

AGRICULTURAL STATISTICS AT A GLANCE

AUGUST 2004

Courtesy :

IFFCO
New Delhi - 110 019

Laser Typeset and Printed by:

Arihant Offset
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PREFACE

Agriculture plays a key role in the overall economic and social well being of India. Though the share of agriculture in both GDP and employment has declined over time, the pace of decline in its share in employment has been much slower than that in GDP. The share of agriculture, including the allied sectors of forestry & logging and fishing, in GDP declined from 39 per cent in 1983 to 25 per cent in 1999-2000 compared with a much lower rate of decline in its share in total employment from 63 per cent to 57 per cent during the same period.

Statistics on diverse facets of agriculture are required both to focus on the problems confronting farming as well as farmers in India in the context of emerging challenges in the global economy, and to throw light on priority areas in need of policy intervention. These include a wide range encompassing crop production and productivity across States/regions, markets and prices, terms of trade, price support and procurement, domestic and international trade, credit, and insurance. The Directorate of Economics and Statistics (DES) has, therefore, been bringing out every year "Agricultural Statistics At A Glance" since 1986. The present issue contains the latest available data on various facets of agriculture and allied sectors.

The detailed work involved in the preparation of this issue has been accomplished by Agricultural Statistics Division of this Directorate under the guidance of Shri Vijay Kumar, Adviser, Shri S. Maitra, Addl. Statistical Adviser and Shri Dhrijesh Kumar Tiwari, Deputy Director.

Constructive suggestions to improve the utility of this publication will be highly appreciated.

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ACRONYMS

AGDP	– Gross Domestic Product From Agriculture
Ant.	– Anticipated
APL	– Above Poverty Line
BE	– Budget Estimates
BPL	– Below Poverty Line
CACP	– Commission For Agricultural Cost and Prices.
CBB	– Commercial Bank Branch
CCE	– Crop Cutting Experiments
CCI	– Cotton Corporation of India
CDSBO	– Crude Degummed Soyabean Oil
CES	– Crop Estimation Surveys
CIF	– Cost, Insurance & Freight
CIP	– Central Issue Price
CPI-IW	– Consumer Price Index for Industrial Workers
CWWG	– Crop Weather Watch Group
DAP	– Di Ammonium Phosphate
DES	– Directorate of Economics and Statistics
E	– Estimated
FAO	– Food and Agriculture Organisation
FAQ	– Fair Average Quality
F2	– Black Soil
F-414/H-777/J34/H4	– Cotton Varieties
FCI	– Food Corporation of India
FDI	– Foreign Direct Investment
FFB	– Fresh Fruit Bunch
FRL	– Full Reservoir Level
FYM	– Farm Yard Manure
GCA	– Gross Cropped Area
GCES	– General Crop Estimation Survey
GCF	– Gross Capital Formation

GDP	– Gross Domestic Product
GNP	– Gross National Product
GSDP	– Gross State Domestic Product
Ha	– Hectares
HYV	– High Yielding Varieties
I	– Irrigated
ICOR	– Incremental Capital Output Ratio
K	– Potash
KMPH	– Kilometers Per Hour
KWH	– Kilo Watt Hour
L2	– Light Soil
LPCPD	– Litres per Capita Per Day
MSCCGMF	– Maharashtra State Co-operative Cotton Growers Marketing Federation
MIS	– Market Intervention Scheme
MSP	– Minimum Support Price
MSR	– Marketed Surplus Ratio
N	– Nitrogen
NA	– Not Announced/ Not Available
NC	– Not Collected
NQ	– Not Quoted
NAFED	– National Agricultural Co-operative Marketing Federation of India Limited
NCAER	– National Council of Applied Economic Research
NDDB	– National Dairy Development Board
Neg.	– Negligible
NNP	– Net National Product
NR	– Not Recommended
NSA	– Net Sown Area
NSS	– National Sample Survey
OECD	– Organisation of Economic Cooperation and Development

OPDP	– Oil Palm Development Programme
P	– Phosphate/ Provisional
PACS	– Primary Agricultural Credit Society
Pd.	– Per day
PDS	– Public Distribution System
PLDB	– Primary Land Development Bank
PSE	– Producers Support Estimate
PSEs	– Public Sector Enterprises
R	– Revised
R&D	– Research & Development
R&M	– Rapeseed & Mustard
RMC	– Regional Ministers Conference
RE	– Revised Estimates
RRBB	– Regional Rural Bank Branch
SDP	– State Domestic Product
SASA	– State Agricultural Statistical Authority
SLDB	– State Land Development Bank
SRS	– Sample Registration Scheme
SSP	– Single Super Phosphate
T	– Target
T E	– Triennium Ending
TD-5	– A Variety of Jute
TPDS	– Targeted Public Distribution System
TRQ	– Tariff Rate Quota
TRRM	– Tropical Rains Measuring Mission
TT	– Tentative Targets
U.K.	– United Kingdom
USA	– United States of America
UI	– Unirrigated
UT	– Union Territory
WTO	– World Trade Organisation

CHAPTER I

METHODOLOGY OF CROP ESTIMATION

1.1 Introduction :

The Directorate of Economics and Statistics (DES) releases estimates of area, production and yield in respect of principal crops of foodgrains, oilseeds, sugarcane, fibers and important commercial and horticulture crops. These crops together account for nearly 87% of agriculture output. The estimates of crop production are obtained by multiplication of area estimates by corresponding yield estimates. Therefore, the estimates of area and yield rates assume prime importance in the entire gamut of agricultural statistics.

1.2 Area Statistics:

From the point of view of collection of area statistics, the States in the country are divided into three broad categories:

- i. States and U.Ts. which have been cadastrally surveyed and where area and land use statistics are built up as a part of the land records maintained by the revenue agencies (referred to as "Land Record States" or temporarily settled states). The system of land records is being followed in 17 major states of Andhra Pradesh, Assam (excluding hilly districts), Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and Uttarakhand and 4 UTs of Chandigarh, Delhi, Dadra & Nagar Haveli and Pondicherry. These states/UTs account for about 86% of reporting area.
- ii. The states where area statistics are collected on the basis of sample surveys, a scheme for Establishment of an Agency for Reporting of Agricultural Statistics (EARAS) has been introduced in these states (Kerala, Orissa and West Bengal) and later on extended to Arunachal Pradesh, Nagaland, Sikkim and Tripura. The scheme envisages, inter-alia, estimation of areas through sample surveys in a sufficiently large sample of 20% villages/ investigator zones. These states account for about 9% of reporting area.
- iii. In the hilly districts of Assam, the rest of the states in North-Eastern Region, (Other than Arunachal Pradesh, Nagaland, Tripura and Sikkim), Goa, UTs of Andman & Nicobar Islands, Daman & Diu and Lakshwadeep where no reporting agency had been functioning, the work of collection of Agricultural Statistics is entrusted with the village headmen of the reporting area (5%).

While the area statistics are collected on complete enumeration basis in respect of states in category (i) above, on ad-hoc methods based on impressionistic approach in case of states in category (iii) above, a scheme for Establishment of Agency for Reporting of Agricultural Statistics (EARAS) has been introduced in the states in category (ii) above for collection of data on sample basis.

1.3 Yield Estimates:

The second most important component of production statistics is yield rates. The yield estimates of major crops are obtained through analysis of Crop Cutting Experiments (CCE) conducted under scientifically designed General Crop Estimation Surveys (GCES). At present over 95% of the production of foodgrains is estimated on the basis of yield rates obtained from the CCEs.

The primary objective of GCES is to obtain fairly reliable estimates of average yield of principal food and non-food crops for States and UTs which are important from the point of view of crop production. The estimates of yield rates thus arrived at are generally adopted for the purposes of planning, policy formulation and implementation. The CCEs consist of identification and marking of experimental plots of a specified size and shape in a selected field on the principle of random sampling, threshing the produce and recording of the harvested produce for determining the percentage recovery of dry grains or the marketable form of the produce.

1.4 Coverage :

The crop-wise details of number of experiments planned under GCES during 2000-01 are given in Table 1.1:

Table 1.1 : No. of Experiments Planned under GCES During 2001-2002

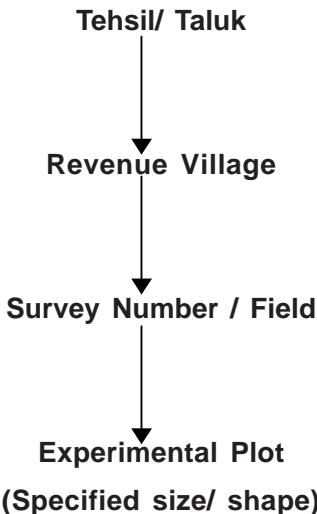
Crops Type/Crop	No. of Experiments Planned		
1. FOOD CROPS	KHARIF	RABI	TOTAL
Paddy	107197	23284	130481
Wheat	-	62497	62497
Jowar	17226	12594	29820
Bajra	13794	662	14456
Maize	21041	1758	22799
Ragi	6862	574	7436
Barley	-	3528	3528
Gram	-	20382	20382
Sugarcane	21488	-	21488
2. NON FOOD CROPS			
Groundnut	16554	5929	22483
Sesamum	8463	4207	12670
Castor	1514	-	1514
Rapeseed & Mustard	-	21165	21165
Linseed	-	5561	5561
Cotton	12016	-	12016
Jute	4582	-	4582
Mesta	882	-	882
Total (1+2)	231619	162141	393760
Other Crops (Kharif & Rabi)			122285
TOTAL ALL CROPS			516045

Source : FOD, NSSO

1.5 Sampling Design :

Stratified multi-stage random sampling design is generally adopted for carrying out GCES with tehsils/ taluks/ revenue inspector circles/ CD blocks/ anchals etc. as strata, revenue villages within a stratum as first stage unit of sampling, survey numbers/ fields within each selected village as sampling unit at the second stage and experimental plot of a specified shape and size as the ultimate unit of sampling as depicted in figure 1.1.

Figure 1.1 SAMPLING DESIGN for GCES



In each selected primary unit, generally 2 survey numbers/fields growing the experimental crop are selected for conducting CCE.

1.6 Advance Estimates of Area and Production :

Final estimates of production based on complete enumeration of area and yield through crop cutting experiments become available much after the crops are actually harvested. However, the Government require advance estimates of production for taking various policy decisions relating to pricing, marketing, export/import, distribution, etc. Considering the genuine requirement of crop estimates much before the crops are harvested for various policy purposes, a time schedule of releasing the advance estimates has been evolved. These estimates of crops are prepared and released at four points of time during a year as enumerated below: -

1.7 First Advance Estimates:

The first official forecast of area and production of kharif crop is prepared in the middle of September every year when south-west monsoon season is about to be over and kharif crops are at an advanced stage of maturity. This coincides with the holding of the National Conference of Agriculture for Rabi

Campaign where states bring assessments of their respective kharif crops. Although there is no specific guideline/methodology issued by the Department of Agriculture & Cooperation (DAC) to make the assessment, these are made by the State Governments based on the reports from the field offices of the State Department of Agriculture. They are mainly guided by visual observations. These are validated on the basis of inputs from the Space Application Center, Ahmedabad the proceedings of Crop Weather Watch Group (CWWG) meetings, and other feedback such as relevant availability of water in major reservoirs, availability/supply of important inputs including credit to farmers.

1.8 Second Advance Estimates:

The second assessment for crop forecast is made sometimes in the month of January every year when the advance estimates of kharif crops prepared during the National Conference of Agriculture for Rabi Campaign may undergo a revision in the light of flow of more precise information from states. Around this time, the first advance estimates of rabi crops are also prepared. The Second Advance Estimates then cover the second assessment in respect of Kharif Crops and the first assessment in respect of Rabi Crops.

1.9 Third Advance Estimates :

The third advance estimates are prepared towards the end of March/ beginning of April every year when the National Conference on Agriculture for kharif campaign is convened and the states come up with their assessments for both kharif and rabi crops. The earlier advance estimates of both kharif and rabi seasons are firmed up/ validated with the information available with State Agricultural Statistical Authorities (SASAs), remote sensing data, reports of Market Intelligence Units (MIU) as well as the proceedings of CWWG.

1.10 Fourth Advance Estimates:

The fourth advance estimates are prepared in the month of June every year when the National Workshop on Improvement of Agricultural Statistics is held. Since most of the rabi crops get harvested by the end of May, SASAs are in a position to supply the estimates of both kharif and rabi seasons as well as likely assessment of summer crops during the National Workshop. Like third advance estimates, the fourth advance estimates are duly validated with the information available from other sources.

2.1 Key Economic Indicators of India

Indicator	Unit	2000-01	2001-02	2002-03	2003-04
GDP at Factor Cost					
at Current Price	Rs. Billion	19030	20910	22495*	25239**
at 1993-94 price	Rs. Billion	11986	12678	13183*	14267**
GDP in Agriculture & Allied Sectors					
at Current Prices	Rs. Billion	4685	5219	5099*	5605**
at 1993-94 Prices	Rs. Billion	2867	3053	2894*	3156**
Population (as on 1st October)	Million	1019	1037	1055	1073
Per Capita National Income (Net National Product at Factor Cost)					
at Current Prices	Rs.	16563	17947	18912*	20862**
at 1993-94 Prices	Rs.	10313	10774	10964*	11672**
Foodgrains Production	Million Tonnes	196.8	212.9	174.19	212.05\$
Inflation Rate					
WPI based (1993-94 =100)					
Point-to-Point	%	4.9	1.6	6.5	4.6
Average	%	7.2	3.6	3.4	5.4
CPI-IW based (1982=100)					
Point-to-Point	%	2.5	5.2	4.1	3.5
Average	%	3.8	4.3	4.0	3.9
WPI for Agricultural commodities		163.6	169.5	175.3	182.4
WPI for Non-Agricultural commodities		153.5	159.1	164.4	174.1
Foreign Trade					
Export	US\$ billion	44.6	43.8	52.7	61.7
Import	US\$ billion	50.5	51.4	61.4	75.4
Balance	US\$ billion	-5.90	-7.60	-8.70	-13.70
Total Agricultural Imports	(Rs. in Crore)	12086.23	16256.61	17608.83	21894.37
% to National Imports		5.29	6.63	5.92	6.19
Total Agricultural Exports	(Rs. in Crore)	28657.37	29728.61	34653.94	36893.90
% to National Exports		14.23	14.22	13.58	12.65
External Debt Outstanding (End March)	US\$ billion	101.13	98.76	104.94	112.13@
Forex Reserves (End March)	US\$ billion	42.3	54.1	75.4	111.6
ExchangeRate (at end of year)	Rs/US \$	45.68	47.69	48.40	45.95

* Quick Estimates ** Revised Estimates @ End December 2003

\$ - Fourth Advance Estimates as on 05.08.2004.

Source : (i) Central Statistical Organisation.

(ii) Directorate of Economics & Statistics, Ministry of Agriculture .

(iii) Economic Survey 2003-04.

2.2: Population and Agricultural Workers

Year	Total Population	Average Annual Exponential Growth Rate(%)	Rural Population	Cultivators	Agricultural Labourers	(In Millions)
						Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1951	361.1	1.25	298.6 (82.7)	69.9 (71.9)	27.3 (28.1)	97.2 (100.0)
1961	439.2	1.96	360.3 (82.0)	99.6 (76.0)	31.5 (24.0)	131.1 (100.0)
1971	548.2	2.22	439.0 (80.1)	78.2 (62.2)	47.5 (37.8)	125.7 (100.0)
1981	683.3	2.20	523.9 (76.7)	92.5 (62.5)	55.5 (37.5)	148.0 (100.0)
1991	846.4	2.14	628.9 (74.3)	110.7 (59.7)	74.6 (40.3)	185.3 (100.0)
2001	1028.7	1.95	742.6 (72.2)	127.3 (54.4)	106.8 (45.6)	234.1 (100.0)

Notes :

1. India and Manipur figures are final and include estimated figures for those of the three sub-divisions viz. Mao Maram, Paomata and Purul of Senapati district of Manipur as population census 2001 in these three sub-divisions were cancelled due to technical and administrative reasons although a population census was carried out in these sub-divisions also as per schedule.
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' on the basis of 2001 final population. The data on workers in columns 5-7 exclude J&K.
3. The 1981 census could not be held in Assam. The figures for 1981 for Assam have been worked out by interpolation.
4. Figures in parentheses represent percentages to the total.

Source: Registrar General of India, New Delhi.

2.3: Population, Growth Rate - 2001

State/UT	India/States/ Union territories	Population 2001			Percentage Decadal Growth	
		Persons	Males	Females	1981-1991	1991-2001
1	2	3	4	5	6	7
	INDIA *	1,028,830,774	532,263,021	496,567,753	23.86	21.56
1	Jammu & Kashmir	10,143,700	5,360,926	4,782,774	30.34	29.98
2	Himachal Pradesh	6,077,900	3,087,940	2,989,960	20.79	17.54
3	Punjab	24,358,999	12,985,045	11,373,954	20.81	20.10
4	Chandigarh	900,635	506,938	393,697	42.16	40.28
5	Uttaranchal	8,489,349	4,325,924	4,163,425	24.23	19.34
6	Haryana	21,144,564	11,363,953	9,780,611	27.41	28.43
7	Delhi	13,850,507	7,607,234	6,243,273	51.45	47.02
8	Rajasthan	56,507,188	29,420,011	27,087,177	28.44	28.41
9	Uttar Pradesh	166,197,921	87,565,369	78,632,552	25.55	25.91
10	Bihar	82,998,509	43,243,795	39,754,714	23.38	28.62
11	Sikkim	540,851	288,484	252,367	28.47	33.06
12	Arunachal Pradesh	1,097,968	579,941	518,027	36.83	27.00
13	Nagaland *	1,988,636	1,041,686	946,950	56.08	64.41
14	Manipur *	2,388,634	1,207,338	1,181,296	29.29	30.02
15	Mizoram	888,573	459,109	429,464	39.70	28.82
16	Tripura	3,199,203	1,642,225	1,556,978	34.30	16.03
17	Meghalaya	2,318,822	1,176,087	1,142,735	32.86	30.65
18	Assam	26,655,528	13,777,037	12,878,491	24.24	18.92
19	West Bengal	80,176,197	41,465,985	38,710,212	24.73	17.77
20	Jharkhand	26,945,829	13,885,037	13,060,792	24.03	23.36
21	Orissa	36,804,660	18,660,570	18,144,090	20.06	16.25
22	Chhattisgarh	20,833,803	10,474,218	10,359,585	25.73	18.27
23	Madhya Pradesh	60,348,023	31,443,652	28,904,371	27.24	24.26
24	Gujarat	50,671,017	26,385,577	24,285,440	21.19	22.66
25	Daman & Diu	158,204	92,512	65,692	28.62	55.73

(Continued)

1	2	3	4	5	6	7
26	Dadra & Nagar Haveli	220,490	121,666	98,824	33.57	59.22
27	Maharashtra	96,878,627	50,400,596	46,478,031	25.73	22.73
28	Andhra Pradesh	76,210,007	38,527,413	37,682,594	24.20	14.59
29	Karnataka	52,850,562	26,898,918	25,951,644	21.12	17.51
30	Goa	1,347,668	687,248	660,420	16.08	15.21
31	Lakshadweep	60,650	31,131	29,519	28.47	17.30
32	Kerala	31,841,374	15,468,614	16,372,760	14.32	9.43
33	Tamil Nadu	62,405,679	31,400,909	31,004,770	15.39	11.72
34	Pondicherry	974,345	486,961	487,384	33.64	20.62
35	Andaman & Nicobar Islands	356,152	192,972	163,180	48.70	26.90

* 2001 census figures are provisional for Nagaland, Manipur and India

Notes: The percentage decadal growth of population of Assam in 1981 and Jammu and Kashmir in 1991 have been worked out by interpolation as 1981 census in Assam and 1991 census in Jammu & Kashmir could not be conducted owing to disturbed conditions.

Source: Registrar General of India, New Delhi.

(Concluded)

2.5: Some Important Indicators of Social Development (1992 - 2007)

Indicator	1991-92	1996-97	2006-2007 (Projected)
1	2	3	4
Life Expectancy (in years)			
Male	57.70	60.10	66.10
Female	58.70	61.10	67.10
Infant Mortality Rate (per thousand births)	78(a)	68(b)	48.00
Death Rate (per thousand) (b)		8.70	7.40
Birth Rate (per thousand) (b)	28.90	25.72	21.70
Fertility Rate (per thousand) (b)	130.30	113.00	91.40
Literacy Rate (%)			
15-35 years	56.00	90.00	100.00
7 years & above	52.00	75.00	90.00
Yearly Per Capita Consumption of foodgrains (Kgs.)	182.00	188.50	225.00
Drinking Water Status			
Villages without drinking water (thousands)	3.0 (c)	0.00	0.00
Villages partially covered (less than 40 lpcpd)	150.00	Neg.	0.00
Electricity as a source of Lighting (Percent of Dwellings)			
Rural	27(d)	50.00	80.00
Urban	75(d)	80.00	95.00

Notes : (a) Estimate based on SRS Data.

(b) Based on assumptions implicit in the population projections made by the Standing Committee of Experts on Population Projection(1989).

(c)The figure indicates the number of villages not having any source of drinking water by end of March 1992 .

(d) Estimates for 1988-89 are based on results of 44th Round of NSS.

Source : Ministry of Rural Development, New Delhi.

2.6: Growth in Population and Labour Force

1	2	(percent per annum)	
		2002-2007	2007-2012
Population			
All age groups	1.63	1.41	1.20
15-59 years	2.41	2.08	1.70
15+	2.57	2.26	1.93
Labour Force *			
15-59 years	2.42	2.15	1.78
15+	2.51	2.25	1.92

* Labour force projections here are on the basis of labour force participation rate for each quinquennial age group remaining unchanged, i.e. the changes in labour force growth in relation to population are due to changes in the age composition of the population.

Source: Draft Tenth Five Year Plan (2002-07), Vol.I, Planning Commission

2.10 : State-wise Estimates of Gross State Domestic Product from Agriculture During 2000-01 and 2001-02 (At 1993-94 Prices)

Sl. No.	States/UTs	2000-2001	2001-2002	(Rs. Lakhs)	
				% Growth over Previous Year	
				2000-2001	2001-2002
1	2	3	4	5	6
1	Andhra Pradesh	2186947	2151299	14.2	-1.6
2	Arunachal Pradesh	33005	30555	8.5	-7.4
3	Assam	520181	524093	-2.5	0.8
4	Bihar *	1104842	1115274	0.9	0.9
5	Jharkhand	N.A.	N.A.	N.A.	N.A.
6	Goa	27382	29986	-12.3	9.5
7	Gujarat	913997	1306394	-13.0	42.9
8	Haryana	1068391	1072615	2.9	0.4
9	Himachal Pradesh	131983	138022	7.8	4.6
10	Jammu & Kashmir	236513	N.A.	-1.1	N.A.
11	Karnataka	1933958	1723436	6.8	-10.9
12	Kerala	746972	760268	1.8	1.8
13	Madhya Pradesh *	1207984	1415167	-27.4	17.2
14	Chhattisgarh	242409	381085	-22.4	57.2
15	Maharashtra	2234398	2308784	-6.8	3.3
16	Manipur	44627	45399	3.8	1.7
17	Meghalaya	54306	54298	1.6	0.0
18	Mizoram	N.A.	N.A.	N.A.	N.A.
19	Nagaland	N.A.	N.A.	N.A.	N.A.
20	Orissa	546867	660152	-7.5	20.7
21	Punjab	1635349	1645427	2.9	0.6
22	Rajasthan	1258061	1610736	-10.4	28.0
23	Sikkim	N.A.	N.A.	N.A.	N.A.
24	Tamil Nadu	1458170	1417331	4.7	-2.8
25	Tripura	63802	65447	-2.4	2.6
26	Uttar Pradesh *	3629363	3811769	0	5.0
27	Uttaranchal	N.A.	N.A.	N.A.	N.A.
28	West Bengal	1919189	2083044	1.8	8.5
29	A&N Islands	13432	14519	8.7	8.1
30	Chandigarh	3036	3028	-3.9	-0.3
31	Delhi	49858	N.A.	-3.5	N.A.
32	Pondicherry	9594	9731	-0.5	1.4

* Divided States

Source: Central Statistical Organisation, New Delhi.

2.11 : Share of Agriculture In Gross State Domestic Product during 2000-01 and 2001-02 (At 1993-94 Prices)

Sl. No.	State/ UT	(Rs. Lakhs)			
		2000-2001		2001-2002	
		Agriculture SDP	% Share of Agriculture SDP to GSDP	Agriculture SDP	% Share of Agriculture SDP to GSDP
1	2	3	4	5	6
1	Andhra Pradesh	2186947	25.6	2151299	24.2
2	Arunachal Pradesh	33005	28.2	30555	26.2
3	Assam	520181	29.6	524093	28.9
4	Bihar *	1104842	36.5	1115274	35.2
5	Jharkhand	N.A.	N.A.	N.A.	NA
6	Goa	27382	6.4	29986	6.6
7	Gujarat	913997	12.0	1306394	15.6
8	Haryana	1068391	32.3	1072615	30.8
9	Himachal Pradesh	131983	17.2	138022	17.1
10	Jammu & Kashmir	236513	27.3	N.A.	NA
11	Karnataka	1933958	28.1	1723436	24.4
12	Kerala	746972	19.4	760268	18.9
13	Madhya Pradesh *	1207984	24.4	1415167	26.6
14	Chhattisgarh	242409	14.6	381085	20.1
15	Maharashtra	2234398	14.3	2308784	13.9
16	Manipur	44627	21.7	45399	20.9
17	Meghalaya	54306	22.6	54298	21.6
18	Mizoram	N.A.	N.A.	N.A.	NA
19	Nagaland	N.A.	N.A.	N.A.	NA
20	Orissa	546867	22.8	660152	25.4
21	Punjab	1635349	39.8	1645427	38.7
22	Rajasthan	1258061	24.2	1610736	28.1
23	Sikkim	N.A.	N.A.	N.A.	NA
24	Tamil Nadu	1458170	16.1	1417331	15.2
25	Tripura	63802	19.6	65447	18.2
26	Uttar Pradesh *	3629363	33.2	3811769	33.2
27	Uttaranchal	N.A.	N.A.	N.A.	NA
28	West Bengal	1919189	22.4	2083044	22.6
29	A&N Islands	13432	21.7	14519	23.1
30	Chandigarh	3036	1.1	3028	1.1
31	Delhi	49858	1.4	N.A.	NA
32	Pondicherry	9594	4.7	9731	4.6

* Divided States

Source: Central Statistical Organisation, New Delhi.

