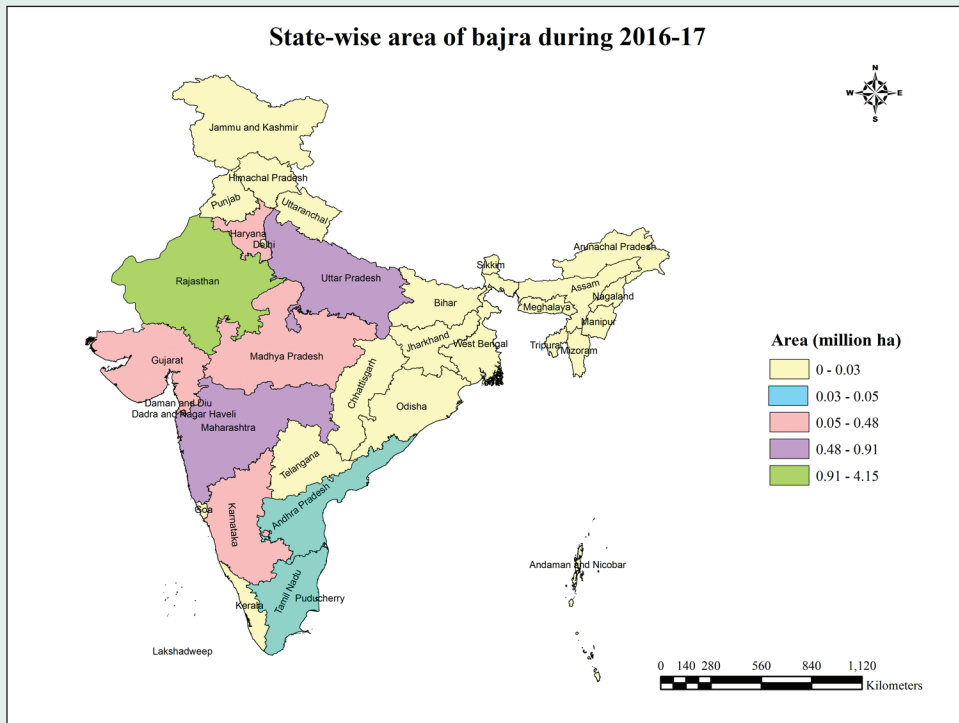
Table 5.14: State-wise area, production and yield of Bajra during 2015-16 and 2016-17 along with coverage under irrigation

State	2016-17 [#]						2015-16				Area under irrigation (%) 2014-15*
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production	% to all India	Yield	
	Rajasthan	4.15	55.54	4.16	42.41	1001	4.04	56.74	3.53	43.73	
Uttar Pradesh	0.91	12.14	1.74	17.72	1914	0.98	13.68	1.78	22.00	1821	12.4
Haryana	0.48	6.40	0.96	9.84	2017	0.37	5.19	0.65	8.08	1762	41.6
Gujarat	0.43	5.77	0.93	9.50	2160	0.39	5.51	0.79	9.76	2004	22.3
Maharashtra	0.85	11.31	0.84	8.60	998	0.80	11.24	0.33	4.13	416	5.0
Madhya Pradesh	0.28	3.75	0.68	6.95	2431	0.27	3.75	0.62	7.66	2315	0.1
Karnataka	0.24	3.23	0.25	2.59	1054	0.17	2.33	0.15	1.80	875	11.2
Tamil Nadu	0.05	0.73	0.12	1.24	2241	0.05	0.72	0.14	1.76	2747	15.6
Andhra Pradesh	0.04	0.56	0.07	0.75	1738	0.04	0.51	0.07	0.81	1806	31.3
Telangana	0.02	0.23	0.02	0.17	1000	0.01	0.08	0.01	0.06	833	81.3
Jammu & Kashmir	0.02	0.21	0.01	0.10	629	0.01	0.13	0.01	0.07	590	4.1
Others	0.01	0.14	0.01	0.13	@	0.01	0.13	0.01	0.14	@	-
All India	7.47	100.00	9.80	100.00	1312	7.13	100.00	8.07	100.00	1132	9.5

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *: Provisional, 3. #: Fourth Advance Estimates, 4. @: Since area/ production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

State-wise area of bajra during 2016-17



State-wise production of bajra during 2016-17

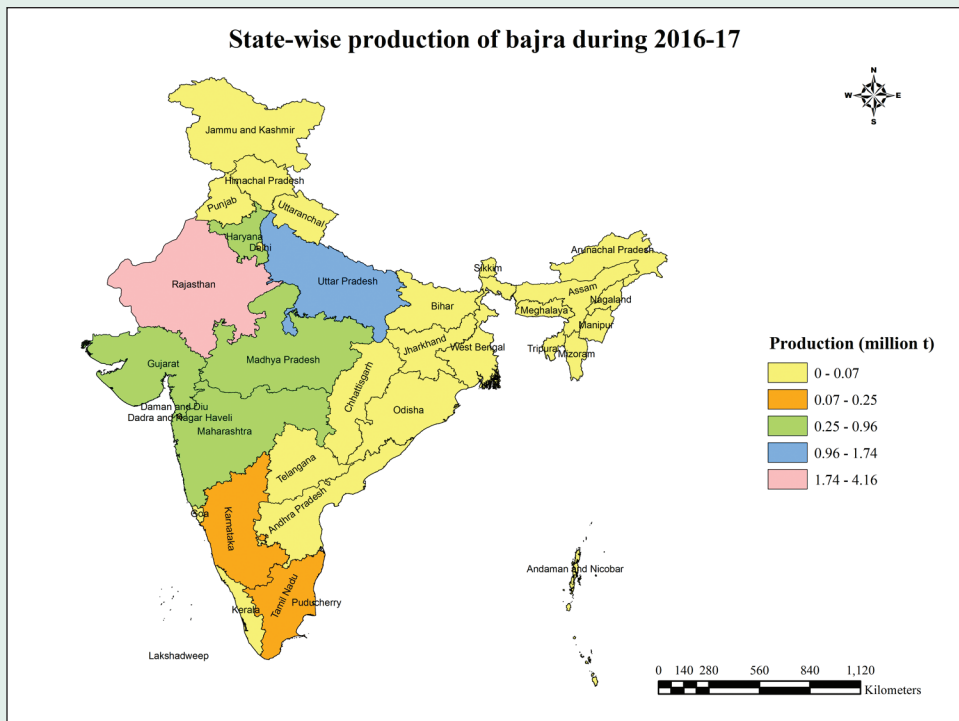


Table 5.15: All India area, production and yield of Maize

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	2.7	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	25.6	24.3
2011-12	8.78	2.7	21.76	0.1	2478	-2.5	25.7
2012-13	8.67	-1.3	22.26	2.3	2566	3.6	25.9
2013-14	9.07	4.6	24.26	9.0	2676	4.3	27.2
2014-15	9.19	1.3	24.17	-0.4	2632	-1.6	26.6
2015-16	8.81	-4.1	22.57	-6.6	2563	-2.6	N.A.
2016-17*	9.86	11.9	26.26	16.3	2664	3.9	N.A.
2017-18 ^s			22.62-27.46				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

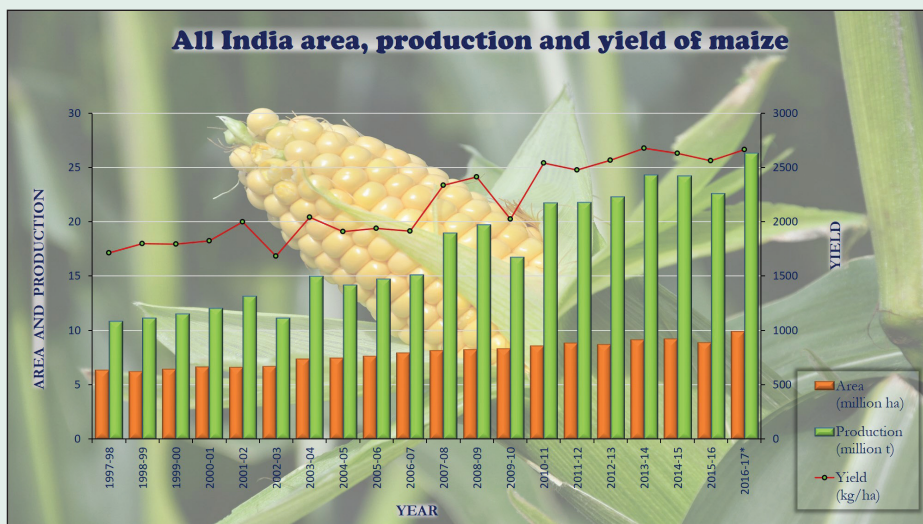


Table 5.16: State-wise area, production and yield of Maize during 2015-16 and 2016-17 along with coverage under irrigation

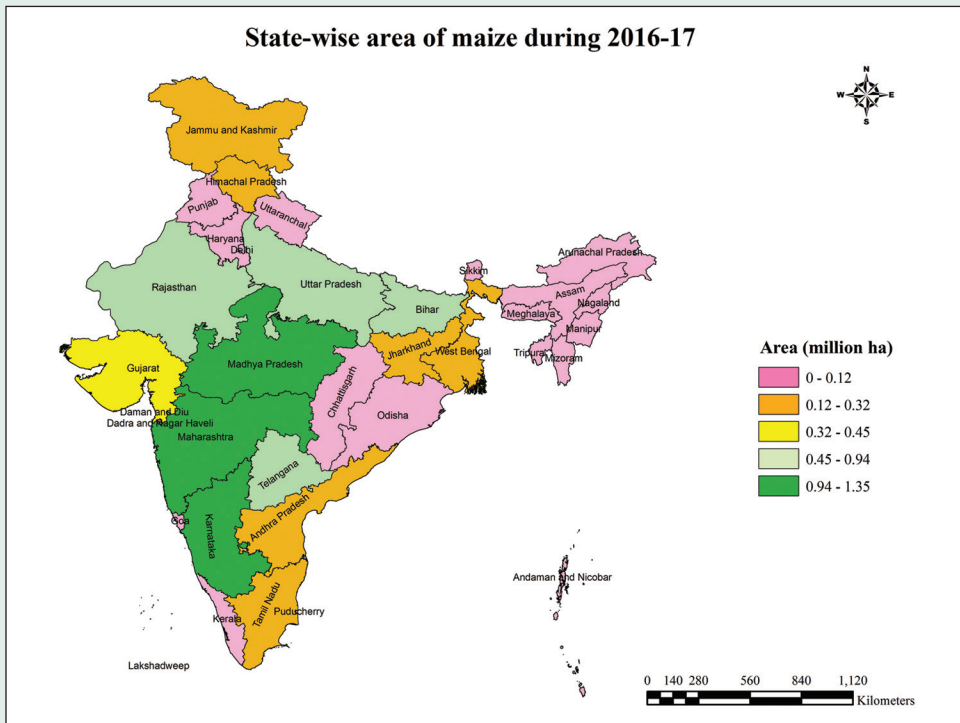
State	2016-17 [#]					2015-16					Area under irrigation (%) 2014-15*
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production	% to all India	Yield	
Maharashtra	1.25	12.72	3.80	14.46	3029	1.07	12.12	1.83	8.09	1712	12.7
Karnataka	1.35	13.73	3.26	12.42	2408	1.22	13.85	3.31	14.67	2713	34.4
Madhya Pradesh	1.28	13.02	3.17	12.06	2468	1.10	12.47	2.58	11.43	2350	3.5
Telangana	0.80	8.12	2.60	9.89	3241	0.57	6.51	1.75	7.76	3056	35.2
Bihar	0.70	7.11	2.55	9.69	3631	0.71	8.01	2.52	11.15	3571	64.3
Andhra Pradesh	0.25	2.55	1.64	6.26	6546	0.23	2.65	1.41	6.25	6056	76.2
Uttar Pradesh	0.83	8.39	1.56	5.95	1889	0.70	7.99	1.31	5.79	1855	45.3
Rajasthan	0.94	9.51	1.47	5.58	1564	0.87	9.91	1.16	5.16	1334	2.0
Tamil Nadu	0.32	3.25	1.25	4.76	3903	0.36	4.03	2.49	11.03	7010	48.8
Gujarat	0.45	4.56	0.80	3.05	1780	0.39	4.39	0.57	2.53	1478	12.5
Himachal Pradesh	0.29	2.98	0.78	2.99	2671	0.29	3.34	0.74	3.27	2507	10.5
West Bengal	0.16	1.64	0.71	2.69	4374	0.15	1.74	0.72	3.17	4654	43.4
Jharkhand	0.30	3.01	0.59	2.25	1992	0.29	3.28	0.38	1.71	1332	2.6
Jammu & Kashmir	0.30	3.03	0.49	1.86	1632	0.29	3.34	0.52	2.32	1782	9.4
Punjab	0.12	1.18	0.45	1.69	3836	0.12	1.31	0.42	1.88	3687	79.2
Others	0.51	5.21	1.16	4.41	@	0.45	5.06	0.85	3.79	@	-
All India	9.86	100.00	26.26	100.00	2664	8.81	100.00	22.57	100.00	2563	26.6

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *: Provisional, 3. #: Fourth Advance Estimates, 4. @: Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Production and productivity

State-wise area of maize during 2016-17



State-wise production of maize during 2016-17

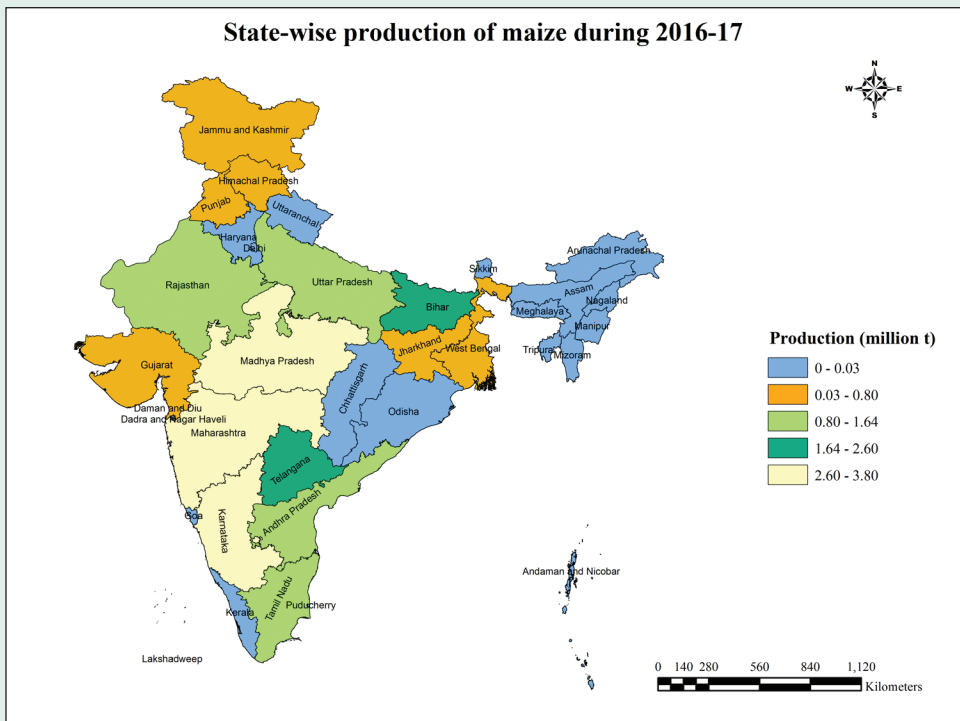


Table 5.17: All India area, production and yield of total pulses

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	14.0
2005-06	22.39	- 1.6	13.39	2.0	598	3.6	14.5
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	15.9
2008-09	22.09	- 6.5	14.57	-1.3	659	5.4	16.5
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	14.9
2011-12	24.46	-7.3	17.09	-6.3	699	1.2	16.1
2012-13	23.26	-4.9	18.34	7.3	789	12.9	18.5
2013-14	25.21	8.5	19.25	5.0	764	-3.2	19.7
2014-15	23.55	-6.6	17.15	-10.9	728	-4.7	19.9
2015-16	24.91	5.8	16.35	-4.7	656	-9.9	N.A.
2016-17*	29.46	18.3	22.95	40.4	779	18.8	N.A.
2017-18 [§]			15.97-22.06				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

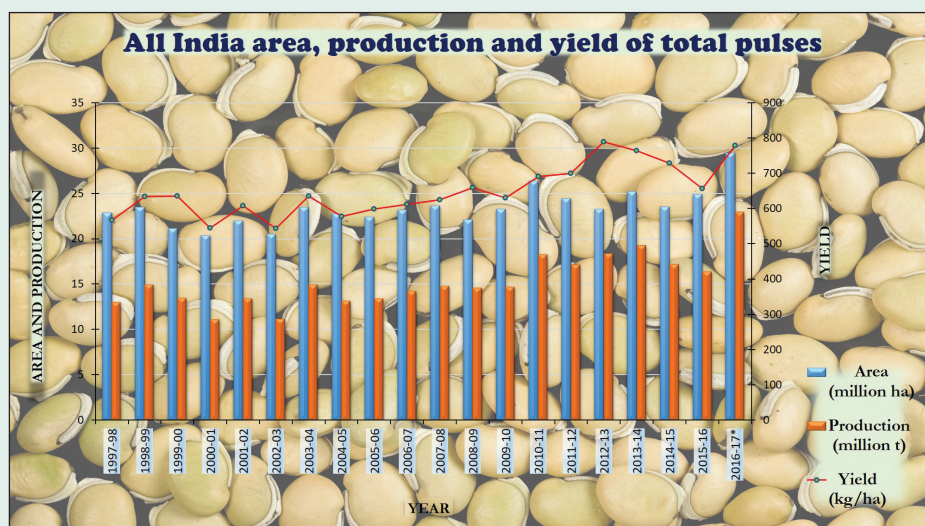


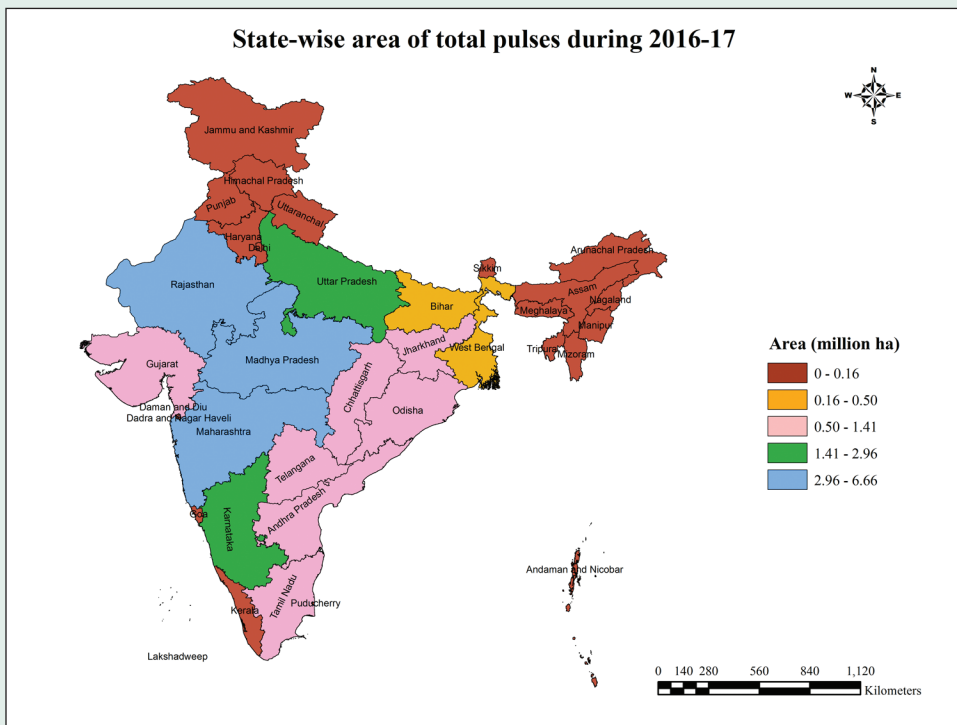
Table 5.18: State-wise area, production and yield of total pulses during 2015-16 and 2016-17 along with coverage under irrigation

State	2016-17 [#]					2015-16					Area under irrigation (%) 2014-15*
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production	% to all India	Yield	
Madhya Pradesh	6.66	22.62	6.25	27.23	938	5.88	23.58	5.30	32.43	902	42.8
Maharashtra	4.60	15.60	3.81	16.58	828	3.54	14.23	1.54	9.45	436	10.9
Rajasthan	5.12	17.37	3.06	13.32	598	3.87	15.52	1.99	12.17	515	20.7
Uttar Pradesh	2.52	8.57	2.19	9.52	866	1.88	7.55	1.16	7.12	619	27.4
Karnataka	2.96	10.03	1.72	7.47	580	2.82	11.33	1.14	6.97	403	8.6
Andhra Pradesh	1.41	4.80	0.97	4.23	687	1.45	5.82	1.23	7.52	848	2.0
Gujarat	0.94	3.20	0.82	3.56	868	0.58	2.34	0.54	3.33	931	13.1
Jharkhand	0.76	2.60	0.77	3.36	1009	0.60	2.39	0.53	3.22	886	3.9
Chhattisgarh	0.88	3.00	0.73	3.17	823	0.84	3.38	0.51	3.13	609	15.0
Telangana	0.69	2.34	0.49	2.11	703	0.47	1.89	0.24	1.47	508	5.1
Bihar	0.50	1.69	0.44	1.91	881	0.50	2.00	0.42	2.57	845	4.5
Tamil Nadu	0.81	2.77	0.44	1.91	539	0.88	3.53	0.55	3.39	631	10.9
Odisha	0.73	2.49	0.40	1.74	543	0.74	2.98	0.38	2.29	506	2.2
West Bengal	0.33	1.10	0.31	1.36	958	0.35	1.39	0.36	2.19	1039	15.0
Assam	0.16	0.54	0.12	0.52	748	0.14	0.57	0.11	0.66	757	1.7
Haryana	0.09	0.29	0.07	0.32	870	0.10	0.39	0.07	0.40	680	20.7
Others	0.30	1.01	0.38	1.68	@	0.28	1.11	0.27	1.68	@	-
All India	29.46	100.00	22.95	100.00	779	24.91	100.00	16.35	100.00	656	19.9

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *: Provisional, 3. #: Fourth Advance Estimates, 4. @: Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

State-wise area of total pulses during 2016-17



State-wise production of total pulses during 2016-17

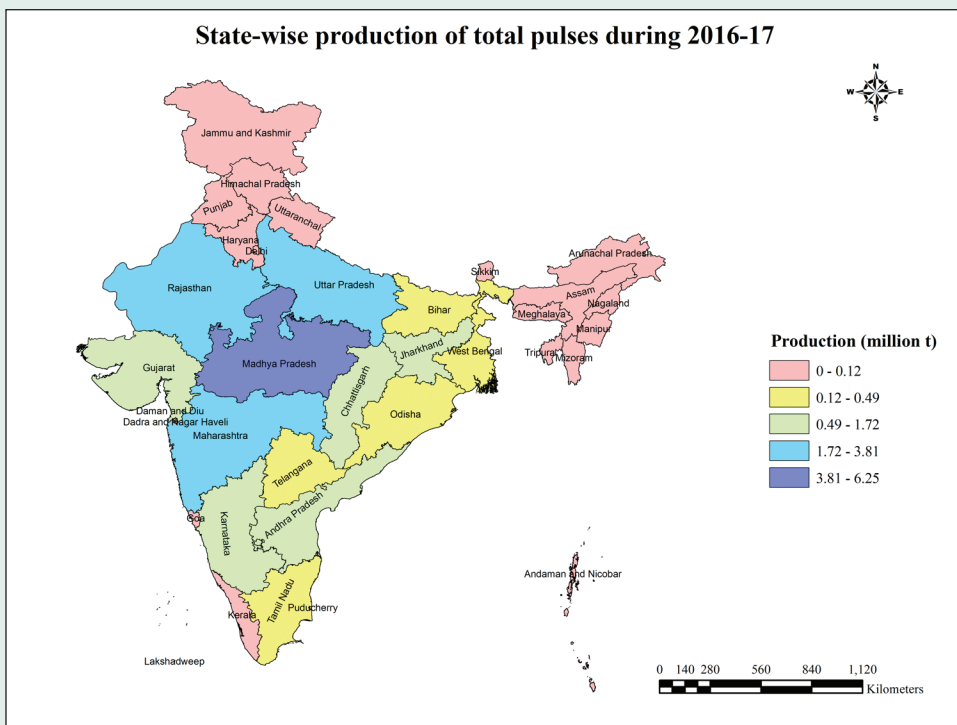


Table 5.19: All India area, production and yield of nine oilseeds

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	27.0
2005-06	27.86	1.2	27.98	14.9	1004	13.4	28.4
2006-07	26.51	-4.8	24.29	-13.2	916	-8.8	29.0
2007-08	26.69	0.7	29.76	22.5	1115	21.7	27.2
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	24.9
2011-12	26.31	-3.3	29.80	-8.3	1135	-4.9	27.5
2012-13	26.48	0.6	30.94	3.8	1168	3.1	28.2
2013-14	28.05	5.9	32.75	5.9	1168	0.0	27.3
2014-15	25.59	-8.8	27.51	-16.0	1075	-8.0	27.4
2015-16	26.09	2.0	25.25	-8.2	968	-10.0	N.A.
2016-17*	26.21	0.5	32.10	27.1	1225	26.5	N.A.
2017-18 [§]			24.93-34.34				

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.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

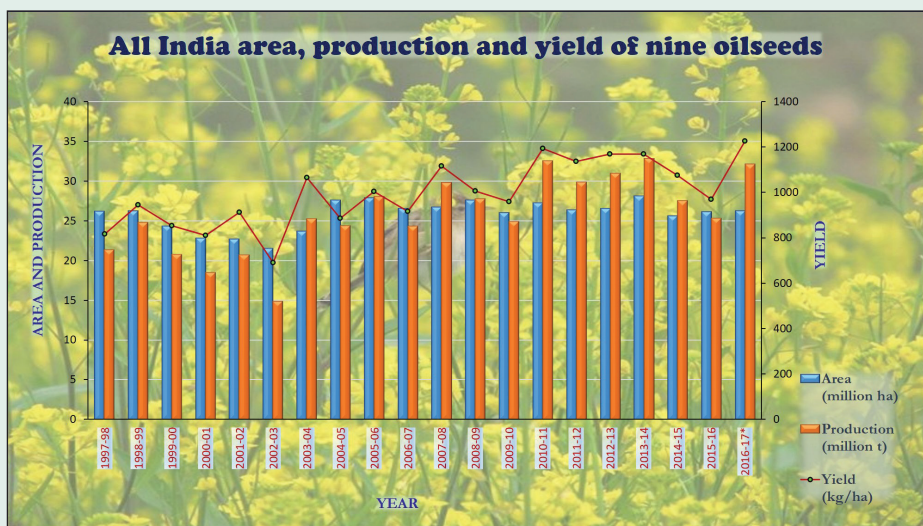


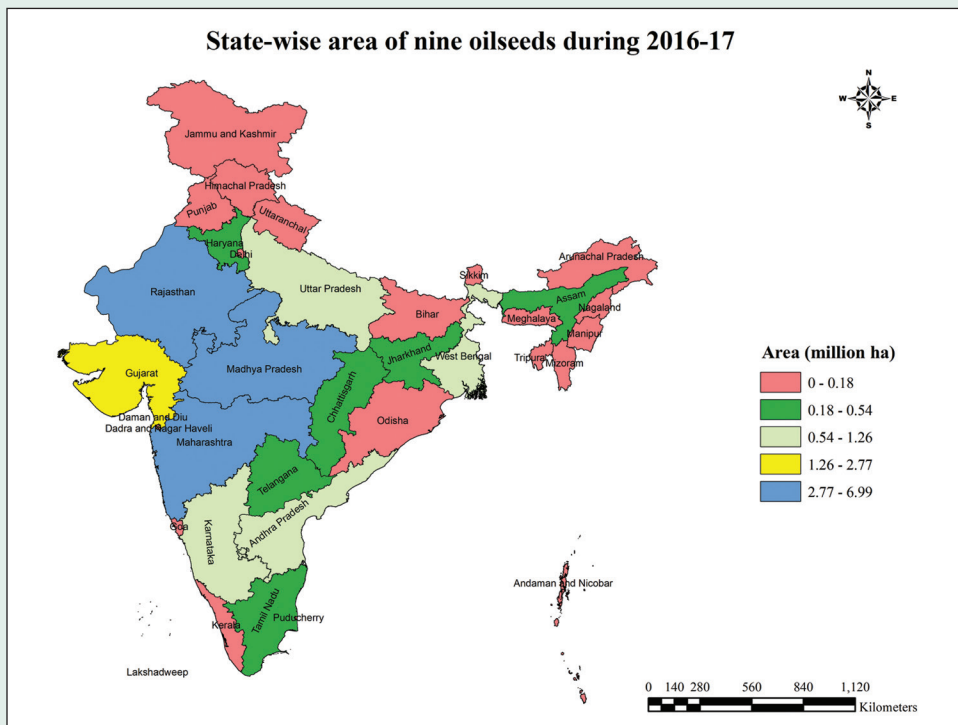
Table 5.20: State-wise area, production and yield of nine oilseeds during 2015-16 and 2016-17 along with coverage under irrigation

State	2016-17 [#]					2015-16					Area under irrigation (%) 2014-15*
	Area	% to all India	Production	% to all India	Yield	Area	% to all India	Production	% to all India	Yield	
Madhya Pradesh	6.99	26.65	8.68	27.05	1243	7.34	28.12	6.17	24.44	841	5.3
Rajasthan	4.55	17.38	6.31	19.67	1386	4.81	18.45	5.69	22.53	1182	63.8
Maharashtra	4.44	16.95	5.26	16.39	1185	4.20	16.11	2.44	9.65	579	3.2
Gujarat	2.77	10.57	4.78	14.90	1725	2.57	9.85	4.18	16.55	1627	29.8
Uttar Pradesh	1.26	4.80	1.06	3.31	845	1.29	4.95	0.86	3.41	670	42.5
West Bengal	0.79	3.03	0.92	2.88	1164	0.79	3.04	0.93	3.67	1168	79.1
Haryana	0.54	2.06	0.92	2.88	1712	0.52	2.00	0.83	3.27	1589	83.1
Karnataka	1.26	4.81	0.79	2.47	628	1.29	4.93	0.75	2.97	583	29.9
Andhra Pradesh	1.15	4.37	0.78	2.42	679	0.92	3.51	0.87	3.46	954	18.7
Telangana	0.52	2.00	0.71	2.20	1353	0.45	1.72	0.50	1.96	1102	40.5
Tamil Nadu	0.35	1.32	0.62	1.92	1787	0.41	1.56	0.93	3.69	2290	66.5
Jharkhand	0.35	1.34	0.26	0.81	737	0.26	0.99	0.18	0.70	681	23.2
Assam	0.31	1.18	0.21	0.66	685	0.31	1.19	0.22	0.85	694	2.5
Chhattisgarh	0.30	1.13	0.17	0.53	572	0.30	1.15	0.15	0.59	501	4.5
Bihar	0.12	0.45	0.13	0.41	1101	0.12	0.46	0.13	0.50	1059	57.2
Odisha	0.18	0.70	0.12	0.37	652	0.19	0.73	0.12	0.48	632	12.7
Punjab	0.04	0.16	0.06	0.18	1406	0.04	0.17	0.06	0.22	1318	86.8
Others	0.29	1.10	0.30	0.95	@	0.28	1.07	0.27	1.05	@	-
All India	26.21	100.00	32.10	100.00	1225	26.09	100.00	25.25	100.00	968	27.4

Note : 1. States have been arranged in descending order of percentage share of production during 2016-17, 2. *, Provisional, 3. #, Fourth Advance Estimates, 4. @. Since area/production is low in individual states, yield rate is not worked out.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

