

FERTILISER STATISTICS

1986-87

Objectives of F.A.I.

To bring together all concerned with the production, marketing and use of fertilisers with a view to promoting a solution of industry problems and the formulation of policies and practices beneficial to the national economy;

To promote consideration and discussion of all questions that contribute to sound agricultural practices and to the economic development of fertiliser industries;

To institute, prosecute, develop, and economic research regarding production of fertilisers, increasing soil fertility

To improve practices within the production and distribution of fertilisers;

To make the cultivators aware of the proper use;

To encourage the use of more advanced

To seek to obtain more efficient

FERTILISER STATISTICS 1986-87



THE FERTILISER ASSOCIATION OF INDIA
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PREFACE

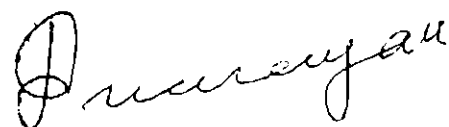
The object of the publication of *Fertiliser Statistics* every year is to keep those engaged in fertiliser industry and others dealing with or interested in fertilisers and agricultural development informed of relevant data pertaining to India in particular and the world in general. The current issue relating to the year 1986-87 is the 32nd edition.

Unlike in previous years, the book is presented in three parts this year. First part deals with Indian fertiliser statistics; part two with Indian agricultural and allied statistics and part three with world fertiliser and agricultural statistics. Write-up about our Active Members and a list of Associate and Overseas Associate Members, normally contained in part four of earlier editions, is being published as a Directory of FAI Members separately. Consequently, part four is being deleted from this issue of *Fertiliser Statistics*.

The data presented in this publication have been drawn from different sources and this has been made possible by the cooperation of multifarious organisations, official and non-official, like Departments of Agriculture & Fertilisers (in the Ministry of Agriculture); Department of Petroleum (in the Ministry of Petroleum and Natural Gas); Ministry of Railways; The Directorate General of Technical Development; Planning Commission; Rural Electrification Corporation; Central Electricity Authority; Food Corporation of India; Reserve Bank of India; National Bank for Agriculture and Rural Development; National Cooperative Development Corporation; State Departments of Agriculture; Minerals and Metals Trading Corporation of India Ltd.; Rajasthan State Mines & Minerals Ltd.; M.P. State Mining Corporation Ltd.; Pyrites, Phosphates and Chemicals Ltd.; West Bengal Mineral Development and Trading Corporation Ltd; Fertiliser manufacturers, importers, marketers and many others. The assistance rendered by them is gratefully acknowledged.

As in the past, the information in respect of world Fertiliser and Agricultural Statistics is based on data contained in the relevant publications of FAO, Rome.

Members of the Association and those interested in the future development of Indian agriculture will, I am sure, continue to find this publication useful.



PRATAP NARAYAN

Executive Director

The Fertiliser Association of India

New Delhi
November 16, 1987

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PART I

FERTILISER STATISTICS

1.00. CAPACITY FOR FERTILISER PRODUCTION

1.01. LICENSED CAPACITY AND PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS FACTORYWISE AND PRODUCTWISE (As on October 1, 1987)

('000 tonnes)

Name of the factory/location	Sector	Feed stock (NH ₃ tpd)	Date of commissioning	End-product			Nutrient capacity (production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P ₂ O ₅
I. IN PRODUCTION								
A. N & NP/NPK Fertilisers								
1. CFL, Vizag (A.P.)	Pvt.	Naphtha (357)	Urea Dec. 1967 UAP/NPK-Feb. 1968 Exp. UAP/NPK- April 1976	Urea NP/NPKs: 28-28-0 14-35-14	— 251.0 96.5	— 259.4 14.6	84.0 (74.6)	104.0 (77.6)
2. Cyanides & Chemicals Co., Surat, (Gujarat)	Pvt.	External NH ₃ (—)	December 1982	A/S	2.0	1.5	0.4 (0.3)	— (—)
3. E.I.D.—Parry (India) Ennore (T.N.)	Pvt.	Naphtha (66)	March 1963 January 1968	APS 16-20-0 A/S @@	51.5 38.8	70.9 —	8.0 (11.2)	10.3 (14.2)
4. EACT, Alwaye (Kerala)	Pub.	Naphtha (355)	June 1947 Stage I— Dec. 1960 Stage II— Nov. 1962 Stage III— Nov. 1967 Stage IV— Nov. 1971	A/S APS: 20-20-0 } 16-20-0 }	198.0 148.5	107.6 139.8	78.0 (51.7)	29.7 (28.0)
5. FACT, Ambalamedu, Cochin-I (Kerala)	Pub.	Naphtha (600)	April 1973	A/CI Urea	24.8 330.0	6.3 229.7	— 152.0 (105.7)	— (—)

6. FACT, Ambalamedu, Cochin-II (Kerala)	Pub.	External NH ₃ (-)	December 1976		NPNPKs:								
			17-17-17	485.0	—	81.0	114.0						
			28-28-0					(80.2)	(90.4)				
			18-46-0							21.3	—	—	
20-20-0	302.9	—	—										
7. FCI:	Pub.												
a) Gorakhpur U.P.)		Naphtla (450)	January 1969 Expn-April 1976	Urea	284.9	182.8	131.0	—					
							(84.1)	(-)					
b) Sindri (Bihar)		Fuel oil & Naphtha (900)	Old Unit A/S—Oct. 1951 ASN and Urea— Oct. 1959 Modernisation— A/S and Urea— Oct. 1979	@ A/S Urea	320.0 330.0	264.4 55.0	219.0 —	— —					
							(135.3)	(-)					
c) Ramagundam (A.P.)		Coal (900)	November 1980	Urea	495.0	246.1	228.0	—					
							(113.2)	(-)					
d) Talcher (Orissa)		Coal (900)	November 1980	Urea	495.0	128.0	228.0	—					
							(58.9)	(-)					
8. GNFC, Bharuch (Gujarat)	Pvt.	Fuel oil (1350)	July 1982	Urea	594.0	617.2	273.0	—					
							(283.9)	(-)					
9. GSFC, Baroda (Gujarat)	Pvt.	Naphtha & Natural gas (500+450)	Phase-I—May 1967	Urea	364.0	375.4	236.0	50.0					
			Phase-II—June 1969						A/S	240.0	255.7	—	—
			Phase III—Aug. 1974						DAP	1.8.0	152.4	—	—
							(252.2)	(69.7)					
10. GSFC, Polymer Unit, Vadodara (Gujarat)	Pvt.	External NH ₃ (-)	June 1981	A/S	9.0	5.6	1.85	—					
							(1.2)	(-)					
11. GSFC, Sikka (Gujarat)	Pvt.	External NH ₃ (-)	Trial run—Dec. 1986	DAP	328.0	—	59.0	150.0					
							(-)	(-)					
12. Hari Fertilisers Varanasi (U.P.)	Pvt.	Coke (40)	November 1958	A, CI	41.0	12.4	10.0	—					
							(3.1)	(-)					

1.00. CAPACITY FOR FERTILISER PRODUCTION

1.01. LICENSED CAPACITY AND PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS FACTORYWISE AND PRODUCTWISE (As on October 1, 1987)

('000 tonnes)

Name of the factory/location	Sector	Feed stock (NH ₃ tpd)	Date of commissioning	End-product			Nutrient capacity (production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P ₂ O ₅
I. IN PRODUCTION								
A. N & NP/NPK Fertilisers								
1. CFL, Vizag (A.P.)	Pvt.	Naphtha (357)	Urea Dec. 1967 UAP/NPK-Feb. 1968 Exp. UAP/NPK- April 1976	Urea NP/NPKs: 28-28-0 14-35-14	— — 251.0 96.5	— — 259.4 14.6	84.0 (74.6)	104.0 (77.6)
2. Cyanides & Chemicals Co., Surat, (Gujarat)	Pvt.	External NH ₃ (—)	December 1982	A/S	2.0	1.5	0.4 (0.3)	— (—)
3. E.I.D.—Parry (India) Ennore (T.N.)	Pvt.	Naphtha (66)	March 1963 January 1968	APS 16-20-0 A/S @@	51.5 38.8	70.9 —	8.0 (11.2)	10.3 (14.2)
4. EACT, Alwaye (Kerala)	Pub.	Naphtha (355)	June 1947 Stage I— Dec. 1960 Stage II— Nov. 1962 Stage III— Nov. 1967 Stage IV— Nov. 1971	A/S APS: 20-20-0 } 16-20-0 } A/CI	198.0 — 148.5 — 24.8	107.6 — 139.8 — 6.3	78.0 (51.7)	29.7 (28.0)
5. FACT, Ambalamedu, Cochin-I (Kerala)	Pub.	Naphtha (600)	April 1973	Urea	330.0	229.7	152.0 (105.7)	— (—)

6. FACT, Ambalamedu, Cochin-II (Kerala)	Pub.	External NH ₃ (-)	December 1976		NPNPKs:				
			17-17-17	}	-	81.0	114.0		
			28-28-0		485.0	(80.2)	(90.4)		
			18-46-0		21.3	-	-		
20-20-0	302.9	-	-						
7. FCI:	Pub.								
a) Gorakhpur U.P.)		Naphtha (450)	January 1969 Expn-April 1976	Urea	284.9	182.8	131.0 (84.1)	- (-)	
b) Sindri (Bihar)		Fuel oil & Naphtha (900)	Old Unit	@A/S	320.0	264.4	219.0 (135.3)	- (-)	
			ASN and Urea— Oct. 1959 Modernisation— A/S and Urea— Oct. 1979	Urea	330.0	55.0	-	-	
c) Ramagundam (A.P.)		Coal (900)	November 1980	Urea	495.0	246.1	228.0 (113.2)	- (-)	
d) Talcher (Orissa)		Coal (900)	November 1980	Urea	495.0	128.0	228.0 (58.9)	- (-)	
8. GNFC, Bharuch (Gujarat)	Pvt.	Fuel oil (1350)	July 1982	Urea	594.0	617.2	273.0 (283.5)	- (-)	
9. GSFC, Baroda (Gujarat)	Pvt.	Naphtha & Natural gas (500 + 450)	Phase-I—May 1967	}	Urea	364.0	375.4	236.0 (252.2)	50.0 (69.7)
			Phase-II—June 1969		A/S	240.0	255.7	-	-
			Phase III—Aug. 1974		DAP	1.8.0	152.4	-	-
10. GSFC, Polymer Unit, Vadodara (Gujarat)	Pvt.	External NH ₃ (-)	June 1981	A/S	9.0	5.6	1.85 (1.2)	- (-)	
11. GSFC, Sikka (Gujarat)	Pvt.	External NH ₃ (-)	Trial run—Dec. 1986	DAP	328.0	-	59.0 (-)	150.0 (-)	
12. Hari Fertilisers Varanasi (U.P.)	Pvt.	Coke (40)	November 1958	A/CI	41.0	12.4	10.0 (3.1)	- (-)	

1.00. CAPACITY FOR FERTILISER PRODUCTION

1.01. LICENSED CAPACITY AND PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS FACTORYWISE AND PRODUCTWISE (As on October 1, 1987)

('000 tonnes)

Name of the factory/location	Sector	Feed stock (NH ₃ tpd)	Date of commissioning	End-product			Nutrient capacity (production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P ₂ O ₅
I. IN PRODUCTION								
A. N & NP/NPK Fertilisers								
1. CFL, Vizag (A.P.)	Pvt.	Naphtha (357)	Urea Dec. 1967 UAP/NPK-Feb. 1968 Exp. UAP/NPK- April 1976	Urea NP/NPKs: 28-28-0 14-35-14	— — 251.0 96.5	— — 259.4 14.6	84.0 (74.6)	104.0 (77.6)
2. Cyanides & Chemicals Co., Surat, (Gujarat)	Pvt.	External NH ₃ (—)	December 1982	A/S	2.0	1.5	0.4 (0.3)	— (—)
3. E.I.D.—Parry (India) Ennore (T.N.)	Pvt.	Naphtha (66)	March 1963 January 1968	APS 16-20-0 A/S @@	51.5 38.8	70.9 —	8.0 (11.2)	10.3 (14.2)
4. EACT, Alwaye (Kerala)	Pub.	Naphtha (355)	June 1947 Stage I— Dec. 1960 Stage II— Nov. 1962 Stage III— Nov. 1967 Stage IV— Nov. 1971	A/S APS: 20-20-0 } 16-20-0 } A/CI	198.0 — 148.5 — 24.8	107.6 — 139.8 — 6.3	78.0 (51.7)	29.7 (28.0)
5. FACT, Ambalamedu, Cochin-I (Kerala)	Pub.	Naphtha (600)	April 1973	Urea	330.0	229.7	152.0 (105.7)	— (—)

6. FACT, Ambalamedu, Cochin-II (Kerala)	Pub.	External NH ₃ (-)	December 1976	NPNPKs:							
				17-17-17	}	485.0	—	81.0 (80.2)	114.0 (90.4)		
				28-28-0							
				18-46-0						21.3	—
20-20-0	302.9	—	—								
7. FCI:	Pub.										
a) Gorakhpur U.P.)		Naphtha (450)	January 1969 Expn-April 1976	Urea	284.9	182.8	131.0 (84.1)	— (-)			
b) Sindri (Bihar)		Fuel oil & Naphtha (900)	Old Unit A/S—Oct. 1951 ASN and Urea— Oct. 1959 Modernisation— A/S and Urea— Oct. 1979	@A/S Urea	320.0 330.0	264.4 55.0	219.0 — (135.3)	— — (-)			
c) Ramagundam (A.P.)		Coal (900)	November 1980	Urea	495.0	246.1	228.0 (113.2)	— (-)			
d) Talcher (Orissa)		Coal (900)	November 1980	Urea	495.0	128.0	228.0 (58.9)	— (-)			
8. GNFC, Bharuch (Gujarat)	Pvt.	Fuel oil (1350)	July 1982	Urea	594.0	617.2	273.0 (283.9)	— (-)			
9. GSFC, Baroda (Gujarat)	Pvt.	Naphtha & Natural gas (500 + 450)	Phase-I—May 1967	}	Urea	364.0	375.4	236.0 (252.2)	50.0 (69.7)		
			Phase-II—June 1969		A/S			240.0	255.7	—	—
			Phase III—Aug. 1974		DAP			1.8.0	152.4	—	—
10. GSFC, Polymer Unit, Vadodara (Gujarat)	Pvt.	External NH ₃ (-)	June 1981	A/S	9.0	5.6	1.85 (1.2)	— (-)			
11. GSFC, Sikka (Gujarat)	Pvt.	External NH ₃ (-)	Trial run—Dec. 1986	DAP	328.0	—	59.0 (-)	150.0 (-)			
12. Hari Fertilisers Varanasi (U.P.)	Pvt.	Coke (40)	November 1958	A/CI	41.0	12.4	10.0 (3.1)	— (-)			

**1.01. LICENSED CAPACITY & PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS
FACTORYWISE & PRODUCTWISE
(As on Oct. 1, 1987) (Continued)**

('000 tonnes)

Name of the factory/location	Sector	Feed stock (NH ₃ 'pd.)	Date of commissioning	End-product			Nutrient capacity (Production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P ₂ O ₅
13. HFCL --	Pub.							
a) Barauni (Bihar)		Naphtha (600)	November 1976	Urea	330.0	133.6	152.0 (61.5)	— (—)
b) Durgapur (W.B.)		Naphth (600)	October 1974	Urea	330.0	110.4	152.0 (50.8)	— (—)
c) Namrup I & II (Assam)		Natural gas (200+600)	January 1969 Expn-Oct. 1976	Urea A/S	330.0 100.0	184.3 30.7	172.0 (91.1)	— (—)
d) Namrup III (Assam)		Natural gas (600)	October 1987 (Old urea plant of Namrup-I scrapped)	Urea	385.0	1.8	177.0 (0.8)	— (—)
14. Hindustan Lever, Haldia (West Bengal)	Pvt.	External NH ₃ (—)	January 1986	DAP	154.0	94.1	28.0 (16.9)	71.0 (43.3)
15. IEL-Kanpur (U.P.)	Pvt.	Naphtha (830+415)	December 1969 and March 1970 Expn-Sept. 1981	Urea	675.0	583.2	310.0 (268.3)	— (—)
16. IFFCO	Co-op.							
a) Kandla } b) Kalol } (Gujarat)		Natural gas and associated gas (910)	January 1975 } November 1974 } Expn.— } September 1981 }	Urea NP/NPKs. 10-26-26 } 12-32-16 } 18-46-0 }	392.0 800.0	402.0 259.9 382.4 331.2	320.0 (316.4)	309.0 (342.3)
c) Phulpur, U.P.)		Naphtha (900)	March 1981	Urea	495.0	483.0	228.0 (222.2)	— (—)

17.	Kothari Industrial Corpn., Manali (T.N.)	Pvt.	External NH ₃ (—)	May 1979	A/CI	20.5	—	5.0 (—)	— (—)
18.	KRIBHCO, Hazira (2 plants) (III+IV) (Gujarat)	Co-op.	Associated gas from Bombay High (1350×2)	Plants I & II— March 1986	Urea	1452.0	1259.6	668.0 (579.4)	— (—)
19.	MFL, Manali (T.N.)	Pub.	Naphtha (750)	November 1971 III Stream-Oct. 1976	Urea NP/NPKs: 17-17-17 } 14-28-14 } 24-24-0 } 18-46-0 }	292.0 540.0	123.4 572.3 21.2 — —	176.0 (157.0)	112.0 (103.2)
20.	MCFL Mangalore (Karnataka)	Pvt.	Naphtha (660) External NH ₃ (—)	March 1976 Expn.-Dec. 1986	Urea DAP	340.0 138.0	308.3 29.3	181.0 (147.1)	63.0 (13.5)
21.	NFL	Pub.							
	a) Bhatinda, (Punjab)		Fuel oil (900)	Oct. 1979	Urea	511.0	368.2	235.0 (169.4)	— (—)
	b) Nangal I & II (Punjab)		Power & Fuel oil (300+900)	February 1961 Expn.-Nov. 1978	CAN (25%N) Urea	320.0 330.0	228.6 293.0	232.0 (191.9)	— (—)
	c) Panipat (Haryana)		Fuel oil (900)	September 1979	Urea	511.0	412.8	235.0 (189.9)	— (—)
22.	NLC, Neyveli (T.N.)	Pub.	Fuel oil (285)	March 1966 (Lignite) Switched over to fuel oil in August 1979	Urea	152.0	128.1	70.0 (58.9)	— (—)
23.	Paradeep Phosphates, Paradeep (Orissa) (I & II)	Pub.	External NH ₃ (—)	August 1986	DAP	720.0	422.8	130.0 (76.1)	331.0 194.5
24.	Punjab National Fertilisers & Chemicals, Naya Nangal (Punjab)	Pvt.	External NH ₃ (—)	January 1985	A/CI	66.0	25.2	16.5 (6.3)	— (—)

**1.01. LICENSED CAPACITY & PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS
FACTORYWISE & PRODUCTWISE
(As on Oct. 1, 1987) (Continued)**

Name of the factory/location	Sector	Feed stock (NH ₃ tpd.)	Date of commissioning	End-product			Nutrient capacity (Production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P ₂ O ₅
25. RCFL:	Pub.							
a) Thal Vaishet (Maharashtra) (2 plants) (I & II)		Associated gas from Bombay High 1350 X 2)	Plant-I, April 1985 Plant-II, July 1985	Urea Urea	742.5 } 742.5 }	1041.8	683.0 (479.2)	— (—)
b) Trombay I-IV (Maharashtra)		-do- (350)	October 1965 November 1965 Debottle-July 1976 4th Stage Expansion- April 1978 Switch over to natural gas in 1979	Urea Nitro- phosphate 15-15-15 Ammonium Nitrate phosphate	99.0 100.0 } 300.0 20.7-20.7-0	100.0 } 264.6 } 298.0 }	165.0 (147.4)	120.0 (101.4)
c) Tromba V (Maharashtra)		-do- (900)	Expn.-July 1982	Urea	330.0	334.1	152.0 (153.7)	— (—)
26. SAIL:	Pub.							
a) Bhilai (M.P.)		COG (—)	January 1955 } 1st Expn.-Dec. 1959 } IInd Expn.-June 83 }	A/S	22.6	27.5	6.7 (5.7)	— (—)
b) Bokaro (Bihar)		COG (—)	Oct. 1972 } 1st Expn.-Nov. 73 } IInd Expn.-March 77 }	A/S	36.3	22.0	7.5 (4.5)	— (—)
c) Durgapur (W.B.)		COG (—)	April 1960	A/S	21.2	6.0	4.4 (1.2)	— (—)
d) IISCO, Burnpur- Kulti (W.B.)		COG (—)	1947	A/S	23.0	3.1	4.7 (1.6)	— (—)

e)	Rourkela (Orissa)		COG (-)	March 1967	A/S	28.2	10.0	5.8 (2.1)	- (-)
f)	Rourkela (Orissa) (Fertiliser plant)		COG & Naphtha (450)	November 1962 Expn.-Aug. 1969 II Naphtha Reformer 1978-79	CAN (25% N)	480.0	160.9	120.0 (40.2)	- (-)
27.	SFC, Kota (Rajasthan)	Pvt.	Naphtha (600)	February 1969 Expn.-December 1974	Urea	330.0	320.0	152.0 (147.2)	- (-)
28.	SPIC-Tuticorin (T.N.)	Pvt.	Naphtha (1100)	June 1975 Expn. I-April 1977 Expn. II-March 1983	Urea NP/NPKs: 18-46-0 10-26-26 } 15-15-15 } 28-28-0 }	512.0 150.0 160.0	601.7 323.0 -	293.0 (334.9)	143.0 (148.6)
29.	TISCO-Jamshedpur (Bihar)	Pvt.	COG (-)	1933	A/S	23.1	15.3	4.8 (3.2)	- (-)
30.	Tuticorin Alkali Chemicals & Fertilisers, Tuticorin (T.N.)	Pvt.	External NH ₃ (-)	July 1982	A/CI	66.0	48.4	16.5 (12.1)	- (-)
31.	ZACL-San Coale (Goa)	Pvt.	Naphtha (600)	May 1973 March 1975	Urea NP/NPKs: 28-28-0 } 19-19-19 } 14-35-14 }	340.0 150.0	326.6 172.3 }	198.0 (215.0)	111.0 (114.7)
			External NH ₃ (-)	Expn.-December 1984	18-46-0	150.0	178.2 }		
B. Ammonia									
1.	Deepak Fertilisers & Petrochemical Corpn.+ Taloja (Maharashtra)	Pvt.	Associated gas from Bombay High (272)	December 1983	NH ₃	90.0	94.2	74.0 (77.5)	- (-)
			P ₂ O ₅ through NP/NPKs		NP/NPKs	-	-	-	1718.0 (1340.9)
			Straight phosphatic fertilisers (vide Table 1.02)		SSP/TSP	-	-	-	752.3 (321.6)

**1.01. LICENSED CAPACITY AND PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS
FACTORYWISE AND PRODUCTWISE
(As on October 1, 1987) (Continued)**

('000 tonnes)

Name of the factory/location	Sector	Feed stock (NH ₃ tpd)	Date of commissioning	End-product		Nutrient capacity (production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P_{2}O_{5}

	N		P ₂ O ₅	
	Capacity	Production	Capacity	Production
Sectorwise				
Public	4003.1	2514.1	778.6*	535.4*
Private	1883.0	1780.9	1382.7*	784.8*
Cooperative	1198.0	1118.0	309.0	342.3
I. (i) Total (capacity and production)	7084.1	5413.0	2470.3	1662.5
(ii) Capacity utilisation (per cent)		79		81

II. UNDER IMPLEMENTATION

A. N and NP/NPK Fertilisers

1. Nagarjuna Fertilisers & Chemicals, Kakinada (A.P.)	Pvt.	Naphtha (900)	I Qr. 1991	Urea	495.0	228.0	—
2. HFCL, Haldia (W.B.)	Pub.	Fuel Oil (600)	IV Qr. 1988	Urea	165.0	152.0	75.0
				Nitro-phosphate 20-20-0	375.0		
3. Godavari Fertilisers & Chemicals, Kakinada (A.P.)	Pvt.	External HH ₃ (—)	Train I-Dec. 1987 Train II-Feb. 1988	DAP	300.0	54.0	138.0
4. FACT, Alwaye (Kerala)	Pub.	Co-product caprolactum (—)	Stage-V V Qr. 1988	A/S	225.0	46.4	—

5.	SPIC-Tuticorin (Tamil Nadu) (Retrofitting)	Pvt.	External NH ₃ (—)	Dec. 1987	DAP	105.0	19.0	48.0
6.	NFL-Vijaypur, Guna (M.P.) (V Plant)	Pub.	Associated gas from Bombay High (1350)	Dec. 1987	Urea	726.0	334.0	—
7.	Indo-Gulf Fertilisers & Chemicals Corpn. Jagdshpur (Dist-Sultanpur) (U.P.) (VI Plant)	Pvt.	Associated gas from Bombay High (1350)	IV Qr. 1988	Urea	726.0	334.0	—
8.	IFFCO, Aonla (Dist. Bareilly) (U.P.) (VII Plant)	Coop.	Associated gas from Bombay High (1350)	III Qr. 1988	Urea	726.0	334.0	—
9.	Aravali Fertilisers, Bilopa (Dist. Sawai Madhopur) (Raj.) (VIII Plant)	Pvt.	Associated gas from Bombay High (1350)	I Qr. 1991	Urea	726.0	334.0	—
10.	Tata-Babralla (Dist. Badaun) (U.P.) (IX Plant)	Pvt.	Associated gas from Bombay High (1350)	III Qr. 1991	Urea	726.0	334.0	—
11.	GNFC, Bharuch (Gujarat)	Pvt.	Fuel Oil (Captive NH ₃)	III Qr. 1989	CAN (25%N) Nitrophos. (23-23-0)	142.5 } I 142.5 } J	68.0	33.0
	P ₂ O ₅ through NP/NPKs				NP/NPKs		—	294.0
	Straight phosphatic fertilisers (Vide Table 1.02)				SSP/TSP		—	164.3

Sectorwise	Public	532.4	129.1*
Capacity	Private	1371.0	329.2*
	Coop.	334.0	—
II. Total Capacity		2237.4	458.3

(Continued)

**101. LICENSED CAPACITY & PRODUCTION OF NITROGENOUS & COMPLEX FERTILISERS
FACTORYWISE & PRODUCTWISE
(As on Oct. 1, 1987) (Concluded)**

Name of the factory, location	Sector	Feed stock (NH ₃ tpd)	Date of commissioning	End-product			Nutrient capacity (Production)	
				Product	Capacity	Production 1986-87 (April- March)	N	P ₂ O ₅
III. APPROVED IN PRINCIPLE								
A. N and NP/NPK Fertilisers								
1. Apeejay Fertilisers, Shahjahanpur (Dist. Shahjahanpur) (U.P.) (X Plant)	Pvt.	Associated gas from Bombay High (1350)		Urea	726.0		334.0	—
IFCI, Korba (M.P.)	Pub.	Coal (900)		Urea	495.0		228.0†	—
2. Deepak Fertilisers & Petrochemicals Corpn. Talaja (Maharashtra)	Pvt.	Associated gas from Bombay High (Captive ammonia)	IV Quarter 1990	Ammo- nium nitrophos- phate (23-23-0)	252.5		58.0	58.0
3. Gujarat State Fertilisers Co. Ltd Baroda (Gujarat)	Pvt.	Naphtha and Natural gas (1350)†		Ammonia † (additional)	132.0		106	—
P ₂ O ₅ through NP/NPKs				NP/NPKs	—		—	58.0
Straight phosphatic fertilisers (vide Table 1.02)				SSP/TSP	—		—	127.2
			Sectorwise Capacity:	Public	—		—	—
				Private	—		500.0	185.2*
				Cooperative	—		—	—
			III. Total capacity:				500.0	185.2
			Sectorwise Capacity:	Public			4535.5	907.7*
			(I+II+III)	Private			3754.0	1897.1*
				Cooperative			1532.0	309.0
			Grand Total Capacity (I+II+III)				9821.5	3113.8

IV. UNDER CONSIDERATION

A. N & NPK Fertilisers

1. IEL, Kanpur (U.P.)	Pvt.	Natural gas (450)	Urea	247.5	114.0	—
P ₂ O ₅ through NP/NPKs			NP/NPKs	—	—	—
Straight phosphatic fertilisers (vide Table 1.02)			SSP/TSP	—	—	33.0
Sectorwise Capacity			Public		—	33.0*
			Private		114.0	—
			Cooperative		—	—
			IV. Total Capacity		114.0	33.0

- Note:** 1. Several organisations appeared to have submitted proposals to the Govt. for setting up of additional/replacement ammonia plants like, MFL, Manali (1350 tpd. NH₃), SPIC, Tuticorin (additional 900 tpd. NH₃). Details are awaited.
2. In Phase II of Nangal Modernisation Scheme, production of Nitrophosphate (22.9-22.9-0) (546 tpd) and CAN (25%N) (568 tpd) is planned.
3. Production of N excludes nitrogen meant for non-agricultural purposes.

Abbreviations:

CFL — Coromandel Fertilisers Ltd.
 FACT — Fertilisers & Chemicals Travancore Ltd.
 FCI — Fertilizer Corpn. of India Ltd.
 GNFC — Gujarat Narmada Valley Fertilizers Co. Ltd.
 GSFC — Gujarat State Fertilizers Co. Ltd.
 HFCL — Hindustan Fertilizer Corpn. Ltd.
 IFFCO — Indian Farmers Fertiliser Coop. Ltd.
 IISCO — Indian Iron & Steel Co. Ltd.
 KRIBHCO — Krishak Bharati Cooperative Ltd.
 MCFL — Mangalore Chemicals & Fertilizers Ltd.

MFL — Madras Fertilizers Ltd.
 NFL — National Fertilizers Ltd.
 NLC — Neyveli Lignite Corporation Ltd.
 RCFL — Rashtriya Chemicals & Fertilisers Ltd.
 SAIL — Steel Authority of India Ltd.
 SFC — Shriram Fertilisers & Chemicals.
 SPIC — Southern Petrochemical Industries Corpn. Ltd.
 TISCO — Tata Iron & Steel Co. Ltd.
 ZACL — Zuari Agro Chemicals Ltd.
 Pub. — Public
 Pvt. — Private
 Coop — Cooperative

(NH₃ tpd) = Ammonia capacity per day in tonnes.

() = Production during 1988-87 (April-March).

* = Includes contribution from straight phosphatic Fertilisers (details vide Table 1.02).

@ = Old Sindri Unit closed in January 1978.

† = They manufacture ammonia as intermediate, therefore, their capacity (a total of 74,000 tonnes of N) and production are not included in all India total).

N.A. = Not Available

@@ = A/S Plant not in operation, therefore, its capacity has been deleted.

† = The project has been shelved for the time being which may be revived in some future plan period. Currently its capacity is not considered.

†† = The existing ammonia capacity (950 tpd) would be gradually phased out.

**1.02(a). LICENSED CAPACITY AND PRODUCTION OF PHOSPHATIC FERTILISERS—
FACTORYWISE AND PRODUCTWISE**

(As on October 1, 1987)

('000 tonnes)

Name of the factory/location	Sector	Date of commissioning	End-product		P ₂ O ₅	
			Capacity	Production 1986-87 (April- March)	Capacity	Production 1986-87 (April- March)

I. IN PRODUCTION

(A1) Single Superphosphate (16% W.S. P₂O₅)

1. Adarsh Chemicals & Fertilisers, Udhna (Gujarat)	Pvt.	Oct. 1962 Exp. January 1983	136.0	37.1	21.8	5.9
2. Agro Chem. Punjab, Singhpura, Dera Bassi (Chandigarh)	Pvt.	May 1986	66.0	85.0	10.6	5.6
3. Andhra Fertilisers, Tadepalle (A.P.)	Pvt.	Nov. 1960	50.0	25.3	8.0	4.0
4. Andhra Sugars, Tanuku (A.P.)	Pvt.	March 1961	33.5	14.6	5.4	2.3
5. Anil Starch Products, Bhavnagar (Gujarat)	Pvt.	Ahmedabad 1947 Shifted site April 1964	33.5	3.2	5.4	0.5
6. BEC Fertilisers, Sirgitti, Bilaspur (M.P.)	Pvt.	June 1985	66.0	57.3	10.6	9.2
7. Bharat Chemicals & Fertilisers, Alwar (Rajasthan)	Pvt.	March 1980	66.0	48.1	10.6	7.7
8. Bharat Fertiliser Industries, Majiwada (Maharashtra)	Pvt.	April 1968 Expn. Feb. 1985	28.1	14.4	4.5	2.3
9. Bharat Fertiliser Industries, Kharivali (Maharashtra)	Pvt.	January 1986	66.0	55.0	10.6	8.8
10. Bihar State Superphosphate Factory, Sindri Instt. (Bihar)	Pub.	May 1958	23.5	0.3	3.8	0.05
11. Chemical Unit of Associated Industries (Assam), Chandrapur (Assam)	Pub.	August 1963 Recommissioned in 1975	33.5	7.5	5.4	1.2
12. Coimbatore Pioneer Fertiliser, Coimbatore (T.N.)	Pvt.	February 1966	40.6	19.6	6.5	3.1

13.	Dharamsi Morarji Chemical Co., Ambarnath (Maharashtra)	Pvt.	Original 1924 Exp.-I May 1973 Exp.-II January 1983 Exp.-III April 1985	300.0	219.6	48.0	35.1
14.	Dharamsi Morarji Chemicals Co., Kumhari (M.P.)	Pvt.	October 1961 Exp.-I May 1973 Exp.-II May 1980 Exp.-III April 1985	213.7	175.9	34.2	28.1
15.	Shri Durga Bansal, Faizabad (U.P.)	Pvt.	Trial run—October 1987	66.0	—	10.6	—
16.	East Coast Fertilisers & Chemicals, Kalme (Orissa)	Pvt.	August 1987	66.0	—	10.6	—
17.	EID-Parry (India), Ranipet (T.N.)	Pvt.	1906	50.0	34.1	8.0	5.5
18.	Fertilisers & Chemicals Travancore, Alwaye (Kerala)	Pub.	April 1948	44.7	14.9	7.2	2.4
19.	Gammon Fer.-Chems, Belagula (Karnataka) (Formerly Mysore Chemicals & Fertilisers)	Pvt.	Original July 1941 Renovated July 1976 Expn. September 1983	55.0	21.3	8.8	3.4
20.	Ganges Fertilisers & Chemicals, Farrukhabad (U.P.)	Pvt.	December 1985	66.0	18.6	10.6	3.0
21.	Hindustan Copper, Khetri (Rajasthan)	Pub.	October 1976	187.5 ⁺	41.6	30.0	7.3
22.	Hindustan Zinc, Debari (Rajasthan)	Pub.	October 1967	72.6	12.1	11.6	1.9
23.	Hyderabad Chemicals & Fertilizers, Maula Ali (A.P.)	Pub.	Bellampalli 1946 shifted site in 1963	41.9	0.3	6.7	0.05
24.	Indag Products, Cuddalore (T.N.) (Formerly, Premier Fertilisers)	Pvt.	Original Feb. 1963 Renovated August 1983	40.6	23.9	6.5	3.8
25.	Jayshree Chemicals & Fert., Khardah (W.B.)	Pvt.					
	a) Unit—I		December 1961 Expn.-I March 1973 Expn.-II August 1984	93.7	16.6	15.0	2.7
	b) Unit—II		November 1984	66.0	31.9	10.6	5.1
26.	Jayshree Chemicals & Fertilisers, Pataudi (Haryana)	Pvt.	October 1986	66.0	3.5	10.6	0.6
27.	Jayshree (Magarwara) Fert. & Chemicals, Magarwara (U.P.) (Formerly, Rallis India)	Pvt.	July 1984 Original plant Sept. 1952	72.0	22.1	11.5	3.5

**1 02(a). LICENSED CAPACITY AND PRODUCTION OF PHOSPHATIC FERTILISERS—
FACTORYWISE AND PRODUCTWISE**

(As on October 1, 1987) (Continued)

('000 tonnes)

Name of the factory/location	Sector	Date of commissioning	End-product		P ₂ O ₅	
			Capacity	Production 1986-87 (April- March)	Capacity	Production 1986-87 (April- March)
28. Khatan Chemicals & Fertilisers, Nimrani (M.P.)	Pvt.	May 1987	66.0	—	10.6	—
29. Kothari Industrial Corpn., Ennore (T.N.)	Pvt.	July 1962, Expn. May 1986	66.0	29.2	10.6	4.7
30. Krishna Industrial Corpn., Nidadavole (A.P.)	Pvt.	April 1964	50.8	13.5	6.1	2.2
31. Maharashtra Agro-Industries Dev. Corporation, Panvel (Maharashtra)	Pub.	March 1974	45.0	31.9	7.2	5.1
32. Mittal Fertilisers, Rae Bareilly (U.P.)	Pvt.	May 1983, Expn. Oct. 1984	66.0	48.1	10.6	7.7
33. Multitech International, Dharuhera (Haryana)	Pvt.	January 1982 Expn.- April 1986	82.5	46.8	13.2	7.5
34. Munak Chemicals, Bhatinda (Punjab)	Pvt.	July 1984	66.0	46.0	10.6	7.4
35. Oriental Carbon & Chemicals, Dharuhera (Haryana)	Pvt.	October 1984	66.0	49.5	10.6	7.9
36. Paushak, Baroda (Gujarat) (Formerly, Alambic Chemical Works)	Pvt.	1951 Closed since Dec. 1985 shifting site to Panvel	33.0	—	5.3	—
37. Phosphate Co., Rishra (W.B.)	Pvt.	1950 Expn. I Dec. 1967 Expn. II June 1973	108.0	75.1	17.3	12.0
38. Pragati Fertilisers, Vizag (A.P.)	Pvt.	October 1983	33.0	20.0	5.3	3.2
39. Rama Krishi Rasayan, Lonl Kalbhor (Maharashtra)	Pvt.	Mundhawa-1950 shifted site and Recommissioned in June 1967 Expn. April 1986	128.7	22.9	20.6	3.7

40.	Rama Fertilizers, Junagadh (Gujarat)	Pvt.	March 1984	66.0	23.1	10.6	3.7
41.	Rama Phosphates, Indore (M.P.)	Pvt.	Trial run— October 1987	66.0	—	10.6	—
42.	Rampur Distillery & Chemicals, Rampur (U.P.)	Pvt.	October 1986	66.0	9.1	10.6	1.5
43.	Ramganga Fertilisers, Gajraula (U.P.)	Pvt.	June 1986	66.0	54.8	10.6	8.8
44.	Shaw Wallace & Co., Avadi (T.N.)	Pvt.	April 1967 Expn.-Jan. 1986	} 98.1	78.2	15.7	12.5
45.	Shivalik Fertilisers, Rail Majra (Punjab)	Pvt.	October 1980 Expn.-Nov. 1982					} 132.0	61.6	21.1	9.9
46.	Shree Acids & Chemicals, Gajraula (U.P.)	Pvt.	July 1984	66.0	47.6	10.6	7.6
47.	Shriram Foods & Fertiliser Industries, (Formerly, DCM Chemical Co. Ltd.) Delhi	Pvt.	1946 Expn.-I April 1968 Expn.-II July 1984 Not manufacturing since December 1985	216.0	—	34.6	—
48.	Shrinivas Fertilisers, Jhansi (U.P.)	Pvt.	October 1986	66.0	4.4	10.6	0.7
49.	Trimurtee Fertilisers, Kanpur Dehat (U.P.)	Pvt.	June 1986	66.0	22.2	10.6	3.6
50.	Udaipur Phosphates & Fertilisers, Khemli (Rajasthan)	Pvt.	October 1983	66.0	77.3	10.6	12.4
51.	Uniakem Industries, Raisen (M.P.)	Pvt.	April 1987	66.0	—	10.6	—
52.	Varinder Agro Chemicals, Sangaera (Punjab)	Pvt.	July 1985	66.0	67.1	10.6	10.7
53.	Western Chemicals Industries, Goregaon (East) (Maharashtra)	Pvt.	July 1948 Not manufacturing since May 1984	3.4	—	0.5	—
(A1) Total SSP (53 plants) (Main Plants)				4064.9	1786.2	650.4	285.8
(A2) Single Superphosphate (16 W.S. P₂O₅)— SSI Units@							
1.	Anish Chemicals, Ahmedabad (Gujarat)	Pvt.	November 1972 Shifted site February 1977	9.0	0.3	1.4	0.05
2.	Avadh Fertilisers, Baharaich (U.P.)	Pvt.	Not available	N.A.	N.A.	N.A.	N.A.
3.	Brij Fertilisers, Shikohabad (U.P.)	Pvt.	Not available	N.A.	N.A.	N.A.	N.A.

**1 02(a). LICENSED CAPACITY AND PRODUCTION OF PHOSPHATIC FERTILISERS—
FACTORYWISE AND PRODUCTWISE**

(As on October 1, 1987) (Continued)

('000 tonnes)

Name of the factory/location	Sector	Date of commissioning	End-product		P ₂ O ₅	
			Capacity	Production 1986-87 (April- March)	Capacity	Production 1986-87 (April- March)
4. Charotar Agro Chemicals & Fertilisers Kanjari, Baroda (Gujarat)	Pvt.	May 1984	24.0	2.3	3.8	0.4
5. Dee Bee Agro Products, Nagpur (Maharashtra)	Pvt.	September 1986	21.0	1.4	3.4	0.2
6. Girraj Fertilisers & Chemicals, Shikohabad (U.P.)	Pvt.	July 1979 Expn. April 1984	18.0	2.4	2.9	0.4
7. Growmore Fertilizers, Nandesari (Gujarat) (formerly, Viraj Chemicals)	Pvt.	October 1974	2.2	0.3	0.4	0.05
8. Gujarat Superphosphate Industries, Ahmedabad (Gujarat)	Pvt.	April 1986	13.2	1.0	2.1	0.2
9. Harshvardhan Chemicals & Minerals, Antervella (M.P.)	Pvt.	October 1985	40.0	23.4	6.4	3.7
10. Kashi Urvarak, Lucknow (U.P.)	Pvt.	Not available	N.A.		N.A.	
11. Khicha Industries, Udaipur (Rajasthan)	Pvt.	June 1980	3.6	—	0.6	—
12. Liberty Pesticides & Fertilisers, Udalpur (Rajasthan)	Pvt.	February 1977 Expn.-I October 1978 Expn.-II October 1982	40.3	12.3	6.4	2.0
13. Madhuvan Chemicals & Fertilisers, Dabok (Rajasthan)	Pvt.	Original January 1977 Expn. August 1983	26.4	10.0	4.2	1.6
14. Madan Madhav Fertilisers & Chemicals, Fatehgarh (U.P.)	Pvt.	June 1984	26.3	11.6	4.2	1.9
15. Modern Agro Chems., Alwalpur, Dist. Jalandhar (Punjab)	Pvt.	October 1984	33.0	57.4	5.3	9.2
16. Natraj Organics, Muzaffarnagar (U.P.)	Pvt.	January 1983	22.5	14.2	3.6	2.3

17.	Neera Chemicals & Fertilisers, Ghaziabad (U.P.)	Pvt.	October 1986	30.0	7.2	4.8	1.2
18.	Nitin Chemicals & Fertilisers, Rukadi (Haryana)	Pvt.	July 1985	45.0	10.1	7.2	1.6
19.	Noble Fertilisers, Taloja (Maharashtra)	Pvt.	Ghatkopur April 1980 Shifted to Taloja Dec. 1983	12.0	2.8	1.9	0.4
20.	Phosphates India, Bichhadi Udaipur (Rajasthan)	Pvt.	February 1984	44.0	18.9	7.0	3.0
21.	Punjab Phosphates, Chheharta, Amritsar (Punjab)	Pvt.	June 1980 Expn. October 1984	15.0	21.6	2.4	3.5
22.	Sarvottam Fertilisers, Allahabad (U.P.)	Pvt.	Not available	N.A.	N.A.	N.A.	N.A.
23.	Shree Beharji Fert., Kanpur, Dehat (U.P.)	Pvt.	October 1985	24.0	2.8	3.8	0.4
24.	Surya Phosphate, Kodarma, Dist. Hazaribagh (Bihar)	Pvt.	November 1984	36.0	2.8	5.8	0.4
25.	Tulsi Fertilisers, Patna (Bihar)	Pvt.	April 1985	9.0	6.4	1.4	1.0
26.	Vijay Fertilisers, Ghaziabad (U.P.)	Pvt.	October 1982 Expn. February 1985	33.0	14.3	5.8	2.0
27.	H.S.B. Fertilisers, Shahpur, Dist. Hoshiarpur (Punjab)	Pvt.	May 1987	33.0	—	5.5	—

(A2)	Total SSP (27 plants) (SSI Units)			560.5	223.5	89.7	35.8
(A)	Total SSP (80 plants) (A1)+(A2)			4625.4	2009.7	740.1	321.6

(B) Triple Superphosphate

1.	Dharamsi Morarji Chemical Co., Ambarnath (Maharashtra)	Pvt.	January 1968	27.0	Nil	12.2	Nil
(B)	Total TSP			27.0	Nil	12.2	Nil

P₂O₅ (through SSP/TSP)

	Sectorwise	Capacity	Production
	Public	71.9	18.0
	Private	680.4	303.6
	Coop.	—	—
I. (i)	Total (capacity and production)	752.3	321.6
	(ii) Capacity utilisation (SSP) (per cent)		53

(Continued)

**1.02(a). LICENSED CAPACITY AND PRODUCTION OF PHOSPHATIC FERTILISERS—
FACTORYWISE AND PRODUCTIONWISE
(as on October 1, 1987) (Concluded)**

PSE

('000 tonnes)U

Name of the factory/location	Sector	Date of commissioning	End product capacity	P ₂ O ₅ capacity
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II. UNDER IMPLEMENTATION

(A) Single Superphosphate (16% w.s. P₂O₅)

1. DMCC, Amreli (Gujarat)	Pvt.	1988-89	66.0	10.6
2. Hindustan Agro Chemicals, Debari (Raj.) (Formerly, at Bichhadi)	Pvt.	April/June 1988	22.0	3.5
3. Kumar Chemicals & Fertiliser, Chenglepet, N. Arcot (T.N.)	Pvt.	1987-88	66.0	10.6
4. Munak Chemicals, Bhatinda (Punjab)	Pvt.	1987-88	66.0	10.6
5. Paushak, Panchav (Guj.)	Pvt.	April/June 1988	33.0	5.3
6. Madhuban Chemicals & Fertilisers, Dabok (Raj.)	Pvt.	April/June 1988	39.6	6.3
7. Podar Chemicals & Fertilisers, Jalgaon (Maha.)	Pvt.	April/June 1988	66.0	10.6
8. Pratap Fertilizers & Chemicals, Manawala, Amritsar (Punjab)	Pvt.	April/June 1988	66.0	10.6
9. Punjab State Cooperative Marketing Federation, Sangrur (Punjab)	Pub.	1987-88	66.0	10.6
10. Punjab Sulphur Products, Hoshiarpur (Punjab)	Pvt.	January/March 1988	66.0	10.6
11. Punjab National Fertilisers & Chemicals, Naya Nangal (Punjab)	Pvt.	1988-89	66.0	10.6
12. Pyrites, Phosphates & Chemicals, Amjhore (Bihar)	Pub.	1988-89	206.2	33.0
13. Mahadeo Fertilisers, Fatehpur (U.P.)	Pvt.	March 1988	66.0	10.6
14. Sundarban Fertilisers, Sundarban (W.B.)	Pvt.	1987-88	66.0	10.6
15. Development Corpn. of Vidarbha, Gunjkheda Pulgaon (Maha.)	Pub.	April/June 1988	66.0	10.6

(A) Total SSP 1026.8 164.3

Statewise Capacity		Public	338.2	54.1
		Private	688.6	110.2
		Cooperative	—	—

II. Total Capacity 1026.8 164.3

3. Sen and Singh Associates, Bharatpur (Raj.)	Pvt.	1988-89	66.0	10.6
4. Shyam Kumar Srivastava, Jhabua (M.P.)	Pvt.	1989-89	66.0	10.6
5. Amresh R. Patil, Dhulia (Maha.)	Pvt.	1989-90	68.0	10.6
6. A.L. Prasad, Khammam (A.P.)	Pvt.	1989-90	66.0	10.6
7. International Ore & Fertiliser, Warangal (A.P.)	Pvt.	1989-90	66.0	10.6
8. G.B. Patil & S.S. Patil, Gulbarga (Karnataka)	Pvt.	1989-90	66.0	10.6
9. Himalaya Phosphates, Purnea (Bihar)	Pvt.	1989-90	6.00	10.6
10. Ranjan Chemicals, Begusarai (Bihar)	Pvt.	1989-90	66.0	10.6
11. Vivek Fertilisers, Kamrup (Assam)	Pvt.	1989-90	66.0	10.6
12. Bimalendu Nath-Kanpur Dehat (U.P.)	Pvt.	1989-90	66.0	10.6

(A) Total SSP 792.0 127.2

Sectorwise Capacity: Public — —
Private 792.0 127.2
Cooperative — —

III Total Capacity 792.0 127.2

Sectorwise Capacity: Public — 126.0
(I+II+III) Private — 917.8
Cooperative — —

Grand Total (I+II+III) Capacity — 1043.8

IV. UNDER CONSUMPTION

(A) Single Superphosphate (16% w.e. P₂O₅)

1. Pyrites, Phosphates & Chemicals, Saladipura (Raj.) Public 1989-90 206.2 33.0

(A) Total SSP: 206.2 33.0

Sectorwise Capacity: Public 206.2 33.0
Private — —
Cooperative — —

IV. Total Capacity — 33.0

N.A. = Not available.

Note: The capacity of M/s. FCI, Sindri (R) (Bihar) (15000 tpy P₂O₅), M/s. Chammdi Chemicals, Murirabad (Karnataka) (6500 tpy P₂O₅) and M/s. Orissa Fertilisers & Chemicals, Rourkela (Orissa) (7,600 tpy P₂O₅) have been excluded from the above listing due to long term closure.

+ The P₂O₅ capacity of HCL, Khetri has been readjusted from 90 to 30 thousand tpy w.e.f. 1-4-1986. 30 thousand tonnes P₂O₅ is equivalent to 187.5 thousand tonnes of SSP per annum.

@ The capacity of SSP units is according to the communication received from them.