2.12: State-wise Gross State Domestic Product from Agriculture during 2000-01 and 2001-02 (At Current Prices)

Sl. No.	States/UTs	(Rs. Lakhs)			
		2000-2001		% Growth over previous year	
		2000-2001	2001-2002	2000-2001	2001-2002
1	2	3	4	5	6
1	Andhra Pradesh	3648380	3702018	12.8	1.5
2	Arunachal Pradesh	55446	53704	11.5	-3.1
3	Assam	997111	976063	-4.1	-2.1
4	Bihar *	1624351	1732118	6.6	6.6
5	Jharkhand	406579	N.A.	-40.8	N.A.
6	Goa	40848	43222	-14.0	5.8
7	Gujarat	1336597	1815283	-14.9	35.8
8	Haryana	1676270	1714498	6.5	2.3
9	Himachal Pradesh	281758	323004	8.9	14.6
10	Jammu & Kashmir	371815	N.A.	3.1	N.A.
11	Karnataka	2701694	2379283	6.0	-11.9
12	Kerala	1332045	1392253	4.8	4.5
13	Madhya Pradesh *	1815434	2186940	-24.9	20.5
14	Chhattisgarh	412316	618471	-18.7	50.0
15	Maharashtra	3309208	3453781	-7.5	4.4
16	Manipur	77988	81716	8.7	4.8
17	Meghalaya	85138	85396	11.5	0.3
18	Mizoram	44914	N.A.	59.5	N.A.
19	Nagaland	N.A.	N.A.	N.A.	N.A.
20	Orissa	1011776	1232369	-11.8	21.8
21	Punjab	2663862	2765972	6.9	3.8
22	Rajasthan	1962203	2440000	-12.0	24.4
23	Sikkim	22823	25214	10.3	10.5
24	Tamil Nadu	2043141	2005991	8.3	-1.8
25	Tripura	115298	127271	-5.8	10.4
26	Uttar Pradesh *	5755181	6075056	0.6	5.6
27	Uttarakhand	N.A.	N.A.	N.A.	N.A.
28	West Bengal	3520408	3814658	1.0	8.4
29	A&N Islands	19711	26567	9.6	34.8
30	Chandigarh	5039	5054	-5.4	0.3
31	Delhi	87475	N.A.	4.8	N.A.
32	Pondicherry	15182	15048	-3.6	-0.9

* Divided States

Source: Central Statistical Organisation, New Delhi.

2.13 : Share of Agriculture In Gross State Domestic Product During 2000-01 and 2001-02 (At Current Prices)

Sl.No.	State/UT	2000-2001		2001-2002	
		Agriculture SDP	% Share of Agriculture SDP to GSDP	Agriculture SDP	% Share of Agriculture SDP to GSDP
1	2	3	4	5	6
1	Andhra Pradesh	3648380	26.2	3702018	24.7
2	Arunachal Pradesh	55446	29.2	53704	27.6
3	Assam	997111	32.5	976063	30.1
4	Bihar *	1624351	35.1	1732118	34.0
5	Jharkhand	406579	14.0	N.A.	N.A.
6	Goa	40848	5.4	43222	5.6
7	Gujarat	1336597	12.1	1815283	14.5
8	Haryana	1676270	30.7	1714498	28.7
9	Himachal Pradesh	281758	21.1	323004	21.9
10	Jammu & Kashmir	371815	25.2	N.A.	N.A.
11	Karnataka	2701694	25.8	2379283	21.7
12	Kerala	1332045	19.3	1392253	18.3
13	Madhya Pradesh *	1815434	24.8	2186940	26.9
14	Chhattisgarh	412316	15.8	618471	20.4
15	Maharashtra	3309208	13.9	3453781	12.7
16	Manipur	77988	23.6	81716	22.8
17	Meghalaya	85138	22.8	85396	21.5
18	Mizoram	44914	25.4	N.A.	N.A.
19	Nagaland	N.A.	N.A.	N.A.	N.A.
20	Orissa	1011776	26.1	1232369	28.5
21	Punjab	2663862	40.3	2765972	39.1
22	Rajasthan	1962203	24.7	2440000	27.2
23	Sikkim	22823	25.1	25214	25.8
24	Tamil Nadu	2043141	14.5	2005991	13.5
25	Tripura	115298	21.9	127271	21.0
26	Uttar Pradesh *	5755181	33.3	6075056	32.4
27	Uttaranchal	N.A.	N.A.	N.A.	N.A.
28	West Bengal	3520408	25.2	3814658	24.4
29	A&N Islands	19711	20.6	26567	24.9
30	Chandigarh	5039	1.1	5054	1.1
31	Delhi	87475	1.5	N.A.	N.A.
32	Pondicherry	15182	4.5	15048	4.0

* Divided States

Source: Central Statistical Organisation, New Delhi.

2.14 : Annual Growth Rate of GDP at Factor Cost in Agriculture During 1951-52 to 2003-04

(Percent)

Year	At current prices		At 1993-94 prices	
	Agriculture	Agriculture, Forestry & Fishing	Agriculture	Agriculture, Forestry & Fishing
1	2	3	4	5
1951-52	3.5	3.3	1.6	1.5
1952-53	-1.7	-2.6	4.2	3.2
1953-54	10.9	10.2	9.0	7.7
1954-55	-16.1	-14.9	2.8	2.9
1955-56	-3.4	-3.0	-1.5	-0.9
1956-57	28.0	27.0	6.0	5.4
1957-58	-2.3	-2.1	-5.1	-4.5
1958-59	16.7	16.0	11.2	10.1
1959-60	0.0	0.5	-1.5	-1.0
1960-61	4.9	5.3	7.3	6.7
1961-62	3.0	3.6	-0.3	0.1
1962-63	2.1	2.1	-2.1	-2.0
1963-64	18.2	17.7	1.9	2.3
1964-65	23.0	22.2	10.3	9.2
1965-66	-0.9	-0.3	-13.5	-11.0
1966-67	16.5	16.3	-2.3	-1.4
1967-68	26.0	25.1	17.1	14.9
1968-69	2.3	3.1	-0.3	-0.2
1969-70	9.7	9.4	7.2	6.4
1970-71	2.8	3.1	7.4	7.1
1971-72	1.7	2.2	-2.7	-1.9
1972-73	9.7	10.0	-5.6	-5.0
1973-74	32.3	31.8	8.4	7.2
1974-75	8.9	9.6	-2.8	-1.5
1975-76	-1.5	-0.9	14.2	12.9
1976-77	1.7	2.2	-6.1	-5.8
1977-78	18.9	18.4	12.5	10.0
1978-79	1.8	2.8	2.0	2.3
1979-80	2.3	3.5	-13.4	-12.8
1980-81	26.4	25.8	14.4	12.9
1981-82	11.9	12.4	5.6	5.3
1982-83	6.4	7.0	-0.5	-0.7
1983-84	20.5	19.5	10.3	9.6
1984-85	7.3	7.6	1.4	1.5
1985-86	7.4	7.5	0.7	0.7
1986-87	7.2	7.6	-0.6	-0.6
1987-88	11.2	11.3	-1.4	-1.3
1988-89	24.0	23.0	16.8	15.5
1989-90	9.9	10.5	0.7	1.5
1990-91	17.2	16.7	4.4	4.1
1991-92	17.2	16.2	-1.9	-1.5
1992-93	12.0	12.1	6.2	5.8
1993-94	16.0	16.2	4.1	4.1
1994-95	15.0	15.2	5.1	5.0
1995-96	8.9	8.7	-1.1	-0.9
1996-97	20.2	19.6	10.1	9.6
1997-98	5.8	6.7	-2.8	-2.4
1998-99	15.0	14.3	6.9	6.2
1999-00	3.9	4.4	-0.1	0.3
2000-01	0.3	1.4	-0.4	-0.1
2001-02	11.7	11.4	6.7	6.5
2002-03*	-3.6	-2.3	-6.0	-5.2
2003-04**	-	10.5	-	9.1

* Quick Estimates

** Advance Estimates

Source: Central Statistical Organisation, New Delhi.

3.4 : Plan Allocation and Expenditure of Department of Agriculture and Cooperation During 1991-92 to 2004-05

Year 1	BE 2	RE 3	(Rs. Crore)
			Expenditure 4
1991-92	1041.35	1016.93	957.86
1992-93	1050.00	1273.16	1214.88
1993-94	1330.00	1320.05	1183.50
1994-95	1405.00	1458.84	1279.43
1995-96	1490.00	1325.39	1246.42
1996-97	1471.25	1377.91	1378.61
1997-98	1431.00	1266.28	1222.80
1998-99	1956.00	1378.41	1358.89
1999-2000	1956.00	1492.00	1471.90
2000-2001	1965.00	1692.00	1666.04
2001-2002	1985.00	1985.00	1792.92
2002-2003	2167.00	1667.00	1656.78
2003-04	2167.00	2120.00	NA
2004-05	2650.00	NA	NA

NA : Not Available.

Source : Policy & Plan Division, Ministry of Agriculture.

3.5 : Budget Estimates/ Expenditure of Department of Agriculture and Cooperation

Period	Centrally Sponsored Schemes	Central Sector	Externally Aided Projects	(Rs. Crore)	
					Total
1	2	3	4	5	
IX Plan Outlays	5533.65	3343.17	277.00	9153.82	
1997-98					
BE Expenditure	913.65 804.53	505.35 399.93	12.00 18.34	1431.00 1222.80	
1998-99					
BE Expenditure	1348.08 957.67	564.19 372.85	43.73 28.37	1956.00 1358.89	
1999-2000					
BE Expenditure	1166.35 876.91	735.64 559.05	54.01 35.94	1956.00 1471.90	
2000-2001					
BE Expenditure	1063.76 583.59	847.24 1062.60	54.00 19.85	1965.00 1666.04	
2001-2002					
BE Expenditure	1215.40 801.97	731.99 962.74	37.61 28.21	1985.00 1792.92	
IX Plan Expenditure	4024.67	3357.17	130.71	7512.55	
X Plan Outlays Proposed	7236.73	5694.00	264.27	13200.00	
2002-2003					
BE Expenditure	1341.53 913.55	760.47 732.35	65.00 30.88	2167.00 1656.78	
2003-04					
BE Expenditure	1005.72 -	1149.25 -	12.03 -	2167 -	

Source : Policy & Plan Division, Ministry of Agriculture.

3.7: Sectoral Growth Rates and ICOR under Different Sectors of the Economy

Sl. No.	Sector	(Based on estimates at 1993-94 Prices)					
		Eighth plan		Ninth Plan		Tenth Plan	
		Growth Rate (%)	ICOR	Growth Rate (%)	ICOR	Growth Rate (%)	ICOR
1	2	3	4	5	6	7	8
1	Agriculture & Allied Sectors	4.69	1.59	2.06	4.05	3.97	1.99
2	Mining & Quarrying	3.59	10.74	3.81	5.44	4.30	7.99
3	Manufacturing	9.77	6.67	3.69	18.37	9.82	7.77
4	Electricity, Gas & Water	5.50	18.00	6.46	15.43	7.99	14.97
5	Construction	3.56	1.74	6.82	1.00	8.34	0.99
6	Trade	9.06	0.54	5.86	1.09	9.44	0.91
7	Rail Transport	1.95	27.94	4.70	9.87	5.40	14.66
8	Other Transport	8.42	4.41	5.63	6.09	7.54	5.37
9	Communications	14.31	7.25	17.14	5.28	15.00	8.33
10	Financial Services	10.21	2.23	8.93	1.35	11.69	1.56
11	Public Administration	3.91	7.82	9.21	4.09	6.43	5.45
12	Other Services	6.22	4.19	8.19	3.70	9.26	3.53
	Total	6.54	3.43	5.35	4.53	7.93	3.58

Note :- These are implicit ICORs calculated over the Plan period.

Source :- Tenth Five Year Plan 2002-07 Volume-I, Planning Commission, New Delhi.

**4.1(b): Targets and Achievements of Production of Major Crops
during 2002-2003 & 2003-04**

Crop	(Million Tonnes)			
	2002-2003		2003-04	
	Targets	Achievements	Targets	Achievements*
1	2	3	4	5
Rice	93.00	72.66	93.00	87.00
Wheat	78.00	65.10	78.00	72.06
Coarse Ceareals	33.00	25.29	34.00	37.76
Pulses	16.00	11.14	15.00	15.23
Foodgrains	220.00	174.19	220.00	212.05
Oilseeds	27.00	15.06	24.70	25.14
Sugarcane	320.00	281.58	320.00	236.18
Cotton #	15.00	8.72	15.00	13.79
Jute & Mesta@	12.00	11.38	12.00	11.20

Million Bales of 170 kg. each.

@ Million Bales of 180 kg. each.

* Advance Estimates as on 05.08.2004

4.2 : Three Largest Producing States of Important Crops during 2002-03

Crops/ Groups of Crops	States	Production : Million Tonnes		
		Production	% Share of Production to All India	Cumulative % Share of Production
1	2	3	4	5
I. Foodgrains				
Rice	West Bengal	14.39	19.81	19.81
	Punjab	8.88	12.22	32.03
	Uttar Pradesh	8.11	11.16	43.19
Wheat	Uttar Pradesh	23.61	36.27	36.27
	Punjab	14.18	21.78	58.05
	Haryana	9.19	14.12	72.17
Maize	Madhya Pradesh	1.50	14.56	14.56
	Andhra Pradesh	1.49	14.47	29.03
	Karnataka	1.38	13.40	42.43
Total Coarse Cereals	Maharashtra	5.94	23.48	23.48
	Rajasthan	2.14	8.46	31.94
	Karnataka	3.63	14.35	46.28
Total Pulses	Madhya Pradesh	2.21	19.84	19.84
	Uttar Pradesh	2.06	18.49	38.33
	Maharashtra	2.05	18.40	56.73
Total Foodgrains	Uttar Pradesh	36.30	20.84	20.84
	Punjab	23.49	13.49	34.32
	West Bengal	15.53	8.91	43.23
II .Oilseeds				
Groundnut	Gujarat	1.09	25.00	25.00
	Tamil Nadu	0.98	22.48	47.48
	Andhra Pradesh	0.82	18.81	66.28
Rapeseed & Mustard	Rajasthan	1.32	33.67	33.67
	Uttar Pradesh	0.76	19.39	53.06
	Haryana	0.69	17.60	77.66
Soyabean	Madhya Pradesh	2.58	56.58	56.58
	Maharashtra	1.58	34.65	91.23
	Rajasthan	0.24	5.26	96.49
Sunflower	Karnataka	0.41	45.05	45.05
	Andhra Pradesh	0.28	30.77	75.82
	Maharashtra	0.15	16.48	92.31
Total Oilseeds	Madhya Pradesh	3.00	19.92	19.92
	Maharashtra	2.33	15.47	35.39
	Rajasthan	1.75	11.62	47.01

(Continued)

1	2	3	4	5
III . Other Cash Crops				
Sugarcane	Uttar Pradesh Maharashtra Karnataka	116.32 37.02 32.48	41.31 13.15 11.54	41.31 54.46 65.99
Cotton @	Maharashtra Gujarat Andhra Pradesh	2.60 1.68 1.09	29.82 19.27 12.50	29.82 49.08 61.58
Jute & Mesta\$	West Bengal Bihar Assam	8.58 1.13 0.72	75.40 9.93 6.33	75.40 85.33 91.65
Potato	Uttar Pradesh West Bengal Bihar	10.16 6.90 1.44	43.88 29.80 6.22	43.88 73.68 79.90
Onion	Maharashtra Gujarat Karnataka	1.22 0.72 0.45	29.08 17.04 10.57	29.08 46.12 56.69

@ : Production in million bales of 170 kgs. each.

\$: Production in million bales of 180 kg. each.

(Concluded)

4.3 : Normal Area, Production and Yield of Major Crops in India

Crops/ Group of Crops 1	Season 2	Area - Million Hectares		
		Area 3	Production - Million Tonnes	
			Yield - Kg./ Hectare 5	
Crops/ Group of Crops 1	Season 2	Area 3	Production 4	Yield 5
I. Foodgrains				
Rice	Kharif	39.9	73.3	1835
	Rabi	4.0	11.9	2972
	Total	43.9	85.2	1938
Wheat	Rabi	26.4	71.0	2692
Jowar	Kharif	4.7	4.6	989
	Rabi	5.1	3.2	633
	Total	9.8	7.8	803
Bajra	Kharif	9.0	6.5	718
Maize	Kharif	5.8	10.0	1713
	Rabi	0.7	1.8	2749
	Total	6.5	11.8	1817
Total Coarse Cereals		Kharif	22.5	24.0
		Rabi	6.5	6.5
		Total	29.0	30.5
Tur	Kharif	3.4	2.4	703
Gram	Rabi	6.4	5.1	796
Total Pulses		Kharif	10.2	4.7
		Rabi	11.2	8.1
		Total	21.4	12.8
Total Foodgrains		Kharif	72.7	101.9
		Rabi	48.1	97.5
		Total	120.8	199.4
II . Oilseeds				
Groundnut	Total	6.6	6.4	970
Rapeseed & Mustard	Rabi	5.3	4.9	924
Soyabean	Kharif	6.3	6.0	958
Sunflower	Total	1.4	0.8	552
Nine Oilseeds		Total	23.4	19.9
III . Other Cash Crops				
Sugarcane	Total	4.3	298.5	69065
Cotton @	Total	8.7	10.4	204
Jute & Mesta\$	Total	1.0	10.8	1944
Potato	Total	1.3	23.6	18343
Onion	Total	0.5	4.8	10540

Note : 'Normal' is worked out as simple average of estimates for 5 years, i.e., 1998-99 to 2002-03.

@ : Production in million bales of 170 kgs. each.

\$: Production in million bales of 180 kg. each.

4.4: Season-wise Area, Production and Yield of Foodgrains from 1966-1967 to 2003-04

A - Area in Million Hectares
 P - Production in Million Tonnes
 Y - Yield in kg./Hectare.

Year	Kharif			Rabi			Total		
	A 1	P 2	Y 3	A 5	P 6	Y 7	A 8	P 9	Y 10
1966-67	78.21	48.89	625	37.09	25.34	683	115.30	74.23	644
1967-68	81.49	60.76	746	39.93	34.29	859	121.42	95.05	783
1968-69	80.40	59.57	741	40.03	34.44	860	120.43	94.01	781
1969-70	82.30	62.35	758	41.27	37.15	900	123.57	99.50	805
1970-71	82.36	68.92	837	41.96	39.50	941	124.32	108.42	872
1971-72	79.22	62.99	795	43.40	42.18	972	122.62	105.17	858
1972-73	78.34	58.64	749	40.94	38.39	938	119.28	97.03	813
1973-74	84.12	67.84	806	42.42	36.83	868	126.54	104.67	827
1974-75	79.74	59.10	741	41.34	40.73	985	121.08	99.83	824
1975-76	83.15	73.89	889	45.03	47.14	1047	128.18	121.03	944
1976-77	81.18	66.53	820	43.18	44.64	1034	124.36	111.17	894
1977-78	82.88	77.72	938	44.64	48.69	1091	127.52	126.41	991
1978-79	82.85	78.08	942	46.16	53.82	1166	129.01	131.90	1022
1979-80	80.79	63.25	783	44.42	46.45	1046	125.21	109.70	876
1980-81	83.21	77.65	933	43.46	51.94	1195	126.67	129.59	1023
1981-82	83.93	79.38	946	45.21	53.92	1193	129.14	133.30	1032
1982-83	79.08	69.90	884	46.02	59.62	1296	125.10	129.52	1035
1983-84	84.14	89.23	1060	47.02	63.14	1343	131.16	152.37	1162
1984-85	81.18	84.52	1041	45.49	61.02	1341	126.67	145.54	1149
1985-86	81.80	85.25	1042	46.22	65.19	1410	128.02	150.44	1175
1986-87	81.46	80.20	985	45.74	63.22	1382	127.20	143.42	1128
1987-88	74.89	74.56	996	44.80	65.79	1469	119.69	140.35	1173
1988-89	82.03	95.64	1166	45.64	74.28	1628	127.67	169.92	1331
1989-90	81.40	100.99	1241	45.37	70.05	1544	126.77	171.04	1349
1990-91	80.78	99.44	1231	47.06	76.95	1635	127.84	176.39	1380
1991-92	78.02	91.59	1174	43.85	76.79	1751	121.87	168.38	1382
1992-93	77.92	101.47	1302	45.23	78.01	1725	123.15	179.48	1457
1993-94	75.81	100.40	1324	46.94	83.86	1787	122.75	184.26	1501
1994-95	75.19	101.09	1344	48.67	90.41	1858	123.86	191.50	1546
1995-96	73.60	95.12	1292	47.42	85.30	1799	121.02	180.42	1491
1996-97	75.34	103.92	1379	48.24	95.52	1980	123.58	199.44	1614
1997-98	74.15	101.58	1370	49.70	90.68	1825	123.85	192.26	1552
1998-99	73.99	102.91	1391	51.18	100.69	1967	125.17	203.60	1627
1999-2000	73.24	105.51	1441	49.87	104.29	2091	123.11	209.80	1704
2000-01	75.22	102.09	1357	45.83	94.73	2067	121.05	196.81	1626
2001-02	74.23	112.07	1510	48.55	100.78	2076	122.78	212.85	1734
2002-03	67.07	87.81	1309	44.43	86.38	1944	111.50	174.19	1562
2003-04*	73.96	112.04	1515	50.27	100.01	1989	124.24	212.05	1707

* Advance Estimates As on 05.08.2004.

4.5(a): All-India Area, Production and Yield of Foodgrains From 1950 - 51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Area - Million Hectares	
			Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	97.32	50.82	522	18.1
1951-52	96.96	51.99	536	18.4
1952-53	102.09	59.20	580	18.1
1953-54	109.07	69.82	640	18.1
1954-55	107.86	68.03	631	18.4
1955-56	110.56	66.85	605	18.5
1956-57	111.14	69.86	629	18.2
1957-58	109.48	64.31	587	19.3
1958-59	114.76	77.14	672	18.7
1959-60	115.82	76.67	662	18.8
1960-61	115.58	82.02	710	19.1
1961-62	117.23	82.71	706	19.1
1962-63	117.84	80.15	680	19.8
1963-64	117.42	80.64	687	19.8
1964-65	118.11	89.36	757	20.2
1965-66	115.10	72.35	629	20.9
1966-67	115.30	74.23	644	22.2
1967-68	121.42	95.05	783	21.6
1968-69	120.43	94.01	781	23.6
1969-70	123.57	99.50	805	23.7
1970-71	124.32	108.42	872	24.1
1971-72	122.62	105.17	858	24.5
1972-73	119.28	97.03	813	25.4
1973-74	126.54	104.67	827	24.5
1974-75	121.08	99.83	824	26.5
1975-76	128.18	121.03	944	26.5
1976-77	124.36	111.17	894	27.4
1977-78	127.52	126.41	991	27.7
1978-79	129.01	131.90	1022	28.8
1979-80	125.21	109.70	876	30.3
1980-81	126.67	129.59	1023	29.7
1981-82	129.14	133.30	1032	29.6
1982-83	125.10	129.52	1035	30.8
1983-84	131.16	152.37	1162	30.9
1984-85	126.67	145.54	1149	31.9
1985-86	128.02	150.44	1175	31.4
1986-87	127.20	143.42	1128	32.6
1987-88	119.69	140.35	1173	33.5
1988-89	127.67	169.92	1331	34.4
1989-90	126.77	171.04	1349	35.0
1990-91	127.84	176.39	1380	35.1
1991-92	121.87	168.38	1382	37.4
1992-93	123.15	179.48	1457	37.4
1993-94	122.75	184.26	1501	38.7
1994-95	123.86	191.50	1546	39.6
1995-96	121.01	180.42	1491	40.1
1996-97	123.58	199.44	1614	40.0
1997-98	123.85	192.26	1552	40.8
1998-99	125.17	203.61	1627	42.4
1999-2000	123.10	209.80	1704	43.9
2000-01	121.05	196.81	1626	43.4
2001-02	122.78	212.85	1734	NA
2002-03	111.50	174.19	1562	NA
2003-04*	124.24	212.05	1707	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.6 (a): All-India Area, Production and Yield of Rice From 1950 - 51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	30.81	20.58	668	31.7
1951-52	29.83	21.30	714	31.7
1952-53	29.97	22.90	764	32.3
1953-54	31.29	28.21	902	33.6
1954-55	30.77	25.22	820	34.4
1955-56	31.52	27.56	874	34.9
1956-57	32.28	29.04	900	35.4
1957-58	32.30	25.53	790	36.4
1958-59	33.17	30.85	930	36.3
1959-60	33.82	31.68	937	35.8
1960-61	34.13	34.58	1013	36.8
1961-62	34.69	35.66	1028	37.5
1962-63	35.69	33.21	931	37.4
1963-64	35.81	37.00	1033	37.1
1964-65	36.46	39.31	1078	37.3
1965-66	35.47	30.59	862	36.5
1966-67	35.25	30.44	863	37.9
1967-68	36.44	37.61	1032	38.6
1968-69	36.97	39.76	1076	38.4
1969-70	37.68	40.43	1073	38.2
1970-71	37.59	42.22	1123	38.4
1971-72	37.76	43.07	1141	37.2
1972-73	36.69	39.24	1070	39.1
1973-74	38.29	44.05	1151	38.4
1974-75	37.89	39.58	1045	38.8
1975-76	39.48	48.74	1235	38.7
1976-77	38.51	41.92	1089	38.4
1977-78	40.28	52.67	1308	40.2
1978-79	40.48	53.77	1328	41.6
1979-80	39.42	42.33	1074	42.8
1980-81	40.15	53.63	1336	40.7
1981-82	40.71	53.25	1308	41.5
1982-83	38.26	47.12	1231	42.0
1983-84	41.24	60.10	1457	42.7
1984-85	41.16	58.34	1417	43.7
1985-86	41.14	63.83	1552	42.9
1986-87	41.17	60.56	1471	44.1
1987-88	38.81	56.86	1465	43.6
1988-89	41.73	70.49	1689	45.8
1989-90	42.17	73.57	1745	46.1
1990-91	42.69	74.29	1740	45.5
1991-92	42.65	74.68	1751	47.3
1992-93	41.78	72.86	1744	48.0
1993-94	42.54	80.30	1888	48.6
1994-95	42.81	81.81	1911	49.8
1995-96	42.84	76.98	1797	49.9
1996-97	43.43	81.74	1882	51.0
1997-98	43.45	82.53	1900	50.8
1998-99	44.80	86.08	1921	52.3
1999-2000	45.16	89.68	1986	53.9
2000-01	44.71	84.98	1901	53.6
2001-02	44.90	93.34	2079	NA
2002-03	40.28	72.65	1804	NA
2003-04*	42.41	87.00	2051	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.7(a): All-India Area, Production and Yield of Wheat From 1950 - 51 to 2003-04 Alongwith Percentage Coverage Under Irrigation.

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1950-51	9.75	6.46	663	34.0
1951-52	9.47	6.18	653	35.8
1952-53	9.83	7.50	763	37.2
1953-54	10.68	8.02	750	36.2
1954-55	11.26	9.04	803	35.0
1955-56	12.37	8.76	708	32.7
1956-57	13.52	9.40	695	29.4
1957-58	11.73	7.99	682	33.3
1958-59	12.62	9.96	789	31.8
1959-60	13.38	10.32	772	31.8
1960-61	12.93	11.00	851	32.7
1961-62	13.57	12.07	890	31.9
1962-63	13.59	10.78	793	33.8
1963-64	13.50	9.85	730	34.9
1964-65	13.42	12.26	913	36.8
1965-66	12.57	10.40	827	43.1
1966-67	12.84	11.39	887	48.0
1967-68	14.99	16.54	1103	43.4
1968-69	15.96	18.65	1169	49.8
1969-70	16.63	20.09	1208	51.1
1970-71	18.24	23.83	1307	54.3
1971-72	19.14	26.41	1380	54.5
1972-73	19.46	24.74	1271	57.6
1973-74	18.58	21.78	1172	57.7
1974-75	18.01	24.10	1338	61.8
1975-76	20.45	28.84	1410	61.8
1976-77	20.92	29.01	1387	65.1
1977-78	21.46	31.75	1480	64.6
1978-79	22.64	35.51	1568	66.0
1979-80	22.17	31.83	1436	68.3
1980-81	22.28	36.31	1630	76.5
1981-82	22.14	37.45	1691	70.7
1982-83	23.57	42.79	1816	72.5
1983-84	24.67	45.48	1843	73.0
1984-85	23.56	44.07	1870	74.5
1985-86	23.00	47.05	2046	74.6
1986-87	23.13	44.32	1916	76.3
1987-88	23.06	46.17	2002	76.8
1988-89	24.11	54.11	2244	79.2
1989-90	23.50	49.85	2121	80.3
1990-91	24.17	55.14	2281	81.1
1991-92	23.26	55.69	2394	83.7
1992-93	24.59	57.21	2327	84.2
1993-94	25.15	59.84	2380	84.8
1994-95	25.70	65.77	2559	85.2
1995-96	25.01	62.10	2483	85.8
1996-97	25.89	69.35	2679	86.2
1997-98	26.70	66.35	2485	85.8
1998-99	27.52	71.29	2590	85.8
1999-2000	27.49	76.37	2778	87.2
2000-01	25.73	69.68	2708	88.1
2001-02	26.34	72.77	2762	NA
2002-03	24.86	65.10	2619	NA
2003-04*	26.62	72.06	2707	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.8(a): All-India Area, Production and Yield of Coarse Cereals From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation.