State-wise area of nine oilseeds during 2016-17



State-wise production of nine oilseeds during 2016-17

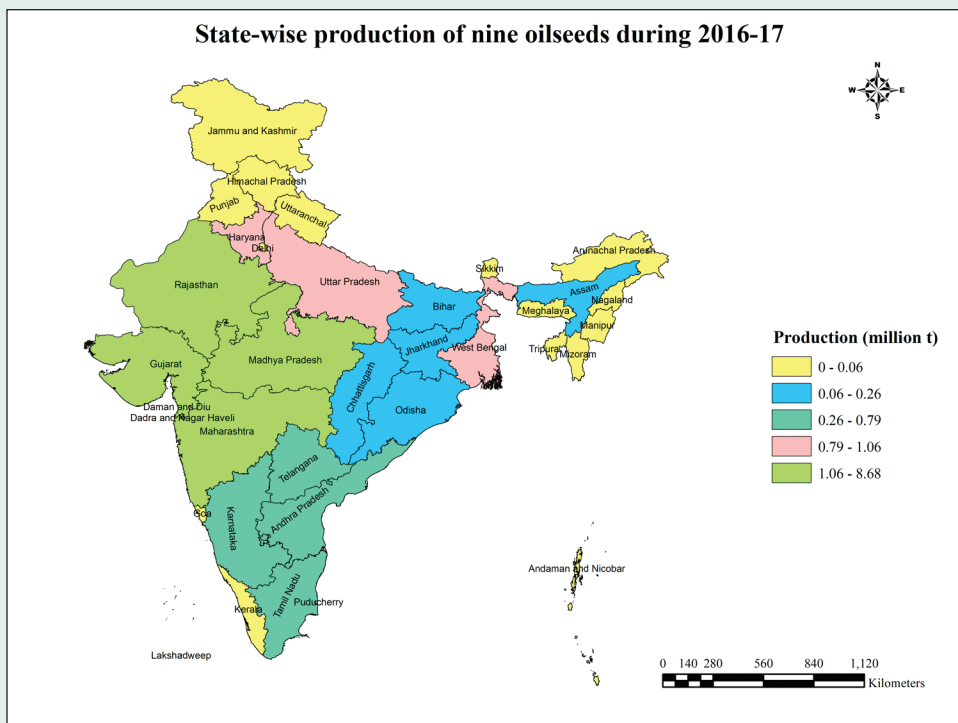


Table 5.21: Production of oilseeds/oils and net domestic availability of edible oils

(in lakh t)

Vegetable oils	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16		2016-17*	
	Oilseeds	Oils	Oilseeds	Oils	Oilseeds	Oils	Oilseeds	Oils	Oilseeds	Oils	Oilseeds	Oils	Oilseeds	Oils
A. Primary source														
Groundnut	82.65	19.01	69.64	16.02	46.95	10.80	97.14	22.34	74.02	17.02	67.71	15.36	75.65	17.16
Rapeseed/Mustard	81.79	25.35	66.04	20.47	80.29	24.89	78.77	24.42	62.82	19.47	68.21	21.16	79.77	24.74
Soybean	127.36	20.38	122.14	19.54	146.66	23.47	118.60	18.97	103.74	16.60	85.92	13.76	137.94	22.10
Sunflower	6.51	2.15	5.16	1.70	5.44	1.80	5.04	1.66	4.34	1.43	3.31	1.10	2.41	0.80
Sesamum	8.93	2.77	8.10	2.51	6.85	2.12	7.15	2.21	8.68	2.57	8.66	2.70	7.84	2.45
Nigerseed	1.08	0.32	0.98	0.29	1.02	0.31	0.98	0.29	0.76	0.23	0.77	0.22	0.83	0.24
Safflower	1.50	0.45	1.45	0.44	1.09	0.33	1.13	0.31	0.90	0.27	0.64	0.18	0.78	0.22
Castor	13.50	5.40	22.95	9.18	19.64	7.86	17.27	6.91	18.70	7.48	16.50	5.80	14.21	4.99
Linseed	1.47	0.44	1.52	0.46	1.49	0.45	1.41	0.41	1.55	0.47	1.32	0.34	1.54	0.39
Sub Total	324.79	76.27	297.98	70.61	309.43	72.03	327.49	77.52	275.51	65.54	253.04	60.62	320.97	73.09
B. Secondary source														
Coconut		4.00		4.00		3.90		5.30		4.80		4.32		5.20
Palm oil		-		-		-		-		-		-		2.30
Cotton seed		10.89		11.62		11.57		12.40		12.15		10.05		12.24
Rice bran		7.20		7.50		7.80		8.10		9.20		9.90		10.31
Solvent extracted oils		4.20		4.10		4.10		3.10		3.00		3.50		2.85
Tree & forest origin		1.20		1.20		1.20		1.20		1.60		1.50		1.50
Sub Total	27.49			28.42		28.57		30.10		30.75		29.27		34.40
Total (A+B)	103.76			99.03		100.60		107.62		96.29		89.89		107.49
C. Less: Exports & industrial use		5.94		9.46		8.41		7.10		5.94		5.50		6.50
D. Net domestic availability of edible oils		97.82		89.57		92.19		101.90		92.06		86.37		100.99
E. Import of edible oils[§]		72.42		99.43		106.05		109.76		138.53		148.20		153.11
F. Total availability/consumption of edible oils		170.24		189.00		198.24		211.66		230.59		234.57		254.10

Note : 1. *: Based on 4th advance estimates (released by Ministry of Agriculture & Farmers Welfare on 16.08.2017). 3. \$: Directorate General of Commercial Intelligence & Statistics (Department of Commerce), 4. N.A.: Not available.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.22: All India area, production and yield of commercial crops

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

Crops		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
Groundnut	Area	5.86	5.26	4.72	5.51	4.77	4.60	5.31
	Production	8.26	6.96	4.70	9.71	7.40	6.73	7.57
	Yield	1411	1323	995	1764	1552	1465	1424
Rapeseed & Mustard	Area	6.90	5.89	6.36	6.65	5.80	5.75	6.02
	Production	8.18	6.60	8.03	7.88	6.28	6.80	7.98
	Yield	1185	1121	1262	1185	1083	1183	1324
Sunflower	Area	0.93	0.73	0.83	0.67	0.59	0.49	0.34
	Production	0.65	0.52	0.54	0.50	0.43	0.30	0.24
	Yield	701	712	655	750	736	608	699
Soybean	Area	9.60	10.11	10.84	11.72	10.91	11.60	11.32
	Production	12.74	12.21	14.67	11.86	10.37	8.57	13.79
	Yield	1327	1208	1353	1012	951	738	1219
Nine oil seed	Area	27.22	26.31	26.48	28.05	25.59	26.09	26.21
	Production	32.48	29.80	30.94	32.75	27.51	25.25	32.10
	Yield	1193	1133	1168	1168	1075	968	1225
Cotton[@]	Area	11.24	12.18	11.98	11.96	12.82	12.29	10.85
	Production	33.00	35.20	34.22	35.90	34.80	30.01	33.09
	Yield	499	491	486	510	462	415	519
Jute & Mesta^{**}	Area	0.87	0.90	0.86	0.84	0.81	0.78	0.77
	Production	10.62	11.40	10.93	11.68	11.13	10.52	10.60
	Yield	2192	2283	2281	2512	2473	2421	2490
Sugarcane	Area	4.88	5.04	5.00	4.99	5.07	4.93	4.39
	Production	342.38	361.04	341.20	352.14	362.33	348.45	306.72
	Yield	70091	71668	68254	70522	71512	70720	69886
Potato	Area	1.86	1.91	1.99	1.97	2.08	2.12	2.15 [#]
	Production	42.34	41.48	45.34	41.56	48.01	43.42	48.24 [#]
	Yield	22724	21753	22760	21060	23126	20509	22422 [#]
Onion	Area	1.06	1.09	1.05	1.20	1.17	1.32	1.29 [#]
	Production	15.12	17.51	16.81	19.40	18.93	20.93	21.72 [#]
	Yield	14210	16109	15989	16120	16111	15857	16801 [#]
Coconut	Area	1.90	2.07	2.14	2.14	1.98	2.09	2.08 [#]
	Production	10.84	14.94	15.61	14.91	14.07	15.26	16.84 [#]
	Yield	5700	7200	7300	7000	7164	7305	8109 [#]
Tobacco	Area	0.49	0.47	0.43	0.46	0.46	0.45	N.A.
	Production	0.88	0.75	0.66	0.74	0.84	0.80	N.A.
	Yield	1794	1613	1542	1612	1842	1781	N.A.

Note : 1. #: 3rd Advance Estimate, 2. @: Production in million bales of 170 kg each, 3. **: Production in million bales 180 kg each, 4. *: 4th Advance estimates, 5. N.A.: Not available.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.23: Three largest producing States of important crops during 2016-17*

(Production: million t)

Crops	States	Production	% Share of production to all India	Cumulative % share of production
Foodgrains				
Rice	West Bengal	15.09	13.70	13.70
	Uttar Pradesh	12.95	11.76	25.46
	Punjab	11.03	10.01	35.47
Wheat	Uttar Pradesh	30.06	30.55	30.55
	Madhya Pradesh	17.94	18.24	48.79
	Punjab	16.44	16.71	65.50
Maize	Maharashtra	3.80	14.47	14.47
	Karnataka	3.26	12.41	26.88
	Madhya Pradesh	3.17	12.07	38.96
Total coarse cereals	Maharashtra	6.96	15.75	15.75
	Rajasthan	6.78	15.34	31.09
	Karnataka	3.17	11.81	42.91
Total pulses	Madhya Pradesh	6.25	27.23	27.23
	Maharashtra	3.81	16.60	43.83
	Rajasthan	3.06	13.33	57.17
Total foodgrains	Uttar Pradesh	49.14	17.83	17.83
	Madhya Pradesh	32.98	11.96	29.79
	Punjab	27.99	10.15	39.94
Oilseeds				
Groundnut	Gujarat	3.16	41.80	41.80
	Rajasthan	1.14	15.08	56.88
	Andhra Pradesh	0.71	9.39	66.27
Rapeseed & Mustard	Rajasthan	3.71	46.49	46.49
	Madhya Pradesh	0.92	11.53	58.02
	Haryana	0.90	11.28	69.30
Soybean	Madhya Pradesh	7.08	51.34	51.34
	Maharashtra	4.77	34.59	85.93
	Rajasthan	1.13	8.19	94.13
Sunflower	Karnataka	0.10	41.67	41.67
	Odisha	0.02	8.75	50.42
	Andhra Pradesh	0.02	8.33	58.75
Total oilseeds	Madhya Pradesh	8.68	27.04	27.04
	Rajasthan	6.31	19.66	46.70
	Maharashtra	5.26	16.39	63.08
Other Cash Crops				
Sugarcane	Uttar Pradesh	144.78	47.20	47.20
	Maharashtra	50.64	16.51	63.71
	Karnataka	23.54	7.67	71.39

Production and productivity

Crops	States	Production	% Share of production to all India	Cumulative % share of production
Cotton [@]	Maharashtra	10.62	32.09	32.09
	Gujarat	8.22	24.84	56.94
	Telangana	2.93	8.85	65.79
Jute & Mesta ^{\$}	West Bengal	7.86	74.15	74.15
	Bihar	1.68	15.85	90.00
	Assam	0.83	7.83	97.83

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

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.24: Area, production and yield of principal condiments and spices

(Area: 000' ha; Production: 000' t, Yield: kg/ha)

Crop		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
Pepper	Area	200.30	124.60	123.81	129.00	128.59	131.21
	Production	40.60	52.60	50.87	65.00	54.64	71.87
	Yield	203.00	422.00	411.00	504.00	425.00	548.00
Cardamom	Area	89.00	92.40	92.84	100.00	85.66	84.66
	Production	15.80	18.40	21.28	24.00	24.07	27.66
	Yield	178.00	199.00	229.00	240.00	281.00	327.00
Coriander	Area	557.90	543.20	447.13	553.00	581.60	703.90
	Production	532.90	523.90	313.65	462.00	584.98	899.53
	Yield	955.00	964.00	701.00	835.00	1006.00	1278.00
Chillies	Area	804.80	794.10	774.87	761.00	811.14	844.58
	Production	1276.30	1304.40	1492.14	1605.00	1520.39	2126.04
	Yield	1586.00	1643.00	1926.00	2109.00	1874.00	2517.00
Guar Seed	Area	3449.40	5151.30	5958.70	5344.80	5603.40	N.A.
	Production	2222.10	2457.60	3585.30	3275.90	2824.80	N.A.
	Yield	644.00	477.00	602.00	613.00	504.00	N.A.
Turmeric	Area	218.60	194.20	232.67	184.00	185.90	221.59
	Production	1166.80	971.10	1189.89	830.00	943.30	1131.64
	Yield	5337.00	5000.00	5114.00	4511.00	5074.00	5107.00
Garlic	Area	242.49	247.52	230.59	262.00	280.95	322.43
	Production	1228.32	1259.27	1251.88	1425.00	1617.34	1697.10
	Yield	5065.00	5088.00	5429.00	5439.00	5757.00	5263.00
Ginger	Area	155.06	136.25	132.65	142.00	163.62	168.09
	Production	755.62	682.63	655.06	760.00	1109.18	1075.82
	Yield	4873.00	5010.00	4939.00	5352.00	6779.00	6400.00

Note : 1. *: 3rd Advance Estimate, 2. N.A.: Not available.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.25: State-wise production of Lac in India

(t)

States	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Andhra Pradesh	20	120	93	113	170	172	88
Assam	50	100	130	150	285	315	105
Chhattisgarh	1985	3200	3260	3381	2336	3187	2693
Gujarat	35	35	55	47	45	48	22
Jharkhand	3980	10240	11020	12207	8630	9950	8926
Madhya Pradesh	685	1300	2524	2497	2586	2222	2274
Maharashtra	435	950	1155	1182	1525	1465	875
Meghalaya	5	5	150	168	160	127	20
Odisha	230	350	310	673	715	623	354
Uttar Pradesh	175	200	100	90	75	55	15
West Bengal	1435	1400	780	500	451	582	980
Total	9035	17900	19577	21008	16978	18746	16352

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

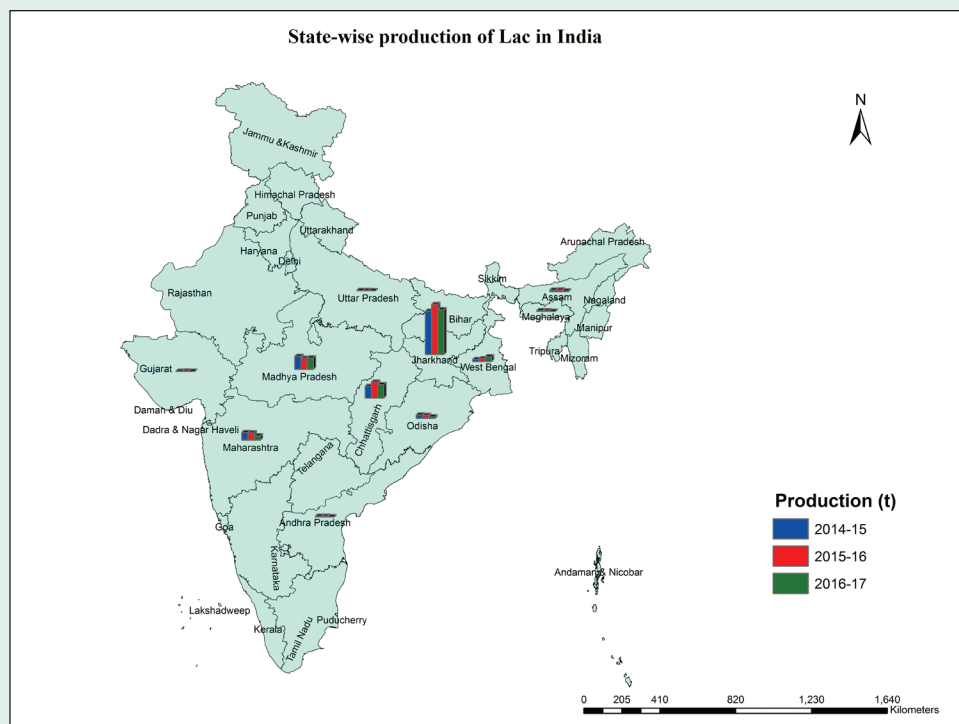


Table 5.26: Per capita net availabilities of foodgrains (per day) in India

(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
1961	201.1	79.1	119.5	399.7	30.2	69.0	468.7
1971	192.6	103.6	121.4	417.6	20.0	51.2	468.8
1981	197.8	129.6	89.9	417.3	13.4	37.5	454.8
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
1997	214.0	179.1	72.9	466.0	12.4	37.1	503.1
1998	200.3	151.5	62.4	414.2	13.4	32.8	447.0
1999	203.4	162.3	63.4	429.2	14.6	36.5	465.7
2000	203.7	160.0	59.0	422.7	10.8	31.8	454.4
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	181.6	163.6	65.5	410.7	14.5	43.0	468.2
2012	190.2	158.4	60.0	408.6	13.5	41.7	463.8
2013	197.4	183.1	52.7	433.2	15.3	43.3	491.9
2014	198.0	183.0	61.8	442.9	16.3	46.4	489.3
2015	186.0	167.9	77.7	421.4	14.0	43.8	465.1
2016	184.2	199.7	71.6	443.7	13.3	43.6	487.3
2017 ^(P)	189.9	192.0	82.1	451.7	17.3	54.4	506.1

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 gram/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 into account any change in stocks in possession of traders, producers and consumers, 4. Cereals include rice, wheat and other cereals, 5. Pulses include all kharif and rabi pulses, 6. Foodgrains includes rice, wheat, other cereals and all pulses, 7. P: Provisional.

Source : *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

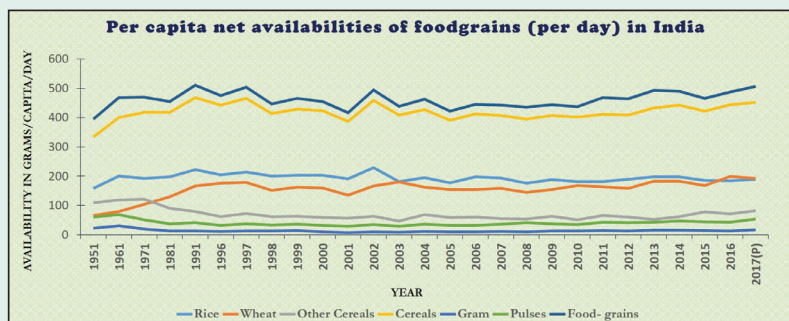


Table 5.27: Cost of production of important crops in India during 2014-15

Crop	State	Cost of Cultivation (₹/ha)		Cost of Production (₹/q)	Yield (q/ha)
		A2+FL	C2	C2	
Rice	Punjab	39631.03	73254.48	1091.75	66.74
	Andhra Pradesh	52092.45	78968.33	1282.17	58.33
	Karnataka	48704.20	68315.20	1195.71	53.24
Wheat	Punjab	27772.52	52590.47	1081.84	42.88
	Haryana	33649.03	61318.70	1240.99	39.96
	Rajasthan	35872.93	50089.47	1156.25	34.58
Maize	Tamil Nadu	60448.07	80010.51	1253.92	60.41
	Andhra Pradesh	41509.60	65916.32	1130.40	55.67
	Punjab	38426.75	51749.20	1154.79	38.21
Jowar	Andhra Pradesh	23309.78	37177.30	1732.18	16.16
	Maharashtra	32734.56	44764.79	1951.96	13.78
	Karnataka	17515.09	24811.88	2266.91	9.06
Bajra	Gujarat	35920.62	46812.70	1125.22	27.86
	Haryana	26208.19	37615.55	1487.42	17.71
	Maharashtra	35622.93	43373.26	2749.83	13.22
Barley	Rajasthan	34436.27	45200.62	1002.76	32.16
	Uttar Pradesh	24638.13	41970.24	1450.72	21.70
Ragi	Karnataka	43421.41	54317.49	3240.98	12.26
	Uttarakhand	14948.91	19826.99	905.79	18.76
Arhar	Maharashtra	42313.15	59401.50	5715.19	10.10
	Gujarat	32507.72	41891.52	4550.86	8.87
	Karnataka	22525.78	33585.73	3963.24	8.27
Gram	Andhra Pradesh	32334.44	47413.80	3085.18	15.02
	Bihar	19029.27	33262.94	2389.66	13.49
	Madhya Pradesh	21376.69	33952.35	2911.56	11.00
Urad	Andhra Pradesh	14608.64	33527.11	3394.44	9.83
	Chhattisgarh	23655.42	31650.43	3394.59	8.69
	Madhya Pradesh	17185.26	25638.75	3482.43	7.05
Moong	Andhra Pradesh	15185.13	25132.57	4655.63	5.37
	Karnataka	15987.69	23174.39	5790.59	3.95
	Maharashtra	24601.39	32001.87	8098.91	3.92
Lentil	West Bengal	22327.40	38680.61	2518.08	14.98
	Bihar	16457.57	30105.16	2399.78	11.98
	Madhya Pradesh	19037.02	31121.42	3575.36	8.34
Groundnut	Tamil Nadu	57324.24	75449.68	3571.59	19.65
	Gujarat	54841.87	70827.74	3409.54	17.07
	Orissa	41989.55	59255.51	4516.02	12.82

Production and productivity

Crop	State	Cost of Cultivation (₹/ha)		Cost of Production (₹/q)	Yield (q/ha)
		A2+FL	C2	C2	
Rapeseed & Mustard	Gujarat	26250.95	39449.70	2068.79	18.41
	Haryana	24941.42	47679.26	2930.17	14.79
	Madhya Pradesh	18674.03	34489.10	2216.82	14.64
Soybean	Madhya Pradesh	23971.63	34985.38	2661.81	12.53
	Andhra Pradesh	28024.29	40321.28	3854.21	10.36
	Maharashtra	36054.83	45160.23	4521.97	9.72
Sunflower	Andhra Pradesh	23847.41	32370.95	7923.19	4.06
	Karnataka	19913.10	28340.18	3159.53	8.83
Safflower	Karnataka	10248.46	18231.29	2113.43	8.39
	Maharashtra	18491.84	22335.92	6972.54	3.19
Nigerseed	Madhya Pradesh	13824.32	17978.15	5697.21	3.00
	Orissa	12341.82	16023.77	6302.23	2.48
Peas	Uttar Pradesh	25033.39	36988.47	3230.40	10.75
Sesamum	West Bengal	29269.19	41501.10	3375.65	11.88
	Gujarat	29055.91	39359.26	6903.85	5.64
	Madhya Pradesh	16725.67	29141.57	5289.28	5.38
Sugarcane	Maharashtra	145489.58	193364.50	182.74	993.77
	Tamil Nadu	124126.89	160892.00	171.05	926.39
	Karnataka	73659.48	118220.50	143.45	808.81
Cotton	Tamil Nadu	69912.63	88992.70	3770.22	23.51
	Gujarat	57070.13	73271.72	3659.32	19.67
	Punjab	52923.06	76777.61	3890.58	18.39
Jute	West Bengal	58351.73	80286.87	2655.57	27.29
	Assam	55065.78	68361.55	2627.43	24.51
	Orissa	52753.86	66408.93	3495.91	16.95
Onion	Maharashtra	120342.20	171271.10	754.14	225.89
	Gujarat	92472.64	125716.20	852.24	146.81
	Karnataka	41828.75	54731.59	1210.34	44.32
Potato	West Bengal	123377.36	146702.30	565.97	259.21
	Uttar Pradesh	105856.90	134770.90	712.73	189.09
	Bihar	60663.42	79846.72	448.18	178.16

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 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

Table 5.28: Cost of cultivation of principal crops during 2014-15

(₹/ha)

Item	Paddy					
	A.P.	T. Nadu	U.P.	Punjab	M.P.	W.B.
I Operational cost	51820.70	55251.95	39481.03	34041.18	28415.16	54259.48
Human labour	25799.85	24089.03	20130.27	14718.57	12449.54	35414.34
Animal labour	557.56	196.23	360.11	40.87	4023.51	1640.84
Machine labour	9402.23	10156.25	4607.36	6371.44	3777.68	3903.56
Seed	2265.17	6751.07	3592.87	1771.16	2014.48	1810.01
Fertilisers and manure	8369.91	8965.19	4325.32	3704.80	4203.75	6033.65
Fertilisers	7399.47	6319.99	4265.80	3349.03	2566.84	4963.39
Manure	970.44	2645.20	59.52	355.77	1636.91	1070.26
Insecticide	2708.08	1490.79	183.79	3928.25	917.22	1385.89
Irrigation charges	1432.22	2181.09	5424.35	2623.08	329.97	2912.35
Interest on working capital	1289.18	1390.23	855.68	853.88	608.99	1103.55
Miscellaneous	16.50	32.07	1.28	29.13	92.02	55.29
II Fixed cost	27147.63	18824.96	19501.30	39213.30	12965.61	17580.94
Rental value of owned land	25118.45	13646.75	12742.73	30200.60	9372.98	14130.98
Rent paid for leased in land	59.36	191.63	595.92	5283.62	-	582.76
Land revenue, cesses & taxes	1.00	7.15	3.34	-	4.10	59.83
Depreciation on implements & farm buildings	211.39	327.83	897.09	306.23	861.81	844.64
Interest on fixed capital	1757.43	4651.60	5262.22	3422.85	2726.72	1962.73
Total I+II	78968.33	74076.91	58982.33	73254.48	41380.77	71840.42
III (a) Yield and value						
1) Yield (q/ha)	58.33	49.49	37.08	66.74	25.44	44.69
2) Value of the main-product	79537.13	71405.84	46850.41	106255.70	32704.99	51812.22
3) Value of the by-product	4434.92	4887.99	3566.62	570.34	4786.92	7143.41
III (b) Material and labour inputs per hectare						
1) Seeds (kg)	68.67	-	-	-	69.84	62.42
2) Fertilisers (kg of Nutrients)	248.46	231.10	172.02	184.96	106.31	159.88
3) Manure (q)	16.94	27.91	1.14	20.30	13.65	17.14
4) Human labour (man-hours)	613.57	581.91	797.26	345.50	517.74	1054.88
5) Animal labour (pair-hours)	7.21	2.75	2.68	0.38	48.35	35.88

Continued...

Production and productivity

Item	Wheat					Jowar	
	Punjab	Rajasthan	M.P.	U.P.	Bihar	A.P.	Maha-rashtra
I Operational cost	23717.84	35134.58	25625.32	30543.85	26816.98	22887.68	31848.53
Human labour	5437.08	16927.60	8469.54	10996.90	9562.08	14232.96	17043.50
Bullock labour	49.19	397.60	774.49	584.45	15.41	2134.76	3453.25
Machine labour	8276.24	5595.47	6632.69	6203.57	5634.81	2812.95	5567.74
Seed	1961.84	3432.66	2589.10	3177.11	2994.30	783.10	711.55
Fertilisers and manure	5228.90	3726.19	2877.00	4868.00	4396.22	2161.46	2723.99
Fertilisers	5203.53	3558.17	2877.00	4836.89	4317.49	2161.46	2077.61
Manure	25.37	168.02	-	31.11	78.73	-	646.38
Insecticides	1545.83	95.45	38.72	41.46	62.24	9.05	41.40
Irrigation charges	498.45	4303.70	3644.49	3968.25	3500.14	307.86	1551.90
Interest on working capital	635.82	655.91	599.11	703.91	651.78	445.54	755.20
Miscellaneous	84.49	-	0.18	0.20	-	-	-
II Fixed cost	28872.63	14954.89	18329.28	20536.73	14632.08	14289.62	12916.26
Rental value of owned land	20587.25	10359.99	13808.68	13376.25	11480.42	11987.08	6060.58
Rent paid for leased in land	3653.11	307.09	-	1175.49	-	177.17	-
Land revenue, cesses & taxes	-	12.22	5.24	4.13	65.20	2.33	26.37
Depreciation on implements & farm buildings	401.56	419.04	590.01	1020.94	589.84	242.59	859.65
Interest on fixed capital	4230.71	3856.55	3925.35	4959.92	2496.62	1880.45	5969.66
Total I+II	52590.47	50089.47	43954.60	51080.58	41449.06	37177.30	44764.79
III (a) Yield and value							
1) Yield (q/ha)	42.88	34.58	32.73	25.88	26.52	16.16	13.78
2) Value of the main-product	62199.69	50621.24	46423.39	35426.16	36283.22	32295.16	21912.84
3) Value of the by-product	8286.27	12373.47	8811.34	11162.46	9770.33	8063.46	14443.35
III (b) Material and labour inputs per ha							
1) Seeds (kg)	18.46	22.58	22.53	21.54	25.77	16.37	13.99
2) Fertilisers (kg of Nutrients)	21.04	25.08	25.72	27.07	28.86	81.46	76.62
3) Manure (q)	22.99	59.98	-	66.45	60.83	-	3.31
4) Human labour (man-hours)	43.93	36.63	29.72	27.95	24.57	368.16	600.26
5) Animal labour (pair-hours)	104.56	112.18	77.49	96.65	202.84	25.49	38.53

Continued...

Production and productivity

Item	Bajra		Maize			Groundnut	
	Gujarat	Maharashtra	A.P.	Bihar	Rajasthan	A.P.	Gujarat
I Operational cost	35545.20	34892.16	41175.25	29537.69	33067.76	36803.49	54324.72
Human labour	17500.94	17832.35	19262.75	13083.88	19184.89	16280.53	21419.21
Bullock labour	802.63	4241.34	2254.75	-	1643.14	1725.96	3816.19
Machine labour	4800.46	5692.15	5420.37	3990.29	4468.85	2270.62	6298.86
Seed	1897.91	956.65	5099.21	3100.02	3437.55	8601.85	9277.02
Fertilisers and manure	4312.04	4435.50	6883.52	5141.66	3119.49	6015.26	6972.58
Fertilisers	3673.48	1795.04	6321.77	4715.14	2832.80	2918.96	2821.08
Manure	638.56	2640.46	561.75	426.52	286.69	3096.30	4151.50
Insecticides	23.32	-	700.07	-	123.18	387.83	2825.87
Irrigation charges	5371.73	1001.39	587.30	3566.16	615.23	561.13	2378.60
Interest on working capital	836.17	723.78	967.29	655.68	475.43	957.95	1336.39
Miscellaneous	-	-	-	-	-	2.36	-
II Fixed cost	11267.50	8481.10	24741.07	13940.60	11953.20	16950.39	16503.02
Rental value of owned land	9065.58	4157.40	22498.79	10640.04	7947.00	15191.32	13144.35
Rent paid for leased in land	261.24	-	14.86	-	-	-	298.75
Land revenue, cesses & taxes	3.64	18.61	5.92	52.40	10.40	2.88	6.27
Depreciation on implements & farm buildings	110.55	712.17	313.57	823.71	623.80	133.21	212.12
Interest on fixed capital	1826.49	3592.92	1907.93	2424.45	3363.00	1622.98	2841.53
Total I+II	46812.70	43373.26	65916.32	43478.29	45020.96	53753.88	70827.74
III (a) Yield and value							
1) Yield (q/ha)	27.86	13.22	55.67	31.96	21.51	10.79	17.07
2) Value of the main-product	37270.15	20894.44	71757.23	36379.95	38835.78	47289.18	66431.45
3) Value of the by-product	18335.99	4045.01	3369.39	7266.62	8836.68	3348.56	14399.90
III (b) Material and labour inputs per ha							
1) Seeds (kg)	7.91	4.49	23.89	21.84	29.26	110.97	141.70
2) Fertilisers (kg of Nutrients)	159.22	89.81	250.33	158.44	121.58	88.12	83.36
3) Manure (q)	6.37	21.98	4.41	5.13	2.21	50.96	35.97
4) Human labour (man-hours)	675.30	649.31	537.45	528.99	533.89	536.64	676.66
5) Animal labour (pair-hours)	8.47	47.80	27.55	-	23.92	20.49	41.16

Continued ...

Production and productivity

Item	Tur (Arhar)			Cotton		
	U.P.	Karnataka	Gujarat	Haryana	A.P.	Gujarat
I Operational cost	20942.88	22324.65	31328.89	44783.67	56038.71	55323.05
Human labour	15851.45	9544.27	15438.99	24026.15	30470.09	27190.54
Bullock labour	338.98	2900.40	2131.67	514.27	4055.01	1747.84
Machine labour	2396.19	2958.71	5125.15	4780.31	4745.42	6097.69
Seed	1543.37	851.04	594.94	4626.60	4106.40	3375.28
Fertilisers and manure	184.11	2643.02	4092.00	3206.48	7344.93	8684.83
Fertilisers	184.11	2603.57	2502.25	3206.48	6701.88	5319.66
Manure	-	39.45	1589.75	-	643.05	3365.17
Insecticides	0.84	2779.08	1704.88	2360.10	3451.85	3541.82
Irrigation charges	323.79	79.54	1547.14	4273.53	501.03	3357.62
Interest on working capital	304.15	568.59	694.12	894.88	1362.34	1327.43
Miscellaneous	-	-	-	101.35	1.64	-
II Fixed cost	19769.71	11261.08	10562.63	20121.24	23798.91	17948.67
Rental value of owned land	14504.57	9609.38	7029.66	15358.71	19513.84	12008.96
Rent paid for leased in land	-	-	772.22	-	179.66	1464.28
Land revenue, cesses & taxes	9.97	11.33	52.66	-	0.31	12.66
Depreciation on implements & farm buildings	997.77	189.80	353.95	311.68	512.29	270.15
Interest on fixed capital	4257.40	1450.57	2354.14	4450.85	3592.81	4192.62
Total I+II	40712.59	33585.73	41891.52	64904.91	79837.62	73721.72
III (a) Yield and value						
1) Yield (q/ha)	7.92	8.27	8.87	10.85	17.08	19.67
2) Value of the main-product	35817.66	46910.98	42643.63	43982.54	65950.27	78527.56
3) Value of the by-product	8397.99	1135.93	1614.27	3295.50	218.37	1426.78
III (b) Material and labour inputs per ha						
1) Seeds (kg)	16.89	11.78	9.80	2.23	1.96	2.13
2) Fertilisers (kg of Nutrients)	7.63	73.751	95.03	127.18	229.43	215.67
3) Manure (q)	-	0.51	16.50	-	12.82	31.84
4) Human labour (man-hours)	548.59	360.60	808.54	531.10	872.66	1014.73
5) Animal labour (pair-hours)	2.34	51.86	25.29	4.02	48.59	18.43

Continued...