**1.02 (b). STATEWISE NUMBER AND CAPACITY OF SSP PLANTS IN PRODUCTION WITH
SHARE TO TOTAL P₂O₅ CAPACITY**

(As on 1-10-87)

(000 tonnes)

Zone/State	Main plants				SSI units			Total			@ Total P ₂ O ₅ capacity through SSP/TSP & NP/NPKs (11)	Per cent share of P ₂ O ₅ capacity through SSP to total P ₂ O ₅ capacity (12) = (10/11)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (3+6)	(10) = (4+7)		
East	5	390.7	62.5	2	45.0	7.2	37	435.7	69.7	471.8	14.8	
Assam	1	33.5	5.4	—	—	—	1	33.5	5.4	5.4	100.0	
Bihar	1	23.5	3.8	2	45.0	7.2	3	68.5	11.0	11.0	100.0	
Orissa	1	66.0	10.6	—	—	—	1	66.0	10.6	341.8	3.1	
West Bengal	2	267.7	42.8	—	—	—	2	267.7	42.8	113.6	37.7	
North	17	1360.5	217.7	14	279.8	44.8	31	1,640.3	262.5	262.5	100.0	
Haryana	3	214.5	34.3	1	45.0	7.2	4	259.5	41.5	41.5	100.0	
Punjab	4	330.0	52.8	3	81.0	13.0	7	411.0	65.8	65.8	100.0	
Uttar Pradesh	9	600.0	96.0	10	151.8	24.6	19	753.8	120.6	120.6	100.0	
Delhi	1	216.0*	34.6*	—	—	—	1	216.0	34.6	34.6	100.0	
South	12	604.2	96.7	—	—	—	12	604.2	96.7	612.9	14.4	
Andhra Pradesh	5	209.2	33.5	—	—	—	5	209.2	33.5	137.6	24.3	
Karnataka	1	55.0	8.8	—	—	—	1	55.0	8.8	71.8	12.3	
Kerala	1	44.7	7.2	—	—	—	1	44.7	7.2	1.09	4.8	
Tamil Nadu	5	295.3	47.2	—	—	—	5	295.3	47.2	312.6	15.1	

West	19	1,709.5	273.5	11	235.7	37.7	30	1,945.2	311.2	1,063.1	29.3
Gujarat	4	268.5	43.0	4	48.4	7.7	8	316.9	50.7	559.8	9.1
Madhya Pradesh	5	477.7	76.4	1	40.0	6.4	6	517.7	82.8	82.8	100.0
Maharashtra	6	571.2	91.4	2	33.0	5.3	8	604.2	96.7	228.5	42.3
Rajasthan	4	392.1	62.7	4	114.3	18.3	8	506.4	81.0	81.0	100.0
Goa	—	—	—	—	—	—	—	—	—	111.0	—
All India	53	4,064.9	650.4 [87.9]	27	560.5	89.7 [12.1]	80	4,625.4	740.1 [100.0]	2,470.3	30.0

* =Not in operation.

@=Vide table 1.06.

† =of these, capacity in respect of 4 units is not available.

Main plants=Licences issued by the Directorate General Technical Development, Ministry of Industry,
Government of India, New Delhi.

SSI units =Letters of Registration issued by the Directorate of Industry of the respective State Governments.

[] =Share of main and SSI capacity to total SSP capacity (horizontal).

**1.03. SHARE OF FERTILISER CAPACITY UNDER VARIOUS STAGES OF IMPLEMENTATION
NUTRIENTWISE AND SECTORWISE**

(as on October 1, 1987)

('000 tonnes of nutrient per annum)

Category/Sector	N				P ₂ O ₅			
	Public Sector	Private Sector	Co-ope. Sector	Total	Public Sector	Private Sector	Co-ope. Sector	Total
1. Factories in production	4003.1 (56.5)	1883.0 (26.6)	1198.0 (16.9)	7024.1 (100.0)	778.6 (31.5)	1382.7 (56.0)	309.0 (12.5)	2470.3 (100.0)
2. Projects under implementation	532.4 (23.8)	1371.0 (61.3)	334.0 (14.9)	2237.4 (100.0)	129.1 (28.2)	329.2 (71.8)	— (—)	458.3 (100.0)
3. Projects approved in principle	— (—)	500.0 (100.0)	— (—)	500.0 (100.0)	— (—)	185.2 (100.0)	— (—)	185.2 (100.0)
4. Projects under consideration	— (—)	114.0 (100.0)	— (—)	114.0 (100.0)	33.0 (100.0)	— (—)	— (—)	33.0 (100.0)
Total	4535.5 (45.7)	3268.0 (8.9)	15.2 (15.4)	9935.5 (100.0)	940.7 (29.9)	1897.1 (60.3)	309.0 (9.8)	3146.8 (100.0)

Note: 1. Figures in brackets indicate the percentage contribution through the sector to the total (horizontal).

2. Capacity of ammonia and phosphoric acid manufactured as intermediate are not included in the above totals.

1.04 CAPACITY OF NITROGEN (N) ACCORDING TO SOURCES OF FEEDSTOCK
(as on October 1, 1987)

('000 tonnes of nutrient N per annum)

Category/feedstock	Natural Gas	Naphtha	Fuel oil	Coal	Coke/Coke oven gas	Electric power	Ammonia (External supply)	Total
1. Factories in production	2648.9 (37.4)	2259.0@ (31.9)	1174.0@ (16.6)	456.0 (6.4)	76.0@ (1.1)	80.0* (1.1)	390.2 (5.5)	7084.1 (100.0)
2. Projects under implementation	1670.0 (74.6)	274.4 (12.3)	220.0 (9.8)	— (—)	— (—)	— (—)	73.0 (3.3)	2237.4 (100.0)
3. Projects approved in principle	500.0 (100.0)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	500.0 (100.0)
4. Projects under consideration	114.0 (100.0)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	114.0 (100.0)
Total	4932.9 (49.6)	2533.4 (25.5)	1394.0 (14.0)	456.0 (4.6)	76.0 (0.8)	80.0 (0.8)	463.2 (4.7)	9935.5† (100.0)

Note: 1. Capacity of ammonia planned to be marketed as such is not included in the totals.

2. Figures in brackets indicate the percentage contribution through fertiliser feedstock to the total (horizontal).

@ In the case of (i) FCL Sindri (219,000 tpy N) it is assumed: 209,000 tpy capacity on fuel oil; 10,000 tpy capacity on naphtha,

(ii) SAIL, Rourkela (120,000 tpy N) it is assumed: 99,000 tpy capacity on naphtha; 21,000 tpy capacity on COG,

(iii) RCFL, Trombay (165,000 tpy N) it is assumed: 90,000 tpy capacity on associated gas from Bombay High, 75,000 tpy capacity on external supply of ammonia,

(iv) GSFC, Baroda 236,000 tpy N) it is assumed: 144,000 tpy capacity on naphtha; 92,000 tpy capacity on natural gas.

* Only a part of the capacity is based on power and the rest is on fuel oil.

† This is likely to materialise by 1991-92.

1.05. CAPACITY OF NITROGEN (N) ACCORDING TO PROCESS DEPLOYED IN THE MANUFACTURE OF AMMONIA (NH₃) BASED ON VARIOUS FEEDSTOCKS

(As on October 1, 1987)

('000 tonnes N per annum)

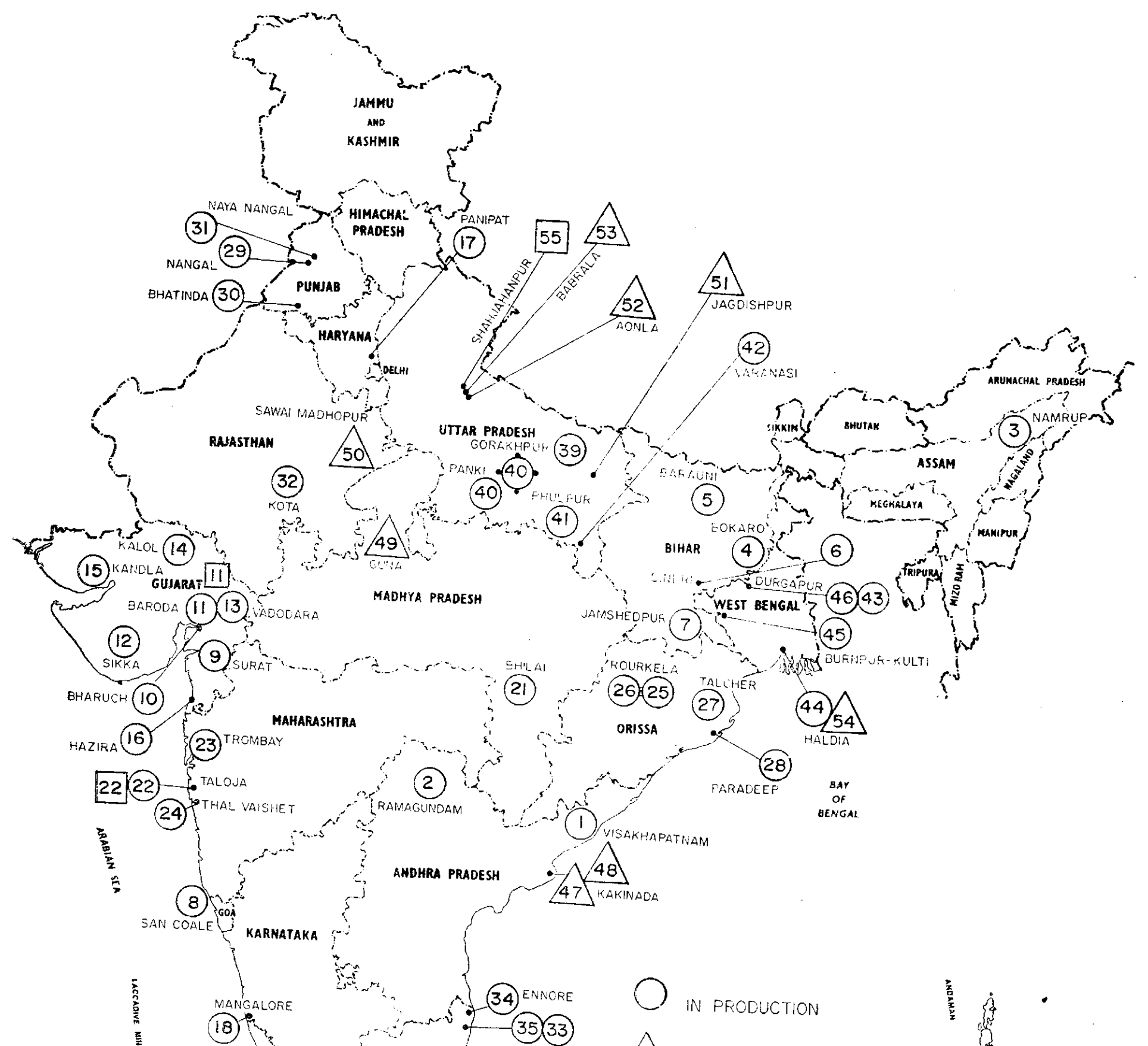
Category/process	Partial Oxidation				Steam reforming			Electrolysis	Coal gasification with partial oxidation	Coke gasification	Grand Total
	Naphtha	Fuel Oil	Natural associated gas	Total	Naphtha	Natural associated gas	Total				
1. Factories in production	225	1,184	90	1,499 (22.8)	2,157	2,357	4,514 (68.8)	80 (1.2)	456 (7.0)	10 (0.2)	9,559 (100.0)
2. Projects under implementation	228	220	—	448 (21.2)	—	1,670	1,670 (78.8)	— (—)	— (—)	— (—)	2,118 (100.0)
3. Projects approved in principle	—	—	—	— (—)	108	392	500 (100.0)	— (—)	— (—)	— (—)	500 (100.0)
4. Projects under consideration	—	—	—	— (—)	—	114	114 (100.0)	— (—)	— (—)	— (—)	114 (100.0)
Total	453	1,404	90	1,947 (20.9)	2,265	4,533	6,798 (73.2)	80 (0.9)	456 (4.9)	10 (0.1)	9,291 (100.0)

Note: This excludes 'N' capacity of factories/projects based on external supply of NH₃, therefore, all-India total does not tally with those given in Table 1.01 under different categories of implementation.

() — Figures in brackets indicate the percentage contribution through the process deployed to the total 'N' (horizontal).

() — Figures in brackets indicate the percentage contribution through...
 ▲ — ... deployed to the total 'N' (horizontal)

LIST OF LOCATION OF NITROGENOUS AND COMPLEX FERTILISER FACTORIES (N & NP/NPK) (As on 1-10-1987)



105 CAPACITY OF NITROGEN (N) ACCORDING TO PROCESS DEPLOYED IN THE MANUFACTURE

1.07. CAPACITY AND FINANCIAL OUTLAY OF FERTILISER INDUSTRY
(As on 1-10-1987)

Year/Period/Sector	Capacity during the period* ('000 tonnes)		Financial outlay during the period (Rs. crore)			
			Sector			
	N	P ₂ O ₅	Public	Coop.	Private	Total
I. In Production						
Before 1947	5 (5)	63 (63)	0.8 (0.8)	— (—)	2.5 (2.5)	3.3 (3.3)
At the end of 1947	5 (10)	5 (68)	5.5 (6.3)	— (—)	0.4 (2.9)	5.9 (9.2)
At the end of 1950	— (10)	34 (102)	0.4 (6.7)	— (—)	1.2 (4.1)	1.6 (10.8)
1951-56 (I Plan)	90 (100)	4 (106)	53.7 (60.4)	— (—)	0.4 (4.5)	54.1 (64.9)
1956-61 (II Plan)	21 (121)	22 (128)	4.5 (64.9)	— (—)	5.3 (9.8)	9.8 (74.7)
1961-66 (III Plan)	349 (474)	146 (274)	113.8 (178.7)	— (—)	8.2 (18.0)	122.0 (196.7)
1966-69 (Annual Plans)	385 (855)	160 (434)	94.5 (273.2)	— (—)	119.3 (137.3)	213.8 (410.5)
1969-74 (IV Plan)	1092 (1947)	147 (581)	193.1 (466.3)	— (—)	179.5 (316.8)	372.6 (783.1)
1974-79 (V Plan)	1327 (3274)	536 (1117)	639.2 (1105.5)	97.6 (97.6)	237.0 (553.8)	973.8 (1756.9)
1979-80	628 (3902)	167 (1284)	735.7 (1841.2)	— (97.6)	3.5 (557.3)	739.2 (2496.1)
1980-85 (VI Plan)			708.8 (2550.0)	233.5 (331.1)	670.8 (1228.1)	1613.1 (4109.2)
—Public	612 } 275 } 452 }	1339 } (5241) } 311 }	—6 } 133 } (1722)			438
—Coop.						
—Private						
1985-86 (VII Plan) (as on 1-10-85)	683 (5924)	52 (1774)	957.0 (3507.0)	— (331.1)	34.4 (1262.5)	991.4 (5100.6)

(Continued)

1.07. CAPACITY AND FINANCIAL OUTLAY OF FERTILISER INDUSTRY (Concluded)
(As on 1-10-1987)

Year/Period/Sector	Capacity during the period* ('000 tonnes)		Financial outlay during the period (Rs. crore)			
	N	P ₂ O ₅	Sector			
			Public	Coop.	Private	Total
1986-87			450.0	927.0	120.0	1497.0
as on 1-10-86			(3957.0)	(1258.1)	(1382.5)	(6597.6)
- Public	114	331				514
- Coop.	668	—				(2318)
- Private	56	213				(6762)
						838
1987-88			283.3	—	139.6	422.9
(as on 1-10-87)			(4240.3)	(1258.1)	(1522.1)	(7020.5)
- Public	199	210				153
- Coop.	42	49				(2471)
- Private	87	314				(7084)
						322
II. Under Implementation			1186.4	696.0	3275.0	5157.4
			(5426.7)	(1954.1)	(4797.1)	(12177.9)
- Public	532	129				458
- Coop.	334	—				(2929)
- Private	1371	329				(9321)
						2237
III. Approved in Principle			—	—	1234.0	1234.0
			(5426.7)	(1954.1)	(6031.1)	(13411.9)
- Public	—	—				185
- Coop.	—	—				(3114)
- Private	500	—				(9821)
						500
IV. Under Consideration			44.7	—	145.0	189.7
			(5471.4)	(1954.1)	(6176.1)	(13601.8)
- Public	—	33				33
- Coop.	—	—				(3147)
- Private	114	—				(9835)
						114

*=For details on capacity, see tables 1.01, 1.02, 1.03 and 1.11

- Note:**
1. Calendar year can be taken as to broadly conform to the financial year. Say 1951-1951-52 and so on.
 2. Figures in brackets represent cumulative totals.
 3. Rupee was devalued on 6-6-66. Projects commissioned before that date are on cost related to pre-devaluation and thereafter, to the post devaluation of rupee.
 4. Proportionate cost of by-product ammonium sulphate capacities is not included here as this is not separately available.

1.08. CAPACITY OF PHOSPHATE (P₂O₅) ACCORDING TO RAW MATERIALS
(As on Oct. 1, 1987)

('000 tonnes of nutrient P₂O₅ per annum)

Category/type of fertilisers	Raw materials						Total
	Sulphur	Pyrites	Smelter Gases	Sulphuric acid (external supply)	Nitric acid	Phosphoric acid (external supply)	
I. Factories in production							
1. SSP	586.4 + 26.0@	—	41.6	112.1	—	—	740.1 + 26.0@
2. TSP	12.2	—	—	—	—	—	12.2
3. NP/NPK fertilisers	493.0	—	—	—	120.0	1105.0	1718.0
4. Others	42.0@	—	—	—	—	—	42.0@
I. Total	1091.6 + 68.0@ (44.2)	(—)	(1.7)	(4.5)	(4.9)	(44.7)	2470.3 + 68.0@ (100.0)
II. Projects under implementation							
1. SSP	131.3	33.0	—	—	—	—	164.3
2. NP/NPK fertilisers	—	—	—	—	75.0	219.0	294.0
II. Total	131.3 (28.6)	33.0 (7.2)	(—)	(—)	(75.0) (16.4)	(219.0) (47.8)	458.3 (100.0)
III. Projects approved in principle							
1. SSP	127.2	—	—	—	—	—	127.2
2. NP/NPK fertilisers	—	—	—	—	—	58.0	58.0
III. Total	127.2 (68.7)	(—)	(—)	(—)	(—)	(58.0) (31.3)	185.2 (100.0)
IV. Projects under consideration							
1. SSP	—	33.0	—	—	—	—	33.0
2. NP/NPK fertilisers	—	—	—	—	—	—	—
IV. Total	(—)	(33.0) (100.0)	(—)	(—)	(—)	(—)	(33.0) (100.0)
Total (I + II + III)							
1. SSP	844.9 + 26.0@	66.0	41.6	112.1	—	—	1064.6 + 26.0@
2. TSP	12.2	—	—	—	—	—	12.2
3. NP/NPK fertilisers	493.0	—	—	—	195.0	1382.0	2070.0
4. Others	42.0@	—	—	—	—	—	42.0@
Grand Total: (I + II + III + IV)	1350.1 + 68.0@ (42.9)	66.0 (2.1)	(4.16) (1.3)	(112.1) (3.6)	(195.0) (6.2)	(1382.0) (43.9)	3146.8 + 68.0@ (100.0)

@ Phosphoric acid is planned to be marketed as such, therefore, not included in the totals.

Note: 1. Rockphosphate is the basic raw material which is processed with H₂SO₄, HNO₃ and H₃PO₄ to release P₂O₅ in the desired concentration. Factories based on imported H₃PO₄ do not require either rock or sulphur as such to manufacture phosphatic fertilisers.

2. Figures in brackets indicate the percentage contribution through a fertiliser feedstock to the total (Horizontal).

**1.09. LICENSED CAPACITY OF FERTILISERS—
1950 to**

Sl. No.	Installed as on	Nitrogenous fertilisers					NP/NPK	
		AS 20.6% N	ASN 26% N	Urea 46% N	ACI 25% N	CAN 25% N 20.5% ¹ N	Nitro- phos- phate 20-20-0	18-46-0
								← MATE
1.	December 31, 1950	81.0						
2.	December 31, 1951	430.8						
3.	December 31, 1952	430.8						
4.	December 31, 1953	430.8						
5.	December 31, 1954	430.8						
6.	December 31, 1955	430.8						
7.	December 31, 1956	430.8						
8.	December 31, 1957	430.8						
9.	December 31, 1958	430.8						
10.	December 31, 1959	446.8	148.0	24.0	40.0	—	—	—
11.	December 31, 1960	491.9	148.0	24.0	48.8	—	—	—
12.	December 31, 1961	499.8	150.4	24.0	48.8	395.1 ¹	—	—
13.	August 31, 1962	502.1	140.2	24.0	48.8	394.2 ¹	—	—
14.	July 31, 1963	536.0	140.2	24.0	48.8	699.3 ¹	—	—
15.	September 30, 1964	536.0	140.2	23.5	48.8	685.0 ¹	—	—
16.	September 30, 1965	536.0	140.2	23.5	48.8	685.4 ¹	—	—
17.	September 30, 1966	662.2	121.9	276.5	65.6	685.4 ¹	330.0	—
18.	September 30, 1967	691.5	121.9	376.5	65.6	[320.0] 290.0 ¹	330.0	108.0
19.	September 30, 1968	978.1	121.9	627.3	65.6	[320.0] 585.4 ¹	270.0	108.0
20.	September 30, 1969	978.1	121.9	1,131.3	65.6	800.0	270.0	108.0
21.	September 30, 1970	1,013.1	121.9	1,581.3	65.6	800.0	180.0	108.0
22.	September 30, 1971	1,005.8	121.9	1,791.3	65.6	800.0	180.0	108.0

**MATERIALWISE AND NUTRIENTWISE
1987**

('000 tonnes)

fertilisers				Phosphatic fertilisers			Total		Sl. No.
16-20-0 & 20-20-0 ²	19-19-19 28-28-0 14-35-14 ⁸	17-17-17 & 14-28-14	10-26-26 12-32-16 15-15-15 ⁴	Pelofos 18% P ₂ O ₅	SSP 16% P ₂ O ₅	TSP 46% P ₂ O ₅	N	P ₂ O ₅	
					128.0		16.7	20.5	1.
					173.0		88.7	27.7	2.
					198.0		88.7	31.7	3.
					216.0		88.7	31.7	4.
					216.0		88.7	34.6	5.
					270.0		88.7	43.2	6.
					270.0		88.7	49.6	7.
					310.0		88.7	49.6	8.
					334.3		88.7	53.5	9.
	—	—	—	—	504.7	—	148.6	80.8	10.
16.5	—	—	—	—	577.1	—	162.2	95.6	11.
16.8	—	—	—	—	649.4	—	246.3	107.2	12.
16.8	—	—	—	—	649.4	—	246.3	107.2	13.
85.0	—	—	—	—	809.7	—	326.7	146.5	14.
88.5	—	—	—	—	983.6	—	324.0	175.6	15.
88.5	—	—	—	—	1,061.2	—	324.0	187.5	16.
187.8	—	—	—	—	1,131.3	—	524.9	263.6	17.
187.8	—	—	—	—	1,131.3	—	632.4	316.4	18.
186.5	260.0	—	—	—	1,327.8	27.0	904.5	431.2	19.
186.5	260.0	—	—	—	1,327.8	27.0	1,136.4	431.2	20.
232.5	260.0	—	—	—	1,337.9	27.0	1,349.3	433.5	21.
232.5	260.0	360.0	—	—	1,378.8	27.0	1,514.7	532.0	22.

(Continued)

1.09. LICENSED CAPACITY OF FERTILISERS—
1950 to

S No.	Installed as on	Nitrogenous fertilisers					NP/NPK	
		AS 20.6% N	ASN 26% N	Urea 46% N	ACI 25% N	CAN 25% N 20.5% ¹ N	Nitro- phos- phate 20-20-0	18-46-0
								← MATE
23.	September 30, 1972	933.8	50.0	1,780.4	64.8	800.0	180.0	108.0
24.	November 1, 1973	950.5	50.0	2,756.4	64.8	800.0	180.0	108.0
25.	November 1, 1974	955.8	50.0	3,172.2	64.8	800.0	180.0	108.0
26.	November 1, 1975	955.8	50.0	4,086.4	64.8	800.0	180.0	108.0
27.	November 1, 1976	945.9	50.0	4,819.0	64.8	800.0	270.0	108.0
28.	October 1, 1977	969.0	50.0	4,819.0	64.8	800.0	270.0	108.0
29.	October 1, 1978	969.0	50.0	5,149.0	64.8	800.0	555.0	108.0
30.	November 1, 1979	969.0	—	6,451.9	84.8	800.0	555.0	108.3
31.	September 1, 1980	969.0	—	7,525.0	84.8	800.0	555.0	108.0
32.	October 1, 1981	969.0	—	8,243.9	84.8	800.0	360.0 ^a	108.0
33.	October 1, 1982	1,071.2	—	9,167.9	151.8	800.0	360.0 ^a	108.0
34.	October 1, 1983	1,073.2	—	9,167.9	151.8	800.0	360.0 ^a	258.0
35.	October 1, 1984	1,073.2	—	9,167.9	151.8	800.0	360.0 ^a	258.0
36.	October 1, 1985	1,073.2	—	10,656.9	217.8	800.0	360.0 ^a	348.0
37.	October 1, 1986	1,073.2	—	12,105.4	217.8	800.0	360.0 ^a	1,283.0
38.	October 1, 1987 ^b	1,087.8	—	12,435.4	217.8	800.0	360.0 ^a	1,749.0

^a = For factorywise, projectwise details, see Tables 1.01 and 1.02.

^a = of grade 20.7-20.7-0

^b = TSP capacity of HCL, Khetri and FCI, Sindri (R) have been deleted as there are not in operation.

† = Deleted, as this capacity is not in operation since long.

MATERIALWISE AND NUTRIENTWISE

1987 (Concluded)

('000 tonnes)

fertilisers				Phosphatic fertilisers			Total		Sl. No.
16-20-0 & 20-20-0 ²	19-19-19 28-28-0 14-35-14 ³	17-17-17 & 14-28-14	10-26-26 12-32-16 15-15-15 ⁴	Pelofos 18% P ₂ O ₅	SSP 16% P ₂ O ₅	TSP 46% P ₂ O ₅	N	P ₂ O ₅	

RIAL →

{ 51.5 171.5 ²	260.0	360.0	—	—	1,249.8	27.0	1,471.2	502.6	23.
{ 51.5 171.5 ²	360.0	360.0	—	45.0	1,399.8	27.0	1,935.5	534.2	24.
{ 51.5 171.5 ²	260.0	360.0	375.5	45.0	1,431.2	27.0	2,162.1	666.2	25.
{ 51.5 171.5 ²	410.6	360.0	375.5	45.0	1,420.6	27.0	2,625.1	737.6	26.
{ 51.5 171.5 ²	{ 401.6 96.5 ³	445.0	{ 503.5 32.0	45.0	1,444.8	227.0	3,014.1	927.5	27.
{ 51.5 181.0 ²	{ 401.0 96.5 ³	920.0	{ 503.5 32.0	45.0	1,451.4	567.0	3,068.8	1,192.6	28.
{ 51.5 181.0 ²	{ 401.0 96.5 ³	920.0	{ 503.5 32.0	45.0	1,474.7	567.0	3,295.8	1,278.5	29.
{ 51.5 181.0 ²	{ 401.0 96.5 ³	920.0	{ 503.5 32.0	45.0	1,539.4	567.0	3,901.8	1,309.5	30.
{ 51.5 181.0 ²	{ 401.0 96.5 ³	920.0	{ 503.5 32.0	45.0	1,634.4	567.0	4,357.8	1,333.8	31.
{ 51.5 148.5 ²	{ 401.0 96.5 ³	920.0	{ 800.0 300.0 ¹	45.0	1,836.9	567.0	4,735.8	1,386.1	32.
{ 51.5 148.5 ²	{ 401.0 96.5 ³	920.0	{ 800.0 300.0 ¹	45.0	1,869.1	567.0	5,178.5	5,511.7	33.
{ 51.5 148.5 ²	{ 401.0 96.5 ³	920.0	{ 800.0 300.0 ⁴	45.0	2,074.5	567.0	5,201.3	1,622.7	34.
{ 51.5 148.5 ²	{ 401.0 96.5 ²	920.0	{ 800.0 300.0 ¹	45.0	2,416.6	567.0	5,201.3	1,631.6	35.
{ 51.5 148.5 ²	{ 401.0 96.5 ³	1,185.0	{ 800.0 300.0	†	3,038.4	567.0	5,923.5	1,773.7	36.
{ 51.5 148.5 ²	{ 401.0 96.5 ³	1,005.0	{ 800.0 300.0 ¹	†	3,811.2	567.0	6,762.2	2,318.0	37.
{ 51.5 148.5 ²	{ 401.0 96.5 ³	1,005.0	{ 800.0 300.0 ¹	†	4,625.4	27.0 ^b	7,084.1	2,470.3	38.

**1.10. ALL-INDIA CAPACITY, PRODUCTION AND CAPACITY UTILISATIONS OF FERTILISER INDUSTRY
1980-81 to 1986-87 (April-March)**

Year	N			P ₂ O ₅		
	Capacity*	Production	Capacity Utilisation (%)	Capacity*	Production	Capacity Utilisation (%)
	----- '000 tonnes -----			----- '000 tonnes -----		
1980-81	4,586.0	2,163.9	53	1,330.0	841.5	65
1981-82	4,719.0	3,143.3	67	1,408.0	949.7	69
1982-83	5,174.0	3,429.7	67	1,492.0	983.7	69
1983-84	5,200.0	3,491.5	67	1,614.3	1,064.1	70
1984-85	5,592.0	3,917.3	74	1,767.6	1,317.8	86
1985-86	6,695.0	4,322.9	72	1,952.5	1,430.1	85
1986-87	6,880.0	5,412.2	79	2,214.1	1,661.9	81

* As at the end of the year viz., 31st March.

Note: Capacity utilisation has been worked out after taking into account the dates of commissioning of new plants/expansions/closures/trial run production to work out effective capacity and production.

1.11. CAPACITY OF N AND P₂O₅ ANTICIPATED DURING 1987-88 TO 1991-92
(situation as at the end of the year)

Year	('000 tonnes)							
	Public		Private		Cooperative		Total	
	N	P ₂ O ₅	N	P ₂ O ₅	N	P ₂ O ₅	N	P ₂ O ₅
1985-86 ¹	(3,669.0)	(658.0)	(1,870.0)	(1,034.5)	(1,156.0)	(260.0)	(6,695.0)	(1,952.5)
1986-87 ¹	<u>177.0</u> (3,846.0)	<u>119.0</u> (777.0)	<u>-34.0</u> (1,836.0)	<u>127.5</u> (1,162.0)	<u>42.0</u> (1,198.0)	<u>49.0</u> (309.0)	<u>185.0</u> (6,880.0)	<u>295.5</u> (2,248.0)
	55.9%	34.6%	25.7%	51.7%	17.4%	13.7%	100.0%	100.0%
1987-88	<u>486.9</u> (4,332.0)	<u>10.6</u> (787.6)	<u>125.0</u> (1,961.0)	<u>460.9</u> (1,620.9)	<u>—</u> (1,198.0)	<u>—</u> (309.0)	<u>611.0</u> (7,491.0)	<u>471.5</u> (2,719.5)
1988-89	<u>198.5</u> (4,530.5)	<u>118.6</u> (906.2)	<u>334.0</u> (2,295.0)	<u>99.9</u> (1,722.8)	<u>334.0</u> (1,532.0)	<u>—</u> (309.0)	<u>866.5</u> (8,357.5)	<u>218.5</u> (2,938.0)
1989-90	<u>—</u> (4,530.5)	<u>33.0</u> (939.2)	<u>68.0</u> (2,363.0)	<u>117.8</u> (1,840.6)	<u>—</u> (1,532.0)	<u>—</u> (309.0)	<u>68.0</u> (8,425.5)	<u>150.0</u> (3,088.8)
	53.8%	30.4%	78.1%	59.6%	18.2%	10.0%	100.0%	100.0%
1990-91	<u>—</u> (4,530.5)	<u>—</u> (939.2)	<u>620.0</u> (2,983.0)	<u>58.0</u> (1,898.6)	<u>—</u> (1,532.0)	<u>—</u> (309.0)	<u>620.0</u> (9,045.5)	<u>58.0</u> (3,146.8)
1991-92	<u>—</u> (4,530.5)	<u>—</u> (939.2)	<u>890.0</u> (3,873.0)	<u>—</u> (1,898.6)	<u>—</u> (1,532.0)	<u>—</u> (309.0)	<u>890.6</u> (9,935.5)	<u>—</u> (3,146.8)

¹ Actually installed by the end of the year.

()=Figures in brackets indicate the cumulative capacity at the end of each year viz by 31st March.

—=Figures underlined represent the nutrientwise sector's share to total capacity.

Note: 1. For details, see Tables 1.01 and 1.02.

2. Projects for manufacturing ammonia and phosphoric acid, to be marketed as such, have not been accounted here.

**1.12. MANUFACTURERS AND LICENSED CAPACITY OF PHOSPHORIC ACID
FOR FERTILISER MANUFACTURE
(As on October 1, 1987)**

Name of factory	Sector	Date of commissioning	Capacity of acid as P ₂ O ₅		
			Per annum (000 tonnes)	Per day (tonnes)	
I. IN PRODUCTION					
1. Albright, Morarji & Pandit Ambarnath (Maha.)	Private	January 1968	17.4	58	
2. Coromandel Fertilisers, Vizag (A.P.)	Private	February 1968 Expn. April 1976	104.0	325	
3. EID-Parry (India), Ennore (T.N.)	Private	March 1963	10.3	32	
4. Fertilisers & Chemicals Travancore Alwaye (Kerala)	Public	December 1960 Expn. March 1972	29.7	100 +25	
5. Fertilisers & Chemicals Travancore Ambalamedu (Cochin Phase II) (Kerala)	Public	December 1976	114.0	360	
6. Fertilizer Corpn. of India, Sindri (Bihar) (Rationalisation)	Public	April 1979	119.0*	360*	
7. Gujarat State Fertilisers Co. Baroda (Gujarat)	Private	May 1967	54.0	165	
8. Hindustan Copper, Khetri (Rajasthan)	Public	October 1976	69.0*	210*	
9. Hindustan Lever, Haldia (West Bengal)	Private	October 1979	42.0	140	
10. Hindustan Zinc, Debari (Rajasthan)	Public	February 1979	26.0	87	
11. Rashtriya Chemicals & Fertilisers Trombay (Maha)	Public	Acid Plant June 1975	33.0	100	
12. Southern Petrochemical Industries Corpn., Tuticorin (Tamil Nadu)	Private	July 1976	53.0	165	
	Sectorwise Capacity	{ Public Private Cooperative	202.7 280.7 —	672 885 —	
I. Total Capacity			483.4	1557	
II. UNDER IMPLEMENTATION					
1. Hindustan Fertilizer Corporation Haldia (West Bengal)	Public	Oct./Dec. 1988	33.0	100	
2. Pradeep Phos., Paradeep (Phase II) (Orissa)	Public	January/March 1988	225.0	750	
	Sectorwise Capacity	{ Public Private Cooperative	258.0 — —	850 — —	
II. Total Capacity			258.0	850	
Total Sectorwise Capacity (I+II)			{ Public Private Cooperative	460.7 280.7 —	1522 885 —
Total Capacity (I+II)			741.4	2407	

*=Not in operation, therefore, not included in total capacity.

1.13. MANUFACTURERS—LICENSED & INSTALLED CAPACITY OF SULPHURIC ACID
(As on October 1, 1987)

(tonnes)

Name of factory	Capacity	
	Licensed	Installed
I. IN PRODUCTION		
Andhra Pradesh	447,750	446,250
*1. Andhra Fertilisers Pvt. Ltd., Tadepalle	16,500	16,500
*2. Andhra Sugars Ltd., Tanuku	24,750	24,750
*3. Coromandel Fertilisers Ltd., Visakhapatnam	306,000	306,000
*4. Hyderabad Chemicals & Fertilisers, Maula Ali	18,000	16,500
+5. Hindustan Zinc Ltd., Visakhapatnam	66,000	66,000
*6. Krishna Industrial Corpn., Nidadavole	16,500	16,500
Karnataka	54,750	43,000
*7. Gammon Fert. Chems, Belagula	24,750	24,750
*8. Gwalior Rayon Silk Manf. Wvg. Co. Kumarapatnam, Dharwad	30,000	18,250
Kerala	756,200	770,290
+9. Comminco Binani Zinc Ltd., Binanipuram, Ernakulam	40,000	36,000
*10. Fertilisers & Chemicals Travancore Ltd., Udyogamandal	278,000	278,000
*11. Fertilisers & Chemicals Travancore Ltd., Ambalamedu	330,000	330,300
*12. Travancore Rayon Ltd., Rayonpuram	18,290	18,290
*13. Travancore Titanium Products Ltd., Trivandrum	90,000	108,000
Tamil Nadu	572,880	434,250
*14. Coimbatore Pioneer Fertilisers Ltd., Coimbatore	16,500	18,000
*15. EID-Parry (India) Ltd., Ennore	54,000	72,500
*16. EID-Parry (India) Ltd., Ranipet	16,500	20,400
*17. Indag Products Pvt. Ltd., Cuddalore	33,000	16,500
18. Kumar Chemicals & Ind., N. Arcot	33,000	33,000
*19. Kothari Industrial Corpn., Ennore	33,000	20,000
20. Madras Petro Chemicals, Manali	20,600	16,500
*21. Shaw Wallace & Co. Ltd., Avadi	32,000	32,000
22. South India Viscose Ltd., Coimbatore	34,500	33,600
*23. Southern Petrochemicals Industries Ltd., Tuticorin	278,000	150,000
24. Tamil Nadu Fluoride & Allied Chemicals, Cuddalore	21,780	21,780
Gujarat	646,050	591,050
*25. Adarsh Chemicals & Fert. Ltd., Udhna	56,100	56,100
26. Anil Starch Products Ltd., Ahmedabad	12,600	12,600
27. Anil Starch Products Ltd., Bhavnagar	18,000	18,000
28. Atul Products Ltd., Atul, Bulsar	21,000	33,000
29. Atic Industries, Post Atul	16,500	16,500

(Continued)

1 13 MANUFACTURERS - LICENSED & INSTALLED CAPACITY OF SULPHURIC ACID
(As on Oct. 1, 1987) (Continued)

Name of factory	Capacity	
	Licensed	Installed
(tonnes)		
1. IN PRODUCTION (Continued)		
Gujarat (Concluded)		
30. Baroda Rayon Corpn., Udhna	216,000	021,600
*31. Gujarat State Fert. Co. Ltd., Baroda	308,000	302,000
32. Indian Rayon Co. pn., Ltd. Veraval	20,625	20,625
33. Navin Fluorine Industries, Udhna	20,625	20,625
*34. Paushak Ltd., Baroda	18,000	18,000
35. Rama Industrial Chemicals, Vapi	100,000	33,000
36. Shri Sulphurics Pvt. Ltd., Bharuch	33,000	33,000
Maharashtra	706,750	718,850
37. Albright Morarji & Pandit, Ambernath	45,000	45,000
*38. Bharat Fertilisers Industries, Kharivali	33,000	33,000
39. Century Spinning & Weaving Mills, Bombay	29,000	231,000
*40. Dharamsi Morarji Chemicals Co. Ltd., Ambernath	220,000	220,000
41. Hindustan Organic Chemicals Ltd., Rasayani	43,800	43,800
42. Indian Dyestuff Industries Ltd., Kalyan, Thane	33,000	33,000
43. Indian Link Chain Mfg. Co., Thane	16,500	16,500
44. National Rayon Corpn. Kalyan, Thane	48,000	58,000
*45. Rashtriya Chemicals & Fertilisers, Trombay	90,000	99,000
46. Solar Chemicals, Chandrapur	33,000	33,000
47. Sonawala Industries Pvt. Ltd., Kalyan, Maharashtra	3,600	33,000
48. Tarapur Acids & Alkali, Thane	33,000	33,000
49. Western Chemicals Industries Ltd., Goregaon East Bombay	3,900	39,000
50. Rama Krishi Rasayan Ltd., Loni Kalbhor	16,500	16,500
51. Siddeshwari Sulphur Products, Thane	41,250	41,250
52. Divya Chemicals Ltd., Raigarh	16,500	16,500
Madhya Pradesh	2 2,600	262,100
*53. BEC Fertilisers, Bilaspur	33,000	33,000
*54. Dharamsi Morarji Chemical Co. Ltd., Kumhari	66,000	66,000
55. Gwallor Rayon Silk Manufacturing Co. Ltd., (Wvg.) Nagda	68,600	118,100
56. Steel Authority of India Ltd., Bhilai	45,000	45,000
Rajasthan	359,600	358,100
*57. Bharat Fertilizers & Chemicals Ltd., Alwar	39,600	39,600
**58. Hindustan Copper Ltd., Khetri	18200	18,200
*59. Hindustan Zinc Ltd., Debari, Udaipur	87,000	87,000
60. Shriram Rayons, Kota	18,000	16,500
*61. Udalpur Phosphates & Fertilizers, Khemli	33,000	33,000

(Continued)

1.13. MANUFACTURERS—LICENSED & INSTALLED CAPACITY OF SULPHURIC ACID
(As on Oct. 1, 1987) (Continued)

(tonnes)

Name of factory	Capacity	
	Licensed	Installed
I. IN PRODUCTION (Continued)		
Uttar Pradesh	305,630	260,250
62. Cawnpore Chemical Work (P) Ltd., Anwarganj	9,000	9,000
63. J.K. Cotton Spg. & Wvg. Mills, Kanpur	8,250	8,250
64. Jayshree (Magarwara) Fert. & Chem, Magarwara	24,380	25,000
*65. Rampur Distillery Chemicals, Rampur	33,000	33,000
*66. Ganges Fertilisers, Farukhabad	33,000	33,000
67. Ramaganga Fertiliser, Bharatigram	33,000	33,000
*68. Mittal Fertilisers, Rae Bareli	33,000	33,000
69. Salfur India Ltd., Akrapur, Unnao	66,000	20,000
*70. Shri Acids & Chemicals, Gujraula	33,000	33,000
71. Trimurti Fertilizers Ltd., Bhoginpur	33,000	33,000
Delhi	144,000	144,000
*72. Shriram Foods & Fert. Ind. Delhi	144,000	144,000
Haryana	140,250	148,500
73. Dharuhera Chemicals Co. Ltd., Dharuhera	33,000	33,000
74. Indian Sulph Acids Industries Ltd., Shahabad Dist. Kurukshetra	33,000	33,000
*75. Multitech International, Dharuhera	41,250	49,500
*76. Jayshree Chemicals & Fertilisers, Pataudi	33,000	33,000
Punjab	198,000	165,000
77. Agrochem Punjab, Mani Majra	33,000	33,000
78. Bhatinda Heavy Allied Chemicals, Bhatinda	165,000	16,500
79. Punjab Sulphur Products, Rail Majra, Dist. Hoshiapur	33,000	33,000
*80. Munak Chemicals, Bhatinda	33,000	33,000
*81. Varinder Agro Chem., Railkot	33,000	33,000
*82. Shivalik Fertilisers, Railmajra	49,500	33,000
Assam	107,100	107,100
*83. Chemicals Units of Associated Industries (Assam) Ltd., Chandrapur	18,000	18,000
*84. Hindustan Fertiliser Corpn., Ltd., Namrup	82,500	82,500
85. Assam Oil Corpn., Dibrugarh	6,600	6,600
Bihar	669,600	476,400
86. Steel Authority of India Ltd., Bokaro, Dist., Dhanbad	84,000	84,000
++87. Hindustan Copper Ltd., Ghatshila	108,000	54,000
88. Uranium Corpn., of India Ltd., Jaduguda Mines, Dist. Singhbhum	18,250	16,500

(Continued)

**1.13. MANUFACTURERS—LICENSED & INSTALLED CAPACITY OF SULPHURIC ACID
(As on October 1, 1987) (Concluded)**

(tonnes)

Name of factory	Capacity	
	Licensed	Installed
I. IN PRODUCTION (Concluded)		
Bihar (Concluded)		
89. Ranjan Chemicals Ltd., Barauni	16,500	16,500
90. Indian Steel & Wire Products Ltd., Jamshedpur	3,600	3,600
*@91. Fertiliser Corpn. of India Ltd., Sindri	396,000	264,000
92. Rohtas Industries Ltd., Dalmianagar, Rohtas	3,600	3,000
93. Tata Iron & Steel Co. Ltd., Jamshedpur	36,000	31,500
94. Tinplate Co. of India Ltd., Golmuri, Dist. Singhbhum	3,650	3,300
Orissa	59,400	59,400
95. East Coast Fertilisers & Chemicals, Kalme, Mayurbhanj	33,000	33,000
96. Jayshree Chemicals, Ganjam	8,400	8,400
97. Steel Authority of India Ltd., Rourkela	18,000	18,000
West Bengal	35,4790	354,790
98. Bengal Chemicals & Pharmaceutical Works Ltd., Panihati	28,050	28,050
99. Hindustan Heavy Chemicals Ltd., Khardah	8,250	8,250
*100. Hindustan Lever Ltd., Haldia	108,000	108,000
101. Steel Authority of India Ltd., Durgapur	20,120	20,120
102. Indian Iron & Steel Co. Ltd., Burnpur	31,020	31,020
103. Keshoram Industries & Cotton Mills Ltd, Tribeni, Hooghly	22,500	22,500
104. Jayshree Chemicals & Fertilisers, Khardah Unit I	19,250	19,250
Unit II	33,000	33,000
*105. Phosphate Co. Ltd., Rishra	39,600	39,600
106. C.D. Thakkar & Co., Rupnarayanpur	12,000	12,000
107. Vidula Chemicals & Manufacturing Ind. Ltd., 24-Pgs.	33,000	33,000
I. Total	5,768,440	5,339,360

SUMMARY

Based on	No. of Units	Capacity	
		Licensed	Installed
1. Elemental Sulphur	102	4,889,440	4,650,360
2. By-product from copper smelter	2	290,000	236,000
3. By-product from Zinc smelter	3	193,000	264,000
4. Iron pyrites	1	396,000	264,000
Total	108	5,768,440	5,339,360

* Fertiliser manufacturer.

† By-product from zinc smelter.

++ By-product from copper smelter.

@ Iron pyrites based.

Note: As per policy decision of the Government, a SSP plant of capacity 66,000 tpy would have to have its own sulphuric acid plant of capacity 33,000 tpy. For SSP capacity listing please see Table 1.02.

1.14. MANUFACTURERS AND INSTALLED CAPACITY OF GRANULATED FERTILISER MIXTURES

(As on April 1, 1987)

(tonnes/annum)

Name of factory

Installed Capacity

I. IN PRODUCTION

Name of factory	Installed Capacity
East	340,000
*1. Bihar State Coop. Marketing Union Ltd., Tiltrath, Begusarai (Bihar)	45,000
*2. Bihar State Superphosphate Factory (NPK Granulation Plant), Sindri Institute, Disstt. Dhanbad (Bihar)	36,000
3. Shakti Chemical & Fertiliser (Pvt.) Ltd., P.O. Lokal, Kodarma (Bihar)	30,000
*4. Bihar Agro Industries, Forbesganj (Bihar)	6,000
5. Chem. Fert. (India) Pvt. Ltd., Cola Road Samastipur (Bihar)	18,000
6. Kosi Chemicals College Road, Katihar (Bihar)	18,000
7. Himalaya Agro Chemicals, Purnea (Bihar)	12,000
*8. Orissa State Coop. Marketing Federation Ltd., Bargarh (Orissa)	19,000
9. Phosphate Co. Ltd., Rishra (West Bengal)	48,000
10. Jayshree Chemicals & Fertilisers, Khardah (West Bengal)	24,000
11. Ferti-chem. Ltd., Narangi, Gauhati (Assam)	60,000
12. Tatanagar Fertiliser (Pvt.) Ltd., Adityapur (Bihar)	24,000
North	530,000
1. Haryana Agro Fertiliser & Chemicals, Shahabad Markanda (Haryana)	30,000
*2. Haryana State Coop. & Supply Marketing Federation, Taraori (Haryana)	30,000
*3. Haryana State Coop. & Supply Marketing Federation, Shahabad (Haryana)	30,000
4. Hind Fertiliser & Chemicals Industries Pvt. Ltd., Rukri (Haryana)	40,000
5. Himalaya Fertiliser Ltd., Nalagarh Solan (H.P.)	50,000
*6. Punjab Fertilisers Industrial, Focal Point, Ludhiana (Punjab)	45,000
*7. Punjab State Coop. Supply & Marketing Federation, Dhuri (Punjab)	36,000
*8. Punjab State Coop. Supply & Mktg. Fed., Anandpur Sahib (Punjab)	45,000
9. Indja Agro Chemicals Industries, Chabal, Amritsar (Punjab)	N.A.
10. Varinder Agro Chemicals, Ludhiana (Punjab)	N.A.
11. Shriram Foods & Fertiliser Industries (Delhi)	48,000
12. Chemicals & Fertilisers India, Rampur (U.P.)	6,000
13. Agarwal Pesticides & Chemical Industries, Muzaffarnagar (U.P.)	12,000
14. D.R. Chemicals & Fertilisers, Gorakhpur (U.P.)	36,000
*15. Fertilizers Corpn. of India, Gorakhpur (U.P.)	36,000
16. Shri Madan Fertilizer Co., Fatehgarh (U.P.)	12,000
17. Ravi Fertilisers, Ballia (U.P.)	22,000
18. Rallis India Ltd., Magarwara (U.P.)	N.A.
19. U.P. Pesticides & Fertiliser, Muzaffarnagar (U.P.)	10,000
20. U.P. Pesticides Products, Azamgarh (U.P.)	6,000
*21. U.P. Cooperative Federation, Barabanki (U.P.)	36,000
South	179,000
*1. Raichur Agricultural Produce Coop. Mktg. Society, Raichur (Karnataka)	45,000
*2. Chikodi Taluka Agri. Produce Coop. Mktg. Society Ltd., Nipani (Karnataka)	54,000
*3. Pamani Fertiliser Ltd., Pamani, Thanjavur (T.N.) (Unit of TNCMF)	35,000
*4. Tamil Nadu Coop. Mktg. Federation Ltd., Madras (T.N.)	45,000

(Continued)

1.14. MANUFACTURERS AND INSTALLED CAPACITY OF GRANULATED FERTILISER MIXTURES

(As on April 1, 1987) (Concluded)

(tonnes/annum)

Name of factory	Installed capacity
I. IN PRODUCTION (Concluded)	
West	889000
1. Granulated Fertiliser & Feeds Pvt. Ltd., Bhavnagar (Gujarat)	30,000
2. Dewas Chemicals & Fertiliser Manufacturing Co., Dewas (M.P.)	45,000
3. M. P. Agro Morarji Fertiliser Ltd., Raisalpur (M.P.)	60,000
*4. M. P. State Cooperative Marketing Federation Ltd., Bhopal (M.P.)	45,000
5. Deccan Sales Corpn. Ltd., Bombay (Maharashtra)	44,000
*6. Godavari Pravara Canal Coop. Purchase & Sales Union, Karpargaon (Maharashtra)	300,000
*7. Vidharbha Coop. Mktg. Society Ltd., Amravati & Butibori (Maharashtra)	80,000
*8. Kolhapur Dist. Granulated Fert. Coop. Ltd., Laxmipuri Kolhapur (Maharashtra)	50,000
*9. Bhagirath Granulated Fertiliser Factory, Chikalthana (Maharashtra)	45,000
10. Maharashtra Agro Industries Development Corpn. Ltd., Rasayani, Nanded and Pachora (Maharashtra)	165,000
*11. Shetkari Sahakari Sangh Ltd., Rukadi (Maharashtra) Unit No. 1	30,000
12. Goa Agro Chemicals Ltd., Margao (Goa)	45,000
13. Madhuvan Chemicals & Fertilisers Pvt. Ltd., Udaipur (Rajasthan)	50,000
14. Jeevan Fertiliser & Chemicals Co. Pvt. Ltd., Kota (Rajasthan)	40,000
15. Sriganganagar Fertiliser Corpn., Sriganganagar (Rajasthan)	50,000
16. Rajasthan Multi Fertilisers Pvt. Ltd., Bichadi (Rajasthan)	60,000
17. Himco Fertilisers Pvt. Ltd., Jalna	20,000
Total I	1938,000
II. PLANNED AND YET TO GO INTO PRODUCTION	
South	
1. Fertilisers and Chemicals Travncore Ltd., Alwaye (Kerala)	N.A.
West	50,000
1. Trimurti Agro Chemicals Ltd., Nangrol (Gujarat)	50,000
North	
1. Hind Fertilizer & Chemicals Ltd., Barara	N.A.
2. Kraya Vikray & Prakriyaimak Sahakri Samiti, Varanasi (U.P.)	N.A.
Total II	50,000
Grand Total (I+II)	1,988,000

N.A.=Not available.