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1950-51	37.67	15.38	408	7.9
1951-52	38.88	16.09	414	8.7
1952-53	42.45	19.61	462	8.1
1953-54	45.37	22.97	506	7.8
1954-55	43.92	22.82	520	8.1
1955-56	43.45	19.49	449	8.0
1956-57	42.02	19.87	473	7.6
1957-58	42.91	21.23	495	8.0
1958-59	44.66	23.18	519	7.5
1959-60	43.79	22.87	522	7.5
1960-61	44.96	23.74	528	7.7
1961-62	44.73	23.22	519	7.1
1962-63	44.29	24.63	556	7.3
1963-64	43.93	23.72	540	7.3
1964-65	44.35	25.37	514	7.3
1965-66	44.34	21.42	483	8.1
1966-67	45.09	24.05	533	8.5
1967-68	47.34	28.80	608	8.0
1968-69	46.24	25.18	545	9.6
1969-70	47.24	27.29	578	9.4
1970-71	45.95	30.55	665	8.3
1971-72	43.57	24.60	564	8.4
1972-73	42.21	23.14	548	8.6
1973-74	46.24	28.83	623	8.3
1974-75	43.15	26.13	606	10.9
1975-76	43.80	30.41	694	9.9
1976-77	41.94	28.88	689	9.7
1977-78	42.28	30.02	710	8.9
1978-79	42.23	30.44	721	8.5
1979-80	41.36	26.97	652	9.4
1980-81	41.78	29.02	695	9.2
1981-82	42.45	31.09	733	9.0
1982-83	40.43	27.75	685	9.0
1983-84	41.71	33.90	813	7.8
1984-85	39.21	31.17	795	8.4
1985-86	39.47	26.20	664	8.4
1986-87	39.74	26.83	675	9.1
1987-88	36.55	26.36	721	9.8
1988-89	38.68	31.47	814	9.2
1989-90	37.69	34.76	922	9.8
1990-91	36.32	32.70	900	9.0
1991-92	33.42	25.99	778	10.7
1992-93	34.42	36.59	1063	10.1
1993-94	32.82	30.82	939	10.4
1994-95	32.17	29.88	929	10.4
1995-96	30.88	29.03	940	11.0
1996-97	31.81	34.10	1072	10.2
1997-98	30.83	30.40	986	11.0
1998-99	29.34	31.34	1068	12.0
1999-2000	29.34	30.33	1034	12.6
2000-01	30.26	31.08	1027	12.5
2001-02	29.52	33.38	1131	NA
2002-03	26.31	25.30	962	NA
2003-04*	30.76	37.76	1228	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.9 (a): All-India Area, Production and Yield of Jowar From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1	2	3	4	5
1950-51	15.57	5.50	353	3.0
1951-52	15.94	6.08	381	3.5
1952-53	17.54	7.36	420	3.1
1953-54	17.76	8.08	455	3.1
1954-55	17.46	9.20	527	3.3
1955-56	17.36	6.73	387	3.6
1956-57	16.24	7.33	451	3.4
1957-58	17.31	8.64	499	3.5
1958-59	17.96	9.03	503	3.5
1959-60	17.71	8.58	484	3.6
1960-61	18.41	9.81	533	3.6
1961-62	18.25	8.03	440	3.7
1962-63	18.41	9.75	529	3.7
1963-64	18.38	9.20	501	3.9
1964-65	18.06	9.68	536	3.8
1965-66	17.68	7.58	429	4.1
1966-67	18.05	9.22	511	4.0
1967-68	18.42	10.05	545	3.9
1968-69	18.73	9.80	523	4.5
1969-70	18.61	9.72	522	4.1
1970-71	17.37	8.11	466	3.6
1971-72	16.78	7.72	460	4.4
1972-73	15.51	6.97	449	3.3
1973-74	16.72	9.10	544	4.0
1974-75	16.19	10.41	643	4.6
1975-76	16.09	9.50	591	4.9
1976-77	15.77	10.52	667	5.1
1977-78	16.32	12.06	739	4.9
1978-79	16.15	11.44	708	4.8
1979-80	16.67	11.65	699	4.9
1980-81	15.81	10.43	660	4.7
1981-82	16.60	12.06	727	4.6
1982-83	16.38	10.75	657	4.3
1983-84	16.43	11.92	725	4.1
1984-85	15.94	11.40	715	4.4
1985-86	16.10	10.20	633	4.5
1986-87	15.95	9.19	576	4.9
1987-88	16.00	12.20	762	4.9
1988-89	14.60	10.17	697	5.8
1989-90	14.84	12.90	869	6.3
1990-91	14.36	11.68	814	5.6
1991-92	12.36	8.10	655	6.5
1992-93	13.04	12.81	982	6.1
1993-94	12.71	11.41	895	6.2
1994-95	11.51	8.97	779	6.7
1995-96	11.33	9.33	823	6.8
1996-97	11.43	10.93	956	6.7
1997-98	10.80	7.53	697	7.3
1998-99	9.79	8.42	859	8.1
1999-2000	10.25	8.68	847	7.7
2000-01	9.86	7.53	764	7.9
2001-02	9.80	7.56	771	NA
2002-03	9.20	7.08	769	NA
2003-04*	9.49	7.33	772	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.10(a): All-India Area, Production and Yield of Bajra From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	9.02	2.60	288	3.4
1951-52	9.52	2.35	246	3.8
1952-53	10.77	3.19	296	3.3
1953-54	12.20	4.55	373	3.1
1954-55	11.37	3.52	310	3.6
1955-56	11.34	3.43	302	3.6
1956-57	11.25	2.87	255	3.1
1957-58	11.17	3.62	324	2.9
1958-59	11.43	3.87	338	3.0
1959-60	10.70	3.49	327	2.5
1960-61	11.47	3.28	286	2.8
1961-62	11.28	3.65	323	2.6
1962-63	10.96	3.96	361	2.7
1963-64	11.10	3.88	349	2.3
1964-65	11.83	4.52	382	2.3
1965-66	11.97	3.75	314	2.8
1966-67	12.24	4.47	365	3.1
1967-68	12.81	5.19	405	3.0
1968-69	12.05	3.80	315	4.1
1969-70	12.49	5.33	426	4.2
1970-71	12.91	8.03	622	4.0
1971-72	11.77	5.32	452	3.7
1972-73	11.82	3.93	333	4.5
1973-74	13.93	7.52	540	4.2
1974-75	11.29	3.27	290	5.5
1975-76	11.57	5.74	496	5.1
1976-77	10.75	5.85	544	4.9
1977-78	11.10	4.73	426	4.4
1978-79	11.39	5.57	489	4.4
1979-80	10.58	3.95	373	5.5
1980-81	11.66	5.34	458	5.5
1981-82	11.78	5.54	470	6.0
1982-83	10.94	5.13	469	6.0
1983-84	11.83	7.72	653	4.8
1984-85	10.62	6.05	569	5.2
1985-86	10.65	3.66	344	5.1
1986-87	11.27	4.51	401	6.0
1987-88	8.71	3.30	378	8.4
1988-89	12.04	7.78	646	5.3
1989-90	10.90	6.65	610	6.3
1990-91	10.48	6.89	658	5.1
1991-92	10.03	4.67	465	6.5
1992-93	10.62	8.88	836	5.8
1993-94	9.55	4.97	521	6.6
1994-95	10.22	7.16	700	5.5
1995-96	9.32	5.38	577	6.2
1996-97	9.98	7.87	788	5.3
1997-98	9.67	7.64	791	5.9
1998-99	9.30	6.96	748	7.0
1999-2000	8.90	5.78	650	8.3
2000-01	9.83	6.76	688	8.0
2001-02	9.53	8.28	869	NA
2002-03	7.60	4.63	610	NA
2003-04*	10.39	11.79	1134	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.11 (a): All-India Area, Production and Yield of Maize From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1950-51	3.16	1.73	547	11.4
1951-52	3.31	2.08	627	16.4
1952-53	3.61	2.87	796	14.0
1953-54	3.87	3.04	785	11.5
1954-55	3.75	2.98	794	14.6
1955-56	3.70	2.60	704	11.8
1956-57	3.76	3.08	819	13.1
1957-58	4.08	3.15	772	13.4
1958-59	4.27	3.46	812	10.5
1959-60	4.34	4.07	938	9.9
1960-61	4.41	4.08	926	12.6
1961-62	4.51	4.31	957	9.5
1962-63	4.64	4.61	992	11.5
1963-64	4.58	4.56	995	11.4
1964-65	4.62	4.66	1010	12.1
1965-66	4.80	4.82	1005	16.1
1966-67	5.07	4.89	964	15.6
1967-68	5.58	6.27	1123	11.9
1968-69	5.72	5.70	997	19.5
1969-70	5.86	5.67	968	18.2
1970-71	5.85	7.49	1279	15.9
1971-72	5.67	5.10	900	14.3
1972-73	5.84	6.39	1094	18.8
1973-74	6.02	5.80	965	14.7
1974-75	5.86	5.56	948	21.0
1975-76	6.03	7.26	1203	16.2
1976-77	6.00	6.36	1060	17.7
1977-78	5.68	5.97	1051	16.3
1978-79	5.76	6.20	1076	16.3
1979-80	5.72	5.60	979	24.0
1980-81	6.01	6.96	1159	20.1
1981-82	5.94	6.90	1162	19.8
1982-83	5.72	6.55	1145	21.7
1983-84	5.86	7.92	1352	16.9
1984-85	5.80	8.44	1456	17.5
1985-86	5.80	6.64	1146	18.7
1986-87	5.92	7.59	1282	21.2
1987-88	5.56	5.72	1029	21.2
1988-89	5.90	8.23	1395	21.0
1989-90	5.92	9.65	1632	20.8
1990-91	5.90	8.96	1518	19.7
1991-92	5.86	8.06	1376	22.5
1992-93	5.96	9.99	1676	21.5
1993-94	6.00	9.60	1602	22.4
1994-95	6.14	8.88	1570	20.5
1995-96	5.98	9.53	1595	22.6
1996-97	6.26	10.77	1720	20.6
1997-98	6.32	10.82	1711	20.6
1998-99	6.20	11.15	1797	21.7
1999-2000	6.42	11.51	1792	22.9
2000-01	6.61	12.04	1822	22.4
2001-02	6.58	13.16	2000	NA
2002-03	6.29	10.30	1642	NA
2003-04*	7.42	14.72	1983	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.12 (a): All-India Area, Production and Yield of Total Pulses From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	Area - Million Hectares	
				Production - Million Tonnes	
				Yield - Kg./Hectare	
1	2	3	4	% Coverage Under Irrigation	
1950-51	19.09	8.41	441	9.4	
1951-52	18.78	8.42	448	9.7	
1952-53	19.84	9.19	463	9.8	
1953-54	21.73	10.62	489	9.2	
1954-55	21.91	10.95	500	8.8	
1955-56	23.22	11.04	476	8.4	
1956-57	23.32	11.55	495	7.3	
1957-58	22.54	9.56	424	9.1	
1958-59	24.31	13.15	541	8.4	
1959-60	24.83	11.80	475	8.5	
1960-61	23.56	12.70	539	8.0	
1961-62	24.24	11.76	485	8.1	
1962-63	24.27	11.53	475	8.9	
1963-64	24.18	10.07	416	8.9	
1964-65	23.88	12.42	520	9.2	
1965-66	22.72	9.94	438	9.4	
1966-67	22.12	8.35	377	10.9	
1967-68	22.65	12.10	534	8.7	
1968-69	21.26	10.42	490	9.8	
1969-70	22.02	11.69	531	9.4	
1970-71	22.54	11.82	524	8.8	
1971-72	22.15	11.09	501	8.8	
1972-73	20.92	9.91	474	8.1	
1973-74	23.43	10.01	427	7.9	
1974-75	22.03	10.02	455	8.1	
1975-76	24.45	13.04	533	7.9	
1976-77	22.98	11.36	494	7.5	
1977-78	23.50	11.97	510	7.1	
1978-79	23.66	12.18	515	7.9	
1979-80	22.26	8.57	385	8.8	
1980-81	22.46	10.63	473	9.0	
1981-82	23.84	11.51	483	8.5	
1982-83	22.83	11.86	519	8.2	
1983-84	23.54	12.89	548	7.5	
1984-85	22.74	11.96	526	7.9	
1985-86	24.42	13.36	547	8.5	
1986-87	23.16	11.71	506	9.6	
1987-88	21.27	10.96	515	9.4	
1988-89	23.15	13.85	598	9.3	
1989-90	23.41	12.86	549	10.0	
1990-91	24.66	14.26	578	10.5	
1991-92	22.54	12.02	533	10.7	
1992-93	22.36	12.82	573	10.4	
1993-94	22.25	13.30	598	11.3	
1994-95	23.03	14.04	610	12.7	
1995-96	22.28	12.31	552	12.9	
1996-97	22.45	14.24	635	12.7	
1997-98	22.87	12.98	567	11.3	
1998-99	23.50	14.91	634	12.1	
1999-2000	21.12	13.42	635	16.1	
2000-01	20.35	11.08	544	12.5	
2001-02	22.01	13.37	607	NA	
2002-03	20.05	11.14	556	NA	
2003-04*	24.45	15.24	623	NA	

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

**4.13(a): All-India Area, Production and Yield of
Gram From 1950-51 to 2003-04 Alongwith
Percentage Coverage Under Irrigation**

Year	Area	Production	Yield	Area - Million Hectares	
				Production - Million Tonnes	
1	2	3	4	% Coverage Under Irrigation	
1950-51	7.57	3.65	482	12.5	
1951-52	6.83	3.39	496	15.1	
1952-53	7.26	4.21	580	14.6	
1953-54	7.97	4.83	606	14.0	
1954-55	9.25	5.62	608	12.8	
1955-56	9.78	5.42	554	12.1	
1956-57	9.67	6.23	644	10.8	
1957-58	9.09	4.89	538	12.5	
1958-59	10.08	7.02	697	12.0	
1959-60	10.33	5.62	544	12.4	
1960-61	9.28	6.25	674	11.9	
1961-62	9.57	5.79	605	12.2	
1962-63	9.19	5.36	583	13.7	
1963-64	9.35	4.50	481	13.7	
1964-65	8.87	5.78	651	15.8	
1965-66	8.02	4.22	527	16.4	
1966-67	8.00	3.62	453	18.8	
1967-68	8.26	5.97	723	15.6	
1968-69	7.11	4.31	607	18.8	
1969-70	7.75	5.55	715	17.3	
1970-71	7.84	5.20	663	15.6	
1971-72	7.91	5.08	642	15.0	
1972-73	6.97	4.54	651	15.6	
1973-74	7.76	4.10	528	15.8	
1974-75	7.04	4.02	570	17.8	
1975-76	8.32	5.88	707	16.5	
1976-77	7.97	5.42	680	15.2	
1977-78	7.97	5.41	678	14.7	
1978-79	7.71	5.74	745	15.6	
1979-80	6.99	3.36	481	18.6	
1980-81	6.58	4.33	657	20.6	
1981-82	7.87	4.64	590	17.9	
1982-83	7.40	5.29	715	15.6	
1983-84	7.16	4.75	663	14.5	
1984-85	6.91	4.56	661	14.8	
1985-86	7.80	5.79	742	15.6	
1986-87	6.98	4.53	649	19.4	
1987-88	5.77	3.63	629	19.2	
1988-89	6.81	5.13	753	18.3	
1989-90	6.47	4.22	652	21.0	
1990-91	7.52	5.36	712	20.5	
1991-92	5.58	4.12	739	24.2	
1992-93	6.45	4.42	684	22.0	
1993-94	6.36	4.98	783	24.0	
1994-95	7.54	6.44	853	25.3	
1995-96	7.12	4.98	700	26.0	
1996-97	6.85	5.57	813	25.1	
1997-98	7.56	6.13	811	21.8	
1998-99	8.47	6.80	803	21.0	
1999-2000	6.15	5.12	833	29.1	
2000-01	5.19	3.86	744	30.9	
2001-02	6.42	5.47	853	NA	
2002-03	5.67	4.13	728	NA	
2003-04*	7.29	5.77	792	NA	

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.14 (a): All-India Area, Production and Yield of Tur (Arhar) From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	2.18	1.72	788	0.5
1951-52	2.45	1.83	748	0.5
1952-53	2.40	1.70	709	0.6
1953-54	2.40	1.86	775	0.6
1954-55	2.40	1.72	715	0.5
1955-56	2.29	1.86	814	0.4
1956-57	2.29	1.99	867	0.3
1957-58	2.36	1.48	625	0.5
1958-59	2.47	1.70	688	0.5
1959-60	2.43	1.70	700	0.5
1960-61	2.43	2.07	849	0.5
1961-62	2.45	1.37	559	0.5
1962-63	2.45	1.58	645	0.4
1963-64	2.52	1.38	549	0.4
1964-65	2.58	1.89	733	0.5
1965-66	2.56	1.73	678	0.4
1966-67	2.52	1.13	448	0.7
1967-68	2.67	1.74	653	0.5
1968-69	2.53	1.82	718	0.5
1969-70	2.67	1.84	690	0.3
1970-71	2.66	1.88	709	0.3
1971-72	2.35	1.68	718	0.3
1972-73	2.42	1.93	795	0.4
1973-74	2.65	1.41	532	0.4
1974-75	2.53	1.83	725	0.5
1975-76	2.67	2.10	786	0.4
1976-77	2.57	1.73	672	0.5
1977-78	2.63	1.93	735	0.5
1978-79	2.64	1.89	716	0.8
1979-80	2.73	1.76	643	1.8
1980-81	2.84	1.96	689	2.6
1981-82	3.00	2.24	745	2.1
1982-83	2.93	1.99	680	2.4
1983-84	3.22	2.58	801	3.0
1984-85	3.16	2.58	819	3.9
1985-86	3.18	2.44	767	4.3
1986-87	3.15	2.27	722	4.2
1987-88	3.33	2.28	685	4.9
1988-89	3.49	2.72	779	4.7
1989-90	3.60	2.75	763	5.1
1990-91	3.59	2.41	673	5.5
1991-92	3.63	2.13	588	5.2
1992-93	3.58	2.33	652	4.9
1993-94	3.53	2.69	762	5.0
1994-95	3.31	2.14	644	5.5
1995-96	3.45	2.31	670	5.2
1996-97	3.51	2.66	756	5.4
1997-98	3.36	1.85	551	5.5
1998-99	3.44	2.71	787	4.2
1999-2000	3.43	2.69	786	4.4
2000-01	3.63	2.25	618	4.2
2001-02	3.33	2.26	679	NA
2002-03	3.38	2.21	653	NA
2003-04*	3.53	2.43	690	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

**4.15(a) : All-India Area, Production and Yield of Lentil
(Masur) From 1970-71 to 2002-03**

Year	Area - Million Hectares		
	Production - Million Tonnes		
	Yield - Kg./Hectare		
1	2	3	4
1970-71	0.75	0.37	497
1971-72	0.63	0.30	481
1972-73	0.83	0.37	447
1973-74	0.93	0.41	440
1974-75	0.95	0.46	480
1975-76	0.94	0.46	492
1976-77	0.85	0.39	461
1977-78	0.88	0.38	436
1978-79	1.01	0.45	443
1979-80	0.85	0.32	377
1980-81	0.93	0.47	498
1981-82	0.95	0.50	525
1982-83	1.00	0.49	491
1983-84	0.94	0.53	566
1984-85	0.98	0.55	557
1985-86	1.09	0.66	607
1986-87	1.09	0.66	607
1987-88	1.04	0.66	635
1988-89	1.08	0.73	679
1989-90	1.11	0.71	635
1990-91	1.19	0.85	717
1991-92	1.19	0.80	674
1992-93	1.20	0.79	657
1993-94	1.18	0.75	632
1994-95	1.16	0.78	678
1995-96	1.26	0.71	569
1996-97	1.37	0.96	702
1997-98	1.29	0.80	623
1998-99	1.39	0.94	675
1999-2000	1.46	1.08	738
2000-01	1.48	0.92	619
2001-02	1.47	0.97	664
2002-03	1.32	0.88	663

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.16 (a): All-India Area, Production and Yield of Nine Oilseeds From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1	2	3	4	5
1950-51	10.73	5.16	481	NA
1951-52	11.69	5.03	430	NA
1952-53	11.18	4.73	424	0.8
1953-54	10.99	5.37	488	1.0
1954-55	12.52	6.40	511	1.1
1955-56	12.09	5.73	474	2.4
1956-57	12.49	6.36	509	2.7
1957-58	12.66	6.35	502	3.5
1958-59	13.00	7.30	561	3.2
1959-60	13.95	6.56	470	3.1
1960-61	13.77	6.98	507	3.3
1961-62	14.77	7.28	493	3.6
1962-63	15.34	7.39	482	3.3
1963-64	14.82	7.13	481	3.7
1964-65	15.26	8.56	561	3.4
1965-66	15.25	6.40	419	3.7
1966-67	15.00	6.43	428	5.1
1967-68	15.67	8.30	530	5.0
1968-69	14.47	6.85	473	4.8
1969-70	14.81	7.73	522	6.1
1970-71	16.64	9.63	579	7.4
1971-72	17.27	9.08	526	7.7
1972-73	15.79	7.14	452	7.2
1973-74	16.90	9.39	555	8.8
1974-75	17.31	9.15	529	9.2
1975-76	16.92	10.61	627	7.9
1976-77	16.47	8.43	512	7.6
1977-78	17.17	9.66	563	10.4
1978-79	17.71	10.10	570	11.0
1979-80	16.94	8.74	516	12.6
1980-81	17.60	9.37	532	14.5
1981-82	18.91	12.08	639	15.4
1982-83	17.76	10.00	563	15.6
1983-84	18.69	12.69	679	17.0
1984-85	18.92	12.95	684	19.6
1985-86	19.02	10.83	570	17.3
1986-87	18.63	11.27	605	17.9
1987-88	20.13	12.65	629	20.6
1988-89	21.90	18.03	824	22.3
1989-90	22.80	16.92	742	22.1
1990-91	24.15	18.61	771	22.9
1991-92	25.89	18.60	719	25.5
1992-93	25.24	20.11	797	24.1
1993-94	26.90	21.50	799	22.8
1994-95	25.30	21.34	843	25.0
1995-96	25.96	22.11	851	26.0
1996-97	26.34	24.38	926	26.3
1997-98	26.12	21.32	816	24.3
1998-99	26.23	24.75	944	23.2
1999-2000	24.28	20.72	853	25.2
2000-01	22.77	18.44	810	23.0
2001-02	22.64	20.66	913	NA
2002-03	21.22	15.06	710	NA
2003-04*	23.44	25.14	1072	NA

* Advance Estimates as on 05.08.2004.

Note :1. The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

2. Data for 1950-51 to 1969-70 relate to total of five major oilseeds viz. groundnut, castorseed, sesamum, rapeseed & mustard and linseed.