Item	Sugarcane			
	A.P.	Uttar Pradesh	Maharashtra	Tamil Nadu
I Operational cost	105736.17	52322.23	143965.79	123398.90
Human labour	62020.85	32037.46	57275.15	85197.19
Bullock labour	1598.62	453.25	7919.26	518.26
Machine labour	3384.85	1363.38	19852.75	2815.89
Seed	14084.38	4734.35	9034.64	5798.43
Fertilisers and manure	14962.84	4044.42	25188.84	14624.77
Fertilisers	14181.00	3794.92	18938.94	12092.51
Manure	781.84	249.50	6249.90	2532.26
Insecticides	789.20	388.18	782.94	674.78
Irrigation charges	3530.91	7184.92	16727.16	7708.47
Interest on working capital	5364.52	2116.27	7185.05	6061.11
Miscellaneous	-	-	-	-
II Fixed cost	57831.63	45594.86	49398.71	37493.10
Rental value of owned land	50491.14	36642.05	33276.51	26551.58
Rent paid for leased in land	2203.12	428.11	-	57.87
Land revenue, cesses & taxes	-	13.45	274.80	11.62
Depreciation on implements & farm buildings	297.04	1685.40	1249.00	658.43
Interest on fixed capital	4840.33	6825.85	14598.40	10213.60
Total I+II	163567.80	97917.09	193364.50	160892.00
III (a) Yield and value				
1) Yield (q/ha)	730.90	539.07	993.77	926.39
2) Value of the main-product	178032.90	156313.80	187343.80	225461.80
3) Value of the by-product	4224.01	6897.05	12275.34	3480.06
III (b) Material and labour inputs per ha				
1) Seeds (kg)	65.90	16.07	32.60	23.90
2) Fertilisers (kg of Nutrients)	549.98	198.43	640.70	417.47
3) Manure (q)	13.95	4.37	36.21	43.22
4) Human labour (man-hours)	1616.18	1184.29	1800.07	1731.38
5) Animal labour (pair-hours)	20.89	4.49	66.10	9.73

Source : 1. *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.
2. *Reports of the Commission for Agricultural Costs and Prices 2016-17*, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Govt. of India.

Table 5.29: Cropping pattern according to land utilization during 2012-13 and 2013-14 (Provisional)

Crops		2012-13		2013-14 [#]	
		Area (000' ha)	% share to total cropped area	Area (000' ha)	% share to total cropped area
I.	Food crops	138928	71.56	143983	71.68
	1. Total food grains	120402	62.02	125136	62.30
	(A) Cereals & millets	98419	50.69	101357	50.46
	Rice	42757	22.02	44475	22.14
	Jowar	6305	3.25	5755	2.87
	Bajra	7668	3.95	8094	4.03
	Maize	8580	4.42	9020	4.49
	Ragi	1117	0.58	1211	0.60
	Wheat	30495	15.71	31385	15.63
	Barley	702	0.36	687	0.34
	Other cereals & millets	795	0.41	731	0.36
	(B) Pulses	21983	11.32	23779	11.84
	Gram	7974	4.11	9397	4.68
	Tur (Arhar)	3499	1.80	3527	1.76
	Other pulses	10509	5.41	10855	5.40
	2. Sugar	5492	2.83	5572	2.77
	Sugarcane	5443	2.80	5526	2.75
	Others	49	0.03	46	0.02
	3. Condiments & spices	3287	1.69	3302	1.64
	Pepper black	122	0.06	122	0.06
	Chillies	671	0.35	695	0.35
	Ginger	117	0.06	119	0.06
	Turmeric	205	0.11	185	0.09
	Cardamom	84	0.04	88	0.04
	Betel nuts	444	0.23	454	0.23
	Others	1644	0.85	1640	0.82
	4. Total fruits & vegetables	9546	4.92	9768	4.86
	(i) Total fruits	4113	2.12	4160	2.07
	(A) Fresh fruits	3583	1.85	3637	1.81
	Mangoes	1370	0.71	1374	0.68
	Citrus fruits	463	0.24	469	0.23
	Banana	539	0.28	573	0.29
	Grapes	121	0.06	114	0.06
	Pome fruits	95	0.05	94	0.05
	Papaya	57	0.03	59	0.03
	Apple	68	0.04	68	0.03
	Others	870	0.45	886	0.44
	(B) Dry fruits	530	0.27	523	0.26
	Cashew nut	515	0.27	508	0.25
	Others	15	0.01	15	0.01
	(ii) Vegetables	5434	2.80	5608	2.79
	Potato	1649	0.85	1693	0.84
	Tapioca	174	0.09	173	0.09

Production and productivity

Crops	2012-13		2013-14 [#]	
	Area (000' ha)	% share to total cropped area	Area (000' ha)	% share to total cropped area
Sweet potato	56	0.03	55	0.03
Onion	526	0.27	597	0.30
Others	3029	1.56	3090	1.54
5. Other food crops	201	0.10	203	0.10
II. Non-food crops	55212	28.44	56876	28.32
1. Oilseeds	29015	14.95	30111	14.99
Groundnut	5209	2.68	5430	2.70
Castor seed	1223	0.63	988	0.49
Sesamum (Til)	1786	0.92	1685	0.84
Rapeseed & Mustard	5954	3.07	6055	3.01
Linseed	229	0.12	228	0.11
Coconut	1889	0.97	1896	0.94
Nigerseed	269	0.14	271	0.13
Safflower	241	0.12	234	0.12
Soybean	10943	5.64	12007	5.98
Sunflower	920	0.47	772	0.38
Others	352	0.18	545	0.27
2. Fibres	12788	6.59	12797	6.37
Cotton	11882	6.12	11907	5.93
Jute	780	0.40	758	0.38
Mesta	75	0.04	70	0.03
Sunhemp	20	0.01	19	0.01
Others	31	0.02	43	0.02
3. Dyes & tanning material	54	0.03	50	0.02
Indigo	2	0.001	3	0.001
Others	52	0.03	47	0.02
4. Drugs, narcotics & plantation crops	2760	1.42	2810	1.40
Opium	7	0.004	6	0.003
Tobacco	426	0.22	457	0.23
Cinchona	9	0.00	9	0.00
Indian hemp	0	0.00	1	0.00
Tea	648	0.33	656	0.33
Coffee	353	0.18	354	0.18
Rubber	587	0.30	624	0.31
Others	730	0.38	704	0.35
5. Fodder crops	9249	4.76	9831	4.89
6. Green manure crops	376	0.19	309	0.15
7. Other non-food crops	971	0.50	968	0.48
Total area sown under all crops (I+II)	194140	100.00	200859	100.00

Note : #: Provisional.

Source : *Fertiliser Statistics 2016-17*, The Fertiliser Association of India, New Delhi.

Table 5.30: Minimum support prices of various agricultural commodities
(As on 24 January 2018)

(₹/q)

Commodity	Variety	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Kharif Crops							
Paddy	Common	1250	1310	1360	1410	1470	1550
	Grade 'A'	1280	1345	1400	1450	1510	1590
Jowar	Hybrid	1500	1500	1530	1570	1625	1700
	Maldandi	1520	1520	1550	1590	1650	1725
Bajra		1175	1250	1250	1275	1330	1425
Maize		1175	1310	1310	1325	1365	1425
Ragi		1500	1500	1550	1650	1725	1900
Arhar/Tur		3850	4300	4350	4625 [^]	5050 ^{^^}	5450 [^]
Moong		4400	4500	4600	4850 [^]	5225 ^{^^}	5575 [^]
Urad		4300	4300	4350	4625 [^]	5000 ^{^^}	5400 [^]
Cotton	Medium staple	3600	3700	3750	3800	3860	4020
	Long staple	3900	4000	4050	4100	4160	4320
Groundnut in shell		3700	4000	4000	4030	4220*	4450 [^]
Sunflower Seed		3700	3700	3750	3800	3950*	4100*
Soybean		2240	2560	2560	2600	2775*	3050 [^]
Sesamum		4200	4500	4600	4700	5000 [^]	5300*
Nigerseed		3500	3500	3600	3650	3825*	4050*
Rabi Crops							
Wheat		1350	1400	1450	1525	1625	1735
Barley		980	1100	1150	1225	1325	1410
Gram		3000	3100	3175	3500**	4000 [^]	4400 [@]
Masur (Lentil)		2900	2950	3075	3400**	3950 [@]	4250*
Rapeseed/Mustard		3000	3050	3100	3350	3700*	4000*
Safflower		2800	3000	3050	3300	3700*	4100*
Toria		2970	3020	3020	3290	3560	3900*
Other Crops							
Copra (Calendar year)	Milling	5100	5250	5250	5550	5950	6500
	Ball	5350	5500	5500	5830	6240	6785
De-husked Coconut (Calendar year)		1400	1425	1425	1500	1600	1760
Jute		2200	2300	2400	2700	3200	3500
Sugarcane ^s		170	210	220	230	230	255

Note : 1. \$: Fair and remunerative price, 2. *: Including Bonus of ₹ 100 per quintal, 3. **: Including Bonus of ₹ 75 per quintal, 4. ^: Including Bonus of ₹ 200 per quintal, 5. ^^: Including Bonus of ₹ 425 per quintal, 6. @: Including Bonus of ₹ 150 per quintal.

Source : 1. *Agricultural Statistics at a Glance 2017*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)
2. *Minimum Support Prices* released by Directorate of Economics and Statistics, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Govt. of India.












भाग-VI
कृषि अभियांत्रिकी एवं उत्पाद प्रबंधन






SECTION-VI
Agricultural Engineering and
Produce Management











Table 6.1: Improved selected farm implements and machines


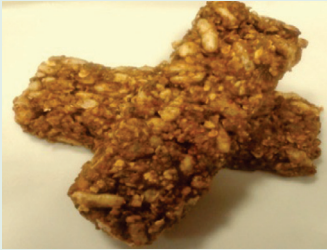


S. No.	OPERATION-WISE EQUIPMENT	
AGRICULTURAL MECHANIZATION		
1.	<p>Inclined Plate Planter Suitability: It is suitable for precision planting of single seed of crops like mustard, sorghum, soybean, cotton seed, pigeon pea, maize, groundnut, okra etc. at predetermined spacing.</p> <p>No. of rows : 2-6 adjustable Row spacing : 250 mm & above</p>	
2.	<p>Tractor Drawn Pneumatic Planter Suitability: 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.</p> <p>Field Capacity : 0.5-1.0 ha/h Power Source : Tractor (35-45 hp)</p>	
3.	<p>Plastic Mulch Laying Machine Suitability: For laying plastic film for mulching & moisture conservation, raising soil temperature for better germination of seed and weed control.</p> <p>Capacity : 0.12-0.18 ha/h Power Source : Tractor (35 hp or above)</p>	
4.	<p>Rotary Assisted Broad Bed Former-cum-seeder Suitability: 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.</p> <p>Field Capacity : 0.35 ha/h - 0.56 ha/h Power Source : Tractor 50 hp</p>	
5.	<p>Sugarcane Bud Chipping Machine 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>	



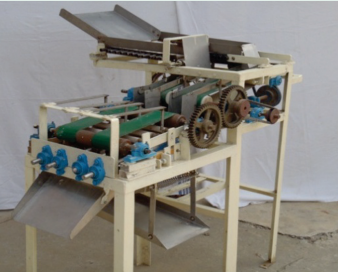

S. No.	OPERATION-WISE EQUIPMENT	
6.	<p>Vegetable Transplanter Use : Planting of Chilly, Brinjal, Tomato etc. Work capacity & description and cost planting capacity : 0.12 ha/h Required power : 35 hp Tractor Required man-power : 2 (one labour for each row) Required seedling tray no. : 2 Kinds of seedling : Seedling without soil</p>	
7.	<p>Self Propelled Multipurpose Hydraulic System for Orchard Operations 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>Arecanut Sheath Shredder 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"> • The output size of arecanut sheath shred is 5 to 8 mm, free from dust. • It can shred arecanut leaf sheath of different moisture content. 	
9.	<p>Power Operated Ribboner for Jute It is for removal of 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"> • The machine gives output of 100 kg of fibre per hour with 88-90 % ribbon recovery. • Reduces water requirement for retting by 20-25 times. • Retting time is also reduced to 7-8 days only as against 15-20 days with traditional method. 	
10.	<p>Millet Thresher 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>Capacity : 80-120 kg/h crops Cost of Operation : Rs. 0.20/kg grain efficiency more than 98%.</p>	

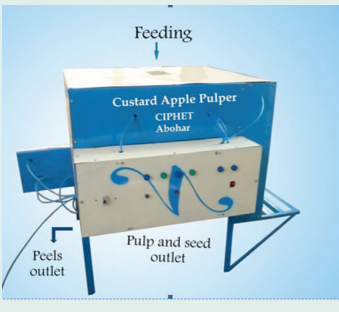



S. No.	OPERATION-WISE EQUIPMENT	
11.	<p>Laser Guided Land Leveller It is used for levelling the field. There is a control unit which guides the machine through a receiver mounted on machine itself. It saves the irrigation by 20-25%.</p>	
12.	<p>Tractor Operated Zero Till Drill Tractor operated zero till 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>Tractor Operated Raised Bed Planter 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>Tractor Operated Aero Blast Sprayer 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>
15.	<p>Tractor Operated Peg Type Puddler 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 Draft : 1000 N</p>	



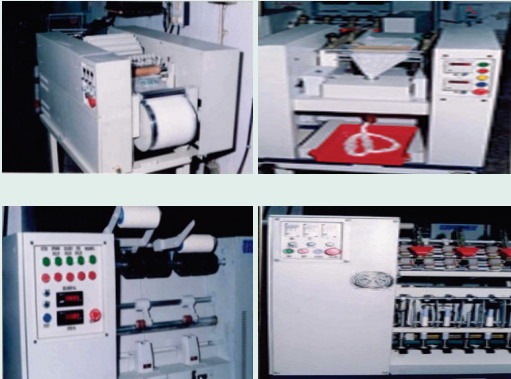
S. No.	OPERATION-WISE EQUIPMENT	
16.	<p>Self Propelled Vertical Conveyor Reaper (walk behind type) The self-propelled vertical conveyor reaper, also known as walk behind type harvester, consists of 6 hp diesel engine, crop row dividers, star wheels, standard cutter bar having 76.2 mm pitch of knife sections, 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.</p> <p>Weight : 245 kg Power source : 6 hp diesel engine</p>	
17.	<p>Tractor Operated Straw Reaper-cum-Trailer 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 Length of cutter bar : 1830 mm Height of cut : 60 mm Number of blowe : 1-2 Fuel consumption : 5.6 l/h</p>	
AGRICULTURAL PRODUCE & PROCESSING		
18.	<p>Pedal Operated Potato Peeler 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. 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>Pedal Operated Potato Slicer 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>	


S. No.	OPERATION-WISE EQUIPMENT	
20.	<p>Cottage Scale Soy Paneer Plant</p> <p>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 80 OC in air free surroundings to produce paneer. Its capacity is 300 kg milk and 50 kg paneer per day.</p>	
21.	<p>CIAE-Millet Mill</p> <p>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"> • Power requirement: One hp single phase electric motor. • It has provisions to adjust the clearance between the dehusking surfaces to suit the different sizes of minor millets. • Working principle: Gentle abrasion/attribution & (aerodynamic) cyclone separator. 	
22.	<p>Fruit Grader</p> <p>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"> • Capacity of grading is 1.2 to 1.5 tonnes per hour. • Power requirement – 0.5 hp single phase. The Grader is light in weight (Approx. 138 kg). • Cost of operation is Rs. 51 per tonne assuming 4 hour operation per day. 	
23.	<p>Aloevera Gel Extractor</p> <p>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"> • 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. • 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. • The equipment is unique in design and very useful in separating the aloevera gel with ease with minimal quantity of aloin. 	

S. No.	OPERATION-WISE EQUIPMENT	
24.	<p>Various Soy-products</p> <ul style="list-style-type: none"> • Soy milk • Soy flour (full fat, medium fat, defatted) • Tofu (soy paneer) • Traditional foods • Dairy analogs • Okara based products 	
25.	<p>CIAE Nutri-bar: A Healthy Snack</p> <p>It substantially contributes to our daily requirement of energy, protein and minerals and also provides added advantages of phenolics and antioxidants. 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>	
AGRICULTURAL ENERGY & POWER		
26.	<p>Biomass Gasification & Electricity Generation Plant</p> <ul style="list-style-type: none"> • The agro waste crop residues are converted into briquette suited for gasifier. • The agro waste briquettes are converted into fuel gas. These fuel gases are used in gas engine for generation of electricity. • 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. 	
IRRIGATION & DRAINAGE ENGINEERING		
27.	<p>Mole Plough</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>	

S. No.	OPERATION-WISE EQUIPMENT	
AGRO PROCESSING MACHINERY		
28.	<p>Manually Operated Banana Comb Cutter 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>Pomegranate Aril Separator 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>	
POWER OPERATED PROCESSING MACHINES		
30.	<p>Automatic Litchi Peeler Litchi is non-climacteric fruit that possesses poor shelf life and therefore needs processing to enhance shelf life.</p> <p>Capacity : 120 kg/h Peeling efficiency : 96 % Pulp loss : 4 %</p>	
31.	<p>Pomegranate Aril Extractor 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.</p> <p>Aril extraction capacity : 5.0 quintal /h Aril extraction efficiency : 90-94% Mechanical damage : 2-4% to arils</p>	

S. No.	OPERATION-WISE EQUIPMENT	
32.	<p>Custard Apple Pulper 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.</p> <p>Capacity : 120 kg/h Peeling efficiency : 94 % Pulp loss : 6 %</p>	
33.	<p>Cryogenic Spice Grinding System 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> <p>Capacity : 30–50 kg/h</p>	
34.	<p>Makhana Popping Machine This 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 and energy saving.</p> <p>Capacity : 35-40 kg/h Decortication efficiency : 95 % Popping efficiency : 92-94 %</p>	
35.	<p>Potato Peeler 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.</p> <p>Capacity : 400 kg/h Peeling efficiency : 99.5 % Peel loss : 0.5 %</p>	

S. No.	OPERATION-WISE EQUIPMENT	
MACHINERIES USED IN THE POST-HARVEST PROCESSING OF COTTON		
36.	<p>Cotton Pre-Cleaner Useful to remove the trash from the seed cotton before ginning to get improved ginning performance and obtain better quality lint.</p> <p>Capacity : 3500 – 6000 kg/h Power requirement : 2.98 – 5.59kW Cleaning efficiency : 40 – 50%</p>	
37.	<p>Lilliput Gin A portable ginning machine useful to breeders, seed companies, traders, marketing agencies and farmers etc. for ginning small seed cotton (kapas) samples and ascertain the ginning percentage as well as assess fibre quality.</p> <p>Power requirement : 0.75 kW (single phase) Capacity : 5 kg seed cotton/h</p>	
38.	<p>CIRCOT Miniature Spinning System Useful for assessment of spinning quality of small cotton fibre samples and for the preparation of fibre sliver and yarn samples. The system consists of four table model microprocessor controlled machines (units) viz., Miniature Carding Machine, Miniature Draw frame, Miniature Sliver to Yarn Spinner and Rotor OE Spinner.</p> <p>Output capacity : 100 g/h (cotton sample) Power requirement : Single phase, 0.6 kW</p>	

S. No.	OPERATION-WISE EQUIPMENT	
39.	<p>Axial Flow Cotton Pre-Cleaner Useful for on-farm cleaning of seed cotton by farmers and traders. It removes small trash particles, kawadi, sand and dust.</p> <p>Power requirement : 1.86 Output capacity : 650 kg seed cotton/h Cleaning efficiency : 30 - 40%</p>	
40.	<p>CIRCOT Minicard for Sliver Production (Village Level) This machine is suitable for making sliver from cotton that can be used in cottage industries.</p> <p>Power requirement : 1.12 kW Capacity : 2 kg/h of sliver</p>	
41.	<p>Stick Removal Machine for Mechanically Harvested Cotton This machine is used to remove the large sized vegetative trash (sticks) from mechanically harvested cotton.</p> <p>Power requirement : 3.73 kW and 0.74 kW Output capacity : 750-800 kg seed cotton/h Stick removal efficiency : 80-85%</p>	
42.	<p>Saw Band Cleaner for Cleaning of Machine Harvested Cotton Machine is used to remove fine trash, burrs etc. from mechanically harvested seed cotton.</p> <p>Power requirement : 3.73 kW and 0.74 kW for feed roller Output capacity : 800-850 kg seed cotton/h Fine trash removal efficiency : 25-30%</p>	

S. No.	OPERATION-WISE EQUIPMENT	
43.	<p>On Board Pre-cleaner for Cleaning Mechanically Stripped Cotton Machine is used for on-farm cleaning of trash, burrs, bracts etc., from cotton harvested by machine stripper.</p> <p>Cleaning efficiency : 48-50% Capacity : 900-1000 kg/h Power Requirement : 3 kW</p>	
44.	<p>Lint Opener Used for preparing the cotton samples for testing of micronaire value on High Volume Instrument.</p> <p>Capacity : 30 samples of 100 g each per hour Power Requirement : 2.5 kW</p>	

- Source** :
1. Equipment from 1-27, ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.
 2. Equipment from 28-35, ICAR- Central Institute of Post-Harvest Engineering & Technology, Ludhiana, Punjab.
 3. Equipment from 36-44, ICAR- Central Institute for Research on Cotton Technology, Adenwala Road, Matunga, Mumbai 400 019.

Table 6.2: Agricultural engineering inputs status in India

Year	Tractors sold and exported	Power tillers sold	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	561751	19014881
2013-14	696828	53927	572466	19156212
2014-15	626839	N.A.	577698	19912081
2015-16	571249	N.A.	586065	20434180
2016-17	777914	N.A.	592080	20645608
2017-18	796873	N.A.	592829*	21198411**

Note : 1. N.A.: Not available, 2. * as on 30.6.2017, 3. ** as on 31.10.2017

- 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.
 4. www.indiastat.com/table/power/26/villageelectrificatn accessed on 26.4.2018
 5. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

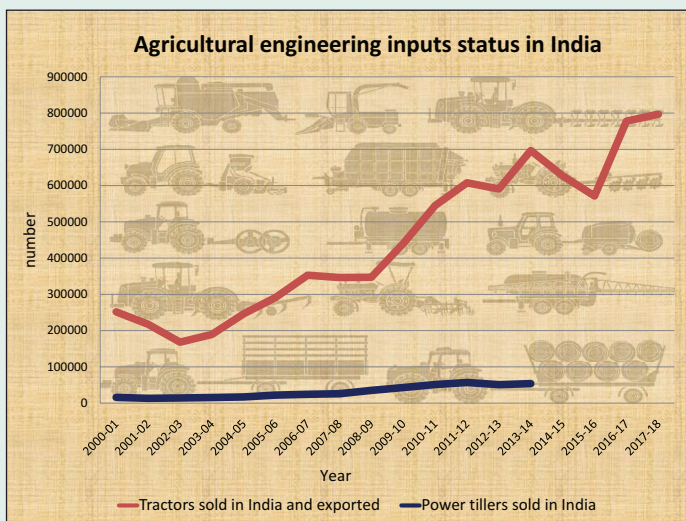


Table 6.3: Production and sale of tractors in India

(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

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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
2016-17	777914	744536
2017-18	790673	796873

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

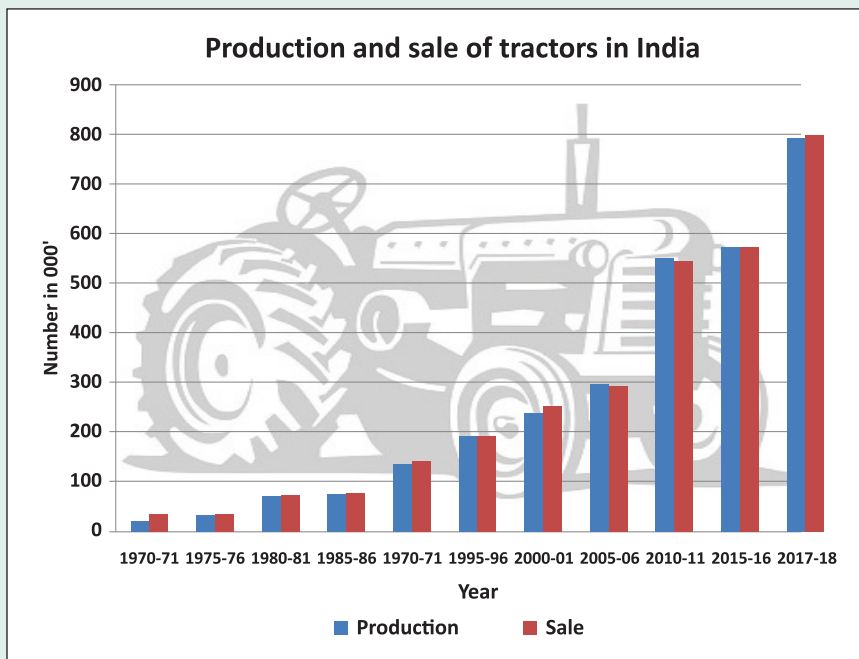


Table 6.4: Horse power-wise tractor production in India

(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.

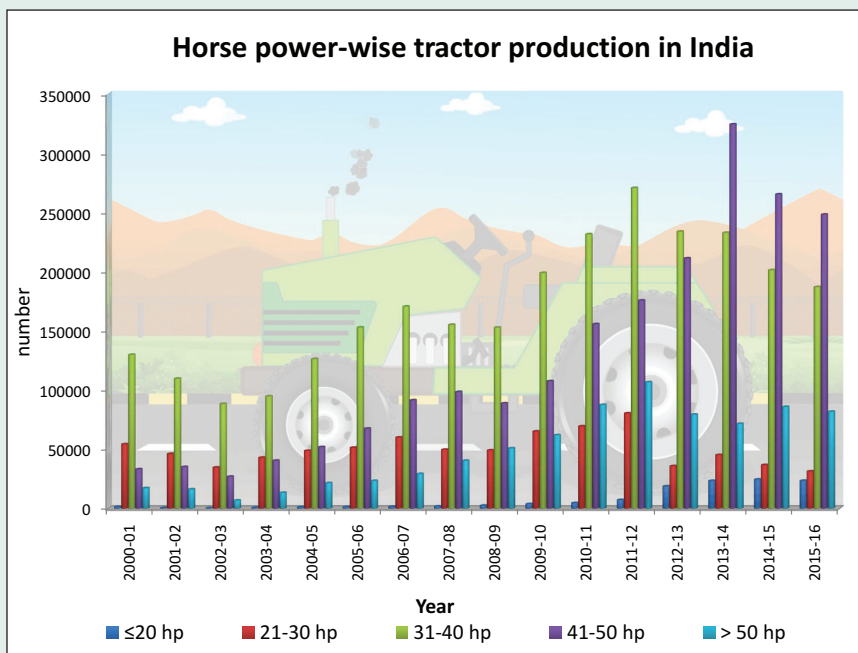


Table 6.5: State-wise annual sale of tractors

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	30090	35402
Chhatisgarh	N.A.	4939	7129	6570	8790	10192	N.A.	N.A.	N.A.	N.A.	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	N.A.	2349	2961	2897	3643	5676	N.A.	N.A.	N.A.	N.A.	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
Telangana	9931	6053	4896	6487	12470	18294	21880	16894	14609	15768	20638	26298	18448	9865	8072	14667
Tamil Nadu	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.	N.A.	N.A.	13153
Uttarakhand	N.A.	1345	2861	2479	1869	2321	N.A.	N.A.	N.A.	N.A.	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	5595	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	N.A.	N.A.	N.A.	4567	20076	28097	33766	43553	41142	37622	62872	70772	62890	62677	75376	77485
Total	239565	214683	184608	203601	261833	302436	339830	334555	332708	422041	545109	607658	590524	696523	626839	571249

Note : N.A.: 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 2013-14, 2014-15 and 2015-16

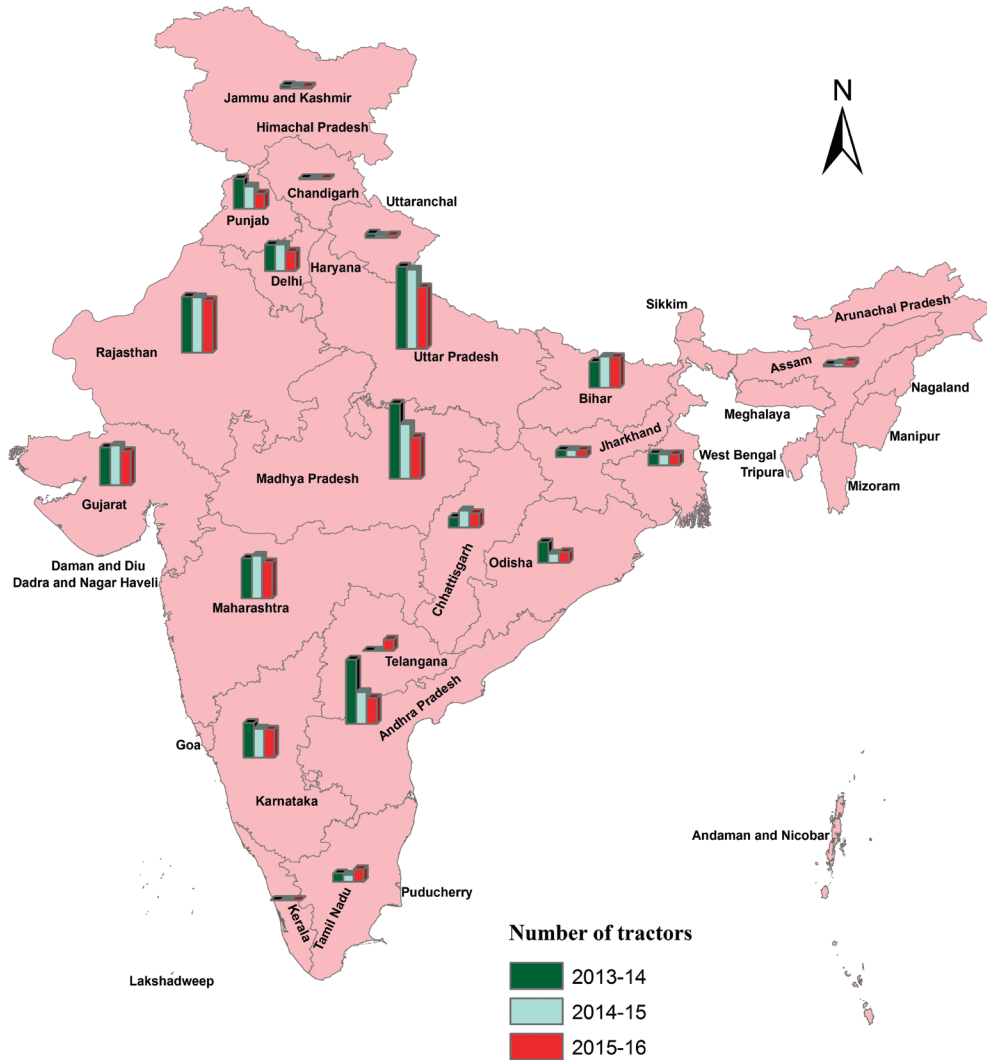


Table 6.6: Cumulative deployment of various renewable energy systems/ devices in India (as on 31.3.2018)

Sector	Cumulative Achievements
I. Grid-Interactive Power (Capacity in MW)	
Wind Power	34046.00
Small Hydro Power	4485.80
Bio Power (Biomass & Gasification and Bagasse Cogeneration)	8700.80
Waste to Power	138.30
Solar Power- roof top	1063.63
Solar Power- Ground mounted	20587.83
Total	69022.36
II. Off-Grid/ Captive Power (Capacity in MW eq.)	
Waste to Energy	172.15
Biomass(non-bagasse) Cogeneration	662.61
Biomass Gasifiers	163.37
Aero-Genrators/Hybrid systems	3.29
SPV Systems	671.41
Water mills/micro hydel	18.81
Total	1672.83
III. Other Renewable Energy Systems	
Family Biogas Plants (numbers in lakhs)	49.82

Note : eq.: equivalent,

Source : 1. <http://mnre.gov.in/mission-and-vision-2/achievements> accessed on 26.04.2018
2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

Table 6.7: Pump set energisation up to October, 2017

(Number)

Sl. No.	States/UTs	Cumulative
States		
1	Andhra Pradesh	1320480
2	Arunachal Pradesh	0
3	Assam	3675
4	Bihar	285501
5	Chhattisgarh	376450
6	Goa	8499
7	Gujarat	2085531
8	Haryana	614970
9	Himachal Pradesh	29377
10	Jammu and Kashmir	9714
11	Jharkhand	9453
12	Karnataka	2399439
13	Kerala	514896
14	Madhya Pradesh	1424192
15	Maharashtra	4306381
16	Manipur	108
17	Meghalaya	24
18	Mizoram	0
19	Nagaland	194
20	Odisha	78200
21	Punjab	1268252
22	Rajasthan	1329639
23	Sikkim	0
24	Tamil Nadu	2086842
25	Telangana	1806569
26	Tripura	5746
27	Uttar Pradesh	996031
28	Uttarakhand	28054
29	West Bengal	290395
	Total	21278612
Union Territories*		
1	Andaman & Nicobar Island	0
2	Chandigarh	421
3	Delhi	30575
4	Dadra & Nagar Haveli	953
5	Daman & Diu	1243
6	Lakshadweep	0
7	Puducherry	9225
	Total	42417
	Grand Total	21321029

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, 3. N.A.: Not available.