*In Cooperative Sector.

Source: State Departments of Agriculture.

2.00. RAW MATERIALS

2.01(a). PRODUCTION OF ROCKPHOSPHATE IN INDIA
1969-70 to 1986-87 (April-March)

('000 tonnes)

Year	PPCL ¹	RSMML ²	MPSMC ³		WBMDTC ⁴	Total
	Mussoorie phos	Jhamarkotra	Meghnagar (Jhabua)	Hirapur (Sagar)	Purulia	
1969-70	—	96.9	—	—	—	96.9
1970-71	—	195.1	—	—	—	195.1
1971-72	0.7	232.2	—	—	—	232.9
1972-73	7.3	191.6	—	—	—	198.9
1973-74	9.9	123.4	—	—	—	133.3
1974-75	16.9	402.3	9.7	—	—	428.9
1975-76	7.9	350.7	28.0	—	7.0	393.6
1976-77	21.4	500.2	41.0	—	20.3	582.9
1977-78	29.0	506.3	47.6	—	28.6	611.5
1978-79	43.2	535.8	67.6	6.9	24.5	678.0
1979-80	59.0	404.0	82.2	11.1	14.7	571.0
1980-81	59.1	273.8	79.8	21.8	13.6	448.1
1981-82	62.9	282.9	72.3	17.4	15.6	451.1
1982-83	70.0	288.0	75.0	17.7	14.3	465.0
1983-84	52.5	357.5	27.1	17.7	6.4	461.2
1984-85	80.6	355.5	75.0@	18.0@	6.0	531.1@
1985-86	101.9	423.9	81.8@	23.8@	2.5	533.9@
1986-87	120.2	285.0	57.7	22.3	1.2	486.4

Source: ¹ Pyrites, Phosphate and Chemicals Ltd., Dehra Dun (U.P.).² Rajasthan State Mines and Minerals Ltd., Udaipur (Rajasthan).³ Madhya Pradesh State Mining Corporation Ltd., Bhopal (M.P.).⁴ West Bengal Mineral Dev. and Trading Corpn. Ltd., Calcutta (W.B.).

@=Estimated.

2.01(b). DISTRIBUTION OF INDIGENOUS ROCKPHOSPHATE
1969-70—1986-87 (April-March)

('000 tonnes)

Year	PCL ¹		RSMM ²			MPSMC ³				WBMDTC ⁴	Total					
	Mussoorie phos	Total ⁺	Jhamarkotra		Total	Meghnagar (Jhabua)			Hirapur (Sagar)	Total*	Purulia	Total ⁺	Fertilisers	Others*	Total	
			Fertilisers	Others*		Fertilisers	Others*	Total								
1969-70	—	—	—	—	7.0	—	—	—	—	—	—	—	—	—	—	7.0
1970-71	—	—	121.4	69.9	191.3	—	—	—	—	—	—	121.4	69.9	191.3	—	191.3
1971-72	0.7	—	213.8	9.2	222.3	—	—	—	—	—	—	213.1	9.2	222.3	—	222.3
1972-73	4.7	—	181.4	14.5	195.9	—	—	—	—	—	—	181.4	14.5	195.9	—	195.9
1973-74	10.1	—	97.5	25.2	122.7	—	—	—	—	—	—	97.5	25.2	122.7	—	122.7
1974-75	9.9	—	126.9	34.0	160.9	—	2.9	2.9	—	—	—	126.9	35.9	163.8	—	163.8
1975-76	8.2	—	233.6	54.2	287.6	9.0	16.3	25.3	—	4.0	—	242.6	82.7	325.3	—	325.3
1976-77	20.1	—	497.4	91.6	589.0	5.7	27.1	32.8	—	16.4	—	503.1	155.2	658.3	—	658.3
1977-78	33.0	—	489.8	60.6	550.4	21.8	37.6	59.4	—	18.9	—	511.6	150.1	661.7	—	661.7
1978-79	45.3	—	458.6	42.1	500.7	14.9	56.6	71.5	4.4	17.6	—	473.5	166.0	639.5	—	639.5
1979-80	58.2	—	355.9	61.3	417.2	25.6	43.8	69.4	14.4	12.1	—	381.5	189.8	571.3	—	571.3
1980-81	56.6	—	326.5	18.3	344.5	26.1	59.0	85.1	22.9	13.5	—	352.6	170.0	522.6	—	522.6
1981-82	58.1	—	338.6	9.5	348.1	8.2	57.7	65.9	15.8	8.3	—	346.8	149.4	496.2	—	496.2
1982-83	61.3	—	379.4	20.9	400.3	0.8	42.4	43.2	17.4	4.5	—	380.2	146.5	526.7	—	526.7
1983-84	68.0	—	500.6	16.6	517.2	8.1	52.9	61.0	19.3	6.6	—	508.7	163.4	672.1	—	672.1
1984-85	80.2	—	554.3	12.9	567.2	5.9	60.7	66.6	21.7	2.2	—	560.2	177.7	737.9	—	737.9
1985-86	100.7	—	403.8	7.7	411.5	2.1	71.0	73.1	23.3	2.2	—	405.9	205.0	610.9	—	610.9
1986-87	115.4	—	324.6	8.5	333.1	2.6	73.0	75.6	18.0	1.3	—	327.2	216.2	543.4	—	543.4

*Constitutes supplies to mixtures and other users.

+ For direct application.

Source: ¹ Pyrites Phosphates & Chemicals Ltd., Dehra Dun (U.P.)

² Rajasthan State Mines & Minerals Ltd., Udaipur (Rajasthan)

³ M.P. State Mining Corporation Ltd., Bhopal (M.P.)

⁴ West Bengal Mineral Development & Trading Corporation Ltd., Calcutta (W.B.)

2.02(a). IMPORT OF ROCKPHOSPHATE AND SULPHUR
(1979-80 to 1986-87)

('000 tonnes)

Country	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
Rock Phosphate								
1. China	—	—	—	—	—	—	—	12
2. Jordan	603	617	674	714	453	886	904	1,038
3. Morocco	441	367	310	274	491	289	333	249
4. Senegal	157	126	150	176	227	210	227	229
5. U.S.A.	279	235	271	254	288	338	228	282
6. Egypt	—	—	13	—	—	18	11	9
7. Togo	—	—	—	—	8	21	58	66
Total	1480 (764.6)	1345 (862.9)	1418 (941.2)	1418 (525.5)	1467 (503.5)	1762 (743.0)	1761 (744.4)	1884 (N.A.)

Sulphur								
1. Canada	170	140	672	191	194	550	406	248
2. Iran	32	103	28	—	—	—	71	—
3. Poland	51	48	44	—	—	—	68	162
4. Iraq	381	128	—	—	213	82	—	—
5. Saudi Arabia	—	—	—	403	371	438	325	—
6. Kuwait	33	67	83	126	117	30	68	198
7. U.S.S.R.	31	—	12	—	12	32	35	35
8. U.S.A.	—	291‡	39	81	78	100	66	57
9. Bahrain	66	39	5	25	26	19	22	22
10. D.P.R. Korea	11	—	—	—	—	—	—	—
11. Qatar	—	—	—	6	—	19	25	370
12. West Indies	—	—	16	—	—	—	—	—
13. Singapore	—	—	6	—	—	—	—	—
14. Others*	—	317	—	—	—	—	—	—
15. Abu Dhabi	—	—	—	—	—	39	—	—
16. China	—	—	—	—	—	—	—	8
Total	1092 (1109.9)	816 (1071.7)	905 (N.A.)	832 (876.3)	1011 (961.7)	1309 (1940.3)	1086 (1985.8)	1148 (N.A.)

* = Spot purchase.

‡ = U.S.A. and Mexico

N.A. - Not available

Figures in brackets indicate the value in Rs. million

Source: Minerals & Metals Trading Corporation of India Ltd., New Delhi.

2.02(b). PORTWISE IMPORT OF ROCKPHOSPHATE AND SULPHUR

(1984-85 to 1986-87)

(April-March)

('000 tonnes)

Port	Rockphosphate			Sulphur		
	1984-85	1985-86	1986-87	1984-85	1985-86	1986-87
1. Bombay	393	409	568	371	350	450
2. Kandla	71	93	70	237	90	36
3. Bhavnagar	7	50	75	18	40	43
4. Madras	209	200	164	106	86	75
5. Kakinada	43	25	13	—	—	—
6. Cochin	259	208	178	217	160	172
7. Vizag	361	378	384	194	215	156
8. Calcutta	54	77	65	80	60	69
9. Tuticorin	118	51	100	49	19	44
10. Haldia	72	73	67	42	26	26
11. Cuddalore	14	—	—	—	—	—
12. Other Ports	161	197	200	5	40	77
Total	1,762	1,761	1,884	1,319	1,086	1,148

Source: MMTC, New Delhi.

2.03(a). DISTRIBUTION OF IMPORTED ROCKPHOSPHATE & SULPHUR
(1984-85 to 1986-87)

('000 tonnes)

Item	1984-85			1985-86			1986-87		
	Fertilisers	Others	Total	Fertilisers	Other	Total	Fertilisers	Others	Total
1. Imported rock-phosphate	1,635 (97)	55 (3)	1,690	1,740 (95)	93 (5)	1,833	1,801 (96)	77 (4)	1,878
2. Sulphur	856 (68)	409 (32)	1,265	611 (56)	488 (44)	1,099	676 (60)	452 (40)	1,128

Note=Entire requirement of sulphur is met through imports, except a very small quantity recovered from petroleum refineries.

()=% share of total (horizontal).

Source:: MMTC, New Delhi.

2.03.(b) TOTAL AVAILABILITY AND SUPPLIES OF ROCKPHOSPHATE
(1984-85 to 1986-87)

('000 tonnes)

Item	1984-85				1985-86				1986-87			
	Availa- bility*	Supplies			Availa- bility*	Supplies			*Avai- lability	Supplies		
		Ferti- lisers	Others	Total		Ferti- lisers	Others	Total		Ferti- lisers	Others	Total
Rockphosphate through												
1. Import Sources	1,762 (77)	1,635	55	1,690	1,761 (77)	1,740	93	1,833	1,884 (79)	1,801	77	1,878
2. Indigenous Sources	531@ (23)	560	178	738	534@ (23)	406	205	611	486 (21)	327	216	543
Total	2,293 (100)	2,195	233	2,428	2,295 (100)	2,146	298	2,444	2,370 (100)	2,128	293	2,421

@=Estimated.

* This excludes stocks as at the beginning of the year. [(See Tables 2.02(a) & 2.01(a)].

()=%share of total (vertical).

**2.04. ALL INDIA PRODUCTION OF SULPHURIC ACID
1969-70 to 1986-87 (April-March)**

('000 tonnes)

Year	Production
1969-70	1,213.7
1970-71	1,200.1
1971-72	1,264.1
1972-73	1,339.4
1973-74	1,412.3
1974-75	1,457.7
1975-76	1,445.2
1976-77	1,778.1
1977-78	2,045.2
1978-79	2,107.4
1979-80	2,196.0
1980-81	2,163.0
1981-82	2,200.0
1982-83	2,364.0
1983-84	2,312.0
1984-85	2,809.0
1985-86	2,709.0
1986-87	2,649.5 (Est.)

Source: Directorate General of Technical Development, Government of India, New Delhi.

**2.05. PRODUCTION OF PHOSPHORIC ACID AND ITS CONSUMPTION
IN THE FERTILISER INDUSTRY
1977-78 to 1986-87 (April-March)**

(tonnes of P₂O₆)

Year	Production	Consumption [†]
1977-78	2,17,869	2,21,525
1978-79	2,62,514	2,60,140
1979-80	2,80,578	2,81,080
1980-81	2,75,226	2,76,998
1981-82	2,70,973	2,68,792
1982-83	2,56,683	2,67,139
1983-84	2,46,422	2,53,493
1984-85	2,66,453	2,77,952
1985-86	2,70,913	2,57,687
1986-87	2,61,624	2,59,896

[†] Out of indigenous production.

Note: Phosphoric acid is expressed as 100 per cent P₂O₆.

**2.06. IMPORT OF PHOSPHORIC ACID AND ITS CONSUMPTION
IN THE FERTILISER INDUSTRY
(1977-78 to 1986-87)**

(tonnes of P₂O₅)

Year	Import	Consumption ⁺
1977-78	2,32,045	2,46,064
1978-79	2,39,730	2,52,746
1979-80	2,71,857	2,70,249
1980-81	3,65,320	3,09,139
1981-82	4,41,126	4,41,218
1982-83	3,93,136	3,90,250
1983-84	5,18,687	5,11,542
1984-85	6,11,029	6,46,749
1985-86	7,55,812	7,91,140
1986-87	10,74,574	10,25,215

⁺out of imports.

Note: Phosphoric acid is expressed as 100 per cent P₂O₅.

**2.07. IMPORT OF AMMONIA FOR FERTILISER INDUSTRY
(1973-74 to 1986-87)**

(tonnes)

Year	Quantity imported
1973-74	5,190
1974-75	Nil
1975-76	27,110
1976-77	16,555
1977-78	43,470
1978-79	95,443
1979-80	1,17,054
1980-81	1,59,258
1981-82	2,40,838
1982-83	1,51,116
1983-84	3,25,000
1984-85	4,10,200
1985-86	3,50,785
1986-87	4,95,296

2.08. TYPICAL ANALYSIS OF ROCKPHOSPHATE (INDIGENOUS)

Component	Jhamarkotra (RSMM, Udaipur)	Maton (HZL, Udaipur)	Mussoorie (PPCL)	Jhabua (MPSMC)	Hirapur (MPSMC)	Purulia (WBMDTC)	Lalitpur (U.P.)
BPL Grade	73/77	69/76	44/52	68/82	68/82	77	
Moisture	3.0	0.30-1.00	—	—	—	—	
Analysis of material on moisture-free basis							
1. P ₂ O ₅	35.47-35.52	31.70-35.50	23.32-24.57	31.55-37.61	31	35-30	31
2. CO ₂	0.71-2.30	0.50-0.90	10.35-16.22	0.39-0.91	—	—	—
3. SiO ₂	8.02-10.05	7.50-16.50	9.62	8.88-17.71	15-16	0.91	15-20
4. CaO	47.83-48.84	43.00-49.00	41.00-41.23	40.68-48.54	46-50	42.33	45-48
5. SO ₂	Traces 0.06	0.20-0.45	0.42-1.22	0.08-0.20	—	—	—
6. Fe ₂ O ₃	0.80-1.30	1.70-2.50	0.40-6.14	0.57-1.42	} 5-6*	17.34	} 4-5*
7. Al ₂ O ₃	0.48-0.64	0.80-1.50	0.35-0.65	0.47-2.63		2.24	
8. MgO	0.50-0.76	0.16-0.40	4.30-4.59	Nil	0.5-0.7	0.90	0.5-0.6
9. Na ₂ O	0.80	—	0.09-0.22	0.12-0.26	—	—	—
10. K ₂ O	Nil	—	0.10-0.36	0.11-0.19	—	—	—
11. F	3.29-4.06	1.60-3.80	1.20-1.38	1.93-3.28	—	3.04	—
12. Cl	Nil-0.0015	Trace-0.008	0.10	0.005-0.01	—	—	—
13. Org matter & combined water	Nil-0.27	0.60-1.30	—	0.40-2.54	—	—	—
14. LOI	0.87	1.50-1.80	—	—	—	3.58	—

*R₂O₃

2.09. TYPICAL ANALYSIS OF ROCKPHOSPHATE (IMPORTED)

Component	Florida	Jordan	Jordan	Morocco	Morocco	Senegal
BPL grade	72/75	70/72	73/75	72/73	75/77	79/81
Moisture	0.67-1.51	1.00-2.60	0.80-2.50	0.64-1.03	0.77-1.17	3.00-11.90
Analysis of material on moisture-free basis						
1. P ₂ O ₅	33.13-34.70	31.94-33.00	33.90-35.70	32.00-34.00	33.70-34.76	36.11-36.72
2. CO ₂	2.93-6.05	3.80-4.58	2.18-4.53	2.00-4.81	3.60-4.40	1.63-2.66
3. SiO ₂	2.38-4.46	3.40-5.50	1.22-3.00	2.00-40.0	1.27-2.15	2.81-3.59
4. CaO	47.26-48.76	47.20-51.00	15-15-53-33	50.00-52.00	50.88-53.10	50.68-51.79
5. SO ₃	0.77-0.94	1.00-1.50	0.75-1.40	1.00-2.00	1.68-1.95	0.34
6. Fe ₂ O ₃	1.15-1.86	0.10-0.50	0.10-0.20	0.10-0.60	0.18-0.39	0.77-1.10
7. Al ₂ O ₃	0.81-1.41	0.20-0.87	0.20-0.51	0.20-0.51	0.32-1.25	0.85-1.18
8. MgO	0.67-1.30	0.30-0.60	0.22-0.70	0.12-0.80	0.15-1.26	0.10
9. Na ₂ O	0.05	0.19-1.30	0.25-0.70	0.50-1.00	0.17-0.75	0.08-0.20
10. K ₂ O	—	0.02-0.20	0.05-0.10	< 0.10	0.06	—
11. F	2.79-4.08	1.13-4.00	2.16-4.30	3.00-5.00	3.01-4.31	2.77-3.70
12. Cl	0.0012-0.0057	0.02-0.20	0.007-0.07	< 0.02	0.001-0.03	0.004
13. Org. matter & combined water	—	0.34-1.50	0.27-2.37	1.00-2.05	0.20-2.05	—
14. LOI	—	4.90-5.70	4.50-6.40	~8.09	5.00	2.54

**2.10(a). RAW MATERIALS AND INTERMEDIATES REQUIREMENTS IN THE
MANUFACTURE OF FERTILISER INTERMEDIATES**

(tonne per tonne)

Intermediate	Raw materials/Intermediate	
1. Ammonia (NH ₃)	Natural gas	860 Nm ³ /te or
	Naphtha	0.9-1.02 or
	*Fuel oil	0.91 or
	*Coal	3.62
2. Sulphuric acid (H ₂ SO ₄)	Sulphur	0.345 or
	Pyrites	0.90
3. Phosphoric acid (H ₃ PO ₄) as P ₂ O ₅	Rock (73-75% BPL)	3.3 and
	H ₂ SO ₄	2.85
4. Nitric acid (HNO ₃)	NH ₃	0.292

*For feedstock only.

2.10(b). PETROLEUM PRODUCT CONVERSION FACTOR

Product	Litres to metric tonnes	Tonnes per K.L.
1. Naphtha	1,467	0.6817
2. L.P.G.	1,457	0.6863
3. Furnace oil	1,071	0.9337
4. L.S.H.S.	1,017	0.9833

Source: Indian Petroleum & Natural Gas Statistics, New Delhi.

**2.10(c). RAW MATERIALS AND INTERMEDIATE REQUIREMENTS IN THE
MANUFACTURE OF FERTILISER MATERIALS**

(tonne per tonne)

Raw material/intermediate fertiliser product	NH ₃	CO ₂	Phos- phate rock	H ₂ SO ₄	H ₃ PO ₄ (as P ₂ O ₅)	HNO ₃	KCl (as 60% K ₂ O)	Gypsum	Remarks
1. a) Ammonium sulphate	0.27	—	—	0.78	—	—	—	—	
b) AS from gypsum route	0.27	0.38	—	—	—	—	—	—	
2. CAN (25% N)	0.16	—	—	—	—	0.59	—	—	
3. Urea	0.60	0.77	—	—	—	—	—	—	
4. SSP	—	—	0.60	0.36	—	—	—	—	
5. TSP	—	—	0.46	—	0.36	—	—	—	
6. UAP (28-28-0)*	0.37	—	—	—	0.29	—	—	—	*Total ammonia including the quantity required for producing urea which is incorporated in the end-product.
7. DAP (18-46-0)	0.24	—	—	—	0.48	—	—	—	} ‡Small quantities of urea are also added to make these formulations.
8. NPK (14-35-14)‡	0.18	—	—	—	0.38	—	0.25	—	
9. NPK (17-17-17)‡	0.22	—	—	—	0.18	—	0.30	—	
10. NPK (19-19-19)	0.24	—	—	—	0.20	—	0.33	—	
11. NPK (12-32-16)	0.15	—	—	—	0.34	—	0.28	—	
12. Nitrophosphate (15-15-15)	0.10	—	—	—	0.16	0.36	0.26	—	

Conversion factors:

1 te N	=	1.215 te NH ₃
1 te NH ₃	=	0.823 te N
600 tpd NH ₃	=	1,52,000 tpa N
900 tpd NH ₃	=	2,28,000 tpa N
1,350 tpd NH ₃	=	3,45,000 tpa N
% BPL	=	2.18 × % P ₂ O ₅
% P ₂ O ₅	=	0.46 × % BPL

3.00. PRODUCTION OF FERTILISERS

3.01. DEVELOPMENT OF PRODUCTION OF FERTILISER MATERIALS

Year of first manufacture	Fertiliser material manufacture	Factory which first manufacture	Total No. of manufacturing units (as on 1-10-87)
(i) 1906	Single superphosphate	EID-Parry (India) Ltd., Ranipet	80
(ii) 1906	Fertiliser mixtures		
(iii)	Ammonium sulphate		12
1933	(a) As a by-product of steel industry	(a) Tata Iron & Steel Co. Ltd., Jamshedpur	6
1941	(b) Using sulphuric acid	(b) Mysore Chemicals & Fertilisers Ltd., Belagula*	2
1947	(c) Using gypsum as a raw material	(c) FACT, Alwaye	5
(iv) 1959	Ammonium sulphate nitrate	FCI Ltd., Sindri	1**
	Urea	FCI Ltd., Sindri	28
	Ammonium chloride (Agriculture)	New Central Jute Mills Co. Ltd, Varanasi (Now Hari Fertilisers)	5
(v) 1960	Ammonium phosphate	FACT, Alwaye	2
(vi) 1961	Calcium ammonium nitrate	NFL, Nangal	2
(vii) 1965	Nitrophosphate	RCFL, Trombay	1
(viii) 1967	Diammonium phosphate	Gujarat State Fertiliser Co. Ltd., Baroda	9
(ix) 1968	Triple superphosphate	Dharamsi Morarji Chemical Co. Ltd., Ambernath	1
	Urea ammonium phosphate	Coromandel Fertilisers Ltd., Vizag	4
	NPK complex fertilisers	RCFL, Trombay	4
(x) 1973	Pelofos	Orissa Fertilisers and Chemicals, Rourkela	1**

*Closed in 1965,

**Now not manufactured.

† Exact number is not available.

3.02. ALL INDIA PRODUCTION OF N AND P₂O₅
(1951-52 to 1986-87)

('000 tonnes)

Year	N			P ₂ O ₅			Total material (all ferti- lisers)
	Through straight N	Through NP/NPK	Total*	Through straight P ₂ O ₅	Through NP/ NPKs	Total†	
1951-52	28.9	—	28.9	9.8	—	9.8	201.6
1952-53	53.1	—	53.1	7.4	—	7.4	304.3
1953-54	52.9	—	52.9	13.8	—	13.8	343.2
1954-55	68.5	—	68.5	14.3	—	14.3	422.1
1955-56	76.9	—	76.9	12.4	—	12.4	450.4
1956-57	78.8	—	78.8	17.6	—	17.6	492.4
1957-58	81.1	—	81.1	25.8	—	25.8	555.1
1958-59	80.8	—	80.8	31.0	—	31.0	585.8
1959-60	83.7	—	83.7	51.4	—	51.4	718.8
1960-61	110.9	1.1	112.0	52.4	1.3	53.7	846.5
1961-62	152.2	2.1	154.3	62.8	2.6	65.4	1,113.5
1962-63	192.7	1.5	194.2	86.5	1.8	88.3	1,637.8
1963-64	214.6	4.5	219.1	103.1	4.7	107.8	1,676.6
1964-65	235.3	7.9	243.2	121.2	9.8	131.0	1,912.7
1965-66	226.9	11.0	237.9	106.2	12.6	118.8	1,781.3
1966-67	285.3	23.7	309.0	121.0	24.7	145.7	2,114.4
1967-68	374.0	28.6	402.6	157.7	49.4	207.1	2,595.6
1968-69	479.9	83.1	563.0	110.7	102.2	213.2	3,200.2
1969-70	625.3	105.3	730.6	103.2	120.5	223.7	3,063.5
1970-71	725.6	106.9	832.5	102.2	125.9	228.1	3,226.2
1971-72	807.4	141.8	949.2	127.6	162.7	290.3	3,741.2
1972-73	886.7	168.7	1,054.5	127.3	203.0	330.3	4,108.4
1973-74	889.4	160.5	1,049.9	126.9	197.6	324.5	4,077.4
1974-75	1,030.1	156.5	1,186.6	134.9	196.3	331.2	4,451.1
1975-76	1,300.0	208.0	1,508.0	75.7	244.7	319.7	5,046.6
1976-77	1,608.8	253.6	1,862.4	127.0	351.3	478.3	6,328.9
1977-78	1,659.3	340.5	1,999.8	161.3	508.6	669.9	7,644.5
1978-79	1,769.8	403.2	2,173.0	186.8	591.2	778.0	7,840.3
1979-80	1,834.5	389.9	2,220.3	178.0	585.1	763.1	7,798.2
1980-81	1,758.7	405.2	2,163.9	196.7	644.8	841.5	7,854.5
1981-82	2,773.8	469.5	3,143.3	215.4	734.6	950.0	10,374.7
1982-83	2,938.8	490.9	3,429.7	222.1	761.6	983.7	11,024.3
1983-84	2,978.5	513.0	3,491.5	248.4	815.7	1,064.1	11,341.8
1984-85	3,291.7	625.6	3,917.3	308.2	1,009.7	1,317.9	13,101.8
1985-86	3,663.1	659.8	4,322.9	342.3	1,087.8	1,430.1	14,445.8
1986-87	4,635.8	776.4	5,412.2	321.0	1,340.9	1,661.9	16,989.3

*Excludes N meant for non-agricultural purposes.

†Excludes P₂O₅ through direct application of phosphate rock.Note: Entire requirement of K₂O is met through imports.

3.03. ALL-INDIA PRODUCTION OF STRAIGHT NITROGENOUS FERTILISERS
1951-52 to 1986-87 (April-March)

('000 tonnes)

Year	Ammonium sulphate (20.6% N)	Ammonium sulphate nitrate (26% N)	Urea (46% N)	Calcium ammonium nitrate (25% N)	Ammonium chloride (25% N)	Total		
						Nutrient* N (straight)	Material	
1951-52	140.3	—	—	—	—	28.9	140.3	
1952-53	257.9	—	—	—	—	53.1	257.9	
1953-54	256.8	—	—	—	—	52.9	256.8	
1954-55	332.4	—	—	—	—	68.5	332.4	
1955-56	373.1	—	—	—	—	76.9	373.1	
1956-57	382.5	—	—	—	—	78.8	382.5	
1957-58	393.9	—	—	—	—	81.1	393.9	
1958-59	392.1	—	—	—	—	80.8	392.1	
1959-60	367.0	21.3	3.8	—	3.4	83.7	395.5	
1960-61	399.0	40.0	11.8	51.3 ^b	10.3	110.9	512.4	
1961-62	402.3	53.2	13.5	228.1 ^b	11.2	152.2	708.3	
1962-63	422.2	62.2	18.7	381.7 ^b	10.6	192.7	1,088.1	
1963-64	426.0	47.2	19.1	498.1 ^b	14.3	214.6	1,004.7	
1964-65	474.4	47.8	17.9	555.6 ^b	11.9	235.3	1,107.6	
1965-66	449.4	52.3	27.5	503.1 ^b	16.4	226.9	1,048.7	
1966-67	438.4	50.0	141.0	540.9 ^b	14.5	285.3	1,194.8	
1967-68	498.6	60.9	290.9	337.8 ^b	194.3	25.4	374.0	1,397.9
1968-69	575.3	49.2	473.2	180.0 ^b	358.9	17.2	479.9	2,133.7
1969-70	581.8	42.8	328.6	3.0 ^b	437.3	12.9	625.3	1,906.4
1970-71	612.3	41.8	1,096.2	317.2		22.1	725.6	2,089.6
1971-72	599.1	30.4	1,236.1	411.5		18.4	807.4	2,295.5
1972-73	554.5	57.0	1,417.7	419.8		13.9	886.7	2,462.9
1973-74	574.6	48.7	1,406.8	431.3		13.7	889.4	2,475.1
1974-75	589.4	26.7	1,734.3	406.6		10.2	1,030.1	2,767.1
1975-76	611.1	21.3	2,196.7	617.5		15.5	1,300.0	3,462.1
1976-77	586.5	2.0	2,875.3	638.2		17.6	1,608.8	4,119.6
1977-78	557.3	—	3,071.8	509.3		16.7	1,659.3	4,155.1
1978-79	508.6	—	3,306.0	558.3		17.9	1,769.8	4,391.3
1979-80	479.3	—	3,513.5	465.3		12.7	1,834.5	4,470.1
1980-81	436.2	—	3,384.2	347.4		18.9	1,758.7	4,186.1
1981-82	443.2	—	5,384.4	403.8		18.9	2,673.8	6,250.3
1982-83	477.7	—	6,019.9	290.0		37.2	2,938.8	6,824.8
1983-84	424.8	—	6,073.8	326.4		61.6	2,973.5	6,886.6
1984-85	454.0	—	6,687.9	409.2		77.2	3,291.7	7,629.0
1985-86	518.9	—	7,467.3	381.1		103.8	3,663.1	8,471.1
1986-87	534.4	—	9,576.6	389.5		92.3	4,635.8	10,592.8

* For agricultural purposes only.

^b This figure is for 20.50% N grade.

3.04. ALL INDIA PRODUCTION OF STRAIGHT PHOSPHATES
1951-52 to 1986-87 (April/March)

('000 tonnes)

Year	Single superphosphate and pelofos material of grade			Triple superphosphate material of grade		Total	
	16% W.S. P ₂ O ₅	Super- phosphate other grades	Nutrient W.S. P ₂ O ₅	46% W.S. P ₂ O ₅	Nutrient W.S. P ₂ O ₅	Nutrient P ₂ O ₅ (straight)	Material
1251-52*	61.3	—	9.8	—	—	9.8	61.3
1952-53*	46.5	—	7.4	—	—	7.4	46.5
1953-54*	86.4	—	13.8	—	—	13.8	86.4
1954-55*	89.7	—	14.3	—	—	14.3	89.7
1955-56*	77.3	—	12.4	—	—	12.4	77.3
1956-57*	109.9	—	17.6	—	—	17.6	109.9
1957-58*	161.2	—	25.8	—	—	25.8	161.2
1958-59*	193.7	—	31.0	—	—	31.0	193.7
1959-60*	323.3	—	51.4	—	—	51.4	323.3
1960-61*	327.4	—	52.4	—	—	52.4	327.4
1961-62*	392.0	—	62.7	—	—	62.7	392.0
1962-63	540.5	—	86.5	—	—	86.5	540.5
1963-64	637.4	6.1	103.1	—	—	103.0	643.5
1964-65	745.3	10.6	121.2	—	—	121.2	755.9
1965-66	664.1	—	106.2	—	—	106.2	664.1
1966-67	747.3	24.2	121.0	—	—	121.0	771.5
1967-68	949.1	31.3	157.5	0.6	0.2	157.7	981.0
1968-69	664.5	14.7	108.9	4.1	1.8	110.7	683.3

(Continued)

3.04. ALL INDIA PRODUCTION OF STRAIGHT PHOSPHATES
1951-52 to 1986-87 (April-March) (Concluded)

('000 tonnes)

Year	Single superphosphate and pelofos material of grade			Triple superphosphate material of grade		Total	
	16% W.S. P ₂ O ₅	Super- phosphate other grade	Nutrient W.S. P ₂ O ₅	46% W.S. P ₂ O ₅	Nutrient W.S. P ₂ O ₅	Nutrient P ₂ O ₅ (straight)	Material
1959-70	609.0	12.4	99.4	7.5	3.4	103.2	629.3
1970-71	613.0	7.9	99.5	5.8	2.6	102.1	626.7
1971-72	773.0	2.6	124.2	7.7	3.5	127.6	783.3
1972-73	781.9	—	125.1	4.9	2.2	127.3	786.8
1973-74	773.3 (10.0)	0.4	125.5	3.0	1.4	126.9	786.7
1974-75	822.8 (12.3)	—	133.8	2.5	1.2	135.0	837.6
1975-76	461.3 (1.6)	1.6	74.0	2.1	1.0	75.0	466.6
1976-77	779.3 (1.8)	7.0	126.2	1.8	0.8	127.0	789.5
1977-78	987.6	—	158.0	7.2	3.3	161.3	994.8
1978-79	1,081.3	34.5‡	177.8	19.6	9.0	186.8	1,135.4
1979-80	1,033.1	16.8‡	167.7	22.4	10.3	178.0	1,072.3
1980-81	1,085.0	22.1‡	176.7	44.5	20.0	196.7	1,150.8
1981-82	1,202.6	6.6‡	193.3	48.0	22.1	215.4	1,257.2
1982-83	1,320.6	—	211.3	23.4	10.8	222.1	1,344.0
1983-84	1,491.7	—	238.7	21.1	9.7	248.4	1,512.8
1984-85	1,898.3	—	303.7	10.0	4.6	308.2	1,908.4
1985-86	2,136.1	—	341.8	1.1	0.5	342.3	2,137.2
1986-87	2,006.1	—	321.0	—	—	321.0	2,006.1

* July-June basis.

() Pelofos.

‡ 14% W.S. P₂O₅.

**3.05. ALL INDIA PRODUCTION OF NP/NPK FERTILISERS
1960-61 to 1986-87 (April-March)**

('000 tonnes)

Year	NPs						NPKs							Total		
	28-28-0	24-24-0	20-20-0	20-20-0**	18-46-0	16-20-0	19-19-19	17-17-17	15-15-15**	14-35-14	14-28-14	12-32-16	10-26-26	Nutrients from NPs & NPKs		Material
														N@	P ₂ O ₅	
1960-61*	—	—	—	—	—	6.7	—	—	—	—	—	—	—	1.1	1.3	6.7
1961-62*	—	—	—	—	—	13.2	—	—	—	—	—	—	—	2.1	2.6	13.2
1962-63	—	—	—	—	—	9.2	—	—	—	—	—	—	—	1.5	1.8	9.2
1963-64	—	—	—	—	—	28.4	—	—	—	—	—	—	—	4.5	4.7	28.4
1964-65	—	—	—	—	—	49.2	—	—	—	—	—	—	—	7.9	9.8	49.2
1965-66	—	—	—	16.4 ^a	—	52.1	—	—	—	—	—	—	—	11.0	12.6	68.5
1966-67	—	—	—	70.6 ^a	—	77.5	—	—	—	—	—	—	—	23.7	24.7	148.1
1967-68	—	—	—	70.5 22.4 ^a 2.7 ^b	27.7 ^a	92.4	—	—	—	—	—	—	—	28.6	49.4	216.7
1968-69	132.2	—	3.4	94.1	55.2 ^c	98.3	—	—	—	—	—	—	—	83.1	102.5	383.2
1969-70	207.4	—	27.2	22.2 87.7 ^b	44.7	87.1	—	—	—	—	—	60.9	—	105.3	120.5	527.2
1970-71	159.7	—	60.2	4.1 22.2	55.5	88.1	—	—	59.4 56.1	—	—	—	6.6	106.9	125.9	509.9
1971-72	195.1	—	35.8	25.0 ^c	49.7	102.8	—	54.9	133.4 44.9	3.1	12.7 4.7 ^d	—	—	141.8	162.7	662.4
1972-73	174.8	—	20.1	—	69.1	94.5	—	242.1	240.1	18.1	—	—	—	167.8	203.0	858.7

(Continued)

3.05. ALL INDIA PRODUCTION OF NP/NPK FERTILISERS
1960-61 to 1986-87 (April-March) (Conc. uded)

('000 tonnes)

Year	NPs						NPKs							Total		
	28-28-0	24-24-0	20-20-0	20-20-0**	18-46-0	16-20-0	19-19-19	17-17-17	15-15-15**	14-35-14	14-28-14	12-32-16	10-26-26	Nutrients from NPs&NPKs		Material
														N@	P ₂ O ₅	
1973-74	171.8	—	19.6	—	60.2	104.8	—	208.9	213.4	36.9	—	—	—	160.5	197.6	815.5
1974-75	136.9	—	23.8	—	67.5	119.7	—	226.4	213.5	28.2	—	16.0	14.4	156.5	196.3	846.4
1975-76	181.1	95.4	30.2 16.3 ^d	12.7 22.3 ^e	52.9 20.1 ⁱ	113.1	15.3	282.1	180.1	12.2	—	72.3	3.1 8.7 ^f	208.0	244.7	1,117.9
1976-77	244.1	5.0	33.0 9.7 ^d	50.9 29.9 ^e	87.0 0.1 ^f	101.7	61.4	261.9	182.4	44.9	5.0	247.5	54.9	253.6	351.3	1,419.4
1977-78	807.6	38.3	40.1 ^h	15.8 15.8	195.1	124.9	87.7	414.8	213.6	19.8	20.0	392.2	108.9	340.5	308.6	2,494.6
1978-79	338.2	28.0	42.7 ^b	128.4 ^g	229.0	119.9	66.5	472.2	265.6	18.0	42.1	484.4	78.6	40.2	591.2	2,313.6
1979-80	261.5	25.7	40.6	199.8	263.4	125.2	68.8	412.5	255.5	55.2	36.8	453.3	56.8	389.8	585.1	2,255.1
1980-81	222.3	35.1	3.8	247.7 ⁺	256.2	109.8	25.2	577.1	263.1	61.9	60.8	498.8	120.4	405.2	644.8	2,517.2
1981-82	297.3	35.4	43.8	255.2 ⁺	277.9	105.0	115.7	602.8	283.1	33.7	44.7	661.5	111.1	469.5	734.6	2,867.2
1982-83	244.2	13.1	126.3	230.7 ⁺	461.0	98.9	140.0	583.3	246.1	44.1	20.3	554.7	92.2	490.9	761.6	2,855.5
1983-84	269.5	4.1	201.7	267.6 ⁺	722.6	128.5	156.1	493.3	269.8	7.6	8.9	304.2	108.5	513.0	815.7	2,942.4
1984-85	267.6	4.9	396.5	268.5 ⁺	894.2	57.4	117.5	574.8	273.8	29.2	31.9	443.2	204.9	625.6	1,009.7	3,564.4
1985-86	288.9	—	452.0	250.5 ⁺	891.9	60.1	186.0	509.1	265.3	21.7	23.0	598.4	290.6	659.8	1,087.8	3,837.5
1986-87	259.0	—	512.5	298.0 ⁺	1562.7	70.9	172.3	572.3	264.6	14.6	21.2	382.4	259.9	776.4	13,409	4,390.4

*July-June basis

^aGrade 19-13-0

^dGrade 18-9-9

^eAPSN 20-20-0

^gAmmonium nitrophosphate

**Nitrophosphate

^bOther grades

^eGrade 20-48-0

^bGrade 20-20-0

⁺2.07-20.7-0 (nitrophos)

@For agriculture purposes only.

^aGrade 18-18-9

^dGrade 19.5-19.5-3

ⁱGrade 22-22-11

**3 06. STATEWISE PRODUCTION OF FERTILISERS—MATERIALWISE AND NUTRIENTWISE
1986-87 (April-March)**

('000 tonnes)

Zone/State	Ammonium sulphate (20.6% N)	Urea (46% N)	Calcium ammonium nitrate (25% N)	Ammonium chloride (25% N)	16-20-0 ¹ 20-20-0 ²	19-19-19 ¹ 14-28-14 ²	28-28-0 ¹ 14-35-14 ²	20.7-20.7-0 ¹ 15-15-15 ²	10-26-26	12-32-16 ¹ 17-17-17 ²	18-46-0 (DAP)	Single super phosphate (16% WS P ₂ O ₅)	Total	
													N	P ₂ O ₅
East	142.1	839.6	160.9	—	5.2²	—	—	—	—	—	513.9	140.6	549.2	259.0
Assam	30.7	184.3	—	—	—	—	—	—	—	—	—	7.5	91.1	1.2
Bihar	92.3	403.0	—	—	—	—	—	—	—	—	—	9.5	204.4	1.5
Orissa	10.0	128.0	160.9	—	—	—	—	—	—	—	419.8	—	176.7	133.2
West Bengal	9.1	124.3	—	—	5.0 ²	—	—	—	—	—	94.1	123.6	77.0	63.1
North	—	2323.0	228.6	37.6	—	—	—	—	—	—	—	678.0	1135.1	108.5
Haryana	—	412.8	—	—	—	—	—	—	—	—	—	109.9	189.9	17.6
Punjab	—	661.2	228.6	25.2	—	—	—	—	—	—	—	288.7	367.6	46.2
Uttar Pradesh	—	1249.0	—	12.4	—	—	—	—	—	—	—	279.4	577.6	44.7
South	107.6	1637.3	—	54.7	507.6² 70.9¹	21.2²	259.0¹ 14.6²	—	—	572.3²	387.0	294.9	1146.7	522.8
Andhra Pradesh	—	246.1	—	—	—	—	259.0 ¹ 14.6 ²	—	—	—	—	73.7	187.8	89.4
Karnataka	—	308.3	—	—	—	—	—	—	—	—	27.3	21.3	147.1	17.0
Kerala	107.6	229.7	—	6.3	507.6 ²	—	—	—	—	—	36.7	14.9	237.5	120.8
Tamil Nadu	—	853.2	—	48.4	70.9 ¹	21.2 ²	—	—	—	572.3 ²	323.0	185.0	574.3	295.6
West	284.7	4776.7	—	—	—	172.3¹	—	298.0¹ 234.6²	259.9	382.4¹	661.8	892.6	2581.2	771.6
Gujarat	257.2	2654.2	—	—	—	—	—	—	259.9	382.4 ¹	483.6	67.3	1432.8	423.5
Madhya Pradesh	27.5	—	—	—	—	—	—	—	—	—	—	256.6	5.7	41.1
Maharashtra	—	1475.9	—	—	—	—	—	264.6 ² 298.0 ¹	—	—	—	348.0	780.5	157.0
Rajasthan	—	320.0	—	—	—	—	—	—	—	—	—	220.7	147.2	35.3
Goa	—	326.6	—	—	—	172.3 ¹	—	—	—	—	178.2	—	215.0	114.7
All India	534.4	9576.5⁺	389.5	92.3	70.9¹ 512.6²	172.3¹ 21.2²	259.0¹ 14.6²	298.0¹ 254.6²	259.9	572.3² 382.4¹	1562.7	2006.1	5412.2[@]	1661.9

@ Excludes N used for non-agricultural purposes.

+ Includes small quantities used for NP/NPK complexes.

3.07. STATEWISE GRANULATED FERTILISER MIXING UNITS
(As on April 1, 1987)

Zone/State	Granulated@		
	Co-op.*	Others	Total
East	3	9	12
Assam	—	1	1
Bihar	2	6	8
Orissa	1	—	1
West Bengal	—	2	2
North	7	14	21
Haryana	2	2	4
Himachal Pradesh	—	1	1
Punjab	3	2	5
Uttar Pradesh	2	8	10
Delhi	—	1	1
South	4	—	4
Andhra Pradesh	—	—	—
Karnataka	2	—	2
Kerala	—	—	—
Tamil Nadu	2	—	2
Pondicherry	—	—	—
West	6	11	17
Gujarat	—	1	1
Madhya Pradesh	1	2	3
Maharashtra	5	3	8
Rajasthan	—	4	4
Goa	—	1	1
Total	20	34	54

*Constitutes fertiliser mixing units with co-operative and public sectors.

@For capacity see Table 1.14.

3.08. PRODUCTION AND DISTRIBUTION OF GRANULATED FERTILISER MIXTURES
1982-83 to 1985-86

(tonnes)

Grade	Production				Despatches			
	1982-83	1983-84	1984-85	1985-86	1982-83	1983-84	1984-85	1985-86
25-13-0	—	—	—	156	—	—	—	—
20-20-10	3,614	1,207	2,070	—	3,720	1,207	2,070	—
20-20-0	15,681	16,936	14,757	21,285	15,423	15,313	16,322	22,067
20-15-20	—	55	130	—	—	55	130	—
20-8-12	—	75	151	—	—	75	148	—
20-0-20	40	40	—	—	103	40	—	—
20-0-10	15	71	52	—	8	42	62	—
20-0-8	—	—	—	—	—	—	—	—
18-18-18	127	—	—	—	103	—	—	—
18-18-10	97,296	78,710	75,611	104,011	95,436	74,169	63,988	103,011
18-18-9	—	—	—	—	—	—	—	—
18-18-6	14,418	—	427	91	14,454	—	399	91
18-9-0	1,106	—	—	—	906	—	—	—
11-3-12	—	—	—	237	—	—	60	231
16-12-12	4	4	—	—	4	24	—	—
16-12-16	—	—	74	1,277	—	—	20	1,174
16-8-8	—	256	—	—	—	249	—	—
17-17-17	7,946	20,979	15,593	889	8,980	20,148	14,521	754
15-20-0	—	—	6	257	—	—	15	299
15-15-5	—	—	—	—	—	—	—	—
15-15-15	40,577	24,183	21,112	11,227	46,240	23,807	20,344	11,256
15-7.5-15	3,201	—	—	—	268	10	—	—
15-10-15	—	54	126	—	—	51	125	—
15-15-7.5	14,637	5,837	1,240	—	10,078	3,311	2,871	—
15-6-21	—	—	—	—	—	—	—	—
15-5-12	—	—	53	106	—	—	32	90

(Continued)

3.08. PRODUCTION AND DISTRIBUTION OF GRANULATED FERTILISER MIXTURES
1982-83 to 1985-86 (Concluded)

(tonnes)

Grade	Production				Despatches			
	1982-83	1983-84	1984-85	1985-86	1982-83	1983-84	1984-85	1985-86
15-5-5	83,294	46,918	57,510	75,748	86,434	45,187	57,301	73,912
15-0-5	—	—	—	—	—	—	—	—
14-14-7	37	37	—	—	24	8	—	—
14-6-21	—	—	34	2,512	—	—	20	2,349
14-5-5	—	—	30	142	—	—	45	149
12-32-16	12,856	9,221	4,831	—	11,855	4,930	811	—
12-32-6	4,975	7,151	8,574	7,405	5,493	6,578	8,727	8,276
12-32-0	—	—	6,876	—	—	—	6,809	—
12-25-6	1,164	10,739	11,063	3,229	528	11,849	10,999	4,542
12-12-12	—	32	16	1,408	—	32	16	1,344
12-6-6	—	695	141	—	—	695	141	—
10-30-10	697	1,617	563	—	249	1,854	571	12
10-26-26	—	—	—	240	1,401	—	—	212
10-10-10	—	—	—	260	—	—	—	153
10-10-4 (1.5)	—	110	144	58	—	118	125	54
10-5-15	—	647	589	—	—	1,271	1,226	894
10-5-10	—	2,895	3,759	1,796	—	2,336	4,026	1,831
10-5-5	118	—	—	1,077	118	—	—	178
10-0-15	—	37	40	—	—	—	74	—
9-20-20	447	498	248	850	467	396	378	870
9-9-9	24	—	—	—	—	—	—	—
8-32-8	2,742	806	2,070	1,504	3,394	1,207	2,070	1,958
8-8-8	8,926	6,884	12,157	796	364	6,728	11,488	722
9-9-5	24	—	—	22	—	—	—	—
9-4.5-9	—	—	—	27	—	—	—	237
Total	313,966	236,753	240,230	236,810	306,050	221,610	225,934	236,636

Note: Data are based on returns received from only some of the granulated mixture manufacturers.

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4.00. IMPORT OF FERTILISERS

4.01. IMPORT OF NITROGENOUS FERTILISERS

1984-85 to 1986-87

('000 tonnes)

Material and origin of import	April-March		
	1984-85	1985-86	1986-87
Ammonium Sulphate (21% N)			
Germany, Fed. Rep.	33.0	—	—
U.S.A.	18.0	—	—
Total	51.0	—	—
Urea (46% N)			
Abu Dhabi	229.0	223.8	68.2
Belgium	—	31.9	—
Bulgaria	184.0	193.5	110.8
Burma	—	9.6	—
Canada	292.0	—	—
Czechoslovakia	11.0	47.9	37.7
Egypt	48.0	—	—
Finland	37.8	—	—
France	51.0	21.2	19.0
Germany, Fed. Rep.	98.0	73.5	31.8
German, Dem. Rep.	58.0	120.7	104.1
Holland	548.0	229.0	381.9
Hungary	13.0	73.1	—
Indonesia	—	31.0	116.4

(Continued)

4 01. IMPORT OF NITROGENOUS FERTILISERS
1984-85 to 1986-87 (Concluded)

('000 tonnes)

Material and origin of Import	April-March		
	1984-85	1985-86	1986-87
Ireland	—	—	14.8
Italy	231.0	137.2	107.5
Japan	—	10.3	11.4
Kuwait	300.0	207.3	67.2
Libya	291.0	294.1	76.1
Malaysia	—	30.7	—
Norway	53.0	29.0	—
Pakistan	2.0	—	—
Poland	14.0	16.4	28.5
Qatar	280.0	145.8	62.1
Romania	101.0	218.2	235.7
Saudi Arabia	164.0	205.6	85.0
Spain	36.0	9.5	—
Trinidad & Tobago	—	96.7	—
USA	221.0	55.2	—
Urea (46% N)			
U.S.S.R.	325.0	314.1	577.7
Venezuela	28.0	—	—
Yugoslavia	76.0	3.1	30.1
	3686.0	2827.9	2165.9
Calcium Ammonium Nitrate (26% N)			
Romania	42.0	—	—
Total	42.0	—	—

4.02. IMPORT OF COMPLEX FERTILISERS
1984-85, 1985-86 & 1986-87

('000 tonnes)

Material and origin of import	April-March		
	1984-85	1985-86	1986-87
DAP (18-46-0)			
Canada	21.0	—	—
Jordan	198.0	290.9	131.5
Romania	—	—	48.7
U.S.A.	1,401.0	1,458.7	427.0
Total	1,620.0	1,749.6	607.2

4.03. IMPORT OF POTASSIC FERTILISERS
1984-85, 1985-86 & 1986-87

('000 tonnes)

Material and origin of import	April-March		
	1984-85	1985-86	1986-87
Muriate of Potash (60% K₂O)			
Abu Dhabi	20.0	—	—
Canada	646.0	439.3	479.3
German, Dem. Rep.	373.0	412.2	447.7
Germany, Fed. Rep.	262.0	244.2	208.9
Jordan	124.0	313.5	270.8
USA	—	64.8	62.4
USSR	—	15.6	—
Total	1,425.0	1,489.6	1,469.2
Sulphate of Potash (50% K₂O)			
German, Dem. Rep.	—	—	4.2
Germany, Fed. Rep.	32.0	—	12.0
Total	32.0	—	16.2

Source: Ministry of Agriculture, New Delhi.