4.17 (a): All-India Area, Production and Yield of Groundnut From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	Area - Million Hectares Production - Million Tonnes Yield - Kg./Hectare
	2	3	4	% Coverage Under Irrigation
1950-51	4.49	3.48	775	NA
1951-52	4.92	3.19	649	NA
1952-53	4.80	2.93	611	1.2
1953-54	4.25	3.45	811	1.5
1954-55	5.54	4.25	766	1.7
1955-56	5.13	3.86	752	1.7
1956-57	5.53	4.37	783	1.8
1957-58	6.42	4.71	734	2.9
1958-59	6.25	5.18	828	2.5
1959-60	6.44	4.56	708	2.5
1960-61	6.46	4.81	745	3.0
1961-62	6.89	4.99	725	3.4
1962-63	7.28	5.06	695	2.6
1963-64	6.89	5.30	769	3.0
1964-65	7.38	6.00	814	2.9
1965-66	7.70	4.26	554	3.4
1966-67	7.30	4.41	604	4.8
1967-68	7.55	5.73	759	5.4
1968-69	7.09	4.63	653	5.1
1969-70	7.13	5.13	720	5.8
1970-71	7.33	6.11	834	7.5
1971-72	7.51	6.18	823	7.3
1972-73	6.99	4.09	585	6.6
1973-74	7.02	5.93	845	9.1
1974-75	7.06	5.11	724	8.2
1975-76	7.22	6.76	935	6.9
1976-77	7.04	5.26	747	5.9
1977-78	7.03	6.09	866	8.1
1978-79	7.43	6.21	835	9.6
1979-80	7.17	5.77	805	12.1
1980-81	6.80	5.01	736	13.3
1981-82	7.43	7.22	972	14.2
1982-83	7.22	5.28	732	14.8
1983-84	7.54	7.09	940	16.0
1984-85	7.17	6.44	898	16.1
1985-86	7.12	5.12	719	14.8
1986-87	6.98	5.88	841	15.1
1987-88	6.84	5.85	855	19.0
1988-89	8.53	9.66	1132	18.6
1989-90	8.71	8.10	930	17.0
1990-91	8.31	7.51	904	18.6
1991-92	8.67	7.09	818	19.1
1992-93	8.17	8.56	1049	19.7
1993-94	8.32	7.83	941	19.4
1994-95	7.85	8.06	1027	19.9
1995-96	7.52	7.58	1007	18.1
1996-97	7.60	8.64	1138	17.9
1997-98	7.09	7.37	1040	19.5
1998-99	7.40	8.98	1214	19.4
1999-2000	6.87	5.26	766	19.0
2000-01	6.56	6.41	977	17.6
2001-02	6.24	7.03	1127	NA
2002-03	5.95	4.36	733	NA
2003-04*	6.02	8.33	1384	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.18 (a): All-India Area, Production and Yield of Rapeseed & Mustard From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation

Year	Area	Production	Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	2.07	0.76	368	NA
1951-52	2.40	0.94	393	NA
1952-53	2.11	0.86	408	NA
1953-54	2.24	0.87	389	NA
1954-55	2.44	1.04	425	NA
1955-56	2.56	0.86	336	10.4
1956-57	2.54	1.04	411	13.5
1957-58	2.41	0.93	387	13.0
1958-59	2.45	1.04	426	13.0
1959-60	2.91	1.06	365	12.3
1960-61	2.88	1.35	467	12.1
1961-62	3.17	1.35	425	13.2
1962-63	3.13	1.30	417	13.3
1963-64	3.05	0.92	300	16.1
1964-65	2.91	1.47	507	15.2
1965-66	2.91	1.30	446	15.8
1966-67	3.01	1.23	408	20.3
1967-68	3.24	1.57	483	14.8
1968-69	2.87	1.35	469	18.4
1969-70	3.17	1.56	493	23.5
1970-71	3.32	1.98	594	25.2
1971-72	3.61	1.43	396	28.6
1972-73	3.32	1.81	545	26.7
1973-74	3.46	1.70	493	30.4
1974-75	3.68	2.25	612	35.4
1975-76	3.34	1.94	580	31.2
1976-77	3.13	1.55	496	34.4
1977-78	3.58	1.65	460	39.7
1978-79	3.54	1.86	525	39.7
1979-80	3.47	1.43	411	41.9
1980-81	4.11	2.30	560	43.7
1981-82	4.40	2.38	541	44.9
1982-83	3.83	2.21	577	44.0
1983-84	3.87	2.61	673	46.6
1984-85	3.99	3.07	771	53.3
1985-86	3.98	2.68	674	51.3
1986-87	3.72	2.60	700	51.8
1987-88	4.62	3.45	748	54.7
1988-89	4.83	4.38	906	60.0
1989-90	4.97	4.13	831	61.6
1990-91	5.78	5.23	904	59.8
1991-92	6.55	5.86	895	63.9
1992-93	6.19	4.80	776	60.0
1993-94	6.29	5.33	847	59.4
1994-95	6.01	5.76	958	62.4
1995-96	6.55	6.00	916	65.8
1996-97	6.55	6.66	1017	69.1
1997-98	7.04	4.70	668	60.0
1998-99	6.51	5.66	869	58.3
1999-2000	6.03	5.79	960	63.2
2000-01	4.48	4.19	935	66.1
2001-02	5.07	5.08	1002	NA
2002-03	4.52	3.92	866	NA
2003-04*	5.06	5.83	1152	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

**4.19 (a): All-India Area, Production and Yield of Soyabean
From 1970-71 to 2003-04 Alongwith Percentage
Coverage Under Irrigation.**

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1	2	3	4	5
1970-71	0.03	0.01	426	NA
1971-72	0.03	0.01	426	NA
1972-73	0.03	0.03	819	NA
1973-74	0.05	0.04	829	NA
1974-75	0.07	0.05	768	NA
1975-76	0.09	0.09	975	NA
1976-77	0.13	0.12	988	NA
1977-78	0.20	0.18	940	NA
1978-79	0.31	0.30	975	NA
1979-80	0.50	0.28	568	NA
1980-81	0.61	0.44	728	NA
1981-82	0.48	0.35	741	NA
1982-83	0.77	0.49	637	NA
1983-84	0.84	0.61	735	NA
1984-85	1.24	0.95	768	NA
1985-86	1.34	1.02	764	NA
1986-87	1.53	0.89	584	NA
1987-88	1.54	0.90	582	NA
1988-89	1.73	1.55	892	NA
1989-90	2.25	1.81	801	NA
1990-91	2.56	2.60	1015	NA
1991-92	3.18	2.49	782	NA
1992-93	3.79	3.39	894	2.6
1993-94	4.37	4.75	1086	2.5
1994-95	4.32	3.93	911	2.9
1995-96	5.04	5.10	1012	3.7
1996-97	5.45	5.38	987	2.7
1997-98	5.99	6.46	1079	2.6
1998-99	6.49	7.14	1100	2.5
1999-2000	6.22	7.08	1138	1.6
2000-01	6.42	5.28	822	1.4
2001-02	6.34	5.96	940	NA
2002-03	5.87	4.56	777	NA
2003-04*	6.50	7.85	1208	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

**4.20 (a): All-India area, Production and Yield of Sunflower
From 1970-71 to 2003-04 Alongwith Percentage
Coverage Under Irrigation.**

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
				Yield - Kg./Hectare
1	2	3	4	5
1970-71	0.12	0.08	653	NA
1971-72	0.12	0.08	653	NA
1972-73	0.12	0.08	653	NA
1973-74	0.24	0.17	712	NA
1974-75	0.34	0.23	671	NA
1975-76	0.32	0.22	686	NA
1976-77	0.26	0.14	541	NA
1977-78	0.27	0.14	523	NA
1978-79	0.18	0.10	543	NA
1979-80	0.06	0.03	519	NA
1980-81	0.12	0.07	555	NA
1981-82	0.28	0.16	564	NA
1982-83	0.46	0.23	497	NA
1983-84	0.70	0.30	431	NA
1984-85	0.84	0.44	527	NA
1985-86	0.75	0.28	374	NA
1986-87	1.02	0.42	411	NA
1987-88	1.65	0.64	385	NA
1988-89	1.10	0.37	335	NA
1989-90	1.19	0.63	529	NA
1990-91	1.63	0.87	535	NA
1991-92	2.11	1.19	565	NA
1992-93	2.09	1.18	567	19.6
1993-94	2.67	1.35	505	17.7
1994-95	2.00	1.22	610	18.2
1995-96	2.12	1.26	593	21.0
1996-97	1.93	1.25	646	21.1
1997-98	1.74	0.89	548	21.6
1998-99	1.82	0.94	517	20.1
1999-2000	1.29	0.69	538	23.3
2000-01	1.07	0.65	602	27.6
2001-02	1.18	0.68	577	NA
2002-03	1.63	0.91	557	NA
2003-04*	2.01	1.09	539	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

**4.21 (a): All-India Area, Production and Yield of Cotton
From 1950-51 to 2003-04 Alongwith Percentage
Coverage Under Irrigation.**

Area - Million Hectares
Production - Million Bales of 170 kgs. each
Yield - Kg./Hectare

Year	Area	Production	Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	5.88	3.04	88	8.2
1951-52	6.56	3.28	85	9.1
1952-53	6.36	3.34	89	8.5
1953-54	6.99	4.13	100	8.4
1954-55	7.55	4.45	100	9.8
1955-56	8.09	4.18	88	10.0
1956-57	8.02	4.92	104	11.0
1957-58	8.01	4.96	105	12.7
1958-59	7.96	4.88	104	12.5
1959-60	7.30	3.68	86	12.9
1960-61	7.61	5.60	125	12.7
1961-62	7.98	4.85	103	13.0
1962-63	7.73	5.54	122	14.1
1963-64	8.22	5.75	119	15.3
1964-65	8.37	6.01	122	15.5
1965-66	7.96	4.85	104	15.9
1966-67	7.84	5.27	114	16.1
1967-68	8.00	5.78	123	16.7
1968-69	7.60	5.45	122	16.5
1969-70	7.73	5.56	122	16.4
1970-71	7.61	4.76	106	17.3
1971-72	7.80	6.95	151	20.3
1972-73	7.68	5.74	127	21.0
1973-74	7.57	6.31	142	22.1
1974-75	7.56	7.16	161	22.9
1975-76	7.35	5.95	138	23.5
1976-77	6.89	5.84	144	24.6
1977-78	7.87	7.24	157	26.2
1978-79	8.12	7.96	167	27.2
1979-80	8.13	7.65	160	27.5
1980-81	7.82	7.01	152	27.3
1981-82	8.06	7.88	166	27.7
1982-83	7.87	7.53	163	29.0
1983-84	7.72	6.39	141	29.9
1984-85	7.38	8.51	196	28.5
1985-86	7.53	8.73	197	30.2
1986-87	6.95	6.91	169	31.1
1987-88	6.46	6.38	168	32.0
1988-89	7.34	8.74	202	33.0
1989-90	7.69	11.42	252	34.2
1990-91	7.44	9.84	225	32.9
1991-92	7.66	9.71	216	33.3
1992-93	7.54	11.40	257	34.6
1993-94	7.32	10.74	249	34.7
1994-95	7.87	11.89	257	34.2
1995-96	9.04	12.86	242	35.0
1996-97	9.12	14.23	265	35.8
1997-98	8.87	10.85	208	36.8
1998-99	9.34	12.29	224	34.9
1999-2000	8.71	11.53	225	35.2
2000-01	8.53	9.52	190	34.3
2001-02	9.13	10.00	186	NA
2002-03	7.67	8.72	193	NA
2003-04*	7.64	13.79	307	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.21 (c) : Staple-wise Estimates of Area and Production of Cotton from 1997-98 to 1999-2000

Area : Lakh Hectares

Production : Lakh Bales of 170 kgs. each

Staple Length	Area			Production		
	1997-98	1998-99	1999-2000	1997-98	1998-99	1999-2000
1	2	3	4	5	6	7
I. Long						
i. Superior Long (27 mm & above)	22.0	25.8	24.0	37.5	47.9	35.8
ii. Long (24.5 mm to 26 mm)	14.2	15.7	14.9	10.9	14.5	15.3
Sub-Total (Long)	36.2	41.5	38.9	48.4	62.4	51.1
II. Medium						
i. Superior Medium (22 mm to 24 mm)	36.7	35.5	32.7	43.9	43.2	44.6
ii. Medium (20 mm to 21.5 mm)	2.6	2.0	2.0	3.2	2.7	2.5
Sub-Total (Medium)	39.3	37.5	34.7	47.1	45.9	47.1
III. Short						
i. Short (19 mm & below)	13.2	14.5	13.5	13.1	14.5	17.1
Total	88.7	93.5	87.1	108.6	122.8	115.3

4.22 (a): All-India Area, Production and Yield of Jute and Mesta From 1950-51 to 2003-04

Year	Area	Area - Million Hectares	
		Production	Production - Million Bales of 180 kgs. each
			Yield
1	2	3	4
1950-51	0.57	3.31	1043
1951-52	0.79	4.72	1074
1952-53	0.93	5.32	1028
1953-54	0.68	3.77	992
1954-55	0.68	3.86	1021
1955-56	0.94	5.39	1038
1956-57	1.07	5.81	977
1957-58	1.02	5.33	944
1958-59	1.10	6.91	1130
1959-60	0.98	5.69	1049
1960-61	0.90	5.26	1049
1961-62	1.34	8.24	1104
1962-63	1.24	7.19	1041
1963-64	1.27	7.98	1130
1964-65	1.21	7.66	1136
1965-66	1.11	5.78	936
1966-67	1.12	6.58	1058
1967-68	1.20	7.59	1137
1968-69	0.81	3.84	855
1969-70	1.09	6.79	1120
1970-71	1.08	6.19	1032
1971-72	1.11	6.84	1107
1972-73	0.99	6.09	1104
1973-74	1.16	7.68	1188
1974-75	0.98	5.83	1068
1975-76	0.91	5.91	1164
1976-77	1.09	7.10	1173
1977-78	1.16	7.15	1108
1978-79	1.27	8.33	1186
1979-80	1.22	7.96	1177
1980-81	1.30	8.16	1130
1981-82	1.15	8.37	1311
1982-83	1.02	7.17	1265
1983-84	1.05	7.72	1320
1984-85	1.13	7.79	1242
1985-86	1.50	12.65	1524
1986-87	1.07	8.62	1454
1987-88	0.96	6.78	1274
1988-89	0.92	7.86	1540
1989-90	0.91	8.29	1646
1990-91	1.02	9.23	1634
1991-92	1.11	10.29	1662
1992-93	0.93	8.59	1658
1993-94	0.89	8.43	1713
1994-95	0.93	9.08	1760
1995-96	0.93	8.81	1712
1996-97	1.10	11.13	1818
1997-98	1.11	11.02	1792
1998-99	1.03	9.81	1722
1999-2000	1.04	10.56	1836
2000-01	1.02	10.56	1867
2001-02	1.05	11.67	2008
2002-03	1.04	11.38	1968
2003-04*	1.05	11.20	1923

Note : Figures for 1950-51 & 1951-52 relate to Jute crop only.

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

4.23 (a): All-India Area, Production and Yield of Sugarcane (Cane) From 1950-51 to 2003-04 Alongwith Percentage Coverage Under Irrigation.

Year	Area	Production	Yield	% Coverage Under Irrigation
1	2	3	4	5
1950-51	1.71	57.05	33422	67.3
1951-52	1.94	61.63	31786	68.8
1952-53	1.73	51.00	29495	66.3
1953-54	1.41	44.41	31497	67.7
1954-55	1.62	58.74	36303	68.8
1955-56	1.85	60.54	32779	67.2
1956-57	2.05	69.05	33683	64.9
1957-58	2.07	71.16	34325	65.2
1958-59	1.95	73.36	37658	67.4
1959-60	2.14	77.82	36414	67.9
1960-61	2.42	110.00	45549	69.3
1961-62	2.46	103.97	42349	68.0
1962-63	2.24	91.91	40996	67.8
1963-64	2.25	104.23	46353	69.6
1964-65	2.60	121.91	46838	71.5
1965-66	2.84	123.99	43717	71.1
1966-67	2.30	92.83	40336	71.0
1967-68	2.05	95.50	40665	74.1
1968-69	2.53	124.68	49236	76.9
1969-70	2.75	135.02	49121	75.5
1970-71	2.62	126.37	48322	72.4
1971-72	2.39	113.57	47511	71.8
1972-73	2.45	124.87	50933	75.0
1973-74	2.75	140.81	51163	76.5
1974-75	2.89	144.29	49855	77.9
1975-76	2.76	140.60	50903	78.0
1976-77	2.87	153.01	53383	77.2
1977-78	3.15	176.97	56160	78.1
1978-79	3.09	151.66	49114	77.8
1979-80	2.61	128.83	49358	77.2
1980-81	2.67	154.25	57844	81.2
1981-82	3.19	186.36	58359	82.3
1982-83	3.36	189.51	56441	80.5
1983-84	3.11	174.08	55978	80.3
1984-85	2.95	170.32	57673	83.6
1985-86	2.85	170.65	59889	84.5
1986-87	3.08	186.09	60444	85.4
1987-88	3.28	196.74	60006	85.6
1988-89	3.33	203.04	60992	86.2
1989-90	3.44	225.57	65612	86.9
1990-91	3.69	241.05	65395	86.9
1991-92	3.84	254.00	66069	88.0
1992-93	3.57	228.03	63843	88.3
1993-94	3.42	229.66	67120	88.8
1994-95	3.87	275.54	71254	87.9
1995-96	4.15	281.10	67787	87.4
1996-97	4.17	277.56	66496	88.1
1997-98	3.93	279.54	71134	91.3
1998-99	4.05	288.72	71203	91.7
1999-2000	4.22	299.32	70935	92.0
2000-01	4.32	295.96	68577	92.1
2001-02	4.41	297.21	67370	NA
2002-03	4.36	281.57	64562	NA
2003-04*	4.00	236.18	59119	NA

* Advance Estimates as on 05.08.2004.

Note : The yield rates given above have been worked out on the basis of production & area figures taken in '000 units.

5.1 (a): All-India Area, Production and Yield of Potato From 1950-51 to 2002-03

Year	Area 1	Production 2	Yield 3
1950-51	0.24	1.66	6917
1951-52	0.25	1.71	6848
1952-53	0.26	1.99	7812
1953-54	0.26	1.96	7611
1954-55	0.27	1.76	6632
1955-56	0.28	1.86	6639
1956-57	0.29	1.72	6028
1957-58	0.32	2.00	6243
1958-59	0.34	2.35	6947
1959-60	0.36	2.73	7550
1960-61	0.38	2.72	7251
1961-62	0.37	2.45	6704
1962-63	0.41	3.37	8152
1963-64	0.42	2.59	6249
1964-65	0.43	3.61	8395
1965-66	0.48	4.08	8513
1966-67	0.47	3.52	7440
1967-68	0.50	4.23	8441
1968-69	0.52	4.73	9011
1969-70	0.50	3.91	7888
1970-71	0.48	4.81	9976
1971-72	0.49	4.83	9810
1972-73	0.51	4.45	8821
1973-74	0.54	4.86	8946
1974-75	0.59	6.23	10598
1975-76	0.62	7.31	11738
1976-77	0.62	7.17	11573
1977-78	0.67	8.14	12228
1978-79	0.81	10.13	12555
1979-80	0.69	8.33	12152
1980-81	0.73	9.67	13258
1981-82	0.76	9.91	12996
1982-83	0.74	9.96	13549
1983-84	0.79	12.15	15299
1984-85	0.85	12.57	14806
1985-86	0.84	10.42	12364
1986-87	0.83	12.74	15322
1987-88	0.89	14.05	15869
1988-89	0.93	14.86	15929
1989-90	0.94	14.77	15714
1990-91	0.94	15.21	16254
1991-92	1.03	16.39	15904
1992-93	1.05	15.23	14458
1993-94	1.05	17.39	16610
1994-95	1.07	17.40	16262
1995-96	1.11	18.84	16973
1996-97	1.25	24.22	19376
1997-98	1.21	17.65	14587
1998-99	1.32	23.61	17886
1999-2000	1.34	24.71	18440
2000-01	1.22	22.49	18434
2001-02	1.21	23.92	19806
2002-03	1.34	23.16	17321

5.2 (a): All-India Area, Production and Yield of Onion From 1978-79 to 2002-03

Year	Area 1	Production 2	Yield 3
1978-79	0.21	2.20	10403
1979-80	0.24	2.50	10232
1980-81	0.25	2.50	9961
1981-82	0.25	2.65	10562
1982-83	0.24	2.43	10330
1983-84	0.27	2.70	9982
1984-85	0.28	3.10	11139
1985-86	0.28	2.86	10202
1986-87	0.26	2.53	9659
1987-88	0.27	2.70	9857
1988-89	0.32	3.35	10620
1989-90	0.30	3.07	10176
1990-91	0.30	3.23	10686
1991-92	0.32	3.58	11088
1992-93	0.32	3.49	10791
1993-94	0.37	4.01	10902
1994-95	0.38	4.04	10632
1995-96	0.40	4.08	10200
1996-97	0.40	4.18	10450
1997-98	0.40	3.62	9050
1998-99	0.47	5.33	11340
1999-2000	0.49	4.90	10000
2000-01	0.42	4.55	10833
2001-02	0.45	4.83	10686
2002-03	0.42	4.21	9912

**5.3 (a) All-India Area, Production and Yield of Tobacco
From 1950-51 to 2002-03 Alongwith Percentage
Coverage Under Irrigation.**

Year	Area	Production	Yield	Area - Million Hectares
				Production - Million Tonnes
1	2	3	4	Yield - Kg./Hectare
				% Coverage Under Irrigation
1950-51	0.36	0.26	731	NA
1951-52	0.29	0.21	723	NA
1952-53	0.36	0.25	675	9.7
1953-54	0.37	0.27	737	9.7
1954-55	0.35	0.26	737	10.8
1955-56	0.41	0.30	739	16.9
1956-57	0.42	0.31	728	20.4
1957-58	0.36	0.24	669	22.5
1958-59	0.38	0.32	836	21.0
1959-60	0.41	0.29	716	22.4
1960-61	0.40	0.31	766	21.9
1961-62	0.42	0.34	811	17.9
1962-63	0.41	0.34	842	18.2
1963-64	0.44	0.36	817	15.4
1964-65	0.41	0.36	876	17.0
1965-66	0.38	0.29	778	16.9
1966-67	0.42	0.35	834	17.1
1967-68	0.42	0.37	871	17.4
1968-69	0.44	0.36	821	20.4
1969-70	0.44	0.34	770	19.5
1970-71	0.45	0.36	810	23.7
1971-72	0.46	0.42	914	24.5
1972-73	0.45	0.37	837	26.3
1973-74	0.46	0.46	1001	24.2
1974-75	0.38	0.36	954	21.0
1975-76	0.37	0.35	950	29.8
1976-77	0.43	0.42	969	30.2
1977-78	0.50	0.49	979	23.3
1978-79	0.41	0.45	1109	31.5
1979-80	0.43	0.44	1031	32.6
1980-81	0.45	0.48	1065	33.7
1981-82	0.44	0.52	1172	33.9
1982-83	0.50	0.58	1157	29.6
1983-84	0.44	0.49	1120	34.0
1984-85	0.44	0.49	1113	37.7
1985-86	0.40	0.44	1111	39.9
1986-87	0.39	0.46	1187	40.7
1987-88	0.32	0.37	1155	45.9
1988-89	0.38	0.49	1307	42.4
1989-90	0.41	0.55	1335	43.2
1990-91	0.41	0.56	1353	43.2
1991-92	0.43	0.58	1369	39.0
1992-93	0.42	0.60	1425	40.4
1993-94	0.38	0.56	1463	43.7
1994-95	0.38	0.57	1486	45.3
1995-96	0.39	0.54	1356	46.5
1996-97	0.43	0.62	1444	43.8
1997-98	0.46	0.64	1394	39.8
1998-99	0.51	0.74	1451	43.1
1999-2000	0.43	0.52	1211	46.0
2000-01	0.26	0.34	1318	52.8
2001-02	0.35	0.55	1565	NA
2002-03	0.33	0.49	1506	NA

5.4 (a): All-India Area, Production and Yield of Coconut From 1952-53 to 2002-03

Area - Million Hectares
 Production - '00 Million Nuts
 Yield - No. of Nuts/Hectare

Year	Area	Production	Yield
1	2	3	4
1952-53	0.65	44.98	6909
1953-54	0.66	46.49	7012
1954-55	0.64	44.09	6878
1955-56	0.65	42.26	6532
1956-57	0.66	43.83	6671
1957-58	0.67	44.55	6689
1958-59	0.69	45.89	6651
1959-60	0.72	47.34	6621
1960-61	0.72	46.39	6470
1961-62	0.72	44.78	6194
1962-63	0.80	50.17	6288
1963-64	0.80	47.25	5920
1964-65	0.85	50.43	5950
1965-66	0.88	50.35	5698
1966-67	0.89	51.92	5814
1967-68	0.92	53.21	5760
1968-69	0.99	55.46	5613
1969-70	1.03	58.59	5670
1970-71	1.05	60.75	5811
1971-72	1.09	61.24	5626
1972-73	1.10	59.97	5456
1973-74	1.10	58.51	5309
1974-75	1.12	60.30	5401
1975-76	1.07	58.29	5449
1976-77	1.08	57.65	5366
1977-78	1.06	54.13	5123
1978-79	1.06	57.30	5431
1979-80	1.08	56.36	5239
1980-81	1.08	57.20	5280
1981-82	1.09	55.73	5109
1982-83	1.15	63.56	5531
1983-84	1.17	58.08	4983
1984-85	1.18	69.13	5842
1985-86	1.23	67.70	5524
1986-87	1.23	63.77	5179
1987-88	1.35	72.70	5401
1988-89	1.43	85.41	5992
1989-90	1.47	93.59	6357
1990-91	1.48	97.30	6595
1991-92	1.53	100.80	6593
1992-93	1.54	112.41	7310
1993-94	1.64	119.75	7324
1994-95	1.71	133.00	7760
1995-96	1.83	129.52	7066
1996-97	1.89	130.61	6908
1997-98	1.86	127.17	6898
1998-99	1.75	125.36	7163
1999-2000	1.77	121.29	6860
2000-01	1.82	126.78	6966
2001-02(P)	1.89	127.92	6772
2002-03(P)	1.87	119.86	6422

(P) Provisional

**5.5 (a) : All-India Area, Production and Yield of Cashewnut
From 1990-91 to 2002-2003**

Year	Area	Productive Area	Area - Thousand Hectares	
			Production	Yield - Kg./Hectare
1	2	3	4	5
1990-91	532	464	295	636
1991-92	534	482	305	633
1992-93	560	508	349	687
1993-94	565	517	348	673
1994-95	577	510	322	631
1995-96	635	485	418	862
1996-97	659	515	430	835
1997-98	675	512	360	703
1998-99	706	573	460	803
1999-2000	686	601	520	865
2000-2001	720	627	450	710
2001-2002	7750	666	470	710
2002-2003	770	675	500	760

Source: The Directorate of Cashewnut & Cocoa Development, Cochin, Kerala.

5.7 : State-wise Area Under Fruits & Vegetables during 2000-01 as per Land Use Statistics

State	(Thousand Hectares)	
	1990-91	2000-01(P)
1	2	3
Andhra Pradesh	527	849
Arunachal Pradesh	33	41
Assam	209	291
Bihar	442	517
Chhattisgarh	*	102
Goa	61	72
Gujarat	200	310
Haryana	62	59
Himachal Pradesh	73	94
Jammu & Kashmir	60	67
Karnataka	272	463
Kerala	574	606
Madhya Pradesh	217	182**
Maharashtra	508	729
Manipur	24	27
Meghalaya	57	72
Mizoram	9	20
Nagaland	9	33
Orissa	996	617
Punjab	83	138
Rajasthan	75	95
Sikkim	7	10
Tamil Nadu	358	533
Tripura	84	103
Uttar Pradesh	867	955
West Bengal	871	1260
A & N Islands	2	4
Dadra & Nagar Haveli	2	2
Delhi	6	3
Lakshadweep	1	-
Pondicherry	1	1
Total	6690	8256

* The figure for Chhattisgarh for 1990-91 is not shown as it did not exist then.

** The figure for Madhya Pradesh for 2000-01 excludes Chhattisgarh.

7.1 : Share of Various Countries in World Production of Major Agricultural Commodities during 1999 to 2001

Commodity/ Country	(Production in '000 tonnes)		
	1999-2001	% Share of	
	Average Production *	the country	
1	2	3	
1. Paddy			
World	601128	100.0	
Bangladesh	36994	6.2	
Brazil	11002	1.8	
China	190577	31.7	
Egypt	5839	1.0	
India	131852	21.9	
Indonesia	50953	8.5	
Japan	11551	1.9	
Myanmar	20683	3.4	
Pakistan	7229	1.2	
Philippines	12377	2.1	
Russian Federation	509	0.1	
Thailand	24993	4.2	
U.S.A.	9222	1.5	
Vietnam	31950	5.3	
2. Maize			
World	602814	100.0	
Argentina	15224	2.5	
Brazil	35109	5.8	
Canada	8053	1.3	
China	116757	19.3	
Egypt	6356	1.1	
France	15967	2.6	
Hungary	6606	1.1	
India	11486	1.9	
Indonesia	9324	1.5	
Italy	10248	1.7	
Mexico	17960	3.0	
Pakistan	1632	0.3	
Philippines	4540	0.8	
Romania	7778	1.3	
Russian Federation	1133	0.2	
Turkey	2166	0.4	
U.S.A.	244296	40.5	

(Continued)

1	2	3
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3. Wheat

World	585421	100.0
Argentina	16450	2.8
Bangladesh	1943	0.3
Canada	25009	4.3
China	102339	17.5
Egypt	6389	1.1
France	35367	6.0
India	71773	12.3
Iran	8087	1.4
Italy	7237	1.2
Pakistan	19296	3.3
Romania	5364	0.9
Russian Federation	37422	6.4
Spain	5812	1.0
Syria	3514	0.6
Turkey	18333	3.1
U.K.	14380	2.5
U.S.A	58867	10.1
Ukraine	15026	2.6
Australia	23654	4.0

4. Groundnut (in shell)

World	33802	100.0
Argentina	549	1.6
Brazil	187	0.6
China	13925	41.2
India	5974	17.7
Indonesia	998	3.0
Japan	27	0.1
Myanmar	642	1.9
Nigeria	2862	8.5
Senegal	1046	3.1
Sudan	998	3.0
Thailand	136	0.4
U.S.A	1714	5.1
Uganda	141	0.4
Vietnam	349	1.0

(Continued)

1	2	3
5. Sugarcane		
World	1259906	100.0
Argentina	15900	1.3
Australia	35913	2.9
Bangladesh	6868	0.5
Brazil	333563	26.5
China	76369	6.1
Columbia	32817	2.6
Cuba	35133	2.8
Egypt	15498	1.2
Guatemala	16612	1.3
India	293653	23.3
Indonesia	23667	1.9
Mexico	48552	3.9
Mauritius	4831	0.4
Pakistan	48377	3.8
Philippines	25906	2.1
Thailand	50965	4.0
U.S.A	32119	2.5
6. Tobacco Leaves		
World	6686	100.0
Argentina	110	1.6
Bangladesh	33	0.5
Brazil	591	8.8
Bulgaria	32	0.5
Canada	62	0.9
China	2448	36.6
France	26	0.4
Greece	136	2.0
India	652	9.8
Indonesia	135	2.0
Italy	127	1.9
Japan	63	0.9
Korea (Republic)	63	0.9
Pakistan	107	1.6
Philippines	49	0.7
Poland	32	0.5
Spain	43	0.6
Thailand	76	1.1
Turkey	201	3.0
U.S.A	506	7.6
Zimbabwe	199	3.0

* Triennium average of production during 1999, 2000 and 2001.