Source : 1. <http://www.cea.nic.in/monthlyothers.html> accessed on 31.05.2016.
2. <https://www.indiastat.com/table/power/26/pumpsettubewellsenergisation> accessed on 26.04.2018.
3. 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 (31.03.2016 and 30.03.2017)

States/ UTs	Biomass Power		Waste to Energy		Wind Power		Small Hydro Power		Solar Power		Total		Growth Rate (2015-16 to 2016-17)
	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	
	(MW)												
Andhra Pradesh	380.75	378.20	58.16	58.16	1431.45	3618.85	232.98	241.98	572.96	1867.23	2676.30	6164.42	130.33
Arunachal Pradesh	-	-	-	-	-	-	104.61	104.61	0.27	0.27	104.87	104.87	0.00
Assam	-	-	-	-	-	-	34.11	34.11	0.00	0.00	34.11	34.11	45.89
Bihar	43.42	113.00	-	-	-	-	70.70	70.70	5.10	108.52	119.22	292.22	145.11
Chhattisgarh	279.90	228.00	-	-	-	-	52.00	76.00	93.58	128.86	425.48	432.86	1.73
Goa	-	-	-	-	-	-	0.05	0.05	0.00	0.71	0.05	0.76	1420.00
Gujarat	56.30	65.30	-	-	4037.50	5340.62	16.60	16.60	1119.17	1249.37	5229.57	6671.89	27.58
Haryana	45.30	96.40	-	-	-	-	73.50	73.50	15.39	81.40	134.19	251.30	87.28
Himachal Pradesh	-	-	-	-	-	-	793.31	831.81	0.20	0.73	793.51	832.54	4.92
Jammu & Kashmir	-	-	-	-	-	-	156.53	158.03	1.00	1.36	157.53	159.39	1.18
Jharkhand	-	-	-	-	-	-	4.05	4.05	16.19	23.27	20.24	27.32	35.01
Karnataka	872.18	1452.00	1.00	1.00	2869.15	3751.40	1217.73	1225.73	145.46	1027.84	5105.52	7457.97	46.08
Kerala	-	-	-	-	43.50	51.50	198.92	213.02	13.05	74.20	255.47	338.72	32.59
Madhya Pradesh	35.00	93.00	3.90	3.90	2141.10	2497.79	86.16	86.16	776.37	857.04	3042.53	3537.89	16.28
Maharashtra	1220.78	2065.00	12.72	12.72	4654.15	4771.33	339.88	346.18	385.76	452.37	6613.28	7647.60	15.64
Manipur	-	-	-	-	-	-	5.45	5.45	0.00	0.03	5.45	5.48	0.55
Meghalaya	-	-	-	-	-	-	31.03	31.03	0.00	0.01	31.03	31.04	0.03
Mizoram	-	-	-	-	-	-	36.47	41.47	0.10	0.10	36.57	41.57	13.67
Nagaland	-	-	-	-	-	-	30.67	30.67	0.00	0.50	30.67	31.17	1.63
Odisha	20.00	50.40	-	-	-	-	64.63	64.63	66.92	79.42	151.55	194.45	28.31

States/ UTs	Biomass Power		Waste to Energy		Wind Power		Small Hydro Power		Solar Power		Total		Growth Rate* (2015-16 to 2016-17)	
	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17	31.03.16	31.03.17		
Punjab	155.50	179.00	10.25	9.25	-	-	-	170.90	170.90	405.06	793.95	741.71	1153.10	55.46
Rajasthan	108.30	119.30	-	-	3993.95	4281.72	-	23.85	23.85	1269.93	1812.93	5396.03	6237.80	15.60
Sikkim	-	-	-	-	-	-	-	52.11	52.11	0.00	0.00	52.11	52.11	0.00
Tamil Nadu	641.90	878.00	8.05	8.05	7613.86	7861.46	-	123.05	123.05	1061.82	1691.83	9448.68	10562.39	11.79
Telangana	-	158.10	-	-	77.70	100.80	-	-	-	527.84	1286.98	605.54	1545.88	155.29
Tripura	-	-	-	-	-	-	-	16.01	16.01	5.00	5.09	21.01	21.10	0.43
Uttar Pradesh	870.00	1933.00	5.00	5.00	-	-	-	25.10	25.10	143.50	336.73	1043.60	2299.83	120.38
Uttarakhand	76.00	73.00	-	-	-	-	-	209.33	209.32	41.15	233.49	326.48	515.81	57.99
West Bengal	26.00	300.00	-	-	-	-	-	98.50	98.50	7.77	26.14	132.27	424.64	221.04
Andaman & Nicobar	-	-	-	-	-	-	-	5.25	5.25	5.10	6.56	10.35	11.81	14.11
Chandigarh	-	-	-	-	-	-	-	-	-	6.81	17.32	6.81	17.32	154.48
Dadar & Nagar Haveli	-	-	-	-	-	-	-	-	-	0.00	2.97	0.00	2.97	-
Daman & Diu	-	-	-	-	-	-	-	-	-	4.00	10.46	4.00	10.46	161.50
Delhi	-	-	16.00	16.00	-	-	-	-	-	14.28	40.27	30.28	56.27	85.83
Lakshadweep	-	-	-	-	-	-	-	-	-	0.75	0.71	0.75	0.71	-5.33
Puducherry	-	-	-	-	-	-	-	-	-	0.03	0.08	0.03	0.08	220.00
Others	-	-	-	-	4.30	4.30	-	-	-	58.31	58.31	62.61	62.61	0.00
All India Total	4831.33	8181.70	115.08	114.08	26866.66	32279.77	4273.47	4379.86	6762.85	12288.83	42849.38	57244.23		
Distribution (%)	11.28	14.29	0.27	0.20	62.70	56.39	9.97	7.65	15.78	21.47	100.00	100.00		

Note : -: Not available

Source : 1. Energy Statistics 2018, Ministry of New and Renewable Energy, Govt. of India, New Delhi.

2. www.indiaiat.com/table/power/26/ accessed on 31.05.2017.

3. 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 31.03.2017)

State/UT	Biogas Plants (No. lakh)	Biomass Gasifiers (Rural+ Industrial) (KW)	Biomass (non-bagasse) (MW)	Water Pumping/ Wind Mills# (Nos.)	SPV Pumps (Nos.)	Solar Photovoltaic			
						SLS (No. lakh)	HLS (No. lakh)	SL (No. lakh)	PP (KWP)
Andhra Pradesh	5.49	23	99.0	6.0	10,619	0.1	0.2	0.5	3785.6
Arunachal Pradesh	0.03	-	-	0.0	22	0.0	0.2	0.1	600.1
Assam	1.28	3	-	3.0	45	0.0	0.1	0.0	1605.0
Bihar	1.30	6	8.2	46.0	2,882	0.0	0.1	0.5	3968.6
Chhattisgarh	0.54	1	2.5	1.0	11,125	0.0	0.1	0.0	28444.0
Goa	0.04	-	-	0.0	15	0.0	0.0	0.0	32.7
Gujarat	4.33	20	-	945.0	8,051	0.0	0.1	0.3	13576.6
Haryana	0.62	4	77.1	0.0	543	0.2	0.6	0.9	2321.3
Himachal Pradesh	0.48	-	7.2	0.0	6	0.6	0.2	0.3	1853.5
Jammu & Kashmir	0.03	0	-	0.0	39	0.1	0.7	0.5	7719.9
Jharkhand	0.07	1	4.3	0.0	3,146	0.0	0.1	0.2	3639.9
Karnataka	4.90	6	15.2	28.0	3,477	0.0	0.5	0.1	7754.0
Kerala	1.49	-	0.7	79.0	810	0.0	0.4	0.5	13894.4
Madhya Pradesh	3.64	10	12.4	0.0	3,813	0.1	0.0	0.1	3654.0
Maharashtra	8.99	7	16.4	26.0	2,028	0.1	0.0	0.7	3857.7
Manipur	0.02	-	-	-	40	0.0	0.0	0.0	1241.0
Meghalaya	0.10	0	13.8	-	19	0.0	0.1	0.2	884.5
Mizoram	0.05	-	-	-	37	0.1	0.1	0.1	1719.0
Nagaland	0.08	-	-	-	3	0.1	0.0	0.1	1506.0
Odisha	2.70	0	8.2	-	7,079	0.1	0.1	0.1	567.5

State/UT	Biogas Plants (No. lakh)	Biomass Gasifiers (Rural+ Industrial) (KW)	Biomass (non-bagasse) (MW)	Water Pumping/ Wind Mills# (Nos.)	SPV Pumps (Nos.)	Solar Photovoltaic			PP (KWP)
						SLS (No. lakh)	HLS (No. lakh)	SL (No. lakh)	
Punjab	1.77	-	123.1	-	1,857	0.4	0.1	0.2	2066.0
Rajasthan	0.71	3	2.0	222.0	40,190	0.1	1.6	0.0	10850.0
Sikkim	0.09	-	-	-	-	0.0	0.2	0.2	850.0
Tamil Nadu	2.23	15	24.1	60.0	4,763	0.4	2.3	0.2	12752.6
Telangana	-	-	-	-	424	0.0	-	-	5374.0
Tripura	0.04	-	-	-	151	0.0	0.3	0.6	657.0
Uttar Pradesh	4.41	30	170.4	-	10,860	1.9	2.4	0.6	10041.5
Uttarakhand	0.21	2	47.5	-	26	0.2	0.9	0.9	1539.0
West Bengal	3.67	30	19.9	-	653	0.1	1.5	0.2	1730.0
Andaman & Nicobar	0.00	-	-	2.0	5	0.0	0.0	0.1	167.0
Chandigarh	0.00	-	-	-	12	0.0	0.0	0.0	730.0
Dadra & Nagar Haveli	0.00	-	-	-	-	-	-	-	0.0
Daman & Diu	-	-	-	-	-	-	-	-	0.0
Delhi	0.01	-	-	-	90	0.0	-	0.0	1269.0
Lakshadweep	-	-	-	-	-	0.0	-	0.1	2190.0
Puducherry	0.01	-	-	-	21	0.0	0.0	0.0	121.0
Others*	0.02	-	-	-	2,027	0.1	1.3	1.3	23885.0
Total	49.56	161.46	651.91	1418.08	114878	4.64	14.07	9.96	176847.36

Note : 1. *: Others include installations through NGOs/IREDA in different states, 2. SLS = Street Lighting System, 3. HLS = Home Lighting System, 4. SL = Solar Lantern, 5. PP = Power Plants, 6. SPV = Solar, 7. Photovoltaic, 8. SHP = Small Hydro Power, 9. MW = Mega Watt, 10. KWP = Kilowatt peak, 11. -: Not available.

Source : 1. Energy Statistics 2018, 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.

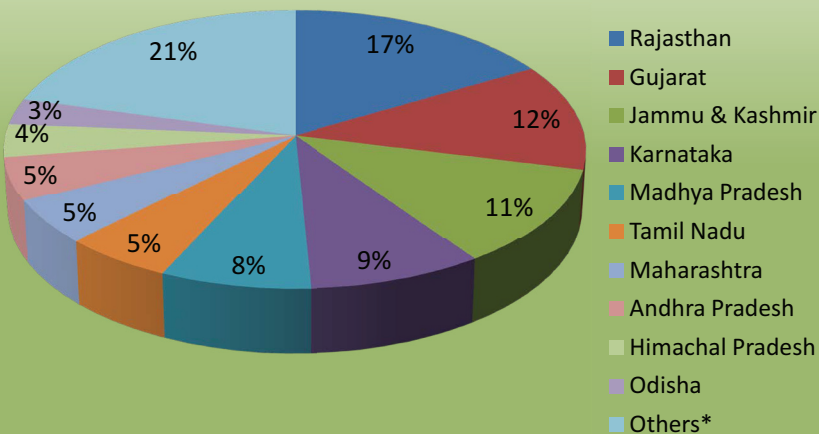
Table 6.10: Source-wise and state-wise estimated potential of renewable power in India (as on 31.03.2017)

State/UT	Wind Power	Small Hydro Power	Biomass Power	Cogeneration bagasse	Waste to Energy	Solar energy	Total	
	@ 100 m						Estimated Potential	Distribution (%)
Andhra Pradesh	44229	409	738.3	250	123	3840	49590	5.05
Arunachal Pradesh	-	2065	9.3	-	-	8650	10724	1.09
Assam	-	202	278.7	-	8	13760	14249	1.45
Bihar	-	527	645.9	200	73	11200	12646	1.29
Chhattisgarh	77	1098	245.6	10	24	0	1445	0.15
Goa	1	5	26.1	-	-	88	120	0.01
Gujarat	84431	202	1226.1	50	112	35770	121791	12.39
Haryana	-	107	1375.1	100	24	4560	6167	0.63
Himachal Pradesh	-	3460	142.2	-	1.5	33840	37444	3.81
Jammu & Kashmir	-	1707	42.7	-	-	111050	112800	11.48
Jharkhand	-	228	107	-	10	18180	18525	1.88
Karnataka	55857	3726	1222.1	1400	-	24700	86906	8.84
Kerala	1700	647	864.4	-	36	6110	9358	0.95
Madhya Pradesh	10484	820	1386.2	-	78	61660	74429	7.57
Maharashtra	45394	786	1969.7	2200	287	64.32	50701	5.16
Manipur	-	100	15.3	-	2	10630	10747	1.09
Meghalaya	-	230	11.4	-	2	5860	6103	0.62
Mizoram	-	169	1.2	-	1.5	9090	9262	0.94
Nagaland	-	182	10.2	-	-	7290	7482	0.76
Odisha	3093	286	432.7	-	22	25780	29614	3.01
Punjab	-	578	3177.6	160	45	2810	6771	0.69
Rajasthan	18770	52	1121.9	10	62	142310	162326	16.52
Sikkim	-	267	2.4	-	-	4940	5209	0.53
Tamil Nadu	33800	604	1163.9	700	151	17670	54089	5.50
Telangana	4244	102	-	100	1.5	20410	24858	2.53
Tripura	-	47	3	-	176	2080	2306	0.23
Uttar Pradesh	-	461	1764.9	2000	5	22830	27061	2.75
Uttarakhand	-	1664	88.3	80	148	16800	18781	1.91
West Bengal	2	392	529.2	-	-	6260	7183	0.73
Andaman & Nicobar	8	7	-	-	6	-	21	0.00
Chandigarh	-	-	-	-	-	-	0	0.00
Dadar & Nagar Haveli	-	-	-	-	-	-	-	0.00
Daman & Diu	-	-	-	-	131	-	131	0.01
Delhi	-	-	-	-	-	2050	2050	0.21
Lakshadweep	8	-	-	-	2.5	-	11	0.00
Puducherry	153	-	-	-	1022	-	1175	0.12
Others*	-	-	-	-	-	790	790	0.08
All India Total	302251	21134	18601.4	7260	2554	649342	982862	100.00
Distribution (%)	30.75	2.15	1.89	0.74	0.26	66.07	100.00	

Note : 1. *: Industrial waste, 2. -: Not available

Source : 1. Ministry of New and Renewable Energy, Govt. of India, New Delhi.
2. Energy Statistics 2018, 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.

Percentage distribution of state-wise estimated potential of renewable power in India as on 31.03.17



Percentage distribution of source-wise estimated potential of renewable power in India as on 31.03.17

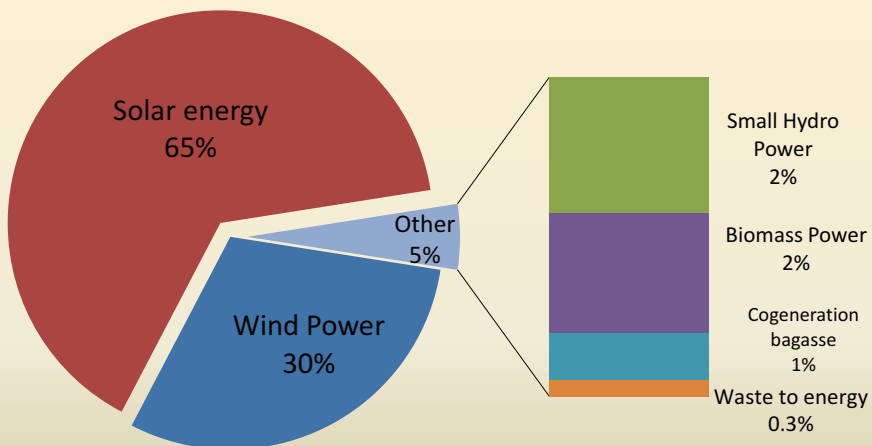


Table 6.11: Consumption of electricity by various sectors in India(in Giga Watt Hour) = (10⁶ x Kilo Watt Hour)

Year	Industry	Agriculture	Domestic	Commercial	Traction & Railways	Others	Total Electricity Consumed
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	384,418	152,744	199,842	74,247	15,540	47,418	874,209
2014-15	418,346	168,913	217,405	78,391	16,177	49,289	948,522
2015-16	423,523	173,185	238,876	86,037	16,594	62,976	1001,191
2016-17*	4,26,665	1,95,473	2,59,311	98,333	17,217	69,269	10,66,268
Distribution (%)	40.01	18.33	24.32	9.22	1.61	6.50	100.00
Growth rate of 2015-16 over 2014-15 (%)	0.74	12.87	8.55	14.29	3.75	9.99	6.50
CAGR 2006-07 to 2015-16 (%)	8.46	6.50	7.93	7.73	4.48	8.85	7.82

Note : *: Provisional.

Source : 1. Central Electricity Authority.
 2. Energy Statistics 2018, 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)

State	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17@
West Bengal	5800	5962	4404	6810	7343	9308	4710
Chhattisgarh	3600	5435	5630	6900	4770	3815	5270
Jharkhand	3500	3370	3580	6865	4920	3650	4594
Maharashtra	700	1000	900	1500	1950	1430	1776
Madhya Pradesh	100	125	80	74	150	200	380
Others	-	-	-	-	-	383	248
Total	13600	15892	14594	22149	19292	18786	16978

Note : 1. *: Includes the quantity of imported and carry over Lac in India, 2. @: 2nd Advance Estimates,
 3. -: Not available.

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

Table 6.13: Power from renewable sources of energy in India during 2017-18

Sector	Cumulative Achievements
I. Grid-Interactive Power (Capacity in MW)	
Wind Power	34046.00
Solar Power- roof top	1063.63
Solar Power- Ground mounted	20587.83
Small Hydro Power	4485.80
Bio-Power (Biomass & Gasification and Bagasse Cogeneration)	8700.80
Waste to Power	138.30
Total	69022.36
II. Off-Grid/ Captive Power (Capacity in MW eq.)	
Waste to Energy	172.15
Biomass (non-bagasse) Cogeneration	662.61
Biomass Gasifiers	163.37
Aero-Generators/Hybrid systems	3.29
SPV Systems	671.41
Water mills/micro hydel	18.81
Total	1672.83
III. Other Renewable Energy Systems	
Family Biogas Plants (in Lakhs)	49.82

Note : eq.: equivalent

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 6.14: State-wise number of cold storages and capacity in India
(as on 31.03.2018)**

(MW)

States/UTs	Number of cold storages	Capacity (MT)
Andaman and Nicobar Islands	3	810
Andhra Pradesh	442	1782561
Arunachal Pradesh	2	6000
Assam	36	157906
Bihar	306	1415595
Chandigarh	7	12462
Chhattisgarh	98	484087
Delhi	97	129857
Goa	29	7705
Gujarat	764	2901807
Haryana	338	749830
Himachal Pradesh	66	131017
Jammu and Kashmir	38	112516
Jharkhand	58	236680
Karnataka	198	560178
Kerala	198	80405
Lakshadweep	1	15
Madhya Pradesh	300	1263665
Maharashtra	604	978392
Manipur	2	5500
Meghalaya	4	8200
Mizoram	3	4001
Nagaland	4	7350
Odisha	171	540141
Puducherry	3	85
Punjab	660	2155704
Rajasthan	166	555278
Sikkim	2	2100
Tamil Nadu	174	337625
Tripura	14	45477
Uttar Pradesh	2299	14176062
Uttarakhand	46	160419
West Bengal	512	5947561
India	7645	34956991

- Source :
1. Lok Sabha Unstarred Question No. 3892, dated on 26.4.2018.
 2. Information received from ICAR-Central Institute of Agricultural Engineering, Nabi Bagh, Berasia Road, Bhopal.

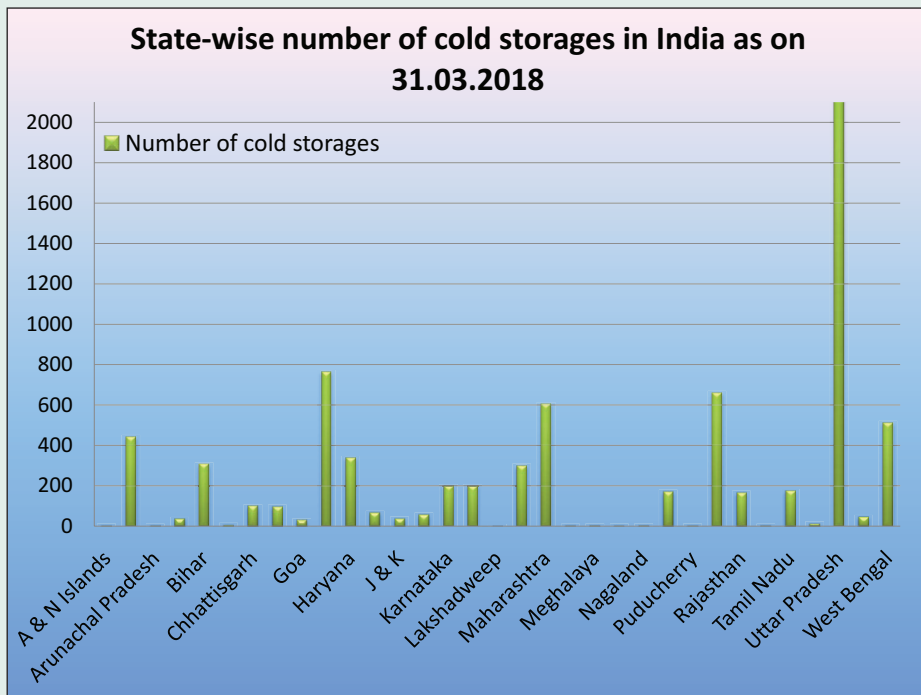
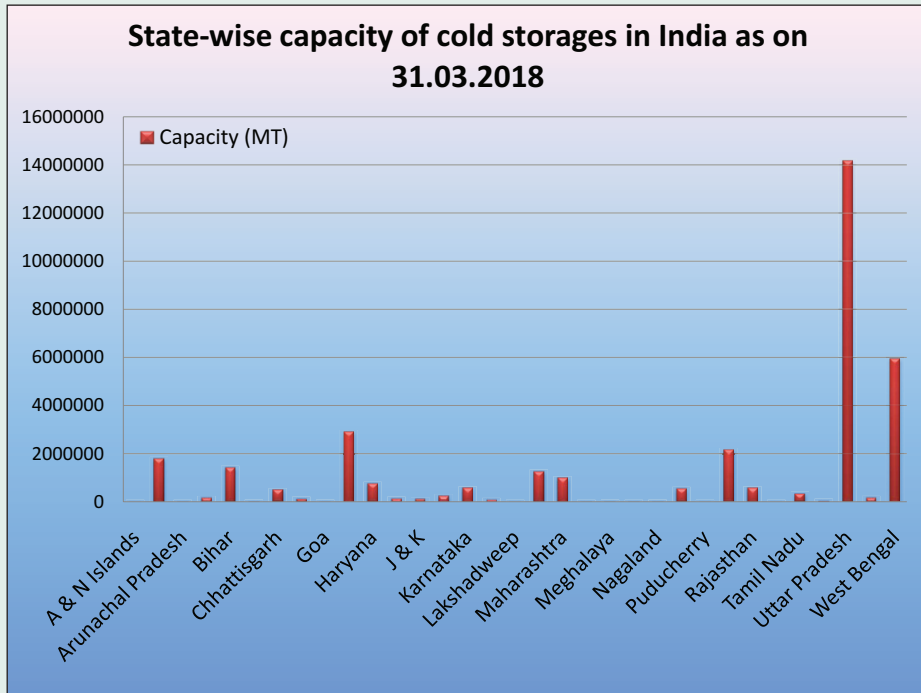


Table 6.15: Horse power-wise models of tractors and power tillers available in India (as on 31.03.2016)

S.No.	Tractor company/model	Horse power (hp)
1.0	New Holland Tractors, Gautam Budh Nagar, Uttar Pradesh	
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
2.0	Tractors & Farm Equipment Ltd. (Massey Ferguson), Chennai, Tamil Nadu	
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

Agricultural Engineering and Produce Management

S.No.	Tractor company/model	Horse power (hp)
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
3.0	Mahindra Gujarat Tractors, Vadodara, Gujarat	
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
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	
4.0	Escort Tractors, Faridabad, Haryana	
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

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S.No.	Tractor company/model	Horse power (hp)
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
5.0	Eicher Tractors, Mandideep, Madhya Pradesh	
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
6.0	HMT Tractors, Panchkula, Haryana	
6.1	HMT 2522 Orchard Special (OS)	25
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
7.0	John Deere (India) Tractors, Pune, Maharashtra	
7.1	5038 D	38
7.2	5310	55
7.3	5036 C	35

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S.No.	Tractor company/model	Horse power (hp)
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
8.0	Punjab Tractors Limited (Swaraj), SAS Nagar, Punjab	
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
9.0	Sonalika international Tractors, Hoshiarpur, Punjab	
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
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

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S.No.	Tractor company/model	Horse power (hp)
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
10.0	Force Tractors, Pune, Maharashtra	
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
11.0	Indo-Farm Tractors & Motors Ltd., Solan, Himachal Pradesh	
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
12.0	Captain Tractors Pvt. Ltd., Rajkot, Gujarat	
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

Agricultural Engineering and Produce Management

S.No.	Tractor company/model	Horse power (hp)
13.0	VST Tillers Tractors Ltd, Bangalore, Karnataka	
14.0	PREET Tractors, Nabha, Punjab	
14.1	PREET 4549	45
14.2	PREET 6549	65
14.3	PREET 7549	75
14.4	PREET 9049	90
15.0	SAS Motors Ltd, New Delhi	
15.1	Angad 240-DI	22
16.0	Action Construction Equipment (Tractors Division), Faridabad, Haryana	
16.1	ACE350	
16.2	ACE450	
17.0	Amar Tractors, Ludhiana, Punjab	
17.1	Amar 240DI	
18.0	Jayant Agro Industries, Rajkot, Gujarat	
18.1	Mini Tractor	12
19.0	Standards Combines (Tractor Division), Barnala, Punjab	
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
20.0	Zimidara Tractors Pvt Ltd, Barnala, Punjab	
20.1	Bharat Track 3035	35
20.2	Bharat Track 3045	45
21.0	Farmer Tractor, Rajkot, Gujarat	
21.1	Mini Tractor	
22.0	Field Marshal, Rajkot, Gujarat	
22.1	Mini Tractor	
23.0	Green Field Agro Equipment, Thane, Maharashtra (Samson)	
23.1	Mini Tractor	
24.0	SAME Deutz-Fahr India (P) Ltd.	
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

Agricultural Engineering and Produce Management

S.No.	Tractor company/model	Horse power (hp)
24.6	Agrolux 80 Profiline	80
Power Tiller company (Manufacturers and Suppliers)		
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	
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, ICAR-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 ₹)

Year	Import			Export		
	Agriculture	Total (National)	% Agriculture to total	Agriculture	Total (National)	% Agriculture to total
	Value	Value	(National)	Value	Value	(National)
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	1213190.20	27370865.80	4.43	2396810.40	18964454.70	12.64
2015-16*	1402886.90	24902980.80	5.63	2153956.80	17163780.50	12.55

Note : *: Provisional.