4.04. IMPORT OF FERTILISER MATERIAL—1971-72 to 1986-87
(April-March)

Q=Quantity in '000 tonnes
V=Value in Rs. million

Year	Nitrogenous					P/NPKs					Potassic		Total				
	Ammo. sulphate	Ammo. sulphate nitrate	Urea	Calcium ammo. nitrate	Ammo. chloride	Ammo. nitro-phosphate 20-20-0, 24-24-0, 23-23-0	Ammo. phosphate 20-20-0	Diammonium phosphate 18-46-0	NPKs (various grades)	Mono, ammo. phosphate 11-55-0	Triple superphosphate	Muriate of potash	Sulphate of potash	N	P ₂ O ₅	K ₂ O	Value
1971-72	Q 186.6	32.0	549.6	317.2	—	—	—	352.8	289.0	—	—	362.0	—	481.3	247.8	268.2	899.7
	V 31.2	11.4	249.4	113.7	—	—	—	200.0	183.6	—	—	110.4	—	—	—	—	—
1972-73	Q 128.2	—	1,008.4	317.7	—	56.4	—	347.8	119.0	12.0	—	504.0	6.1	665.4	204.7	325.3	1,212.6
	V 25.7	—	507.9	121.9	—	31.8	—	273.8	76.6	9.6	—	160.2	3.2	—	—	—	—
1973-74	Q 75.9	2.0	1,033.9	133.4	—	239.8	—	340.2	55.0	—	—	607.0	5.0	658.8	212.7	370.4	1,767.5
	V 39.0	1.8	737.1	105.6	—	202.0	—	359.8	44.2	—	—	275.0	3.0	—	—	—	—
1974-75	Q 235.1	13.6	1,244.1	359.6	30.0	182.7	—	435.9	285.0	—	5.0	639.9	10.0	883.8	285.9	437.3	5,991.3
	V 261.5	17.2	2,711.7	559.6	48.8	323.9	—	982.1	593.4	—	14.8	467.4	11.6	—	—	—	—
1975-76	Q 96.0	10.0	1,545.0	176.0	30.0	—	—	536.0	618.0	—	—	390.0	—	996.0	361.0	278.0	7,227.7
	V 143.7	17.6	3,668.8	274.0	47.6	—	—	1,477.6	1,271.5	—	—	327.4	—	—	—	—	—
1976-77	Q —	—	1,596.9	4.5	—	34.6	—	30.1	13.4	—	—	441.0	10.5	750.1	22.8	277.8	2,202.2
	V —	—	1,772.7	4.9	—	40.2	—	43.4	22.8	—	—	305.8	12.3	—	—	—	—

1977-78																
Q	3.8	—	1,498.9	14.3	—	—	—	356.3	—	—	--	926.3	14.6	758.1	163.9	598.9
V	2.8	—	1,845.0	12.4	—	—	—	532.7	—	—	—	654.8	16.7			3,064.4
1978-79																
Q	342.8	—	2,218.3	175.6	—	—	—	529.3	—	—	—	853.4	10.7	1,233.1	243.5	517.4
V	261.4	—	2,849.3	155.7	—	—	—	717.0	—	—	—	603.4	13.4			4,600.2
1979-80																
Q	202.7	—	2,399.7	216.0	—	—	—	515.4	—	—	—	781.6	8.4	1,295.3	237.1	473.2
V	148.5	—	3,592.0	228.9	—	—	—	891.1	—	—	—	672.4	12.1			5,545.0
1980-81																
Q	20.0	—	2,848.0	73.5	—	—	—	982.8	—	—	—	1,309.8	21.8	1,510.4	452.1	796.5
V	15.2	—	5,399.8	91.6	—	—	—	2,147.3	—	—	—	1,560.7	37.8			9,252.2
1981-82																
Q	6.0	—	1,999.0	—	—	—	—	746.0	—	—	—	1,063.0	12.0	1,055.0	343.0	644.0
V	4.6	—	4,167.5	—	—	—	—	1,645.7	—	—	—	1,325.0	23.5			7,166.3
1982-83																
Q	—	—	868.0	—	—	—	—	136.0	5.0*	—	—	1,063.0	10.0	425.0	63.0	644.0
V																2,735.3
1983-84																
Q	—	—	1,305.0	—	—	—	—	310.0	—	—	—	919.0	10.0	656.1	142.6	556.4
V																3,650.5
1984-85																
Q	51.0	—	3,686.0	42.0	—	—	—	1,620.0	—	—	—	1,425.0	32.0	2,008.6	745.2	871.0
V																14,350.0
1985-86																
Q	—	—	2,827.9	—	—	—	—	1,749.6	—	—	—	1,489.6	—	1,615.8	804.8	893.8
V																14,050.0
1986-87																
Q	—	—	2,165.9	—	—	—	—	607.2	—	—	—	1,469.2	16.2	1,105.6	279.3	889.6
V																6,510.0

* Grade 17-17-17.

Source Ministry of Agriculture, New Delhi.

5.00. DESPATCHES OF FERTILISERS

5.01. DESPATCHES OF NITROGENOUS 1986-87

Zone/State	April-June 1986			July-Sept. 1986		
	Pool	Non-Pool	Total	Pool	Non-Pool	Total
Urea (46% N)						
East	26.51	162.15	188.66	112.30	248.89	361.19
Assam	0.49	5.20	5.69	0.08	5.23	5.31
Bihar	2.62	61.53	64.15	35.38	117.62	153.00
Orissa	6.18	19.21	25.39	20.56	22.62	43.18
West Bengal	17.22	59.84	77.06	56.28	90.66	146.94
Manipur	—	5.98	5.98	—	1.87	1.87
Meghalaya	—	0.16	0.16	—	0.05	0.05
Nagaland	—	—	—	—	0.18	0.18
Tripura	—	1.1	1.51	—	3.24	3.24
Arunachal Pradesh	—	—	—	—	0.13	0.13
Mizoram	—	—	—	—	0.11	0.11
Tea (NE)	—	8.72	—	—	7.18	7.18
North	151.85	808.12	959.97	271.77	1018.65	1290.42
Haryana	16.27	110.26	126.53	25.64	187.34	212.98
Himachal Pradesh	—	0.36	0.36	—	3.51	3.51
Jammu & Kashmir	0.38	18.07	18.45	1.89	1.79	3.68
Punjab	52.60	259.45	312.05	86.74	338.39	425.13
Uttar Pradesh	82.60	418.35	500.95	157.50	484.49	641.99
Delhi	—	1.63	1.63	—	3.13	3.13
South	108.99	334.16	443.15	209.12	509.82	718.94
Andhra Pradesh	70.59	117.22	187.81	140.50	191.00	331.50
Karnataka	12.71	59.15	71.86	23.45	132.89	156.34
Kerala	5.08	17.51	22.59	10.32	24.77	35.09
Tamil Nadu	20.21	138.16	158.37	32.49	157.85	190.34
Pondicherry	—	1.94	1.94	0.36	1.04	1.40
Coffee-Board	—	0.18	0.18	—	2.27	2.27
Tea-Board (South)	0.40	—	0.40	2.0	—	—
West	63.63	524.76	588.39	146.54	603.84	750.38
Gujarat	13.17	122.88	136.05	17.81	140.39	158.20
Madhya Pradesh	15.63	123.16	138.79	33.36	135.88	169.24
Maharashtra	25.80	219.47	245.27	81.76	258.81	340.57
Rajasthan	9.03	57.66	66.69	13.61	67.74	81.35
Goa	—	1.59	1.59	—	1.02	1.02
Others*	0.03	6.65	6.38	0.21	9.61	9.82
All India	351.01	1835.84	2186.85	739.94	2390.81	3130.75

*'Others' include despatches to buffer godowns whose Statewise despatches are not available.

**FERTILISERS—POOL & INDIGENOUS
QUARTERWISE**

('000 tonnes)

Oct.-Dec. 1986			Jan.-March 1987			Total April '86 to March '87		
Pool	Non-Pool	Total	Pool	Non-Pool	Total	Pool	Non-Pool	Total
81.71	292.75	374.46	119.84	312.59	432.43	340.36	1016.38	1356.74
0.10	0.48	0.58	—	0.59	0.59	0.67	11.50	12.17
29.28	175.88	204.96	17.53	149.87	167.40	84.81	504.70	589.51
1.51	45.71	47.22	7.78	36.92	44.70	36.03	124.46	160.49
50.82	66.73	117.55	94.53	98.00	192.53	218.85	315.23	534.08
—	0.30	0.30	—	4.16	4.16	—	12.31	12.31
—	—	—	—	—	—	—	0.21	0.21
—	—	—	—	—	—	—	0.18	0.18
—	1.07	1.07	—	2.66	2.66	—	8.48	8.48
—	0.01	0.01	—	—	—	—	0.14	0.14
—	—	—	—	—	—	—	0.11	0.11
—	2.77	2.77	—	20.39	20.39	—	39.06	39.06
272.27	1394.20	1666.47	37.82	1358.57	1396.39	733.71	4579.54	5313.25
38.87	157.35	196.22	15.40	244.04	259.44	96.18	698.99	795.17
—	4.71	4.71	—	0.31	0.31	—	8.89	8.89
0.05	3.67	3.72	—	9.06	9.06	2.32	32.59	34.91
100.67	398.48	499.15	22.42	432.21	454.63	262.43	1428.53	1690.96
132.68	829.69	962.37	—	669.24	669.24	372.78	2401.77	2774.55
—	0.30	0.30	—	3.71	3.71	—	8.77	8.77
213.46	505.23	718.69	62.27	537.53	599.80	593.84	1886.74	2480.58
129.83	152.92	282.75	39.58	162.09	201.67	380.50	623.23	1003.73
17.45	67.32	84.77	11.54	124.04	135.58	65.15	383.40	448.55
2.44	23.46	25.90	1.60	15.26	16.94	19.52	81.00	100.52
63.74	257.87	321.61	9.47	234.64	244.11	125.91	788.52	914.43
—	1.77	1.77	—	1.46	1.46	0.36	6.21	6.57
—	1.89	1.89	—	0.04	0.04	—	4.38	4.38
—	—	—	—	—	—	2.40	—	2.40
100.69	470.69	571.38	62.18	400.25	462.43	373.04	1999.54	2372.58
23.14	107.11	130.32	26.66	56.64	83.30	80.78	427.09	507.87
33.43	139.22	172.65	9.14	119.75	128.89	91.56	518.01	609.57
22.57	93.90	116.47	21.43	134.95	156.38	151.56	707.13	858.69
21.55	130.11	151.66	4.95	88.52	93.47	49.14	344.03	393.17
—	0.28	0.28	—	0.39	0.39	—	3.28	3.28
0.21	16.32	16.53	0.75	12.72	13.47	1.20	45.30	46.50
668.34	2679.19	3347.53	282.85	2621.66	2904.52	2042.15	9527.50	11569.65

**5.02. DESPATCHES OF NITROGENOUS FERTILISERS—INDIGENOUS
1986-87 QUARTERWISE**

('000 tonnes)

Zone/State	April-June 1986	July-Sept. 1986	Oct.-Dec. 1986	Jan.-March 1987	Total	April-June 1987
					April 86 to March '87	
(A) Ammonium Sulphate (20.6% N)						
East	14.33	28.32	32.72	46.22	121.59	21.27
Assam	—	—	—	0.05	0.05	—
Bihar	2.53	8.34	12.43	7.33	30.63	11.58
Orissa	1.51	1.81	1.78	14.40	19.50	0.52
West Bengal	5.30	11.46	11.12	14.24	42.12	3.12
Meghalaya	0.49	1.97	4.39	0.61	7.46	1.30
Tea (NE)	4.50	4.74	3.00	9.59	21.83	4.75
North	10.95	6.24	2.56	9.62	29.57	5.18
Haryana	0.22	—	—	0.39	0.61	—
Punjab	1.45	—	1.05	1.39	3.89	0.84
Uttar Pradesh	9.28	6.24	1.51	8.04	25.07	4.34
South	39.80	55.28	64.79	51.62	211.49	39.67
Andhra Pradesh	19.21	21.57	28.86	20.86	90.50	11.29
Karnataka	7.63	14.60	13.85	10.12	46.40	8.22
Kerala	4.64	4.86	6.85	7.28	23.63	7.73
Tamil Nadu	8.32	14.05	15.23	13.36	50.96	12.43
West	36.66	55.89	42.67	25.83	161.05	45.97
Gujarat	23.47	37.98	30.01	17.42	108.88	27.61
Madhya Pradesh	2.35	2.86	2.15	1.57	8.93	4.67
Maharashtra	10.84	13.95	10.51	6.84	42.14	12.45
Rajasthan	—	1.10	—	—	1.10	0.32
Others	1.92	2.72	2.67	2.12	9.43	0.92
All India	103.66	148.45	145.41	135.61	533.13	112.09

(Continued)

**5.02. DESPATCHES OF NITROGENOUS FERTILISERS—INDIGENOUS
1986-87 QUARTERWISE (Continued)**

(000' tonnes)

Zone/State	April/ June 1986	July/Sept. 1986	Oct /Dec. 1986	Jan./March 1986	Total	
					April '86 to March '87	April/June 1987
(B) Calcium Ammonium Nitrate (25% N)						
East	4.83	19.00	23.37	20.17	67.37	15.75
Bihar	—	1.66	16.00	6.05	22.71	3.38
Orissa	3.36	7.96	5.70	10.16	27.18	4.00
West Bengal	1.47	9.38	1.67	4.96	17.48	8.37
North	7.90	45.06	47.13	45.47	145.56	19.40
Haryana	1.03	4.17	10.31	3.73	19.24	2.60
Himachal Pradesh	3.88	7.60	4.98	23.78	40.24	3.49
Jammu & Kashmir	0.12	0.02	—	—	0.14	—
Punjab	2.39	20.87	24.87	6.72	54.84	6.66
Uttar Pradesh	0.48	12.13	6.63	10.87	30.11	6.41
Delhi	—	0.27	0.35	0.37	0.99	0.24
South	6.51	33.68	43.14	31.72	115.05	84.42
Andhra Pradesh	3.14	19.83	25.10	13.57	61.64	17.08
Karnataka	3.37	10.53	9.66	14.58	38.14	10.97
Tamil Nadu	—	3.32	8.38	3.57	15.27	6.37
West	—	9.47	10.96	11.68	32.11	11.11
Gujarat	—	3.52	—	—	3.52	—
Madhya Pradesh	—	—	0.84	3.37	4.21	0.75
Maharashtra	—	—	1.66	3.43	5.09	—
Rajasthan	—	5.95	8.46	4.88	19.29	10.36
Bhutan	0.13	—	—	—	0.13	—
All India	19.37	107.21	124.60	109.04	360.22	80.68

(Continued)

5.02. DESPATCHES OF NITROGENOUS FERTILISERS—INDIGENOUS
1986-87 QUARTERWISE (Concluded)

('000 tonnes)

Zone/State	April/June 1986	July/Sept. 1986	Oct./Dec 1986	Jan./March 1987	Total	
					April '86 to March '87	April/June 1987
(C) Ammonium Chloride (25% N)						
East	2.89	0.91	2.25	1.40	7.45	2.84
Bihar	2.23	0.12	1.27	0.13	3.75	2.04
West Bengal	0.66	0.79	0.98	1.27	3.70	0.80
North	10.84	7.87	9.69	9.66	38.06	7.71
Haryana	5.60	4.13	5.58	5.51	20.82	3.36
Jammu & Kashmir	0.05	—	0.21	0.05	0.31	0.16
Punjab	3.53	1.52	1.01	1.61	7.67	2.35
Uttar Pradesh	1.66	2.22	2.85	2.49	9.22	1.84
Delhi	—	—	0.04	—	0.04	—
South	10.91	10.16	20.92	7.36	49.25	5.73
Andhra Pradesh	0.39	3.90	4.53	0.91	9.63	1.01
Karnataka	0.77	0.68	0.41	0.14	2.00	0.41
Kerala	0.16	0.16	0.10	0.14	0.56	0.13
Tamil Nadu	9.39	5.37	15.47	6.15	36.38	3.92
Pondicherry	0.20	0.05	0.41	0.02	0.68	0.26
West	0.50	1.23	2.70	1.28	5.71	0.20
Gujarat	0.24	—	0.48	0.33	1.05	0.20
Madhya Pradesh	0.02	0.14	—	—	0.17	—
Maharashtra	0.23	1.09	2.22	0.95	4.48	—
Rajasthan	0.01	—	—	—	0.01	—
All India	25.14	20.17	35.56	19.70	100.57	16.48

**5.03. DESPATCHES OF PHOSPHATIC FERTILISERS—INDIGENOUS
1986-87 QUARTERWISE**

('000 tonnes)

Zone/State	April/June 1986	July/Sept. 1986	Oct./Dec. 1986	Jan./March 1987	Total April-86 March-87	April/June 1987
(A) Single Super Phosphate (16% W.S.P₂O₅)						
East	49.45	50.59	69.47	33.31	202.82	45.05
Assam	0.88	4.47	1.97	1.22	8.54	1.72
Bihar	10.57	16.69	29.75	8.93	65.94	8.01
Manipur	—	0.01	—	0.10	0.11	—
Meghalaya	0.71	2.13	2.00	0.47	5.31	1.00
Mizoram	0.03	—	—	—	0.03	—
Nagaland	0.03	—	—	—	0.03	0.20
Orissa	8.13	2.09	4.46	3.47	18.15	8.80
Tripura	0.70	—	—	—	0.70	0.19
West Bengal	28.04	25.15	29.90	17.45	100.54	24.52
A & N Islands	—	—	—	0.30	0.30	—
Tea (NE)	0.36	0.05	1.39	1.37	3.17	0.70
North	160.80	169.16	230.72	153.32	714.00	186.84
Haryana	32.13	17.20	25.64	23.03	98.00	34.50
Himachal Pradesh	0.50	0.44	2.38	4.06	7.38	0.40
Punjab	85.30	80.70	84.00	80.00	330.00	75.54
Uttar Pradesh	42.87	70.82	118.70	46.23	278.62	76.54
Delhi	—	—	—	—	—	0.15
South	98.50	79.37	80.85	51.73	310.45	84.00
Andhra Pradesh	50.88	28.43	33.90	19.95	133.16	47.20
Karnataka	17.84	23.26	11.64	12.67	65.41	11.65
Kerala	3.11	3.12	3.90	5.32	15.45	4.05
Tamil Nadu	26.10	23.49	30.01	13.20	92.80	21.00
Pondicherry	0.57	1.07	1.40	0.59	3.63	0.10
West	239.06	188.34	186.70	158.24	772.34	294.35
Gujarat	26.24	15.58	20.36	16.40	78.58	23.20
Madhya Pradesh	111.92	91.24	98.57	68.45	370.19	171.10
Maharashtra	76.90	68.63	45.77	53.15	244.45	71.95
Rajasthan	24.00	12.89	22.00	20.24	79.12	28.10
Others*	6.49	5.90	9.75	7.15	29.29	7.80
All India	554.30	493.36	577.49	403.75	2028.90	618.04
(B) Triple Super Phosphate (40% P₂O₅)						
East	—	—	0.01	—	0.01	} Neg
West Bengal	—	—	0.01	—	0.01	
North	—	—	—	0.02	0.02	
Uttar Pradesh	—	—	—	0.02	0.02	
South	0.03	—	0.05	0.15	0.23	
Andhra Pradesh	—	—	0.02	0.09	0.11	
Karnataka	—	—	—	—	—	
Tamil Nadu	0.03	—	0.03	0.05	0.11	
Pondicherry	—	—	—	0.01	0.01	
West	0.02	0.008	0.11	0.10	0.23	
Gujarat	0.02	—	0.03	0.03	0.08	
Maharashtra	Neg	0.008	0.08	0.07	0.15	
All India	0.05	0.008	0.17	0.27	0.49	

Neg=Negligible.

*Others include Quantity used in mixture.

**5.04. DESPATCHES OF COMPLEX FERTILISERS—
1986-87**

Zone State	April-June 1986			July-September 1986		
	Pool	Non-pool	Total	Pool	Non-pool	Total
Diammonium Phosphate (18-46-0)						
East	5.47	7.02	12.49	28.81	27.39	56.00
Assam	0.15	—	0.15	2.23	—	2.23
Bihar	2.48	—	2.48	7.19	9.27	16.46
Manipur	—	—	—	—	—	—
Meghalaya	—	—	—	—	—	—
Orissa	0.85	—	0.85	1.93	5.11	7.04
Sikkim	—	—	—	—	—	—
Tripura	0.02	—	0.02	0.01	—	0.01
West Bengal	1.92	7.02	8.94	17.25	13.01	30.26
Mizoram	—	—	—	—	—	—
Nagaland	0.05	—	0.05	—	—	—
North	18.43	16.46	34.89	77.46	114.48	191.94
Haryana	5.79	—	5.79	12.66	7.02	19.68
Himachal Pradesh	—	—	—	—	—	—
Jammu & Kashmir	—	1.65	1.65	6.32	3.94	10.26
Punjab	2.34	3.09	5.43	31.82	55.71	87.53
Uttar Pradesh	10.30	11.72	22.02	26.66	47.81	74.47
Delhi	—	—	—	—	—	—
South	38.46	95.69	134.15	74.90	110.98	185.88
Andhra Pradesh	13.16	10.36	23.52	40.98	21.13	62.11
Karnataka	15.98	32.83	48.81	18.26	9.42	27.68
Kerala	0.32	0.10	0.42	0.22	0.10	0.32
Tamil Nadu	5.15	52.33	57.48	13.73	79.59	93.32
Pondicherry	—	—	—	—	—	—
Tea Board	3.85	—	3.85	1.71	—	1.71
Coffee Board	—	0.07	0.07	—	0.74	0.74
West	35.19	79.07	114.26	53.06	87.11	140.17
Gujarat	1.13	42.29	43.42	10.37	22.65	33.02
Madhya Pradesh	13.47	7.45	20.92	9.40	25.87	35.27
Maharashtra	10.39	17.59	27.98	18.22	24.92	43.14
Rajasthan	10.20	10.98	21.18	15.07	13.56	28.63
Goa	—	0.76	0.76	—	0.11	0.11
Others@	0.11	2.74	2.85	0.13	29.88	30.01
Total	97.66	200.98	298.64	234.16	369.84	604.00

@—'Others' include despatches to buffer godowns whose Statewise despatches are not available.

LISERS—
1986-87**POOL & INDIGENOUS**
Quarterwise

('000 tonnes)

1986	October-December 1986			January-March 1987			Total April '86 to March '87		
	Pool	Non-pool	Total	Pool	Non-pool	Total	Pool	Non-pool	Total
56.00	86.03	49.98	136.01	15.39	57.99	73.38	135.50	142.38	277.88
2.23	0.36	—	0.36	—	0.53	0.53	2.74	0.53	3.27
16.46	42.74	29.32	72.06	—	22.47	22.47	52.41	61.06	113.47
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
7.04	0.65	0.07	0.72	0.32	8.59	8.91	3.75	13.77	17.52
—	—	—	—	—	—	—	—	—	—
0.01	—	—	—	1.03	—	1.03	1.06	—	1.06
30.26	42.20	20.59	62.79	13.81	26.40	40.21	75.18	67.02	142.20
—	—	—	—	—	—	—	—	—	—
—	0.08	—	0.08	0.23	—	0.23	0.36	—	0.36
191.94	478.67	204.25	682.92	32.87	191.61	224.48	607.43	526.80	1134.23
19.68	88.68	36.71	125.39	5.16	34.13	39.29	112.29	77.86	190.15
—	—	—	—	—	—	—	—	—	—
10.26	—	3.95	3.95	—	3.53	5.53	6.32	15.07	21.39
87.53	215.96	83.30	299.26	1.54	69.35	70.89	251.66	211.45	463.11
74.47	174.03	78.35	252.38	26.17	82.60	108.77	237.16	220.48	457.64
—	—	1.94	1.94	—	—	—	—	1.94	1.94
185.88	47.65	145.05	192.70	36.28	103.64	139.92	197.29	455.36	652.65
62.11	26.47	19.03	45.50	17.00	14.93	31.93	97.61	65.45	163.06
27.68	11.25	13.70	24.95	12.41	19.55	31.96	57.90	75.50	133.40
0.32	0.20	0.40	0.60	0.22	1.66	1.88	0.96	2.26	3.22
93.32	9.73	111.88	121.61	6.65	67.46	74.11	35.26	311.26	346.52
—	—	—	—	—	—	—	—	—	—
1.71	—	—	—	—	—	—	5.56	—	5.56
0.74	—	0.04	0.04	—	0.04	0.04	—	0.89	0.89
140.17	100.90	108.10	209.00	16.32	56.74	73.06	205.47	331.02	536.49
33.02	26.92	36.62	63.54	4.72	22.05	26.77	43.14	123.61	166.75
35.27	24.33	24.33	48.66	0.86	9.62	10.48	48.06	67.27	115.33
43.14	11.78	21.18	32.96	10.74	11.16	21.90	51.13	74.85	125.98
28.63	37.87	25.64	63.51	—	13.80	13.80	63.14	63.98	127.12
0.11	—	0.33	0.33	—	0.11	0.11	—	1.31	1.31
30.01	0.32	33.47	33.79	0.13	41.95	42.08	0.69	108.04	108.73
604.00	713.57	540.85	1254.42	100.99	451.93	552.92	1146.38	1563.60	2709.98

**5.05. DESPATCHES OF COMPLEX FERTILISERS INDIGENOUS
1986-87 QUARTERWISE**

('000 tonnes)

Zone/State	April/ June 1986	July/ Sept. 1986	Oct./ Dec. 1986	Jan / March 1987	Total	
					April '86 March '87	April/ June 1987
(A) Ammonium Phosphate Sulphate (16-20-0)						
South	19.36	18.77	17.76	17.44	73.33	16.65
Andhra Pradesh	1.99	1.25	0.24	0.29	3.77	1.18
Karnataka	13.77	11.24	9.44	13.03	47.48	13.06
Kerala	0.39	1.30	0.02	0.76	2.47	0.15
Tamil Nadu	3.13	4.80	7.91	3.14	18.98	2.10
Pondicherry	0.08	0.18	0.15	0.22	0.63	0.16
All India	19.36	18.77	17.76	17.44	73.33	16.65
(B) Ammonium Phosphate Sulphate (20-20-0)						
South	80.30	127.21	157.10	133.83	498.44	114.83
Andhra Pradesh	32.32	50.31	73.67	67.26	223.56	58.86
Karnataka	20.34	37.31	18.61	35.72	111.98	23.10
Kerala	16.06	20.37	23.85	15.75	76.03	21.75
Tamil Nadu	11.58	19.22	40.97	15.10	86.87	11.12
All India	80.30	127.21	157.10	133.83	498.44	114.83
(C) Nitrophosphate (20.7-20.7-0)						
East	1.38	5.81	21.24	7.01	35.44	4.50
Bihar	1.05	2.03	12.77	1.59	17.44	1.57
West Bengal	0.33	3.78	8.47	5.42	18.00	2.93
North	5.37	11.73	22.80	—	39.30	3.10
Uttar Pradesh	5.37	11.73	22.80	—	39.90	3.10
South	3.48	18.38	17.86	6.53	39.25	10.76
Andhra Pradesh	1.89	9.23	6.61	5.77	23.50	8.58
Karnataka	1.59	8.45	3.01	0.40	13.45	1.90
Tamil Nadu	—	0.70	1.24	0.36	2.30	0.28
West	47.61	51.87	27.17	64.75	191.40	43.86
Gujarat	4.71	3.85	4.06	0.41	13.03	5.97
Madhya Pradesh	2.04	2.81	2.69	6.66	14.20	0.92
Maharashtra	40.86	45.21	20.42	57.68	164.17	36.97
All India	57.84	87.79	82.07	78.29	305.99	59.12

(Continued)

**5.05. DESPATCHES OF COMPLEX FERTILISERS-INDIGENOUS
1986-87 QUARTERWISE (Continued)**

('000 tonnes)

State/Zone	April/ June 1986	July/ Sept. 1986	Oct. Dec. 1986	Jan./ March 1987	Total	April/ June 1987
					April '86 March '87	
(D) NPK (14-28-14)						
South	7.21	8.82	5.16	0.02	21.21	5.10
Andhra Pradesh	4.34	3.57	0.28	—	8.19	2.74
Karnataka	2.50	5.80	2.19	—	9.77	2.02
Tamil Nadu	0.37	0.17	2.69	0.02	3.25	0.34
All India	7.21	8.82	5.16	0.02	21.21	5.10
(E) NP (28-28-0)						
East	8.39	11.60	4.73	20.53	45.25	10.31
Orissa	5.06	7.16	1.58	12.80	26.60	8.60
West Bengal	3.33	4.44	3.15	7.73	18.65	1.71
South	23.66	47.86	60.50	61.46	193.48	4.81
Andhra Pradesh	23.66	47.86	60.50	61.46	193.48	4.81
West	4.44	11.45	3.96	0.82	30.67	1.83
Madhya Pradesh	4.44	11.45	3.96	0.82	20.67	1.83
All India	36.49	70.91	69.19	82.81	259.40	16.95

(Continued)

**5.05. DESPATCHES OF COMPLEX FERTILISERS-INDIGENOUS
1986-87 QUARTERWISE (Continued)**

('000 tonnes)

Zone/State	April/ June 1986	July/ Sept. 1986	Oct./ Dec. 1986	Jan./ March 1987	Total	
					April '86 March '87	April/ June 1987
(F) NPK (12-32-16)						
East	8.56	—	9.92	—	18.48	0.83
Bihar	8.56	—	9.92	—	18.48	0.83
North	19.35	49.35	29.43	21.68	119.81	11.92
Haryana	—	2.63	1.78	—	4.41	1.66
Punjab	—	14.61	6.96	3.31	24.88	10.26
Uttar Pradesh	19.35	32.11	20.69	18.37	90.52	—
South	—	0.52	—	—	0.52	7.49
Karnataka	—	—	—	—	—	7.49
Tamil Nadu	—	0.52	—	—	0.52	—
West	49.32	17.26	12.19	34.77	113.54	45.08
Gujarat	26.99	10.29	5.27	20.90	63.45	37.05
Maharashtra	0.25	—	—	0.30	0.55	—
Madhya Pradesh	19.49	2.42	6.92	12.09	40.92	7.06
Rajasthan	2.59	4.55	—	1.48	8.62	0.97
All India	77.23	67.13	51.54	56.45	252.35	65.32
(G) NPK (10-26-26)						
East	11.56	34.34	19.78	6.59	72.27	14.88
Orissa	3.29	4.97	—	—	8.26	6.60
West Bengal	8.27	29.37	19.78	6.59	64.01	8.28
South	8.35	19.37	8.29	13.30	49.11	18.25
Karnataka	5.02	1.65	1.66	3.33	11.66	11.68
Kerala	—	3.33	—	3.32	6.65	—
Tamil Nadu	3.33	14.19	6.63	6.65	30.80	6.57
West	21.70	16.25	8.31	7.59	53.85	26.41
Gujarat	0.05	0.02	—	—	0.07	0.24
Maharashtra	21.65	16.23	8.31	7.59	53.78	26.17
All India	41.61	69.76	36.38	27.48	175.23	59.54

(Continued)

5.05. DESPATCHES OF COMPLEX FERTILISERS—INDIGENOUS
1986-87 QUARTERWISE (Continued)

('000 tonnes)

Zone/State	April/ June 1986	July/ Sept. 1986	Oct./ Dec. 1986	Jan./ March 1987	Total	April/ June 1987
					April '86 to March '87	
(H) Nitrophosphate (15-15-15)						
East	2.39	15.01	16.85	8.53	42.78	6.64
Bihar	1.15	1.49	2.10	—	4.74	—
West Bengal	1.24	13.52	14.75	8.53	38.04	6.64
North	2.29	1.40	8.17	—	11.86	—
Haryana	1.56	—	0.74	—	2.30	—
Punjab	—	—	0.64	—	0.64	—
Uttar Pradesh	0.73	1.40	6.79	—	8.92	—
South	15.15	24.97	21.09	24.05	35.26	25.59
Andhra Pradesh	3.65	5.50	2.44	3.45	15.04	2.93
Karnataka	11.50	18.47	17.78	15.07	62.82	18.34
Kerala	—	1.00	—	1.12	1.12	0.36
Tamil Nadu	—	—	—	3.76	3.76	3.96
Coffee Board	—	—	0.87	0.65	1.52	—
West	40.05	39.20	17.72	31.67	125.64	42.53
Gujarat	2.38	2.03	1.88	2.05	8.34	3.60
Madhya Pradesh	1.13	1.00	1.12	0.23	3.64	2.36
Maharashtra	36.54	33.01	14.72	29.39	113.66	36.57
All India	59.88	77.58	63.83	64.25	265.54	74.76
(I) NPK (19-19-19)						
South	20.60	30.54	29.39	12.82	93.35	16.51
Andhra Pradesh	8.31	8.46	14.68	4.20	35.65	2.95
Karnataka	11.73	19.03	14.29	8.40	53.45	13.56
Coffee Board	0.56	3.05	0.42	0.22	4.25	—
West	22.54	27.79	19.81	12.53	82.67	29.53
Goa	2.33	1.13	1.16	0.58	5.20	2.86
Maharashtra	20.21	26.59	18.60	11.94	77.34	26.67
Madhya Pradesh	—	0.07	0.05	0.01	0.13	—
All India	43.14	58.33	49.20	25.35	176.02	46.04

(Continued)

**5.05. DESPATCHES OF COMPLEX FERTILISERS—INDIGENOUS
1986-87 QUARTERWISE (Concluded)**

('000 tonnes)

Zone/State	April/ June 1986	July/ Sept. 1986	Oct./ Dec. 1986	Jan./ March 1987	Total	April June 1987
					April '86 to March '87	
(J) NPK (17-17-17)						
South	66.36	182.92	156.55	164.95	572.50	87.11
Andhra Pradesh	25.14	68.93	50.22	57.00	201.29	22.00
Karnataka	12.27	49.86	20.76	51.19	134.08	21.19
Kerala	8.26	10.73	18.47	12.60	50.06	14.04
Tamil Nadu	19.75	53.40	65.77	42.81	181.73	28.90
Pondicherry	0.94	1.72	1.33	1.35	5.34	0.98
All India	66.36	182.92	156.55	164.95	572.50	87.11
(K) NPK (14-35-14)						
East	0.18	1.63	—	—	1.81	0.10
Orissa	0.18	—	—	—	0.18	0.05
West Bengal	—	1.63	—	—	1.63	0.05
South	0.83	2.39	4.08	1.69	8.99	—
Andhra Pradesh	0.83	2.39	4.08	1.69	8.99	—
West	0.55	2.04	0.08	—	2.67	3.38
Madhya Pradesh	0.55	2.04	0.08	—	2.67	3.38
All India	1.56	6.06	4.16	1.69	13.47	3.48

**5.06. DESPATCHES OF POTASSIC FERTILISERS
1986-87 QUARTERWISE**

('000 tonnes)

Zone/State	April/June 86	July/Sept. 86	Oct./Dec. 86	Jan./Mar. 87	Total	
					April 86 to March 87	April/June 1987
A. Muriate of Potash (60% K₂O)						
East	25.76	31.62	62.75	49.01	169.14	31.08
Assam	6.85	5.81	7.86	16.20	36.72	11.90
Bihar	4.50	3.03	24.62	2.67	34.82	3.39
Manipur	—	0.30	—	—	0.30	—
Meghalaya	0.09	0.07	—	0.20	0.36	0.05
Mizoram	—	—	0.01	—	0.01	—
Orissa	1.54	3.09	2.84	5.36	12.83	2.42
Tripura	0.34	0.38	0.06	0.48	1.26	0.37
West Bengal	12.40	18.84	27.31	24.10	82.65	12.95
A & N Islands	0.04	0.06	0.05	—	0.15	—
North	10.80	28.11	65.45	2.20	106.56	13.68
Haryana	1.23	1.37	1.97	0.03	4.60	1.30
Himachal Pradesh	0.40	0.51	3.10	0.63	4.64	0.47
Jammu & Kashmir	0.44	—	1.67	—	2.11	2.00
Punjab	2.32	6.47	2.96	0.21	11.96	2.51
Uttar Pradesh	6.37	19.71	55.73	1.33	83.14	7.31
Delhi	0.04	0.05	0.02	—	0.09	0.01
South	94.58	134.65	136.93	73.47	439.63	105.08
Andhra Pradesh	7.13	12.52	13.37	11.34	44.36	10.67
Karnataka	18.23	33.87	15.68	16.62	84.40	21.23
Kerala	27.92	35.91	27.94	10.53	102.30	30.18
Tamil Nadu	39.67	51.14	78.49	33.31	202.61	41.69
Pondicherry	1.63	1.21	1.45	1.67	5.96	1.31
West	39.36	44.25	36.70	32.86	153.17	47.82
Gujarat	8.83	7.27	9.37	8.83	34.30	10.41
Madhya Pradesh	6.85	8.39	6.92	2.72	24.88	7.66
Maharashtra	22.96	27.73	19.67	20.39	90.75	28.64
Rajasthan	0.59	0.61	0.74	0.77	2.71	0.96
Goa	0.13	0.25	—	0.15	0.53	0.15
Others	141.79	152.34	160.94	111.13	566.20	87.71
All India	312.29	390.97	462.77	288.67	1434.70	285.29
B. Sulphate of Potash (50% K₂O)						
South	2.98	2.91	5.03	0.59	11.51	3.08
Andhra Pradesh	0.11	2.44	4.46	0.32	7.33	0.44
Karnataka	2.87	0.47	0.57	0.27	4.18	2.56
Tamil Nadu	0.005	—	—	—	0.005	—
West	0.59	1.15	0.95	0.29	2.98	0.71
Maharashtra	0.59	1.15	0.95	0.29	2.98	0.71
All India	3.57	4.06	5.98	0.88	14.49	3.71

**5.07. DISTRIBUTION OF TOTAL FERTILISERS MATERIALS
1978-79 to 1986-87**

('000 tonnes)

Fertiliser/ Materials	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
A. Nitrogenous									
Ammonium sulphate (20.6% N)	581.4	710.2	503.6	501.5	508.6	459.6	479.9	507.6	533.1
Urea (46% N)	835.8	5786.4	6044.8	6701.4	7130.7	8241.4	9347.3	10015.3	11569.7
Ammonium sulphate nitrate (26% N)	0.7	—	—	—	—	—	—	—	—
Calcium ammonium nitrate (25% N)	554.1	484.0	307.3	412.6	319.3	319.9	374.3	422.9	360.6
Calcium ammonium nitrate (26% N)	84.7	101.0	162.9	61.6	34.5	41.0	17.9	22.6	—
Ammonium chloride (25% N)	23.2	17.0	17.7	18.5	23.3	54.4	73.2	95.3	100.5
B. NPs and NPKs									
16-20-0	121.6	129.8	106.7	105.7	95.1	130.9	57.9	57.7	73.3
20-20-0	42.4	40.9	36.3	43.7	125.2	202.2	396.3	451.7	498.4
28-28-0	325.1	281.4	226.0	299.5	233.8	280.1	263.1	290.7	259.4
24-24-0	30.0	20.0	37.1	24.3	14.0	4.3	4.0	—	—
14-35-14	16.8	53.5	63.2	35.1	37.4	15.0	30.1	21.6	14.4
20-20-0/20.7-20.7-0	120.7*	183.8	240.8	252.8	226.3	267.0	267.7	234.2	306.0
20-20-0 (20-10-10)	(0.1)	—	—	—	—	—	—	—	—
19-19-19	78.1	59.1	26.3	110.7	131.8	180.3	121.2	177.1	176.0
15-15-15	247.7	270.4	240.8	305.0	248.4	266.5	265.9	263.7	265.5
15-15-15 (imported)	8.5	—	—	—	—	—	—	—	—
17-17-17	491.3	442.1	542.3	609.4	541.3	537.6	553.4	526.6	572.5
10-26-26	77.6	57.9	111.1	122.9	96.8	112.2	199.4	287.1	268.0
12-32-16	482.2	458.6	515.7	672.2	685.4	316.2	439.5	584.7	392.8
18-46-0	620.2	751.3	808.1	722.9	885.1	1293.9	2006.7	2253.8	2710.0
14-28-14	42.4	36.0	62.1	43.8	22.4	9.8	32.0	23.0	21.2
20-20-0**	5.8	—	—	—	—	—	—	—	—
Other grades of NP/NPKs (Now not imported)	4.4	—	—	—	—	—	—	—	—

(Continued)

**5.07. DISTRIBUTION OF TOTAL FERTILISERS MATERIALS
1978-79 to 1986-87 (Concluded)**

('000 tonnes)

Fertiliser/ Materials	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
C. Phosphatic									
Single super phosphate (16% P ₂ O ₅)	1025.0 [32.8]	1040.5 [24.0]	1051.3 [19.5]	1163.8 [5.6]	1249.2	1492.8	1740.6	2080.3	2028.9
Triple super-phosphate (46% P ₂ O ₅)	15.7	21.6	33.3	46.5	32.8	25.7	7.9	2.6	0.5
D. Potassic									
Muriate of Potash (60% K ₂ O)	918.3	901.5	1017.0	1108.3	1026.0	1036.1	1400.2	1411.8	1434.7
Sulphate of Potash (48-50 K ₂ O)	14.3	9.2	14.8	10.9	12.2	13.9	12.6	14.1	14.5
Total N	2986.2	3444.2	3522.0	3881.7	4043.0	4637.3	5333.3	5750.0	6528.7
P ₂ O ₅	950.6	997.9	1074.1	1154.7	1182.5	1351.3	1795.1	2041.2	2197.7
K ₂ O	560.1	545.1	617.6	670.4	621.7	628.6	846.4	854.1	868.1
Total Material	10816.2	11979.8	12188.8	13377.8	13646.4	15300.6	18090.7	19744.4	21600.8

* This consists of APSN as well as Ammonium Nitrophosphate.

** Imported Nitrophosphate.

[14% P₂O₅]

() Other grades.

5.10. CROPPED AREA SERVICED AND FERTILISER CONSUMPTION PER SALE POINT

1984-85, 1985-86 & 1986-87 (April-March)

Zone/State	1984-85			1985-86 [@]			1986-87 [@]		
	Gross cropped area/ sale point (ha)	N+P ₂ O ₅ +K ₂ O con- sumption/sale point (tonnes)	N+P ₂ O ₅ +K ₂ O con- sumption per unit of cropped area (kg/ha)	Gross cropped area/ sale point (kg)	N+P ₂ O ₅ +K ₂ O con- sumption/sale point (tonnes)	N+P ₂ O ₅ +K ₂ O con- sumption/per unit of cropped area (kg/ha)	Gross cropped area/ sale point (ha)	N+P ₂ O ₅ +K ₂ O con- sumption/sale point (tonnes)	N+P ₂ O ₅ +K ₂ O con- sumption per unit of cropped area (kg/ha)
East	856	24.3	28.4	772	25.0	33.2	687	25.0	36.3
Assam	1267	4.9	3.9	1148	5.4	4.7	1092	5.1	4.7
Bihar	1323	49.2	37.2	1323	64.7	48.8	1161	59.7	51.4
Chhatisgarh	204	4.1	20.6	399	10.5	26.3	393	12.1	30.7
Madhya Pradesh	412	5.6	13.6	412	5.8	14.4	325	5.3	16.2
Nagaland	8864	13.2	1.5	8865	11.4	1.3	8478	15.2	1.8
Orissa	1485	17.7	12.0	890	13.1	14.7	774	10.1	13.0
Sikkim	1057	12.4	11.2	1057	11.4	10.8	810	9.9	12.2
Tripura	1154	9.5	8.3	1103	15.1	13.9	1103	20.1	18.2
West Bengal	413	21.4	51.7	392	20.4	52.2	370	23.6	63.7
North	1130	86.7	76.8	1111	98.0	88.2	1086	91.9	84.7
Haryana	1548	91.6	59.1	1530	100.0	65.5	1476	107.6	72.9
Himachal Pradesh	452	10.0	22.4	452	11.0	24.3	413	11.1	26.9
Jammu & Kashmir	687	19.8	28.8	687	23.9	34.8	676	20.3	30.0
Punjab	1150	172.6	150.1	1096	172.5	157.4	1097	175.4	159.9
Uttar Pradesh	1154	74.2	64.4	1141	89.8	78.7	1116	78.9	70.7
Delhi	636	56.4	19.5	593	54.0	20.3	593	69.2	26.0
South	862	59.7	69.3	814	53.2	65.4	844	56.1	66.9
Andhra Pradesh	1424	104.3	73.2	1252	83.0	66.3	1370	92.2	67.2
Karnataka	1349	69.4	51.5	1274	61.7	48.4	1228	60.5	49.3
Kerala	418	18.6	44.7	418	20.8	49.8	485	25.6	52.8
Tamil Nadu	455	45.3	99.5	438	42.2	96.2	438	42.6	97.1
Pondicherry	1686	54.8	325.0	169	56.7	338.4	169	62.5	370.5
West	2273	51.9	22.8	2154	51.5	23.9	2073	51.1	24.6
Gujarat	1338	64.8	48.4	1302	52.6	40.5	1287	49.7	38.6
Madhya Pradesh	2692	44.3	16.5	2348	44.8	19.1	2152	46.9	21.8
Maharashtra	2022	55.6	27.5	1906	60.3	31.7	1938	60.1	31.0
Rajasthan	3587	39.2	11.0	3841	44.9	11.6	3487	45.6	13.1
Goa	575	18.9	37.3	462	21.7	47.7	416	12.0	28.8
All India	1237	56.3	45.5	1158	56.1	48.4	1124	54.7	48.7

[@]=Provisional

- Note:— 1. Sale points as on 31-3-84, 31-3-85 and 31-3-86 used in calculation for 1984-85, 1985-86 and 1986-87, respectively.
2. Gross cropped area—1983-84 used in calculation for all the three years, i.e. 1984-85, 1985-86 and 1986-87.

**6.03 (a). SEASONWISE CONSUMPTION OF NITROGEN (N) BY STATES AND THEIR PERCENTAGE INCREASE
1985-86 and 1986-87 (April-March)**

Zone/State	Consumption of N ('000 tonnes)						±% over the previous year					
	1985-86			1986-87 ⁺ @			1985-86			1986-87 ⁺ @		
	Kharif	Rabi@ ⁺	Total@	Kharif	Rabi	Total	Kharif	Rabi@ ⁺	Total@	Kharif	Rabi	Total
East	312.8	401.9	714.7	328.4	438.4	766.8	21.8	12.8	16.5	5.0	9.1	7.3
Arunachal Pradesh	0.05	0.05	0.10	0.06	0.02	0.08	25.0	150.0	66.7	20.0	-60.0	-20.0
Assam	5.2	4.1	9.3	5.1	3.6	8.7	44.4	5.1	24.0	-1.9	-12.2	-6.5
Bihar	159.3	192.1	351.4	158.4	202.0	360.8	33.3	18.8	25.0	-0.3	5.2	2.7
Manipur	3.7	0.2	3.9	4.18	0.15	4.33	27.6	-33.3	21.9	13.0	-25.0	11.0
Meghalaya	0.7	0.9	1.6	0.84	1.03	1.87	40.0	-18.2	—	20.0	14.4	16.9
Nagaland	0.1	0.08	0.18	0.15	0.03	0.18	-33.3	166.7	—	50.0	-62.5	—
Orissa	45.6	41.5	87.1	42.2	39.3	81.5	22.6	25.0	23.7	-7.5	-5.3	-6.4
Sikkim	0.4	0.22	0.62	0.44	0.26	0.70	—	-26.7	-11.4	10.0	18.2	12.9
Tripura	1.1	2.4	3.5	2.18	2.31	4.55	37.5	84.6	66.6	98.2	-1.2	30.0
West Bengal	96.6	160.3	256.9	114.4	189.6	304.0	5.3	3.8	4.3	18.4	18.3	18.3
Mizoram	0.04	0.01	0.05	0.030	0.017	0.047	-20.0	-66.7	-37.5	-25.0	70.0	-6.0
Andaman & Nicobar Islands	0.03	0.03	0.06	0.03	0.01	0.04	400.0	2.5	100.0	—	-66.7	-33.3
North	1136.0	1480.7	2616.7	1067.8	1443.6	2511.4	19.4	8.4	12.9	-6.0	-2.5	-4.0
Haryana	123.4	173.0	296.4	126.9	200.2	327.1	15.8	4.2	8.7	2.8	15.7	10.4
Himachal Pradesh	9.9	7.9	17.8	10.8	8.5	19.3	4.2	16.2	9.2	9.1	7.6	8.4
Jammu & Kashmir	16.5	8.4	24.9	16.8	5.8	22.6	14.6	10.5	13.2	1.8	-31.0	-9.2

South	674.8	636.5	1311.3	647.6	691.4	1339.0	-12.1	-1.7	-7.4	-4.0	-8.6	2.1
Andhra Pradesh	321.5	247.4	568.9	303.1	280.1	583.2	-11.8	-11.7	-11.8	-5.7	13.2	2.5
Karnataka	179.5	116.2	295.7	179.1	122.5	201.6	-2.4	-8.5	-4.9	-0.2	5.4	2.0
Kerala	33.1	26.7	59.8	33.7	27.0	60.7	0.3	8.5	3.6	1.8	1.1	2.0
Tamil Nadu	137.3	241.6	378.9	127.5	257.3	384.8	-24.8	14.3	-3.8	-7.1	6.5	1.6
Pondicherry	3.4	4.6	8.0	4.2	4.5	8.7	-10.5	7.0	-1.2	23.5	-2.1	8.8
West	622.3	492.3	1114.6	648.6	475.2	1123.8	12.3	2.1	5.5	4.2	-3.5	0.8
Gujarat	147.4	139.1	286.5	144.2	111.5	255.7	3.3	17.1	-10.6	-2.2	19.8	-10.8
Madhya Pradesh	131.1	122.1	253.2	151.4	138.1	289.5	15.7	10.7	13.2	15.5	13.1	14.3
Maharashtra	288.6	122.0	410.6	292.9	105.0	397.9	22.8	-1.7	14.3	1.5	13.9	-3.1
Rajasthan	52.6	108.2	160.8	58.7	119.7	178.4	3.3	8.7	6.9	11.6	10.6	10.9
Goa, Daman & Diu	2.4	0.9	3.3	1.2	0.8	2.0	14.3	—	10.0	-50.0	-11.1	-39.4
Dadra & Nagar Haveli	0.2	0.04	0.24	0.2	0.06	0.26	11.1	33.3	14.3	—	50.0	8.3
Others*	30.1	28.0	58.1	27.9	27.1	55.0	-32.2	-28.6	-30.5	-6.7	-3.2	-5.3
All India	2776.0	3039.4	5815.4	2720.3	3075.7	5796.0	7.8	4.4	6.0	-2.0	1.2	-0.3

* Includes plantations.

@ Provisional.

+ Collected & completed in FAI.

Source: Ministry of agriculture, New Delhi.