Source :- FAO Production Year Book 2001.

(Concluded)

7.2: Area, Production and Yield of Principal Crops in Various Countries during 2001

Area - '000 Hectares
 Production - '000 Tonnes
 Yield - Kg./Hectare

Country	Area	Production	Yield
1	2	3	4
1. Paddy			
World	151541	592831	3912
Bangladesh	10900 *	39112	3588
Brazil	3147	10207	3243
China	28587 *	181515 *	6350
Egypt	650 F	5700 F	8769
India	44500 *	131900 *	2964
Indonesia	11793	50096	4248
Japan	1700	11320	6659
Myanmar	6500 F	20600 *	3169
Pakistan	2250 *	6750 *	3000
Philippines	4065	12955	3187
Russian Federation	169 *	497	2941
Thailand	9800 F	25200 *	2571
U.S.A.	1341	9664	7205
Vietnam	7500	31925	4256
2. Wheat			
World	213817	582692	2725
Argentina	7108	17723 F	2493
Bangladesh	830 *	2000 *	2410
Canada	10971	21282	1940
China	24399 *	93500	3832
Egypt	984	6255	6357
France	4779	31695	6632
India	24963	68458	2742
Iran	6000 *	7500 *	1250
Italy	2305	6503	2822
Pakistan	8125	18954	2333
Romania	2500	7000	2800
Russian Federation	20920 *	46871	2240
Spain	2201	5019	2280
Syria	1684	4745	2818
Turkey	8600 *	16000 *	1860
U.K.	1635	11570	7076
U.S.A	19689	53278	2706
UKRAINE	6880	21333	3101
AUSTRALIA	12526	23760	1818

(Continued)

1	2	3	4
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3. Maize

World	137597	609182	4427
Argentina	2745	15350	5592
Brazil	12355	41411	3352
Canada	1191	8171	6860
China	23474 *	115805 *	4933
France	1917	16472	8593
Egypt	840 F	6450 F	7679
Hungry	1220	7686 *	6300
India	6552	11836	1806
Indonesia	3305	9090 *	1549
Italy	1184	10588	8942
Mexico	7280 F	18616	2557
Pakistan	930 F	1600 F	1720
Philippines	2487	4525	1820
Romania	3100	7500 *	2419
Turkey	550 *	2100 *	3818
U.S.A.	27846	241485	8672
Russian Fed	566 *	831	1468

4. Groundnuts (in shell)

World	25538	35096	1374
Argentina	249	563	2261
Brazil	103	198	1931
China	4631 *	14553	3143
India	8200 *	6200 *	756
Indonesia	651	1000 *	1537
Japan	12 *	28 *	2333
Myanmar	586	731	1247
Nigeria	2668 F	2901 F	1087
Senegal	1095 F	1062 F	969
Sudan	1460 F	1000 F	685
Thailand	86 F	135 F	1579
U.S.A.	567	1923	3393
Uganda	208	146	702
Vietnam	250	375	1500

(Continued)

1	2	3	4
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5. Sugarcane

World	19245	1254857	65204
Argentina	265 *	15000 *	56604
Australia	411 *	31039 *	75521
Bangladesh	169	6742	39921
Brazil	5023	339136	67510
China	1034 F	79700	77079
Colombia	403	33400 F	82855
Cuba	1100 F	35000 F	31818
Egypt	134 F	15620 F	116579
Guatemala	182	16935	93049
India	4050	286000	70617
Indonesia	386	23500 *	60868
Mauritius	78 F	5500 F	70513
Mexico	630	49500 F	78628
Thailand	850 F	49070	57729
Pakistan	961	43606	45385
Philippines	305 F	28238	92583
U.S.A.	417	31571	75799

6. Tobacco Leaves

World	4182	6347	1518
Argentina	56 F	101 *	1804
Bangladesh	31 F	35 F	1123
Brazil	302	565	1871
Bulgaria	42 F	30 F	714
Canada	25 F	58 F	2335
China	1524 F	2303 *	1511
France	9 *	25 *	2710
Greece	61	130 F	2134
India	450 F	610 F	1356
Indonesia	165	134	814
Italy	45 F	125 F	2778
Japan	24	62 F	2633
Korea Republic	24 *	56	2326
Pakistan	54	103	1907
Philippines	37 *	47	1271
Poland	13	22	1729
Spain	14 F	43 F	3185
Thailand	42 *	74 F	1769
Turkey	213 *	170 F	797
U.S.A.	175	454	2593
Zimbabwe	81 *	175 *	2156

* : Unofficial figure

F: FAO Estimate

Source :- FAO Production Year Book - 2001

(Concluded)

7.3 : India's Position in World Agriculture during 2001

Item	India	World	India's Position		
			% Share	Rank	Next to
1	2	3	4	5	6
1. Area ** (Million Hectares)					
Total Area	329	13425	2.5	Seventh	Russian Federation, Canada, U.S.A., China, Brazil, Australia
Land Area	297	13062	2.3	Seventh	Russian Federation, China, Canada, U.S.A., Brazil, Australia
Arable Land	162 F	1364	11.9	Second	U.S.A.
Irrigated Area	55 F	272	20.2	First	
2. Population (Million)					
Total	1025	6134	16.7	Second	China
Agriculture	739	3211	23.0	Second	China
3. Economically Active Population (Million)					
Total	451	2993	15.1	Second	China
Agriculture	267	1327	20.1	Second	China
4. Crop Production (Million Tonnes)					
(A) : Total Cereals	231	2086	11.1	Third	China, USA
Wheat	68	583	11.7	Second	China
Rice (Paddy)	132 *	593	22.3	Second	China
Coarse grains	30	911	3.3	Fourth	China, Brazil, Russian Federation
Total Pulses	11	52	21.2	First	
(B) : Oilseeds					
Groundnut	6 *	35	17.1	Second	China
Rapeseed	4	36	11.1	Fourth	China, Canada, Germany
5. Fruits & Vegetables (Million Tonnes)					
(A) : Vegetables & Melons	68 F	698	9.7	Second	China
(B) : Fruits excluding Melons	49 F	466	10.5	Second	China
(C) : Potatoes	25 F	308	8.1	Third	China, Russian Federation
(D) : Onion (Dry)	5 F	47	10.6	Second	China

(Continued)

1	2	3	4	5	6
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6. Commercial Crops (Million Tonnes)

(A) : Sugarcane	286	1255	22.8	Second	Brazil
(B) : Tea	0.86 *	3.06	28.1	First	
(C) : Coffee (green)	0.30 *	7.05	4.3	Sixth	Brazil, Vietnam, Colombia, Indonesia, Mexico
(D) : Jute & Jute like Fibres	1.88 F	3.07	61.2	First	
(E) : Cotton(int)	1.75 *	21.03	8.3	Fourth	China, USA, Pakistan
(F) : Tobacco Leaves	0.61 F	6.35	9.6	Second	China

7. Livestock (Million Heads)

(A) : Cattle	220 *	1352	16.3	First	
(B) : Buffaloes	94 *	166	56.6	First	
(C) : Camels	1.03 F	19.33	6.3	Fifth	Somalia, Sudan, Mauritania, Ethiopia
(D) : Sheep	58 *	1056	5.5	Third	China, Australia
(E) : Goats	124 F	738	16.8	Second	China
(F) : Chicken	413 F	14859	2.8	Sixth	China, USA, Brazil, Indonesia, Mexico

8. Animal Products

(A) : Total Milk (000 MT)	83970 *	583339	14.4	First	
(B) : Eggs Total (Million)	1906 *	56594	3.4	Fifth	China, U.S.A., Japan, Russian Federation
(C) : Total Meat (000 MT)	4917	236541	2.1	Seventh	China, U.S.A., Brazil, Germany, France, Spain

9. Implements (Thousands numbers)**

Tractors-in-use	1525 F	26410	5.8	Fourth	USA, Japan, Italy
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F : FAO Estimates

* Unofficial Figures

** Figures relate to 2000

Source: FAO Production Year Book, 2001

(Concluded)

7.4: Selected Indicators of Agriculture Development in India, Asia - Pacific Region and the World, 1991 and 2001

Sl. No.	Indicator	Year	India	Asia Pacific Region			World
				Developing Countries		Developed Countries	
				5	6	7	
1	2	3	4	5	6	7	8
1	Agriculture Land ('000 hectares)						
		1991	169340	504467	54987	559454	1504117
		2001	169900	565409	58766	624175	1532090
2	Agriculture Land as % of Total Land						
		1991	57.0	18.0	6.6	16.8	11.5
		2001	57.1	20.3	7.1	16.7	11.7
3	Agriculture Population ('000)						
		1991	497793	1782173	9421	1791594	2455875
		2001	545254	1884978	5847	1890825	2575340
4	Agriculture Population as % of Total Population						
		1991	57.8	61.0	6.5	61.0	46.0
		2001	53.2	55.9	3.9	55.9	42.0
5	Ratio of Agriculture Land to Agriculture Population (Hectare/ Person)						
		1991	0.34	0.25	5.84	0.28	0.61
		2001	0.31	0.27	10.05	0.30	0.59
6	Irrigated Land as % of Agricultural Land						
		1991	28.0	31.6	9.3	29.2	16.5
		2001	32.3	33.2	9.0	30.7	17.8
7	Consumption Per hectare of Agriculture Land (Kg. Plant nutrient/ hectare) Mineral Fertilizers						
		1991	75.2	120.3	63.2	114.1	89.5
		2001	102.2	135.7	80.1	129.9	89.9
8	No. of Agricultural Tractors in Use						
		1991	1063012	2694709	2357000	5051709	26248090
		2001	1525000	4268101	2419000	6687101	26854000

Source: Selected Indicators of Food and Agriculture Development in Asia - Pacific Region 1992-2002,
FAO Regional Office for Asia and the Pacific , Bangkok, October, 2003

8.2: Central Issue Prices of Rice, Wheat and Coarse Grains

(Rs. per Quintal)

Period	APL		BPL
	Common	Grade "A"	Common/Grade"A"
1	2	3	4

RICE

01.12.1997 to 28.01.1999	550\$	700	350
29.01.1999 to 24.07.2000	1135\$	1180	590
25.07.2000 to 11.07.2001	1087\$	1130	565
12.07.2001 to 31.03.2002	795\$	830	565
01.04.2002 to 30.06.2002	695\$	730	565
01.07.2002 to till date	795\$	830	565

WHEAT

01.06.1997 to 28.01.1999	450	250
29.01.1999 to 31.03.1999	650	250
01.04.1999 to 31.03.2000	682	250
01.04.2000 to 24.07.2000	900	450
25.07.2000 to 11.07.2001	830	415
12.07.2001 to 31.03.2002	610	415
01.04.2002 to 30.06.2002	510	415
01.07.2002 to till date	610	415

COARSE GRAINS

1.10.1990 TO TILL DATE

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\$ Applicable only to J & K, H.P, North Eastern States, Sikkim and Uttaranchal

8.3 : Marketed Surplus Ratio (MSR) of Important Agricultural Commodities in Various States (Based on Comprehensive Scheme for Studying Cost of Cultivation of Principal Crops in India)

Group of Crops 1	Crops 2	State 3	1999-2000 4	2000-01 5	2001-02 6
I. Foodgrains : Cereals	1. Rice	Andhra Pradesh	72.6	80.1	80.3
		Assam	27.6	43.8	46.1
		Bihar	62.4	65.3	77.0
		Haryana	86.5	96.7	89.8
		Karnataka	58.6	92.9	77.9
		Kerala	50.0	57.4	57.0
		Madhya Pradesh	45.5	57.9	57.6
		Orissa	49.8	56.9	61.5
		Punjab	96.1	95.1	95.6
		Tamil Nadu	66.1	75.2	73.5
		Uttar Pradesh	62.5	79.6	79.2
		West Bengal	46.1	58.3	61.5
	All-India Weighted Average		61.7	73.8	73.6
	2. Wheat	Bihar	62.1	65.9	72.0
		Gujarat	65.0	81.0	78.8
		Haryana	73.7	80.0	79.7
		Himachal Pradesh	17.9	47.1	24.0
		Madhya Pradesh	50.3	64.6	55.3
		Punjab	75.1	84.1	80.5
		Rajasthan	49.5	81.1	62.9
		Uttar Pradesh	42.2	56.0	74.4
	All-India Weighted Average		56.5	69.7	73.3
	3. Maize	Andhra Pradesh	88.5	100.0	100.0
		Bihar	55.0	40.8	49.2
		Himachal Pradesh	31.7	30.3	41.4
		Karnataka	99.0	96.4	95.7
		Madhya Pradesh	65.9	52.9	61.8
		Rajasthan	37.5	36.8	42.3
		Uttar Pradesh	61.9	78.5	61.4
	All-India Weighted Average		67.3	69.1	66.0
	4. Jowar	Andhra Pradesh	26.3	71.5	57.4
		Karnataka	40.0	71.5	58.4
		Madhya Pradesh	69.1	57.0	44.4
		Maharashtra	51.9	60.2	65.6
		Rajasthan	11.7	11.7	11.7
	All-India Weighted Average		47.6	62.7	59.5

Continued

1	2	3	4	5	6
	5. Bajra	Gujarat	63.4	56.3	81.5
		Haryana	90.9	91.1	71.5
		Maharashtra	58.6	61.8	73.4
		Rajasthan	40.6	37.9	37.5
		Uttar Pradesh	72.6	90.2	74.5
	All-India Weighted Average		61.7	62.1	56.9
	6. Barley	Rajasthan	71.9	60.2	66.1
		Uttar Pradesh	27.1	41.5	100
	All-India Weighted Average		42.9	49.1	84.9
	7. Ragi	Andhra Pradesh	58.3	58.3	58.3
		Karnataka	24.0	33.6	32.5
	All-India Weighted Average		26.5	35.1	34.1
II. Pulses	8. Arhar	Karnataka	83.3	72.7	84.6
		Madhya Pradesh	55.5	57.0	58.5
		Maharashtra	75.8	93.3	82.1
		Orissa	65.4	60.1	70.8
		Uttar Pradesh	37.1	70.8	79.3
	All-India Weighted Average		63.5	77.6	77.2
	9. Gram	Bihar	59.2	46.5	76.4
		Madhya Pradesh	78.4	73.8	87.4
		Rajasthan	80.7	82.2	81.4
		Uttar Pradesh	44.2	74.7	64.7
All-India Weighted Average			71.8	74.5	81.2
	10. Urad	Andhra Pradesh	98.8	90.8	90.9
		Madhya Pradesh	83.7	64.8	96.4
		Maharashtra	67.1	77.8	88.6
		Orissa	53.0	66.7	96.4
		Rajasthan	99.9	86.1	90.3
		Tamil Nadu	64.2	82.5	73.4
		Uttar Pradesh	99.7	82.7	52.9
	All-India Weighted Average		90.5	88.3	85.5
	11. Moong	Andhra Pradesh	83.1	76.9	89.2
		Maharashtra	89.5	91.4	78.9
		Orissa	47.3	57.8	49.4
		Rajasthan	73.6	90.0	74.6
	All-India Weighted Average		74.6	83.2	74.7
	12. Lentil	Bihar	61.5	71.6	77.5
		Madhya Pradesh	72.0	66.8	85.7
		Uttar Pradesh	46.1	52.0	95.7
	All-India Weighted Average		56.7	60.1	89.9

Continued

1	2	3	4	5	6
III. Oilseeds	13. Groundnut	Andhra Pradesh	44.3	83.5	66.6
		Gujarat	85.4	95.9	93.0
		Karnataka	69.9	93.8	81.8
		Maharashtra	53.4	72.4	84.7
		Tamil Nadu	63.7	63.7	63.7
	All-India Weighted Average		62.2	81.3	80.1
	14. Rapeseed & Mustard	Gujarat	99.9	99.9	99.9
		Haryana	98.1	94.3	90.4
		Madhya Pradesh	62.9	76.4	90.0
		Rajasthan	87.1	91.9	83.1
		Uttar Pradesh	33.4	36.1	38.8
		West Bengal	48.0	59.3	63.4
	All-India Weighted Average		73.3	73.9	76.5
	15. Soyabean	Madhya Pradesh	89.9	86.1	94.2
		Maharashtra	100.0	100.0	100.0
	All-India Weighted Average		92.5	89.8	95.8
	16. Sunflower	Andhra Pradesh	100.0	100.0	100.0
		Karnataka	100.0	97.9	100.0
		Maharashtra	97.9	98.9	80.7
	All-India Weighted Average		99.2	98.8	96.0
	17. Sesamum	Gujarat	98.1	98.7	97.8
		Madhya Pradesh	78.7	71.4	85.9
		Orissa	70.8	77.1	79.5
		Rajasthan	43.2	16.8	69.6
	All-India Weighted Average		86.1	77.0	88.4
	18. Safflower	Karnataka	86.8	79.4	83.1
		Maharashtra	90.2	100.0	80.4
	All-India Weighted Average		89.2	92.4	81.4
	19. Nigerseed	Madhya Pradesh	100.0	100.0	100.0
		Orissa	89.8	73.3	95.2
	All-India Weighted Average		94.7	83.1	97.1
IV. Other Commercial Crops	20. Sugarcane	Andhra Pradesh	65.0	100.0	82.5
		Haryana	100.0	100.0	100.0
		Karnataka	100.0	100.0	100.0
		Uttar Pradesh	100.0	100.0	100.0
	All-India Weighted Average		96.4	100.0	98.3
	21. Cotton	Gujarat	98.2	100.0	99.7
		Haryana	42.6	42.6	42.6
		Karnataka	97.5	98.8	89.3
		Madhya Pradesh	83.6	99.8	99.3
		Rajasthan	99.0	100.0	99.5
	All-India Weighted Average		83.8	81.9	86.9
	22. Jute	West Bengal	97.5	88.9	93.2
	All-India Weighted Average		97.5	88.9	93.2
V. Vegetables	23. Onion	Karnataka	98.5	96.9	100.0
	All-India Weighted Average		98.5	96.9	100.0
	24. Potato	Bihar	62.8	80.2	45.3
		Uttar Pradesh	47.6	72.7	97.8
		West Bengal	44.2	85.5	91.2
	All-India Weighted Average		47.6	78.9	91.1

Notes : 1. All-India Weighted Average refers to weighted average of states listed above, weights being the proportion of production.

2. Bold and underlined figures are estimated on the basis of average of MSR for preceding/succeeding year(s) Concluded

8.4 : Marketed Surplus Ratio of Various Crops at All-India Level - Based on comprehensive scheme for studying Cost of Cultivation of Principal Crops in India and of NCAER (1988-89 Survey)

Crop	Marketed Surplus Ratio (MSR) Recommended
(1)	(2)
Masur	53.5
Mesta	87.3 *
Safflower	87.7
Sugarcane	92.5
Coconut	67.6
Tobacco	96.8
Arecanut	92.1
Potato	78.5
Sweetpotato	75.8
Tapioca	70.0
Onion	94.4
Orange	97.0
Mango	97.4
Banana	85.7
Cashew	100.0 **
Chillies	90.9
Ginger	82.9
Pepper	95.8
Turmeric	96.4
Garlic	94.4 *
Coriander	90.9 *
Cardamom	96.5
Fodder	23.3
Pine Apple	92.1 *
Guava	85.7 *
Litchi	85.7 *
Sapota	85.7 *
Okra	78.5 *
Cabbage	78.5 *
Brinjal	78.5 *
Marigold	100.0 **
Rose	100.0 **
Jasmine	100.0 **
Beef and Buffalo Meat	100.0 **

* MSRs adopted from a related item

** MSRs assumed to be 100.

Source : Report of Sub Group on Agricultural Commodities
for Wholesale Price Index (DES. 1997)

9.5: Procurement of Onion by NAFED Under Market Intervention Scheme

Year 1	Price (Rs. Per Quintal) 2	Quantity Procured (Tonnes) 3	Value (Rs. lakh) 4	Major State(s) of Procurement 5
1989-90	60/70	32460	186.72	Gujarat & Maharashtra
1990-91 (MIS-90)	70	61948	433.94	Gujarat & Maharashtra
1992-93 (MIS-91)	70/75	4500	33.31	Gujarat
1996-97	300	60	1.98	Karnataka
1999-2000	250	65000	1950.00	Maharashtra
2000-01	Nil	Nil	Nil	-
2001-02	Nil	Nil	Nil	-
2002-03	Nil	Nil	Nil	-

10.1: Net Availability of Foodgrains (Per Day) in India from 1951 to 2003

(Grams per Capita per Day)

Year	Rice	Wheat	Other Cereals	Cereals	Gram	Pulses	Foodgrains
1	2	3	4	5	6	7	8
1951	158.9	65.7	109.6	334.2	22.5	60.7	394.9
1952	158.5	57.6	109.3	325.4	19.8	59.1	384.5
1953	165.9	62.5	121.5	349.9	24.2	62.7	412.6
1954	194.1	58.0	136.0	388.1	27.3	69.7	457.8
1955	179.7	58.3	134.9	372.9	31.0	71.1	444.0
1956	187.7	61.5	111.2	360.4	29.0	70.3	430.7
1957	192.7	71.6	111.0	375.3	32.8	71.8	447.1
1958	164.8	66.5	119.0	350.3	25.3	58.5	408.8
1959	191.0	78.5	123.9	393.4	35.5	74.9	468.3
1960	187.8	78.3	118.0	384.1	27.7	65.5	449.6
1961	201.1	79.1	119.5	399.7	30.2	69.0	468.7
1962	203.2	84.2	111.5	398.9	27.3	62.0	460.9
1963	186.9	79.2	117.9	384.0	24.7	59.8	443.8
1964	201.4	90.1	109.5	401.0	20.3	51.0	452.0
1965	210.2	93.6	114.7	418.5	25.5	61.6	480.1
1966	161.9	95.4	102.6	359.9	18.3	48.2	408.1
1967	154.0	90.5	117.3	361.8	15.3	39.6	401.4
1968	183.7	95.8	124.6	404.1	24.6	56.1	460.2
1969	190.5	100.5	106.8	397.8	17.4	47.3	445.1
1970	190.2	102.3	110.6	403.1	21.9	51.9	455.0
1971	192.6	103.6	121.4	417.6	20.0	51.2	468.8
1972	197.8	126.0	95.3	419.1	19.0	47.0	466.1
1973	172.0	118.1	90.4	380.5	16.7	41.1	421.6
1974	190.4	108.8	111.2	410.4	14.8	40.8	451.2
1975	158.9	112.1	94.8	365.8	14.2	39.7	405.5
1976	187.2	79.5	107.1	373.8	20.2	50.5	424.3
1977	168.8	114.5	103.0	386.3	18.4	43.3	429.6
1978	196.2	126.3	100.0	422.5	17.8	45.5	468.0
1979	200.3	132.3	99.2	431.8	18.6	44.7	476.5
1980	166.1	126.8	86.6	379.5	10.7	30.9	410.4
1981	197.8	129.6	89.9	417.3	13.4	37.5	454.8
1982	193.2	127.9	94.8	415.9	14.0	39.2	455.1
1983	169.8	144.4	83.3	397.5	15.6	39.5	437.0
1984	197.8	140.8	98.9	437.6	13.7	41.9	479.4
1985	188.8	138.6	87.9	415.3	12.9	38.1	453.4
1986	212.0	151.0	70.7	433.7	16.2	43.8	477.5
1987	206.0	157.8	71.0	434.8	12.3	36.4	471.2
1988	188.2	154.2	68.8	411.2	9.6	36.4	447.6
1989	215.0	156.2	80.3	451.5	13.4	41.9	493.4
1990	212.1	132.6	86.8	431.5	10.7	41.1	472.6
1991	221.7	166.8	80.0	468.5	13.4	41.6	510.1
1992	217.0	158.6	58.9	434.5	10.1	34.3	468.8
1993	201.1	140.2	86.6	427.9	10.7	36.2	464.1
1994	207.4	159.5	67.1	434.0	11.8	37.2	471.2
1995	220.0	172.7	64.9	457.6	14.9	37.8	495.5
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(P)	228.1	164.4	64.7	457.3	10.7	35.0	492.2
2003(P)	183.4	178.9	44.9	407.1	8.3	29.1	436.3

Notes :

1. The net availability of foodgrains is estimated to be Gross Production (-) seed, feed & wastage (-) exports(+) imports, (+/-) changes in stocks. The net availability of foodgrains divided by the population estimates for a particular year indicate per capita availability of foodgrains in terms of kg/year. Net availability, thus worked out further divided by the number of days in a year i.e., 365 days gives us net availability of foodgrains in terms of grams / day.

2. 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.