- Source : 1. *Agricultural Statistics at a Glance 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.
http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_At_Glance-2015.pdf
 2. *Pocket Book of Agricultural Statistics 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.
http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_2016.pdf

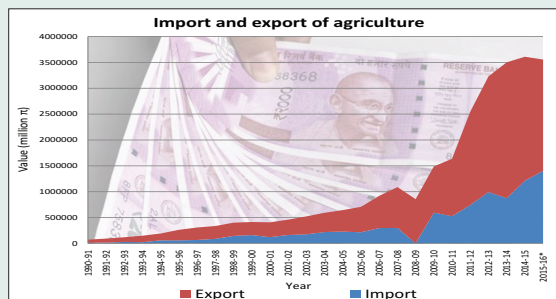


Table 7.2: Quantity and value of export of major commodities in agriculture

(Quantity: MT, Value: ₹ Lakh)

Product	2014-15		2015-16		2016-17	
	Quantity	Value	Quantity	Value	Quantity	Value
Floriculture						
Floriculture	22947.27	46077.23	22691.65	48341.34	22020.33	54670.73
Fruits & vegetables seeds	12499.31	42703.80	13104.26	52919.98	11288.62	52275.17
Total	35446.58	88781.03	35795.91	101261.32	33308.95	106945.90
Fresh fruits and vegetables						
Fresh onions	1238102.60	230054.14	1382959.54	309720.85	2415739.06	310606.44
Other fresh vegetables	835501.20	240223.60	740466.23	221912.95	1016437.72	283202.56
Walnuts	2665.85	13645.24	3291.71	11791.54	2191.19	5527.26
Fresh Mangoes	42998.33	30253.66	36779.26	32063.90	52761.00	44366.00
Fresh grapes	107257.81	108648.99	161029.04	157668.70	231116.86	206528.94
Other fresh fruits	274436.09	124588.02	377314.78	177189.96	409081.25	183592.69
Total	2500961.88	747413.65	2701840.56	910347.90	4127327.08	1033823.89
Processed fruits and vegetables						
Cucumber and Gherkins (Prepd.&Presvd)	251183.01	120242.24	202954.44	99917.20	179660.96	93619.23
Dried & preserved vegetables	63701.77	84713.55	66444.05	91563.71	86791.22	108170.99
Mango Pulp	154820.66	84138.54	128866.01	79618.09	130886.07	84601.79
Other processed fruits & vegetables	316059.42	256991.89	321498.98	290614.51	355315.51	314881.22
Pulses	222262.07	121908.35	256051.91	165809.29	136968.03	127879.42
Total	1008026.93	667994.57	975815.39	727522.80	889621.79	729152.65
Animal products						
Buffalo meat	1476309.78	2928915.69	1314533.59	2668807.86	1323576.11	2616148.67
Sheep/Goat meat	22827.77	82153.84	21635.69	83389.82	22008.58	86974.13
Other meat	261.92	267.17	0.00	0.00	12.07	20.65
Processed meat	406.11	1419.71	279.42	616.48	140.90	457.83
Animal casings	260.15	1933.25	206.36	1702.45	173.24	1383.69

Product	2014-15		2015-16		2016-17	
	Quantity	Value	Quantity	Value	Quantity	Value
Poultry products	556698.81	65119.18	659304.15	76871.61	448724.73	53043.94
Dairy products	66424.37	120539.56	33442.52	75551.32	39166.98	90572.80
Casein	8168.05	42853.42	5897.99	21594.03	6129.89	23765.83
Natural honey	29578.56	53509.97	38177.04	70587.11	45055.45	55779.04
Albumin (eggs & milk)	2125.02	16118.53	1934.12	14982.69	1703.32	8781.67
Total	2163060.54	3312830.32	2075410.88	3014103.37	1886691.27	2936928.25
Other processed foods						
Groundnuts	708386.26	467536.90	542726.41	407563.27	725704.34	544433.45
Guargum	665177.71	947993.57	325250.71	323387.42	419948.19	310662.03
Jaggery & Confectionery	258252.73	116181.13	292841.25	129027.36	297680.57	146794.26
Cocoa Products	20877.70	84865.67	32652.56	126760.66	25649.50	108677.27
Cereal Preparations	306328.81	303875.50	316533.44	335811.08	339923.14	356554.69
Milled Products	415984.45	101909.43	431464.50	110273.42	255803.64	81354.01
Alcoholic Beverages	264625.53	223162.15	238672.05	200638.91	230827.23	199135.24
Miscellaneous Preparations	372998.36	243781.07	355786.36	259869.28	282577.03	256579.94
Total	3012631.55	2489305.42	2535927.28	1893331.40	2578113.64	2004190.89
Cereals						
Basmati Rice	3702260.07	2759789.17	4045822.29	2271859.66	3985195.60	2151290.92
Non Basmati Rice	8274046.02	2042854.26	6464569.77	1548339.32	6770804.28	1692987.72
Wheat	2924070.18	499183.94	666668.95	106177.28	265606.06	44785.02
Maize	2825610.60	403750.82	697947.17	116201.04	566352.23	103013.40
Other Cereals	688199.92	122401.73	269974.46	54048.71	168435.54	39563.56
Total	18414186.79	5827979.92	12144982.64	4096626.01	11756393.71	4031640.62
Grand Total	27134314.27	13134304.91	20469772.66	10743192.80	21271456.44	10842682.20

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: MT, Value: ₹ Lakh)

Product	2014-15		2015-16		2016-17	
	Quantity	Value	Quantity	Value	Quantity	Value
Floriculture						
Floriculture	4813.70	11326.18	4768.81	11440.01	5550.08	13381.00
Fruits & vegetables seeds	14115.24	61147.72	14328.07	70303.49	14073.87	65333.20
Total	18928.94	72473.90	19096.88	81743.50	19623.95	78714.20
Fresh fruits and vegetables						
Fresh onions	386.93	63.88	87323.61	20112.70	86.83	21.33
Other fresh vegetables	15863.45	4330.25	10340.91	1783.33	8496.56	1101.97
Walnuts	1341.85	3620.67	5543.83	11026.52	13033.23	24039.78
Fresh Mangoes	0.00	0.00	0.95	0.60	5.04	4.65
Fresh grapes	20586.18	37150.46	20340.70	44519.74	17887.85	41076.52
Other fresh fruits	742344.91	496298.77	697665.58	464879.03	865073.18	523461.61
Total	780523.32	541464.03	821215.58	542321.92	904582.69	589705.86
Processed fruits and vegetables						
Cucumber and Gherkins (prepd. & presvd)	157.96	174.96	22.46	24.16	59.78	94.21
Dried & preserved vegetables	3355.20	4188.75	4285.99	4355.09	3502.50	5154.95
Mango Pulp	30.00	1.83	19.22	20.98	0.00	0.00
Other processed fruits & vegetables	42453.56	56930.81	50976.53	60670.78	53745.87	62079.71
Pulses	4634739.84	1727257.04	5878397.52	2596394.64	6661329.15	2875096.45
Total	4680736.56	1788553.39	5933701.72	2661465.65	6718637.30	2942425.32
Animal products						
Sheep/Goat Meat	83.57	844.07	57.35	479.67	122.92	850.20
Other Meat	475.19	2018.18	499.89	1718.24	593.46	1899.45
Processed Meat	248.35	928.20	72.10	275.38	132.47	446.69
Poultry Products	814.18	3648.45	869.27	2641.89	721.37	2956.93

Product	2014-15		2015-16		2016-17	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Products	11901.61	28278.12	16986.74	32230.14	16305.78	23020.25
Casein	1134.46	7574.46	823.66	3920.04	434.19	1710.98
Natural Honey	792.62	1414.84	423.01	934.44	161.70	752.28
Albumin(Eggs & Milk)	1562.10	9736.74	2207.73	9064.91	4332.74	14701.76
Total	17012.08	54443.06	21939.75	51264.71	22804.63	46338.54
Other processed foods						
Groundnuts	21.00	14.94	106.43	31.32	325.05	139.28
Guargum	147.82	589.00	634.63	1392.88	182.05	240.68
Jaggery & Confectionery	53608.34	51180.66	72927.53	53927.00	64086.73	56065.05
Cocoa Products	65309.57	155093.94	56424.69	139890.92	63613.17	154230.78
Cereal Preparations	63249.61	56892.71	61392.61	57259.63	67030.69	58453.19
Milled Products	3466.12	1775.57	4393.66	2139.56	3555.95	1621.80
Alcoholic Beverages	160664.94	238376.80	283096.37	280673.76	433798.28	347631.46
Miscellaneous Preparations	196700.86	179518.18	186123.68	182459.66	229557.04	212571.50
Total	543168.26	683441.80	665099.60	717774.73	862148.96	830953.74
Cereals						
Non Basmati Rice	1903.43	1059.63	1020.13	591.18	1141.36	725.44
Wheat	27973.19	5874.48	516166.56	87000.32	5749431.07	850904.90
Maize	6021.20	2836.10	181763.94	29177.20	83216.79	16245.75
Other Cereals	18951.19	3626.04	24381.72	5253.92	228152.50	33072.36
Total	54849.01	13396.25	723332.35	122022.62	6061941.72	900948.45
Grand Total	6095218.17	3153772.43	8184385.88	4176593.13	14589739.25	5389086.11

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

Table 7.4: Value of export and import of selected commodities in agriculture

Product description	Value of export						Value of import				(million ₹)						
	2014-15		2015-2016		2016-2017		2017-2018*		2014-15			2015-2016		2016-2017		2017-2018*	
Fish and crustaceans molluscs and other aquatic invertebrates	320843.78	293789.15	368978.94	407560.93	3792.91	4415.19	3952.36	5242.84									
Products of animal origin not elsewhere specified or included	6083.78	6025.14	5357.70	6866.77	2269.43	2511.27	2700.69	2529.84									
Live trees & other plants; bulbs; roots and the like; cut flowers and ornamental foliage	4607.97	4834.13	5467.07	4658.08	1133.71	1144.00	1338.10	1236.31									
Edible vegetables & certain roots and tubers	72160.31	82675.29	86798.29	72209.67	173588.22	264092.94	288129.70	188036.31									
Edible fruits & nuts; peel or citrus fruit or melons	98591.31	104037.58	116005.57	104088.09	162877.52	198839.91	203989.87	206120.40									
Coffee tea mate & spices	175631.01	193265.57	213444.48	188958.71	44627.61	50568.18	50821.42	49124.46									
Cereals	582822.20	409662.63	403165.07	463781.79	1364.97	12254.13	90110.47	26931.56									
Products of milling industry malt; starches; inulin; wheat gluten	18670.91	19550.43	14611.62	14176.22	3757.01	3726.25	4021.33	4505.79									
Oilseeds & olea. fruits; misc. grains; seeds and fruit; industrial or medicinal plants; straw and fodder	135608.42	109677.77	121458.67	95592.25	19658.37	21434.05	25556.27	19589.37									
Lac gums resins & other veg. saps and extracts	118954.33	56719.05	56601.86	58267.79	11181.20	13344.60	14658.71	14500.70									
Animal or vegetable fats & oils and their cleavage products; pre edible fats; animal or vegetable wax or other aquatic invertebrates	59550.23	57418.15	59835.66	74238.91	651845.44	689271.40	733980.21	697561.87									
Prep. of meat of fish or of crustaceans molluscs or other aquatic invertebrates	9519.82	13874.48	21271.46	24790.54	200.12	186.10	193.14	275.16									
Sugars & sugar confectionery	65747.26	116077.76	101191.83	61880.67	41887.04	45625.22	74175.61	65650.52									
Cocoa & cocoa preparations	8486.57	12676.07	10867.73	9979.03	15516.27	13989.09	15422.76	13341.59									
Preparations of cereals flour starch or milk; pastrycooks products	29964.65	33135.92	34811.69	31536.30	4000.77	3873.87	3690.01	3907.39									
Preparations of vegetables fruit nuts or other parts of plants	30894.85	32009.49	33102.62	33633.07	4592.33	5137.12	5494.49	5867.10									
Misc. edible preparations	35910.48	37265.93	42123.07	41766.63	7617.61	9008.19	10007.39	11429.43									
Beverages spirits & vinegar	23152.27	20976.13	20921.77	20010.69	33224.45	36670.63	45128.02	41796.14									

Export & Import

Product description	Value of export			Value of import				
	2014-15	2015-2016	2016-2017	2017-2018*	2014-15	2015-2016	2016-2017	2017-2018*
Residues & waste from food industries; prepared animal fodder	100061.53	52366.23	74572.71	88561.13	20226.06	24999.86	33165.29	31330.18
Tobacco & mfd. tobacco substitutes	58685.87	64523.59	64239.70	54258.98	2984.46	3312.16	3057.55	2338.51
Fertilizers	5548.10	6733.67	4655.41	6343.49	391061.48	459731.06	287541.87	281729.51
Tanning or dyeing extracts; tannins and their derivatives pigments and other colouring matter; paints and var; putty and other mastics; inks	172058.58	161651.38	171894.22	169547.84	98205.18	104668.43	111858.24	118933.75
Essential oils & resinoids cosmetics perfumery or toilet preparations	89277.41	97326.38	105865.60	108750.66	38566.54	42272.24	45767.67	50288.12
Rubber and articles thereof	166575.48	155011.69	167181.79	171668.06	198637.40	190646.79	195006.72	203534.52
Wood & articles of wood charcoal	21178.99	29119.37	26977.51	23957.62	160210.62	155023.40	134033.17	139151.41
Cork & articles of cork	123.95	130.64	161.11	164.23	339.49	347.31	329.49	363.97
Manufactures of plaiting materials basket ware and wickerwork	275.96	493.55	661.35	1387.07	165.60	143.73	144.89	159.73
Pulp of wood or other fibrous cellulosic material; waste and scrap of paper or paperboard	495.40	739.30	480.33	67.24	103230.82	106988.51	110876.20	122181.43
Paper & paperboard articles of paper pulp of paper or of paperboard	70369.65	74937.36	78558.21	82169.13	158018.66	162045.73	181610.19	180909.75
Textile articles	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	3660.93	4342.61	4547.11	3179.71	1378.18	1897.82	2524.38	2149.25
Total	2485512.00	2251046.44	2415810.09	2424051.27	2356159.47	2628169.16	2679286.19	2490716.91

Note : 1. N.A.: Not available, 2. *: data is for the period of April to February.

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				
	2013-14	2014-15	2015-2016	2016-2017	2017-2018*	2013-14	2014-15	2015-2016	2016-2017	2017-2018*		
Livestock	692.97	777.53	4662.74	5273.99	2602.51	615.55	739.80	612.30	620.31	545.29		
Meat and edible meat offal	272128.72	301865.28	276039.21	270608.61	246216.65	118.85	196.62	127.64	209.88	269.16		
Dairy produce birds' eggs natural honey edible prod. of animal origin not elsewhere spec. or included	42741.01	23135.81	21457.87	19635.27	20443.60	2259.22	3051.94	3404.52	2438.26	2894.64		
Animal fodder and feed	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.		
Raw hide & skins (other than furskins) & Leather	78025.18	81410.44	68527.86	59474.52	51265.10	34965.08	44823.92	43111.66	40852.93	36464.99		
Wool fine or coarse animal hair horsehair yarn and woven fabric	9547.60	10835.93	11660.14	10758.97	9413.56	22780.19	24455.66	23687.89	21730.96	20450.87		
All groups (total)	403135.48	418024.99	382347.81	365751.36	329941.41	60738.89	73267.94	70944.01	65852.33	60624.95		

Note : 1. N.A.: Not available, 2. *: data is for the period of April to February.

Source : 1. *Basic Animal Husbandry Statistics 2015*, Department of Animal Husbandry Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India.
2. Department of Commerce Ministry of Commerce & Industry Govt. of India. (Website: <http://www.commerce.nic.in/gdb/eecom.asp>)

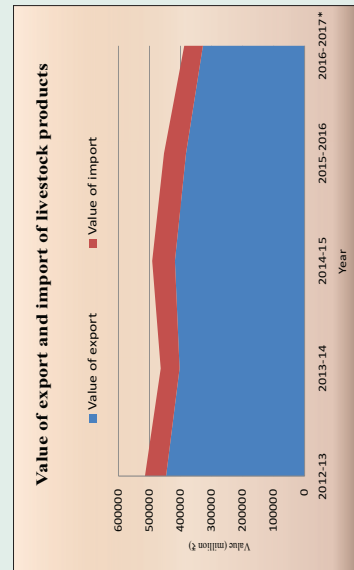


Table 7.6: Month-wise total imports of fruits and nuts by India

(₹ 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 ₹ in Lakh, 2. - : Negligible or Not available.

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

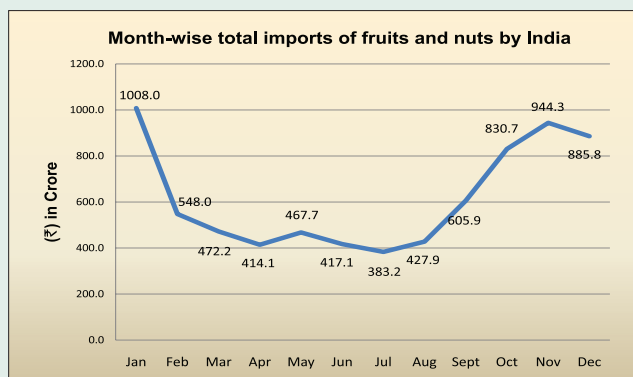


Table 7.7: Quantity and value of export of principal agricultural commodities including marine products

(Quantity: 000't, Value: million ₹)

Items	2012-13		2013-14		2014-15		2015-16*	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Tea	268.80	47187.90	249.91	48733.40	234.39	41712.5	245.70	47190
Coffee	254.02	47110.70	253.9	479910	463.55	49732.5	255.74	51254.5
Tobacco unmanufactured	230.40	50302.30	237.11	47827.40	219.57	41627.1	215.32	43734.5
Tobacco manufactured	N.A.	N.A.	N.A.	13517.20	N.A.	17058.8	N.A.	20789.10
Spices	1008.86	153649.70	895.91	151463.60	939.01	148477.40	831.68	166301.50
Cashew	104.04	40672.10	120.68	50954.90	134.57	55658.50	103.13	50279.90
Cashew Shell Liquid	N.A.	N.A.	9.48	386.10	10.94	558.10	11.68	575.90
Sesamum and Niger seeds	317.38	29709.80	278.28	36970.70	393.82	48267.30	342.58	31355.80
Other oil seeds	N.A.	N.A.	194.46	9455.30	247.54	11353.60	204.62	9644.70
Vegetable oils	N.A.	N.A.	23.01	3248.20	423.72	5801.30	30.60	5229.40
Oil meals	6578.18	165195.30	9830.21	170701.30	3904.59	81291.80	2056.36	35995.60
Castor oil	565.99	43098.20	544.80	43643.30	566.46	47104.20	586.78	46161.00
Shellac	3.60	4017.40	7.74	5139.60	5.24	2674.70	6.39	2033.10
Sugar and molasses	3136.64	87996.60	2746.97	73257.90	2202.80	55218.40	4663.02	104813.30
Marine products	965.10	188412.00	1192.88	306272.80	1231.81	336883.80	978.03	312194.30
Floriculture products	N.A.	4234.50	N.A.	4559.00	22.95	4608.00	22.69	4834.10
Fruits & vegetables seeds	17.17	3477.20	19.34	4165.80	12.50	4270.40	13.10	5291.90
Processed fruits and juices	N.A.	19687.70	N.A.	33320.50	588.38	36268.60	532.28	37669.90
Misc. processed items	N.A.	49626.60	N.A.	25314.80	N.A.	27724.40	N.A.	29078.10
Meat & meat prep.	N.A.	1790320	1389.02	271630.10	1527.53	301275.60	1336.45	275281.40
Cotton raw and waste	2056.69	202765.10	1947.68	223378.40	1142.53	116426.40	1347.07	128211.30
Total (Agri.)	N.A.	2320411.10	N.A.	2627789.60	N.A.	2396810.40	N.A.	2153956.80
Total export	N.A.	16343188.00	N.A.	19050111.00	N.A.	18964455.00	N.A.	17163781.00
% share of agricultural exports	N.A.	14.10	N.A.	13.79	N.A.	12.64	N.A.	12.55

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

Source : 1. *Agricultural Statistics at a Glance 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_At_Glance-2015.pdf)
 2. *Pocket Book of Agricultural Statistics 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_2016.pdf)

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

(Quantity: 000' t , Value: million ₹)

Items	2012-13		2013-14		2014-15		2015-16*	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Tea	22.30	2745.20	22.74	2916.80	28.39	3886.60	23.72	3774.70
Coffee	71.20	7957.20	59.94	7290.20	74.88	9304.70	65.61	8018.30
Tobacco unmanufactured	2166.77	919.40	1.55	795.20	1.93	981.70	2.88	1373.00
Tobacco manufactured	N.A.	1550.10	N.A.	1688.70	N.A.	2002.80	N.A.	1939.20
Spices	157.64	26151.40	155.58	34516.90	163.09	43932.50	193.44	53999.50
Milk & cream	5.34	1072.00	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Cashew nut	892.37	53317.40	776.34	46678.00	933.19	65997.40	961.67	87012.80
Cashew Shelled	6.15	1021.70	0.38	20.80	1.72	100.30	1.86	56.00
Sesame Seeds	N.A.	N.A.	72.93	8086.40	34.77	3799.90	23.60	1796.60
Niger Seeds	N.A.	N.A.	N.A.	N.A.	0.70	37.30	5.78	441.40
Oil seeds	N.A.	4060.70	54.70	1667.90	51.56	1632.90	62.51	2186.20
Veg. oils fixed (Edible)	11013.73	611065.90	7942.89	440380.40	12731.60	648896.00	15642.33	686766.20
Oil Meals	148.30	2103.80	126.94	1998.70	165.10	2726.50	255.01	4299.10
Castor Oil	0.14	22.30	0.07	20.40	0.05	18.10	0.03	11.00
Shellac	2.78	1726.10	0.68	458.00	1.77	595.40	0.71	194.80
Sugar	1122.26	30943.80	880.96	22868.60	1538.64	36682.10	1943.13	40378.60
Mollasses	14.68	75.00	15.07	89.30	60.28	301.40	17.27	75.00
Fruits & nuts excluding cashew nut	N.A.	62979.30	N.A.	N.A.	14.01	6115.30	14.33	7030.30
Marine Product	28.10	4527.00	31.22	4110.10	27.72	4539.00	50.13	6397.70
Veg. and animal fats	1.16	370.40	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total Agri. Imports	N.A.	993386.60	N.A.	874656.60	N.A.	1213190.20	N.A.	1402886.90
Total imports	N.A.	26691619.60	N.A.	27154339.10	N.A.	27370865.80	N.A.	24902980.80
Agri. imports as % of all imports	N.A.	3.72	N.A.	3.22	N.A.	4.43	N.A.	5.63

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

Source : 1. *Agricultural Statistics at a Glance 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.

(http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_At_Glance-2015.pdf)

2. *Pocket Book of Agricultural Statistics 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare Govt. of India. (http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_2016.pdf)

Table 7.9: Trend in exports of marine products

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

Year	Quantity	Value	Unit value	Unit value index	Annual growth rate (%)	
					Quantity	Value
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
2014-15	1051243	334416.10	N.A.	N.A.	6.86	10.69
2015-16	945892	304208.30	N.A.	N.A.	-10.02	-9.03
2016-17	1134948	378709.00	N.A.	N.A.	19.99	24.49

Note : N.A.: Not available.

Source : 1. *Hand Book on Fisheries Statistics 2014*, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare, Govt. of India. (Website: <http://eands.dacnet.nic.in>)
 2. <http://pib.nic.in/newsite/PrintRelease.aspx?relid=122960>
 3. http://mpeda.gov.in/MPEDA/marine_products_exports.php#

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

(Quantity: 000't, Value: million ₹)

Year	Quantity	Value	Annual growth rate (%)	
			Quantity	Value
1992-93	210.79	17431.50	10.83	20.82
1993-94	257.98	25518.90	22.39	46.40
1994-95	320.91	35366.40	24.39	38.59
1995-96	327.37	33811.30	2.01	-4.40
1996-97	394.55	40076.30	20.52	18.53
1997-98	398.20	44867.60	0.93	11.96
1998-99	311.26	43685.50	-21.83	-2.63
1999-00	390.74	51245.60	25.53	17.31
2000-01	502.60	63672.90	28.63	24.25
2001-02	468.03	58983.40	-6.88	-7.36
2002-03	527.87	69280.50	12.79	17.46
2003-04	409.49	61056.30	-22.43	-11.87
2004-05	483.52	64692.20	18.10	5.96
2005-06	554.20	70359.10	14.60	8.76
2006-07	611.55	80010.40	10.35	13.71
2007-08	490.06	69266.70	-19.87	-13.43
2008-09	464.90	70663.70	-5.13	2.02
2009-10	678.44	100485.30	45.93	42.20
2010-11	813.09	129014.70	19.85	28.39
2011-12	862.02	165972.30	6.02	28.65
2012-13	928.22	188562.60	7.68	13.61
2013-14	983.76	302132.60	5.98	60.23
2014-15	1051.24	334416.06	6.86	10.69
2015-16	945.89	304208.30	-10.02	-9.03
2016-17	1134.95	378709.00	19.99	24.49

Source : 1. *Agricultural Statistics at a Glance 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.

(http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_At_Glance-2015.pdf)

2. http://commerce.nic.in/pressrelease/pressrelease_detail.asp

3. http://mpeda.gov.in/MPEDA/marine_products_exports.php#

4. <http://pib.nic.in/newsite/PrintRelease.aspx?relid=122960>

Export & Import

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

(Quantity: t, Value: Lakh ₹)

S. No.	Name of product	Export						Import					
		2014-15		2015-16		2016-17		2014-15		2015-16		2016-17	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
A. Natural resins													
1.	Copal	0.58	0.99	0.00	0.00	2	1.08	2073.05	943.65	2078.20	1115.79	1,838.03	1,322.93
2.	Dammar batu	8.96	15.84	2.84	6.58	5.8	11.57	13663.31	4482.79	16525.84	5674.14	14,521.98	5,156.79
3.	Mastic gum	6569.17	32249.58	7668.42	24755.18	142.64	179.71	N.A.	N.A.	N.A.	N.A.	43,098.06	39,591.01
4.	Gum rosin	0.50	2.22	0.38	2.59	7241.00	20690.00	2.16	10.29	4.40	23.25	N.A.	N.A.
5.	Lac	374.89	520.87	204.33	303.30	0.14	0.12	36117.76	45038.61	41962.57	44297.13	3.75	20.32
6.	Other resins	235.47	409.55	344.96	360.93	169.4	191.55	172.05	772.47	106.03	315.77	117.44	148.7
	Total	7189.56	33199.04	8220.93	25428.57	7560.98	21074.03	52028.33	51247.82	60677.03	51426.08	59579.26	46239.75
B. Gums													
1.	Gum arabic	398.65	1099.32	4136.56	3281.17	0.35	4.94	31007.75	12872.35	31916.79	20496.96	N.A.	N.A.
2.	Asian gum	405.60	1775.30	440.86	1730.61	395.07	1,350.28	46.97	31.52	29.89	15.34	25.66	12.87
3.	African gum	0.50	0.81	0.60	1.11	5,450.32	2,848.47	315.00	92.90	0.00	0.00	46,242.34	28,064.71
4.	Karaya gum Indian tragacanth	198.02	770.63	230.79	771.62	41,177.93	27,294.55	586.28	394.67	771.56	637.97	N.A.	N.A.
5.	Tragacanth (Adraanth)	0.12	0.24	0.36	1.26	276,888.84	246,336.16	2.35	3.10	0.02	1.52	66.85	219.73
6.	Guar gum refined split	84744.27	116171.44	45667.65	40311.47	186.9	630.1	65.15	296.49	32.93	206.08	912.55	784.23
7.	Guar gum treated and pulverized	436431.64	799103.48	211009.53	260841.87	1.2	9.82	60.41	255.03	600.20	1177.43	10	0.29
8.	Xanthum gum	1.00	7.72	4.70	22.87	2.6	9.17	80.48	165.24	24.25	48.78	56.88	80.4
9.	Other natural gums	3062.81	4841.57	1639.90	5033.62	2,302.64	,394.38	309.64	639.35	303.77	549.50	648.85	1,321.07
	Total	525242.60	923770.50	263130.94	311995.60	326405.85	278483.49	32474.02	14750.65	33679.40	23133.58	47963.13	30483.3
C. Gum resins													
1.	Asafetida	10883.07	4104.90	885.43	4625.51	1,190.32	5,738.40	1029.27	39891.82	1199.12	52742.14	1,322.70	58,347.01
2.	Myrrh	12.39	20.50	0.61	10.22	0.51	8.49	57.03	251.22	71.16	359.87	77.93	374.45

S. No.	Name of product	Export						Import					
		2014-15		2015-16		2016-17		2014-15		2015-16		2016-17	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
3.	Oilbanum or Frankincense	87.00	107.82	102.79	143.79	74.56	164.94	54.78	114.43	74.46	480.00	60.6	416.45
4.	Other gum resins	205.89	2068.19	121.51	1792.28	145.85	1,949.18	546.39	1157.24	686.46	1027.69	761.02	1,304.93
	Total	11188.35	6301.40	1110.34	6571.80	1,411.24	7,861.01	1687.47	41414.71	2031.19	54609.70	2,222.25	60,442.84
	Grand Total	543620.51	963270.94	272462.21	343995.98	335,378.07	307,418.53	86189.81	107413.18	96387.62	129169.37	109,764.64	137,165.89

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 ₹)

Year	Grade→	Export						Import					
		Shellac & button lac	Seedlac	Dewaxed shellac	Aleurtic Acid	Bleached lac	Gasket shellac	Shellac wax	Other	Total	Total	Lac	
2010-11	Quantity	4616.18	1089.55	200.12	64.00	336.13	4.32	28.75	N.A.	6339.05	N.A.	N.A.	
	Value	13565.14	3659.44	1051.68	1118.13	1598.86	6.62	113.05	N.A.	21112.92	N.A.	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.	N.A.	
	Value	21565.47	7737.20	2031.08	1118.13	2454.52	7.43	290.35	0.06	36461.30	N.A.	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.	N.A.	
	Value	23744.40	8422.49	3066.53	10068.10	2082.03	9.20	557.53	77.33	48027.60	N.A.	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.	N.A.	
	Value	22556.46	19803.33	1930.74	10054.42	2311.04	0.00	183.61	14.03	56853.63	N.A.	N.A.	
2014-15	Quantity	3261.44	2690.29	183.02	181.12	142.89	N.A.	15.20	95.22	6569.17	N.A.	367.02	
	Value	14650.36	8770.25	1250.94	5909.11	1048.13	N.A.	116.28	504.52	32249.58	N.A.	447.39	
2015-16	Quantity	3798.80	3091.06	150.57	168.50	225.34	6.48	14.20	213.49	7668.42	N.A.	100.71	
	Value	11619.82	6225.18	775.23	3669.51	1275.90	16.50	64.21	1108.83	24755.18	N.A.	92.31	
2016-17	Quantity	3273.16	3151.45	274.81	151.76	385.06	N.A.	4.49	0.05	7240.78	N.A.	309.00	
	Value	8556.63	6109.3	1268.07	2658.47	2068.67	N.A.	28.7	0.08	20689.92	N.A.	767.63	

Note : N.A.: Not available.

Source : 1. Directorate General of Commercial Intelligence & Statistics, Kolkata. (www.dgciscol.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, import and consumption of fertilizers

Year	1980-81	1990-91	2000-01	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
(000 't)												
Nitrogenous fertilizers												
Production	2164	6993	10961	10900	10870	11900	12156	12259	12194	12378	12394	13416
Imports	1510	414	154	3677	3844	3447	4492	5240	4690	3808	4766	5068
Consumption	3678	7997	10920	14419	15090	15580	16558	17300	16821	16750	16945	17372
Phosphatic fertilizers												
Production	842	2052	3743	3807	3464	4321	4223	4368	3830	3960	4121	4394
Imports	452	1016	396	1253	2927	2756	3802	4427	2778	1590	1832	2888
Consumption	1214	3221	4215	5515	6506	7274	8050	7914	6653	5633	6098	6979
Potassic fertilizers												
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	797	1328	1541	2653	3380	2944	4069	3335	1230	1333	2537	2053
Consumption	624	1328	1568	2636	3313	3632	3514	2576	2062	2099	2532	2402
All fertilizers (NPK)												
Production	3006	9045	14704	14707	14334	16221	16380	16627	16024	16338	16515	17810
Imports	2759	2758	2091	7583	10151	9148	12363	13002	8698	6731	9135	10009
Consumption	5516	12546	16703	22570	24909	26486	28122	27790	25536	24482	25576	26753
C & F Values of Urea Imports (₹ Crore)	N.A.	1335.82	#	N.A.	N.A.	N.A.	8348.89	15442.02	15980.22	14987.95	12035.26	13984.93**

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 2015*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India.

(http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_At_Glance-2015.pdf)

2. *Pocket Book of Agricultural Statistics 2016*, Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare Govt. of India.

(http://eands.dacnet.nic.in/PDF/Agricultural_Statistics_2016.pdf)

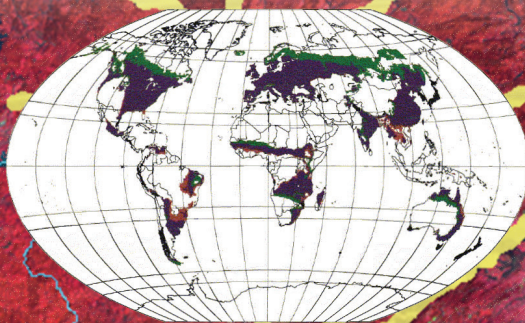
Table 7.14: Import of fertilizer materials

(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 ₂ O)	SOP (50% K ₂ O)
1997-98	-	2389.0	-	1536.0 17.9 ^s	-	2380.4	18.1
1998-99	97.0	556.0	-	2091.1 44.0 ^s	-	2579.8	20.5
1999-00	79.0	553.0	-	3268.0 56.0 ^s	-	2946.1	12.5
2000-01	-	-	-	861.0 78.1 ^s	-	2646.0	12.8
2001-02	-	220.0	-	932.7 125.2 ^s	-	2810.2	22.2
2002-03	-	119.4**	-	383.2 99.9 ^s	-	2603.2	13.0
2003-04	-	143.1**	-	734.1 65.0 ^s	-	2579.3	10.5
2004-05	-	641.0	-	643.6 21.6 ^s	-	3409.5	25.2
2005-06	-	2056.8	-	2437.7 45.0 ^s	-	4577.5	35.1
2006-07	24.8	4718.8	-	2875.4 97.2 ^s	-	3448.4	13.1
2007-08	-	6928.0	5.0	2723.6 266.0 ^s	-	4420.8	31.6
2008-09	23.0	5667.0	2.5	6191.7 266.9 ^s	173.1	5671.7	27.3
2009-10	35.6	5210.0	11.5	5888.9 193.4 ^s	87.0	5286.5	37.1
2010-11	26.0	6610.0	-	7411.0 188.0 ^s	98.0	6357.0	36.0
2011-12	36.0	7834.0	-	6905.2 493.7 ^s	159.7	3984.6	54.0
2012-13	1.4	8044.0	-	5702.3 152.2 ^s	-	2496.1	29.5
2013-14	2.9	7088.0	-	3261.1 38.6 ^s	-	3180.0	57.5
2014-15	155.3	8749.0	-	3853.0 136.0 ^s	-	4197.0	78.0
2015-16	50.9	8474.0	-	6008.0 22.0 ^s	-	3243.0	45.4
2016-17*	114.6	5481.0	-	4385.0 (-) ^s	-	3736.0	46.0

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, 9. -: Not available.