**8.02(b). SEASONWISE CONSUMPTION OF PHOSPHATE (P₂O₅) BY STATES AND THEIR PERCENTAGE INCREASE
1985-86 and 1986-87 (April-March)**

Zone/State	Consumption of P ₂ O ₅ ('000 tonnes)						±% over the previous year					
	1985-86			1986-85 ⁺ @			1985-86			1986-87 ⁺ @		
	Kharif	Rabi@ ⁺	Total@	Kharif	Rabi	Total	Kharif	Rabi@ ⁺	Total@	Kharif	Rabi	Total
East	94.7	143.3	238.0	103.0	165.5	268.5	37.4	18.8	25.6	8.8	15.5	12.8
Arunachal Pradesh	0.13	0.02	0.15	0.04	0.03	0.07	225.0	100.0	300.0	-69.2	50.0	-53.3
Assam	2.4	1.2	3.6	1.8	1.4	3.2	140.0	-33.3	73.1	-25.0	16.7	-11.2
Bihar	37.5	67.4	104.9	37.6	78.4	116.0	78.6	55.3	62.9	0.3	16.3	-10.6
Manipur	0.7	0.1	0.8	1.03	0.11	1.14	75.0	-28.6	48.1	47.1	10.0	42.5
Meghalaya	0.5	0.8	1.3	0.55	0.84	1.39	25.0	—	8.3	10.0	5.0	3.9
Nagaland	0.01	0.05	0.06	0.13	0.02	0.15	-88.9	150.0	-45.5	1200.0	-60.0	150.0
Orissa	17.0	16.4	33.4	17.6	13.2	30.8	21.4	22.4	21.9	3.5	-19.5	-7.8
Sikkim	0.25	0.26	0.51	0.26	0.29	0.55	25.0	4.0	13.3	4.0	11.5	7.3
Tripura	0.3	0.7	1.0	0.64	0.66	1.30	76.5	75.0	75.4	113.3	-5.7	30.0
West Bengal	36.0	56.3	92.3	43.3	70.5	113.8	13.9	-6.6	0.4	20.3	25.2	23.3
Mizoram	0.02	0.01	0.03	0.045	0.024	0.069	—	-83.3	-61.5	125.0	140.0	130.0
Andaman & Nicobar Islands	0.02	0.0	0.04	0.02	0.009	0.029	1900.0	—	90.5	—	-55.0	-27.5
North	183.3	560.1	743.4	152.5	575.2	727.7	54.8	11.3	19.6	-16.8	2.7	-2.1
Haryana	14.2	55.5	69.7	15.5	66.5	82.0	40.6	20.1	23.8	9.2	19.8	17.6
Himachal Pradesh	0.7	2.7	3.4	0.7	3.3	4.0	16.7	3.8	6.2	—	22.2	17.6
Jammu & Kashmir	4.0	3.5	7.5	3.7	2.8	6.5	42.9	16.7	29.3	-7.5	-20.0	-13.4
Punjab	63.8	223.4	287.2	63.9	225.6	289.5	13.3	6.3	7.8	0.2	1.0	0.8
Uttar Pradesh	100.3	274.0	374.3	68.3	275.6	343.9	107.7	14.2	29.8	-31.9	0.6	-8.1
Chandigarh	0.04	0.10	0.14	0.05	0.20	0.25	-65.7	-50.0	-51.7	25.0	100.0	78.6
Delhi	0.27	0.9	1.17	0.3	1.21	1.51	35.0	-10.0	-2.5	11.1	34.4	29.1

South	343.1	247.1	590.2	309.2	275.2	584.4	-2.4	0.7	-1.1	-9.9	11.4	-1.0
Andhra Pradesh	149.5	93.3	242.8	130.2	111.2	241.4	-3.8	-5.8	-4.6	-12.9	19.2	-0.6
Karnataka	109.6	54.8	164.4	99.2	61.8	161.0	1.4	-10.5	-2.9	-9.5	12.8	-2.1
Kerala	20.1	14.7	34.8	20.4	15.4	35.8	5.8	8.1	6.7	1.5	4.8	2.9
Tamil Nadu	62.7	82.7	145.4	58.1	85.1	143.2	-7.4	17.8	5.4	-7.3	2.9	-1.5
Pondicherry	1.2	1.6	2.8	1.7	1.7	3.0	—	23.1	12.0	8.3	6.3	7.1
West	261.2	210.0	471.2	277.3	233.6	511.4	13.7	-6.9	3.5	6.4	11.2	8.5
Gujarat	60.3	49.0	109.3	53.7	58.1	111.8	-21.1	-31.4	-26.5	-10.9	18.6	2.3
Madhya Pradesh	74.3	78.5	152.8	88.4	85.4	173.8	32.9	14.1	22.5	19.0	8.8	13.7
Maharashtra	108.2	43.1	151.3	115.8	43.6	159.4	37.7	-14.4	17.2	7.0	1.2	5.4
Rajasthan	16.7	38.8	55.5	19.0	45.9	64.9	-1.2	12.8	8.2	13.8	18.3	16.9
Goa, Daman & Diu	1.6	0.6	2.2	0.8	0.6	1.4	77.8	20.0	57.1	-50.0	—	-36.4
Dadra & Nagar Haveli	0.11	0.03	0.14	0.11	0.04	0.15	10.0	—	7.7	—	33.3	7.1
Others*	14.5	10.7	25.2	11.6	9.1	20.7	5.8	12.6	8.6	-20.0	-15.9	-18.3
All India	896.8	1171.2	2068.0	854.1	1258.5	2112.6	14.6	6.1	9.6	-4.8	7.4	2.2

@=Provisional.

* =Includes plantations.

+ =Collected and compiled in FAI.

Source: Ministry of Agriculture, New Delhi.

**6.03(c). SEASONWISE CONSUMPTION OF POTASH (K₂O) BY STATES AND THEIR PERCENTAGE INCREASE
1985-86 and 1986-87 (April-March)**

Zone/State	Consumption of K ₂ O ('000 tonnes)						± % over the previous year					
	1985-86			1986-87 ⁺ @			1985-86			1986-87 ⁺ @		
	Kharif	Rabi@ ⁺	Total@	Kharif	Rabi	Total	Kharif	Rabi@ ⁺	Total@	Kharif	Rabi	Kharif
East	47.1	82.4	129.5	61.6	89.4	151.0	-6.0	11.4	4.4	30.8	8.5	16.6
Arunachal Pradesh	0.02	0.01	0.03	0.01	0.03	0.04	—	—	50.0	-50.0	200.0	33.3
Assam	2.1	1.7	3.8	2.5	2.4	4.9	40.0	-15.0	8.6	19.0	41.2	28.9
Bihar	14.6	30.5	45.1	15.7	34.9	50.6	18.7	28.7	25.3	7.5	14.4	12.2
Manipur	0.09	0.04	0.13	0.15	0.04	0.19	125.0	100.0	116.7	66.7	—	46.2
Meghalaya	0.09	0.08	0.17	0.10	0.12	0.22	125.0	-27.3	13.3	11.1	50.0	29.4
Nagaland	0.01	—	0.01	0.02	0.002	0.022	—	—	—	100.0	—	120.0
Orissa	9.7	10.2	19.9	4.1	8.4	12.5	26.0	20.0	22.8	-57.7	-17.6	37.2
Sikkim	0.04	0.02	0.06	0.10	0.01	0.11	—	-60.0	53.3	150.0	-50.0	83.3
Tripura	0.17	0.55	0.72	0.42	0.56	0.98	21.4	61.8	50.0	147.1	1.8	36.1
West Beng I	20.3	39.3	59.6	38.5	42.9	81.4	-29.3	—	-11.8	89.7	9.2	36.6
Mizoram	0.01	0.002	0.012	0.02	0.011	0.031	-66.7	-90.0	-76.0	100.0	450.0	158.8
Andaman & Nicobar Islands	0.02	0.01	0.03	0.02	0.01	0.03	100.0	-50.0	—	—	—	—
North	54.9	95.4	150.3	39.2	91.8	131.0	49.2	17.1	27.0	-28.6	-3.8	-12.8
Haryana	2.0	4.2	6.2	1.7	4.1	5.8	5.3	-26.3	-18.4	-15.0	-2.4	-6.5
Himachal Pradesh	0.35	2.1	2.45	0.4	2.4	2.8	9.4	10.5	10.4	14.3	14.3	14.7
Jammu & Kashmir	0.88	1.9	2.76	0.7	0.5	1.2	76.0	137.5	112.3	-20.5	-73.7	-56.5
Punjab	9.8	13.9	23.7	9.6	13.5	23.1	3.2	8.6	6.3	-2.0	-2.9	-2.5
Uttar Pradesh	41.8	73.0	114.8	26.7	71.2	97.9	70.6	21.5	-35.7	-36.2	-2.5	-14.7
Chandigarh	0.01	0.2	0.21	0.01	0.03	0.04	—	566.6	425.0	—	-85.0	-81.0
Delhi	0.05	0.13	0.18	0.1	0.07	0.17	-54.6	-18.8	-33.3	100.0	-46.2	-5.6

South	199.9	168.0	367.9	189.2	186.4	305.6	-11.6	1.8	-6.0	-5.7	16.9	4.6
Andhra Pradesh	39.9	36.6	76.5	35.3	41.6	76.9	-16.2	9.0	-5.6	-11.5	13.7	0.5
Karnataka	62.3	33.2	95.5	61.4	41.0	103.0	-13.6	-13.3	-13.5	-1.4	25.3	7.8
Kerala	28.8	19.1	47.9	31.6	23.1	54.7	29.1	26.5	28.1	9.7	20.9	14.2
Tamil Nadu	67.0	76.9	143.9	58.7	87.7	146.4	-18.6	0.6	-9.3	-13.4	14.0	1.7
Pondicherry	1.9	2.2	4.1	2.2	2.4	4.6	—	22.2	10.8	15.8	9.1	12.2
West	110.7	54.3	165.0	106.7	61.6	168.3	26.7	-24.0	3.9	-3.6	15.3	2.6
Gujarat	16.7	8.9	25.6	17.9	17.0	34.9	-13.9	-44.7	-27.9	7.2	91.0	36.3
Madhya Pradesh	15.6	10.2	25.8	18.2	12.1	30.3	17.3	-7.3	6.2	16.7	18.6	17.4
Maharashtra	75.5	31.7	107.7	68.3	30.0	98.3	44.1	-21.3	15.4	-9.5	-5.4	-8.3
Rajasthan	1.5	3.1	4.6	1.6	2.2	3.8	7.1	-8.8	-4.2	6.7	-29.0	-17.4
Goa, Daman & Diu	1.4	0.4	1.8	0.7	0.3	1.0	55.6	-	100.0	-50.0	-25.0	-44.4
Dadra & Nagar Haveli	0.01	0.01	0.02	0.01	0.01	0.02	—	—	—	—	—	—
Other*	21.8	19.1	40.9	18.4	16.9	35.3	17.4	-3.0	11.3	-15.6	-11.5	-13.7
All India	434.4	410.2	853.6	415.1	456.2	871.3	1.8	1.8	1.8	-4.4	8.8	2.1

* =Includes plantations.

@=Provisional.

+ =Collected and compiled in FAI.

Source: Ministry of Agriculture, New Delhi.

**6.03(d). SEASONWISE CONSUMPTION OF N+P₂O₅+K₂O BY STATES AND THEIR PERCENTAGE INCREASE
1985-86 and 1986-87 (April-March)**

Zone/State	Consumption of N+P ₂ O ₅ +K ₂ O ('000 tonnes)						± % over the previous year					
	1985-86			1986-87@+			1985-86			1986-87+@		
	Kharif	Rabi+@	Total@	Kharif	Rabi	Total	Kharif	Rabi+@	Total@	Kharif	Rabi	Total
East <i>Arundel</i> Andhra Pradesh	454.7	627.5	1082.2	493.0	693.3	1186.3	20.9	13.9	16.8	8.4	10.5	9.6
Assam	0.10	0.08	0.18	0.11	0.08	0.19	11.1	100.0	38.5	10.0	—	5.6
Bihar	9.7	7.0	16.7	9.4	7.4	16.8	59.0	-9.1	21.0	-3.1	5.7	0.6
Manipur	211.5	290.0	501.5	212.1	315.4	527.4	38.3	26.8	31.4	0.3	8.8	5.2
Meghalaya	4.5	0.34	4.84	5.36	0.30	5.66	36.4	-15.0	30.8	19.1	-11.8	16.9
Nagaland	1.2	1.8	3.0	1.50	1.98	3.48	20.0	-5.3	3.4	25.0	10.0	16.0
Orissa	0.2	0.05	0.25	0.30	0.05	0.35	-20.0	25.0	-13.8	50.0	—	40.0
Sikkim	72.4	68.1	140.5	63.9	60.9	124.8	22.9	23.6	23.8	-11.8	-10.6	-11.2
Tripura	0.7	0.48	1.20	0.80	0.56	1.36	6.1	-25.0	-7.7	14.3	16.7	13.3
West Bengal	1.5	3.65	5.15	3.24	3.59	6.83	36.4	82.5	66.1	116.0	-1.6	32.6
Mizoram	152.8	253.9	408.7	196.2	303.0	499.2	0.8	0.7	0.7	28.4	18.4	22.1
Andaman & Nicobar Islands	0.07	0.022	0.092	0.095	0.052	0.15	-30.0	25.0	—	35.7	-65.3	-31.9
North	0.07	0.06	0.13	0.07	0.03	0.10	250.0	—	62.5	—	-50.0	-23.1
Haryana	1374.4	2136.0	3510.4	1259.5	2110.6	3370.1	24.2	9.5	14.8	-8.4	-1.2	-4.0
Himachal Pradesh	139.6	232.6	372.0	144.1	270.8	414.9	17.6	6.7	10.5	3.2	16.4	11.5
Jammu & Kashmir	11.0	12.6	23.6	11.9	14.2	26.1	7.8	10.5	9.3	8.2	12.7	10.6
Punjab	21.4	13.8	35.2	21.2	9.1	30.3	20.9	21.1	21.0	-0.9	-34.1	-13.9
Uttar Pradesh	425.6	672.6	1098.2	428.0	687.5	1115.5	5.3	4.5	4.8	0.6	2.2	1.6
	773.9	1198.0	1971.9	650.7	1121.0	1771.7	40.0	13.0	22.3	-15.9	-6.4	-10.2

South	1217.8	1051.6	2269.4	1146.0	1163.0	2309.0	-9.5	-0.6	-5.6	-5.9	10.6	1.7
Andhra Pradesh	510.9	377.2	888.1	468.6	432.9	901.5	-10.0	-8.6	-9.4	-8.3	14.8	1.5
Karnataka	351.4	204.2	555.6	339.7	225.9	565.6	-3.5	-9.8	-5.9	-3.3	10.6	1.8
Kerala	82.0	60.6	142.6	85.7	65.5	151.2	10.4	13.7	11.8	4.5	8.1	6.0
Tamil Nadu	267.1	401.2	668.3	244.3	430.1	674.4	-19.7	12.1	-3.2	-8.5	7.2	0.9
Pondicherry	6.4	8.4	14.8	7.7	8.6	16.3	-8.6	15.1	3.5	20.3	2.4	10.1
West	994.1	756.7	1750.8	1033.1	770.4	1803.5	14.1	-5.4	4.8	3.9	1.8	3.0
Gujarat	224.3	197.0	421.3	215.8	186.6	402.4	-10.0	-22.8	-16.5	-3.8	-5.3	-4.5
Madhya Pradesh	221.1	210.8	431.9	258.0	235.6	493.6	21.1	10.9	15.9	16.7	11.8	14.3
Maharashtra	472.3	196.8	669.1	477.0	178.6	655.6	29.0	-8.6	15.1	1.0	-9.2	-2.0
Rajasthan	70.8	150.1	220.9	79.3	167.8	247.1	2.3	9.3	7.0	12.0	11.8	11.9
Goa, Damaman & Diu	5.3	1.9	7.2	2.7	1.7	4.4	39.4	5.6	28.6	-49.1	-10.5	-39.9
Dadra & Nagar Haveli	0.32	0.08	0.40	0.32	0.11	0.43	6.7	33.3	11.1	—	37.5	7.5
Others*	66.4	57.8	124.2	57.9	53.1	111.0	-22.0	-15.1	-18.9	-12.4	-8.4	-10.6
All India	4107.4	4629.6	8737.0	3989.5	4790.4	8779.9	8.5	4.6	6.4	--2.9	3.5	0.5

* Includes plantations.

@ Provisional.

+ Collected & compiled in FAI.

Source: Ministry of Agriculture, New Delhi.

**6.06. ALL INDIA CONSUMPTION RATIO OF N & P₂O₅ IN RELATION TO
K₂O AND N IN RELATION TO P₂O₅**

1951-52 to 1986-87

Year	N/K ₂ O	P ₂ O ₅ /K ₂ O	N/P ₂ O ₅
1951-52	7.9	0.9	8.5
1952-53	17.5	1.4	12.6
1953-54	11.9	1.1	10.8
1954-55	8.5	1.4	6.3
1955-56	10.0	1.3	8.3
1956-57	8.3	1.1	7.7
1957-58	16.6	1.7	6.8
1958-59	7.7	1.3	5.8
1959-60	10.8	2.5	4.3
1960-61	7.3	1.8	4.0
1961-62	8.9	2.2	4.1
1962-63	9.1	2.3	4.0
1963-64	7.4	2.3	3.2
1964-65	8.0	2.1	3.7
1965-66	7.4	1.7	4.3
1966-67	6.5	2.2	3.0
1967-68	5.5	2.0	3.1
1968-69	7.1	2.2	3.2
1969-70	6.5	2.0	3.3
1970-71	6.3	2.3	2.7
1971-72	6.0	1.9	3.2
1972-73	5.3	1.7	3.2
1973-74	5.1	1.8	2.8
1974-75	5.3	1.4	3.7
1975-76	7.7	1.7	4.6
1976-77	7.7	2.0	3.9
1977-78	5.8	1.7	3.4
1978-79	5.8	1.9	3.1
1979-80	5.8	1.9	3.0
1980-81	5.9	1.9	3.0
1981-82	6.0	1.9	3.1
1982-83 (Feb /Jan.)	5.8	2.0	2.9
1982-83 (April/March)	5.8	2.0	3.0
1983-84 (April/March)	6.7	2.2	2.9
1984-85 (April/March)	6.5	2.2*	2.9
1985-86 (April/March)†	6.8	2.4	2.8
1986-87 (April/March)†	6.7	2.4	2.7

†Provisional.

**6.07. STATEWISE CONSUMPTION RATIO OF N & P₂O₅ IN RELATION TO
K₂O AND N IN RELATION TO P₂O₅
1985-86 and 1986-87**

Zone/State	1985-86@			1986-87@		
	N/K ₂ O	P ₂ O ₅ /K ₂ O	N/P ₂ O ₅	N/K ₂ O	P ₂ O ₅ /K ₂ O	N/P ₂ O ₅
East	5.5	1.8	3.0	5.1	1.8	2.9
Assam	2.4	0.9	2.6	1.8	0.7	2.7
Bihar	7.8	2.3	3.3	7.1	2.3	3.1
Manipur	30.0	6.2	4.9	22.8	6.0	3.8
Meghalaya	9.4	7.6	1.2	8.5	6.3	1.3
Nagaland	18.0	6.0	3.0	8.2	0.7	1.2
Orissa	4.4	1.7	2.6	6.5	2.5	2.6
Tripura	4.9	1.4	3.5	4.6	1.3	3.5
West Bengal	4.3	1.5	2.8	3.7	1.4	2.7
North	17.4	4.9	3.5	19.2	5.6	3.5
Haryana	47.8	11.2	4.3	56.4	14.1	4.0
Himachal Pradesh	7.3	1.4	5.2	6.9	1.4	4.8
Jammu & Kashmir	9.0	2.7	3.3	18.8	5.4	3.5
Punjab	33.0	12.1	2.7	34.8	12.5	2.8
Uttar Pradesh	13.0	3.3	4.0	13.0	3.5	3.9
Delhi	32.1	5.9	5.8	51.2	8.9	5.8
South	3.6	1.6	2.2	3.5	1.5	2.3
Andhra Pradesh	7.4	3.2	2.3	7.6	3.1	2.4
Karnataka	3.1	1.7	1.8	2.9	1.6	1.9
Kerala	1.2	0.7	1.7	1.1	0.7	1.7
Tamil Nadu	2.6	1.0	2.6	2.9	1.0	2.7
Pondicherry	2.0	0.7	2.9	1.9	0.7	2.8
West	6.8	2.9	2.4	6.6	3.0	2.2
Gujarat	11.2	4.3	2.6	7.3	3.2	2.8
Madhya Pradesh	9.8	5.9	7.7	9.6	5.7	1.7
Maharashtra	3.8	1.4	2.7	4.0	1.6	2.5
Rajasthan	35.0	12.1	2.9	46.9	17.1	2.7
Goa, Daman & Diu	1.8	1.2	1.5	2.0	1.4	1.4
All India	6.8	2.4	2.8	6.7	2.4	2.7

@=Provisional.

**6.08. ALL-INDIA CONSUMPTION OF PLANT NUTRIENTS PER UNIT OF
GROSS CROPPED AREA
(1951-52 to 1986-87)**

Year	Gross cropped area ('000 ha)	Consumption per hectare (kg)			
		N	P ₂ O ₅	K ₂ O	Total
1951-52	133,234	0.44	0.05	0.06	0.55
1952-53	137,675	0.42	0.03	0.02	0.47
1953-54	142,480	0.63	0.06	0.05	0.74
1954-55	144,087	0.66	4.10	0.08	0.84
1955-56	147,311	0.73	0.09	0.07	0.89
1956-57	149,492	0.82	0.11	0.10	1.03
1957-58	145,832	1.02	0.15	0.09	1.26
1958-59	151,629	1.13	0.19	0.15	1.47
1959-60	152,824	1.50	0.35	0.14	1.99
1960-61	151,772	1.39	0.35	0.19	1.93
1961-62	156,209	1.60	0.39	0.18	2.17
1962-63	156,760	2.12	0.53	0.23	2.88
1963-64	156,963	2.40	0.74	0.32	3.56
1964-65	159,229	3.49	0.93	0.44	4.86
1965-66	155,276	3.70	0.85	0.50	5.05
1966-67	157,355	4.69	1.58	0.73	7.00
1967-68	163,736	6.32	2.04	1.04	9.40
1968-69	159,529	7.58	2.40	1.07	11.05
1969-70	162,265	8.06	2.56	1.29	12.21
1970-71	165,791	8.92	3.26	1.43	13.61
1971-72	165,194	10.38	3.38	1.88	16.14
1972-73	162,150	11.34	3.58	2.14	17.06
1973-74	169,871	10.77	3.82	2.12	16.71
1974-75	164,190	10.75	2.87	2.05	15.67
1975-76	170,994	12.57	2.3	1.63	16.93
1976-77	167,280	14.09	3.80	1.90	20.39
1977-78	172,310	16.91	5.03	2.94	24.83
1978-79	174,764	19.57	6.33	3.38	29.28
1979-80	169,657	20.62	6.78	3.57	30.97
1980-81	173,096	21.22	7.00	3.60	31.82
1981-82	177,042	22.98	7.47	3.82	34.27
1982-83	173,396 ⁺	24.36	8.28	4.19	36.83
1983-84	180,361 ⁺	28.85	9.59	4.30	42.75
1984-85	180,361 ⁺	30.42	10.46	4.63	45.53
1985-86 ⁺	180,361 ⁺	32.24	11.47	4.73	48.44
1986-87 ⁺	180,361 ⁺	32.14	11.71	4.83	48.68

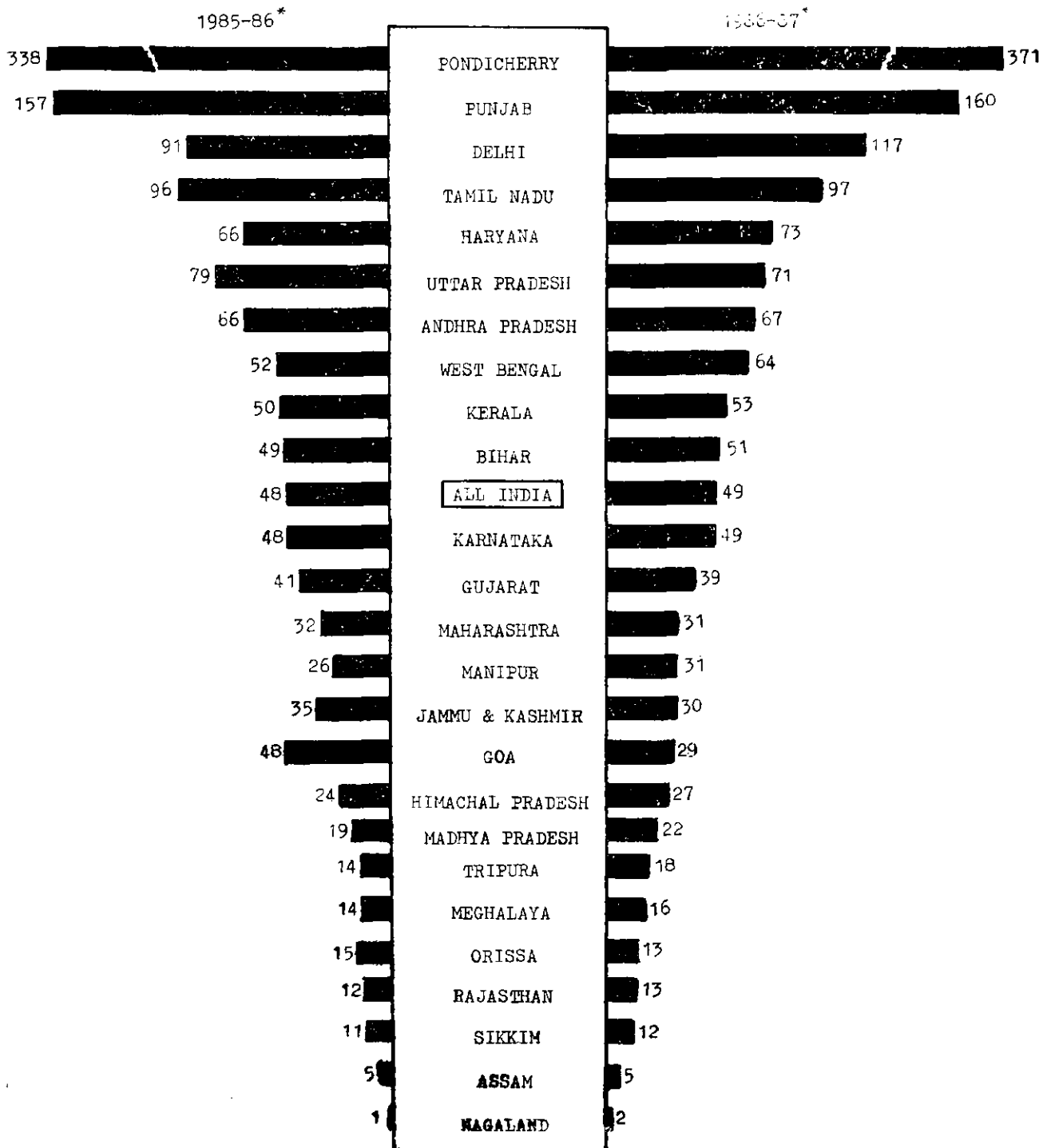
*Figures of consumption and gross cropped area refer to the same year, except last four years, where gross cropped area is for the year 1983-84.

⁺Provisional.

Note: Calculated on the basis of consumption figures given in Table 6.01 (Part-I) and gross cropped area in Table 1.02 (Part-II).

Consumption of Plant Nutrients (Kg**)

(N + P₂O₅ + K₂O)



* PROVISIONAL

**PER HECTARE OF GROSS CROPPED AREA

**6.09. STATEWISE CONSUMPTION OF PLANT NUTRIENTS PER UNIT OF GROSS
CROPPED AREA
1985-86 and 1986-87**

(kg/hectare)

Zone/State	1985-86@				1986-87@			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
East	21.9	7.3	4.0	33.2	23.5	8.2	4.6	36.3
Assam	2.6	1.0	1.1	4.7	2.4	0.9	1.4	4.7
Bihar	34.2	10.2	4.4	48.8	35.2	11.3	4.9	51.4
Orissa	9.1	3.5	2.1	14.7	8.5	3.2	1.3	13.0
West Bengal	32.8	11.8	7.6	52.2	38.8	14.5	10.4	63.7
Meghalaya	7.5	6.1	0.8	14.4	8.7	6.5	1.0	16.2
Manipur	21.2	4.3	0.8	26.3	23.5	6.2	1.0	30.7
Nagaland	0.9	0.3	0.5	1.3	0.9	0.8	0.1	1.8
Sikkim	5.5	4.5	0.4	10.8	6.3	4.9	1.0	12.2
Tripura	9.3	2.7	1.9	13.9	12.1	3.5	2.6	18.2
North	65.7	18.7	3.8	88.2	63.1	18.3	3.3	84.7
Haryana	52.1	12.3	1.1	65.5	57.5	14.4	1.0	72.9
Himachal Pradesh	18.3	3.5	2.5	24.3	19.9	4.1	2.9	26.9
Jammu & Kashmir	24.6	7.4	2.8	34.8	22.4	6.4	1.2	30.0
Punjab	112.8	41.2	3.4	157.4	115.1	41.5	3.3	159.9
Uttar Pradesh	59.2	14.9	4.60	78.7	53.1	13.7	3.9	70.7
Chandigarh	9.0	1.6	2.9	13.5	10.2	2.8	0.5	13.5
Delhi	75.8	13.1	2.0	90.9	97.8	17.0	1.9	116.7
South	37.8	17.0	10.6	65.4	38.5	16.8	11.1	66.9
Andhra Pradesh	42.5	18.1	5.7	66.3	43.5	18.0	5.7	67.2
Karnataka	25.8	14.3	8.3	48.4	26.3	14.0	9.0	49.3
Kerala	20.9	12.2	16.7	49.8	21.2	12.5	19.1	52.8
Tamil Nadu	55.1	20.4	20.7	96.2	55.4	20.6	21.1	97.1
Pondicherry	181.8	63.5	93.1	338.4	197.7	68.2	104.6	370.5
West	15.2	6.4	2.3	23.9	15.3	7.0	2.3	24.6
Gujarat	27.5	10.5	2.5	40.5	24.5	10.8	3.3	38.6
Madhya Pradesh	11.2	6.8	1.1	19.1	12.8	7.7	1.3	21.8
Maharashtra	19.4	7.2	5.1	31.7	18.8	7.5	4.7	31.0
Rajasthan	8.5	2.9	0.2	11.6	9.5	3.4	0.2	13.1
Goa, Daman & Diu	21.6	14.3	11.8	47.7	13.1	9.2	6.5	28.8
All India	32.2	11.5	4.7	48.4	32.1	11.7	4.9	48.7

@ Provisional.

Note: Figures for consumption of Plant nutrients per hectare have been worked out on the basis of Statewise consumption data given in Tables 6.03(a), 6.03(b) and 6.03(c) and latest gross cropped area available for the year 1983-84.

6.10. SHARE OF GROSS CROPPED AREA AND FERTILISER CONSUMPTION TO ALL-INDIA—STATEWISE—1986-87 (April-March)

Zone/State	Share of state to All-India gross cropped area (%)	Share of state to All-India@ consumption (N+P+K) (%)	Gross area sown ('000 hectares)	N+P+K@ consumption per hectare of gross cropped area (kg)	Col. 3 vs Col. 2*
(1)	(2)	(3)	(4)	(5)	(6)
East	18.1	13.5	32,596	38.3	Lower
Assam	2.9	0.2	3,577	4.7	Lower
Bihar	5.7	6.0	10,259	51.4	Higher
Orissa	5.3	1.4	9,563	18.0	Lower
West Bengal	4.3	5.7	7,842	63.7	Higher
North	22.1	38.4	39,807	84.7	Higher
Haryana	3.2	4.7	5,688	72.9	Higher
Himachal Pradesh	0.5	0.3	971	26.9	Lower
Jammu & Kashmir	0.6	0.3	1,011	30.0	Lower
Punjab	3.9	12.7	6,977	159.9	Higher
Uttar Pradesh	13.9	20.2	25,067	70.7	Higher
South	19.2	25.3	34,722	66.4	Higher
Andhra Pradesh	7.4	10.3	13,393	67.2	Higher
Karnataka	6.4	6.4	11,476	52.8	Higher
Kerala	1.6	1.7	2,861	49.3	Higher
Tamil Nadu	3.9	7.7	6,945	97.1	Higher
Pondicherry	00.2	0.2	44	370.5	Higher
West	40.6	20.5	73,236	24.6	Lower
Gujarat	5.8	4.6	10,423	38.6	Lower
Madhya Pradesh	12.5	5.6	22,628	21.8	Lower
Maharashtra	11.7	7.5	21,130	31.0	Lower
Rajasthan	10.5	2.8	18,877	13.1	Lower
Goa, Daman and Diu	0.08	0.05	153	28.2	Higher
All India	100.0	100.0	180,361	48.7	

@ Provisional.

* In a state where total nutrient (N + P₂O₅ + K₂O) consumption share is higher than or equal to gross cropped area share, consumption of plant nutrients (N + P₂O₅ + K₂O) in that state (kg/ha) is above all-India average of 48.7 kg/ha and vice versa.

Note: Zonal percentages of consumption (N + P₂O₅ + K₂O) do not add upto 100 per cent due to omission of small states, UTs and plantations.

6.11. PATTERN OF FERTILISER CONSUMPTION BY SIZE OF FARMS

Item	Size of farm (hectares)					
	Below 1	1-2	2-4	4-10	10 and above	All households
1. Distribution of cultivator households (per cent)	40.7	24.8	19.8	21.1	2.6	100.0
2. Area cultivated (per cent)	9.7	15.7	24.3	31.6	18.7	100.0
3. Cultivator households using fertilisers (per cent)	36.8	44.8	55.3	55.4	58.8	45.2
4. Proportion of fertilised area to gross cropped area (per cent)	31.3	32.7	36.1	35.2	34.2	34.4
5. Proportion of fertilised area to gross cropped area of households using fertilisers (per cent)	79.9	70.3	62.4	58.9	49.8	61.5
6. Fertiliser input per fertilised hectare (kg)	92.9	85.8	80.1	71.1	59.0	76.4
7. Distribution of fertiliser consumption (N + P ₂ O ₅ + K ₂ O) (per cent)	12.2	18.5	28.2	29.9	11.2	100.0

Source: Adapted from "Fertiliser use in India: Role of Small and Marginal Farmers"—T.K. Roy and H.Y. Siddiqi (NCAER)—Fertiliser Marketing News—October 1980.

**SHARE OF CONSUMPTION OF N, P₂O₅, and K₂O BY MAIN CROPS—
1977-78**

(Per cent)

Crop	N	P ₂ O ₅	K ₂ O
Kharif Paddy	31.68	27.47	36.09
Jowar	1.58	1.21	1.65
Bajra	1.28	1.40	0.80
Maize	2.15	0.63	0.52
Groundnut	1.87	5.02	4.46
Cotton	5.71	5.43	4.44
Rabi Paddy	7.59	10.16	14.38
Wheat	27.64	29.22	15.37
Sugarcane	8.39	7.20	7.55
Other Crops	12.11	12.26	14.74
Total	100.0	100.0	100.0

Source: Fertiliser Demand Study, Final Report, Vol. 1 NCAER, New Delhi.

7.00. CONSUMPTION OF FERTILISERS—BY DISTRICTS/IFPC

7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O 1986-87 (April-March)

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
I. EAST ZONE												
1. Assam												
1. Goalpara	148	76	73	297	153	88	87	328	301	164	160	625
2. Dhubri	119	56	79	254	193	78	172	443	312	134	251	697
3. Kokrajhar	146	84	140	370	148	63	221	432	294	147	361	802
4. Barpeta	364	194	181	739	142	99	129	370	506	293	310	1,109
5. Kamrup	451	142	152	745	450	197	217	864	901	339	369	1,609
6. Nowgong	615	220	259	1,094	689	152	138	979	1,304	372	397	2,073
7. Darrang	161	86	99	346	232	132	158	522	393	218	257	868
8. Sonitpur	91	60	137	288	183	101	196	480	274	161	333	768
9. Lakhimpur	92	43	83	218	135	65	157	357	227	108	240	575
10. Jorhat	1,471	278	414	2,163	334	80	324	738	1,805	358	738	2,901
11. Sibsagar	268	201	132	601	185	80	82	347	453	281	214	948
12. Dibrugarh	451	210	565	1,226	336	126	319	781	787	336	884	2,007
13. Cachar	481	88	102	671	241	48	141	430	722	136	243	1,101
14. Karimganj	212	29	85	326	155	28	40	223	367	57	125	549
15. K. Anglong	17	12	4	33	36	32	12	80	53	44	16	113
16. N.C. Hills	10	6	2	18	15	7	14	36	25	13	16	54
Total	5,097	1,785	2,507	9,389	3,627	1,376	2,407	7,410	8,724	3,161	4,914	16,799

2. Bihar

1. Patna	9,494	1,190	255	10,939	12,188	2,968	1,386	16,542	21,682	4,158	1,641	27,481
2. Nalanda	8,428	1,479	641	10,548	8,783	3,507	1,460	13,750	17,211	4,986	2,101	24,298
3. Bhojpur	12,395	2,423	1,049	15,867	15,018	5,625	2,637	23,280	27,413	8,048	3,686	39,147
4. Rohtas	16,951	5,098	2,235	24,284	22,477	8,244	3,440	34,161	39,428	13,342	5,675	58,445
5. Gaya	9,459	1,452	562	11,473	9,655	2,508	1,169	13,332	19,114	3,960	1,731	24,805
6. Aurangabad	7,754	2,183	1,190	11,127	5,896	1,922	773	8,591	13,650	4,105	1,963	19,718
7. Nawadah	4,500	1,516	598	6,614	5,012	1,657	1,007	7,676	9,512	3,173	1,605	14,290
8. Saram	4,510	516	226	5,252	6,952	2,251	1,448	10,651	11,462	2,767	1,674	15,503
9. Siwan	2,827	245	107	3,179	5,605	2,590	630	8,825	8,432	2,835	737	12,004
10. Gopalgaj	4,415	1,080	456	5,951	8,987	3,750	1,648	14,385	13,402	4,830	2,104	20,336
11. East Champaran	6,605	1,760	898	9,263	9,506	2,450	1,274	13,230	16,111	4,210	2,172	22,493
12. West Champaran	7,335	1,898	1,113	10,346	6,563	1,647	312	8,522	13,898	3,545	1,425	18,868
13. Muzaffarpur	4,235	1,109	497	5,841	7,432	2,910	1,107	11,449	11,667	4,019	1,604	17,290
14. Vaishali	4,065	1,052	326	5,443	3,700	1,700	400	5,800	7,765	2,752	726	11,243
15. Sitamarhi	3,566	118	80	3,764	2,867	913	245	4,025	6,433	1,031	325	7,789
16. Darbangha	2,126	184	102	2,412	3,891	1,713	526	6,130	6,017	1,897	628	8,542
17. Madhubani	2,025	779	215	3,019	2,937	1,030	318	4,285	4,962	1,809	533	7,304
18. Samastipur	3,732	1,036	394	5,162	9,730	4,892	2,568	17,190	13,462	5,928	2,962	22,352
19. Begusarai	3,894	1,442	580	5,916	6,013	4,065	2,122	12,200	9,907	5,507	2,702	18,116
20. Monghyr	3,728	680	210	4,618	4,986	794	240	6,020	8,714	1,474	450	10,638
21. Khagaria	857	173	295	1,325	3,654	1,176	960	5,790	4,511	1,349	1,255	7,115
22. Bhagalpur	6,374	1,127	460	7,961	5,167	1,743	732	7,642	11,541	2,870	1,192	15,603
23. Santhal Parganas	3,270	684	235	4,189	2,224	1,145	125	3,494	5,494	1,829	360	7,683
24. Saharsa	2,360	402	230	2,992	3,706	1,495	779	5,980	6,066	1,897	1,009	8,972
25. Madhopura	3,477	1,052	386	4,915	4,902	2,518	1,196	8,616	8,379	3,570	1,582	13,531
26. Purnea	6,410	1,968	586	8,964	12,948	7,635	4,099	24,682	19,358	9,603	4,685	33,646
27. Katihar	2,615	1,001	483	4,099	4,119	2,138	1,055	7,312	6,734	3,139	1,538	11,411
28. Hazaribagh	1,011	197	57	1,265	247	321	108	1,376	1,958	518	165	2,641
29. Giridih	676	230	89	995	639	157	55	851	1,315	387	144	1,846
30. Dhanbad	120	12	5	137	126	32	13	171	246	44	18	308
31. Ranchi	6,644	2,389	753	9,786	3,883	2,230	811	6,924	10,527	4,619	1,564	16,710
32. Palaman	1,608	397	89	2,094	790	329	99	1,218	2,398	726	188	3,312
33. Singhbhum	1,357	706	336	2,399	745	375	141	1,261	2,102	1,081	477	3,660

Total	158,823	37,578	15,738	212,139	202,048	78,430	34,883	315,361	360,871	116,008	50,621	527,500
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(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O
1986-87 (April-March) (Continued)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
1. EAST ZONE (Continued)												
3. Manipur												
1. Imphal	1,007	207	34	1,248	57	40	19	116	1,064	247	53	1,364
2. Thoubal	1,928	418	47	2,393	37	8	1	46	1,965	426	48	2,439
3. Bishnupur	1,083	288	24	1,395	28	31	1	60	1,111	319	25	1,455
4. Ukhrui	6	5	2	13	2	2	—	4	8	7	2	17
5. Senapati	31	31	7	69	14	26	6	46	45	57	13	115
6. Tamenglong	33	35	13	81	3	2	—	5	36	37	13	86
7. Churachandpur	63	33	21	117	7	5	8	20	70	38	29	137
8. Chandel	32	11	2	45	2	—	1	3	34	11	3	48
Total	4,183	1,028	150	5,361	50	114	36	300	4,333	1,142	186	5,661
4. Mizoram												
1. Aizwal West	8.03	13.90	5.50	27.43	5.82	9.00	4.14	18.96	13.85	22.90	9.64	46.39
2. Aizwal East	12.00	15.15	6.89	34.04	6.61	11.48	4.95	23.04	18.61	26.63	11.84	57.08
3. Lunglei	5.57	8.45	4.15	18.17	2.94	2.02	1.09	6.05	8.51	10.47	5.24	24.22
4. Chhlmupui	4.40	7.50	3.46	15.36	1.26	1.15	0.49	2.90	5.66	8.65	3.95	18.26
Total	30.00	45.00	20.00	95.00	16.63	23.65	10.67	50.95	46.63	68.65	30.67	145.95

5. Meghalaya												
1. E. Khasi Hills	399	247	39	685	540	419	43	1,002	939	666	82	1,687
2. W. Khasi Hills	258	150	27	435	425	325	35	785	683	475	62	1,220
3. E. Garo Hills	37	24	7	68	10	13	7	30	47	37	14	98
4. W. Garo Hills	60	34	14	108	20	28	17	65	80	62	31	173
5. Jaintia Hills	87	98	16	201	30	56	15	101	117	154	31	302
Total	841	553	103	1,497	1,025	841	117	1,983	1,866	1,394	220	3,480
6. Tripura												
1. West	1,181	268	172	1,621	847	344	180	1,371	2,028	612	352	2,992
2. South	1,047	268	175	1,490	467	221	118	806	1,514	489	293	2,296
3. North	312	138	133	583	328	301	166	795	640	439	299	1,378
Total	2,540	674	480	3,694	1,642	866	464	2,972	4,182	1,540	944	6,666
7. Orissa												
1. Balasore	3,328	987	524	4,839	5,718	2,662	2,461	10,841	6,046	3,649	2,985	15,680
2. Bolangir	1,566	809	505	2,880	1,725	992	524	3,241	3,291	1,801	1,029	6,121
3. Cuttack	5,665	1,929	1,678	9,272	7,429	2,470	2,120	12,019	13,094	4,399	3,798	21,291
4. Dhenkanal	1,657	555	345	2,557	1,615	609	372	2,596	3,272	1,164	717	5,153
5. Ganjam	9,326	1,841	880	12,052	5,772	683	526	8,981	15,088	2,524	1,406	19,033
6. Kalahandi	529	208	126	863	318	112	99	529	847	320	225	1,392
7. Keonjhar	1,138	669	275	2,082	433	327	217	977	1,571	996	492	3,059
8. Koraput	3,371	1,500	888	5,759	1,499	504	406	2,409	4,870	2,004	1,294	8,168
9. Mayurbhang	1,301	800	372	2,473	721	451	299	1,471	2,022	1,251	671	3,944
10. Phulbani	522	142	98	762	451	114	110	675	973	256	208	1,437
11. Puri	4,747	1,441	1,240	7,428	6,984	1,813	1,329	10,126	11,731	3,254	2,569	17,554
12. Sambalpur	10,150	6,146	3,474	19,770	13,091	8,199	3,823	25,113	23,241	14,345	7,297	44,883
13. Sundergarh	1,426	994	607	3,027	1,213	921	638	2,772	2,639	1,915	1,245	5,799
Total	44,726	18,026	11,012	73,764	45,820	19,516	12,634	77,970	80,546	37,542	23,646	151,734

(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O
1986-87 (April-March) (Continued)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
EAST ZONE (Concluded)												
8. West Bengal												
1. Darjeeling	2,210	1,240	1,074	4,524	3,064	1,407	1,268	5,739	5,274	2,647	2,342	10,263
2. Jalpaiguri	2,166	1,203	1,008	4,377	4,365	2,301	1,303	7,969	6,531	3,504	2,311	12,346
3. Cooch Behar	3,005	1,441	1,290	5,736	6,562	3,596	2,293	12,451	9,567	5,037	3,583	18,187
4. West Dinajpur	5,520	1,681	1,124	8,325	11,061	3,810	2,931	17,802	16,581	5,491	4,055	26,127
5. Malda	5,203	2,581	2,077	9,861	12,060	3,608	3,604	19,272	17,263	6,189	5,681	29,133
6. Murshidabad	8,059	3,943	2,850	14,852	15,066	5,784	3,456	24,306	23,125	9,727	6,308	39,158
7. Nadia	8,302	2,731	2,706	13,739	14,068	3,918	3,089	21,075	22,370	6,649	5,795	34,814
8. 24 Parg'ns (N)	7,320	3,525	2,892	13,737	11,573	4,322	3,068	18,963	18,893	7,847	5,960	32,700
9. 24 Parg'ns (S)	5,672	2,470	2,225	10,367	8,074	2,884	1,356	12,294	13,746	5,354	3,561	22,661
10. Howrah	5,290	3,083	2,609	10,982	8,772	3,681	2,467	14,920	14,062	6,764	5,076	25,902
11. Hooghly	14,643	4,428	3,808	22,879	23,169	9,082	4,487	36,738	37,812	13,510	8,295	59,617
12. Burdwan	16,389	3,931	3,704	24,024	24,567	9,051	3,509	37,127	40,656	12,982	7,213	61,151
13. Birbhum	7,160	2,001	2,525	11,686	12,760	4,138	2,937	19,835	19,920	6,139	5,462	31,521
14. Bankura	5,613	2,009	2,350	9,972	9,672	3,424	2,440	15,536	15,285	5,433	4,790	25,508
15. Purulia	3,941	1,631	1,506	7,078	4,867	2,005	1,135	8,007	8,808	3,636	2,641	15,085
16. Midnapur (W)	7,805	2,252	2,593	12,650	9,276	3,834	1,679	14,789	17,081	6,086	4,272	27,439
17. Midnapur (E)	6,073	3,153	2,153	11,379	10,676	3,669	1,875	16,220	16,749	6,822	4,028	27,599
Total	114,371	43,313	38,494	195,178	189,652	70,514	42,877	303,043	304,023	113,827	81,371	499,221

II. NORTH ZONE**1. Haryana**

1. Ambala	15,132	2,236	460	17,828	16,719	5,148	828	22,695	31,851	7,384	1,288	40,523
2. Kurukshetra	28,209	3,840	492	32,541	34,791	10,189	768	45,748	63,000	14,029	1,260	78,289
3. Karnal	24,607	3,426	361	28,394	32,206	9,070	924	42,200	56,813	12,496	1,285	70,594
4. Rohtak	4,541	395	9	4,945	12,322	5,780	83	18,185	16,863	9,175	92	26,130
5. Sonapat	5,805	480	57	6,342	11,070	3,867	62	14,999	16,875	4,347	119	21,341
6. Bhiwani	1,229	114	4	1,347	3,810	1,536	13	5,359	5,039	1,650	17	6,706
7. Hissar	17,483	1,768	85	19,336	27,718	8,987	297	37,002	45,201	10,755	382	56,338
8. Sarsa	15,238	2,214	126	17,578	22,382	8,833	677	31,892	37,620	11,047	803	49,470
9. Gurgaon	855	151	29	1,035	7,076	2,002	48	9,126	7,931	2,153	77	10,161
10. Faridabad	2,454	152	44	1,650	8,090	3,081	243	11,414	10,544	3,233	287	14,064
11. Mahendragarh	1,120	140	6	1,266	8,755	3,538	67	12,320	9,875	3,678	73	17,231
12. Jind	10,204	541	56	10,801	15,260	4,469	104	19,833	25,464	5,010	160	30,634

Total	126,878	15,457	1,729	144,064	200,159	66,500	4,114	270,773	327,037	81,957	5,843	414,837
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2. Himachal Pradesh

1. Bilaspur	957	27	13	997	528	135	73	736	1,485	162	86	1,733
2. Chamba	380	13	6	399	85	12	12	109	465	25	18	508
3. Hamirpur	1,243	46	25	1,314	424	96	70	590	1,667	142	95	1,904
4. Kangra	2,327	66	41	2,434	2,068	778	562	3,408	4,395	844	603	5,842
5. Kinnaur	32	10	8	50	28	11	9	48	60	21	17	98
6. Kullu	318	32	32	382	584	243	299	1,126	902	275	331	1,508
7. Lahaul Spiti	12	6	3	21	126	96	59	281	138	102	62	302
8. Mandi	1,495	85	47	1,627	1,314	423	336	2,073	2,809	508	383	3,700
9. Shimla	606	196	138	940	1,035	853	708	2,596	1,641	1,049	846	3,536
10. Solan	1,131	73	32	1,236	658	204	96	958	1,789	277	128	2,194
11. Sirmaur	806	46	18	870	403	225	108	736	1,209	271	126	1,606
12. Una	1,459	127	41	1,627	1,206	260	88	1,554	2,665	387	129	3,181

Total	10,766	727	404	11,897	8,459	3,336	2,420	14,215	19,225	4,063	2,824	26,112
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(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O
1986-87 (April-March) (Continued)**

('000 tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
II. NORTH ZONE (Continued)												
3. Jammu Kashmir												
1. Anantnag	3,221	803	166	4,190	757	247	100	1,104	3,978	1,050	266	5,294
2. Pulwana	3,056	982	152	4,190	807	323	53	1,183	3,863	1,305	205	5,373
3. Kupwara	177	173	53	949	36	9	2	47	753	182	55	990
4. Baramula	3,030	556	146	3,732	538	109	43	690	3,568	665	189	4,422
5. Srinagar	723	191	28	942	162	26	8	196	885	217	36	1,138
6. Budgam	1,848	379	27	2,254	338	64	13	415	2,186	443	40	2,669
7. Jammu]	1,557	213	36	1,806	1,440	1,123	109	2,672	2,997	1,336	145	4,478
8. C.A.D.]	818	193	38	1,049	948	642	99	1,689	1,766	835	137	2,738
9. Kathua	95	13	3	111	108	47	12	167	203	60	15	278
10. Udhampur	393	72	23	488	319	133	30	482	712	205	53	970
11. Doda	358	62	25	445	72	17	8	97	430	79	33	542
12. Rajouri	423	29	12	464	175	34	16	225	598	63	28	689
13. Poonch	595	16	10	621	94	19	12	125	689	85	22	746
Total	16,834	3,682	719	21,235	5,794	2,793	505	9,092	22,628	6,475	1,224	30,327