3. For calculation of per capita net availability the figures of net imports from 1981 to 1994 are based on imports and exports on Government of India account only. Net imports from 1995 onwards are the total exports and imports (on Government as well as private accounts)

10.2: Net Availability of Foodgrains (per Annum) in India from 1951 to 2003

Year	Rice	Wheat	Other Cereals	Cereals	Gram	Pulses	Per Capita Foodgrains	(Kgs. per Year)
	1	2	3	4	5	6	7	8
1951	58.0	24.0	40.0	122.0	8.2	22.1	144.1	
1952	58.0	21.1	40.0	119.1	7.3	21.6	140.7	
1953	60.6	22.8	44.3	127.7	8.8	22.9	150.6	
1954	70.9	21.2	49.6	141.7	10.0	25.4	167.1	
1955	65.6	21.3	49.2	136.1	11.3	25.9	162.0	
1956	68.7	22.5	40.7	131.9	10.6	25.7	157.6	
1957	70.4	26.1	40.5	137.0	12.0	26.2	163.2	
1958	60.2	24.3	43.4	127.9	9.2	21.3	149.2	
1959	69.7	28.6	45.3	143.6	13.0	27.3	170.9	
1960	68.8	28.6	43.2	140.6	10.1	24.0	164.6	
1961	73.4	28.9	43.6	145.9	11.0	25.2	171.1	
1962	74.2	30.7	40.7	145.6	10.0	22.6	168.2	
1963	68.2	28.9	43.1	140.2	9.0	21.8	162.0	
1964	73.7	33.0	40.1	146.8	7.4	18.6	165.4	
1965	76.7	34.2	41.9	152.8	9.3	22.5	175.3	
1966	59.1	34.8	37.5	131.4	6.7	17.6	149.0	
1967	56.2	33.0	42.8	132.0	5.6	14.5	146.5	
1968	67.2	35.1	45.6	147.9	9.0	20.5	168.4	
1969	69.5	36.7	39.0	145.2	6.4	17.3	162.5	
1970	69.4	37.4	40.4	147.2	8.0	18.9	166.1	
1971	70.3	37.8	44.3	152.4	7.3	18.7	171.1	
1972	72.4	46.1	34.9	153.4	7.0	17.2	170.6	
1973	62.8	43.1	33.0	138.9	6.1	15.0	153.9	
1974	69.5	39.7	40.6	149.8	5.4	14.9	164.7	
1975	58.0	40.9	34.6	133.5	5.2	14.5	148.0	
1976	68.5	29.1	39.2	136.8	7.4	18.5	155.3	
1977	61.6	41.8	37.6	141.0	6.7	15.8	156.8	
1978	71.6	46.1	36.5	154.2	6.5	16.6	170.8	
1979	73.1	48.3	36.2	157.6	6.8	16.3	173.9	
1980	60.8	46.4	31.7	138.9	3.9	11.3	150.2	
1981	72.2	47.3	32.8	152.3	4.9	13.7	166.0	
1982	70.5	46.7	34.6	151.8	5.1	14.3	166.1	
1983	62.0	52.7	30.4	145.1	5.7	14.4	159.5	
1984	72.2	51.4	36.1	159.7	5.0	15.3	175.0	
1985	68.9	50.6	32.1	151.6	4.7	13.9	165.5	
1986	77.4	55.1	25.8	158.3	5.9	16.0	174.3	
1987	75.2	57.6	25.9	158.7	4.5	13.3	172.0	
1988	68.7	56.3	25.1	150.1	3.5	13.3	163.4	
1989	78.5	57.0	29.3	164.8	4.9	15.3	180.1	
1990	77.4	48.4	31.7	157.5	3.9	15.0	172.5	
1991	80.9	60.0	29.2	171.0	4.9	15.2	186.2	
1992	79.2	57.9	21.5	158.6	3.7	12.5	171.1	
1993	73.4	51.2	31.6	156.2	3.9	13.2	169.4	
1994	75.7	58.2	24.5	158.4	4.3	13.6	172.0	
1995	80.3	63.0	23.7	167.0	5.4	13.8	180.8	
1996	74.6	64.3	22.6	161.5	4.1	12.0	173.5	
1997	78.1	65.4	26.6	170.1	4.5	13.5	183.6	
1998	73.1	55.3	22.8	151.2	4.9	12.0	163.2	
1999	74.2	59.2	23.1	156.7	5.3	13.3	170.0	
2000	74.3	58.4	21.5	154.3	3.9	11.6	165.9	
2001	69.5	49.6	20.5	141.0	2.9	10.9	151.9	
2002(P)	83.1	60.0	23.6	166.9	3.9	12.8	179.7	
2003(P)	66.9	65.3	16.4	148.6	3.0	10.6	159.2	

Notes :

- The net availability of foodgrains is estimated to be Gross Production (-) seed, feed & wastage, (-) exports (+) imports, (+/-) change in stocks.
- The net availability of foodgrains is estimated to be Gross Production (-) seed, feed & wastage, (-) exports(+/-) imports, (+/-) changes in stocks. The net availability of foodgrains divided by the population estimates for a particular year indicate per capita availability of foodgrains in terms of kg/year. Net availability, thus worked out further divided by the number of days in a year i.e., 365 days gives us net availability of foodgrains in terms of grams /day.
- 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.
- For calculation of per capita net availability the figures of net imports from 1981 to 1994 are based on imports and exports on Government of India account only. Net imports from 1995 onwards are the total exports and imports (on Government as well as private accounts)

10.3: Per Capita Availability of Certain Important Articles of Consumption during 1960-61, 1965-66 and 1971-72 to 2002-03

Year	Edible# Oils @ (kgs.)	Vanaspati (kgs.) #	Sugar (Nov-Oct) (kgs.) +	Cloth (meters)			Tea * (gms) ##	Coffee* (gms)
				Cotton @@	Man-made	Total		
1	2	3	4	5	6	7	8	9
1960-61	3.2	0.8	4.8	13.8	1.2	15.0	296.0	80.0
1965-66	2.7	0.8	5.7	14.7	1.7	16.4	346.0	72.0
1971-72	3.0	1.1	6.8	12.4	2.2	14.6	426.0	65.0
1972-73	2.4	1.0	6.2	13.2	2.0	15.2	458.0	69.0
1973-74	3.4	0.8	6.1	12.0	1.9	13.9	492.0	64.0
1974-75	3.3	0.6	5.8	12.9	1.7	14.6	471.0	62.0
1975-76	3.5	0.8	6.1	12.6	2.0	14.6	446.0	62.0
1976-77	3.2	0.9	6.0	11.4	2.4	13.8	450.0	71.0
1977-78	3.8	0.9	7.2	9.5	4.0	13.5	516.0	73.0
1978-79	3.8	1.0	9.6	10.2	4.8	15.0	599.0	77.0
1979-80	3.7	1.0	7.8	10.1	4.6	14.7	521.0	73.0
1980-81	3.8	1.2	7.3	12.9	4.4	17.3	511.0	74.0
1981-82	5.1	1.3	8.2	12.2	4.9	17.1	466.0	79.0
1982-83	4.5	1.3	9.0	11.8	4.3	16.1	525.0	82.0
1983-84	5.8	1.2	10.5	12.6	4.7	17.3	519.0	78.0
1984-85	5.5	1.3	10.7	12.6	4.6	17.2	576.0	72.0
1985-86	5.0	1.3	11.1	15.4	6.1	21.5	589.0	71.0
1986-87	5.0	1.2	11.4	15.2	6.6	21.8	545.0	76.0
1987-88	5.8	1.2	11.7	14.0	7.0	21.0	592.0	72.0
1988-89	5.3	1.2	12.1	15.0	8.0	23.0	612.0	79.0
1989-90	5.3	1.1	12.3	14.6	8.1	22.7	571.0	65.0
1990-91	5.5	1.0	12.7	15.1	9.0	24.1	612.0	59.0
1991-92	5.4	1.0	13.0	13.7	9.2	22.9	655.0	64.0
1992-93	5.8	1.0	13.7	15.6	8.9	24.5	649.0	60.0
1993-94	6.1	1.0	12.5	15.9	10.3	26.2	667.0	56.0
1994-95	6.3	1.0	13.2	15.2	10.8	26.0	664.0	55.0
1995-96	7.0	1.0	14.1	16.3	11.7	28.0	646.0	55.0
1996-97	8.0	1.0	14.6	16.2	13.1	29.3	657.0	58.0
1997-98	6.2	1.0	14.5	15.9	15.0	30.9	635.0	58.0
1998-99	8.5	1.3	14.9	13.1	15.1	28.2	684.0	65.0
1999-2000	9.0	1.4	15.6	14.2	16.4	30.6	642.0	55.0
2000-01	8.2	1.3	15.8	14.2	16.5	30.7	631.0	58.0
2001-02	8.8	1.4	16.0	14.8	17.2	32.0	650.0	67.0
2002-03(P)	7.2	1.4	16.3	14.4	17.0	31.4	596.0	67.0

@ Includes Groundnut Oil, Sesamum Oil, Rapeseed Oil, Coconut Oil, Nigerseed Oil, Soyabean Oil and Sunflower oil but excludes oil used for manufacture of vanaspati.

@@ Figures for blended/mixed fabrics were not separately available prior to 1969. These have been included under man made fibre fabrics after 1969.

* Figures upto 1971-72 relate to coffee season and thereafter on calendar year basis. The figures for 1972-73 correspond to 1973 and so on.

Relates to financial year.

Relates to calendar year.

+ Relates to actual releases for domestic consumption.

(P) Provisional

Note - 1. From 1967-68 sugar season is October-September.

2. The data of cloth prior to 1980-81 is calendar year-wise; in meters upto 1984-85 and in square meter from 1985-86 onwards.

Sources: 1. Directorate of Vanaspati Vegetable oil & Fats, Ministry of Consumer Affairs, Food & Public Distribution, New Delhi.

2. Directorate of Sugar, Ministry of Consumer Affairs, Food & Public Distribution, New Delhi.

3. Ministry of Textiles, New Delhi.

4. Tea Board, Kolkata.

5. Coffee Board, Bangalore.

6. Central Electricity Authority, Department of Power, New Delhi.

10.4 : Percentage Share of Monthly Per Capita Expenditure on Cereals and Non-Cereals in Total Food Items

Year	Rural Areas		Urban Areas	
	Cereals	Non-Cereals	Cereals	Non-Cereals
1	2	3	4	5
1987-88	40.99	59.01	26.46	73.54
1993-94	38.30	61.70	25.69	74.31
1999-2000	37.31	62.69	25.70	74.30
2000-01	35.58	64.42	25.13	74.87
2001-02	34.55	65.45	24.30	75.70

Source : National Sample Survey Organisation, Report No.481 on Household Consumer Expenditure and Employment- Unemployment Situation in India, 2001-02, NSS 57th Round (July 2001 - June 2002).

**11.1: Stock of Cereals held by Central and State Agencies
from 1991 to 2004 (as on 1st January)**

Year	Rice	Wheat	Coarse Cereals	(Million Tonnes)
				Total
1	2	3	4	5
1991	9.63	9.38	0.12	19.13
1992	9.29	5.43	0.01	14.73
1993	9.48	3.47	0.18	13.13
1994	11.95	11.10	0.47	23.52
1995	17.42	12.88	-	30.30
1996	15.41	13.15	Neg.	28.56
1997	12.94	7.08	-	20.02
1998	11.49	6.76	-	18.25
1999	11.68	12.70	-	24.38
2000	14.72	17.17	-	31.89
2001	20.70	25.04	0.03	45.77
2002	25.62	32.41	0.08	58.11
2003	19.37	28.83	0.00	48.20
2004	11.73	12.69	0.60	25.02

**11.2: Consumption and Stocks of Raw Jute
From 1982-83 to 2002-2003**

Year (July-June)	(Lakh Bales of 180 kgs. each)	
	Consumption 2	Stocks (End of Season) 3
1		
1982-83	75.60	18.98
1983-84	63.83	20.91
1984-85	78.33	7.50
1985-86	87.68	42.42
1986-87	82.00	43.00
1987-88	74.00	34.00
1988-89	84.50	20.50
1989-90	86.00	9.50
1990-91	87.40	16.10
1991-92	79.50	32.00
1992-93	85.00	25.00
1993-94	87.50	9.50
1994-95	85.50	9.00
1995-96	87.00	5.00
1996-97	91.10	18.50
1997-98	103.00	27.00
1998-99	97.00	22.00
1999-2000	97.50	10.50
2000-2001	97.50	7.00
2001-2002	100.00	16.00
2002-03*	100.00	35.00

* Estimated

Source : Jute Corporation of India, Kolkata.

13.4 : Tariffs and Bound Rates on Major Agricultural Commodities/ Groups

S.No	Item description	Basic Customs duty (%) (As on 01.03.2004)	Bound duty (%) (As on 01.01.2004)
1	2	3	4
I. Cereals and Pulses			
1	Pulses other than peas (<i>pisum sativum</i>)	10	100
2	Wheat	50	100
3	Maize (Corn) seed	50	70
4	Rice in the husk	80	80
5	Husked (brown) rice; broken rice	80	80
6	Semi-milled or wholly milled rice whether or not polished	70	70
7	Millet, Jowar	70	70
8	Sorghum	80	80
9	Buck wheat and canary seed	Free	100/Free
10	Other cereals (rye, barley etc.)	Free	100
II. Cereals Products			
1	Atta	30	150
2	Maida	30	150
3	Sooji	30	150
4	Wheat and potato starch	30	35
5	Flour, meal and powder of dried leguminous vegetables including sago, tamarind and mango	30	150
6	Other starches	30	100
7	Roasted malt	30	100
8	Unroasted malt	30	100
III. Dairy Products			
1	Fresh milk and cream	30	100
2	Butter and melted butter (ghee)	30	40
3	Cheese	30	40
4	Milk powder	60	60
5	Yoghurt	30	150
IV. Plantation Crops			
1	Tea	100	150
2	Coffee	100	100
3	Coconut	70	100
4	Copra	70	100
5	Cassia and cinnamon	30	100
6	Cloves	70	100
7	Other Spices	30/70	150/100

(Continued)

1	2	3	4
V. Meat & Poultry			
1	Chicken sausages	100	150
2	Chicken leg (processed)	100	150
3	Meat of poultry, not cut in pieces, fresh or chilled	30	100
4	Raw hams, pig fat; meat of bovine animals	30	100
5	Other meat and offal	30	100
6	Processed hams	30	55
7	Fish	30	Unbound
VI. Sugar			
VII. Horticulture			
1	Apples	50	50
2	Grapefruit	25	100
3	Strawberries, dried apricots etc.	30	100
4	Pears and quinces	30	35
5	Oranges; lemons and limes; fresh grapes	30	100
6	Fresh pomegranates, lichi, tamarind (fresh), custard apple	15	100
7	Other fruits except Sapota (Black berries etc.)	30	100
8	Garlic	100	100
9	Onions	5	100
10	Mushrooms	30	100
11	Potato	30	100
12	Sweet Potato	30	150
13	Frozen vegetables-peas, beans, spinach, sweet corn etc.	30	150
14	Other edible roots and tubers with high starch or insulin content, fresh or chilled (cassava)	30	100
15	All other vegetables	30	100
16	Arecanut	100	100
17	Hop cones (ground, powdered or inpellets)	30	75
18	Hop cones (other than ground, powdered or inpellets)	30	100
19	Bétel leaves	30	100
20	Planting materials of oilseeds	5	10
21	Oilseeds, misc grains, seeds of fruits, industrial or medicinal plants (other than the kind used for sowing and hop cones)	30	100
22	Basil, hyasop, rosemary, sage, savory, comboge fruit rind	15	100

(Continued)

1	2	3	4
23	Apricot, peach or plum stones and kernels	30	100
24	Seeds of a kind used for sowing (other than vegetable seeds)	15	100
25	Vegetable seeds	5	10
26	Oilcake and oilcake meal solvent extracted (defatted) variety of coconut/ copra; oilcake and oilcake meal expeller variety of coconut/ copra	15	100

VIII. Edible Oils (Crude)

1	Soyabean Oil	45	45
2	Palm Oil (for manufacture of vanaspati)	75	300
3	Groundnut Oil	75	300
4	Sunflower/ Safflower	85	300
5	Coconut Oil	85/100	300
6	Rapeseed Oil	75	75
7	Colza or Mustard Oil	75	75
8	Castor Oil/ Tung Oil	85/100	100
9	Other Oils	20/85/100	300

IX. Edible Oils (Refined)

1	Soyabean Oil	45	45
2	RBD Palmolein	70	300
3	Palm Oil	70	300
4	Groundnut Oil	85	300
5	Sunflower/ Safflower	85	300
6	Coconut Oil Edible grade	85	300
	Coconut Oil Other	100	300
7	Rapeseed Oil	75	75
8	Colza or Mustard Oil	75	75
9	Castor Oil/ Tung Oil	100	100/300
	Other Oils edible grade	85	300
10	Other Oils other than edible grade	100	100/300

(Concluded)

Source: Ministry of Finance, Department of Revenue, New Delhi.

14.2: Selected Categories of Land Use from 1950-51 to 2000-01

Year	Net Sown Area	Gross Sown Area	Area Sown More Than Once (3-2)	Net Irrigated Area	(Million hectares)	
					5	6
1	2	3	4	5	6	7
1950-51	118.75	131.89	13.14	20.85	22.56	1.71
1951-52	119.40	133.23	13.83	21.05	23.18	2.13
1952-53	123.44	137.67	14.23	21.12	23.30	2.18
1953-54	126.81	142.48	15.67	21.87	24.36	2.49
1954-55	127.85	144.09	16.24	22.09	24.95	2.86
1955-56	129.16	147.31	18.15	22.76	25.64	2.88
1956-57	130.85	149.49	18.64	22.53	25.71	3.18
1957-58	129.08	145.83	16.75	23.16	26.63	3.47
1958-59	131.83	151.63	19.80	23.40	26.95	3.55
1959-60	132.94	152.82	19.88	24.04	27.45	3.41
1960-61	133.20	152.77	19.57	24.66	27.98	3.32
1961-62	135.40	156.21	20.81	24.88	28.46	3.58
1962-63	136.34	156.76	20.42	25.66	29.45	3.79
1963-64	136.48	156.96	20.48	25.89	29.71	3.82
1964-65	138.12	159.23	21.11	26.60	30.70	4.10
1965-66	136.20	155.28	19.08	26.34	30.90	4.56
1966-67	137.23	157.35	20.12	26.91	32.68	5.77
1967-68	139.88	163.74	23.86	27.19	33.21	6.02
1968-69	137.31	159.53	22.22	29.01	35.48	6.47
1969-70	138.77	162.26	23.49	30.20	36.97	6.77
1970-71	140.27	165.79	25.52	31.10	38.19	7.09
1971-72	139.72	165.19	25.47	31.55	38.43	6.88
1972-73	137.14	162.15	25.01	31.83	39.05	7.22
1973-74	142.42	169.87	27.45	32.55	40.28	7.73
1974-75	137.17	164.19	26.40	33.71	41.74	8.03
1975-76	141.65	171.29	29.64	34.59	43.36	8.77
1976-77	139.47	167.33	27.86	35.15	43.55	8.40
1977-78	141.95	172.23	30.28	36.55	46.08	9.53
1978-79	142.98	174.80	31.82	38.06	48.31	10.25
1979-80	138.90	169.59	30.69	38.52	49.21	10.69
1980-81	140.00	172.63	32.63	38.72	49.78	11.06
1981-82	141.93	176.75	34.82	40.50	51.41	10.91
1982-83	140.22	172.75	32.53	40.69	51.83	11.14
1983-84	142.84	179.56	36.72	41.95	53.83	11.88
1984-85	140.89	176.33	35.44	42.15	54.53	12.38
1985-86	140.90	178.46	37.56	41.86	54.28	12.42
1986-87	139.58	176.41	36.83	42.57	55.76	13.19
1987-88	134.09	170.74	36.65	42.89	56.04	13.15
1988-89	141.89	182.28	40.39	46.15	61.13	14.98
1989-90	142.34	182.27	39.93	46.70	61.85	15.15
1990-91	143.00	185.74	42.74	47.78	62.47	14.69
1991-92	141.63	182.24	40.61	49.87	65.68	15.81
1992-93	142.72	185.70	42.98	50.30	66.76	16.46
1993-94	142.34	186.58	44.24	51.34	68.25	16.91
1994-95 (P)	142.96	188.05	45.09	53.00	70.65	17.65
1995-96 (P)	142.20	187.47	45.27	53.40	71.35	17.95
1996-97 (P)	142.81	189.59	46.78	55.05	73.25	18.20
1997-98 (P)	142.08	190.57	48.49	54.98	73.01	18.03
1998-99 (P)	142.58	193.03	50.45	56.51	77.64	21.13
1999-2000 (P)	141.10	190.32	49.22	56.76	77.99	21.23
2000-2001 (P)	141.10	187.94	46.84	54.68	75.14	20.46

14.3: Percentage Distribution of Gross Cropped Area across Different Crops during 1999-2000 and 2000-01

Crop	Area		Percentage Share of Area to Gross Cropped
	1999-2000	2000-01	
1	2	3	
Rice	23.88	23.85	
Wheat	14.50	13.79	
Jowar	5.43	5.31	
Bajra	4.79	5.23	
Maize	3.45	3.61	
Ragi	0.91	0.98	
Barley	0.39	0.42	
Other Cereals & Millets	0.77	0.85	
Coarse Cereals	15.75	16.49	
Total Cereals	54.13	54.13	
Gram	3.32	2.80	
Tur	1.81	1.96	
Other Pulses	6.49	6.57	
Total Pulses	11.62	11.33	
Total Foodgrains	65.74	65.96	
Sugarcane	2.36	2.44	
Condiments & Spices	1.52	1.49	
Total Fruits	1.78	1.88	
Potatoes	0.70	0.67	
Onions	0.26	0.24	
Total Vegetables	2.54	2.51	
Groundnut	3.67	3.59	
Rapeseed & Mustard	3.16	2.45	
Sesamum	0.95	0.96	
Linseed	0.37	0.31	
Other Oil Seeds	9.62	6.16	
Total Oil Seeds	14.10	13.46	
Cotton	4.74	4.67	
Jute	0.45	0.46	
Mesta	0.09	0.10	
Total Fibres	5.34	5.28	
Tobacco	0.24	0.18	
Other Crops	6.83	6.77	
Gross Cropped Area	100.00	100.00	

15.1: Performance of South West Monsoon during 1989 to 2003 (1 June - 30 September)

Year	Number of Meteorological Sub-Divisions @		Percentage of Districts with Normal/ Excess Rainfall	Actual Rainfall as % of Normal Rainfall (All India)
	Excess/ Normal Rainfall	Deficient/ Scanty Rainfall		
1	2	3	4	5
1989	29	6	72	101
1990	32	3	88	119
1991	27	8	68	91
1992	32	3	65	93
1993	31	4	78	100
1994	25	10	77	110
1995	33	2	79	100
1996	32	3	82	103
1997	32	3	81	102
1998	33	2	83	106
1999	28	7	67	96
2000	28	7	66	92
2001	30	5	68	92
2002	15	21	39	81
2003	33	3	75	102

@ Total number of Meteorological sub-divisions was 35 upto 2001. From 2002 onwards, the no. of meteorological sub-divisions is 36.

Excess : + 20% or more of Long Period Average Rainfall

Normal : Between + 19% and -19% of Long Period Average Rainfall

Deficient : Between -20% and -59% of Long Period Average Rainfall

Scanty : Between -60% and -99% of Long Period Average Rainfall

**15.4: All-India Consumption of Fertilisers in Terms of Nutrients
(N, P & K) from 1951-52 to 2002-2003**

YEAR	N	P	K	(' 000 Tonnes)	
				1	2
1951-52	58.7	6.9	-		65.6
1952-53	57.8	4.6	3.3		65.7
1953-54	89.3	8.3	7.5		105.1
1954-55	94.8	15.0	11.1		120.9
1955-56	107.5	13.0	10.3		130.8
1956-57	123.1	15.9	14.8		153.8
1957-58	149.0	21.9	12.8		183.7
1958-59	172.0	29.5	22.4		223.9
1959-60	229.3	53.9	21.3		304.5
1960-61	210.0	53.1	29.0		292.1
1961-62	249.8	60.5	28.0		338.3
1962-63	333.0	82.8	36.4		452.2
1963-64	376.1	116.5	50.6		543.2
1964-65	555.2	148.7	69.3		773.2
1965-66	574.8	132.5	77.3		784.6
1966-67	737.8	248.6	114.2		1100.6
1967-68	1034.6	334.8	169.6		1539.0
1968-69	1208.6	382.1	170.0		1760.7
1969-70	1356.0	416.0	210.0		1982.0
1970-71	1487.0	462.0	228.0		2177.0
1971-72	1798.0	558.2	300.6		2656.8
1972-73	1839.0	581.3	347.6		2767.9
1973-74	1829.0	649.7	359.8		2838.5
1974-75	1765.7	471.5	336.1		2573.3
1975-76	2148.6	466.8	278.3		2893.7
1976-77	2456.9	634.9	319.2		3411.0
1977-78	2913.0	866.6	506.2		4285.8
1978-79	3419.5	1105.9	591.5		5116.9
1979-80	3498.1	1150.9	606.4		5255.4
1980-81	3678.1	1213.6	623.9		5515.6
1981-82	4068.6	1322.3	673.2		6064.1
1982-83	4224.3	1437.0	727.0		6388.3
1983-84	5204.4	1730.3	775.4		7710.1
1984-85	5486.1	1886.4	838.5		8211.0
1985-86	5660.8	2005.2	808.1		8474.1
1986-87	5716.0	2078.9	850.0		8644.9
1987-88	5716.8	2187.0	880.5		8784.3
1988-89	7251.0	2720.7	1068.3		11040.0
1989-90	7386.0	3014.2	1168.0		11568.2
1990-91	7997.2	3221.0	1328.0		12546.2
1991-92	8046.3	3321.2	1360.5		12728.0
1992-93	8426.8	2843.8	883.9		12154.5
1993-94	8788.3	2669.3	908.4		12366.0
1994-95	9507.1	2931.7	1124.7		13563.5
1995-96	9822.8	2897.5	1155.8		13876.1
1996-97	10301.8	2976.8	1029.6		14308.1
1997-98	10901.8	3913.6	1372.5		16187.9
1998-99	11353.8	4112.2	1331.5		16797.5
1999-2000	11592.7	4798.3	1678.7		18069.7
2000-01	10920.2	4214.6	1567.5		16702.3
2001-02	11310.2	4382.4	1667.1		17359.7
2002-03	10474.1	4018.8	1601.2		16094.1

Note : Upto 1982-83, figures relate to Feb. -Jan. and from 1983-84 onwards, these relate to April-March.

15.7: Fertiliser Consumption per Hectare of Agricultural Land* in Selected Countries during 1998-99 and 1999-2000

Country	(Kg./Hectare)								
	1998-99					1999-2000			
	N 1 2	P 3	K 4	Total 5		N 6	P 7	K 8	Total 9
Africa									
Egypt	307.3	39.0	8.6	354.9		303.8	42.4	13.6	359.8
Morocco	17.5	9.8	5.1	32.4		17.9	10.8	6.0	34.7
South Africa	26.4	13.9	8.6	48.9		26.6	14.4	10.1	51.1
North & Central America									
Canada	35.6	14.6	7.8	58.0		35.2	14.0	7.3	56.5
Mexico	48.9	10.5	6.3	65.7		47.6	12.8	6.1	66.5
USA	63.0	22.0	25.4	110.4		62.8	22.3	25.8	110.9
South America									
Brazil	23.7	31.0	35.0	89.7		25.6	29.7	34.5	89.8
Chile	93.9	75.3	35.6	204.8		102.6	71.8	32.5	206.9
Colombia	72.1	30.9	41.8	144.8		68.7	25.5	42.9	137.1
Asia									
Bangladesh	105.9	19.4	15.2	140.5		119.2	19.2	15.6	154.0
China	169.1	69.9	27.7	266.7		180.2	65.7	25.1	271.0
India	66.9	24.2	7.8	98.9		68.3	28.3	9.9	106.5
	(59.5)	(21.6)	(7.0)	(88.1)		(60.8)	(25.2)	(8.8)	(94.8)
Japan	97.0	114.4	77.7	289.1		98.5	116.9	79.9	295.3
Jordan	38.5	12.0	10.4	60.9		33.6	12.9	12.9	59.4
Korea Dem. Rep.	64.2	13.0	1.5	78.7		65.0	19.5	14.5	99.0
Korea Rep.	236.1	98.4	119.4	453.9		237.5	99.0	122.7	459.2
Nepal	21.6	6.7	0.6	28.9		22.5	6.7	0.4	29.6
Pakistan	95.2	21.2	1.0	117.4		101.0	27.2	0.8	129.0
Sri Lanka	75.3	15.4	32.6	123.3		86.2	17.7	32.4	136.3
Europe									
Austria	86.5	38.5	41.6	166.6		86.5	37.2	40.6	164.3
Belarus	44.4	15.8	84.8	145.0		44.4	15.9	75.3	135.6
Bel-Lux	205.5	56.5	109.4	371.4		199.0	54.0	105.5	358.5
Denmark	110.8	19.8	43.0	173.6		109.5	17.8	42.6	169.9
France	127.5	51.8	68.5	247.8		131.7	49.5	62.3	243.5
Germany	157.2	33.6	51.9	242.7		167.3	34.9	49.8	252.0
Netherlands	382.6	65.9	77.4	525.9		361.4	62.2	76.9	500.5
Norway	117.4	33.2	70.9	221.5		120.9	34.2	71.8	226.9
Poland	59.9	21.4	26.9	108.2		59.8	20.6	25.6	106.0
Russian Federation	5.8	1.6	1.8	9.2		8.3	1.2	1.8	11.3
Spain	64.8	35.3	27.7	127.8		63.7	34.7	26.5	124.9
Sweden	64.4	14.7	16.2	95.3		68.9	14.7	17.0	100.6
United Kingdom	204.1	55.0	71.4	330.5		218.3	53.6	70.9	342.8
Ukraine	12.0	2.3	0.9	15.2		9.7	1.8	0.8	12.3
Oceania									
Australia	18.2	19.3	4.3	41.8		22.6	20.5	4.7	47.8
New Zealand	46.8	114.6	40.2	201.6		47.6	115.9	40.5	204.0
World	54.8	22.0	14.8	91.6		67.0	22.1	15.1	104.2

* Agricultural land includes land under permanent meadows and pastures in addition to arable land and land under permanent crops.