Source : *Fertilizer Statistics 2016-2017*, 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 in 2015

Item	India	World	India's		Next to
			% Share	Rank	
1. Area (million ha)					
Total area	329	13467	2.4	VII	Russian Federation, Canada, USA, China, Brazil, Australia
Land area	297	13009	2.3	VII	Russian Federation, China, USA, Canada, Brazil, Australia
Arable land	156	1426	11.0	I	
2. Population (million)					
Total	1309	7383	17.7	II	China
Rural	862	3368	25.6	I	
3. Crop production (million t)					
(A) Total Cereals					
Wheat	87	737	11.7	II	China
Rice (Paddy)	157	740	21.2	II	China
(B) Total Pulses					
	17	78	22.5	I	
(C) Oilseeds					
Groundnut (in shell)	7	45	15.0	II	China
Rapeseed	6	71	8.8	III	Canada, China
(D) Fruits & Vegetables					
Vegetables & Melons	119	1195	10.0	II	China
Fruits Excluding Melons	87	710	12.3	II	China
Banana	29	115	25.2	I	
Potatoes	48	377	12.7	II	China
Onion (Dry)	19	91	20.8	II	China
(E) Commercial crops					
Sugarcane	362	1887	19.2	II	Brazil
Tea	1.2	5.7	21.8	II	China
Coffee (green)	0.3	8.9	3.7	VII	Brazil, Vietnam, Colombia, Indonesia, Ethiopia, Honduras
Jute & allied fibres	1.9	3.5	54.0	I	
Cotton (lint)	6.2	26.2	23.66	I	
Tobacco	0.7	7.0	10.7	II	China
Unmanufactured					
4. Livestock (million heads)					
Cattle	185	1452	12.7	II	Brazil
Buffaloes	111	196	56.4	I	
Sheep	62	1160	5.4	III	China, Australia
Goats	132	979	13.5	II	China
Chicken				VI	China, USA, Indonesia, Brazil, Iran (Islamic Republic of)
	740	22112	3.3		
5. Animal Products (million t)					
Total Milk	156	807	19.3	I	
Total Eggs (Primary)	4	78	5.5	III	China, USA
Total Meat	7	324	2.2	VI	China, USA, Brazil, Russian Federation, Germany

Source : *Agricultural Statistics at a Glance 2017*. Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Govt. of India. (In press)

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

(Area: in million ha, Production: in million t)

Crop	Area					Production				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
Rice	162.72 (27.05)	162.19 (26.36)	164.53 (26.83)	162.91 (27.08)	160.76 (26.99)	726.38 (21.74)	736.26 (21.43)	741.99 (21.46)	742.43 (21.17)	740.08 (21.15)
Wheat	220.49 (13.18)	217.77 (13.71)	218.74 (13.56)	221.26 (13.77)	222.16 (14.17)	697.70 (12.45)	672.72 (14.1)	710.96 (13.15)	733.53 (13.07)	736.98 (11.74)
Maize	171.21 (5.13)	178.81 (4.87)	185.93 (5.07)	184.66 (5.01)	182.49 (4.76)	886.01 (2.46)	874.24 (2.55)	1015.40 (2.39)	1038.33 (2.33)	1010.61 (2.23)
Total cereals	706.18 (14.25)	706.71 (14.00)	722.32 (13.75)	722.87 (13.83)	712.57 (13.97)	2588.11 (11.12)	2562.05 (11.45)	2768.02 (10.65)	2823.73 (10.48)	2795.55 (10.17)
Total pulses	79.60 (35.97)	79.34 (32.72)	80.01 (32.35)	82.74 (34.28)	81.62 (33.13)	69.80 (25.28)	74.43 (22.53)	77.97 (23.77)	78.07 (25.63)	77.57 (22.54)
Groundnut in shell	25.10 (21.15)	25.56 (18.66)	27.26 (20.20)	26.99 (17.36)	26.80 (17.01)	40.86 (17.04)	42.02 (11.17)	46.42 (20.41)	45.47 (16.28)	45.08 (15.02)
Tobacco unmanufactured	4.22 (11.61)	4.17 (11.02)	4.26 (10.58)	4.02 (10.78)	3.89 (11.41)	7.48 (11.10)	7.59 (10.80)	7.62 (10.19)	7.29 (9.89)	6.99 (10.69)
Sugarcane	25.54 (19.36)	26.06 (19.53)	26.91 (18.8)	27.05 (18.45)	26.66 (19.01)	1794.33 (19.08)	1830.94 (19.72)	1901.69 (17.94)	1884.73 (18.68)	1886.88 (19.20)

Note : Figures in parentheses denote India's share to World area and production of principal crops.

Source : FAOSTAT website as on 24.06.2018.

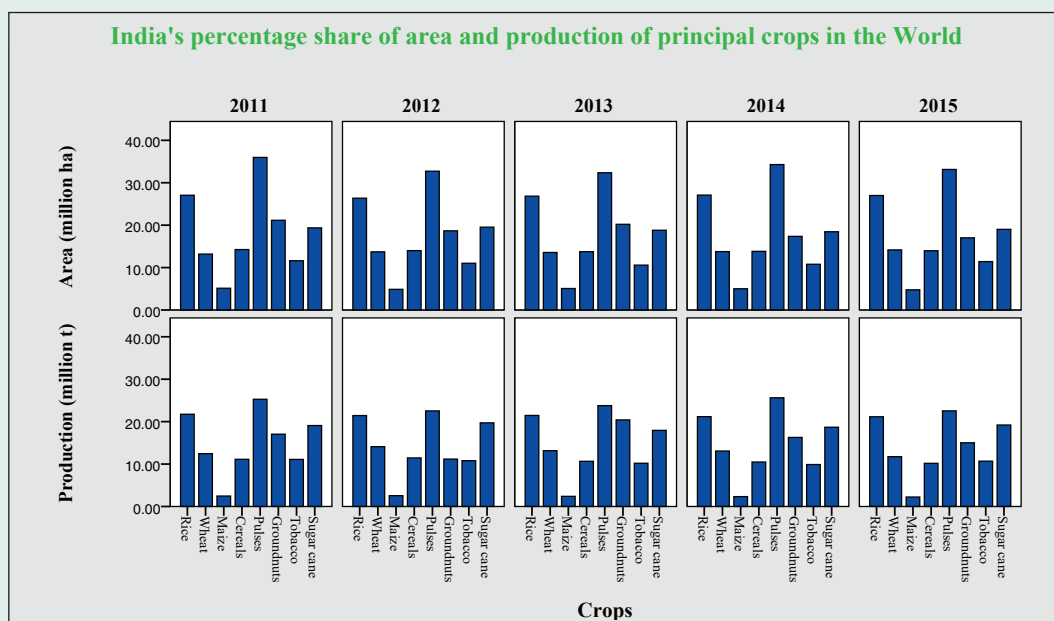


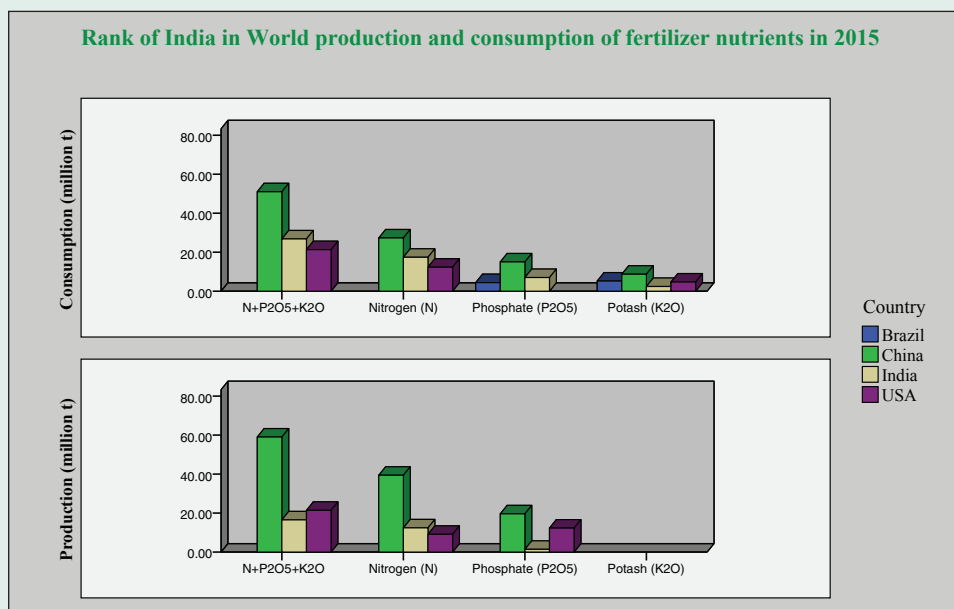
Table 8.3: Rank of India in World production and consumption of fertilizer nutrients in 2015

(Production & Consumption in million t)

Fertilizer	Country	Production [#]	India's Rank in World	Country	Consumption	India's Rank in World
Nitrogen (N)	World	113.3	II	World	103.8	II
	China	39.4		China	27.3	
	India	12.4		India	17.4	
	USA	9.1		USA	12.3	
Phosphate (P ₂ O ₅)	World	53.2	III	World	46.5	II
	China	19.6		China	15.0	
	USA	12.3		India	7.0	
	India	1.4		Brazil	4.4	
Potash (K ₂ O)	India	-	*	World	33.5	IV
				China	8.7	
				Brazil	5.2	
				USA	4.7	
				India	2.4	
N+P ₂ O ₅ +K ₂ O	World	166.6 ^{\$}	III	World	183.8	II
	China	59.0 ^{\$}		China	51.0	
	USA	21.4 ^{\$}		India	26.8	
	India	16.5^{\$}		USA	21.3	

Note : 1. *: There is no known source of K₂O in India, 2. P₂O₅ includes ground rock phosphate, 3. \$: N+P₂O₅, 4. #: Production figure relates to 2014.

Source : *Fertilizer Statistics 2016-17*, The Fertilizer Association of India, New Delhi.



India's Position in World Agriculture

**Table 8.4: Fertilizer consumption per hectare of agricultural land*
in selected countries in 2014 and 2015**

(kg)

Continent/Country	2014				2015			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
Africa								
Egypt	299.7	48.3	16.8	364.8	325.4	46.5	17.1	388.9
Morocco	7.4	7.1	0.9	15.4	7.4	7.2	1.1	15.8
South Africa	4.5	2.0	1.3	7.8	4.1	1.9	1.3	7.3
North America								
Canada	39.5	14.5	6.1	60.1	38.9	15.7	5.8	60.4
USA	29.1	10.0	10.9	50.0	30.1	10.4	11.6	52.1
Latin America and the Caribbean								
Brazil	13.7	16.8	19.1	19.6	12.5	15.6	18.3	46.3
Chile	12.3	8.2	6.4	26.8	12.4	7.9	6.1	26.5
Mexico	14.1	3.4	2.0	19.6	12.7	3.3	2.6	18.6
Asia								
Bangladesh	145.2	66.7	47.8	259.7	138.2	71.0	50.1	259.2
China, Main	48.9	29.6	15.9	94.4	53.1	29.2	17.0	99.3
India	94.4 (85.4)	34.0 (30.7)	14.1 (12.8)	142.4 (129.0)	96.7 (87.6)	38.9 (35.2)	13.4 (12.1)	149.0 (134.9)
Indonesia	52.3	23.3	31.1	106.7	49.7	25.3	28.7	103.7
Japan	87.6	79.3	62.6	229.6	79.5	76.4	51.3	207.1
Korea Rep.	152.7	64.8	63.5	281.0	151.9	71.4	63.2	286.4
Malaysia	80.2	44.4	157.8	282.4	73.4	40.7	142.9	256.9
Nepal	25.7	11.4	0.5	37.5	25.9	7.3	0.7	33.9
Pakistan	91.4	26.9	0.9	119.3	74.0	27.8	0.6	102.3
Sri Lanka	72.7	26.9	33.2	132.8	82.9	25.3	38.6	146.9
Thailand	63.7	22.5	29.2	115.4	56.1	18.7	23.9	98.8
Turkey	38.7	14.8	3.0	56.5	38.6	15.2	3.4	57.2
Vietnam	124.5	64.4	55.2	244.1	138.6	65.4	49.6	253.6
Europe								
Belarus	59.7	17.5	70.6	147.7	54.8	18.1	60.7	133.5
Denmark	77.5	12.2	24.3	114.0	87.5	12.4	24.7	124.6
France	76.3	14.2	15.9	106.4	76.9	14.8	14.4	106.1
Germany	109.0	18.0	27.5	154.5	102.3	17.2	23.8	143.3
Netherlands	99.5	7.6	13.0	120.2	103.3	7.8	13.6	124.7
Poland	69.6	21.1	33.6	124.3	72.8	22.7	36.7	132.3
Russian Fed.	6.8	2.8	1.6	11.3	7.8	2.8	1.6	12.3
Spain	38.2	15.2	13.7	67.0	37.1	14.6	14.0	65.7
United Kingdom	60.8	11.6	15.8	88.1	59.5	11.6	15.7	86.8
Ukraine	28.6	5.2	5.5	39.2	29.5	6.2	5.3	41.0
Oceania								
Australia	3.5	2.3	0.6	6.3	3.1	2.4	0.5	6.0
New Zealand	38.5	32.1	11.8	82.5	38.4	28.6	11.8	78.8
World	20.9	9.4	6.8	37.1	21.2	9.5	6.8	37.5

Note : 1. *: Data pertain to Agricultural Land is for the year 2014, 2. Figure in parenthesis indicates fertilizer consumption per hectare of gross cropped area. Data for gross cropped area pertain to 2014-15.

Source : *Fertilizer Statistics 2016-17*, The Fertilizer Association of India, New Delhi.

Table 8.5: Fertilizer consumption and yield of principal crops in selected countries in 2015 (Provisional)

Continent/ Country	Fertilizer consumption (N+P ₂ O ₅ +K ₂ O)			Yield per ha [@]			
	Per ha of		Per capita of Agricultural Population ^S	Rice	Wheat	Maize	Potato
	Agriculture Land [*]	Arable land and land under permanent crop [*]					
Africa							
Egypt	388.9	388.9	64.7	9431	6592	7355	26965
Morocco	15.8	50.3	59.4	7617	2466	754	29829
South Africa	7.3	54.6	148.0	2695	3022	3753	35851
North America							
Canada	60.4	77.8	6369.8	N.A.	2881	10337	12618
USA	52.1	135.2	4213.6	8372	2930	10572	46900
Latin America and the Caribbean							
Brazil	46.3	151.2	640.1	5753	2228	5536	29316
Chile	26.5	239.0	184.6	6897	5633	12290	19010
Mexico	18.6	77.2	99.0	5808	4526	3478	27144
Asia							
Bangladesh	259.2	277.5	35.3	4509	3080	6984	19648
China, Main	99.3	420.0	61.6	6815	5244	5809	16920
India	149.0	158.0 (134.9)	45.0	3608	2750	2597	23126
Indonesia	103.7	128.5	66.5	5341	N.A.	5178	18203
Japan	207.1	207.1	370.4	6631	4711	2627	31555
Rep. of Korea	286.4	296.2	242.4	7220	2623	5095	26576
Malaysia	256.9	266.6	605.7	2855	N.A.	6227	N.A.
Nepal	33.9	60.1	4.9	3360	2591	2431	13126
Pakistan	102.3	118.7	49.7	3724	2726	4425	23444
Sri Lanka	146.9	175.0	44.5	3873	N.A.	3714	15435
Thailand	98.8	102.5	77.9	2851	1017	4179	16528
Turkey	57.2	92.1	154.9	7941	2880	9327	30949
Vietnam	253.6	269.5	49.5	5760	N.A.	4539	14624
Europe							
Belarus	133.5	199.2	1410.9	N.A.	3962	4365	19363
Denmark	124.6	134.5	2391.2	N.A.	7953	6200	42202
France	106.1	157.9	2509.9	5001	7801	8378	42505
Germany	143.3	198.5	1942.2	N.A.	8088	8722	43812
Netherlands	124.7	212.2	577.8	N.A.	9126	10825	42732
Poland	132.3	168.8	345.7	N.A.	4574	4709	21021
Russian Fed.	12.3	21.4	238.1	5580	2388	4934	15934
Spain	65.7	101.6	894.1	7750	2924	11461	31867
UK	86.8	238.3	1649.4	N.A.	8976	N.A.	43318
Ukraine	41.0	50.6	337.0	5343	3879	5713	16142
Oceania							
Australia	6.0	51.7	2815.9	9910	1917	8300	39250
New Zealand	78.8	1333.9	2608.3	N.A.	8672	11441	48754
World	37.5	116.0	70.1	4604	3317	5538	19855

Note : 1. *: Data pertain to Agricultural Land and Arable Land and Land under Permanent Crop is for the year 2014, 2. \$: Based on agricultural population 2011, 3. @: Yield figures have been rounded, 4. Figure in parenthesis denote fertilizer consumption per hectare of gross cropped area. Data for gross cropped area pertain to 2014-15, 5. N.A.: Not available, 6. Arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years) whereas Agricultural land is the sum of areas under Arable land, Permanent crops, and Permanent pastures.

Source : *Fertilizer Statistics 2016-17*, The Fertilizer Association of India, New Delhi.

Table 8.6: Major cereals and pulses producing countries in the World in 2015

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

Country	Cereals			Country	Pulses		
	Area	Production	Yield		Area	Production	Yield
China	95.64	572.05	5.98	India	27.04	17.48	0.65
USA	58.12	431.87	7.43	Myanmar	4.25	6.29	1.48
India	99.53	284.33	2.86	Canada	3.25	6.07	1.87
Brazil	21.20	106.03	5.00	China	2.39	4.16	1.74
Russian Fed.	42.84	102.45	2.39	Brazil	2.88	3.10	1.07
Indonesia	17.90	95.01	5.31	Ethiopia	1.61	2.95	1.83
France	9.63	72.88	7.57	USA	1.42	2.57	1.81
Ukraine	14.40	59.62	4.14	Russian Fed.	1.58	2.47	1.56
Argentina	11.11	55.65	5.01	Nigeria	3.78	2.37	0.63
Bangladesh	12.15	54.90	4.52	Tanzania	2.08	2.02	0.97
Others	330.04	960.76	2.91	Others	31.32	28.09	0.90
World	712.57	2795.55	3.92	World	81.62	77.57	0.95

Source : FAOSTAT website as on 24.06.2018.

Major cereals and pulses producing countries in the World in 2015

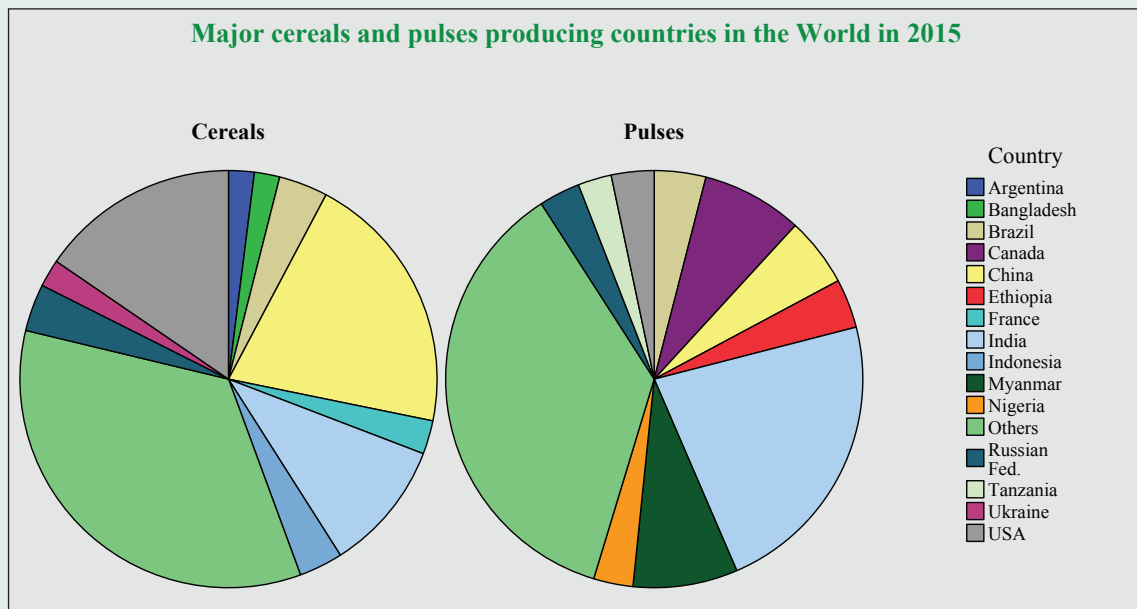
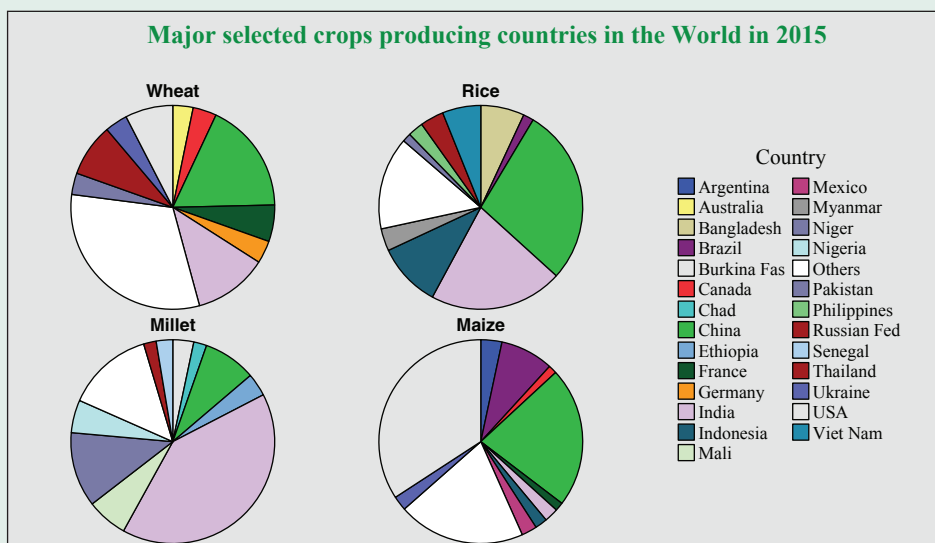


Table 8.7: Major selected crops producing countries in the World in 2015

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

Country	Rice			Country	Wheat		
	Area	Production	Yield		Area	Production	Yield
China	30.22	208.23	6.89	China	24.14	130.19	5.39
India	43.39	156.54	3.61	India	31.47	86.53	2.75
Indonesia	14.12	75.40	5.34	Russian Fed.	25.87	61.79	2.39
Bangladesh	11.37	51.28	4.51	USA	19.06	55.84	2.93
Viet Nam	7.83	45.11	5.76	France	5.48	42.75	7.80
Thailand	9.72	27.70	2.85	Canada	9.58	27.59	2.88
Myanmar	6.77	26.21	3.87	Germany	3.28	26.55	8.09
Philippines	4.66	18.15	3.90	Ukraine	6.84	26.53	3.88
Brazil	2.14	12.30	5.75	Pakistan	9.20	25.09	2.73
Pakistan	2.74	10.20	3.72	Australia	12.38	23.74	1.92
Others	27.82	108.97	3.92	Others	74.85	230.39	3.08
World	160.76	740.08	4.60	World	222.16	736.98	3.32

Country	Maize			Country	Millet		
	Area	Production	Yield		Area	Production	Yield
USA	32.68	345.49	10.57	India	9.12	11.63	1.28
China	38.12	224.63	5.89	Niger	6.43	3.40	0.53
Brazil	15.41	85.28	5.54	China	0.82	2.40	2.94
Argentina	4.63	33.82	7.31	Mali	1.94	1.86	0.96
Mexico	7.10	24.69	3.48	Nigeria	1.59	1.49	0.93
Ukraine	4.08	23.33	5.71	Ethiopia	0.47	1.04	2.23
India	8.69	22.57	2.60	Burkina Faso	1.13	0.95	0.84
Indonesia	3.79	19.61	5.18	Senegal	0.92	0.75	0.81
France	1.64	13.72	8.38	Chad	1.10	0.59	0.54
Canada	1.31	13.56	10.34	Russian Fed.	0.44	0.57	1.29
Others	65.05	203.91	3.13	Others	5.55	3.94	0.71
World	182.49	1010.61	5.54	World	29.50	28.62	0.97



India's Position in World Agriculture

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

Country	Sugarcane			Country	Chick Peas		
	Area	Production	Yield		Area	Production	Yield
Brazil	10.11	750.29	74.20	India	8.19	7.33	0.90
India	5.07	362.33	71.47	Myanmar	0.37	0.57	1.54
China	1.60	116.97	73.12	Australia	0.42	0.56	1.31
Thailand	1.40	94.14	67.21	Ethiopia	0.26	0.52	2.02
Pakistan	1.13	65.48	57.87	Turkey	0.36	0.46	1.29
Mexico	0.76	55.40	73.02	Pakistan	0.94	0.38	0.40
Colombia	0.41	36.71	89.65	Iran (IR)	0.46	0.19	0.42
Guatemala	0.27	33.87	126.43	Mexico	0.08	0.14	1.71
Australia	0.38	32.38	85.99	USA	0.08	0.11	1.39
USA	0.36	29.14	81.15	Russian Fed.	0.10	0.11	1.10
Others	5.18	310.17	59.88	Others	0.66	0.66	1.01
World	26.66	1886.88	70.76	World	11.93	11.04	0.93

Country	Soybeans			Country	Groundnut (in shell)		
	Area	Production	Yield		Area	Production	Yield
USA	33.12	106.95	3.23	China	4.62	16.44	3.56
Brazil	32.18	97.46	3.03	India	4.56	6.77	1.48
Argentina	19.33	61.40	3.18	Nigeria	2.80	3.47	1.24
China	6.51	11.79	1.81	USA	0.63	2.82	4.44
Paraguay	3.54	8.86	2.50	Tanzania	1.62	1.84	1.13
India	11.67	8.57	0.73	Myanmar	0.95	1.52	1.60
Canada	2.20	6.37	2.90	Senegal	1.14	1.05	0.92
Ukraine	2.14	3.93	1.84	Sudan	1.46	1.04	0.71
Uruguay	1.33	3.11	2.33	Argentina	0.42	1.01	2.38
Bolivia*	1.32	3.11	2.35	Chad	0.88	0.93	1.06
Others	7.45	11.66	1.57	Others	7.71	8.19	1.06
World	120.79	323.20	2.68	World	26.80	45.08	1.68

Note : *: Bolivia (Plurinational State of).

Source : FAOSTAT website as on 24.06.2018.

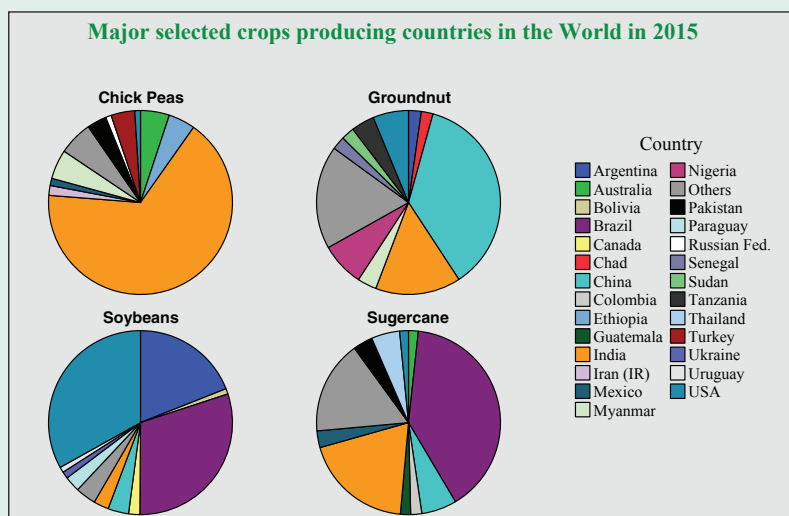


Table 8.8: Major fruits and vegetables producing countries in the World in 2015

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

Country	Fruits			Country	Vegetables		
	Area	Production	Yield		Area	Production	Yield
China	16.08	259.33	16.13	China	23.19	532.73	22.97
India	6.73	88.84	13.20	India	8.16	118.04	14.48
Brazil	2.37	40.12	16.96	USA	1.01	34.11	33.64
USA	1.20	27.25	22.64	Turkey	0.69	23.67	34.19
Indonesia	0.79	20.69	26.16	Egypt	0.67	16.37	24.56
Turkey	1.39	20.30	14.65	Russian Fed.	0.68	16.12	23.72
Mexico	1.39	20.21	14.58	Viet Nam	1.02	14.27	13.94
Spain	1.69	19.57	11.60	Nigeria	3.94	14.11	3.58
Iran (IR)	1.66	18.76	11.30	Iran (IR)	0.45	13.70	30.28
Italy	1.15	18.35	15.95	Italy	0.47	13.31	28.50
Others	29.85	320.24	10.73	Others	16.25	255.08	15.70
World	64.28	853.67	13.28	World	56.53	1051.52	18.60

Source : FAOSTAT website as on 24.06.2018.