4. Punjab

1. Amritsar	35,578	5,652	724	41,954	51,849	25,972	2,081	79,852	87,427	31,624	2,755	121,806
2. Bhatinda	22,082	1,824	530	24,436	41,671	24,489	87	66,247	63,753	26,313	437	90,503
3. Faridkot	43,705	11,123	734	55,562	57,764	34,260	1,308	93,332	101,469	45,383	2,042	148,894

4. Ferozepur	46,060	9,905	651	56,616	47,575	18,063	346	65,984	93,635	27,968	997	122,600
5. Gurudaspur	31,036	4,260	818	36,114	32,520	16,299	1,551	50,370	63,556	20,519	2,369	86,484
6. Hoshiarpur	12,009	2,921	1,161	16,091	14,411	6,290	787	21,488	26,420	9,211	1,918	37,579
7. Jalandher	23,510	6,751	1,689	31,950	27,229	12,962	2,291	42,482	50,739	19,713	3,980	74,432
8. Kapurthala	12,980	2,782	512	16,274	18,178	9,897	753	28,828	31,158	12,679	1,265	45,102
9. Ludhiana	44,351	9,195	1,509	55,055	47,819	26,599	2,532	76,950	92,170	35,794	4,041	132,005
10. Patiala	41,937	4,633	697	47,267	47,194	19,393	798	67,385	89,131	24,026	1,495	114,652
11. Ropar	8,686	1,728	409	10,823	11,865	5,493	621	17,979	20,551	7,221	1,030	28,802
12. Sangrur	32,570	3,156	377	36,103	50,348	25,884	411	76,643	82,918	29,040	788	112,746

Total	354,504	63,930	9,631	428,065	449,423	225,601	13,516	687,540	802,927	289,531	23,147	1115,605
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5. Uttar Pradesh

1. Agra	3,120	544	239	3,093	14,340	6,866	1,913	23,119	17,460	7,410	2,152	27,022
2. Aligarh	7,155	530	113	7,798	19,747	9,309	1,377	30,433	26,902	9,839	1,490	38,231
3. Allahabad	15,554	2,663	893	19,110	23,552	7,798	3,298	34,648	39,106	10,461	4,191	53,758
4. Almora	168	95	40	303	286	155	31	472	454	250	71	775
5. Azamgarh	9,805	1,882	793	12,480	19,966	6,965	2,102	29,033	29,771	8,847	2,895	41,513
6. Bahraich	6,431	916	319	7,666	12,434	5,419	1,094	18,947	18,865	6,335	1,413	26,613
7. Ballia	6,908	1,018	373	8,299	15,868	4,650	1,031	21,549	22,776	5,668	1,404	29,848
8. Banda	1,605	198	77	1,880	3,959	2,088	76	6,123	5,564	2,286	153	8,003
9. Baraabnki	10,872	1,184	392	12,448	13,388	4,321	1,164	18,873	24,260	5,505	1,556	31,321
10. Bareilly	14,941	1,853	907	17,701	17,294	6,182	3,424	26,900	32,235	8,035	4,331	44,601
11. Basti	18,709	2,440	714	21,863	19,709	7,611	1,063	28,383	38,418	10,051	1,777	50,246
12. Bijnore	21,168	2,823	851	24,842	18,651	5,813	1,996	26,460	39,819	8,636	2,847	51,302
13. Badaun	12,723	1,583	524	14,830	18,372	6,747	1,288	26,407	31,095	8,330	1,812	41,237
14. Bulandshahr	15,992	1,263	406	17,661	19,892	6,634	1,818	28,344	35,884	7,897	2,224	46,005

(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O
1986-87 (April-March) (Continued)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
II. NORTH ZONE (Concluded)												
5. Uttar Pradesh (Concluded)												
15. Chamoli	47	31	5	83	87	77	25	189	134	108	30	272
16. Dehradun	804	123	55	982	844	325	80	12,49	1,648	448	135	2,231
17. Deoria	23,120	3,967	1,300	28,387	28,867	9,502	2,271	40,740	51,987	13,469	3,671	69,127
18. Etah	5,810	503	180	6,493	15,712	6,232	797	22,741	21,522	6,735	977	29,234
19. Etawah	7,764	826	235	8,825	15,263	4,137	811	20,211	23,027	4,963	1,046	29,036
20. Faizabad	16,001	1,400	331	17,732	15,924	4,634	1,180	21,738	31,925	6,034	1,511	39,470
21. Farukhabad	12,190	1,360	717	14,267	23,921	7,165	1,980	33,066	36,111	8,525	2,697	47,333
22. Fatehpur	8,751	1,491	400	10,642	11,268	2,642	437	14,347	20,019	4,133	837	24,989
23. Ghaziabad	11,993	1,145	290	13,428	15,008	6,176	1,904	23,088	27,001	7,321	2,194	36,516
24. Ghazipur	9,579	1,138	795	11,512	17,563	6,257	1,873	25,693	27,142	7,395	2,668	37,205
25. Gonda	5,603	501	195	6,299	10,227	3,752	552	14,531	15,830	4,253	747	20,830
26. Gorakhpur	17,860	2,592	1,175	21,627	25,617	9,772	2,770	38,159	43,477	12,364	3,945	59,786
27. Hamirpur	224	128	14	366	2,669	2,213	39	4,921	2,893	2,341	53	5,287
28. Hardoi	8,464	947	318	9,729	14,818	3,073	574	18,465	23,282	4,020	892	28,194
29. Jalaun	628	332	43	1,003	5,892	3,568	313	9,773	6,520	3,900	356	10,776
30. Jaunpur	13,850	1,970	977	16,797	21,826	6,921	1,874	30,621	35,676	8,891	2,851	47,418
31. Jhansi	289	174	26	489	3,092	2,391	49	5,532	3,381	2,565	75	6,021
32. Kanpur (City)	2,989	188	84	3,261	4,038	1,341	206	5,585	7,027	1,529	290	8,846
33. Kanpur (Dehat)	6,314	930	366	7,610	16,433	5,692	1,280	23,405	22,747	6,622	1,646	31,015

34. Kheri	14,634	2,381	890	17,905	12,848	6,992	1,964	21,804	27,482	9,373	2,854	39,709
35. Lucknow	6,250	931	310	7,491	8,012	2,863	673	11,548	14,262	3,794	983	19,039
36. Lalitpur	274	261	2	537	1,750	2,373	17	4,140	2,024	2,634	19	4,677
37. Mainpuri	6,797	535	210	7,542	17,404	6,259	1,442	25,105	24,201	6,794	1,652	32,647
38. Mathura	2,339	779	319	3,437	14,704	7,275	1,675	23,654	17,043	8,054	1,994	27,091
39. Meerut	22,226	1,094	303	23,623	22,482	6,905	1,327	30,714	44,708	7,999	1,630	54,337
40. Mirzapur	5,426	1,371	689	7,486	6,857	2,934	950	10,741	12,283	4,305	1,639	18,227
41. Moradabad	27,232	1,109	577	28,918	25,628	8,608	2,402	36,638	52,860	9,717	2,979	65,556
42. Muzaffarnagar	268,10	1,219	440	28,469	2,494	6,119	1,376	28,989	48,304	7,338	1,816	57,458
43. Nainital	21,469	4,196	1,708	27,373	19,789	8,323	2,639	30,751	41,258	12,519	4,347	58,124
44. Pauri Garhwal	105	58	9	172	273	148	13	434	378	206	22	608
45. Pilibhit	16,107	1,543	890	18,540	12,787	4,409	2,719	19,915	28,894	5,952	3,609	38,455
46. Pithorgarh	154	59	35	248	160	101	29	290	314	160	64	538
47. Pratapgarh	4,702	862	355	5,919	14,303	4,363	1,068	19,734	19,005	5,225	1,423	25,653
48. Rai Bareilly	7,096	662	224	7,982	12,963	4,431	616	18,010	20,059	5,093	840	25,992
49. Rampur	11,673	1,658	651	13,982	10,706	4,899	1,526	17,131	22,379	6,557	2,177	31,113
50. Saharanpur	27,103	1,935	743	29,781	24,378	7,098	2,029	33,505	51,481	9,033	2,772	63,986
51. Shahjahanpur	160,11	2,527	819	19,357	18,043	6,237	2,444	26,724	34,054	8,764	3,263	46,081
52. Sitapur	8,516	1,133	522	10,171	13,341	4,414	1,444	19,199	21,857	5,547	1,966	29,370
53. Sultanpur	7,460	1,344	542	9,346	11,709	3,440	732	15,881	19,169	4,784	1,274	2,5227
54. Tehri Garhwal	98	51	17	166	111	82	40	233	209	133	57	399
55. Unnao	5,840	882	404	7,126	14,331	3,854	998	19,183	20,171	4,736	1,402	26,309
56. Uttar Kashi	48	51	13	112	95	100	5	200	143	151	18	312
57. Varanasi	19,916	2,959	1,863	24,738	23,431	6,954	2,324	32,709	43,347	9,913	4,187	57,447

Total	555,717	68,338	26,682	650,737	774,126	275,609	71,242	1,120,977	1,329,843	343,947	17,924	1,771,714
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(Continued)

**Y.01. SEASONWISE CONSUMPTION OF N, P₂O₅ AND K₂O
1986-87 (April-March) (Continued)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
III. SOUTH ZONE												
1 Andhra Pradesh												
1. Srikakulam	15,745	4,011	104	19,860	5,131	947	51	6,129	20,816	4,958	155	25,989
2. Vizianagaram	6,253	1,328	3	7,584	2,603	679	68	3,350	8,856	2,007	71	10,934
3. Visakhapatnam	8,131	1,131	232	9,494	2,729	991	286	4,006	10,860	2,122	518	13,500
4. East Godavari	11,868	3,276	1,085	16,229	38,469	11,514	5,188	55,171	50,337	14,790	6,273	71,400
5. West Godavari	38,597	14,393	3,931	56,921	51,651	24,610	8,233	84,494	90,248	39,003	12,164	141,415
6. Krishna	37,273	22,280	7,549	67,102	32,799	11,306	4,470	48,575	70,072	33,586	12,019	115,677
7. Guntur	31,596	12,589	4,612	48,797	31,114	15,776	5,265	52,155	62,710	28,365	9,877	100,952
8. Prakasam	5,909	2,859	1,079	9,847	11,922	2,884	1,847	17,653	17,821	6,743	2,926	27,500
9. Nellore	10,763	3,324	1,826	15,913	29,670	9,557	5,361	44,588	40,433	12,881	7,187	60,501
10. Kurnool	6,281	4,674	1,224	12,179	8,966	5,238	3,003	17,207	15,247	9,512	4,227	29,386
11. Anantpur	2,050	1,509	361	3,920	2,858	1,139	655	4,652	4,908	2,648	1,016	8,572
12. Cuddapah	4,518	2,769	873	8,160	5,527	2,764	870	9,161	10,045	5,333	1,743	17,321
13. Chittoor	8,402	4,415	1,693	14,510	1,693	3,524	974	10,553	14,457	7,939	2,667	25,063
14. Ranga Reddy Hyderabad	3,289	2,110	208	3,607	2,004	1,057	229	3,290	5,293	3,107	437	8,897
15. Nizamabad	29,156	8,691	1,535	39,382	8,079	2,290	690	11,059	37,235	10,981	2,225	50,441
16. Medak	8,614	2,444	189	11,247	3,726	1,424	281	5,431	12,340	3,868	470	16,678
17. Mehbubnagar	17,849	17,879	4,746	40,474	616	403	95	1,114	18,465	18,282	4,841	41,588
18. Nalgonda	10,052	5,376	1,198	16,632	4,016	2,476	587	7,079	14,074	7,852	1,785	23,711
19. Warangal	7,348	2,431	607	10,386	6,250	2,888	826	9,964	13,598	5,319	1,453	20,380
20. Khammam	14,321	3,509	539	18,369	10,912	3,357	811	15,080	25,233	6,866	1,350	32,449
21. Karimnagar	17,964	5,820	1,510	25,294	14,287	4,873	1,702	20,862	32,251	10,693	3,212	46,156
22. Adilabad	7,053	3,415	186	10,654	731	520	130	1,381	7,784	3,935	316	12,035
Total	303,038	130,233	35,290	468,561	280,115	111,217	41,622	432,594	583,153	241,450	76,812	901,515

2. Karnataka

1. Bangalore	9,756	4,290	2,277	16,323	7,183	2,686	2,340	12,209	16,939	6,976	4,617	28,552
2. Belgaum	21,662	8,272	4,707	34,641	14,437	5,311	2,831	22,579	36,099	13,583	7,538	57,220
3. Bellary	18,015	8,515	5,540	32,070	14,435	6,846	2,761	25,285	32,450	15,361	9,544	57,855
4. Bidar	2,683	1,810	445	4,938	1,285	696	371	2,296	3,968	2,506	760	7,234
5. Bijapur	8,961	3,598	1,196	13,755	6,589	1,841	789	9,372	15,550	5,439	2,138	23,127
6. Chickmagalur	6,674	4,736	4,159	15,569	3,150	1,907	1,601	8,066	9,824	6,643	7,168	23,625
7. Chitradurga	11,027	6,654	2,622	20,303	7,018	4,626	1,588	14,496	18,045	11,280	5,474	34,759
8. Dakshina Kannada	3,921	2,505	2,108	3,534	3,315	2,174	1,753	7,677	7,236	4,679	4,296	16,211
9. Dharwar	11,792	11,371	5,557	28,720	4,952	3,560	2,029	10,254	16,744	14,931	7,299	38,974
10. Gulbarga	4,035	5,323	998	10,336	1,818	1,606	409	3,662	5,853	6,929	1,236	14,018
11. Hassan	8,644	6,115	5,962	20,721	3,838	3,156	1,771	9,432	12,482	9,271	8,400	30,153
12. Kodagu	4,485	2,271	4,599	11,355	2,149	1,357	2,179	5,136	6,634	3,628	6,229	16,491
13. Kolar	5,982	3,075	1,399	10,456	4,747	2,553	1,146	9,199	10,729	5,628	3,298	19,655
14. Mandya	13,487	4,565	3,742	21,794	11,423	4,232	2,839	18,824	24,910	8,797	6,911	40,618
15. Mysore	14,051	7,478	5,362	26,891	7,883	3,673	2,438	14,976	21,934	11,151	8,782	41,867
16. Raichur	17,411	7,173	5,302	29,886	19,042	9,707	4,898	33,278	36,453	16,880	9,831	63,164
17. Shimoga	9,341	6,593	3,684	19,618	5,691	3,622	2,079	12,410	15,032	10,415	6,581	32,028
18. Tumkur	5,835	4,137	1,037	11,009	2,828	1,541	504	5,298	8,723	5,678	1,906	16,307
19. Uttar Kannada	1,309	873	751	2,933	645	514	258	1,463	1,954	1,387	1,055	4,396
Total	179,071	99,354	61,447	339,872	122,488	61,808	33,186	225,912	301,559	161,162	103,063	565,784

3. Kerala

1. Alleppey	1,976	935	2,289	5,200	2,824	1,486	2,731	7,041	4,800	2,421	5,020	12,241
2. Cannanore	1,690	1,232	2,545	5,467	1,206	872	1,524	3,602	2,896	2,104	4,069	9,069
3. Ernakulam	3,085	2,025	3,488	8,598	2,331	1,617	2,807	6,755	5,416	3,642	6,295	15,353
4. Idukki	1,452	1,035	838	3,325	1,128	385	593	2,106	2,580	1,420	1,431	5,431
5. Kasaragode	1,260	840	1,345	3,445	882	574	796	2,252	2,142	1,414	2,141	5,697
6. Kottayam	4,233	2,741	3,057	10,031	3,006	1,988	2,830	7,824	7,239	4,729	5,887	17,855
7. Kozhikode	1,550	12,95	2,271	5,116	1,251	888	1,738	3,877	2,801	2,183	4,009	8,993
8. Malappuram	2,494	1,482	2,329	6,305	1,924	1,030	1,427	4,381	4,418	2,512	3,756	10,686
9. Palghat	5,826	2,070	3,162	11,058	4,765	1,644	2,010	8,419	10,591	3,714	5,172	19,477
10. Pathanamthitta	2,142	1,666	1,901	5,709	1,566	1,289	1,159	4,014	3,708	2,955	3,060	9,723
11. Quilon	2,052	1,298	1,914	5,264	1,091	681	931	2,703	3,143	1,979	2,845	7,967
12. Trichur	2,183	1,085	2,864	6,132	2,922	1,542	2,839	7,303	5,105	2,627	5,703	13,435
13. Trivandrum	1,916	1,301	1,784	5,001	1,248	830	958	3,036	3,164	2,131	2,742	8,037
14. Wynad	1,875	1,440	1,795	5,110	905	586	798	2,289	2,780	2,026	2,593	7,399
Total	33,734	20,445	31,582	85,761	27,049	15,412	23,141	65,602	60,783	35,857	54,723	151,363

(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O
1986-87 (April-March) (Continued)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
III. SOUTH ZONE (Concluded)												
4. Tamil Nadu												
1. Anna	2,760	1,610	1,630	6,000	9,015	3,367	3,655	16,037	11,775	4,977	5,285	22,037
2. Chengalpattu	14,991	6,526	6,450	27,967	17,009	5,974	5,750	28,733	32,000	12,500	12,200	56,700
3. Chidambaram	3,000	837	1,058	4,895	5,176	2,099	1,717	8,992	8,176	2,936	2,775	13,887
4. Coimbatore	5,149	3,139	2,607	10,895	24,596	6,509	6,640	37,745	29,745	9,648	9,247	48,640
5. Dharmapuri	2,923	1,486	1,431	5,840	4,192	1,649	1,713	7,554	7,115	3,135	3,144	13,394
6. Kamarajar	1,977	558	410	2,945	2,301	572	633	3,506	4,278	1,130	1,043	6,451
7. Kanniya Kumari	1,251	734	887	2,872	2,911	981	1,023	4,915	4,162	1,715	1,910	7,787
8. Madurai	8,181	4,309	4,348	16,838	11,041	4,401	4,466	19,908	19,222	8,710	8,814	36,746
9. Muthu Ramalingam	1,003	309	238	1,550	4,847	941	945	6,733	5,850	1,250	1,183	8,283
10. North Arcot	11,851	6,666	6,399	24,916	17,668	8,933	8,870	35,471	29,519	15,599	15,269	60,387
11. Periyar	11,517	4,717	4,597	20,831	17,800	6,312	6,950	31,062	29,317	11,029	11,547	51,893
12. Pudukottai	3,236	1,263	1,295	5,794	8,778	1,859	2,012	12,649	12,014	3,122	3,307	18,443
13. Ramanathapuram	258	97	106	461	5,240	831	473	6,544	5,498	928	579	7,005
14. Salem	4,707	2,463	3,355	10,525	10,333	4,559	6,536	21,428	15,040	7,022	9,891	31,953
15. South Arcot	18,368	6,482	6,588	31,438	30,087	7,950	7,690	45,727	48,455	14,432	14,278	77,165
16. Thanjavur	18,140	7,449	7,106	32,695	43,968	12,676	14,288	70,932	62,108	20,125	21,394	103,627
17. The Nilgiris	2,908	2,730	2,993	8,631	3,099	1,720	2,638	7,457	6,007	4,450	5,631	16,088
18. Tiruchirappalli	11,251	5,273	5,715	22,239	28,301	7,602	7,200	43,103	39,552	12,875	12,915	65,342
19. Tirunelveli	4,048	1,400	1,479	6,927	10,924	6,206	4,526	21,656	14,972	7,606	6,005	28,583
Total	127,519	58,048	58,692	244,259	257,286	85,141	87,725	430,152	384,805	143,189	146,417	674,411

IV. WEST ZONE**1. Gujarat**

1. Ahmedabad	10,669	3,913	865	15,447	7,516	4,198	491	12,205	18,185	8,111	1,356	27,652
2. Kaira	19,624	1,839	697	22,160	18,354	3,097	927	22,378	37,978	4,936	1,624	44,538
3. Baroda	18,081	2,416	920	21,417	6,023	1,324	594	7,941	24,104	3,740	1,514	29,358
4. Panchmahal	5,194	1,271	120	6,685	2,173	1,598	119	3,890	7,367	2,869	239	10,475
5. Broach	5,598	1,150	425	7,173	1,935	480	355	2,770	7,533	1,630	780	9,943
6. Surat	17,236	4,834	4,178	26,248	10,790	8,343	7,027	26,160	28,026	13,177	11,205	52,408
7. Valsad	6,066	2,399	647	9,112	3,002	2,863	1,057	6,922	9,068	5,262	1,704	16,034
8. Dang	3	—	—	3	—	11	—	11	3	11	—	14
9. Gandhinagar	562	274	46	882	706	210	32	948	1,268	484	78	1,830
10. Mehsana	7,104	1,264	682	9,050	13,864	5,817	520	20,201	20,968	7,081	1,202	29,251
11. Sabarkantha	9,763	4,468	2,732	16,963	6,436	3,479	1,360	11,275	16,199	7,947	4,092	28,238
12. Banskantha	3,778	958	156	4,892	10,683	4,716	685	16,084	14,461	5,674	841	20,976
13. Rajkot	10,777	6,801	2,431	20,009	6,580	3,898	1,045	11,523	17,357	10,699	3,476	31,532
14. Surendranagar	3,125	2,144	138	5,407	1,775	1,299	33	3,107	4,900	3,443	171	8,514
15. Bhavnagar	9,659	6,023	874	16,556	4,210	4,411	440	9,061	13,869	10,434	1,314	25,617
16. Jamnagar	2,952	2,354	716	6,022	1,504	914	156	2,574	4,456	3,268	872	8,596
17. Amreli	4,859	4,912	1,176	10,947	3,155	2,248	406	5,809	8,014	7,160	1,582	16,756
18. Junagarh	7,656	5,805	1,013	14,474	9,442	7,257	1,633	18,332	17,098	13,062	2,646	32,806
19. Kutch-Bhuj	1,448	844	127	2,419	3,310	1,936	91	5,337	4,758	2,780	218	7,756

Total	144,154	53,669	17,943	215,766	111,458	58,099	16,971	186,528	255,612	111,768	34,914	402,294
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2. Madhya Pradesh

1. Raipur	21,752	10,080	2,980	34,820	2,518	872	424	3,814	24,270	10,504	3,860	38,634
2. Durg	7,741	4,572	960	13,273	760	483	84	1,327	8,501	5,055	1,044	14,600
3. Rajnandgaon	4,497	2,791	531	7,819	537	480	74	1,091	5,034	3,271	605	8,910
4. Bastar	1,465	782	219	2,466	138	103	52	293	1,603	885	271	2,759
5. Bilaspur	14,600	7,202	1,013	22,815	3,061	1,334	281	4,676	17,661	8,536	1,294	27,491
6. Raigarh	5,633	2,226	448	8,309	1,240	760	143	2,143	6,876	2,986	591	10,452
7. Sarguja	1,614	1,395	208	3,217	1,053	870	116	2,039	2,667	2,195	324	5,186

(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ & K₂O
1986-87 (April-March) (Continued)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
IV. WEST ZONE (Continued)												
2. Madhya Pradesh (Concluded)												
8. Jabalpur	1,070	867	68	2,005	5,901	4,349	457	10,707	6,971	2,516	525	12,712
9. Mandala	627	74	5	706	299	39	5	343	926	113	10	1,049
10. Balghat	3,764	1,823	290	5,877	1,355	674	128	2,157	5,119	2,497	418	8,034
11. Chhindwara	3,379	1,674	477	5,530	2,483	1,177	421	4,081	5,862	2,851	898	9,611
12. Seoni	692	438	47	1,177	208	144	23	375	900	582	70	1,552
13. Narsinghpur	1,051	720	72	1,843	2,753	2,210	160	5,123	3,804	2,930	232	6,966
14. Sagar	1,158	1,012	77	2,247	2,322	2,320	321	4,963	3,480	3,332	398	7,210
15. Damoh	325	305	11	641	771	778	19	1,568	1,096	1,083	30	2,209
16. Paura	182	184	32	398	1,306	1,203	113	2,622	1,488	1,387	145	3,020
17. Chattarpur	105	102	6	213	2,552	1,743	153	4,448	2,657	1,845	159	4,661
18. Tikamgarh	283	116	14	413	4,770	3,475	216	1,391	4,983	3,591	230	8,804
19. Rewa	1,948	500	19	2,467	5,300	5,011	164	10,475	7,248	5,511	183	12,942
20. Satna	1,771	457	6	2,234	4,326	3,777	93	8,196	6,097	4,234	99	10,430
21. Sidhi	550	181	31	762	601	366	21	988	1,151	202	52	1,405
22. Shahdol	185	112	6	303	586	443	12	1,041	771	555	18	1,344
23. Indore	3,111	3,692	1,034	7,837	3,898	3,835	794	8,527	7,009	7,527	1,828	16,364
24. Dhar	6,668	3,554	869	11,091	3,505	2,299	474	6,278	10,173	5,853	1,343	17,369
25. Jhabra	1,731	377	39	2,947	545	146	20	711	2,276	523	59	2,858
26. Khargone	14,282	5,423	2,047	21,750	3,371	1,410	582	5,363	17,653	6,833	2,629	27,115
27. Khandawa	5,292	2,225	1,807	9,324	2,408	1,186	1,269	4,863	7,700	3,411	3,076	14,187
28. Ujjain	6,136	5,831	1,066	13,033	4,832	3,761	605	9,198	10,968	9,592	1,671	22,231
29. Ratlam	5,376	2,841	464	8,681	2,560	1,617	236	4,413	7,936	4,458	700	13,094
30. Mandaur	8,298	5,281	735	14,314	8,069	4,586	912	13,566	16,366	9,867	1,647	27,880

31. Dewas	3,703	3,560	743	8,006	2,595	1,832	254	4,681	6,258	5,392	997	12,687
32. Shajapur	2,131	2,434	366	4,931	2,970	2,154	244	5,368	5,101	4,588	610	12,299
33. Gwalior	1,929	562	78	2,563	4,407	2,382	150	6,939	6,330	2,944	228	9,502
34. Shivpuri	515	805	37	1,361	1,431	1,297	70	2,798	1,946	2,106	107	4,159
35. Guna	309	276	53	638	1,499	1,104	78	2,681	1,808	1,380	131	3,319
36. Datia	192	94	5	291	1,443	629	46	2,118	1,635	723	51	2,409
37. Bhind	2,064	538	122	2,724	7,546	2,370	429	10,345	9,610	2,908	551	13,069
38. Morena	3,919	1,444	263	5,626	18,940	4,353	910	24,203	22,859	5,797	1,173	29,829
39. Bhopal	479	568	30	1,077	1,400	1,052	77	2,529	1,879	1,620	107	3,606
40. Sehore	1,911	2,079	109	4,099	2,844	2,295	203	6,342	4,755	4,374	312	10,441
41. Raisen	851	1,185	26	2,062	4,239	3,876	162	8,277	5,090	5,061	188	10,339
42. Vidisha	1,221	1,828	93	3,142	2,029	2,407	105	4,541	3,250	4,235	198	7,683
43. Betul	2,388	975	238	3,601	2,195	935	289	3,419	4,583	1,910	527	7,020
44. Rajgarh	1,530	1,679	88	3,297	2,332	1,392	82	3,806	3,862	3,071	170	7,103
45. Hoshangabad	4,156	3,572	317	8,045	8,252	5,876	621	14,749	12,408	9,448	938	22,794

Total	151,357	88,436	18,157	257,950	138,079	85,405	12,092	235,576	289,436	173,841	30,249	493,526
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3. Maharashtra

1. Thane	4,194	1,899	594	6,687	1,239	306	254	1,799	5,433	2,205	848	8,486
2. Raigad	5,352	351	264	5,967	1,594	411	257	2,262	6,946	762	521	8,229
3. Ratnagiri	2,050	833	580	3,463	44	19	10	73	2,094	852	590	3,536
4. Sindhudurg	2,009	693	604	3,306	220	85	81	386	2,229	778	685	3,629
5. Nasik	16,650	5,930	3,449	25,994	7,816	3,327	2,292	13,435	24,431	9,257	5,741	39,429
6. Dhule	13,283	5,613	2,596	21,492	4,129	1,486	1,008	6,623	17,412	7,092	3,604	28,115
7. Jalgaon	31,862	13,588	8,477	53,927	7,602	3,749	2,757	14,108	39,464	17,337	11,234	68,035
8. Ahmednagar	17,740	5,522	3,691	26,953	14,004	5,684	3,731	23,419	31,744	11,206	7,482	50,372
9. Pune	9,910	4,197	2,758	16,865	6,446	2,111	1,326	9,883	16,356	6,308	4,084	26,748
10. Solapur	7,638	3,364	2,671	13,673	5,719	2,142	1,935	9,796	13,357	5,506	4,606	23,469
11. Satara	14,506	5,553	3,849	23,908	6,475	2,646	1,956	11,077	20,981	8,199	5,805	34,985
12. Sangli	7,341	3,133	3,217	14,091	4,175	2,156	2,709	9,040	11,516	5,689	5,926	23,131

(Continued)

**7.01. SEASONWISE CONSUMPTION OF N, P₂O₅ AND K₂O
1986-87 (April-March) (Concluded)**

(tonnes)

Zone/State/District	Kharif 1986				Rabi 1986-87				Total 1986-87			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
IV WEST ZONE (Concluded)												
3. Maharashtra (Concluded)												
13. Kolhapur	21,176	3,766	7,585	35,527	12,084	4,910	6,014	23,008	33,260	11,676	13,599	58,535
14. Aurangabad	9,893	2,878	1,387	14,158	2,201	1,017	573	3,791	12,094	3,895	1,960	17,949
15. Jalna	6,365	1,849	1,643	9,857	1,420	646	461	2,527	7,785	2,495	2,104	12,384
16. Parbhani	7,385	3,393	1,331	12,109	682	278	107	1,067	8,067	3,671	1,438	13,176
17. Beed	5,006	2,895	1,216	8,617	2,939	1,395	738	5,072	7,945	3,790	1,954	13,689
18. Nanded	15,761	8,303	3,151	27,215	3,064	1,633	724	5,421	18,825	9,936	3,875	32,636
19. Osmanabad	1,423	650	337	2,410	293	118	67	478	1,716	768	404	2,888
20. Latur	2,282	1,034	684	4,000	96	48	25	169	2,378	1,082	709	4,169
21. Buldhana	16,584	6,221	2,947	25,752	2,347	1,153	386	3,886	18,931	7,374	3,333	29,638
22. Akola	14,628	4,516	1,656	20,800	1,647	741	205	2,593	16,275	5,257	1,861	23,393
23. Amravati	10,348	4,734	2,496	17,588	4,366	1,477	593	6,436	14,714	6,211	3,089	24,014
24. Yeotmal	14,965	5,757	3,258	24,000	3,059	1,489	616	5,164	18,044	7,246	3,874	29,164
25. Wardha	9,615	5,135	2,608	17,358	1,584	894	430	2,908	11,199	6,029	3,038	20,266
26. Nagpur	9,306	3,907	2,197	14,410	5,447	1,814	936	8,197	13,753	5,721	3,133	22,607
27. Bhandara	8,795	3,709	1,621	14,125	3,650	1,654	666	5,970	12,445	5,363	2,287	20,095
28. Chandrapur	6,451	2,910	1,163	10,524	253	63	32	348	6,704	2,973	1,195	10,872
29. Gadchiroli	1,400	579	274	2,253	448	162	79	689	1,848	741	353	2,942
Total	292,903	115,812	68,304	477,019	105,043	43,614	30,968	179,625	397,946	159,426	99,272	656,644

4. Rajasthan

1. Ajmer	815	550	31	1,396	1,510	905	33	2,448	2,325	1,455	64	3,844
2. Jaipur	1,770	190	63	2,023	3,580	837	94	4,511	5,350	1,027	157	6,534
3. Dausa	675	433	28	1,116	4,486	670	161	5,317	5,161	1,103	169	6,433
4. Sikar	730	76	3	809	1,659	328	8	1,995	2,389	404	11	2,804
5. Jhunjhunu	158	27	—	185	1,549	226	9	1,784	1,707	253	9	1,969
6. Alwar	1,967	202	20	2,169	5,329	1,246	53	6,628	7,296	1,448	73	3,797

7.	Bharatpur	379	127	8	514	4,561	920	34	5,515	4,940	1,047	42	6,029
8.	Dholpur	595	14	3	612	3,234	811	35	4,080	3,829	825	38	4,692
9.	Sawai Madhopur	1,918	455	9	2,382	8,173	2,287	24	10,484	10,091	2,742	33	12,866
10.	Bikaner (IRDP)	2,628	186	8	2,817	6,258	1,710	13	7,981	8,888	1,896	21	10,798
11.	Ganganagar	8,123	927	116	9,166	14,759	4,757	180	19,696	22,882	5,684	296	28,862
12.	Hanumangarh	9,641	589	93	10,323	13,295	5,747	115	19,157	22,936	6,336	208	29,480
13.	Anoopgarh	2,382	209	10	2,601	3,920	1,105	24	5,049	6,302	1,314	34	7,650
14.	Churu	63	22	11	96	88	31	12	131	151	53	23	227
15.	Jodhpur/Jaisalmer	833	505	210	1,548	1,319	356	118	1,793	2,152	861	328	3,341
16.	Jalore	264	84	5	353	2,156	555	7	2,718	2,420	639	11	3,071
17.	Barmer	19	2	—	21	244	31	—	275	263	33	—	296
18.	Nagour	418	97	13	528	1,293	624	107	2,024	1,711	721	120	2,552
19.	Pali	877	267	23	1,167	2,600	1,268	43	3,911	3,477	1,535	66	5,078
20.	Sirohi	461	179	1	641	375	298	1	874	1,336	477	2	1,515
21.	Kota (CAD)	3,555	2,051	425	6,031	10,322	5,106	530	15,958	13,877	7,157	955	21,989
22.	Kota (NCAD)	1,361	993	19	2,373	3,758	2,281	27	22,026	5,119	3,274	46	24,399
23.	Burdi (CAD)	2,471	924	82	3,477	5,887	2,929	259	9,075	8,358	3,853	341	12,452
24.	Bundi (NCAD)	861	268	7	1,136	1,444	975	11	2,430	2,305	1,243	18	3,566
25.	Jhalawar	1,553	1,206	40	2,799	1,444	847	14	2,305	2,997	2,053	54	5,014
26.	Tonk	365	210	6	581	2,058	1,015	19	3,092	2,423	1,225	25	3,673
27.	Banswara	2,420	665	7	3,092	2,803	1,401	40	4,244	5,223	2,066	47	7,336
28.	Dungarpur	215	168	—	383	220	125	—	345	435	293	—	728
29.	Udaipur	1,092	437	—	1,529	788	251	1	1,040	1,880	668	1	2,659
30.	Bhilwara	3,110	2,218	27	5,355	2,813	1,820	20	4,653	5,923	4,938	47	10,008
31.	Chittorgarh	6,042	4,204	283	10,529	6,770	4,283	225	11,278	12,812	8,487	508	21,807
32.	Kankroli	925	506	—	1,431	510	200	—	710	1,435	706	—	2,141

Total	59,681	18,991	1,551	79,223	119,705	45,945	2,217	167,863	178,386	64,936	3,768	247,090
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**7.02(a). NUMBER OF DISTRICTS ACCORDING TO THE RANGE OF
FERTILISER CONSUMPTION (N + P₂O₅) IN 1986-87**

S. No.	Consumption range (tonnes)	No. of districts	Fertiliser consumption (tonnes)	Cumulative fertilisers consumption (tonnes)	Per cent share of all-India consumption	Per cent cumulative share of all-India consumption	Average consumption in the range (tonnes)
1.	Above 145000	1	148,894	148,894	1.7	1.7	148,894
2.	145000-135000	1	141,415	290,309	1.6	3.3	141,415
3.	135000-125000	1	132,005	422,314	1.5	4.8	132,005
4.	125000-115000	3	360,083	782,397	4.1	8.9	120,028
5.	115000-110000	2	227,398	1009,795	2.6	11.5	113,699
6.	110000-100000	2	204,579	121,4374	2.3	13.8	102,289
7.	100000-90000	1	90,503	1,304,877	1.0	14.9	90,503
8.	90000-80000	1	86,484	1,391,361	0.9	15.8	86,484
9.	80000-75000	2	155,454	1,546,815	1.8	17.6	77,727
10.	75000-70000	3	216,426	1,763,241	2.5	20.1	72,142
11.	70000-65000	4	268,060	2,031,301	3.1	23.1	67,015
12.	65000-60000	5	309,189	2,340,490	3.5	26.7	61,838
13.	60000-55000	11	637,025	2,977,515	7.3	33.9	57,911
14.	55000-50000	8	414,757	3,392,272	4.7	38.6	51,845
15.	50000-45000	9	422,593	3,814,865	4.8	43.4	46,955
16.	45000-40000	9	381,368	4,196,233	4.3	47.8	42,374
17.	40000-35000	14	539,114	4,735,347	6.1	53.9	38,508
18.	35000-30000	17	552,737	5,288,084	6.3	60.2	32,514
19.	30000-25000	42	1,163,201	6,451,285	13.2	73.5	27,695
20.	25000-20000	26	583,039	7,034,324	6.6	80.1	22,424
21.	20000-15000	32	552,713	7,587,037	6.3	86.4	17,272
22.	15000-10000	37	447,597	8,034,634	5.1	91.5	12,097
23.	10000-5000	53	398,321	8,432,955	4.5	96.0	7,515
24.	Below 500	134	346,745	8,779,700	4.0	100.0	2,588

**7.02(b) CLASSIFICATION OF DISTRICTS ACCORDING TO THE PERCENTAGE SHARE OF TOTAL
CONSUMPTION OF PLANT NUTRIENTS (N+P₂O₅+K₂O) IN 1986-87 vis-a-vis 1985-86
(with kg/ha consumption)**

Cumulative consumption (Tonnes) [and % share to All India consumption]	Ranking of districts (No. of districts in the classification)	1986-87			1985-86		
		Districts	State	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Ranking of districts	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Consumption kg per hectare*
	1	Faridkot	Punjab	1,48,894	1	1,48,927	174
	2	West Godawari	Andhra Pradesh	1,41,415	2	1,43,626	242
	3	Ludhiana	Punjab	1,32,005	5	1,28,960	217
	4	Ferozepur	Punjab	1,22,600	4	1,34,415	161
	5	Amritsar	Punjab	1,21,806	6	1,15,867	161
	6	Krishna	Andhra Pradesh	1,15,677	9	97,142	138
	7	Patiala	Punjab	1,14,652	8	1,13,059	165
[10] 8,97,049	(7)			8,97,049			
	8	Sangrur	Punjab	1,12,746	7	1,14,484	144
	9	Thanjavur	Tamil Nadu	1,03,627	10	89,815	98
	10	Guntur	Andhra Pradesh	1,00,952	3	1,37,341	180
	11	Bhatinda	Punjab	90,503	13	80,571	103
[15] 13,04,877	(4)			4,07,828			

(Continued)

**7.02(b). CLASSIFICATION OF DISTRICTS ACCORDING TO THE PERCENTAGE SHARE OF TOTAL
CONSUMPTION OF PLANT NUTRIENTS (N+P₂O₅+K₂O) IN 1986-87 vis-a-vis 1985-86
(with kg/ha consumption)**

Cumulative consumption (tonnes) [and % share to All India consumption]	1986-87				1985-86		
	Ranking of districts (No. of districts in the classification)	Districts	State	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Ranking of districts	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Consumption kg per hectare*
	12	Gurdaspur	Punjab	86,484	11	82,922	184
	13	Kurukshetra	Haryana	78,289	15	72,368	132
	14	South Arcot	Tamil Nadu	77,165	12	82,245	103
	15	Jalandhar	Punjab	74,432	14	77,409	154
	16	East Godawari	Andhra Pradesh	71,400	75	37,675	68
	17	Karnal	Haryana	70,594	21	66,849	135
[20] 17,63,241	(6)			4,58,364			
	18	Deoria	Uttar Pradesh	69,127	22	66,488	102
	19	Jalgaon	Maharashtra	68,035	18	67,652	70
	20	Moradabad	Uttar Pradesh	65,556	20	67,364	91
	21	Tiruchirapalli	Tamil Nadu	65,342	43	51,881	85
	22	Saharanpur	Uttar Pradesh	63,986	27	62,307	101
	23	Raichur	Karnataka	63,164	26	63,182	55
	24	Burdwan	West Bengal	61,151	35	54,657	80
[25] 22,19,602	(7)			4,56,361			
	25	Nellore	Andhra Pradesh	60,501	30	59,435	163
	26	North Arcot	Tamil Nadu	60,387	16	71,395	114

27	Gorakhpur	Uttar Pradesh	59,786	17	68,155	92
28	Hooghly	West Bengal	59,617	38	53,399	163
29	Kolhapur	Maharashtra	58,535	25	63,442	139
30	Rohtas	Bihar	58,445	34	56,681	99
31	Nainital	Uttar Pradesh	58,124	28	62,100	175
32	Muzaffarnagar	Uttar Pradesh	57,458	42	51,907	94
[30]	26,92,455	(8)	4,72,853			
33	Varanasi	Uttar Pradesh	57,447	23	65,194	134
34	Bellary	Karnataka	57,355	24	64,232	100
35	Belgaum	Karnataka	57,220	29	60,295	59
36	Chinglepattu	Tamil Nadu	56,700	19	67,372	164
37	Hissar	Haryana	56,338	53	45,894	54
38	Meerut	Uttar Pradesh	54,337	33	57,261	111
39	Allahabad	Uttar Pradesh	53,758	45	50,819	82
[35]	30,85,610	(7)	3,93,155			
40	Surat	Gujarat	52,408	47	48,164	98
41	Periyar	Tamil Nadu	51,893	64	39,776	110
42	Bijnore	Uttar Pradesh	51,302	51	46,968	98
43	Nizamabad	Andhra Pradesh	50,441	36	54,634	151
44	Ahmednagar	Maharashtra	50,372	67	39,294	29
45	Basti	Uttar Pradesh	50,246	46	49,631	58
46	Sirsa	Haryana	49,470	52	46,466	90
47	Coimbatore	Tamil Nadu	48,640	44	50,992	122
48	Jaunpur	Uttar Pradesh	47,418	39	52,952	121
[40]	35,37,800	(9)	4,52,190			
49	Farukhabad	Uttar Pradesh	47,333	48	48,141	105
50	Kota	Rajasthan	46,388	111	28,108	40

(Continued)

**7.02(b). CLASSIFICATION OF DISTRICTS ACCORDING TO THE PERCENTAGE SHARE OF TOTAL
CONSUMPTION OF PLANT NUTRIENTS (N+P₂O₅+K₂O) IN 1986-87 vis-a-vis 1985-86
(with kg/ha consumption) (Continued)**

Cumulative consumption (tonnes) [and % share to All India consumption]	Ranking of districts (No. of districts in the classification)	1986-87			1985-86		
		Districts	State	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Ranking of districts	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Consumption kg per hectare*
	51	Karimnagar	Andhra Pradesh	46,156	139	23,307	50
	52	Shahjahanpur	Uttar Pradesh	46,081	41	52,137	101
	53	Bulandshahar	Uttar Pradesh	46,005	31	57,976	98
	54	Kapurthala	Punjab	45,102	73	38,053	187
	55	Sambalpur	Orissa	44,883	61	42,307	50
	56	Bareilly	Uttar Pradesh	44,601	49	47,833	96
	57	Keira	Gujarat	44,538	50	47,602	77
	58	Mysore	Karnataka	41,867	69	39,208	64
[45] 39,90,754	(10)			4,52,954			
	59	Mahaboobnagar	Andhra Pradesh	41,588	136	23,435	28
	60	Azamgarh	Uttar Pradesh	41,513	62	41,998	66
	61	Badaun	Uttar Pradesh	41,237	55	44,536	79
	62	Mandya	Karnataka	40,618	71	38,679	128
	63	Ambala	Haryana	40,523	66	39,470	109
	64	Kanpur	Uttar Pradesh	39,861	54	45,865	80
	65	Kheri	Uttar Pradesh	39,709	68	39,249	63
	66	Faizabad	Uttar Pradesh	39,470	37	53,523	117
	67	Nasik	Maharashtra	39,429	32	57,701	59

	68	Murshidabad	West Bengal	39,158	84	33,546	47
	69	Bhojpur	Bihar	39,147	80	35,357	79
[50]	44,33,007	(11)		<u>4,42,253</u>			
	70	Dharwar	Karnataka	38,974	40	52,833	41
	71	Raipur	Madhya Pradesh	38,634	77	37,246	30
	72	Pilibhit	Uttar Pradesh	38,455	60	42,902	117
	73	Aligarh	Uttar Pradesh	38,231	70	38,984	60
	74	Hoshiarpur	Punjab	37,579	81	34,502	90
	75	Ghazipur	Uttar Pradesh	37,205	72	38,158	105
	76	Madurai	Tamil Nadu	36,746	63	40,674	70
	77	Ghaziabad	Uttar Pradesh	36,516	93	31,290	99
	78	Satara	Maharashtra	34,985	87	32,745	52
	79	Nadia	West Bengal	34,814	105	29,437	54
	80	Chitradurga	Karnataka	34,799	96	30,963	49
	81	Purnea	Bihar	33,646	110	28,135	40
[55]	48,73,591	(12)		<u>4,40,584</u>			
	82	Khammam	Andhra Pradesh	33,449	103	29,699	63
	83	Junagarh	Gujarat	32,806	85	33,177	46
	84	24 Parganas (North)	West Bengal	32,700		43,940**	
	85	Mainpuri	Uttar Pradesh	32,647	94	31,143	72
	86	Nanded	Maharashtra	32,636	83	34,093	45
	87	Shimoga	Karnataka	32,028	100	30,131	80
	88	Salem	Tamil Nadu	31,953	97	30,802	61
	89	Rajkot	Gujarat	31,532	89	32,528	40
	90	Birbhum	West Bengal	31,521	26	24,937	52
	91	Barabanki	Uttar Pradesh	31,321	78	37,145	81
	92	Rampur	Uttar Pradesh	31,113	74	37,895	122
	93	Jind	Haryana	30,634	124	25,139	65

(Continued)

**7.02(b). CLASSIFICATION OF DISTRICTS ACCORDING TO THE PERCENTAGE SHARE OF TOTAL
CONSUMPTION OF PLANT NUTRIENT (N+P₂O₅+K₂O) IN 1986-87 vis-a-vis 1985-86
(with kg/ha consumption) (Continued)**

1986-87					1985-86		
Cumulative consumption (tonnes) [and % share to All India consumption]	Ranking of districts (No. of districts in the classification)	Districts	State	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Ranking of districts	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Consumption kg per hectare*
	94	Hassan	Karnataka	30,153	134	23,664	59
	95	Ballia	Uttar Pradesh	29,848	119	26,329	75
[60] 53,17,932	(14)			4,44,341			
	96	Morena	Madhya Pradesh	29,829	128	24,473	56
	97	Buldhana	Maharashtra	29,638	104	29,520	38
	98	Hanumangarh	Rajasthan	29,480	121	26,180	
	99	Kurnool	Andhra Pradesh	29,386	65	39,562	44
	100	Sitapur	Uttar Pradesh	29,370	95	31,132	55
	101	Vadodara	Gujarat	29,358	57	43,517	79
	102	Mehsana	Gujarat	21,251	88	32,573	37
	103	Etah	Uttar Pradesh	29,234	116	27,144	57
	104	Yeotmal	Maharashtra	29,164	131	23,961	28
	105	Malda	West Bengal	29,133	129	24,420	59
	106	Etawah	Uttar Pradesh	29,336	82	34,385	83
	107	Ganganagar	Rajasthan	28,862	122	26,093	13
	108	Ropar	Punjab	28,802	107	29,046	154
	109	Tirunelveli	Tamil Nadu	28,583	59	43,323	47
	110	Bangalore	Karnataka	28,532	101	30,097	75
[65] 57,55,590	(15)			4,37,658			

111	Sabarkantha	Gujarat	28,238	79	35,399	71
112	Hardol	Uttar Pradesh	28,194	91	31,594	57
113	Dhule	Maharashtra	28,115	130	24,304	32
114	Mandsaur	Madhya Pradesh	27,880	147	21,153	27
115	Ahmedabad	Gujarat	27,652	145	21,459	34
116	Midnapur (East)	West Bengal	27,599		43,475†	39‡
117	Prakasam	Andhra Pradesh	27,500	108	28,617	43
118	Bilaspur	Madhya Pradesh	27,491	114	27,701	26
119	Patna	Bihar	27,481	112	27,845	100
120	Midnapur (West)	West Bengal	27,439		\$	39‡
121	Khargaon	Madhya Pradesh	27,115	149	20,638	30
122	Mathura	Uttar Pradesh	27,091	125	25,139	58
123	Agra	Uttar Pradesh	27,022	90	31,666	70
124	Pune	Maharashtra	26,748	99	30,215	26
125	Baharaich	Uttar Pradesh	26,613	102	29,747	44
[70] 61,67,768	(15)		4,12,178			
126	Unnao	Uttar Pradesh	26,309	117	27,050	68
127	Rohtak	Haryana	26,130	158	19,348	107
128	West Dinajpur	West Bengal	26,127	143	21,802	38
129	Rae Bareli	Uttar Pradesh	25,992	105	29,413	74
130	Srikakulam	Andhra Pradesh	25,989	148	21,118	56
131	Howrah	West Bengal	25,902	150	20,434	146
132	Pratapgarh	Uttar Pradesh	25,653	123	25,618	78
133	Bhavnagar	Gujarat	25,617	133	23,946	32
134	Bankura	West Bengal	25,508	157	19,356	42
135	Sultanpur	Uttar Pradesh	25,227	92	31,291	73
136	Chittoor	Andhra Pradesh	25,063	118	26,461	51
137	Fatehpur	Uttar Pradesh	24,989	98	30,771	78
138	Gaya	Bihar	24,805	109	28,136	63
139	Nalanda	Bihar	24,298	115	27,257	105

(Continued)

**7.02(b). CLASSIFICATION OF DISTRICTS ACCORDING TO THE PERCENTAGE SHARE OF TOTAL
CONSUMPTION OF PLANT NUTRIENTS (N+P₂O₅+K₂O) IN 1986-87 vis-a-vis 1985-86
(with kg/ha consumption) (Concluded)**

Cumulative consumption (tonnes) [and % share to All India consumption]	Ranking of districts (No. of districts in the classification)	1986-87			1985-86		
		Districts	State	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Ranking of districts	Consumption (tonnes) (N+P ₂ O ₅ +K ₂ O)	Consumption kg per hectare*
	140	Amravati	Maharashtra	24,014	140	22,768	29
	141	Nalgonda	Andhra Pradesh	23,711	76	37,627	51
	142	Chikmagalur	Karnataka	23,635	183	14,914	55
[75] 65,96,737	(17)			4,28,969			
	143	Solapur	Maharashtra	23,469	137	23,380	20
	144	Akola	Maharashtra	23,393	142	22,325	25
	145	Sangli	Maharashtra	23,131	113	27,823	60
	146	Bijapur	Karnataka	23,127	141	22,447	16
	147	Hoshangabad	Madhya Pradesh	22,794	161	19,119	37
	148	24 Parganas (South)	West Bengal	22,661		N.A.	N.A.
	149	Nagpur	Maharashtra	22,607	135	23,484	38
	150	East Champaran	Bihar	22,493	144	21,725	55
	151	Samastipur	Bihar	22,352	179	15,181	65
	152	Ujjain	Madhya Pradesh	22,231	171	16,457	29
	153	Anna	Tamil Nadu	22,037	160	19,216	N.A.
	154	Chittorgarh	Rajasthan	21,807	164	18,444	35
	155	Sonepat	Haryana	21,341	152	20,251	79
	156	Cuttack	Orissa	21,291	172	16,313	13
	157	Banaskantha	Gujarat	20,976	165	18,311	18
	158	Gonda	Uttar Pradesh	20,830	86	33,002	43

159	Warangal	Andhra Pradesh	20,350	127	24,658	47
160	Gopalgunj	Bihar	20,336	153	20,145	91
161	Wardha	Maharashtra	20,266	154	20,050	44
162	Bhandara	Maharashtra	20,095	—	14,305	45

[80] 70,34,324	(20)		4,37,587			

163	Aurangabad	Bihar	19,718	155	19,658	68
164	Kolar	Karnataka	19,655	167	17,120	46
165	Palghat	Kerala	19,477	162	18,851	59
166	Lucknow	Uttar Pradesh	19,039	120	26,246	126
167	Ganjam	Orissa	19,033	132	23,958	31
168	West Champaran	Bihar	18,868	181	15,008	42
169	Puddukotai	Tamil Nadu	18,443	156	19,507	101
170	Mirzapur	Uttar Pradesh	18,227	146	21,387	40
171	Cooch Bihar	West Bengal	18,187		13,805	40
172	Begusarai	Bihar	18,116	187	14,493	85
173	Aurangabad	Maharashtra	17,949	138	23,329	17
174	Kottayam	Kerala	17,855	163	18,822	79
175	Puri	Orissa	17,554	174	15,553	19
176	Dhar	Madhya Pradesh	17,369	173	16,229	27
177	Cuddapah	Andhra Pradesh	17,321	151	20,276	56
178	Muzaffarpur	Bihar	17,290	169	16,799	41
179	Mohindergarh	Haryana	17,231		10,495	27
180	Amreli	Gujarat	16,756	168	17,029	31
181	Ranchi	Bihar	16,710	177	15,370	23
182	Medak	Andhra Pradesh	16,678	159	19,250	41
183	Kodagn	Karnataka	16,491	184	14,873	100
184	Indore	Madhya Pradesh	16,364		12,113	32
185	Tumkur	Karnataka	16,307		12,528	24
186	Dakshin Kannada	Karnataka	16,211	175	15,478	52
187	Bundi	Rajasthan	16,118		13,006	40

[85] 74,77,271	(25)		4,42,967			

**This is for the composite district of 24 Parganas.

‡This is for composite district of Midnapur.