Note : In respect of India, figures within parentheses are fertilizer consumption per hectare of gross cropped area.

Source : Department of Agriculture & Cooperation Integrated Nutrient Management.

15.8 : Mineral Fertilizers Consumption in Countries of Asia-Pacific Region

('000 Tonnes of plant nutrient)

S.No.	Country	1991	1999	2001	Average Annual Growth Rate During 1991 to 2001
1	2	3	4	5	6
DEVELOPING COUNTRIES					
1.	Bangladesh	1004.4	1365.7	1354.8	3.6%
2.	Bhutan	0.1	0.0	0.0	0.0%
3.	Cambodia	5.7	0.0	0.0	4.3%
4.	China	29659.1	36439.0	35375.2	2.8%
5.	Cook Islands	-	-	-	-
6.	DPR Korea	811.1	253.0	287.0	-11.9%
7.	Fiji	14.0	14.4	10.0	-3.5%
8.	India	12728.1	18056.7	17359.7	4.2%
9.	Indonesia	2400.1	2524.5	2523.6	0.4%
10.	Iran	1149.0	1330.4	1320.1	2.4%
11.	Loa PDR	2.6	9.9	12.3	15.5%
12.	Malaysia	941.0	1323.8	1130.7	2.8%
13.	Maldives	-	-	-	-
14.	Mongolia	16.0	2.8	3.2	-4.9%
15.	Myanmar	83.1	163.1	164.2	9.6%
16.	Nepal	81.1	94.4	70.3	0.2%
17.	Pakistan	1884.1	2833.0	2923.3	4.4%
18.	Papua New Guinea	10.7	9.3	11.8	-1.6%
19.	Philippines	447.8	743.8	781.4	5.1%
20.	Rep. of Korea	927.7	821.1	716.7	-2.5%
21.	Samoa	0.0	1.3	4.9	92.3%
22.	Solomon Islands	-	-	-	-
23.	Sri Lanka	177.2	259.1	234.4	3.1%
24.	Thailand	962.1	1763.0	1717.0	4.8%
25.	Tonga	-	-	-	-
26.	Vanuatu	-	-	-	-
27.	Viet Nam	781.9	2057.6	1999.2	12.7%
	Sub- Total	54086.8	70885.5	68755.6	3.2%
DEVELOPED COUNTRIES					
28.	Australia	1284.6	2353.0	2463.0	6.7%
29.	Japan	1752.0	1438.7	1354.0	-3.0%
30.	New Zealand	438.5	716.0	889.2	5.2%
	Sub- Total	3475.1	4507.7	4706.2	2.6%
	Asia-Pacific Total	57561.9	75393.2	73461.8	3.1%
	Rest of World	77044.5	64908.3	64267.9	-0.9%
	World	134606.4	140301.5	137729.7	1.1%

Source: Selected Indicators of Food and Agriculture Development in Asia - Pacific Region 1992-2002, FAO Regional Office for Asia and the Pacific , Bangkok, October 2003.

15.11 (a): Consumption of Electricity for Agricultural Purposes During 1982-83 to 2001-2002

Year	Consumption for Agricultural Purposes	Total Consumption	(Million KWH)
			% Share of Agricultural Consumption to Total Consumption
1	2	3	4
1982-83	17817	95589	18.64
1983-84	18234	102344	17.81
1984-85	20960	114068	18.38
1985-86	23422	122999	19.04
1986-87	29444	135952	21.66
1987-88	35267	145613	24.22
1988-89	38878	160196	24.27
1989-90	44056	175419	25.12
1990-91	50321	190357	26.44
1991-92	58557	207645	28.20
1992-93	63328	220674	28.70
1993-94	70699	238569	29.64
1994-95	79301	259630	30.54
1995-96	85732	277029	30.95
1996-97	84019	280206	29.98
1997-98	91277	299067	30.52
1998-99	97195	309734	30.75
1999-2000	90934	312841	29.07
2000-2001	84729	316600	26.76
2001-2002	81673	322459	25.33

15.11 (b): State-wise Consumption of Electricity for Agricultural Purposes during 2001-2002

Region	State/UTs	Consumption for Agricultural Purposes	Total Consumption	(Million KWH)
				% Share of Consumption for Agricultural Purposes
1	2	3	4	5
NORTHERN				
	Haryana	4472.85	10534.76	42.46
	Himachal Pradesh	18.05	2351.86	0.77
	Jammu & Kashmir	122.52	2992.03	4.09
	Punjab	5451.85	20008.88	27.25
	Rajasthan	3849.91	13586.66	28.34
	Uttar Pradesh	4985.57	25230.22	19.76
	Uttaranchal	479.52	2182.65	21.97
	Chandigarh	2.26	747.81	0.10
	Delhi	123.00	9798.50	1.26
	Sub-Total	19505.53	87433.37	22.31
WESTERN				
	Gujarat	15696.16	33769.44	46.48
	Madhya Pradesh	4583.97	14509.30	31.59
	Chhattisgarh	678.19	5300.50	12.79
	Maharashtra	8672.81	46330.71	18.72
	Goa	14.01	1245.35	1.12
	Daman & Diu	1.95	739.66	0.26
	D. & N. Haveli	0.91	800.00	0.11
	Sub-Total	29648.00	102694.96	28.87
SOUTHERN				
	Andhra Pradesh	12828.92	31481.59	40.75
	Karnataka	7541.34	19840.02	38.01
	Kerala	187.48	8622.39	2.17
	Tamil Nadu	9622.46	35922.93	26.79
	Pondicherry	97.12	1562.87	6.21
	Lakshadweep	0.00	17.43	0.00
	Sub-Total	30277.32	97447.23	31.07
EASTERN				
	Bihar	670.60	2904.43	23.09
	Jharkhand	149.01	6778.14	2.20
	Orissa	163.91	5773.16	2.84
	West Bengal	1183.10	16003.37	7.39
	A.& N. Islands	0.00	91.15	0.00
	Sikkim	0.00	123.32	0.00
	Sub-Total	2166.62	31673.57	6.84
NORTH EASTERN				
	Assam	9.50	1817.98	0.52
	Manipur	0.72	168.72	0.43
	Meghalaya	0.39	550.72	0.07
	Nagaland	0.09	117.24	0.08
	Tripura	65.22	348.00	18.74
	Arunachal Pradesh	0.00	75.16	0.00
	Mizoram	0.00	132.38	0.00
	Sub-Total	75.92	3210.20	2.36
	Total (All India)	81673.39	322459.33	25.33

15.13: State-wise Number of Kisan Credit Cards Issued upto 30 June, 2004

Sl. No.	State	Cooperative Banks	Regional Rural Banks	Commercial Banks *	Total
1	2	3	4	5	6
1	Andhra Pradesh	3435529	770937	1859982	6066448
2	Assam	1722	23225	52327	77274
3	Arunachal Pradesh	548	679	2111	3338
4	Bihar	775438	71612	360981	1208031
5	Gujarat	974876	125428	524884	1625188
6	Goa\$	2960	0	2350	5310
7	Haryana	1089943	110166	263919	1464028
8	Himachal Pradesh	31437	5542	69294	106273
9	Jammu & Kashmir	33223	4447	3356	41026
10	Karnataka	1125045	462454	853464	2440963
11	Kerala	635892	221607	597961	1455460
12	Madhya Pradesh	2129977	154538	397371	2681886
13	Maharashtra	3003006	94277	703342	3800625
14	Meghalaya #	1999	5504	3955	11458
15	Mizoram #	2037	283	555	2875
16	Manipur #	427	786	2103	3316
17	Nagaland #	699	328	1054	2081
18	Orissa	1876552	162297	265363	2304212
19	Punjab	750945	45540	544211	1340696
20	Rajasthan	2035217	134638	352312	2522167
21	Sikkim #\$	1214	0	958	2172
22	Tamil Nadu	1300391	97076	1103607	2501074
23	Tripura #	1846	5671	5033	12550
24	Uttar Pradesh	4323104	1382807	1865340	7571251
25	West Bengal	608174	90151	320646	1018971
26	A & N Islands #\$	1460	0	643	2103
27	Chandigarh \$	0	0	5	5
28	Daman & Diu @#	0	0	8	8
29	New Delhi #\$	1504	0	1352	2856
30	D & N Haveli @\$	0	0	7	7
31	Lakshdweep @\$	0	0	139	139
32	Pondicherry \$	3955	0	12812	16767
33	Jharkhand	98257	38497	72519	209273
34	Chhattisgarh	404802	57691	43390	505883
35	Uttaranchal	204524	10900	50731	266155
	Total	24856703	4077081	10338085	39271869

State Cooperative Banks function as Central Financing Agencies

@ No Cooperative Bank exists.

\$ No RRB exists.

* Commercial Banks data upto June 2003

Source : Credit Division, Ministry of Agriculture, New Delhi.

16.1 Distribution Of Operational Holdings - All India

No. of Holdings: '000 Number

Area : '000 hectares

Average size: Hectares

Category of Holdings	No of Operational Holdings		Area Operated		Average Size of Operational Holdings	
	1990-91	1995-96	1990-91	1995-96	1990-91	1995-96
1	2	3	4	5	6	7
Marginal (Less than 1 hectare)	63389 (59.4)	71179 (61.6)	24894 (15.0)	28121 (17.2)	0.39	0.40
Small (1.0 to 2.0 hectare (s))	20092 (18.8)	21643 (18.7)	28827 (17.4)	30722 (18.8)	1.43	1.42
Semi-Medium (2.0 to 4.0 hectares)	13923 (13.1)	14261 (12.3)	38375 (23.2)	38953 (23.8)	2.76	2.73
Medium (4.0 to 10.0 hectares)	7580 (7.1)	7092 (6.1)	44752 (27.1)	41398 (25.3)	5.9	5.84
Large (10.0 hectares and above)	1654 (1.6)	1404 (1.2)	28659 (17.3)	24163 (14.8)	17.33	17.21
All Holdings	106637 (100.0)	115580 (100.0)	165507 (100.0)	163357 (100.0)	1.57	1.41

Note : Figures in parentheses indicate the percentage of respective column total.

Source : Agricultural Census Division, Ministry of Agriculture, New Delhi.

16.2(a): State-wise Number of Operational Holdings by Major Size-Groups, 1995-96 *

States/UTs	Marginal	Small	Semi-Medium	Medium	Large	All Holdings
	1	2	3	4	5	6
Andhra Pradesh	6300	2262	1395	563	83	10603
Arunachal Pradesh	21	20	29	28	6	104
Assam	1669	561	351	96	5	2683
Bihar	11344	1526	941	314	29	14155
Goa	57	8	3	1	Neg	70
Gujarat	1034	1058	968	633	91	3781
Haryana	815	338	328	207	40	1728
Himachal Pradesh	556	173	95	34	5	863
Jammu & Kashmir	1041	187	89	18	Neg	1336
Karnataka	2610	1707	1204	594	106	6221
Kerala	5918	262	96	20	3	6299
Madhya Pradesh	3878	2312	1919	1239	255	9603
Maharashtra	4266	3176	2152	943	116	10653
Manipur	69	49	21	3	Neg	143
Meghalaya	72	44	39	6	Neg	160
Mizoram	28	26	12	Neg	Neg	66
Nagaland	9	21	40	64	14	149
Orissa	2145	1106	544	156	15	3966
Punjab	204	183	320	306	80	1093
Rajasthan	1611	1085	1117	1064	487	5364
Sikkim	24	10	6	3	Neg	44
Tamil Nadu	5951	1234	601	200	26	8012
Tripura	247	40	12	1	Neg	301
Uttar Pradesh	16237	3135	1585	532	39	21529
West Bengal	5003	1101	382	60	1	6547
States Total	71109	21625	14249	7086	1404	115473
A & N Islands	2	2	3	2	Neg	10
Chandigarh	1	Neg	Neg	Neg	Neg	2
Dadar & Nagar Haveli	7	4	2	Neg	Neg	14
Daman & Diu	3	Neg	Neg	Neg	Neg	3
Delhi	21	6	4	3	Neg	35
Lakshadweep	9	Neg	Neg	Neg	-	9
Pondicherry	26	4	2	Neg	Neg	34
All UTs	70	18	12	7	Neg	107
All - India	71179	21643	14261	7092	1404	115580

Neg : Negligible

* includes institutional holdings also.

Note : The sum of States/ UTs may not exactly tally with all-India total due to rounding off.

Source : Agricultural Census Division, Ministry of Agriculture, New Delhi.

16.2 (b): State-wise Area Operated by Major Size-Groups, 1995-96*

States/UTs	Marginal	Small	Semi-Medium	Medium	Large	(000 Hectares) All Holdings
	1	2	3	4	5	6
Andhra Pradesh	2904	3229	3736	3231	1273	14374
Arunachal Pradesh	10	26	77	154	77	344
Assam	621	770	924	495	328	3138
Bihar	3871	2018	2566	1749	479	10682
Goa	20	11	9	8	11	59
Gujarat	562	1552	2709	3735	1346	9904
Haryana	404	473	916	1222	661	3676
Himachal Pradesh	230	241	256	194	78	1000
Jammu & Kashmir	402	258	237	97	19	1013
Karnataka	1248	2480	3298	3489	1593	12109
Kerala	912	350	244	104	102	1712
Madhya Pradesh	1795	3336	5289	7364	4107	21890
Maharashtra	2087	4606	5872	5436	1879	19880
Manipur	39	67	54	14	neg	174
Mizoram	17	55	94	27	2	213
Meghalaya	35	36	28	4	neg	85
Nagaland	5	23	104	381	206	720
Orissa	1064	1522	1451	864	243	5144
Punjab	122	240	833	1754	1198	4147
Rajasthan	780	1566	3185	6618	9102	21250
Sikkim	10	14	18	18	13	73
Tamil Nadu	2210	1721	1623	1135	614	7303
Tripura	81	56	30	6	9	181
Uttar Pradesh	6266	4428	4321	2948	606	18570
West Bengal	2399	1624	1046	316	203	5588
States Total	28096	30698	38921	41363	24150	163227
A & N Islands	Neg	3	8	8	3	24
Chandigarh	Neg	Neg	Neg	Neg	Neg	2
Dadar & Nagar Haveli	4	5	5	5	3	22
Daman & Diu	1	Neg	Neg	Neg	Neg	2
Delhi	8	8	12	16	4	48
Lakshadweep	2	Neg	Neg	Neg	--	3
Pondicherry	10	6	6	5	2	30
All UTs	25	24	32	35	13	130
All - India	28121	30722	38953	41398	24163	163357

Neg : Negligible

* includes institutional holdings also.

Source : Agricultural Census Division, Ministry of Agriculture, New Delhi.

16.3: State-wise Average Size of Operational Holdings by Major Size Groups, 1995-96

States/UTs	Marginal	Small	Semi-Medium	Medium	Large	(Hectares) All Holdings
	1	2	3	4	5	6
Andhra Pradesh	0.46	1.43	2.68	5.74	15.39	1.36
Arunachal Pradesh	0.48	1.28	2.62	5.53	13.84	3.31
Assam	0.37	1.37	2.63	5.13	65.64	1.17
Bihar	0.34	1.32	2.73	5.57	16.45	0.75
Goa	0.34	1.32	2.72	5.79	25.91	0.84
Gujarat	0.54	1.47	2.80	5.90	14.81	2.62
Haryana	0.50	1.40	2.79	5.92	16.42	2.13
Himachal Pradesh	0.41	1.39	2.70	5.71	16.54	1.16
Jammu & Kashmir	0.39	1.38	2.68	5.33	19.74	0.76
Karnataka	0.48	1.45	2.74	5.87	15.02	1.95
Kerala	0.15	1.33	2.55	5.26	35.29	0.27
Madhya Pradesh	0.46	1.44	2.76	5.94	16.08	2.28
Maharashtra	0.49	1.45	2.73	5.76	16.17	1.87
Manipur	0.56	1.35	2.52	5.03	13.13	1.22
Meghalaya	0.49	1.24	2.42	4.69	11.95	1.33
Mizoram	0.62	1.38	2.41	5.40	11.00	1.29
Nagaland	0.51	1.13	2.57	5.94	14.30	4.82
Orissa	0.50	1.38	2.67	5.54	15.96	1.30
Punjab	0.60	1.31	2.60	5.74	15.05	3.79
Rajasthan	0.48	1.44	2.85	6.22	18.70	3.96
Sikkim	0.41	1.40	2.71	5.87	24.21	1.65
Tamil Nadu	0.37	1.40	2.70	5.68	23.37	0.91
Tripura	0.33	1.38	2.50	5.33	76.89	0.60
Uttar Pradesh	0.39	1.41	2.73	5.54	15.36	0.86
West Bengal	0.48	1.48	2.74	5.25	175.83	0.85
State Total	0.40	1.42	2.73	5.84	17.20	1.41
A & N Islands	0.39	1.39	2.52	3.92	71.51	2.36
Chandigarh	0.38	1.43	2.77	5.93	12.09	1.15
Dadar & Nagar Haveli	0.53	1.33	2.77	5.81	21.59	1.59
Daman & Diu	0.35	1.37	2.51	6.84	17.04	0.70
Delhi	0.35	1.31	2.70	5.55	14.22	1.36
Lakshadweep	0.23	1.26	2.48	6.70	-	0.28
Pondicherry	0.36	1.47	2.80	5.93	18.91	0.87
UTs Total	0.36	1.37	2.68	5.15	21.00	1.21
All-India	0.40	1.42	2.73	5.84	17.21	1.41

Source : Agricultural Census Division, Ministry of Agriculture, New Delhi

16.5: Distribution of Irrigated Area According to Source of Irrigation by Major Size-Classes of Operational Holdings for All Size Groups, 1990-91

Size Class	Canals 2	Tanks 3	Wells 4	Tubewells 5	Others 6	('000 Hectares)	Total 7
						1	
Marginal	3348	940	1015	3319	835	9457	
Small	3061	682	1611	3013	717	9085	
Semi-medium	3645	654	2311	3555	806	10971	
Medium	3851	503	2845	3442	644	11286	
<u>Large</u>	<u>1762</u>	<u>178</u>	<u>1305</u>	<u>1364</u>	<u>296</u>	<u>4905</u>	
Total	15667	2957	9088	14694	3297	45704	

Source : Agricultural Census Division, Ministry of Agriculture, New Delhi

17.1: Ceilings on Land Holdings

State	Irrigated Land with two crops	Irrigated Land with one crop	Dry land	(In Acres)	
	1	2	3	4	
As recommended in 1972 National Guidelines		10-18	27	54	
Proposed in Agenda Notes 1985 of RMC		12	18	30	
Andhra Pradesh	10 to 18	15 to 27	35 to 54		
Assam	17	17	17		
Bihar	15 to 18	25	30 to 45		
Gujarat	10 to 18	15 to 27	20 to 54		
Haryana	18	27	54		
Himachal Pradesh	10	15	30 to 70		
Jammu & Kashmir	9 to 12.5	9 to 12.5	15 to 23		
					(in Ladakh 19)
Karnataka	10 to 20	25 to 30	54		
Kerala	12 to 15	12 to 15	12 to 15		
Madhya Pradesh	18	27	54		
Maharashtra	18	27	54		
Manipur	12	12	15		
Orissa	10	15	30 to 45		
Punjab	17	27	51		
Rajasthan	18	27	54 to 175		
Tamil Nadu	12	30	60		
Sikkim	12.5	12.5	50		
Tripura	10	10	30		
Uttar Pradesh	18	27	45		
West Bengal	12	12	17		

Note : 1. The actual limits for lands in Karnataka and Uttar Pradesh are higher due to classification of land.

2. The actual ceiling limits in Himachal Pradesh and Rajasthan are higher due to hilly terrain and desert lands.

3. 1 Acre = 0.404686 Hectare.

Source : Ministry of Rural Development, New Delhi.

17.2: Daily Rates of Minimum Wages for Agricultural Workers Fixed by Different States/UTs Administrations under the Minimum Wages Act.,1948 @.

As on 30.06.2003

State/UTs	Minimum wages for unskilled agricultural workers (Rs. per day)
1	2
Andhra Pradesh	Rs. 52.00 to Rs. 55.50 (According to Zones)
Arunachal Pradesh *	Rs. 39.87 to 42.11 (According to Zones)
Assam	60.00 without food, shelter and clothing 50.00 with food, shelter and clothing
Bihar	45.18
Chattisgarh	52.87
Goa *	58.00
Gujarat	50.00
Haryana	79.31 with meal 83.31 without meal
Himachal Pradesh *	60.00
Jharkhand	45.00
Jammu & Kashmir *	45.00
Karnataka	56.30
Kerala	100.00 for Light Work 150.00 for Hard Work
Madhya Pradesh	54.56
Maharashtra	NA
Manipur	66.00
Meghalaya *	50.00
Mizoram *	84.00

(Continued)

1	2
Nagaland *	50.00
Orissa	52.50
Punjab	82.65
Rajasthan	60.00
Sikkim	The Minimum Wages Act, 1948 yet to be extended.
Tamil Nadu	54.00
Tripura *	50.00
Uttar Pradesh	58.00
Uttaranchal	58.00
West Bengal	108.57 with meals 111.77 without meals
Andaman & Nicobar Islands *	100.00 (Andaman) 107.00 (Nicobar)
Chandigarh	100.00
Dadra & Nagar Haveli	60.00
Daman & Diu *	50.00 to 60.00
Delhi	107.10
Lakshadweep	52.00
<u>Pondicherry</u>	
(i) Pondicherry	45.00 to Rs. 119.00
(ii) Mahe Region	30.00 for light work 40.20 for hard work
(iii) Yanam Region	19.25 to Rs. 26.25
(iv) Karaikal	45.00 to Rs. 100.00
Central Sphere	90.05 to 100.48

* No provision of Variable Dearness Allowance in the State

@ The Minimum Wages also include the variable dearness allowance, wherever provided.

Source : Ministry of Labour, New Delhi.

(Concluded)

**18.2: All India Production of Milk, Eggs & Wool during
1983-84 to 2003-04**

Year	Milk (Million Tonnes)	Eggs (Billion Nos.)	Wool (Million Kgs.)
1	2	3	4
1983-84	38.8	12.8	36.1
1984-85	41.5	14.3	38.0
1985-86	44.0	16.1	39.1
1986-87	46.1	17.3	40.0
1987-88	46.7	17.8	40.1
1988-89	48.4	19.0	40.8
1989-90	51.4	20.2	41.7
1990-91	53.9	21.1	41.2
1991-92	55.7	22.0	41.6
1992-93	58.0	22.9	38.8
1993-94	60.6	24.2	39.9
1994-95	64.0	26.0	40.6
1995-96	66.2	27.2	42.4
1996-97	69.1	27.5	44.4
1997-98	72.1	28.7	45.6
1998-99	75.4	29.5	46.9
1999-2000	78.3	30.5	47.9
2000-01	80.8	36.6	48.4
2001-02	84.8	39.1	50.0
2002-03*	87.3	40.3	51.9
2003-04(A)	91.1	43.1	52.6

* Provisional. (A) - Anticipated achievement

Source : Department of Animal Husbandry and Dairying,
Ministry of Agriculture, New Delhi.

**19.1: Fish Production in India during 1950-51, 1960-61,
1970-71 and 1980-81 to 2002-03**

Year 1	Marine 2	Inland 3	(Lakh Tonnes) Total 4
1950-51	5.34	2.18	7.52
1960-61	8.80	2.80	11.60
1970-71	10.86	6.70	17.56
1980-81	15.55	8.87	24.42
1981-82	14.45	9.99	24.44
1982-83	14.27	9.40	23.67
1983-84	15.19	9.87	25.06
1984-85	16.98	11.03	28.01
1985-86	17.16	11.60	28.76
1986-87	17.13	12.29	29.42
1987-88	16.58	13.01	29.59
1988-89	18.17	13.35	31.52
1989-90	22.75	14.02	36.77
1990-91	23.00	15.36	38.36
1991-92	24.47	17.10	41.57
1992-93	25.76	17.89	43.65
1993-94	26.49	19.95	46.44
1994-95	26.92	20.97	47.89
1995-96	27.07	22.42	49.49
1996-97	29.67	23.81	53.48
1997-98	29.50	24.38	53.88
1998-99	26.96	26.02	52.98
1999-2000	28.52	28.23	56.75
2000-01	28.11	28.45	56.56
2001-02	28.30	31.26	59.56
<u>2002-03(P)</u>	<u>29.90</u>	<u>32.10</u>	<u>62.00</u>

Source : Department of Animal Husbandry and Dairying, Ministry of Agriculture,
New Delhi

19.2: State-wise Fish Production in 2002-03 (Provisional)

States/UTs	Marine	Inland	(Tonnes)
			Total
1	2	3	4
Andhra Pradesh	248495	579402	827897
Arunachal Pradesh	0	2604	2604
Assam	0	165521	165521
Bihar	0	261000	261000
Goa	72287	4247	76534
Gujarat	743638	34267	777905
Haryana	0	35182	35182
Himachal Pradesh	0	7244	7244
Jammu & Kashmir	0	19750	19750
Karnataka	180161	86263	266424
Kerala	603286	75036	678322
Madhya Pradesh	0	42168	42168
Maharashtra	386860	127236	514096
Manipur	0	16600	16600
Meghalaya	0	5372	5372
Mizoram	0	3250	3250
Nagaland	0	5500	5500
Orissa	115006	172527	287533
Punjab	0	66000	66000
Rajasthan	0	25600	25600
Sikkim	0	140	140
Tamil Nadu	371500	102000	473500
Tripura	0	29515	29515
Uttar Pradesh	0	249837	249837
West Bengal	181500	938500	1120000
A & N Islands	28228	74	28302
Chandigarh	0	84	84
D & N Haveli	0	46	46
Daman & Diu	11258	0	11258
Delhi	0	2250	2250
Lakshadweep	7496	0	7496
Pondicherry	40105	4910	45015
Chattisgarh	0	99801	99801
Uttaranchal	0	2552	2552
Jharkhand	0	45380	45380
Deep Sea Fishing Sector	0	0	0
Total	2989820	3209858	6199678

Source: Department of Animal Husbandry and Dairying, Ministry of Agriculture,
New Delhi.