Major fruits and vegetables producing countries in the World in 2015

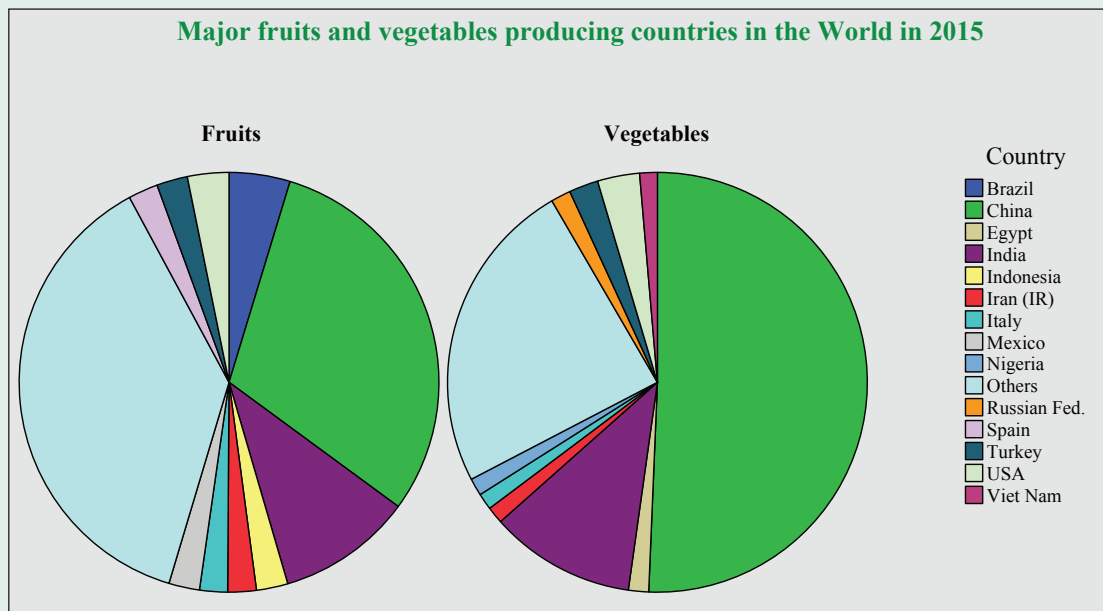
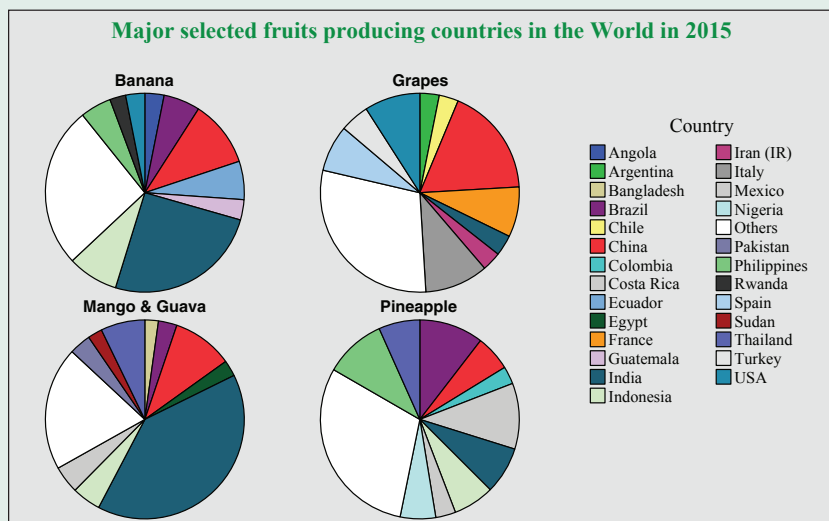


Table 8.9: Major selected fruits producing countries in the World in 2015

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

Country	Banana			Country	Grapes		
	Area	Production	Yield		Area	Production	Yield
India	0.82	29.22	35.55	China	0.80	13.67	17.10
China	0.41	12.47	30.47	Italy	0.67	7.92	11.76
Indonesia	0.19	9.50	50.69	USA	0.41	6.96	16.83
Ecuador	0.19	7.19	38.79	France	0.75	6.26	8.32
Brazil	0.48	6.85	14.38	Spain	0.94	5.80	6.16
Philippines	0.44	5.84	13.17	Turkey	0.46	3.65	7.90
Guatemala	0.08	3.80	50.57	India	0.12	2.60	21.68
Angola	0.13	3.60	28.30	Argentina	0.22	2.42	10.75
USA	0.45	3.58	7.92	Chile	0.20	2.41	12.13
Rwanda	0.32	2.98	9.39	Iran (IR)	0.20	2.40	11.88
Others	1.95	30.22	15.49	Others	2.34	22.75	9.72
World	5.45	115.24	21.16	World	7.13	76.84	10.78

Country	Pineapple			Country	Mango & Guava		
	Area	Production	Yield		Area	Production	Yield
Costa Rica	0.04	2.77	69.29	India	2.16	18.53	8.57
Brazil	0.07	2.70	39.07	China	0.56	4.58	8.15
Philippines	0.06	2.58	41.12	Thailand	0.41	3.33	8.17
India	0.12	1.98	17.10	Indonesia	0.18	2.18	12.14
Thailand	0.07	1.73	25.24	Mexico	0.20	2.07	10.18
Indonesia	0.01	1.73	124.71	Pakistan	0.17	1.64	9.61
China	0.06	1.50	24.72	Brazil	0.08	1.40	17.10
Nigeria	0.18	1.49	8.09	Egypt	0.10	1.21	11.83
Mexico	0.02	0.84	44.55	Sudan	0.04	1.09	24.21
Colombia	0.02	0.74	44.19	Bangladesh	0.10	1.02	10.03
Others	0.37	7.79	21.20	Others	1.29	9.30	7.22
World	1.02	25.87	25.38	World	5.30	46.33	8.74



India's Position in World Agriculture

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

Country	Apple			Country	Orange		
	Area	Production	Yield		Area	Production	Yield
China	2.33	42.61	18.30	Brazil	0.68	16.94	24.96
USA	0.13	4.54	35.50	China	0.50	8.05	16.15
Poland	0.18	3.17	17.57	India	0.57	7.69	13.40
Turkey	0.17	2.57	14.99	USA	0.23	5.79	24.83
Iran (IR)	0.24	2.50	10.42	Mexico	0.32	4.52	14.18
Italy	0.05	2.47	45.20	Egypt	0.13	3.35	25.52
India	0.32	2.13	6.69	Spain	0.15	2.94	19.91
France	0.05	1.97	39.64	Italy	0.09	1.91	21.94
Chile	0.04	1.74	47.95	Indonesia	0.05	1.86	37.19
Russia Fed.	0.19	1.61	8.58	Turkey	0.05	1.82	33.46
Others	1.51	20.91	13.83	Others	1.19	17.94	15.08
World	5.21	86.22	16.56	World	3.96	72.79	18.37

Country	Papaya			Country	Lemons and limes		
	Area	Production	Yield		Area	Production	Yield
India	0.12	4.91	42.72	India	0.27	2.95	11.01
Brazil	0.03	1.48	48.49	Mexico	0.16	2.34	14.49
Mexico	0.02	0.88	55.68	China	0.11	2.20	20.72
Nigeria	0.09	0.87	9.41	Argentina	0.05	1.56	31.75
Indonesia	0.01	0.85	88.88	Brazil	0.05	1.18	25.61
Dominican Republic	0.00	0.76	280.78	Spain	0.04	0.93	24.06
Congo*	0.01	0.22	16.91	USA	0.02	0.82	36.48
Cuba	0.01	0.20	35.00	Turkey	0.03	0.75	26.27
Colombia	0.01	0.18	33.05	Iran (IR)	0.03	0.51	16.06
Venezuela#	0.01	0.17	18.70	Italy	0.03	0.39	15.25
Others	0.11	1.55	13.86	Others	0.29	3.36	11.44
World	0.41	12.08	29.37	World	1.07	16.99	15.85

Note : 1. *: Democratic Republic of the Congo, 2. #: Venezuela (Bolivarian Republic of).

Source : FAOSTAT website as on 24.06.2018.

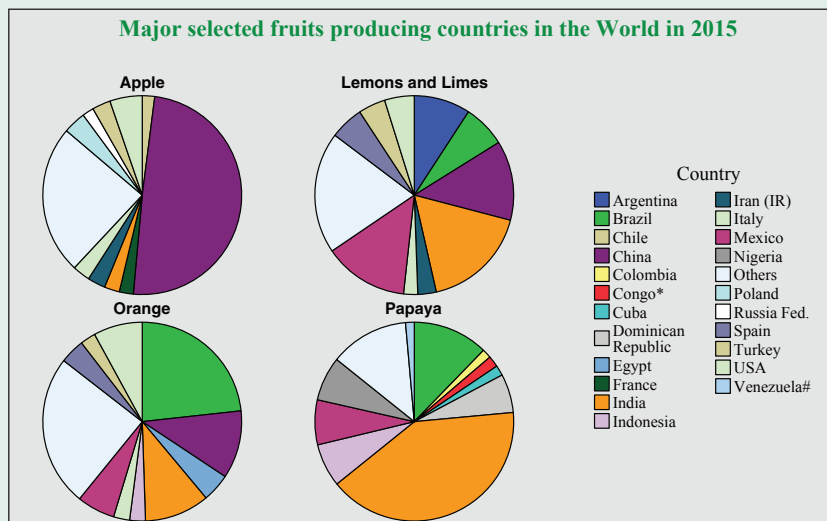
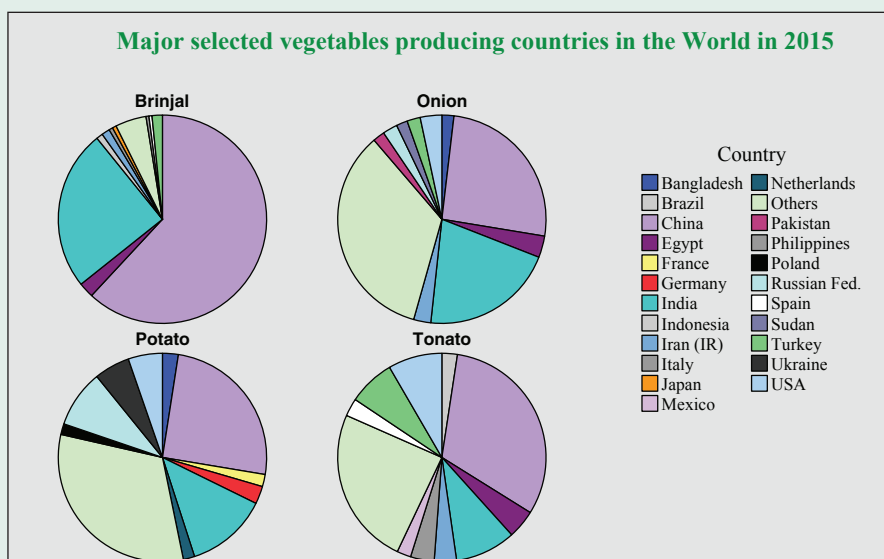


Table 8.10: Major selected vegetables producing countries in the World in 2015

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

Country	Potato			Country	Tomato		
	Area	Production	Yield		Area	Production	Yield
China	5.52	94.86	17.19	China	1.00	54.80	55.00
India	2.08	48.01	23.13	India	0.77	16.39	21.36
Russian Fed.	2.11	33.65	15.93	USA	0.16	14.58	89.46
Ukraine	1.29	20.84	16.14	Turkey	0.19	12.62	65.30
USA	0.43	20.01	46.90	Egypt	0.20	7.74	39.31
Germany	0.24	10.37	43.81	Italy	0.11	6.41	59.80
Bangladesh	0.47	9.25	19.65	Iran (IR)	0.15	6.01	39.57
France	0.17	7.12	42.51	Spain	0.06	4.83	83.13
Netherlands	0.16	6.65	42.73	Brazil	0.06	4.19	65.87
Poland	0.30	6.31	21.02	Mexico	0.09	3.78	41.12
Others	6.22	119.74	19.24	Others	2.00	42.78	21.42
World	18.98	376.81	19.85	World	4.79	174.12	36.38

Country	Onion (Dry)			Country	Brinjal		
	Area	Production	Yield		Area	Production	Yield
China	1.07	23.46	21.92	China	0.79	31.31	39.55
India	1.17	18.93	16.14	India	0.67	12.59	18.71
Egypt	0.08	3.05	36.72	Egypt	0.05	1.20	24.67
USA	0.05	3.05	56.37	Turkey	0.02	0.81	34.34
Iran (IR)	0.06	2.43	38.09	Iran (IR)	0.02	0.64	30.53
Russian Fed.	0.09	2.10	23.90	Indonesia	0.05	0.51	11.20
Turkey	0.06	1.88	31.48	Japan	0.01	0.31	32.83
Bangladesh	0.17	1.70	10.05	Italy	0.01	0.30	29.58
Pakistan	0.13	1.67	12.80	Spain	0.00	0.24	63.75
Sudan	0.09	1.58	18.42	Philippines	0.02	0.23	11.08
Others	1.86	31.32	16.87	Others	0.15	2.43	15.93
World	4.83	91.17	18.86	World	1.80	50.58	28.09



India's Position in World Agriculture

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

Country	Cabbage and other Brassica			Country	Cauliflower and Broccoli		
	Area	Production	Yield		Area	Production	Yield
China	0.97	33.54	34.40	China	0.51	9.93	19.62
India	0.39	8.59	22.24	India	0.41	7.93	19.28
Russian Fed.	0.11	3.60	32.30	USA	0.07	1.29	19.73
Rep. of Korea	0.03	2.38	72.94	Spain	0.03	0.61	18.82
Ukraine	0.07	1.65	24.40	Mexico	0.03	0.52	15.64
Japan	0.03	1.47	42.33	Italy	0.02	0.39	24.70
Indonesia	0.06	1.44	22.33	France	0.02	0.31	15.84
Romania	0.05	1.08	22.10	Bangladesh	0.02	0.27	13.74
Uzbekistan	0.01	0.95	71.63	Poland	0.01	0.25	17.17
USA	0.02	0.92	37.99	Turkey	0.01	0.23	22.02
Others	0.72	14.84	20.58	Others	0.18	2.73	15.40
World	2.48	70.46	28.42	World	1.30	24.44	18.74

Country	Okra			Country	Green Peas		
	Area	Production	Yield		Area	Production	Yield
India	0.50	5.71	11.33	China	1.48	11.81	8.00
Nigeria	1.86	2.07	1.11	India	0.48	4.65	9.77
Sudan	0.02	0.29	11.50	USA	0.07	0.37	5.55
Mali	0.02	0.20	11.22	France	0.03	0.24	7.06
Pakistan	0.02	0.12	7.66	Egypt	0.02	0.17	9.79
Côte d'Ivoire	0.04	0.12	2.72	UK	0.04	0.16	4.51
Cameroon	0.03	0.08	2.64	Pakistan	0.02	0.14	6.34
Ghana	0.00	0.07	21.00	Algeria	0.04	0.14	3.87
Egypt	0.00	0.06	11.50	Peru	0.03	0.13	3.89
Malaysia	0.00	0.05	14.30	Morocco	0.02	0.13	6.23
Others	0.06	0.34	6.02	Others	0.32	1.49	4.65
World	2.56	9.09	3.55	World	2.54	19.44	7.65

Source : FAOSTAT website as on 24.06.2018.

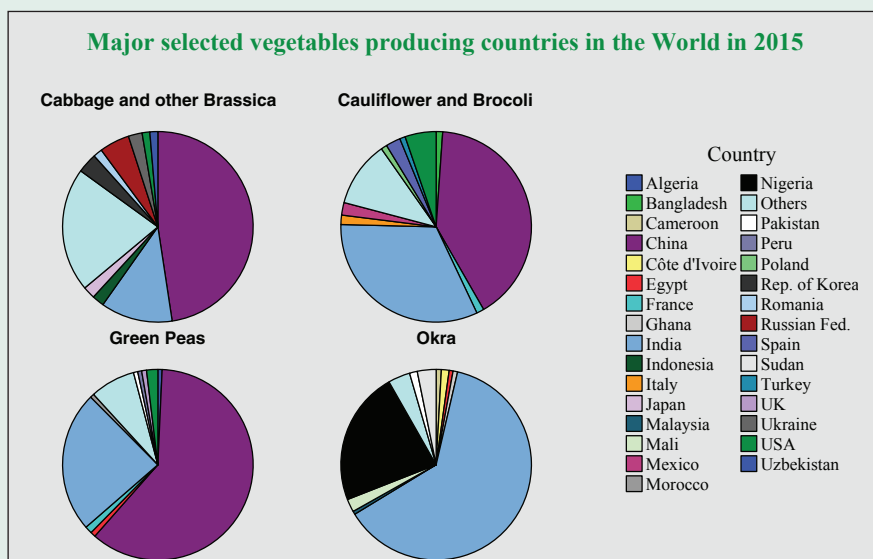


Table 8.11: Yield per hectare of different crops in selected countries in 2015

Country	Rice	Wheat	Maize	Total cereals	Total pulses	Potato	Soybeans	Sugarcane
Algeria	17.58	14.64	39.24	14.00	10.26	296.10	N.A.	N.A.
Argentina	66.99	28.73	73.09	50.08	13.53	291.31	31.76	675.72
Australia	99.10	19.17	83.00	20.27	13.07	392.50	21.15	859.94
Austria	N.A.	56.96	86.79	61.96	23.28	263.39	23.94	N.A.
Bangladesh	45.09	30.80	69.84	45.18	10.08	196.48	19.11	425.47
Belgium	N.A.	100.15	102.28	98.42	50.25	469.23	N.A.	N.A.
Brazil	57.53	22.28	55.36	50.01	10.74	293.16	30.29	742.03
Bulgaria	54.54	45.32	54.09	46.70	17.36	149.63	11.69	N.A.
Canada	N.A.	28.81	103.37	36.60	18.67	126.18	28.99	N.A.
Chile	68.97	56.33	122.90	70.82	13.66	190.10	N.A.	N.A.
China, mainland	68.92	53.93	58.93	59.82	17.41	171.90	18.11	731.21
Colombia	48.71	16.17	36.71	43.00	13.29	194.79	25.80	896.54
Cuba	37.27	N.A.	24.28	29.65	11.91	227.20	N.A.	443.07
Denmark	N.A.	79.53	62.00	68.85	43.19	422.02	N.A.	N.A.
Egypt	94.31	65.92	73.55	70.41	33.95	269.65	32.82	1153.55
France	50.01	78.01	83.78	75.70	32.86	425.05	27.49	N.A.
Germany	N.A.	80.88	87.22	74.98	31.06	438.12	22.50	N.A.
India	36.08	27.50	25.97	28.57	6.47	231.26	7.34	714.66
Indonesia	53.41	N.A.	51.78	53.07	11.77	182.03	15.69	556.11
Iran (IR)	44.30	20.16	70.33	22.31	7.25	320.85	22.75	849.82
Italy	66.79	39.28	97.25	53.85	18.08	271.56	36.15	N.A.
Japan	66.31	47.11	26.27	60.91	23.76	315.55	17.12	538.46
Korea, Dem. Peoples' Rep.	63.38	13.75	40.87	44.40	8.74	119.19	11.67	N.A.
Korea, Rep. of	72.20	26.23	50.95	68.15	12.40	265.76	18.27	N.A.
Mexico	58.08	45.26	34.78	34.70	7.56	271.44	13.65	730.23

Country	Rice	Wheat	Maize	Total cereals	Total pulses	Potato	Soybeans	Sugarcane
Morocco	76.17	24.66	7.54	21.41	7.39	298.29	10.00	465.98
Myanmar	38.72	18.62	37.22	36.57	14.80	152.15	10.39	626.56
Nepal	33.60	25.91	24.31	27.44	10.59	131.26	12.01	459.91
Netherlands	N.A.	91.26	108.25	87.53	40.04	427.32	N.A.	N.A.
New Zealand	N.A.	86.72	114.41	80.27	32.42	487.54	N.A.	N.A.
Pakistan	37.24	27.26	44.25	29.42	4.84	234.44	5.37	578.73
Peru	78.88	15.53	33.99	42.43	11.99	149.12	18.03	1207.45
Philippines	38.98	N.A.	29.35	35.56	8.29	151.07	11.33	544.17
Poland	N.A.	45.74	47.09	37.28	17.65	210.21	N.A.	N.A.
Portugal	63.45	20.23	84.52	46.07	11.99	197.71	N.A.	876.96
Russian Federation	55.80	23.88	49.34	23.91	15.60	159.34	12.99	N.A.
Saudi Arabia	N.A.	56.35	67.55	43.92	29.63	263.32	N.A.	N.A.
South Africa	26.95	30.22	37.53	35.37	10.27	358.51	15.57	574.93
Spain	77.50	29.24	114.61	32.39	10.63	318.67	31.18	455.78
Sri Lanka	38.73	N.A.	37.14	38.45	12.66	154.35	12.76	421.57
Switzerland	N.A.	59.88	89.94	64.36	33.53	356.99	23.58	N.A.
Tajikistan	72.91	30.32	105.82	32.61	39.72	223.07	3.09	N.A.
Thailand	28.51	10.17	41.79	29.59	9.69	165.28	16.64	672.06
Turkey	79.41	28.80	93.27	33.08	15.43	309.49	44.00	N.A.
Ukraine	53.43	38.79	57.13	41.42	20.35	161.42	18.41	N.A.
United Kingdom	N.A.	89.76	N.A.	79.81	36.54	433.18	N.A.	N.A.
USA	83.72	29.30	105.72	74.31	18.13	469.00	32.29	811.54
Uruguay	80.90	36.08	57.71	47.09	9.93	172.21	23.31	623.94
Uzbekistan	60.39	48.18	117.84	48.52	38.39	334.61	N.A.	N.A.
Venezuela, Bol. Rep. of	47.40	29.83	31.26	35.06	6.75	185.14	11.92	565.91
World	46.04	33.17	55.38	39.23	9.51	198.55	26.76	707.64

Note : N.A.: Not available.

Source : FAOSTAT website as on 24.06.2018.

A photograph of an agricultural field with rows of young plants. Several people are visible in the field, some appearing to be working or observing. The background shows a line of trees under a bright sky. A large, semi-transparent white oval is overlaid on the center of the image, containing the text.

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)**

(crore ₹)

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

Note : 1. TRE: Third Revised Estimates, SRE: Second Revised Estimates, FRE: First Revised Estimates and PE: Provisional Estimates, 2. N.A. : Not available

Source : *Agricultural Statistics at a Glance 2014*, Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, 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 (TRE)	2011-12 (SRE)	2012-13 (FRE)	2013-14 (PE)
I. Agriculture, Forestry & Fishing	17.4	16.8	15.8	14.6	14.6	14.4	13.9	13.9
Agriculture	14.7	14.3	13.4	12.3	12.4	12.3	11.8	N.A.
Forestry & logging	1.8	1.7	1.6	1.5	1.4	1.4	1.3	N.A.
Fishing	0.9	0.8	0.8	0.8	0.7	0.7	0.8	N.A.
II. Industry	28.7	28.7	28.1	28.3	27.9	28.2	27.3	26.1
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
III. Services	54.0	54.4	56.1	57.1	57.5	57.4	58.8	59.9
Gross domestic product at factor cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note : 1. TRE: Third Revised Estimates, SRE: Second Revised Estimates, FRE: First Revised Estimates and PE: Provisional Estimates, 2. N.A. : Not available.

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

Table 9.2: National expenditure on Research and Development (R&D) and in relation to Gross National Product (GNP) & Gross Domestic Product (GDP)

(million₹)

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	14192770	0.69	0.63
1997-98	106113.4	14344080	15723940	0.74	0.67
1998-99	124731.7	16537710	18033780	0.75	0.69
1999-00	143976.0	18318420	20231300	0.79	0.71
2000-01	161988.0	19692490	21774130	0.82	0.74
2001-02	170381.5	21476770	23558450	0.79	0.72
2002-03	180881.6	23215100	25363270	0.78	0.71
2003-04	200863.4	26015080	28415030	0.77	0.71
2004-05	241172.4	29490890	32422090	0.82	0.74
2005-06	299325.8	33643870	36933690	0.89	0.81
2006-07	342383.9	39200420	42947060	0.87	0.80
2007-08	394377.7	45615740	49870900	0.86	0.79
2008-09	473533.8	52706440	56300630	0.90	0.84
2009-10	530413.0	60535850	64778270	0.88	0.82
2010-11	601967.5	70785120 [@]	77841150	0.88	0.77
2011-12	659613.3	81982760 [#]	87363290	0.89	0.76
2012-13	739827.9	N.A.	99440130	N.A.	0.74
2013-14	793558.9	N.A.	112335220	N.A.	0.71
2014-15	853261.0	N.A.	124451280	N.A.	0.69

Note : 1. GNP/GDP figures are based on 2004-05 Series up to the year 2010-11, and from 2011-12 onwards 2011-12 Series have been used, 2. @: Quick estimates, 3. #: Advance estimates.

Source : *Research and Development Statistics 2017-18*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

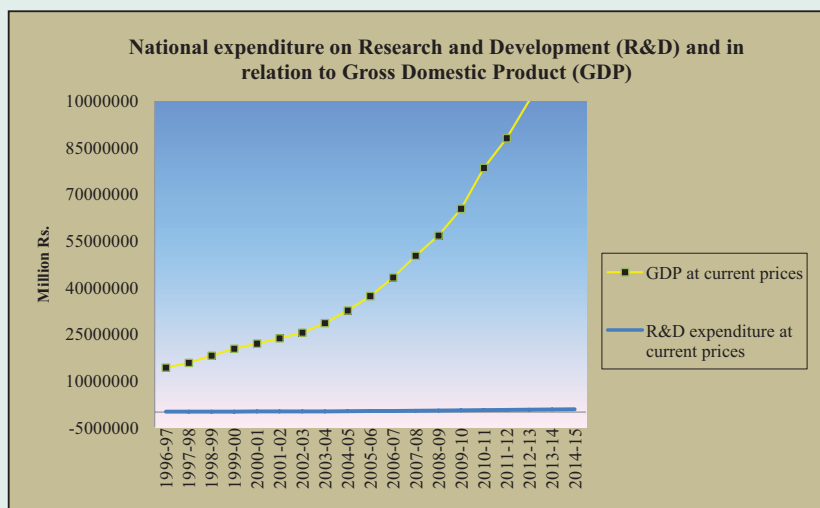


Table 9.3: National expenditure on research and development at current and constant prices

(million₹)

Year	At Current Prices	At Constant Prices
1985-86	20687.8	79609.8
1990-91	39741.7	100851.5
1995-96	74838.8	116273.2
1996-97	89136.1	128734.5
1997-98	106113.4	143932.5
1998-99	124731.7	156639.3
1999-00	143976.0	175423.7
2000-01	161988.0	190428.9
2001-02	170381.5	194056.0
2002-03	180881.6	215638.4
2003-04	200863.4	212363.6
2004-05	241172.4	241172.4
2005-06	299325.8	287159.0
2006-07	342383.9	308644.1
2007-08	394377.7	336163.8
2008-09	473533.8	371450.7
2009-10	530413.0	392280.8
2010-11	601967.5	408501.8
2011-12	659613.3	659613.3
2012-13	739827.9	685442.3
2013-14	793558.9	692388.8
2014-15	853261.0	722435.1

Note : For working out research and development expenditure at constant prices (Base year 2004-05), has been used up to the year 2010-11, and from 2011-12 onwards Base year 2011-12 has been used.

Source : *Research and Development Statistics 2017-18*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

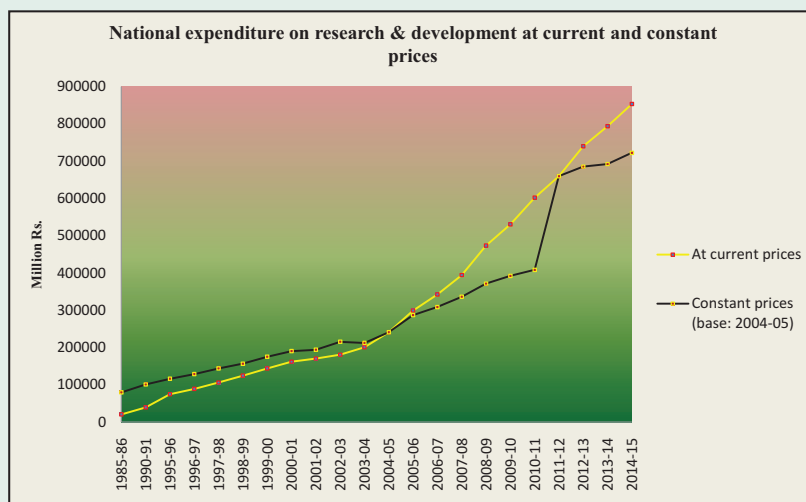


Table 9.4: Expenditure on research and development by major scientific agencies under the Central Government

(million₹)

Agency	Research and Development Expenditure						
	2000-01	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15
Council of Scientific & Industrial Research	8641.2	14270.4	29293.4	31359.1	29099.3	30987	33348.8
Defence Research & Development Organisation	33593.2	52833.5	101489.2	98938.4	98948	108688.8	132579.8
Department of Atomic Energy	10055.2	17525.0	28550.1	32749.7	31905	38182.1	40751.7
Department of Bio-technology	1205.8	3258.5	9206.5	9711.3	10306.4	10370.3	10206
Ministry of Communication & Information Technology	510.7	1678.5	N.A.	N.A.	N.A.	N.A.	N.A.
Ministry of New & Renewable Energy	122.7	96.2	N.A.	N.A.	N.A.	N.A.	N.A.
Ministry of Earth Sciences*	842.3	2354.8	N.A.	N.A.	N.A.	N.A.	N.A.
Department of Science & Technology	3114.6	12370.5	21327.2	23597.1	23776.5	24660.6	27009
Department of Space	19054.0	26676.0	44822.3	37907.8	48562.8	51689.5	58183.7
Indian Council of Agricultural Research	11617.4	17172.7	31824.6	34656.7	35686.3	38848.7	39828.5
Indian Council of Medical Research	1491.2	3310.0	6788	7348.5	8080.4	8404.2	8430
Ministry of Environment & Forest	2728.6	2353.1	N.A.	N.A.	N.A.	N.A.	N.A.
Total	92976.8	153899.4	273301.3	276268.6	286364.7	311831.2	350337.5

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 2017-18*, 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	2000-01	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15
Council of Scientific & Industrial Research	9.29	9.27	10.72	11.35	10.16	9.94	9.52
Defence Research & Development Organisation	36.13	34.33	37.13	35.81	34.55	34.86	37.84
Department of Atomic Energy	10.81	11.39	10.45	11.85	11.14	12.24	11.63
Department of Biotechnology	1.30	2.12	3.37	3.52	3.60	3.33	2.91
Ministry of Communication & Information technology	0.55	1.09	N.A.	N.A.	N.A.	N.A.	N.A.
Ministry of New & Renewable Energy	0.13	0.06	N.A.	N.A.	N.A.	N.A.	N.A.
Ministry of Earth Sciences*	0.91	1.53	N.A.	N.A.	N.A.	N.A.	N.A.
Department of Science & Technology	3.35	8.04	7.80	8.54	8.30	7.91	7.71
Department of Space	20.49	17.33	16.40	13.72	16.96	16.58	16.61
Indian Council of Agricultural Research	12.49	11.16	11.64	12.54	12.46	12.46	11.37
Indian Council of Medical Research	1.60	2.15	2.48	2.66	2.82	2.70	2.41
Ministry of Environment & Forest	2.93	1.53	N.A.	N.A.	N.A.	N.A.	N.A.
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total R & D Expenditure (million ₹)	92976.8	153899.4	273301.3	276268.6	286364.7	311831.2	350337.5

Note : *: Formerly Department of Ocean Development.

Source : *Research and Development Statistics 2017-18*, Department of Science and Technology, Ministry of Science and Technology, Govt. of India.