§See Sl. No. 116.

*of gross cropped area.

**7.03. GROWTH OF FERTILISER CONSUMPTION IN THE DISTRICTS SELECTED UNDER INTENSIVE
FERTILISER PROMOTION CAMPAIGN (IFPC)—KHARIF AND RABI
(1980-81, 1981-82 and 1986-87)**

Sl. No.	Name of the State/District	Lead Manufacturers	Kharif					Rabi				
			Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage Increase/decrease in Kharif 1986		Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage Increase/decrease in Rabi 1986-87	
			Kharif 1980 (Pre-Campaign)	Kharif 1981	Kharif 1986	Over Kharif 1980	Over Kharif 1981	Rabi 1980-81 (Pre-Campaign)	Rabi 1981-82	Rabi 1986-87	Over Rabi 1980-81	Over Rabi 1981-82
I. EAST ZONE												
Assam												
1.	1. Dibrugarh	HFC	803	466	1,226	52.7	163.1	507	538	781	6.1	45.2
Selected District Total			803	466	1,226	52.7	163.1	517	538	781	6.1	45.2
State Total			5,100	5,900	9,589	15.7	59.1	4,950	4,900	7,410	15.7	59.1
Bihar												
2.	1. Purnea	HFC	1,448	1,580	8,964	519.0	467.3	4,486	4,562	24,682	450.2	441.0
3.	2. Saharsa	HFC	580	816	2,992	415.9	266.7	3,599	4,061	5,980	66.2	47.2
4.	3. West Champaran	HFC	1,783	2,560	10,346	480.0	304.0	5,262	5,422	8,522	61.9	57.2
5.	4. Bhagalpur	HFC	2,461	2,727	7,961	223.5	191.9	7,619	7,600	7,642	0.3	0.6
6.	5. Aurangabad	FCI	959	893	11,127	1060.1	1146.0	2,690	3,614	8,591	219.4	137.7
7.	6. Darbhanga	FCI	346	323	2,412	597.1	470.2	2,286	2,498	6,130	168.2	145.4
8.	7. Patna	FCI	2,370	2,083	10,939	361.6	425.2	9,791	9,429	16,542	68.9	75.4
9.	8. East Champaran	FCI	2,089	2,587	9,263	343.4	258.0	8,330	7,623	13,230	58.8	73.6
10.	9. Samastipur	IFFCO	1,496	1,391	5,162	245.0	271.0	5,533	5,484	17,190	210.7	216.3
Selected Districts Total			13,512	15,060	69,166	491.9	359.2	49,646	50,313	108,509	118.5	115.7
State Total			48,300	49,900	211,739	338.4	324.3	158,200	155,400	315,353	99.3	102.9

Orissa													
11.	1.	Dhenkanat	FCI	589	741	2,557	334.1	245.1	1,441	1,439	2,596	80.2	80.4
12.	2.	Sundergarh	FCI	772	1,096	3,027	292.1	176.2	1,358	1,247	2,772	104.1	122.3
13.	3.	Ganjam	IFFCO	3,364	3,989	12,052	258.3	202.1	7,987	8,907	6,981	-12.5	-22.5
14.	4.	Phulbani	HFC	386	225	762	97.4	238.7	537	595	675	25.7	13.4
15.	5.	Sambalpur	CFL	3,640	11,436	19,770	443.1	72.9	9,275	9,829	25,113	170.8	155.5
Selected Districts Total				13,701	17,487	38,168	178.6	118.3	20,598	22,017	38,137	85.1	73.2
State Total				34,600	38,400	73,764	113.2	92.1	41,800	43,600	77,970	86.5	78.8
West Bengal													
16.	1.	West Dinajpur	HFC	5,484	5,847	8,345	52.8	42.7	9,105	5,542	17,802	95.5	221.2
17.	2.	Birbhum	HFC	7,757	9,161	11,686	50.7	27.6	11,716	11,586	19,835	69.3	71.2
18.	3.	24-Parganas	IFFCO	10,379	10,975	24,104	132.2	119.6	17,795	13,880	31,257	75.6	125.2
Selected Districts Total				23,620	25,983	44,135	86.8	69.9	38,616	31,008	68,894	78.4	122.2
State Total				100,400	107,300	196,178	95.4	82.8	182,400	151,120	303,043	66.1	100.5
II. NORTH ZONE													
Haryana													
19.	1.	Rohtak	NFL	1,427	2,544	4,945	246.5	94.3	7,126	6,653	18,185	155.2	173.3
20.	2.	Mohindergarh	NFL	315	502	1,266	301.9	152.2	4,744	6,075	12,320	159.7	102.8
21.	3.	Jind	NFL	3,862	4,972	10,801	179.7	147.0	10,190	11,724	19,833	94.6	69.2
22.	4.	Gurgaon	NFL/IFFCO	374	580	1,035	176.5	78.4	3,881	4,406	9,126	135.1	107.1
23.	5.	Hissar	IFFCO	6,194	5,311	19,336	212.2	264.1	16,928	24,685	37,002	118.6	49.9
Selected Districts Total				12,172	13,309	37,383	207.1	180.9	42,869	53,544	96,466	136.0	80.2
State Total				75,700	75,500	144,064	90.3	90.8	155,100	176,100	270,773	74.6	53.8

(Continued)

**703. GROWTH OF FERTILISER CONSUMPTION IN THE DISTRICTS SELECTED UNDER INTENSIVE
FERTILISER PROMOTION CAMPAIGN (IFPC) - KHARIF AND RABI
(1980-81, 1981-82 and 1986-87) (Continued)**

Sl. No.	Name of the State/District	Lead Manufacturers	Kharif					Rabi				
			Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage Increase/Decrease in Kharif 1986		Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage Increase/Decrease in Rabi 86-87	
			Kharif 1980 (Pre-Campaign)	Kharif 1981	Kharif 1986	Over Kharif 1980	Over Kharif 1981	Rabi 1980-81 (Pre-Campaign)	Rabi 1981-82	Rabi 1986-87	Over Rabi 1980-81	Over Rabi 1981-82
NORTH ZONE (Concluded)												
Himachal Pradesh												
24.	1. Sirmur	NFL	469	980	870	85.5	-11.2	342	365	736	115.2	101.6
25.	2. Solan	NFL	933	678	1,236	32.5	82.3	504	606	958	90.0	58.1
26.	3. Kangra	NFL	1,944	1,621	2,434	25.2	50.1	2,054	1,987	3,408	65.9	71.5
Selected Districts Total			3,346	3,279	4,540	35.7	38.4	2,900	2,958	5,102	75.9	72.5
State Total			9,400	10,600	11,897	26.6	12.2	6,700	7,600	14,215	112.2	87.0
Jammu & Kashmir												
27.	1. Anantnag	IFFCO			4,190					1,104		
28.	2. Kathua	NFL			111					167		
Selected Districts Total					4,301					1,271		
State Total			13,900	17,000	21,235	52.8	24.9			9,092		

Punjab													
29.	1.	Ropar	NFL	4,466	7,300	10,823	142.3	48.3	9,766	10,717	17,979	84.1	67.8
30.	2.	Hoshiarpur	NFL	7,427	7,038	16,091	116.6	128.6	18,741	20,183	21,488	14.6	6.5
Selected Districts Total				11,893	14,338	26,914	69.0	87.7	28,507	30,900	39,467	38.4	27.7
State Total				2,27,500	2,45,000	4,28,065	88.1	74.7	5,26,000	5,75,500	6,87,540	30.7	19.5

Uttar Pradesh													
31.	1.	Bahraich	IFFCO	5,393	7,620	7,666	42.1	0.6	12,910	15,387	18,947	46.8	23.1
32.	2.	Mirzapur	IFFCO	4,907	4,759	7,486	52.5	57.3	10,392	10,807	10,741	3.3	-0.7
33.	3.	Badaun	IFFCO	5,353	6,801	14,830	77.0	118.1	17,847	21,453	26,407	48.0	23.1
34.	4.	Fatehpur	IFFCO	2,422	2,924	10,642	339.4	264.0	9,851	12,472	14,347	45.6	15.0
35.	5.	Unnao	FCI	2,026	1,957	7,126	251.7	264.1	12,116	13,928	19,183	58.3	37.7
36.	6.	Banda	FCI	944	909	1,880	99.1	106.8	4,601	4,611	6,123	33.1	32.8
37.	7.	Pauri Garhwal	FCI	127	93	172	35.4	84.9	200	185	434	117.0	134.6
38.	8.	Rae Bareilly	FCI	3,246	3,580	7,982	145.9	123.0	13,022	14,071	18,010	38.3	28.0
39.	9.	Hardoi	IEL	3,427	3,019	9,729	183.9	122.2	12,862	16,499	18,465	43.6	11.9
40.	10.	Almora	IEL	383	380	303	-20.9	-20.3	438	297	472	7.7	58.9
41.	11.	Etah	SFC	1,871	1,800	6,493	247.0	260.7	14,170	14,714	22,741	60.5	54.6
42.	12.	Agra	GNFC	1,782	1,265	3,903	119.0	208.5	17,521	18,321	23,119	32.0	26.2
Selected Districts Total				31,881	35,107	78,212	145.3	122.8	1,25,930	1,42,745	1,78,989	42.1	25.4
State Total				3,36,600	3,74,100	6,50,737	93.3	73.9	8,14,000	8,95,500	1,12,0977	37.7	25.2

III. SOUTH ZONE

Andhra Pradesh

43.	1.	Srikakulam	CFL	2,567	4,841	19,860	673.7	310.2	9,453	9,970	6,129	-34.9	-38.5
44.	2.	Visakhapatnam	CFL	2,287	1,813	9,494	315.1	423.7	3,623	4,783	4,006	10.6	-16.2

(Continued)

**7.03. GROWTH OF FERTILISER CONSUMPTION IN THE DISTRICTS; SELECTED UNDER
INTENSIVE FERTILISER PROMOTION CAMPAIGN (IFPC)—KHARIF-RABI
(1980-81, 1981-82 & 1986-87) (Continued)**

Sl. No.	Name of the State/District	Lead manufacturers	Kharif					Rabi				
			Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage increase/decrease in Kharif 1986		Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage increase/decrease in Rabi 1986-87	
			Kharif 1980 (pre-campaign)	Khari 1981	Kharif 1986	Over Kharif 1980	Over Kharif 1981	Rabi 1980-81 (pre-campaign)	Rabi 1981-82	Rabi 1986-87	Over Rabi 1980-81	Over Rabi 19-1-82

SOUTH ZONE (Concluded)

Andhra Pradesh (Concluded)

45.	3.	Cuddapah	CFL	4,943	5,885	8,160	65.1	38.6	12,687	18,618	9,161	-27.8	-50.8
46.	4.	Vijayanagaram	RCF	1,576	2,387	7,584	381.2	217.7	4,207	8,680	3,350	-20.4	-61.4
47.	5.	Adilabad	RCF	1,585	2,173	10,654	572.2	390.3	1,011	11,365	1,381	36.6	-87.6
48.	6.	Nalgonda	ZACL	8,881	6,358	16,632	87.3	161.6	10,830	14,422	7,079	-35.5	-50.9
49.	7.	Medak	FACT	4,457	8,665	11,247	152.3	29.8	4,720	5,420	5,431	15.1	0.2
50.	8.	Nellore	SPIC	4,244	7,662	15,913	274.9	107.7	10,870	25,051	44,588	310.2	78.0
51.	9.	Chittoor	MFL	7,204	5,601	14,510	101.4	159.0	5,742	17,131	10,553	83.8	-38.4

Selected Districts Total

37,744 45,385 114,054 202.2 151.3 63,143 115,400 91,678 45.2 -20.8

State Total

226,200 239,000 468,561 107.1 96.0 349,400 416,507 432,594 23.8 3.9

Karnataka

52.	1.	Dharwar	ZACL	15,026	16,126	26,720	77.8	65.7	8,932	10,501	10,254	14.8	-2.4
53.	2.	Tunkur	ZACL	6,066	6,299	11,009	81.5	74.8	5,637	6,397	5,298	-6.1	-17.5
54.	3.	Raichur	IFFCO	16,449	21,624	29,886	81.7	38.2	19,754	21,468	33,278	68.5	55.0

55.	4.	Bangalore	FACT	11,238	10,734	16,323	45.2	52.1	10,036	9,944	12,209	21.6	22.1
56.	5.	Kolar	SPIC	6,792	6,267	10,456	53.9	66.8	5,364	7,752	9,199	71.5	18.7
57.	6.	Bidar	MCF	2,866	4,288	4,939	72.3	15.2	1,382	1,957	2,296	66.1	17.3
58.	7.	Hassan	MFL	12,373	10,082	20,721	67.4	105.5	7,266	7,652	9,432	29.8	23.3

Selected Districts Total

70,810 75,420 120,054 69.5 59.2 58,371 65,671 81,966 40.4 24.8

State Total

180,900 201,900 339,872 87.9 68.3 162,985 181,737 225,912 38.6 24.3

Kerala

59.	1.	Mallapuram	FACT	3,114	3,502	6,305	102.4	80.0	3,103	3,464	4,381	41.2	26.5
60.	2.	Cannanore	FACT	4,348	4,293	5,467	25.7	27.3	4,228	3,667	3,602	-14.8	-1.8
61.	3.	Quilon	FACT	4,151	4,514	5,264	26.8	16.6	2,945	3,273	2,703	-8.2	-17.4

Selected Districts total

11,613 12,309 17,036 46.7 38.4 10,276 10,404 10,686 -4.0 2.7

State Total

50,800 48,500 85,761 68.8 76.8 46,910 46,213 65,602 39.8 41.9

Tamil Nadu

62.	1.	Dharmapuri	MFL	4,569	2,343	5,840	27.8	49.2	4,104	7,688	7,554	84.1	-1.7
63.	2.	Salem	MFL	12,075	6,862	10,525	-12.8	53.4	13,748	15,921	21,428	55.9	34.6
64.	3.	Ramanathapuram	SPIC	4,577	4,657	461	-89.9	85.9	11,485	21,507	6,544	-43.0	-69.5
65.	4.	Kanya Kumari	SPIC	1,944	2,251	2,872	47.7	27.6	3,224	3,381	4,915	52.4	45.4
66.	5.	Tirunelveli	SPIC	10,866	9,988	6,927	-36.2	-30.6	18,227	24,528	21,656	18.8	-7.6
67.	6.	Pudukottai	FACT	2,584	1,638	5,794	124.2	253.7	8,602	9,390	12,649	47.0	34.7

Selected Districts Total

36,615 27,739 32,419 -11.6 16.9 59,390 82,415 74,746 32.5 -12.5

State Total

210,000 159,200 244,259 16.3 53.4 281,214 353,415 430,152 53.0 21.7

(Continued)

**7.03. GROWTH OF FERTILISER CONSUMPTION IN THE DISTRICTS SELECTED UNDER
INTENSIVE FERTILISER PROMOTION CAMPAIGN (IFPC) - KHARIF AND RABI
(1980-81, 1981-82 and 1986-87) (Concluded)**

Sl. No.	Name of the State/Distt.	Lead manufacturers	Kharif					Rabi				
			Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage increase/decrease in Kharif 1986		Consumption (N+P ₂ O ₅ +K ₂ O) (tonnes)			Percentage increase/decrease in Rabi 1986-87	
			Kharif 1980 (pre-campaign)	Kharif 1981	Kharif 1986	Over Kharif 1980	Over Kharif 1981	Rabi 1980-81 (pre-campaign)	Rabi 1981-82	Rabi 1986-87	Over Rabi 1980-81	Over Rabi 1981-82
IV. WEST ZONE												
Gujarat												
68.	1. Mehsana	IFFCO	8,055	8,159	9,050	12.3	10.9	11,768	12,636	20,201	71.7	59.9
69.	2. Ahmedabad	IFFCO	6,541	4,247	15,447	136.2	263.7	5,724	9,910	12,205	113.2	23.2
70.	3. Bharuch	GNFC	4,399	4,895	7,173	63.0	21.7	2,419	3,544	2,770	14.5	-21.9
71.	4. Valsad	GNFC	6,721	6,165	26,248	290.5	325.7	2,636	3,884	26,160	892.4	573.5
72.	5. Gandhinagar	GNFC	928	1,395	882	-4.9	-36.8	968	1,374	948	-2.1	-31.1
73.	6. Banaskantha	GNFC	2,562	2,840	4,892	90.9	72.2	7,382	7,883	16,084	117.9	104.0
74.	7. Panchahel	GNFC	3,787	3,342	6,685	76.5	100.0	2,525	4,098	3,890	54.0	-5.1
Selected districts total			32,993	32,043	70,377	113.3	119.6	33,422	43,329	90,758	171.5	109.5
State total			190,700	197,300	215,766	13.1	9.3	166,184	204,136	186,528	12.2	-8.7

Madhya Pradesh

75.	1. Hoshangabad	IFFCO	1,067	1,685	8,045	654.0	377.4	3,486	4,112	14,748	333.0	258.6
76.	2. Vidisha	IFFCO	113	368	3,142	2680.5	753.8	2,124	3,523	4,541	113.8	28.9
77.	3. Bilaspur	IFFCO	3,195	6,294	22,815	614.0	262.5	5,880	4,374	4,676	-20.5	6.9
78.	4. Rajnandgaon	HFC	1,957	2,315	7,819	299.5	237.7	1,014	1,547	1,091	7.6	-29.5
79.	5. Tikamgarh	HFC	56	201	413	637.5	105.5	4,858	5,859	8,391	72.7	43.2
80.	6. Raipur	DMCC	11,633	17,050	34,820	199.3	104.2	7,903	4,033	3,814	-51.8	-5.5
81.	7. Morena	DMCC	907	1,165	2,724	200.7	233.8	6,416	11,294	24,203	277.2	114.3
82.	8. Shahajpur	SFC	1,166	1,941	8,006	586.6	312.5	1,971	2,288	5,368	172.3	134.6

83.	9.	Damoh-	FCI	32	51	641	1903.1	1156.8	790	840	1,568	98.6	86.7
84.	10.	Sagar	GNFC	223	272	2,247	907.6	726.1	2,274	2,637	4,963	118.2	88.2
85.	11.	Durg	DMCC	2,068	4,315	13,273	541.8	207.6	3,984	2,692	1,327	-66.7	-50.8
Selected districts total				22,517	35,657	103,945	361.6	191.5	40,700	43,199	74,690	83.5	72.9
State total				69,100	98,300	257,950	273.3	162.4	127,697	137,876	235,576	84.5	70.9
Maharashtra													
86.	1.	Pune	RCF	9,267	18,379	16,865	82.0	-8.3	8,547	21,500	9,883	15.6	-54.1
87.	2.	Parbhani	RCF	3,177	4,871	12,109	281.1	148.6	5,525	6,013	1,067	-80.7	-82.3
88.	3.	Akola	RCF	8,094	9,495	20,800	157.0	119.0	3,620	6,329	2,593	-28.4	-59.1
89.	4.	Bhandara	RCF	4,888	5,203	14,125	188.9	171.5	2,198	3,912	5,970	171.6	52.6
90.	5.	Satara	RCF	12,220	13,250	23,908	95.6	80.4	7,850	8,257	11,077	41.1	34.1
91.	6.	Nanded	ZACL	5,844	8,207	27,215	365.7	231.6	4,203	6,584	5,421	29.0	-17.7
92.	7.	Osmanabad	ZACL	4,898	7,950	2,410	-50.8	-69.7	4,218	5,147	478	-78.7	-90.3
93.	8.	Aurangabad	IFFCO	10,464	12,283	14,158	35.3	15.3	11,936	10,693	3,791	-68.2	-64.6
Selected districts total				58,852	79,638	131,590	123.6	65.2	48,097	68,435	40,280	-16.3	-41.2
State total				230,000	302,600	477,019	107.4	57.6	190,346	226,540	179,625	-5.7	-20.7
Rajasthan													
94.	1.	Bhilwara	IFFCO	2,591	2,439	5,355	106.7	119.6	1,945	1,616	4,653	139.2	187.9
95.	2.	Jhalawar	IFFCO	823	986	2,799	240.1	283.8	1,822	1,017	2,305	26.5	126.6
96.	3.	Ganganagar	IFFCO	8,846	8,939	9,166	3.6	2.5	14,672	13,342	19,696	34.2	47.6
97.	4.	Jaipur	SFC	1,130	1,128	2,023	79.0	79.0	2,700	2,910	4,511	67.1	55.0
98.	5.	Ajmer	SFC	654	491	1,396	113.4	184.3	1,222	722	2,448	100.3	239.0
99.	6.	Chittorgarh	SFC	4,888	5,625	10,529	115.4	87.2	5,857	5,858	11,278	92.6	92.6
100.	7.	Kota	SFC	4,101	4,362	8,404	104.9	92.7	9,206	11,469	37,984	312.6	231.2
101.	8.	Udaipur	GSFC	954	632	1,529	60.3	141.9	1,001	938	1,040	3.9	10.9
102.	9.	Banswara	GSFC	699	1,092	3,092	219.1	183.1	922	1,407	4,244	360.3	201.6
103.	10.	Bharatpur	NFL	722	1,222	514	-28.8	-58.0	4,601	4,259	5,515	19.8	29.5
104.	11.	Alwar	NFL	1,447	1,480	2,169	49.9	46.6	4,702	3,957	6,628	41.0	67.5
Selected districts total				27,195	28,396	46,976	72.7	65.4	48,650	47,495	100,302	106.2	111.2
State total				46,500	47,500	79,223	70.4	66.8	88,612	90,524	167,863	89.4	85.4
All-India selected districts total				409,097	461,616	940,496	129.8	103.7	671,622	810,411	1,097,842	63.4	35.4
+All-India total				2,137,800	2,310,200	3,989,560	86.6	72.7	3,377,700	3,757,000	4,790,400	41.8	27.5

+—Includes consumption of small States/U.T.s and plantations.

7.04. CLASSIFICATION OF DISTRICTS ACCORDING TO RANGES OF FERTILISER CONSUMPTION*
(N+P₂O₅+K₂O) per/ha 1985-86 and 1984-85

Zone/State	Cropped area ('000 ha)		Irrigated area ('000 ha)		Percentage of gross irrigated to gross cropped area	No. of districts in the state	Ranges of fertiliser consumption (kg/ha)								
	Gross	Net	Gross	Net			Above 200	150-200	100-150	75-100	50-75	25-50	10-25	5-10	Less than 5
							(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)
East															
Assam	3,577	2,696	572	572	16.0	10	—	—	—	—	—	—	—	4	6
						(10)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(3)	(7)
Bihar	10,269	7,580	3,570	2,517	34.8	33	—	—	1	7	7	9	8	1	—
						(33)	(—)	(—)	(1)	(2)	(7)	(13)	(6)	(4)	(—)
Orissa	9,563	5,990	2,006	1,845	21.0	13	—	—	—	—	—	2	6	3	2
						(13)	(—)	(—)	(—)	(—)	(1)	(6)	(4)	(2)	(—)
West Bengal	7,842	5,341	1,980	1,980	25.2	15	—	—	2	1	5	6	1	—	—
						(15)	(—)	(1)	(1)	(1)	(4)	(7)	(1)	(—)	(—)
North															
Haryana	5,688	3,600	3,594	2,190	63.2	12	—	—	3	2	3	3	—	1	—
						(12)	(—)	(—)	(2)	(2)	(2)	(5)	(—)	(1)	(—)
Himachal Pradesh	971	593	165	94	17.0	12	—	—	1	—	—	4	5	2	—
						(12)	(—)	(—)	(—)	(1)	(—)	(4)	(5)	(2)	(—)
Punjab	6,977	4,212	6,273	3,609	89.9	12	1	8	2	1	—	—	—	—	—
						(12)	(1)	(7)	(2)	(2)	(—)	(—)	(—)	(—)	(—)
Uttar Pradesh	25,067	17,273	12,148	9,879	48.5	56	—	1	13	15	13	5	4	4	1
						(56)	(—)	(—)	(5)	(15)	(18)	(9)	(3)	(1)	(5)

Punjab	6,977	4,212	6,273	3,609	89.9	12 (12)	1 (1)	8 (7)	2 (2)	1 (2)	— (—)	— (—)	— (—)	— (—)	— (—)
Uttar Pradesh	25,067	17,273	12,148	9,879	48.5	56	—	1	13	15	13	5	4	4	1
South															
Andhra Pradesh	13,393	11,436	5,058	3,878	37.8	23 (23)	1 (2)	3 (2)	1 (2)	— (1)	6 (5)	10 (9)	2 (2)	— (—)	— (—)
Karnataka	11,476	10,605	1,945	1,590	16.9	19 (19)	— (—)	— (—)	3 (2)	2 (2)	6 (8)	4 (4)	3 (2)	1 (1)	— (—)
Kerala	2,861	2,180	396	266	13.8	13 (12)	— (—)	— (—)	— (—)	2 (1)	5 (2)	6 (8)	— (1)	— (—)	— (—)
Tamil Nadu	6,945	5,846	3,249	2,618	46.8	17 (15)	1 (1)	1 (1)	6 (7)	5 (3)	1 (1)	3 (1)	— (1)	— (—)	— (—)
West															
Gujarat	10,423	9,583	2,614	2,240	25.1	19 (19)	— (—)	— (—)	1 (—)	2 (3)	2 (3)	8 (8)	4 (3)	1 (1)	1 (1)
Madhya Pradesh	22,628	19,223	2,867	2,772	12.7	45 (45)	— (—)	— (—)	— (—)	— (—)	1 (—)	13 (11)	20 (22)	5 (5)	6 (7)
Maharashtra	21,130	18,302	2,686	1,964	12.7	25 (25)	— (—)	— (—)	1 (1)	— (—)	3 (1)	13 (12)	7 (10)	1 (—)	— (—)
Rajasthan	18,877	16,234	4,014	3,276	21.3	26 (26)	— (—)	— (—)	— (—)	— (—)	— (—)	3 (3)	8 (9)	7 (5)	8 (9)
Total (16 States)+	180,361	142,744	53,937	41,955	29.9	350 (347)	3 (4)	13 (11)	34 (23)	37 (33)	52 (51)	89 (95)	68 (71)	30 (27)	24 (32)

+ Those States for which complete data are available, have been listed here.

() for 1984/85.

* of gross cropped area (in kg)

8.00. PRICES AND SUBSIDIES

8.01. PRICES OF FERTILISERS IN TERMS OF NUTRIENTS

(Inclusive of excise duty)

(50 kg packing)

(Exclusive of Central and State sales tax and local taxes)

(Rs./kg)

As on	Maximum sale price of nutrient through					
	Ammonium sulphate (20.6% N)	Urea (46% N)	Calcium ammonium nitrate (25% N)	Diammonium phosphate (18-46-0)	Super phosphate (16% w.s. P ₂ O ₅)	Muriate of potash (60% K ₂ O)
Nutrient	(N)	(N)	(N)	(P ₂ O ₅)	(P ₂ O ₅)	(K ₂ O)
30-3-1972	2.72	2.08	2.26	1.89 ¹	3.17 ²	0.92 ¹
11-10-1973	2.96	2.28	2.46	2.01	3.27 ²	1.13
1-6-1974	4.54	4.35	4.38	4.83	5.63 ³	2.05
18-7-1975	4.54	4.02	4.38	4.52	6.78 ²	1.97
				4.08 ³	5.85 ³	1.83 ³
16-3-1976	4.54	3.80	4.38	4.17	4.51	1.52
8-2-1977	4.54	3.59	4.38	3.40	3.57	1.34
12-10-1977	4.54	3.37	4.06	3.49	3.57	1.34
2-2-1979	4.54	3.37	4.06	3.49	3.61 ⁴	1.34
10-3-1979	4.37	3.15	4.00	3.55	3.65 ⁵	1.34
8-6-1980*	Decontrolled	4.35	Decontrolled	4.93	5.27 ⁶	1.83
2-7-1980*	7.28 ⁷	4.35	6.40	4.93	5.27 ⁶	1.83
11-7-1981*	7.21 ⁷	5.11	6.40	5.83	5.74 ⁸ (5.87)	2.17
29-6-1983	7.28 ⁹	4.67	6.20 ⁹	5.46	5.31	2.00
31-1-1986	8.01	5.11	6.80	5.83	5.94	2.17

¹w.e.f. March 17, 1972.²As on April 1, 1972.³w.e.f. December 1, 1975.⁴w.e.f. November 1, 1978.⁵w.e.f. March 22, 1979.⁶w.e.f. June 7, 1980.⁷For imported pool material.⁸w.e.f. August 1, 1981.⁹Statutorily controlled w.e.f. 21-8-84.

() = w.e.f. 23-5-1982.

* Prices effective 8-6-1980 (and thereafter) exclude excise duty as it is withdrawn with effect from 7-6-1980 on all fertilisers, except ammonium sulphate and calcium ammonium nitrate in which case, it is 7.5 per cent *and valorem* plus 5% special duty on excise duty. This is also withdrawn with effect from 28-2-1983.

8 02 PRICES OF FERTILISERS
(Exclusive of Central and State sales tax and local taxes)

(Rs./tonne net)

Fertiliser	Grade	Maximum sale price (50 kg packing)							Remarks
		Effective from							
		Feb. 2, 1979*	March 10, 1979**	June 8, 1980**	July 11, 1981	June 28, 1983		Jan. 31, 1986 (current)	
(A) STATUTORILY CONTROLLED									
1. Ammonium sulphate (AS)		935 ¹	900	Decontrolled	Decontrolled	Decontrolled	1,500 ²	1,650	} @AS and CAN 25% N decontrolled from June 8, 1980 to August 20, 1984 and CAN 26% N from June 8, 1980 to September 6, 1984. Thereafter, these three fertilisers were brought again under statutory control, (vide ² & ⁴).
2. a) Calcium ammonium nitrate (CAN)	a) 26% N	1,060 ³	1,040	Decontrolled	Decontrolled	Decontrolled	1,615 ⁴	1,770	
b) Calcium ammonium nitrate (CAN)	b) 25% N	1,015 ³	1,000	Decontrolled	Decontrolled	Decontrolled	1,550 ²	1,700	
3. Urea	46% N	1,550 ⁵	1,450	2,000	2,350	2,150	2,150	2,350	
4. Ammonium chloride	25% N						1,550 ¹⁷	1,700 ⁸	
5. Urea amm. phos.	a) 24-24-0	1,950	1,950	2,600	3,050	2,800		3,050	
	b) 28-28-	2,340	2,200	3,050	3,600	3,350		3,600	
	c) 14-35-14	2,230	2,100	2,900	3,400	3,150		3,400	
6. Amm. phos. sulphate	a) 16-20-0	1,700	1,400	1,950	2,300	2,150		2,300	
	b) 20-20-0	1,845	1,600	2,200	2,600	2,400		2,600	
	c) 18-9-0	1,320	—	—	—	—		—	
7. Diamm. phosphate	18-46-0	2,210	2,000	3,050	3,600	3,350		3,600	
8. a) Nitro. phos. with potash	a) 15-15-15	1,520	1,300	1,800	2,100	1,950		2,100	
b) Nitrophosphate	b) 20-20-0	1,760	1,500	2,050	2,400	2,200		2,400	
9. NP/NPK fertilisers	a) 17-17-17	1,810	1,600	2,200	2,600	2,400		2,600	
	b) 14-28-14	1,950	1,900	2,600	3,050	2,800		3,050	
	c) 19-19-19	2,020	1,800	2,500	2,950	2,750		2,950	
	d) 10-26-26	1,890	1,800	2,500	2,950	2,750		2,950	
	e) 12-32-16	2,090	2,000	2,750	3,250	3,000		3,250	

(Continued)

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8.02. PRICES OF FERTILISERS

(Exclusive of Central and State Sales-tax and local taxes) (Concluded)

(Rs./tonne net)

Fertiliser	Grade	Maximum sale price (50 kg packing)						Remarks
		Effective from						
		Feb. 2 1979 ^a	March 10, 1979 ^{a*}	June 8 1980 ^{a*}	July 11, 1981	June 29, 1983	Jan. 31, 1986 (Current)	
10. Triple superphos.	a) Granular	1,640	1,600	2,200	2,600	2,400	2,600	
	b) Powder		1,500	2,050	2,400	2,200	2,400	
11. Single Superphos.	a) 16% W.S. P ₂ O ₅ Granulated	—	—	—	1,070 ⁶	1,000	1,100	} †Single superphos- phate was statutorily controlled w. e. f. May 23, 1982 (Vide ' & ')
	b) 16% W.S. P ₂ O ₅ Powder	—	—	—	940 ⁷	850	950	
	c) 14% W.S. P ₂ O ₅ Powder	—	—	—	820 ⁶	750	820	
12. Anhydrous ammonia NH ₃						3,500 ¹⁸	3,770	

(B) IMPORTED—POOL FERTILISERS

13. Ammonium sulphate		—	—	1,500 ⁸	1,500 ⁸	1,500 ⁸ @	
14. Calcium amm. nitrate 26% N		—	—	1,614 ⁸	1,614 ⁸	1,614 ⁸ @	
15. Muriate of potash 60% K ₂ O		805 ⁹	805 ⁹	1,100	1,300	1,200	1,300
16. Sulphate of potash 50% K ₂ O		1,295 ⁹	1,295 ⁹	1,800	2,100	1,950	2,100

(C) OTHER THAN STATUTORILY CONTROLLED

17. Ammonium sulphate		—	—	1550-1650	1550-1650	1550-1650@	
18. Ammonium chloride 25% N		1,245 ¹⁰	1,245 ¹⁰	1,245 ¹⁰	2203-2650 ¹⁸	1790-1807 ¹¹	
19. Calcium amm. nitrate 25% N		—	—	1,600	1,600	1,700 ¹² @	

20. Single superphos.

a) 16% W.S. P ₂ O ₅ Granulated					—‡
b) 16% W.S.	578 ¹³	584 ¹⁴	843 ¹⁵		—‡
P ₂ O ₅ Powder					
c) 14% W.S.					—‡
P ₂ O ₅ Powder					

} Single superphos-
| phosphate outside statu-
} tory control upto
| May, 22, 1982.
}

- Notes:**
1. Price of ammonium sulphate and muriate of potash is lower by Rs. 10/- per tonne when packed in 100 kg packing.
 2. Price of fertilisers when sold in bulk by the manufacturers at the factory gate are lower by Rs. 150/- per tonne with effect from 27th April 1982, except single superphosphate in which case it is lower by Rs. 95/- per tonne with effect from July 13, 1982.
 3. For previous prices, see "Fertiliser Statistics—1982-83" (pp 1-145 to 1-160).

*Inclusive of 15% excise duty + 5% Auxiliary duty + 5% special duty on excise duty w.e.f. March 1, 1978.

**Inclusive of 7.5% excise duty + 5% Auxiliary duty + 5% special duty on excise duty w.e.f. March 1, 1979.

***Excise duty, Auxiliary duty and special duty on excise duty withdrawn on all fertilisers w.e.f. June 7, 1980, except ammonium sulphate and calcium ammonium nitrate in which case also it was withdrawn w.e.f. February 28, 1983.

§= This price is applicable only when marketed as fertiliser for agricultural purposes through authorised dealers.

¹=w.e.f. June 1, 1974

⁷=w.e.f. May 23, 1982

¹³=w.e.f. November 1, 1978

²=w.e.f. August 21, 1984

⁸=w.e.f. July 2, 1980

¹⁴=w.e.f. March 22, 1979

³=w.e.f. July 18, 1975

⁹=w.e.f. February 8, 1977

¹⁵=w.e.f. June 7, 1980

⁴=w.e.f. September 7, 1984

¹⁰=w.e.f. March 9, 1977

¹⁶=w.e.f. February 9, 1981

⁵=w.e.f. October 12, 1977

¹¹=w.e.f. August 1, 1983

¹⁷=w.e.f. April 19, 1985

⁶=w.e.f. July 13, 1982

¹²=w.e.f. August 23, 1982

¹⁸=w.e.f. September 26, 1983

8.03. PRICES OF FERTILISER RAW MATERIALS

(a) The basic selling prices for naphtha and furnance oil—ex-companies storage points etc.
(for fertiliser industry)

(Rs.)

Product/effective from	Unit	Gauhati/ Barauni/ Digboi/ Haldia	Kandla	Okha	Koyali/ Bombay/ Mathura	Goa	Cochin	Madras	Vizag	Calcutta	Increase/ decrease in price
1. Naphtha	Per										
Before 1-9-1973	MT		253.00	252.65	252.25	250.05	251.06	268.42	258.57	267.30	+60.00
1-6-1974			487.05	486.70	486.31	484.10	485.11	502.48	429.63	501.36	+234.06
1-9-1975			650.92	658.83	596.31	654.57	595.11	612.48	602.63	653.58	+110.00
1-1-1977 } to } 7-6-1980 }		611.36	650.92	658.83	596.31	654.57	595.11	612.48	602.63	653.58	NiL
8-6-1980		1,086.36	1,125.92	1,133.38	1,071.31	1,129.57	1,070.11	1,087.48	1,077.63	1,118.58	+475.00
3-1-1981		1,386.36	1,425.92	1,433.83	1,371.31	1,429.57	1,390.11	1,387.48	1,377.63	1,428.58	+300.00
11-7-1981		1,738.36	1,777.92	1,785.83	1,723.31	1,481.57	1,742.11	1,739.48	1,729.63	1,780.58	+352.00
18-3-1983		-----	-----	-----	1,723.31	-----	-----	-----	-----	-----	NiL
1-9-1983		-----	-----	-----	1,723.31**	-----	-----	-----	-----	-----	NiL
17-3-1985		-----	-----	-----	1,982.31	-----	-----	-----	-----	-----	+259.00
6-2-1986		-----	-----	-----	1,982.31	-----	-----	-----	-----	-----	NiL

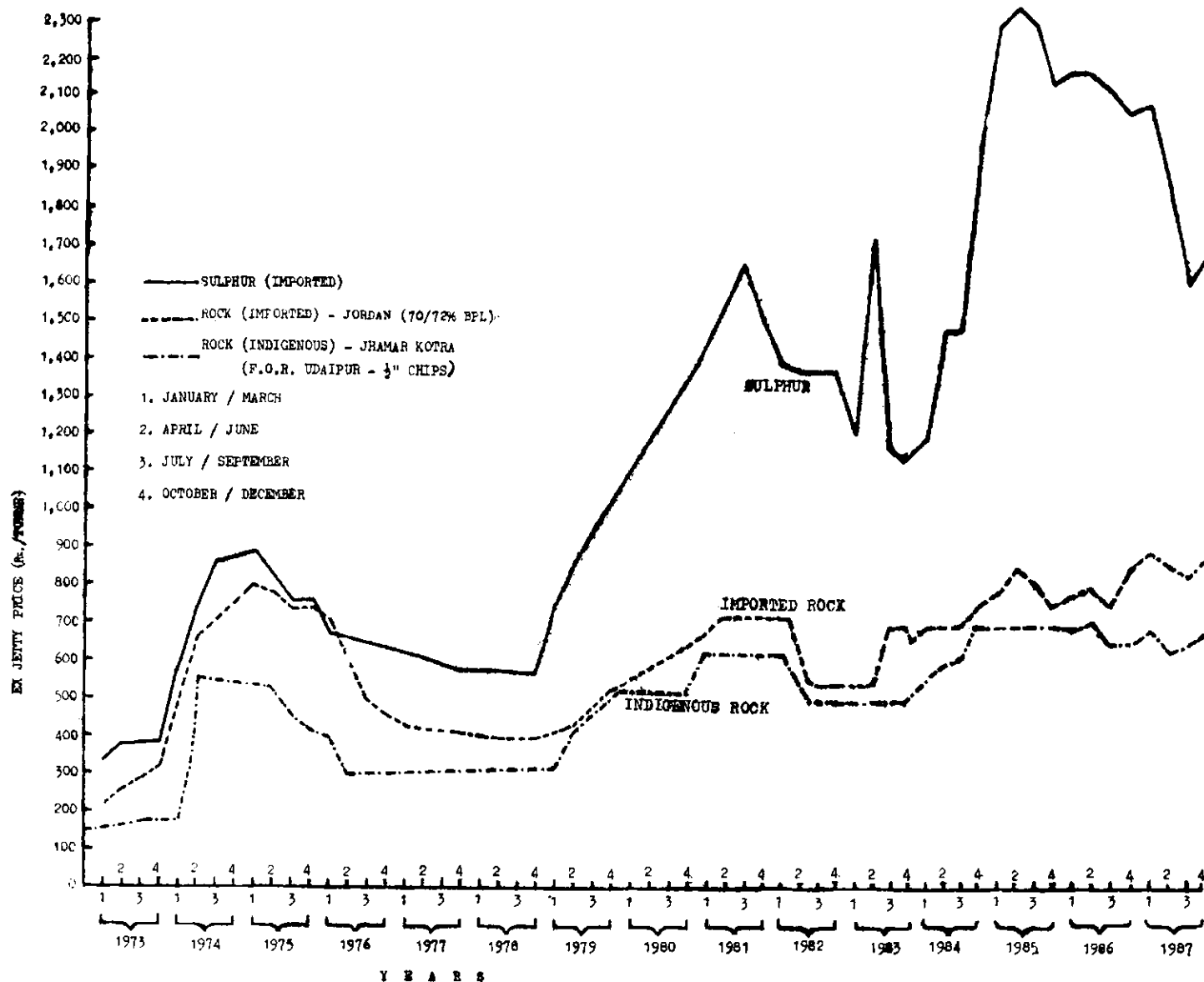
2. Furnance oil (Inclusive of duties)

(a) Ex-storage point	Per										
11-6-1973	KL		249.65	249.32	248.71	247.98	247.98	263.43	255.04	262.46	+15.93
2-3-1974			605.07	604.73	604.12	602.52	603.39	618.84	610.45	617.87	+355.41
18-9-1974			655.07	654.73	654.12	652.52	653.39	668.84	660.45	667.87	+50.00

1-3-1975		684.02	683.68	683.07	681.47	682.34	697.79	689.40	696.82	+ 28.95
14-7-1975		805.17	817.88	763.07	800.38	762.34	777.79	769.40	801.13	+ 80.00
1-12-1975		925.17	937.88	853.07	920.38	882.34	897.79	889.40	921.13	+ 120.00
1-1-1977	777.43	805.78	818.49	763.68	800.99	762.95	878.40	770.01	801.74	- 119.39
1-3-1978	902.81	931.16	943.87	889.06	926.37	888.33	903.78	895.39	927.12	+ 125.38
17-8-1979	842.81	871.16	883.87	829.06	866.37	828.33	843.78	835.39	867.12	- 60.00
3-1-1981	1,052.81	1,081.16	1,093.87	1,039.06	1,076.37	1,038.33	1,053.78	1,045.39	1,077.12	+ 210.00
11-7-1981	1,287.81	1,316.16	1,328.87	1,274.06	1,311.37	1,273.33	1,288.78	1,280.39	1,312.12	+ 235.00
18-3-1983	-----	-----	-----	1,274.06	-----	-----	-----	-----	-----	NIL
1-9-1983	-----	-----	-----	1,148.06*	-----	-----	-----	-----	-----	- 126.00
17-3-1985	-----	-----	-----	1,320.06	-----	-----	-----	-----	-----	+ 127.00
6-2-1986	-----	-----	-----	1,320.06	-----	-----	-----	-----	-----	NIL

- Note:**
- The price of naphtha is exclusive of basic Customs/Excise duties chargeable extra at applicable rates which was Rs. 6 per tonne for Fertiliser Industry. Excise duty on naphtha has since been withdrawn.
 - Excise duty on furnace oil was Rs. 113.00 per tonne. For other than feedstock in fertiliser industry, it is Rs. 63.46/kl, with effect from 1-9-1983.
- * The reduction of excise duty in Rs. 63/- per KL at 15°C per KL equivalent to Rs. 62.36 per KL at 20°C for furnace oil intended for the use other than as feedstock in the manufacture of fertilizers shall be passed on to the Fertilizer Industry.
- ** Exclusive of Excise/Customs duties which will be charged extra at applicable rates.