20.1: Brief History of Most Intense Cyclones during 1970 to 2003

S.No.	Name of Cyclone	Date and Year	Intensity (T-Number)	Observed/ Estimated Max. Wind After Landfall	Damage
1	2	3	4	5	6
I. Over the Arabian Sea					
1	Severe Cyclonic Storm over the Arablan sea	October 19-24, 1975	NA	97 Knots 180 Kmph	85 people died in the districts of Junagarh, Jamnager and Rajkot of Gujarat state. This Cyclone caused considerable damage, estimated to be about Rs. 75 Crores.
2	Severe Cyclonic Storm over the Arablan sea	May 31 -June 5, 1976	NA	90 Knots 167 Kmph	This Cyclone caused damage to property which was estimated to be about Rs. 3 Crore. 4 Burges each. Containing Rs. 5 Lakh and 6 fishing boats were swept away. Mehasana, Bhavnagar, Kaira, Panchmahal, Rajkot and Broach districts of Gujarat State were most affected areas.
3	Severe Cyclonic Storm over the Arablan sea	November 13- 23, 1977	T- 5.5 (as per US satellite)	90 Knots 167 Kmph	Kerala and Lakshadweep were most affected areas due to this storm. People killed - 72. Houses damaged - 8400 and 620 fishing Vessels damaged in Kerala coast. Total loss was estimated to be about Rs 10 crores.
4	Gujarat Cyclone	November 5-13,1978	NA	278 Kmph	Damage to Property reported.
5	Severe Cyclonic Storm over the Arabian sea	October 28 - November 3, 1981	T - 4.0 (as per US satellite)	65 Knots 120 Kmph	Junagarh, Rajkot and Jamnagar of Gujarat state were most affected areas, Total loss of damage to property was estimated to be about Rs 52 Crores
6	Severe Cyclonic Storm over the Arabian sea	November 4-9, 1982	NA	NA	Saurastra Coast of Gujarat about 45 km east of Veraval was affected very much by this storm. 507 people died and 1.5 lakh livestock perished.
7	Severe Cyclonic Storm over the Arabian sea	November 4-9, 1982	T- 4.0	50 Knots 93 Kmph	50 fishermen were reported missing in Gujarat Coast.
8	Severe Cyclonic Storm over the Arabian sea	June 17-20, 1996	T-3.5	60 Knots 111 Kmph	19 Districts of Gujarat State were affected. 33 people died. 27964 pucca houses were destroyed. Total estimated loss was Rs.1803.52 lakh.

Continued

1	2	3	4	5	6
9	Severe Cyclonic Storm over the Arabian sea	October 23-28, 1996	T-4.0	60 Knots 111 Kmph	As the system did not cross the coast no significant damage was reported.
10	Very severe Cyclonic Storm over the Arabian sea	June 4-10, 1998	T-5.0	90 Knots 167 Kmph	Gujarat & Rajasthan states were affected. Porbander of Gujarat state was the most affected area. Loss incurred due to storm was estimated to be about Rs.1855.38 Crores in Kandla. Number of lines lost 1173 and number of persons missing 1774 in Gujarat.
11	Very severe Cyclonic Storm over the Arabian sea	May 16-22, 1999	T- 5.5	105 Knots 195 Kmph	This system caused severe damage in Kutch and Jamnagar districts of Gujarat. 453 people died. Loss of property was estimated to be about Rs. 80 crores. In Rajasthan one person died and 5104 cattle heads perished. 5133 houses were partially damaged.

II. Over the Bay of Bengal

1	Bangladesh (Chittagong)	November 12-13 1970	NA	224 Kmph	3,00,000 People died.
2	Balasore (Orissa)	October 26-31, 1971	NA	185 Kmph	10,000 people died and 1 million people rendered homeless.
3	Andhra Cyclone	November 14-20 1977	NA	259 Kmph	8547 People died. Strom surge height 5 m.
4	Sri Harikota (A.P.)	November 9-14, 1984	T-6.0	213 Kmph	604 people died.
5	Indo-Bangladesh Border	November 24-30 1988	T-6.0	213 Kmph	2000 people died. 6000 people missing in Bangladesh.
6	Kavali (A.P.)	November 1-9, 1989	T-6.5	235 Kmph	69 people died.
7	Machilipatnam (A.P.)	May 4-9, 1990	T-6.5	235 Kmph	967 people died.
8	Bangladesh (Chittagong)	April 25-30, 1991	T-6.5	235 Kmph	1,38,882 people died. 1,39,054 people injured.
9	Bangladesh (Teknaf)	April 24 - May 2 1994	T-6.0	215 Kmph	184 people killed

Continued

1	2	3	4	5	6
10	Bangladesh (Teknaf)	May 15-19, 1997	T-6.0	230 Kmhp As reported by Bangladesh Met. Office	155 people died. 9663 people injured.
11	Gopalpur Cyclone (Orissa)	October 15-19, 1999	T-5.0	170 Kmhp	198 people died. 402 persons injured.
12	Super Cyclone (Orissa)	October 25-31, 1999	T-7.0	260 Kmhp	9887 people died. 129.22 lakh people affected.
13	Very severe Cyclonic Storm over the bay of Bengal.	November 26- 30 , 2000	T- 5.5	102 Knts 189 kmph	Two states viz., Tamil Nadu and Pondicherry were mainly affected by this storm.The loss was mainly due to crop damage. Uprooting of big trees and partial damages to more than one thousand kuchha houses. 30,000, Plantain trees and 50,000 Plantain saplings got destroyed and 30,000 trees were uprooted in Tamil Nadu state. In Pondicherry two persons lost their lives. Damage to paddy crops, plantains, coconut plantation were the major losses in Pondicherry.
14	Very severe Cyclonic Storm over the bay of Bengal	December 23- 28, 2000	T- 5.0	90 Knots 167 Kmhp	Three districts of Tamil Nadu state were affected by this storm in the Ramnathanpuram district, 350 houses were damaged inThirunelveli. Houses damaged - 318. In Tutocorin houses damaged-318, Fishing boats lost 95, loss to crops - 281 hectares of paddy, 650 hectares of plaintain and 80 hectares of betal destroyed.

Note : No intence Cyclone hit the Western Cost / Bay of Bengal during 2001 & upto November, 2003..

Source : India Meteorological Department, New Delhi.

Concluded

20.2. Management and Mitigation of Cyclone : Warning Strategies and Planning

Components of Warning	Current National Status	International status vis-à-vis Gap Areas in the Indian Region
1	2	3
Three stage warning	<ul style="list-style-type: none"> * Pre cyclone-alert at the time of cyclogenesis * Cyclone Alert : 36-48 hours in advance of commencement of adverse weather * Cyclone Warning : 24 hours in advance of cyclone landfall 	<ul style="list-style-type: none"> * At par with the international status. However, further improvement can be done particularly in the direction of disaster manager response to the warning. (Modifications in the National, state and district level contingency plans)
Warning language	<ul style="list-style-type: none"> * District-wise warning about winds, tidal waves, storm surge, fisheries, evacuation 	<ul style="list-style-type: none"> * Possible impact of cyclone as per Saffir-Simpson scale included for better understanding of public
Action by cyclone Managers	<ul style="list-style-type: none"> * Preparedness: State level-High Power Committee meetings. * District-level CDMC meetings at the beginning of cyclone season (in close coordination with Met. Dept.) * Mitigation: Central, state and district-level coordination with the India Met. Department at the time of disaster * Relief & Rehabilitation after the disaster 	<ul style="list-style-type: none"> * Much better coordination required particularly at the time of disaster * Better short and long term plannings are required.
Long term Planning	<ul style="list-style-type: none"> * Cyclone Shelters in several states (particularly Orissa and West Bengal) not enough in number for evacuation * Long term planning of houses, dykes, shelter belts not adequate 	<ul style="list-style-type: none"> * Dense location of Cyclone shelters of adequate specification along coastline * Bangladesh has prepared a master plan (known as BUET/BIDS plan) of cyclone shelters for their coast. (Commission of the European Communities, Brussels report (1996) on Cyclone shelters promises further improvement to this plan) * Dykes for protection against storm surge (Technology available in Japan) * Shelter belts for protection against strong winds

Continued

1	2	3
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		<ul style="list-style-type: none"> * Provision of adequate escape routes at the locations of dense habitations/major installations * Construction of Cyclone proof Houses * Mass Education Programme (we should learn lesson from Philippines which has an extensive mass education programme and has included 'disaster preparedness/mitigation in school/university curriculum) * Risk assessment and vulnerability analysis: Hazard/Risk Mapping of the coastal areas (useful at the time of evacuation) Bangladesh has prepared a detailed Hazard map at a scale 1: 1000000) * Insurance of people belongings/crop in cyclone affected areas
<p>Short-term planning</p> <ul style="list-style-type: none"> * Stock-piling of food/medicines at safer places * Radio transmitters/Power Generators/Helicopters/boats/other transports to be kept in readiness * Selection of appropriate sites for evacuation * Trains/surface transport traffic to be regulated so as to avoid the risk area * Continuous broadcast/telecast of warnings through mass media * Defence forces to be kept under full alert * Removal of road blocks/clearing of highways for providing better escape routes * Dredging of mouths of rivers to minimise the impact of storm surge * Adequate storage of drinking water/clothing * Proper planning of Health Care in the event of disaster * Provision of fool-proof telecommunication (satellite based/Ham Radiosets) 	<p>Gap areas lie in the actual execution of the plan. Countries like Philippines, USA and China have made good progress in executing short-term plans during the disaster.</p>	

Source : National Centre for Medium Range Weather Forecasting, New Delhi.

Concluded

20.3: Tropical Cyclone Observations

Components of observation	Current National Status	International status vis-à-vis gap areas in the Indian region
1	2	3
Positioning of the cyclone trough	<ul style="list-style-type: none"> * Geostationary satellites (INSAT, METEOSAT, etc) * S-Band Cyclone Detection radars (10 such radars on the east & west coasts of India) with effective range of 400 km from the coast. One S-Band Doppler Radar has been installed at Chennai. 	Cyclone Probing through Aircraft reconnaissance (Technology available in USA) Doppler Radars (a close network of such radars has been set up by USA)
Winds around the cyclone	<ul style="list-style-type: none"> * Geostationary satellites (only maximum wind estimates) using Dvorak's technique * Cloud Motion Vector Winds (INSAT derived CMVs and METEOSAT winds). * Ship data (rarely available in the vicinity of cyclone) * Coastal observations (available till the cyclone strong wind area (eye wall) has not touched the coast) <p>"Wind and pressure observations are now available from a number of ocean buoys deployed by the Department of Ocean Development (DOD) in the Bay of Bengal and the Arabian Sea"</p>	<ul style="list-style-type: none"> * Water vapour channel winds (INSAT- 2E WV channel not operational). * Special Sensor Microwave/mager (SSM/I) winds through DMSP (USA) satellite * Earth Research Satellite (ERS)-II winds * TRMM data (Megha- Tropique) * Doppler Radars * Aircraft Reconnaissance
Storm induced tidal wave (storm surge heights)	<ul style="list-style-type: none"> * Tide gauges (can record only normal tides, not sturdy to record storm surge heights) * Estimation through water marking on the walls/pillars. 	Storms surge recorders (sturdy enough to withstand storm surge force and height) (Technology available in Japan/USA)
Sea water inundation over land	Requisite high resolution topographical maps are not available in the country.	High resolution topographical/ demographical maps for inundation/evacuation purposes (through Remote sensing/aerial surveys-USA has done for its entire coastline)

Source : National Centre for Medium Range Weather Forecasting , New Delhi.

20.4: Tropical Cyclone Prediction

Components of prediction	Current National status	International status vis-à-vis gap areas in the Indian region
1	2	3
Track prediction (Most crucial-high priority component)	<ul style="list-style-type: none"> * Synoptic: Persistence * Statistical: Analogue, CLIPER models * Numericals: Regional Model (100kmx100km) (IMD, IIT Delhi) Global (150 kmx 150 km/Regional) (40x40 km Models) (NCMRWF) <p>Single model-Single run</p>	<ul style="list-style-type: none"> * Statistical-Numerical Models (Similar to National Hurricane Centre models, Miami, USA) * Numerical Cyclone Models (MMM, MM5, US Navy - COAMS, etc, high resolution numerical models (2-10 km resolution) available in USA/Japan/UK) * Multiple model-Multiple run (Ensemble/super ensembles)
Intensity Prediction	<ul style="list-style-type: none"> * Subjective (one T No. per day change in intensity as per Dvorak's method) 	High resolution cyclone models (MMM, MM5, US Navy- COAMS, etc.) are capable of predicting intensity changes.
Storm Surge Prediction	<ul style="list-style-type: none"> * Nomograms (developed by (IMD) Dynamic models (developed by IIT, Delhi). Inundation model not available. 	<ul style="list-style-type: none"> * Surge inundation models available in USA (need to be developed for India based on actual coastal topography) * Surge-river-tide interaction models

Source : National Centre for Medium Range Weather Forecasting , New Delhi.

20.5: Availability of Infrastructural/ Human Resource in India vis-à-vis International Status

Components	Current National Status	International status vis-à-vis gap areas in the Indian region
1	2	3
Computer Resources	<p>Cyber-2000 (IMD) (Capable of running only existing Regional Model available in IMD)</p> <p>Cray XMP/216 (NCMRWF) capable of running only existing coarse Global/ Regional Models available in NCMRWF)</p>	<p>High Performance Computers like IBM-SP2, SGI-SV2, Fujitsu-VPP (CPU more than 400 Gflops) which can run high resolution Cyclone models like MMM, MM5, US Navy-COANS, etc.</p>
Human Resource Development	Adequate expertise in cyclone modelling and prediction not available in the country	<p>Technological transfer and training in advanced countries like USA, Japan</p> <p>Dedicated Manpower & R & D for specific task related to cyclone prediction</p>
Instruments		Satellite earth Stations Telecommunication (Cyclone Proof) for Data reception Forecast/Warning Dissemination Hotlines connecting Forecasters with Managers

21 : Conversion Factors between Important Primary and Secondary Agricultural Commodities

Commodity	Conversion Factor
1	2
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 Kgs. Each)
1 Ton of Sacking	1.11 Tons of Raw Jute
1 Ton of Hessian Sacking etc.	6.17 Bales of Raw Jute (of 180 Kgs. Each)
	1.05 Tons of Raw Jute
	5.85 Bales of Raw Jute (of 180 Kgs. Each)
Groundnut	
Kernel to Nuts in Shell	70 Percent
Oil to Nuts in Shell	28 Percent
Oil to Kernels Crushed	40 Percent
Cake to Kernels Crushed	60 Percent
Sesamum	
Oil to Seeds Crushed	40 Percent
Cake to Seeds Crushed	60 Percent
Rapseed and Mustard	
Oil to Seeds Crushed	33 Percent
Cake to Seeds Crushed	67 Percent
Linseed	
Oil to seeds Crushed	33 Percent
Cake to Seeds Crushed	67 Percent
Castorseed	
Oil to Seeds Crushed	37 Percent
Cake to Seeds Crushed	63 Percent
Cotton Seed	
Oil to Seeds Crushed	14 to 18 Percent
Cake to Seeds Crushed	82 to 86 Percent
Coconut	
Copra to Nuts	One Ton of Copra = 6773 Nuts
Oil to Copra Crushed	62 Percent
Cake to Copra Crushed	38 Percent

(Continued)

Commodity	Conversion Factor
1	2
Nigerseed	
Oil to Seeds Crushed	28 Percent
Cake to Seeds Crushed	72 Percent
Kardi Seed	
Oil to Seeds Crushed	40 Percent
Cake to Seeds Crushed	60 Percent
Mahua Seed	
Oil to Seeds Crushed	36 Percent
Cake to Seeds Crushed	64 Percent
Neem Seed	
Oil to Kernels Crushed	45 to 50 Percent
Cake to Kernels Crushed	50 to 55 Percent
Soyabean Seed	
Oil to Soyabean Seed Crushed	18 Percent
Meal to Soyabean Seed Crushed	73 Percent
Hull from Soyabean Seed Crushed	8 Percent
Wastage from Soyabean Seed Crushed	1 Percent
Sugar	
Gur from Cane Crushed	10 Percent
Crystal Sugar from Gur Refined (Gur Refineries)	62.4 Percent
Crystal Sugar from Cane Crushed (Cane Factories)	9.97 Percent
Khandasari Sugar from Gur Refined	37.5 Percent
Molasses from Cane Crushed	3.5 Percent
Cane - Thrash* from Cane Harvested	10.0 Percent
Lac	
Seed Lac	66.0 Percent of Stick Lac
Shell Lac	57.4 Percent of Stick, or 87.0 Percent of Seed Lac
Cashewnut	
Cashew Kernel	25 Percent of Cashewnuts

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

(Concluded)

Appendix I

Explanatory Notes

Poverty Line

1. The Task Force, constituted by the Planning Commission, defined the poverty line as per capita consumption expenditure level, which meets the average per capita daily calorie requirement of 2400 calorie in rural areas and 2100 calorie in urban areas alongwith a minimum of non-food expenditure.
2. The poverty line in 1999-2000 at all-India level as estimated by the Planning Commission is Rs. 327.56 per capita per month for rural areas and Rs. 454.11 per capita per month for urban areas.

Advance Estimates

3. The estimates of area, production and yield rates for 2003-04 are “advance estimates” as on 05.08.2004 and are based on deliberations held in weekly inter-disciplinary meetings of Crop Weather Watch Group, availability of water in important reservoirs in the country, availability/supply of important inputs including credit to farmers community, feed back received from states etc. These estimates are “advance” in the sense that these have been prepared in **advance** of availability of results of CCE (Crop Cutting Experiments) and are subject to revision as more precise information flows from states to DES.

Yield

4. Yield rate is defined as production per unit of area. However, yield rates of various crops given in this publication may not exactly tally with the ratio of production to the corresponding area because figures of area and production of various crops have been generally rounded off in ten thousands.

Growth Rates

Continued

5. The growth rates of area, production and yield of various crops given in the tables contained in Chapter 6 of this publication depict percentage growth based on index numbers of corresponding parameter. The methodology adopted for working out index numbers is given in Appendix II.

Principal Crops

6. Principal Crops as referred to in this publication include only those crops which are covered for preparation of index numbers. The details of these crops are given in Appendix II.

Estimation Procedure for Non-Availability Of Data For 2003-04

7. The index numbers of area, production and yield rate for 2003-04 (from where growth rates have been derived) are based on advance estimates of principal crops as on 05.08.2004. However, there are a number of 'non-forecast' crops such as plantation crops, cardamom and spices for which no advance estimates for 2003-04 (or for that matter any year) are prepared. In such cases, the estimates of area and production for 2002-03 are repeated for 2003-04 for the purpose of index numbers.

Nine Oilseeds

8. Wherever "Nine oilseeds" is mentioned in this publication, it includes Castorseed, Groundnut, Linseed, Nigerseed, Safflower, Sesamum, Soyabean, Sunflower and Rapeseed & Mustard.

Total Oilseeds

9. Total oilseeds include cottonseed and coconut besides nine oilseeds mentioned in the above paragraph.

Net Availability of Foodgrains

Continued

10. The Net availability of foodgrains is defined as

$$\text{NAF} = \text{GP} - \text{SFW} - e + i + s$$

Where NAF = Net availability of Foodgrains

 GP = Gross Production of Foodgrains

 SFW = Seed, feed and wastages of Foodgrains

 e = Exports of Foodgrains

 i = Imports of Foodgrains

 s = Change in Stocks of Foodgrains

To work out per capita net availability of foodgrains in terms of kg. per year, NAF is divided by the estimated population for a particular year. When this is further divided by the number of days in a year i.e. 365 days, it gives net availability of foodgrains per day.

Concluded

Appendix II

METHODOLOGY ON INDEX NUMBERS

1. Base Year

The Directorate of Economics and Statistics (DES) had adopted Triennium Ending (T.E.) 1981-82 as base year for the purpose of Index Numbers of Area, Production and Yield in Agriculture until 1999-2000. In 2000-2001, it decided to adopt T.E. 1993-94 as a way of updating the base to a recent year and keep it in harmony with the other series of indices such as Index of Industrial Production, Whole Sale Price Index and the series of National Accounts Statistics. Since area and production in agriculture can fluctuate a great deal from year to year, the average of area/ production over the TE 1993-94 is taken for determining the base level of area/ production against which the area/ production of the succeeding years is to be compared.

In a chapter of this publication, growth rates of various crops worked out from index numbers based on the above mentioned two base years have been separately given.

2. Weighting Diagram

The weight of a commodity for the production index is taken as the average production of the commodity in the TE 1993-94 and the national average price of the commodity during 1993-94 as obtained from the National Accounts Statistics. This has been done to fix the base production at its average level by eliminating the cyclical variation and to evaluate the production with the same price for all states in view of wide variations observed in the state prices. A similar exercise was done for preparing weighting diagram for TE 1981-82.

3. Coverage

The index numbers of agriculture commodities cover 46 crops under
Continued

two main groups and eight sub-groups. The crops and groups are listed below:

(a) Foodgrains

- i. Cereals - Rice, wheat, jowar, bajra, maize, ragi, barley and small millets. (Crops except rice and wheat constitute the sub-group coarse cereals).
- ii. Pulses - Gram, tur and other pulses.

(b) Non-foodgrains

- i. Oilseeds - Groundnut, sesamum, rapeseed & mustard, linseed, castorseed, safflower, nigerseed, soyabean, sunflower, coconut and cottonseed (the oilseed crops except coconut and cottonseed constitute 9 oilseeds)
- ii. Fibers
 - Cotton, jute, mesta and sannhemp.
(jute and mesta constitute a sub-group)
- iii. Plantation crops
 - Tea, coffee and rubber.
- iv. Condiments and spices
 - Pepper, ginger, garlic, chillies, turmeric, arecanut, coriander and cardamom.
- v. Fruits & vegetables
 - Potato, onion, banana, cashewnut, tapioca and sweet potato.
- vi. Other crops
 - Sugarcane, tobacco and guarseed

4. Methodology

Let

- a_{ijk} - the area under i^{th} crop in the j^{th} year in k^{th} state.
 a_{iok} - the area under i^{th} crop in base year period in k^{th} state.
 p_{ijk} - production of i^{th} crop in the j^{th} year in k^{th} state.

Continued

For the state k and for the year j, individual crop indices are calculated as below :

$$(a) \text{ Index number of area} = \frac{a_{ijk}}{a_{iok}} \times 100 = IA_{ijk}$$

$$(b) \text{ Index number of production} = \frac{P_{ijk}}{P_{iok}} \times 100 = IP_{ijk}$$

$$(c) \text{ Index number of yield} = \frac{IP_{ijk}}{IA_{ijk}} \times 100$$

For any sub-group G of commodities, the indices for the year j and state k are calculated as below:

$$a) \text{ Index number of area} = \frac{\sum a_{ijk}}{\sum a_{iok}} \times 100$$

The state index is obtained by including all the items of the state in sub-group G where the summation is taken over items in G.

$$b) \text{ Index number of production} = \frac{\sum p_{ijk} p_{io}}{\sum p_{iok} p_{io}} \times 100$$

$$c) \text{ Index number of yield} = \frac{\text{Index number of production}}{\text{Index number of area}} \times 100$$

(Concluded)

Appendix III

Glossary of English, Botanical and Hindi Names of Important Crops

Crop/ Group of Crops	English	Botanical	Hindi
1	2	3	4
Cereals	Bara(Bulrush or spiked millet)	<i>Pennisetum Typhoides</i>	Bajra
	Barley	<i>Hordeum vulgare</i>	Jau
	Barnyard millet	<i>Echinochloa frumentacea</i>	Kutki
	Cholam(Great Millet)	<i>Sorghum bicolor</i>	Jowar
	Common Millet	<i>Panicum milliaceum</i>	Cheena
	Little Millet	<i>Penicum milliare</i>	Sawan
	Italian foxtail Millet	<i>Setaria italica</i>	Kangani
	Kodo Millet	<i>Paspalum scrobiculatum</i>	Koden
	Maize or Indian corn	<i>Zea mays</i>	Makka
	Oat	<i>Avena sativa</i>	Jaie
	Ragi	<i>Eleusine coracana</i>	Mundua
	Paddy (Rice)	<i>Oryza sativa</i>	Dhan (Chawal)
	Wheat	<i>Triticum acstivum</i>	Gehun
Pulses and Beans	Black gram	<i>Vignamungo</i>	Urad
	Chickpea (Bengal gram)	<i>Cicer arietinum</i>	Chana
	Chicking vetch	<i>Lathyrus sativus</i>	Khesari
	Cluster Bean	<i>Cyamopiss tetragonoloba</i>	Guar
	Cowpea	<i>Vigna unguiculata</i>	Lobia
	Green Gram	<i>Vigna radiata</i>	Mung
	Horsegram	<i>Dilichos biflorus</i>	Kulthi
	Kidney bean	<i>Vigna aconitifolia</i>	Moth
	Lentil	<i>Lens culimaris</i>	Masur
	Peas	<i>Pisum sativum vararvense</i>	Matar
	Red gram (Pigion pea)	<i>Cajanus cajan</i>	Tur,Arhar
	Soyabean	<i>Glucine max</i>	Soyabean
Sugar Fruits	Sugarcane	<i>Saccharum Officinarum</i>	Ganna
	Apple	<i>Malus sylvespris</i>	Seb
	Apricot	<i>Prunus armeniaca</i>	Khoobani
	Cashewnut	<i>Anaardium occidentale</i>	Kaju
	Fig	<i>Ficus carica</i>	Anjeer
	Grape	<i>Vitis vinifera</i>	Angur
	Guvava	<i>Psidium guajava</i>	Amrood
	Jackfruit	<i>Artocarpur heterophyllus</i>	Katahal
	Lemon	<i>Citrus Lemon</i>	Nimbu
	Lime	<i>Citrus Urantifolia</i>	Bara Nimbu
	Litchi	<i>Litchi chinensis</i>	Litchi
	Mango	<i>Magnifera indica</i>	Aam
	Orange Mandar	<i>Citrus reticulata</i>	Santara, Narangi
	Papaya	<i>Carica papaya</i>	Papeeta
	Pear	<i>Pyrus communis</i>	Naspati
	Pineapple	<i>Ananas comosus</i>	Ananas
	Banana	<i>Musa paradisiaca</i>	Kela
	Pomegranate	<i>Punica granatum</i>	Anaar
	Sweet Orange	<i>Citrus sincensis</i>	Melta, Mosambi

(Continued)

1	2	3	4
Vegetables			
Ash gourd		Benincasa hispida	Petha
Beet		Beta vulgaris	Chukandar
Bitter gourd		Momordica charantia	Karela
Bottle gourd		Lagenaria siceraria	Lauki
Brinjal		Lolanum melongena	Baingan
Cabbage		Brassica oleracea var, Capitata	Band gobi
Carrot		Daucus carota	Gajar
Cauliflower		Brassica oleracea var Botrytis	Phul gobi
Cowpea		Vigna unguiculata	Lobia
Cucumber		Cucumis sativus	Kheera
French bean		Phaseolus vulgaris	Faras bean
Indian flat bean or sem		Dolichos lablab	Sem
Kaol Khol		Brassica oleracea var, Gongylodes	Ganth gobi
Lady's finger		Abelmoschus esculentus	Bhindi
Little gourd		Cucinia cordifolia	Kundur
Musk melon		Cucumis melo	Kharbooz
Onion		Allium cepa	Piyaz
Pointed gourd		Trichosanthes dioica	Parwal, Potal
Potato		Solanum tuberosum	Aaloo
Pumpkin		Curcurbita moschata	Sitaphal, Lal Kaddu, Kumbhra
Radish		Raphanus sativus	Muli
Round gourd of India		Citrullus vulgaris var, fistulosus	Tinda
Snap melon		Cucumis melovvar, momordica	Phoot
Snake gourd		Trichosanthes anguina	Chachinda
Tomato		Lycopersicon esen lenthum	Tamatar
Turnip		Brassica rapa	Shalgam
Water melon		Citrullus vulgaris	Tarbooz
Drugs and Narcotics			
Betal Leave			Paan
Betalnut(arecanut)		Areca catechu	Supari
Indian hemp		Cannabis sativa	Bhang
Opium		Papaver somniferum	Afeem
Tobacco		Nicotiana tabacum and Nicotiana rustica	Tambaku
Condiments and Spices			
Black pepper		Piper nigrum	Kalimirch
Cardamom, Cardamum (lesser)		Elettaria cardamomum	Chhoti Ilaichi
Chillies		Capsicum annuum	Lalmirch

(Concluded)