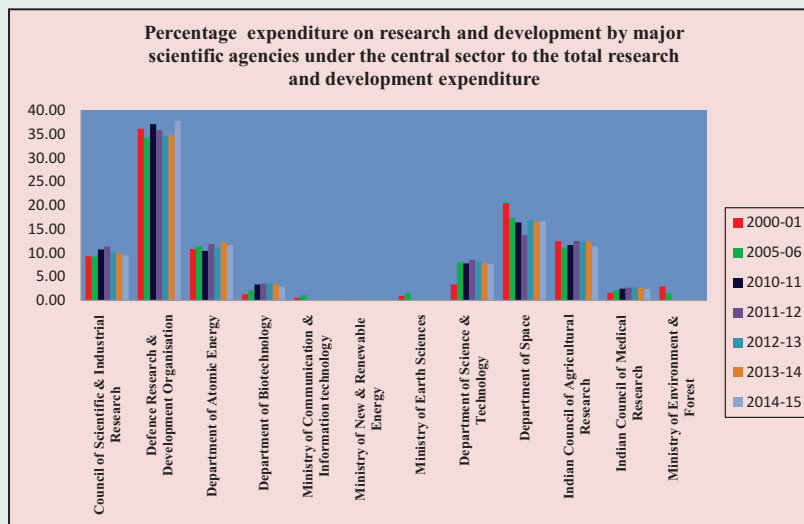


Table 9.6: Division-wise break up of revenue receipt targets and actual achievement

(lakh ₹)

Name of the Division	Revenue Receipts		
	Target for 2014-15	Achievements 2014-15*	Target for 2015-16
Crop Science	2268.00	1275.74	2618.17
Horticulture Science	1454.70	992.54	2194.27
Animal Science	3875.60	1868.67	4076.03
Natural Resource Management	1680.10	839.38	1839.33
Fisheries	373.40	356.76	677.77
Agricultural Engineering	535.40	246.31	544.44
Agricultural Economics & Statistics	26.00	33.07	73.87
Agricultural Education	82.20	108.38	127.88
Agricultural Extension	0.50	0.23	0.53
Agricultural Scientists Recruitment Board	450.60	264.03	277.24
Publication & Information Division	28.10	14.19	15.66
ICAR Headquarters, New Delhi	189.50	44.96	101.16
Total Revenue Receipts and Targeted Receipts	10964.10	6044.98	12546.35

Note : *: This does not include 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₹)

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
Andhra Pradesh									
Acharya N.G. Ranga Agricultural University, Hyderabad									
	2015-16	2677.33	2376.64	1098.39	1098.39	7.31	7.31	3783.04	3482.34
	2016-17	2951.21	2951.21	905.96	905.96	20.87	20.87	3878.04	3878.04
	2017-18	3078.74	3078.73	503.90	503.90	28.24	28.24	3610.88	3610.88
Sri Venkateswara Veterinary University, Tirupati									
	2014-15	1128.02	1362.26	72.81	74.62	24.50	22.12	1225.32	1459.00
	2015-16	1376.56	1043.14	75.38	61.21	10.13	8.43	1462.08	1112.79
	2016-17	1574.00	1104.54	78.39	73.45	75.13	77.97	1727.51	1255.95
Sri Konda Laxman Telangana State Horticultural University, Hyderabad									
	2014-15	121.7	121.70	2.07	2.07	3.20	3.20	126.97	126.97
	2015-16	131.86	131.86	32.96	32.96	9.98	9.98	174.80	174.80
Dr YSR Horticultural University, Venkataramannagudem, Tadepalligudem									
	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
Assam									
Assam Agricultural University, Jorhat									
	2014-15	2239.80	2302.52	592.72	602.41	211.10	217.93	3043.62	3122.86
	2015-16	1935.34	2307.24	729.10	695.86	244.26	167.61	2908.70	3170.71
	2016-17	2173.97	2100.20	570.84	570.00	322.12	302.10	3066.93	2972.30
Bihar									
Rajendra Agricultural University, Pusa, Samastipur									
	2015-16	1283.05	1283.05	225.61	225.61	19.22	19.22	1527.88	1527.88
	2016-17 [@]	475.94	475.94	89.98	89.98	12.16	12.16	578.09	578.09
	2016-17 ^h	211.89	211.89	647.03 ⁱ	647.03 ⁱ	20.96	20.96	879.87	879.87
	2017-18	447.76	447.76	940.40 ^j	940.40 ^j	47.37	47.37	1435.53	1435.53
Bihar Agricultural University, Sabour, Bhagalpur									
	2015-16	3560.02	2074.19	350.65	297.12	3836.38	3495.32	7747.05	5866.64
	2016-17	3147.44	1349.32	482.89	487.95	23.46	12.22	3653.78	1849.48
	2017-18 ^{**}	4254.31	2045.94	391.87	383.61	1.31	1.19	4647.49	2430.73
Chhattisgarh									
Indira Gandhi Krishi Vishwavidyalaya, Raipur									
	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
Chhattisgarh Kamdhenu Vishwavidyalaya, Anjora, Durg (Established on 16 April, 2012)									
	2014-15	2609.85	2138.61	409.98	233.07	158.82	83.59	3178.65	2455.27
	2015-16	2500.75	2427.25	429.73	281.52	226.13	100.91	3156.61	2809.68
	2016-17	3588.61	3874.66	440.66	359.95	173.36	81.46	4202.63	4316.07

Investment in Agricultural Research & Education

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
Gujarat									
Sardar Krushinagar Dantiwada Agricultural University, Dantiwada									
	2015-16	1688.27	1488.32	143.28	168.36	41.26	42.06	1872.81	1698.74
	2016-17	1599.72	1579.82	102.63	131.91	54.87	61.35	1757.21	1773.07
	2017-18	2017.70	1883.25	137.97	186.84	36.03	38.47	2191.70	2108.56
Anand Agricultural University, Anand									
	2015-16	1727.29	1694.81	167.00	170.81	209.82	164.93	2104.11	2030.55
	2016-17	1736.70	1798.07	176.28	213.66	211.97	169.49	2124.95	2181.22
	2017-18	2008.72	1880.41	184.14	150.47	185.30	119.39	2378.16	2150.27
Navsari Agricultural University, Navsari									
	2015-16	1376.50	1487.90	137.70	133.60	56.40	90.20	1570.60	1711.70
	2016-17	1383.80	1343.60	129.60	129.60	67.50	66.50	1580.90	1539.70
	2017-18	1585.20	1423.00	201.50	189.40	58.40	46.20	1845.10	1658.60
Junagadh Agricultural University, Junagadh									
	2015-16	1697.92	1769.71	197.92	180.46	67.92	70.96	1963.76	2021.13
	2016-17	1537.91	1738.26	240.52	253.10	146.69	117.18	1925.12	2108.54
	2017-18*	1853.48	1808.49	248.08	225.90	106.43	91.12	2207.99	2125.51
Haryana									
CCS Haryana Agriculture University, Hisar									
	2014-15	3058.48	3034.61	402.87	389.55	162.39	106.21	3623.74	3530.37
	2015-16	3403.22	3039.83	447.04	401.98	224.17	129.23	4074.43	3571.04
	2016-17	3715.44	3110.02	449.56	485.78	204.37	105.85	4369.37	3701.65
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar									
	2014-15	952.87	656.03	42.47	40.66	56.63	46.34	1051.98	743.02
	2015-16	1046.48	664.81	49.46	41.47	81.25	58.40	1177.19	764.67
	2016-17*	1140.67	743.25	44.57	34.85	94.27	68.55	1279.51	846.64
MaharanaPratap Horticultural University, Karnal									
	2015-16	-	-	-	-	-	-	-	-
	2016-17	-	-	50.00	48.22	-	-	50.00	48.22
	2017-18	50.00	49.59	-	-	62.00	-	112.00	49.59
Himachal Pradesh									
CSK Himachal Pradesh Krishi Vishwavidyalaya, Palampur									
	2015-16	69.42	90.46	24.00	27.89	5.02	4.98	98.44	123.33
	2016-17	111.13	113.00	30.04	35.02	8.57	5.62	149.74	153.64
	2017-18	130.26	132.33	26.86	33.07	8.44	8.35	165.56	173.75
Dr. Y.S. Parmar University of Horticulture & Forestry, Solan									
	2014-15	6924.00	8025.00	1573.00	1513.00	816.00	858.00	9313.00	10396.00
	2015-16	10237.00	10627.00	1470.00	1631.00	1612.00	1776.00	13319.00	14033.00
	2016-17 ^c	9442.00	11000.00	1884.00	1886.00	892.00	1321.00	12018.00	14207.00

Investment in Agricultural Research & Education

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
Jammu & Kashmir									
Sher-e-Kashmir University of Agricultural Science & Technology of Jammu, Jammu									
	2013-14	655.20	728.37 ^s	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
Sher-e-Kashmir University of Agricultural Science & Technology of Kashmir, Srinagar									
	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
Jharkhand									
Birsa Agricultural University, Kanke, Ranchi									
	2015-16	1055.67	868.17	316.77	307.77	34.46	13.86	1406.90	1189.90
	2016-17	1302.23	1107.37	394.77	330.35	3.68	3.68	1700.68	1441.60
	2017-18	1829.48	903.53	300.58	253.28	11.44	11.44	2141.50	1168.25
Karnataka									
University of Agricultural Sciences, Bangalore									
	2015-16	2730.01	2341.38	369.22	322.27	194.45	170.11	3293.68	2833.76
	2016-17	2885.64	2514.17	343.98	380.46	191.64	165.66	3421.26	3060.29
	2017-18	2858.62	2768.89	295.02	269.91	160.94	167.40	3314.58	3206.20
University of Agricultural Sciences, Dharwad									
	2014-15	147.77	155.10	20.26	22.47	19.22	10.15	187.25	187.72
	2015-16	164.69	166.45	29.47	30.16	12.07	17.65	206.23	214.26
	2016-17	180.34	181.46	23.85	25.37	25.45	12.75	229.64	219.58
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar									
	2015-16	1393.63	1655.99	91.47	99.84	28.44	26.85	1513.54	1782.68
	2016-17	1500.91	1689.13	114.19	79.86	25.43	23.96	1640.53	1792.95
	2017-18	1567.88	1828.41	30.64	91.82	21.76	22.73	1620.28	1942.96
University of Horticultural Sciences, Bagalkot									
	2014-15	731.90	731.90	68.13	68.13 ^f	54.75 ^f	54.75	854.79	854.79
	2015-16	734.40	734.40	85.18	85.18 ^f	41.59 ^f	41.59	861.18	861.18
	2016-17	614.90	614.90	90.66	90.66 ^f	68.53 ^f	68.53	774.09	774.09
University of Agricultural Sciences, Raichur									
	2015-16	868.33	800.36	154.82	147.76	152.64	111.90	1175.79	1060.01
	2016-17	1026.19	906.41	181.18	199.03	164.36	138.18	1371.72	1243.62
	2017-18	1043.94	990.05	185.08	196.69	160.58	145.67	1389.60	1332.41
University of Agricultural and Horticultural Sciences, Shivamogga									
	2015-16	884.78	745.71	107.20	91.15	120.31	62.71	1112.29	899.57
	2016-17	972.10	923.11	112.82	114.18	34.44	14.04	1119.36	1051.32
	2017-18	915.90	915.90	72.03	67.14	32.67	10.66	1020.60	993.70
Kerala									
Kerala Agricultural University, Vellanikkara, Thrissur									
	2015-16	3135.3	3031.6	435.57	339.64	602.23	602.23	4173.1	3973.47
	2016-17	2986.7	2986.7	511.75	406.83	557.09	557.09	4055.54	3950.62

Investment in Agricultural Research & Education

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
	2017-18	3529.4	3529.4	475.16	394.7	520.07	520.07	4524.63	4444.17
Kerala Veterinary and Animal Sciences University, Pookode, Wayanad									
	2015-16	969.40	969.40	53.10	51.30	263.50	263.50	1286.00	1284.20
	2016-17	1050.60	1050.60	68.80	68.20	216.00	216.00	1335.40	1334.80
	2017-18	1113.70	1113.70	74.70	66.50	203.90	203.90	1392.30	1384.10
Kerala University of Fisheries and Ocean Studies, Papangad, Kochi									
	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
Madhya Pradesh									
Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur									
	2015-16	968.37	968.37	449.79	436.91	89.67	89.38	1507.82	1494.66
	2016-17	1474.70	1474.70	488.20	477.70	105.18	89.30	2068.08	2041.70
	2017-18	1246.10	1246.10	478.30	446.82	118.68	109.69	1843.08	1802.61
Nanaji Deshmukh Pashuchikitsa Vigyan Vishwavidyalaya, Jabalpur									
	2015-16	2962.05	3541.01	418.16	415.94	2057.87	1216.91	5438.08	5173.86
	2016-17	3913.66	4084.11	474.05	360.06	57.99	36.44	4445.70	4480.61
	2017-18	4233.04	3971.01	412.91	412.91	191.41	191.41	4837.36	4575.33
Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior									
	2014-15	488.60	446.98	270.89	331.18	274.05	188.69	1033.54	1022.24
	2015-16	591.90	602.20	384.18	364.31	143.18	60.87	1119.26	1027.39
	2016-17	598.75	661.04	406.43	490.65	321.76	157.62	1326.93	1309.31
Maharashtra									
Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli									
	2015-16	1048.75	990.69	139.28	146.47	10.55	6.26	1198.58	1143.42
	2016-17	1283.24	1189.73	160.97	165.07	10.30	3.76	1454.51	1358.56
	2017-18*	1305.53	1305.30	185.90	165.90	13.76	7.44	1505.19	1478.64
Mahatma Phule Krishi Vidyapeeth Rahuri, Rahuri									
	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
Vasanttrao Naik Marathwada Krishi Vidyapeeth, Parbhani									
	2015-16	1584.20	1584.20	202.10	202.10	14.90	14.90	1801.20	1801.20
	2016-17	1456.20	1446.20	210.80	217.30	4.50	4.50	1671.50	2068.50
	2017-18	1530.30	1530.30	244.40	200.50	21.50	21.50	1796.20	1752.30
Dr. Punjabrao Deshmukh Krishi Vidyapeeth, Akola									
	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*
Maharashtra Animal & Fishery Sciences University, Nagpur									
	2015-16	894.75	858.28	110.27	105.19	15.48	12.06	1020.50	975.54

Investment in Agricultural Research & Education

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
	2016-17	1181.21	1181.16	13.97	16.10	14.41	16.19	1209.59	1213.44
	2017-18	943.61	943.61	101.25	95.11	80.34	38.93	1125.20	1077.65
Manipur									
Central Agricultural University, Imphal									
	2013-14	N.A.	N.A.	N.A.	N.A.	1199.90	1168.40	1199.90	1168.40
	2014-15	N.A.	N.A.	N.A.	N.A.	1190.00	1229.90	1190.00	1229.90
	2015-16	N.A.	N.A.	N.A.	N.A.	1659.90	1567.10	1659.90	1567.10
Nagaland									
Nagaland University, Lumami									
	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 ^S	15.00 ^{SS}
	2015-16	0.00	0.00	34.44	28.41	0.00	0.00	34.44	28.41
Odisha									
Odisha University of Agriculture & Technology, Bhubaneswar									
	2015-16	1274.06	1406.58	617.05	510.93	419.86	235.38	2310.97	2152.89
	2016-17	1376.00	1502.76	695.87	604.26	548.72	347.30	2620.59	2454.32
	2017-18*	1574.36	1707.54	628.09	626.72	611.83	509.10	2814.28	2843.36
Punjab									
Punjab Agricultural University, Ludhiana									
	2015-16	2926.53	3596.52	720.32	731.80	415.09	465.75	4061.94	4794.07
	2016-17	3117.22	3766.28	730.50	815.62	391.53	522.69	4239.25	5104.59
	2017-18*	3618.54	4004.97	855.16	814.81	357.81	523.81	4831.51	5343.58
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana									
	2015-16	1028.13	1000.20	102.71	103.31	49.89	36.37	1180.73	1139.88
	2016-17	1025.52	886.74	145.23	144.40	54.33	40.27	1225.08	1071.40
	2017-18	969.20	920.40	135.97	133.77	93.73	27.23	1198.89	1081.40
Rajasthan									
Swami Keshwanand Rajasthan Agricultural University, Bikaner									
	2015-16	274.87	274.87	145.03	145.03	68.55	68.55	488.45	488.45
	2016-17	360.76	360.76	241.02	241.02	63.59	63.59	665.37	665.37
	2017-18	385.06	385.06	178.79	178.79	32.87	32.87	56.72	596.72
Maharana Pratap University of Agriculture and Technology, Udaipur									
	2015-16	8144.75	8144.75	4355.08	4355.08	1714.29	1714.29	14214.12	14214.12
	2016-17	7709.64	7709.64	4258.92	4258.92	2028.84	2028.84	13997.40	13997.40
	2017-18	8127.99	8127.99	4575.00	4575.00	1954.51	1954.51	14657.50	14657.50
Rajasthan University of Veterinary and Animal Sciences, Bikaner									
	2013-14	708.16	708.16	53.79	52.43	222.27	222.19	984.22	982.79
	2014-15	795.42	795.99	55.95	59.24	206.06	190.91	1057.42	1046.14
	2015-16	790.92	665.24	35.96	35.46	89.68	87.64	916.57	788.34
Agricultural University, Kota (Established in September, 2013)									
	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

Investment in Agricultural Research & Education

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
Agriculture University, Jodhpur (Established in 21 September, 2013)									
	2014-15	171.69	59.62	76.44	58.06	4.84	2.86	252.97	120.54
	2015-16	170.67	107.48	88.76	69.09	5.00	5.00	264.43	181.57
	2016-17	259.88	166.16	95.67	91.23	6.42	5.92	361.97	263.30
Sri Karan Narendra Agriculture University, Jobner, Jaipur									
	2011-12 ^S	715.55	644.75	387.15	416.03	61.38	151.12	1164.07	1211.89
	2012-13 ^S	834.23	754.71	400.32	453.71	155.56	93.35	1390.11	1306.72
	2013-14	29.00	29.00	\$\$	\$\$	N.A.	N.A.	N.A.	N.A.
Tamil Nadu									
Tamil Nadu Agricultural University, Coimbatore									
	2015-16	3983.84	3684.88	700.17	666.43	565.54	347.24	5249.55	4698.56
	2016-17	4459.42	4348.61	632.67	652.39	378.17	580.47	5470.26	5581.47
	2017-18	5001.21	**	810.35	**	466.82	**	6278.38	**
Tamil Nadu Veterinary and Animal Sciences University, Chennai									
	2014-15	1995.44	2198.69	122.34	128.93	180.80	224.52	2298.58	2252.14
	2015-16	2157.06	2044.67	131.96	130.72	450.45	292.65	2739.48	2468.04
	2016-17*	2067.14	2067.15	163.38	163.38	473.47	473.47	2703.99	2703.99
Tamil Nadu Fisheries University, Nagapattinam									
	2014-15	454.40	454.40	45.98	45.98	34.93	34.93	535.30	535.30
	2015-16	465.80	465.80	26.26	26.26	31.91	31.91	523.97	523.97
	2016-17	744.19	744.19	31.92	31.92	107.11	107.11	883.23	883.23
Telangana									
Professor Jayashankar Telangana State Agricultural University, Hyderabad									
	2014-15 ^a	1982.70	2006.56	544.79	475.01	421.27	289.28	2948.76	2770.86
	2015-16	2391.42	2418.94	280.74	287.07	192.39	213.43	2864.54	2919.44
	2016-17	2689.43	**	313.48	**	232.45	**	3235.36	**
Uttarakhand									
G.B. Pant University of Agriculture & Technology, Pantnagar									
	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
Uttar Pradesh									
C.S. Azad University of Agriculture & Technology, Kanpur									
	2015-16	938.85	1031.42	340.51	206.89	8.53	7.22	1287.89	1214.23
	2016-17	828.41	964.92	1181.16	338.59	10.28	8.76	2019.85	1312.27
	2017-18	807.51	970.25	333.20	313.76	11.90	11.52	1152.62	1295.53
Narendra Dev University of Agriculture & Technology, Faizabad									
	2014-15	1091.17	944.16	412.48	260.69	15.32	13.96	1518.97	1218.81
	2015-16	914.40	732.81	461.17	275.64	15.33	9.16	1390.90	1017.61
	2016-17	1009.08	839.62	372.16	255.61	9.75	10.56	1391.00	1105.79

Investment in Agricultural Research & Education

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
Sam Higginbottom Institute of Agriculture, Technology & Sciences (Deemed University), Allahabad									
	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*	160.09	160.09	46.26	46.26	1009.29	1009.29	1215.64	1215.64
Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut									
	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
U.P. Pt. Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go-Anusandhan Sansthan, Mathura									
	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
	2016-17	419.12	410.82	78.97	78.67	22.75	20.93	520.84	510.42
Banda University of Agriculture & Technology, Banda									
	2013-14 [#]	65.00	30.2	Nil	Nil	Nil	Nil	65.00	30.20
	2014-15 [#]	40.00	36.00	Nil	Nil	Nil	Nil	40.00	36.00
	2015-16 [#]	44.00	44.00	Nil	Nil	Nil	Nil	44.00	44.00
West Bengal									
Bidhan Chandra Krishi Vishwa Vidyalaya, Haringhatta									
	2014-15	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	2015-16	17086.29	9199.45	2375.00	1544.46	1783.50	1507.47	21244.79	12251.38
	2016-17	25246.59	**	3162.80	**	1722.00	**	30131.39	**
Uttar Banga Krishi Viswavidyalaya, Pundibari									
	2015-16	441.50	350.02	31.16	41.73	98.91	32.74	571.57	424.49
	2016-17	363.70	407.57	65.89	48.43	58.35	9.18	487.94	465.28
	2017-18	494.30	473.64	40.12	86.54	131.71	69.09	666.13	629.27
W.B. University of Animal & Fishery Sciences, Kolkata									
	2014-15	292.21 ^b	288.34 ^b	65.96 ^c	53.96 ^c	45.74 ^d	45.70 ^d	403.91	388.02
	2015-16	365.11 ^b	357.63 ^b	94.73 ^c	93.14 ^c	4.80 ^d	4.70 ^d	464.63	455.48
	2016-17	377.88 ^b	360.42 ^b	83.79 ^c	**	5.63 ^d	**	467.30	**

Note : 1.*: Un-audited/Tentative/Provisional, 2.**: The budget accounts are yet to be finalized, 3. a: Expenditure particulars of ICAR and Other Sources (except State Budget) for the year 2014-15 pertains to combined University, 4. b: Includes salary, capital, revenue Plan & Non-Plan expenditure, 5. c: Includes the funding support from ICAR under Education, AICRP, KVK etc., 6. d: Includes the amount received from DBT, DST etc., 7. e: Subject to annual account of this University to be vetted by the local audit department, 8. f: Including Bioiversity, Purudy University, NHM & Govt. of Karnataka Project, NHB & Govt. of India Project & RKVY etc., 9. g: Inclusive of unspent and revalidated amount of the previous year, 10. S: An amount of ₹. 19.00 million was sanctioned under the scheme "Strengthening & Development of Higher Education in Agricultural universities" during 2014-15, however an amount of ₹. 13.00 million only has been released, 11. SS: An amount of ₹. 2.00 million was sanctioned under the scheme "Library Strengthening" during 2014-15, however an amount of ₹. 1.48 million only has been released, 12. S: 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, 13. #: Sum of Head- salary and non-salary, 14. @: From 01.04.2016 to 06.10.2016, 15. h: From 07.10.2016 onwards it becomes Dr. Rajendra Prasad Central Agricultural University, 16. i=It includes DARE and ICAR, 17. N.A.: Not available, 18. Totals may slightly differ due to rounding off the figures.

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

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

(crore ₹)

Schemes	2016-2017 Budget			2016-2017 Revised			2017-2018 Budget		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
Demand No. 2 Department of Agricultural Research and Education									
Gross	6620.00	-	6620.00	6238.00	-	6238.00	6800.00	-	6800.00
Recoveries	-	-	-	-	-	-	-	-	-
Receipts	-	-	-	-	-	-	-	-	-
Net	6620.00	-	6620.00	6238.00	-	6238.00	6800.00	-	6800.00
A. The Budget allocations, net of recoveries, are given below:									
Centre's Expenditure									
I. Establishment Expenditure of the Centre									
1. Secretariat	13.36	-	13.36	13.28	-	13.28	13.98	-	13.98
Central Sector Schemes/Projects									
2. Agricultural Extension	755.99	-	755.99	855.71	-	855.71	232.51	-	232.51
3. Agricultural Engineering	221.31	-	221.31	191.31	-	191.31	42.68	-	42.68
4. Management of Natural Resources									
4.1 Natural Resource Management Institutes including Agro-Forestry Research	666.37	-	666.37	619.23	-	619.23	167.68	-	167.68
4.2 Climate Resilient Agriculture Initiative	110.00	-	110.00	70.50	-	70.50	50.00	-	50.00
Total-Management of Natural Resources	776.37	-	776.37	689.73	-	689.73	217.68	-	217.68
5. Crop Sciences									
5.1 Crop Science	1385.48	-	1385.48	1380.02	-	1380.02	387.41	-	387.41

Schemes	2016-2017 Budget			2016-2017 Revised			2017-2018 Budget		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
5.2 Horticultural Science	560.71	-	560.71	528.87	-	528.87	154.90	-	154.90
5.3 National Agricultural Science Fund	70.00	-	70.00	35.00	-	35.00	48.80	-	48.80
Total-Crop Sciences	2016.19	-	2016.19	1941.89	-	1941.89	591.11	-	591.11
6. Animal Sciences									
6.1 Animal Science	842.68	-	842.68	823.25	-	823.25	271.97	-	271.97
6.2 Fisheries Science	404.70	-	404.70	397.14	-	397.14	115.85	-	115.85
Total-Animal Sciences	1247.38	-	1247.38	1220.39	-	1220.39	387.82	-	387.82
7. Agricultural Education									
7.1 Agricultural Universities and institutions	674.75	-	674.75	726.46	-	726.46	663.37	-	663.37
7.2 Economic Statistics and Management	69.44	-	69.44	65.51	-	65.51	31.29	-	31.29
Total-Agricultural Education	744.19	-	744.19	791.97	-	791.97	694.66	-	694.66
8. Actual Recoveries	-	-	-	-	-	-	-	-	-
Total - Central Sector Schemes	5761.43	-	5761.43	5691.00	-	5691.00	2166.46	-	2166.46
Other Central Sector Schemes/Projects									
1. Autonomous Bodies									
1.1 ICAR Headquarter	545.21	-	545.21	322.22	-	322.22	4382.56	-	4382.56
1.2 Central Agriculture Universities	297.00	-	297.00	200.00	-	200.00	235.00	-	235.00
1.3 National Academy of Agriculture Sciences	3.00	-	3.00	1.50	-	1.50	2.00	-	2.00
Total-Autonomous Bodies	845.21	-	845.21	533.72	-	533.72	4619.56	-	4619.56
Total-Other Central Sector Schemes	845.21	-	845.21	533.72	-	533.72	4619.56	-	4619.56
Grand Total	6620.00	-	6620.00	6238.00	-	6238.00	6800.00	-	6800.00

Investment in Agricultural Research & Education

Schemes	2016-2017 Budget			2016-2017 Revised			2017-2018 Budget		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
B. Developmental Heads									
1. Economic Services									
1.1 Agricultural Research and Education	6236.64	-	6236.64	5914.12	-	5914.12	6469.55	-	6469.55
1.2 Secretaries-Economic Services	13.36	-	13.36	6.88	-	6.88	7.45	-	7.45
Total-Economic Services	6250.00	-	6250.00	5921.00	-	5921.00	6477.00	-	6477.00
2. Others									
2.1 North Eastern Areas	370.00	-	370.00	-	-	317.00	323.00	-	323.00
Total -Others	370.00	-	370.00	317.00	-	317.00	323.00	-	323.00
Grand Total	6620.00	-	6620.00	6238.00	-	6238.00	6800.00	-	6800.00

Source : DARE/ICAR Annual Report 2017-18, 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	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16*
Science and Technology Disciplines (A)							
Science	2822.6 (19.3)	3127.0 (18.4)	3789.9 (18.6)	3992 (18.6)	4095 (17.2)	4675 (17.6)	5417.5 (19)
Engineering/ Technology	1510.8 (10.3)	2862.4 (16.8)	3261.6 (16.1)	3333.2 (15.5)	3696.1 (15.6)	4326.3 (16.3)	4885.1 (17.2)
Medicine	509.0 (3.5)	652.5 (3.8)	715.7 (3.5)	752.3 (3.5)	992.9 (4.2)	1070 (4)	1118.2 (3.9)
Agricultural Sciences	80.4 (0.5)	93.2 (0.6)	97.3 (0.5)	103 (0.5)	107.2 (0.5)	207.8 (0.8)	240.09 (0.8)
Veterinary Science	20.5 (0.14)	27.4 (0.2)	28.5 (0.1)	29.3 (0.1)	28 (0.1)	28 (0.1)	31.33 (0.1)
Total (A)	4943.2 (33.8)	6762.6 (39.8)	7893 (38.8)	8209.8 (38.2)	8919.2 (37.5)	10307.1 (38.8)	11692.2 (41)
Other Disciplines (B)							
Arts (including Oriental Learning)	6144.0 (42.0)	6177.7 (36.4)	7539.5 (37.1)	8157.3 (37.9)	8690.4 (36.6)	9945.7 (37.4)	10271.3 (36.1)
Commerce/Management	2607.6 (17.8)	2904.8 (17.1)	3571.1 (17.6)	3762 (17.5)	4181.6 (17.6)	4357.1 (16.4)	4637.32 (16.3)
Law	343.7 (2.6)	327.1 (1.9)	373.2 (1.8)	400.8 (1.9)	426 (1.8)	444.6 (1.7)	474.42 (1.7)
Education	365.6 (2.5)	570.0 (3.4)	732.6 (3.6)	741.9 (3.5)	1288.9 (5.4)	1215.4 (4.6)	1085.88 (3.8)
Others	220.8 (1.5)	232.7 (1.4)	217.9 (1.1)	229.3 (1.1)	258.8 (1.1)	315.5 (1.2)	323.64 (1.1)
Total (B)	9681.7 (66.2)	10212.3 (60.2)	12434.4 (61.2)	13291.3 (61.8)	14845.7 (62.5)	16278.3 (61.2)	16792.55 (59)
Total (A+B)	14625.0 (100)	16974.9 (100)	20327.4 (100)	21501.1 (100)	23764.9 (100)	26585.4 (100)	28484.75 (100)

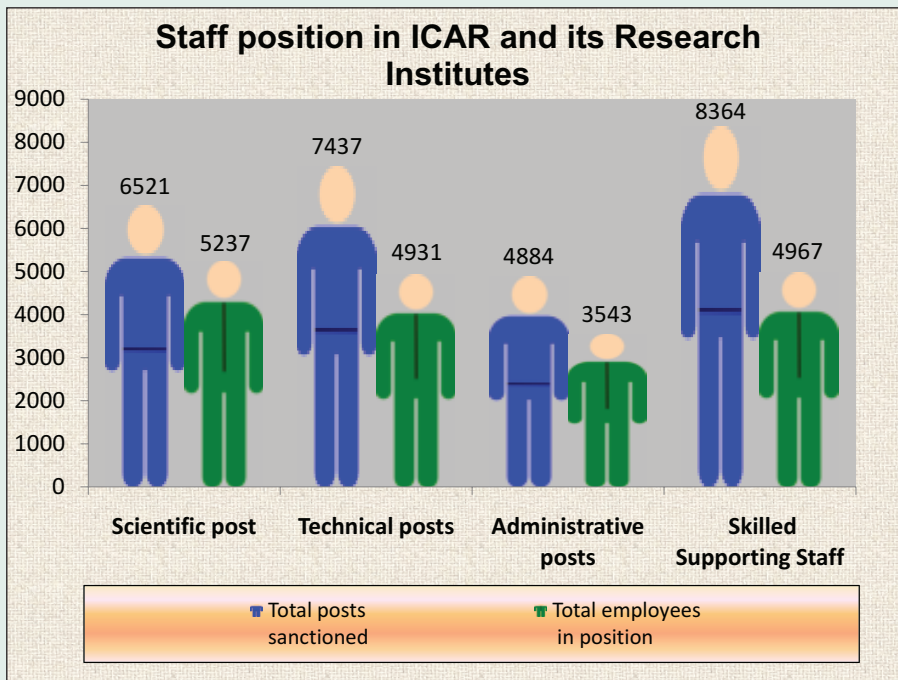
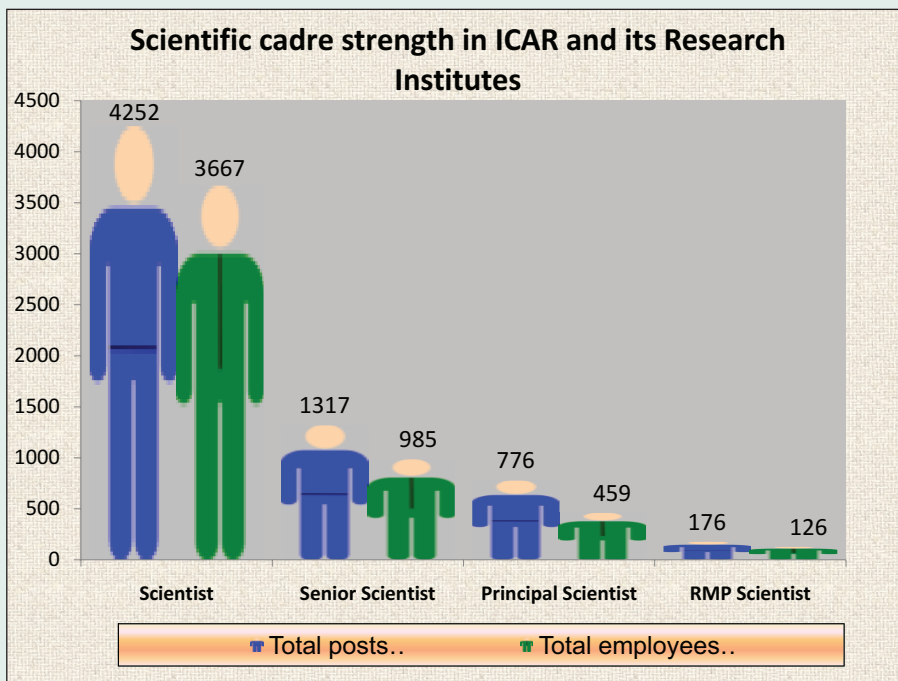
Note : Figures in parentheses indicate percentage.

Source : *Research and Development Statistics 2017-18*, 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
1. Scientific posts									
	Scientist	4252	3667	505	13.77	204	5.56	733	19.99
	Senior Scientist	1317	985	65	6.6	15	1.52	112	11.37
	Principal Scientist	776	459	15	3.27	3	0.65	27	5.88
	RMP Scientist	176	126	8	6.35	5	3.97	17	13.49
	Total	6521	5237	593	11.32	227	4.33	889	16.98
2. Technical posts									
	Category-I	3974	2618	512	19.56	278	10.62	395	15.09
	Category-II	2708	1746	302	17.3	138	7.9	278	15.92
	Category-III	755	567	95	16.75	62	10.93	97	17.11
	Total	7437	4931	909	18.43	478	9.69	770	15.62
3. Administrative posts									
(a)	Category "A" Post	334	316	47	14.87	24	7.59	25	7.91
	Senior Registrar/Director/Deputy Secretary/Under Secretary/CAOs/SAOs/AOs/CF&AO/F&AO/ Legal Advisor/Director(OL)/ DD(OL)/AD(OL)/PPS	2177	1790	279	15.59	124	6.93	197	11.01
(b)	Category "B" Post								
	AF/AO/AAO/PS/SO/AD(OL) / ALA/Assistant/PA/Senior Sales Assistant/JAO/ALA	2361	1437	266	18.51	123	8.56	284	19.76
(c)	Category "C" Post								
	UDC/Steno/LDC	4884	3543	592	16.71	271	7.65	506	14.28
4. Supporting Skilled Staff		8364	4967	1383	27.84	447	9	808	16.27

Source : DARE/ICAR, Annual Report 2017-2018, Ministry of Agriculture & Farmers Welfare, Govt. of India.





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