Ex-Jetty Prices of Rock Phosphate and Sulphur for Fertiliser Industry 1973-74 to 1987-88



8.03. PRICES OF FERTILISER RAW MATERIALS (Continued)
(b) Rockphosphate (for Fertiliser Industry)

Raw material/effective during the period	Price (Rs/tonne)	
	C.I.F.	Ex-Jetty

I. IMPORTED ROCKPHOSPHATE

1. Jordan (70/72% BPL)

January/June '79	363	425
July/December '79	460	536
January '80/Feb. '81	567	651
March '81/April '82	618	708
May/June '82	495	585
July '82/Sept. '83	484	574
October/December '83	600	691
Jan./March '84	579	670
April/Sept. '84	603	709
Oct./Dec. '84	653	759
Jan./March '85	676	784
April/June '85	676	(833)
July/Sept. '85	646	(803)
Oct./Dec. '85	608	(753)
Jan./March '86	629	(780)
April/June '86	638	(788)
July/Sept. '86	595	(745)
Oct./Dec. '86	627	(811)
Jan./March '87	672	(856)
April/June '87	643	(821)
July/Sept. '87	649	(813)
Oct./Dec. '87	671	(836)

(Continued)

8.03. PRICES OF FERTILISER RAW MATERIALS (Continued)
(b) Rockphosphate (for Fertiliser Industry)

Effective from	Price (Rs./tonne) F.O.R. despatching station on cash basis) ⁴		Remarks
	-½" chips ¹ (-12 mm) (loose)	100 Mesh ² bagged 50 kg. net)	

II. INDIGENOUS ROCKPHOSPHATE

1. Udaipur Rockphosphate

1-4-1976	300	—	{ Fright rebate Rs. 15,00/ tonne for | distances beyond 1500 km. { Also, sea-freight concession { Rs. 30/tonne
6-1-1979	318	393		-do-
5-7-1979	415	490	-do-
20-7-1979	415	500	-do-
20-11-1979	510	610	-do-
3-1-1980	512	597	-do-
5-12-1980	512	612	-do-
5-3-1981	600	700	-do-
1-5-1982	495	595	-do-
6-4-1984	585	685	
10-8-1984	609	709	
12-10-1984	659	759	
1-1-1985	682	782	
22-11-1985	652	753	
1-1-1986	678	778	
1-4-1986	696	796	
3-9-1986	653	773	847 ³
7-11-1986	685	805	847 ³
20-12-1986	685	822	847 ³
20-1-1987	730	867	847 ³
20-5-1987	701	838	847 ³
3-8-1987	707	844	847 ³
1-10-1987	737	874	847 ³

(Continued)

8.03. PRICES OF FERTILISER RAW MATERIALS (Continued)
(b) Rockphosphate (for Fertiliser Industry) (Continued)

Effective from	Price (Rs./tonnes) R.O.M. (on cash basis)				Remarks
	Grade				
	I 'A' (+31% P ₂ O ₅)	I 'B' (+30% P ₂ O ₅)	II (+22% to 28%P ₂ O ₅)	III (+18% to 25%P ₂ O ₅)	

II. INDIGENOUS ROCKPHOSPHATE (Continued)

2. Jhabua Rockphosphate (f.o.r. Meghnagar)

1-8-1979	340	290	Rs. 5.50	Rs. 4.50	Road freight rebate: 1. Upto 300 km. Nil 2. Beyond 300 to 500 km. Rs. 10 per tonne
			Per unit of P ₂ O ₅		
4-2-1980	425	320	—	—	3. Beyond 500 to 700 km. Rs. 15 per tonne 4. Beyond 700 to 1000km. Rs. 25 per tonne
1-4-1980	425	320	Rs. 6.50	Rs. 5.00	
			Per unit of P ₂ O ₅		5. Beyond 1000 km. Rs. 35 per tonne
20-6-1981	535	480	Rs. 9.50	Rs. 8.00	
			Per unit of P ₂ O ₅		Road freight rebate increased by Rs.5, Rs.10, and Rs. 20 per tonne for distance slabs mentioned above against items 2 to 5, respectively. Likewise, rail freight discount of Rs. 10 per tonne for 500 to 1000 km. and Rs. 15 per tonne beyond 1000 km.
1-9-1982	418	340	Rs. 90.0	Rs. 8.00	
			Per unit of P ₂ O ₅		Rail freight discount for distances:— 1. Between 700-1000 km. Rs. 25 per tonne 2. Beyond 1000 km. Rs. 35 per tonne
23-5-1983	400	250	Rs. 8.00	—	
			Per unit of P ₂ O ₅		Rail freight discount for distance:— Beyond 800 km. Rs. 25 per tonne
14-4-1984	425	280	Rs. 9.00	—	
			Per unit of P ₂ O ₅		Rail freight discount for distance beyond 800 km. Rs. 20 per tonne Road freight rebate: Rs. 5 per tonne
1-11-1984	440	300	Rs. 10 00	—	
			Per unit of P ₂ O ₅		
1-4-1986	450	310	Rs. 10.00	—	
			Per unit of P ₂ O ₅		

(Continued)

8.03. PRICES OF FERTILISERS RAW MATERIALS (Continued)
(b) Rockphosphate (for Fertiliser Industry) (Continued)

Effective from	Price (Rs./tonne) (R.O.M.) (on cash basis)					Remarks
	Grade					
	Special (+33% P ₂ O ₅)	I 'A' (+31% P ₂ O ₅)	I 'B' (+30% P ₂ O ₅)	II (+22% to 28% P ₂ O ₅)	III (+18% to 25% P ₂ O ₅)	

II. INDIGENOUS ROCKPHOSPHATE (Continued)

3. Sagar Rockphosphate (f.o.r. Hirapur)

1-1-1979 to 19-6-1981	265	235	220	Rs. 5.50	Rs. 4.50	Road freight rebate: 1. Upto 300 km. Nil 2. Beyond 300-500 km. Rs. 10 per tonne 3. Beyond 500-700 km. Rs. 15 per tonne 4. Beyond 700-1000 km. Rs. 25 per tonne 5. Beyond 1000 km. Rs. 35 per tonne																								
				Per unit of P ₂ O ₅																										
20-6-1981	450	420	405	Rs. 8.00	Rs. 7.50	-do-																								
				Per unit of P ₂ O ₅																										
1-9-1982	302	272	257	Rs. 5.50	Rs. 4.50	Freight rebate (Rs./tonne) <table border="1"> <thead> <tr> <th>Distance (km)</th> <th>Rail Rs.</th> <th>Distance (km)</th> <th>Rail Rs.</th> </tr> </thead> <tbody> <tr> <td>1. Upto 300</td> <td>Nil</td> <td></td> <td></td> </tr> <tr> <td>2. 301-500</td> <td>15</td> <td></td> <td></td> </tr> <tr> <td>3. 501-700</td> <td>25</td> <td></td> <td></td> </tr> <tr> <td>4. 701-1000</td> <td>40</td> <td></td> <td></td> </tr> <tr> <td>5. Beyond 1000</td> <td>55</td> <td>1500</td> <td>15</td> </tr> </tbody> </table>	Distance (km)	Rail Rs.	Distance (km)	Rail Rs.	1. Upto 300	Nil			2. 301-500	15			3. 501-700	25			4. 701-1000	40			5. Beyond 1000	55	1500	15
Distance (km)	Rail Rs.	Distance (km)	Rail Rs.																											
1. Upto 300	Nil																													
2. 301-500	15																													
3. 501-700	25																													
4. 701-1000	40																													
5. Beyond 1000	55	1500	15																											
				Per unit of P ₂ O ₅																										

(Continued)

8.03. PRICES OF FERTILISERS RAW MATERIALS (Continued)
(b) Rockphosphate (for Fertiliser Industry) (Concluded)

Effective from	Price (Rs./tonne) (R.O.M.) on cash basis					Remarks
	Grade					
	Special (+33% P ₂ O ₅)	I 'A' (+31% P ₂ O ₅)	I 'B' (+30% P ₂ O ₅)	II (+22% to 28% P ₂ O ₅)	III (+18% to 25% P ₂ O ₅)	

II. INDIGENOUS ROCKPHOSPHATE (Concluded)

3. Sagar Rockphosphate (f.o.r. Hirapur)

23-5-1983	302	272	250	Rs. 7.5	—	Freight rebate (Rs./tonne) <table border="1"> <thead> <tr> <th>Distance (km)</th> <th>Road</th> <th>Distance (km)</th> <th>Rail Rs.</th> </tr> </thead> <tbody> <tr> <td>-do-</td> <td></td> <td>1. 501-1000</td> <td>10</td> </tr> <tr> <td></td> <td></td> <td>2. Beyond 1000</td> <td>15</td> </tr> </tbody> </table>	Distance (km)	Road	Distance (km)	Rail Rs.	-do-		1. 501-1000	10			2. Beyond 1000	15
Distance (km)	Road	Distance (km)	Rail Rs.															
-do-		1. 501-1000	10															
		2. Beyond 1000	15															
				Per unit of P ₂ O ₅														
14-4-1984	300	255	240	Rs. 8.00	—	Rail freight rebate (Rs./tonne) For distances: 1. Between 700-1000 km. Rs. 25 2. Beyond 1000 km. Rs. 35												
				Per unit of P ₂ O ₅														
1-11-1984	320	270	260	Rs. 9.00	—	Rail freight rebate (Rs./tonne) For distances:— Beyond 800 km. Rs. 25												
				Per unit of P ₂ O ₅														
1-4-1986	—	280	260	Rs. 9.00	—	Rail freight rebate Rs./tonne Beyond 800 km. Rs. 20												
				Per unit of P ₂ O ₅														

8.04. ECONOMICS OF APPLICATIONS OF N, P₂O₅ & K₂O ON

Particulars	1971-72	1974-75	1979-80	1980-81	1981-82	1982-83
			w.e.f. 21-9-79	w.e.f. 8-6-80	w.e.f. 11-7-81	w.e.f. 23-5-82
A. FERTILISER & FOODGRAINS						
Nutrient prices (Rs./kg)						
1. N—based on urea	2.01	4.35	3.15	4.35	5.11	5.11
2. P ₂ O ₅						
—based on SSP	2.29	5.33	3.54	4.72	4.88	
	to	to	to	to	to	5.87
	5.53	5.93	4.60	5.82	6.11	
—based on DAP	1.86	4.83	3.55	4.93	5.83	5.83
—based on complex	2.46	5.00	4.18	5.81	6.72	6.72
	to	to	to	to	to	to
	2.97	9.92	4.98	6.98	8.25	8.25
3. K ₂ O based on MOP	0.89	2.05	1.34	1.83	2.17	2.17
Output prices (Rs./kg)						
4. Procurement prices of paddy	0.53	0.74	0.95	0.95	1.05	1.15
5. Procurement prices of wheat	0.76	1.05	1.15	1.17	1.30	1.42
6. Procurement prices of gram			1.40	1.45	1.45	1.45
7. Procurement prices of sorghum	0.55	0.74	0.95	0.95	1.05	1.16
B. PHYSICAL						
Paddy						
8. Kg of paddy required to buy 1 kg N	3.79	5.88	3.32	4.58	4.87	4.44
9. Kg of paddy required to buy 1 kg P ₂ O ₅						
—as SSP	5.45	7.20	3.73	4.97	4.65	
	to	to	to	to	to	5.10
	6.66	8.01	4.84	6.13	5.82	
—as DAP	3.51	6.53	3.74	5.19	5.55	5.07
—as complex	4.64	7.57	4.40	6.12	6.40	5.84
	to	to	to	to	to	to
	5.60	13.41	5.24	7.35	7.86	7.17
10. Kg of paddy required to buy 1 kg K ₂ O	1.68	2.77	1.41	1.93	2.07	1.89
Wheat						
11. Kg of wheat required to buy 1 kg N	2.64	4.14	2.74	3.72	3.93	3.60
12. Kg of wheat required to buy 1 kg P ₂ O ₅						
—as SSP	3.80	4.08	3.08	4.03	3.75	
	to	to	to	to	to	4.13
	4.64	5.65	4.00	4.97	4.70	
—as DAP	2.45	4.60	3.09	4.21	4.48	4.11
—as complex	3.24	5.33	3.63	4.97	5.17	4.73
	to	to	to	to	to	to
	3.91	9.45	4.33	5.97	6.35	5.81
13. Kg of wheat required to buy 1 kg K ₂ O	1.17	1.95	1.17	1.56	1.67	1.53

PADDY, WHEAT, GRAM AND SORGHUM

1983-84		1984-85	1985-86			1986-87		1987-88	
w.e.f. 29-6-83	w.e.f. 7-1-84	w.e.f. 19-7-84	w.e.f. 8-10-85	w.e.f. 29-1-86	w.e.f. 31-1-86	w.e.f. 29-8-86	w.e.f. 12-12-86	w.e.f. 27-8-87	w.e.f. 12-11-87

PRICES (Rs./kg)

4.67	4.67	4.67	4.67	4.67	5.11	5.11	5.11	5.11	5.11
5.31	5.31	5.31	5.31	5.31	5.94	5.94	5.94	5.94	5.94
5.46	5.46	5.46	5.46	5.46	5.83	5.83	5.83	5.83	5.83
6.33	6.33	6.33	6.33	6.33	6.72	6.72	6.72	6.72	6.72
to	to	to	to	to	to	to	to	to	to
7.80	7.80	7.80	7.80	7.80	8.25	8.25	8.25	8.25	8.25
2.00	2.00	2.00	2.00	2.00	2.17	2.17	2.17	2.17	2.17
1.22	1.32	1.37	1.42	1.42	1.42	1.46	1.46	1.50	1.50
1.51	1.52	1.52	1.57	1.62	1.62	1.62	1.66	1.66	1.73
2.35	2.40	2.40	2.65	2.60	2.60	2.60	2.80	2.80	2.90
1.18	1.24	1.24	1.30	1.30	1.30	1.30	1.32	1.35	1.35

RETURNS

3.83	3.54	3.41	3.29	3.29	3.60	3.50	3.50	3.41	3.41
4.35	4.02	3.88	3.74	3.74	4.18	4.07	4.07	3.96	3.96
4.48	4.14	3.99	3.85	3.85	4.11	3.99	3.99	3.89	3.89
5.19	4.80	4.62	4.46	4.46	4.73	4.60	4.60	4.48	4.48
to	to	to	to	to	to	to	to	to	to
6.39	5.91	5.69	5.49	5.49	5.81	5.65	5.65	5.50	5.50
1.64	1.52	1.46	1.41	1.41	1.53	1.49	1.49	1.45	1.45
3.09	3.07	3.07	2.97	2.88	3.15	3.15	3.08	3.08	2.95
3.52	4.49	3.49	3.38	3.28	3.67	3.67	3.58	3.58	3.43
3.62	3.59	3.59	3.48	3.37	3.60	3.60	3.51	3.51	3.37
4.19	4.16	4.16	4.03	3.91	4.15	4.15	4.05	4.05	3.88
to	to	to	to	to	to	to	to	to	to
5.17	5.13	5.13	4.97	4.81	5.09	5.09	4.97	4.97	4.77
1.32	1.32	1.32	1.27	1.23	1.34	1.34	1.31	1.31	1.25

(Continued)

8.04. ECONOMICS OF APPLICATIONS OF N, P₂O₅ & K₂O ON

Particulars	1971-72	1974-75	1979-80	1980-81	1981-82	1982-83
			w.e.f. 21-9-79	w.e.f. 8-6-80	w.e.f. 11-7-81	w.e.f. 23-5-82
B. PHYSICAL						
Gram						
14. Kg of gram required to buy 1 kg N			2.25	3.00	3.52	3.52
15. Kg of gram required to buy 1 kg P ₂ O ₅						
—as SSP			2.53	3.26	3.37	
			to	to	to	4.05
			3.29	4.01	4.21	
—as DAP			2.54	3.40	4.02	4.02
—as complex			2.99	4.01	4.63	4.63
			to	to	to	to
			3.56	4.81	5.69	5.69
16. Kg of gram required to buy 1 kg K ₂ O			0.96	1.26	1.50	1.50
Sorghum						
17. Kg of sorghum required to buy 1 kg N	3.65	5.88	3.32	4.58	4.97	4.41
18. Kg of sorghum required to buy 1 kg P ₂ O ₅						
—as SSP	5.25	7.20	3.73	4.97	4.65	
	to	to	to	to	to	5.06
	6.42	8.01	4.84	6.13	5.82	
—as DAP	3.38	6.53	3.74	5.19	5.55	5.03
—as complex	4.47	7.57	4.40	6.12	6.40	5.79
	to	to	to	to	to	to
	5.40	13.41	5.24	7.35	7.86	7.11
19. Kg of sorghum required to buy 1 kg K ₂ O	1.62	2.77	1.41	1.93	2.07	1.87
C. GROSS FINANCIAL RETURN ON EVERY						
Paddy						
20. Return from nutrient N	2.64	2.04	3.62	2.62	2.47	2.70
21. Return from nutrient P ₂ O ₅						
—based on SSP	1.10	0.97	1.81	1.41	1.51	
	to	to	to	to	to	1.37
	0.90	0.87	1.45	1.14	1.20	
—based on DAP	1.71	1.07	1.87	1.35	1.26	1.38
—based on complex	1.29	0.93	1.59	1.14	1.09	1.20
	to	to	to	to	to	to
	1.07	0.52	1.34	0.95	0.89	0.98
22. Return from nutrient K ₂ O	2.38	0.80	3.54	2.60	2.42	2.65
Wheat						
23. Return from nutrient N	3.78	2.90	4.38	3.23	3.05	3.33

PADDY, WHEAT, GRAM AND SORGHUM (Continued)

1983-84		1984-85	1985-86			1986-87		1987-88	
w.e.f. 29-6-83	w.e.f. 7-1-84	w.e.f. 19-7-84	w.e.f. 8-10-85	w.e.f. 29-1-86	w.e.f. 31-1-86	w.e.f. 29-8-86	w.e.f. 12-12-86	w.e.f. 27-8-87	w.e.f. 12-11-87

RETURNS (Concluded)

1.99	1.95	1.95	1.76	1.80	1.97	1.97	1.83	1.83	1.76
2.26	2.21	2.21	2.00	2.04	2.28	2.28	2.12	2.12	2.05
2.33	2.28	2.28	2.06	2.10	2.24	2.24	2.08	2.08	2.01
2.69	2.64	2.64	2.89	2.43	2.58	2.58	2.40	2.40	2.32
to	to	to	to	to	to	to	to	to	to
3.32	3.25	3.25	2.94	3.00	3.17	3.17	2.95	2.95	2.84
0.85	0.83	0.83	0.75	0.77	0.83	0.83	0.78	0.78	0.75
3.96	3.77	3.77	3.59	3.59	3.93	3.93	3.87	3.79	3.79
4.50	4.28	4.28	4.08	4.08	4.57	4.57	4.50	4.40	4.40
4.63	4.40	4.40	4.20	4.20	4.48	4.48	4.42	4.32	4.32
5.36	5.10	5.10	4.87	4.87	5.17	5.17	5.09	4.98	4.98
to	to	to	to	to	to	to	to	to	to
6.61	6.29	6.29	6.00	6.00	6.35	6.35	6.25	6.11	6.11
1.69	1.61	1.61	1.54	1.54	1.67	1.67	1.64	1.61	1.6

RUPEE INVESTED IN FERTILISERS (Rs.)

3.13	3.39	3.52	3.65	3.65	3.33	3.43	3.43	3.52	3.52
1.61	1.74	1.81	1.87	1.87	1.67	1.72	1.72	1.77	1.77
1.56	1.69	1.76	1.82	1.82	1.70	1.75	1.75	1.80	1.80
1.35	1.46	1.52	1.57	1.57	1.48	1.52	1.52	1.56	1.56
to	to	to	to	to	to	to	to	to	to
1.09	1.18	1.23	1.27	1.27	1.20	1.24	1.24	1.27	1.27
3.05	3.30	3.43	3.55	3.55	3.27	3.36	3.36	3.46	3.46
3.88	3.91	3.91	4.03	4.16	3.80	3.80	3.90	3.90	4.06

(Continued)

3.04. ECONOMICS OF APPLICATIONS OF N, P₂O₅ & K₂O ON

Particulars	1971-72	1974-75	1979-80	1980-81	1981-82	1982-83
			w.e.f. 21-9-79	w.e.f. 8-6-80	w.e.f. 11-7-81	w.e.f. 23-5-82
24. Return from nutrient P₂O₅						
—based on SSP	1.58	1.38	2.27	1.74	1.86	
to		to	to	to	to	1.69
	1.29	1.24	1.75	1.41	1.49	
—based on DAP	2.45	1.52	2.27	1.66	1.56	1.70
—based on complex	1.85	1.31	1.93	1.41	1.35	1.46
to		to	to	to	to	to
	1.54	0.74	1.62	1.17	1.10	1.20
25. Return from nutrient K₂O	3.42	2.56	4.29	3.20	3.00	3.27
Gram						
26. Return from nutrient N			3.56	2.67	2.27	2.27
27. Return from nutrient P₂O₅						
—based on SSP			1.98	1.54	1.48	
to			to	to	to	1.24
			1.52	1.25	1.19	
—based on DAP			1.97	1.47	1.24	1.24
—based on complex			1.67	1.25	1.05	1.08
to			to	to	to	to
			1.41	1.04	0.88	0.88
28. Return from nutrient K₂O			12.01	9.11	7.68	7.68
Sorghum						
29. Return from nutrient N		0.95	1.69	1.22	1.15	1.27
30. Return from nutrient P₂O₅						
—based on SSP		0.56	1.07	0.81	0.86	
to		to	to	to	to	0.79
		0.50	0.83	0.65	0.69	
—based on DAP		0.61	1.07	0.77	0.72	0.80
—based on complex		0.53	0.91	0.65	0.63	0.69
to		to	to	to	to	to
		0.30	0.76	0.54	0.51	0.56
31. Return from nutrient K₂O		4.15	8.15	5.97	5.56	6.15

*Since February, 1983.

For 1971-72, incremental response ratios (kg of extra product per additional kg of nutrient) for paddy, and wheat assumed for analysis are:—

N=10

P₂O₅=6K₂O=4*Note:* Prices of fertilisers mentioned against years 1971-72 and 1974-75 are as on 1st April.

PADDY, WHEAT, GRAM AND SORGHUM (Concluded)

1983-84		1984-85	1985-86			1986-87		1987-88	
w.e.f. 29-6-83	w.e.f. 7-1-84	w.e.f. 19-7-84	w.e.f. 8-10-85	w.e.f. 29-1-86	w.e.f. 31-1-86	w.e.f. 29-8-86	w.e.f. 12-12-86	w.e.f. 27-8-87	w.e.f. 12-11-87
1.99	2.00	2.00	2.07	2.14	1.91	1.91	1.96	1.96	2.04
1.94	1.95	1.95	2.01	2.08	1.95	1.95	1.99	1.99	2.08
1.67	1.68	1.68	1.74	1.79	1.69	1.69	1.73	1.73	1.80
to	to	to	to	to	to	to	to	to	to
1.36	1.36	1.36	1.41	1.45	1.37	1.37	1.41	1.41	1.47
3.79	3.80	3.80	3.93	4.05	3.73	3.73	3.32	3.82	3.99
4.03	4.11	4.11	4.54	4.45	4.07	4.07	4.33	4.38	4.54
2.21	2.26	2.26	2.50	2.45	2.19	2.19	2.36	2.36	2.44
2.15	2.20	2.20	2.43	2.38	2.23	2.23	2.40	2.40	2.49
1.86	1.90	1.90	2.09	2.05	1.93	2.93	2.08	2.08	2.16
to	to	to	to	to	to	to	to	to	to
1.51	1.54	1.54	1.70	1.67	1.58	1.58	1.70	1.70	15.37
13.51	13.80	13.80	15.24	14.95	13.78	13.78	14.84	14.84	15.37
1.41	1.49	1.49	1.56	1.56	1.42	1.42	1.45	1.48	1.48
0.89	0.93	0.93	0.98	0.98	0.88	0.88	0.89	0.91	0.91
0.86	0.91	0.91	0.95	0.95	0.89	0.89	0.91	0.93	0.93
0.75	0.78	0.78	0.82	0.82	0.77	0.77	0.79	0.80	0.80
to	to	to	to	to	to	to	to	to	to
0.61	0.64	0.64	0.67	0.67	0.63	0.63	0.64	0.65	0.65
6.79	7.13	7.13	7.48	7.48	6.89	6.89	6.99	7.15	7.15

For 1974-75 and there after incremental response ratios assumed are:

Nutrient	Paddy & Wheat	Gram	Sorghum
N	12.0	8.0	5.6
P ₂ O ₅	7.0	5.0	4.0
K ₂ O	5.0	11.5	11.5

8.06. SALES TAX ON FERTILISERS (Concluded)

Zone/State ^{1 2}	Rate						
South (Concluded)							
2. Karnataka	<p>A single point levy of 3.0% at the point of first sale. Besides this, the following turnover tax is also levied:—</p> <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><i>Rate of tax</i></th> <th style="text-align: left;"><i>Taxable turnover</i></th> </tr> </thead> <tbody> <tr> <td>1.25%</td> <td>Exceeding Rs. 5 lakhs and upto Rs. 2.5 crores</td> </tr> <tr> <td>1.50%</td> <td>Exceeding Rs. 2.5 crores</td> </tr> </tbody> </table> <p>This turnover tax cannot be passed on to the buyer.</p>	<i>Rate of tax</i>	<i>Taxable turnover</i>	1.25%	Exceeding Rs. 5 lakhs and upto Rs. 2.5 crores	1.50%	Exceeding Rs. 2.5 crores
<i>Rate of tax</i>	<i>Taxable turnover</i>						
1.25%	Exceeding Rs. 5 lakhs and upto Rs. 2.5 crores						
1.50%	Exceeding Rs. 2.5 crores						
3. Kerala	<p>A single point levy of 2.4% inclusive of 20% additional sales tax on sales tax at the point of first sale on all fertilisers. A surcharge at the rate of 8% on sales tax is payable but cannot be passed on to the buyer.</p> <ol style="list-style-type: none"> 1) A single point levy of 3.5% at the point of first sale. 2) A surcharge of 5% on sales tax. 3) An additional surcharge of 5% on sales tax is levied in Madras city and 32 km belt around it. The cities of Madurai and Coimbatore and 16 km belt around them are also covered by this surcharge. 4) A turnover tax which is not be passed on the buyer is levied as under:— <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><i>Rate of tax</i></th> <th style="text-align: left;"><i>Taxable turnover</i></th> </tr> </thead> <tbody> <tr> <td>1.25%</td> <td>Exceeding Rs. 10 lakhs and upto Rs. 40 lakhs</td> </tr> <tr> <td>1.50%</td> <td>Exceeding Rs. 40 lakhs.</td> </tr> </tbody> </table> 	<i>Rate of tax</i>	<i>Taxable turnover</i>	1.25%	Exceeding Rs. 10 lakhs and upto Rs. 40 lakhs	1.50%	Exceeding Rs. 40 lakhs.
<i>Rate of tax</i>	<i>Taxable turnover</i>						
1.25%	Exceeding Rs. 10 lakhs and upto Rs. 40 lakhs						
1.50%	Exceeding Rs. 40 lakhs.						
5. Pondicherry	A single point levy of 1% on all fertilisers at the point of first sale.						
West							
1. Gujarat	4% on sales of fertilisers.						
2. Madhya Pradesh	2%, and 1% turnover tax.						
3. Rajasthan	5% plus 20% surcharge on sales tax plus 1% multipoint octroi on all fertilisers.						

¹=Inter-state movements of Chemical fertiliser is liable to Central sales tax at 4% with effect from 1-1-75 when covered by ('C' and 'D') forms otherwise at 10%.

²=States where there is no sales tax have not been included.

8.07. SUBSIDY ON FERTILISERS AND SOIL CONDITIONERS

Zone/State	Fertilisers & soil conditioners	Subsidy
East		
1. Arunachal Pradesh	Ammonium sulphate Urea, SSP, MOP, DAP, CAN Rock phosphate, lime and others	50% for developed area 75% for partially developed and border areas
2. Assam	All fertilisers Soil Conditioners	50% tribal plan scheme 50% Scheduled Caste Component Plan Scheme 100% Tribal Sub Plan Scheme 100% Scheduled Caste Component Plan Scheme 75% Plan Scheme
3. Tripura	All fertilisers Dolomite	100% Transport Subsidy 50%
4. Manipur	Urea DAP MOP Rock Phosphate/ Mussoorie Phos. CAN SSP 16% P ₂ O ₅ (Powder)	12.5% 25.5% 18.57% 42% 15% 20%
5. Meghalaya	DAP & SSP	Transport subsidy from Calcutta @ Rs. 71 per tonne on SSP and Rs. 126 per tonne on DAP
6. Mizoram	Urea, SSP, MOP, Bonemeal, Suphala, slaked lime	50%
7. Nagaland	All fertilisers	50%
8. Sikkim	Urea, DAP, MOP, Suphala & Rock phosphate Dolomite	40% 100%
9. West Bengal	Dolomite, Basic slag	50% to the farmers holding more than 3 ha. 75% to small & marginal farmers if they get the supply direct from West Bengal Agro Industries Corpn. Limited 100% if the supply is effected through panchayat
10. Andaman & Nicobar Islands	Nitrogen Phosphatics Potassic	15% Cost } 25% Cost } + 100% Transport subsidy 15% Cost }

(Continued)

8.07. SUBSIDY ON FERTILISERS AND SOIL CONDITIONERS (Concluded)

Zone/State	Fertilisers & soil conditioners	Subsidy
North		
1. Haryana	Fertilisers	25% subsidy on nitrogenous, phosphatic and potassic fertilisers upto a maximum of Rs. 66 per acre and Rs. 750 per farmer during Kharif '86 in Hissar, Sirsa and Jind against flood. 25% subsidy on all N, P, K fertilisers during Rabi 86-87 against drought in Hissar, Sirsa, Bhiwani, Rohtak, Gurgaon, Faridabad and Narnaul
	Soil Conditioners	75% subsidy on gypsum
2. Himachal Pradesh	Fertilisers	40% subsidy on nitrogenous, phosphatic and potassic fertilisers except DAP to all the farmers (including scheduled caste and scheduled tribe) upto three bags of fertilisers in each session.
3. Jammu & Kashmir	Not available	
4. Delhi	Not available	
South		
1. Andhra Pradesh	P ₂ O ₅ & K ₂ O	25% and 33½% subsidy respectively to the small and marginal farmers on the cost of all agricultural inputs inclusive of P ₂ O ₅ and K ₂ O upto a maximum of Rs. 3,000 per year under various schemes.
2. Kerala	Fertilisers & soil conditioners	Rs. 100 per hectare to the farmers of Kole lands of Trichur, Pamani and Kayal lands of Kuttanad and Villayani who own less than 5 hectares of land.
3. Pondicherry	Fertilisers	At the rate of Rs. 200 per hectare limited to small and marginal farmers.
	Soil conditioners	50% subsidy to the general category and 100% to scheduled caste farmers for the purchase of Gypsum under reclamation of saline and alkaline soils on the basis of soil sample analysis result.
4. Tamil Nadu	P ₂ O ₅ and K ₂ O	Under Integrated Dryland Agricultural Development Project, Koilpatti, 25% and 33½% subsidy respectively to small and marginal farmers on the cost of fertilisers.
	N, P ₂ O ₅ and K ₂ O	In areas declared as drought-affected, 25% and 33½% subsidy respectively to small and marginal farmers on the cost of fertilisers.
	Soil conditioners	No subsidy given.

- Note:** 1. A Government of India subsidy scheme is in operation beginning Rabi 1979-80 for the purchase of seeds, fertilisers and pesticides ranging from 25% in the cost of small farmers, 33½% in the case of marginal farmers and 50% in the case of scheduled tribes.
2. There is no subsidy on fertilisers & soil conditioners in the states of Western Region comprising Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, Goa, Daman & Diu, Dadra & Nagar Haveli.

9.00. RAILWAY TARIFF

9.01. RAILWAY FREIGHT STRUCTURE FOR FERTILISERS AND FERTILISER RAW MATERIALS SINCE-1-4-73

Chemicals manures	Classification effective from												
	15-4-72	1-4-73	15-9-74	1-4-76	1-4-79	15-7-80	1-4-81	15-6-81	14-8-81	1-1-82	1-4-82	1-4-83	15-4-85
Division A	50	52.5	52.5	52.5	52.5	52.5	52.5	52.5	57.5	57.5	62.5	125	125
Division B	42.5	45	45	45	45	45	45	50	50	50	55	110	110

(Rate in Rs. per tonne)

Distance (km)	As on 1-4-73	As on 1-4-74	As on ¹ 15-9-74	As on ² 1-4-76		As on ³ 1-4-79	As on ⁴ 1-4-81	As on 15-6-81	As on 14-8-81	As on ⁵ 1-1-82	As on ⁷ 1-4-82	As on 1-4-83	As on ⁸ 15-4-85	As on 1-12-86
				Fertilisers & fertiliser raw materials	Sulphur									
DIVISION A														
100	14.00	14.70	17.20	17.20	18.10	19.00	21.90	21.90	23.60	27.90	32.15	39.90	36.90	39.90
200	20.50	21.80	25.40	25.40	26.70	28.00	32.20	32.20	34.80	41.10	47.30	57.50	57.50	64.80
500	37.60	40.60	47.40	47.40	49.80	52.30	60.20	60.20	65.40	77.80	89.40	115.60	115.60	141.40
1000	62.50	68.20	83.20	83.20	91.50	100.70	115.80	115.80	126.40	157.70	181.40	203.80	224.20	272.40
2000	103.40	114.30	139.50	139.50	153.50	168.80	194.00	194.19	212.10	264.50	304.20	336.30	369.90	474.20

(Continued)

**9.01. RAILWAY FREIGHT STRUCTURE FOR FERTILISERS AND FERTILISER
RAW MATERIALS SINCE—1-4-73 (Concluded)**

(Rate in Rs. per tonnes)

Distance (km)	As on 1-4-73	As on 1-4-74	As on ¹ 15-9-74	As on ² 1-4-76		As on ³ 1-4-79	As on ³ 1-4-81	As on 15-6-81	As on 14-8-81	As on ⁶ 1-1-82	As on ⁷ 1-4-82	As on 1-4-83	As on ⁸ 15-4-85	As on 1-2-86
				Fertilisers & fertiliser raw materials	Sulphur									
DIVISION B														
100	12.30	12.90	15.10	15.10	—	16.70	19.20	20.90	20.90	25.00	28.70	33.40	33.40	36.10
200	17.90	19.00	22.20	22.20	—	24.50	28.20	30.90	30.90	37.00	42.50	51.50	51.50	58.00
500	32.50	35.10	41.00	41.00	—	45.20	52.00	57.50	57.50	69.10	79.40	102.70	102.70	125.60
1000	53.80	58.90	71.90	71.90	—	87.00	100.10	110.40	110.40	139.30	180.20	180.20	198.20	240.80
2000	88.90	98.40	120.00	120.00	—	145.20	167.00	185.00	185.00	233.60	268.60	296.0	326.50	418.50

¹ In the supplementary budget presented to the Lok Sabha on 21-8-74, a supplementary charge of 16 $\frac{2}{3}$ % was imposed on all commodities (except foodgrains, pulses and edible oils) upto a distance of 500 km. and thereafter at 22% of the existing rates;

² Additional supplementary charge of 5% for distances upto and inclusive of 500 km. and 10% for distances beyond 500 km. was levied on all commodities (except foodgrains, fertilisers, rockphosphate, pulses and edible oils);

³ w.e.f. 1-4-79:

(i) Exemption originally given to fertilisers and fertiliser raw materials effective 1-4-76 from additional supplementary charge (vide¹) is withdrawn;

(ii) Additional supplementary charge of 5% for distances upto and inclusive of 500 km. and 10% for distances beyond 500 km. is levied on all commodities (except salt).

⁴ w.e.f. 15-7-80:

Additional supplementary charge at 15% is levied on all commodities except salt for domestic use, foodgrains, pulses, sugar, fodder kerosene oil, edible and hydrogenated oils, *chemical manures*, firewood and charcoal, milk and safety matches;

⁵ w.e.f. 1-4-81:

Additional supplementary charge at 15% is levied on all commodities except, salt for domestic use, firewood and charcoal, (Both for wagonloads & smalls).

⁶ w.e.f. 1-1-82:

Additional supplementary charge at 10% for distances upto and inclusive of 500 km. and 15% for distances beyond 500 km. is levied.

⁷ w.e.f. 1-4-82:

Additional supplementary charge at 15% is levied on all commodities except firewood, medicines, fodder, kerosene oil and safety matches. Exemption granted to *chemical manures* on 15-7-80(7) is withdrawn from 1-4-82.

⁸ w.e.f. 15-4-85:

Additional supplementary charge at 10% is levied on all commodities for distances beyond 500 km.

**9.02. CURRENT RAILWAY FREIGHT FOR FERTILISERS AND FERTILISER
RAW MATERIALS (effective from 1-4-1983)**

Articles	Packing condition		General classification	
	Internal*	Outer*	Smalls	Wagon-loads
I. Chemical Manures - Division 'B'				
1. Ammonium chloride**	} IP/3(b)	P/7 or P/9 or P/56	150*	110*
2. Ammonium sulphate—S/44				
3. Ammonium sulphate nitrate				
4. Calcium ammonium nitrate	} IP/3(b)	P/7 or P/9 or P/56	157	110
5. Ground phosphate ⁺				
6. Manure mixture				
7. Minerals phosphate				
8. Muriate of potash@@—S/44				
9. Gypsum	} —	P/7A	150	100
} Powder				
} Broken moulds	—	P/36	150	85
10. Lime stone	—	P/36	150	85
11. Single superphosphate	IP/3(b)	P/7 or P/9 or P/56	150	110
II. Chemical Manures - Division 'A'@				
12. Diammonium phos.—S/44 (DAP)	IP/3(b)	P/12 or P/56	160	125
13. Monoammonium phos.—S/41	IP/3(b)	P/12	160	125
14. Urea**—S/44	IP/3(b)	P/9 or P/53 or P/9	160	125
15. Urea sweepings—S/33	IP/3(b)	P/9 or P/56	160	125
16. Ammonium phosphate	} IP/3(b)	P/7 or P/8 or P/56	160	125
17. Ammonium nitrophosphate				
18. NPK complex fertilisers	} —	P/7 or P/9 or P/56	160	125
19. SNPK complex fertilisers				
20. Zinc sulphate—S/45	—	P/7 or P/9 or P/56	160	125
21. Nitrophosphate	} IP/3(b)	P/7 or P/9 or P/56	160	125
22. Triple superphosphate—S/49				
23. Sulphate of potash				
III. Feedstocks/Raw materials Acids				
1. Sulphur	—	cP/7 or cP/8 or cP/28	160	125
2. Furnace oil	—	—	172	125
3. Naphtha - flashing point at or above 24.4°C	—	—	160	125
—Flashing point below 14.4°C	—	—	260	100.0CC
4. Fuel oil	—	—	—	110.0CC
5. (a) Coal/soft coke	—	P/36	—	75
(b) Hard coke	—	P/36	—	85
6. Sulphuric acid	—	—	240	200
7. Phosphoric acid	—	—	260	220
IV. Organic manures, Oilcake	—	P/47	90	65

* w.e.f. 1-6-1981, powder rockphosphate is classified as 65 for smalls and 45 for wagonloads as against 67.5 and 47.5 respectively brought into force from 5-9-1977 and again on 15-6-1981.

(Continued)

**9.02. CURRENT RAILWAY FREIGHT FOR FERTILISERS AND FERTILISER
RAW MATERIALS (effective from 15-9-1974) (Concluded)**

*For details and "Special Condition—S/32 and S/33" see I.R.C.A. Goods Tariff No. 33 part I.

**For agricultural purposes only.

†While availing classifications for these fertilisers, a certificate has to be obtained from the official of the State Deptt. of Agriculture that the consignment is meant for use as manure (in force from Sept. 1, 1965).

@From 1-4-1969, DAP and Urea are classified under Chemical Manures—Division 'A' From 11-10-1971, Ammonium nitrophosphate, Ammonium phosphate, NPK complexes, fertilisers, Urea sweepings and S/NPK joined this Division. From 15-11-1975 Nitrophosphate and Sulphate of Potash have also been included in Division 'A' (vide Railway Board notification No. TCR/10/15/75/44 dated 17th October 1975 and 6th December 1975).

@@The compliance with the "Special Condition—S.33" should not be demanded where the consignments are booked as fertilisers by the Regional Director (Food) or the Food Corporation of India or MMTC or Indian Potash Ltd.

Note:

A. (i) To all fertilisers listed under "Division A" and "Division B" the tariff rates apply to a minimum wagon load of quintals specified below:

On Board Gauge (BG)—220 quintals for bogie wagon except DAP and ZnSO₄—150 quintals.

On Metre Gauge (MG)—145 quintals for bogie wagon except DAP and ZnSO₄—110 quintals,
On Narrow Gauge (NG)—80 quintals for bogie wagon except DAP and ZnSO₄—65 quintals.

(ii) For sulphur and gypsum, weight of charges is the carrying capacity of the wagon used.

(iii) Furnace oil, naphtha and sulphuric acid are moved in tank wagons and weight of charges is the carrying capacity (C.C.) of the wagon used. If not in tank wagons.

Article	BG	MG	NG
Sulphuric acid	110	90	65
Furnace oil	110	90	65
Naphtha	above 24.4°C	110	90
	below 24.4°C	110	80
Phosphoric acid	110	80	55
Organic manures, oilcake	205†	130††	80

B. (i) Since publishing railway freight rates (pp. 1-442 and 1-447) in Fertiliser Statistics 1972-73 the tariffs were revised on 1-4-1974 keeping classifications unaltered.

(ii) The above rates were revised during 1974, 1976 and 1979 with effect from 15-9-1974, 1-4-1976 and 1-4-1979 by levying a supplementary charge on the total freight charge in respect of all goods traffic (except food grains, pulses and edible oil) on the following scale:—

With effect from

	15-9-74	1-4-76 ¹	1-4-79 ²	15-7-80 ³	1-4-81 ⁴	1-1-82	1-4-82	15-4-85
(i) For distance upto and inclusive of 500 km	16½%	5%	5%	15%	15%	10%	15%	Nil
(ii) For distances beyond 500 km	22%	10%	10%	15%	15%	15%	15%	10%

† When floor area is less than 21.1 sq. metres.

†† When floor area is less than 12.5 sq. metres.

C.C. = Carrying capacity

¹Excluding rockphosphate and fertilisers.

²Excluding only salt (and including foodgrains, pulses and edible oil).

³Excluding chemical manures (including raw materials).

⁴Excluding salt, firewood and charcoal.

9.03(a). QUANTUM OF FERTILISERS MOVED BY RAIL AND AVERAGE LEAD
1975-76 to 1986-87

Year	RAIL*		Total tonnage despatched ('000 tonnes)	Share of rail movement to total (per cent)
	Average lead (km)	Tonnes originating ('000)		
	(1)	(2)	(3)	(4)=2/3)
1975-76	859	7,169	7,948	90.2
1976-77	929	7,776	8,413	92.4
1977-78	991	8,211	9,838	81.5
1978-79	1,038	8,575	10,816	79.3
1979-80	1,122	8,233	11,980	68.7
1980-81	1,100	8,108	12,189	66.5
1981-82	1,013	9,568	13,378	71.5
1982-83	969	8,515	13,646	62.4
1983-84	1,020	8,147	15,301	52.2
1984-85	1,089	12,208	18,091	67.5
1985-86	1,094	13,620	19,341	70.4
1986-87	1,071	14,530	21,600	67.3

*=Source: Ministry of Railway, New Delhi.

9.03(b). RAILWAY ZONEWISE QUANTUM OF FERTILISERS MOVED AND
AVERAGE LEAD—1984-85 and 1985-86

Gauge/Railway Zone	1984-85		1985-86	
	Tonnes Originating ('000)	Average lead (km)	Tonnes originating ('000)	Average lead (km)
I. Broad gauge				
Central	973	552	1,275	609
Eastern	329	333	336	315
Northern	1,652	320	1,940	304
N. Eastern	109	273	105	263
N. Frontier	—	304	—	519
Southern	2,074	431	2,084	401
S. Central	541	531	519	543
S. Eastern	699	615	953	667
Western	2,731	720	2,843	710
Total	9,108	1,078	10,055	1,054
II. Metre gauge				
Northern	13	442	5	408
N. Eastern	6	372	25	385
N. Frontier	106	810	94	823
Southern	1,228	428	1,292	471
S. Central	483	641	723	635
Western	1,262	601	1,417	652
Total	3,098	728	3,556	798
III. Narrow gauge				
Central	—	135	3	101
Northern	—	88	—	63
N. Frontier	—	—	—	—
S. Eastern	2	89	—	67
Western	—	17	6	22
Total	2	98	9	52
Grand total (I+II+III)	12,208	1,089	13,620	1,094

—=Nil/gible tannage.

Source: Ministry of Railways, New Delhi.

10.01. ALL-INDIA PRODUCTION, IMPORTS, DESPATCHES AND CONSUMPTION OF FERTILISERS

1951-52 to 1986-87 (April/March) (Continued)

(b) K₂O and N+P₂O₅+K₂O

Sl. No.	Year	Potash (K ₂ O)				N + P ₂ O ₅ + K ₂ O						Total value of imports (N + P ₂ O ₅ + K ₂ O) (Rs. million)	Sl. No.	
		Quantity ('000 tonnes)			±% over the previous year	Quantity (in '000 tonnes)				±% over the previous year				
		Import	Despatches	Consumption		Consumption	Production	Import	Despatches	Consumption	Production			Consumption
1.	1951-52	7.7	—	—	—	38.7	92.0	65.6	65.6					1.
2.	1952-53	3.0	3.3	3.3	—	60.5	47.0	65.7	65.7	56.3	0.2	45.6		2.
3.	1953-54	7.0	7.5	7.5	127.3	66.7	26.7	105.1	105.1	10.2	59.8	25.2		3.
4.	1954-55	11.0	11.1	11.1	48.0	82.8	31.0	120.9	120.9	24.1	15.1	30.2		4.
5.	1955-56	10.0	10.3	10.3	-7.2	89.3	63.0	130.8	130.8	7.9	8.2	73.3		5.
6.	1956-57	15.0	14.8	14.8	43.7	96.4	72.0	153.8	153.8	8.0	17.5	77.7		6.
7.	1957-58	13.0	12.8	12.8	-13.5	106.9	123.0	183.7	183.7	10.9	19.5	158.8		7.
8.	1958-59	22.0	22.4	22.4	75.0	111.8	119.0	223.8	223.8	4.6	21.8	113.1		8.
9.	1959-60	33.0	21.3	21.3	-4.9	135.1	179.4	304.6	304.6	20.8	36.1	162.2		9.
10.	1960-61	20.0	29.0	29.0	36.2	165.7	419.0	293.8	293.8	22.6	-3.5	121.8		10.

11.	1961-62	]	75.0	28.0	28.0	-3.4	219.7	382.0	383.5	338.3	32.6	15.1	141.2	11.
12.	1962-63	|	41.0	35.4	36.4	30.0	262.5	295.0	477.9	452.2	28.6	33.7	236.9	12.
13.	1963-64	} III Plan	40.0	50.6	50.6	39.0	326.9	281.0	574.2	543.9	15.7	20.3	167.1	13.
14.	1964-65	|	57.0	70.4	69.3	37.0	374.3	301.0	652.6	773.2	14.5	42.2	220.8	14.
15.	1965-66	]	73.0	77.7	77.3	11.5	356.7	413.0	757.3	784.6	-4.7	1.5	411.9	15.
16.	1966-67		118.0	115.7	114.2	47.7	454.7	898.0	1203.0	1100.6	27.5	40.3	1288.2	16.
17.	1967-68		270.0	265.5	169.6	48.5	609.8	1486.0	1739.5	1539.0	34.1	39.8	1933.0	17.
18.	1968-69		213.0	177.6	170.0	0.2	776.2	1195.0	1751.3	1760.7	27.3	14.4	1629.9	18.
19.	1969-70	]	120.0	132.5	210.0	23.5	954.3	881.0	1407.6	1982.0	22.9	12.6	1167.7	19.
20.	1970-71	|	120.0	197.7	236.3	12.5	1060.6	629.0	1812.1	2256.5	11.1	13.9	767.8	20.
21.	1971-72	} IV Plan	268.2	256.3	300.6	27.2	1239.5	997.3	2382.6	2656.8	16.9	17.7	899.7	21.
22.	1972-73	|	325.3	312.1	347.6	15.6	1384.8	1195.4	2588.5	2767.9	11.7	4.2	1212.6	22.
23.	1973-74	]	370.4	381.0	359.8	3.5	1374.4	1241.9	2535.1	2838.6	-0.8	2.6	1767.5	23.
24.	1974-75	]	437.3	317.5	336.1	-6.6	1517.2	1607.0	2660.1	2573.3	10.4	-9.3	5991.3	24.
25.	1975-76	|	278.0	227.0	278.4	-17.2	1827.7	1635.0	2509.3	2893.7	20.5	12.5	7222.7	25.
26.	1976-77	} V Plan	277.8	377.8	319.2	14.7	2340.7+47.1 ⁺	1050.7	3373.0	3410.9	28.1	17.9	2203.6	26.
27.	1977-78	|	598.9	482.7	506.3	58.6	2669.4+37.5 ⁺	1520.9	4069.1	4265.8	14.0	25.7	3064.4	27.
28.	1978-79	]	517.4	560.1	591.5	16.8	2951.0+46.9 ⁺	1994.0	4497.0	5116.9	10.5	19.4	4600.3	28.

(Continued)

10.01. ALL-INDIA PRODUCTION, IMPORTS, DESPATCHES AND CONSUMPTION OF FERTILISERS
1951-52 to 1986-87 (April/March) (Concluded)
(b) K₂O and N+P₂O₅+K₂O (Concluded)

Sl. No.	Year	Potash (K ₂ O)				N+P ₂ O ₅ +K ₂ O						Total value of imports (N+P ₂ O ₅ +K ₂ O) (Rs. million)	Sl. No.
		Quantity ('000 tonnes)			±% over the previous year	Quantity (in '000 tonnes)				±% over the previous year			
		Import	Despatches	Consumption		Consumption	Production	Import	Despatches	Consumption	Production			Consumption
29.	1979-80	473.2	545.5	606.4	2.5	2987.4+32.1*	2005.6	4987.6	5255.4	1.2	2.7	5545.0	29.
30.	1980-81)	796.5	617.6	623.9	2.9	3009.4+56.9*	2759.0	5213.7	5615.9	0.6	5.0	9252.2	30.
31.	1981-82 |	643.8	670.4	676.2	8.4	4093.0+37.2*	2042.1	5706.8	6067.2	36.2	10.0	7166.3	31.
32.	1982-83 } VI Plan	643.7	621.7	726.5	7.4	4413.4+39.2*	1131.7	5647.2	6286.6	7.8	5.3	2735.3	32.
33.	1983-84 |	556.4	628.6	775.4	6.7	4555.6+73.3*	1355.1	6617.2	7710.1	3.2	20.7	3650.5	33.
34.	1984-85 }	871.0	846.4	838.5	8.1	5235.1+57.4*	3624.8	7974.7	8211.0	14.9	6.5	14350.0	34.
35.	1985-86) VII Plan	893.8	854.1	854.6@	1.8@	5753.0+84.0*	3314.4	8645.3	8737.0@	9.9	6.4@	14050.0	35.
36.	1986-87 }	889.6	868.1	871.2@	2.1@	7074.1+63.8*	2274.5	9594.5	8779.5@	23.0	0.5@	6510.0	36.

Notes: 1. From 1951-52 to 1960-61 despatch figures are treated as consumption. From 1961-62 onwards, consumption figures have been taken from "Indian Agriculture in Brief", Ministry of Agriculture, New Delhi.

2. Imports and value have been taken from the Ministry of Agriculture, New Delhi.

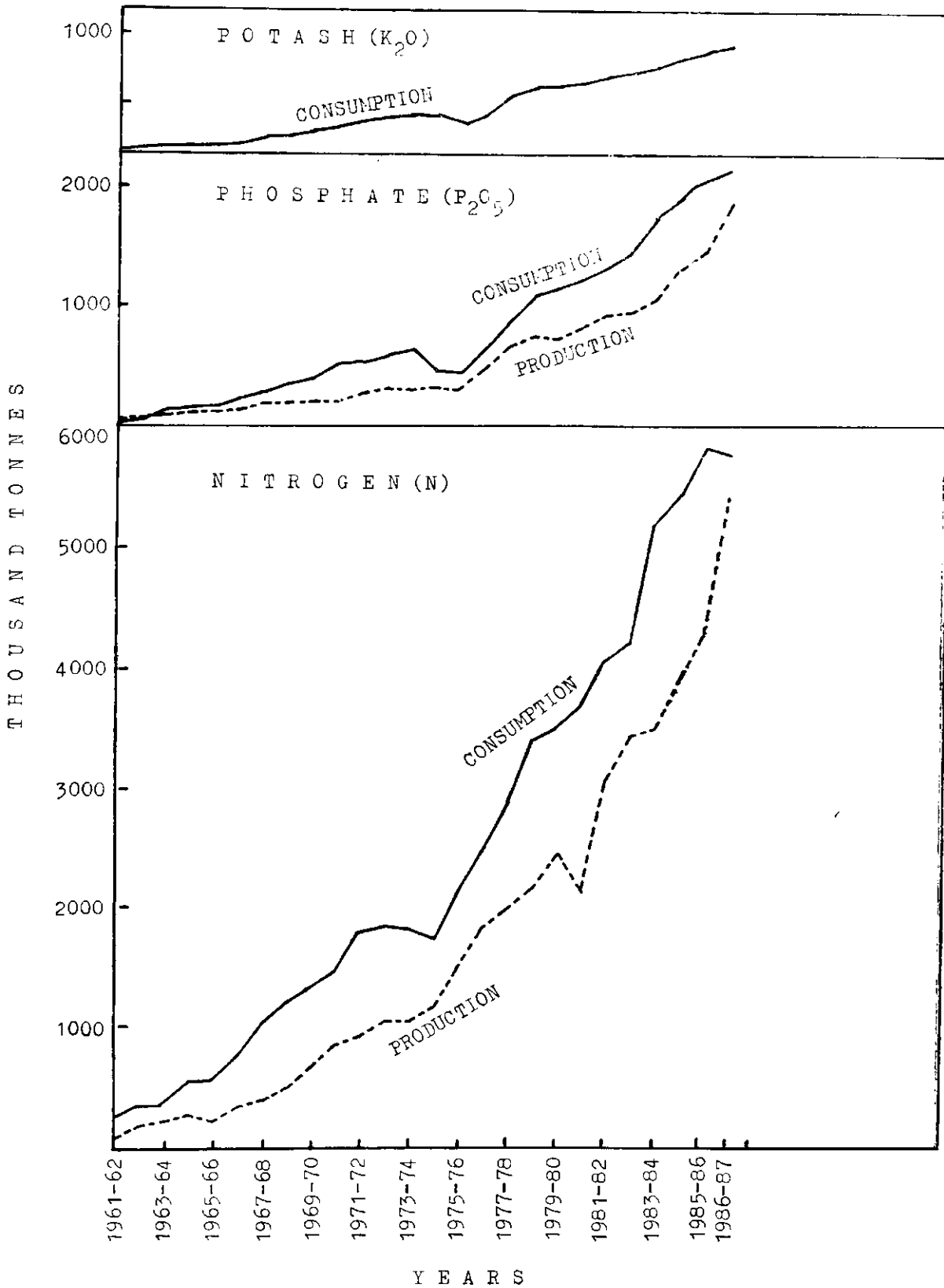
*=Excludes nitrogen meant for non-agricultural purposes.

**=Excludes data in respect to bonemeal and rockphosphate.

}=Meant for non-agricultural purposes (shown separately).

@=Provisional.

**All India Consumption and Production of N, P₂O₅ and K₂O
1961-62 to 1986-87**



10.02. ALL INDIA PRODUCTION, IMPORTS AND DESPATCHES OF FERTILISER MATERIALS
(1985-86 & 1986-7)
(April-March)

('000 tonnes)

Fertiliser	Production		Imports		Despatches	
	1985-86	1986-87	1985-86	1986-87	1985-86	1986-87
I. Straight 'N'						
1) Ammo Sulphate (20.6% N)	518.9	534.4	—	—	507.6	533.1
2) Urea (46% N)	7,467.3	9,576.6	2,827.9	2,165.9	10,015.3	11,569.7
3) CAN (25% N)	381.1	889.5	—	—	422.9	360.6
4) CAN (26% N)	—	—	—	—	22.6	—
5) Ammonium Chloride (25% N)	103.8	92.3	—	—	95.3	100.5
II. Straight 'P₂O₅'						
1) Single Superphosphate (16% P ₂ O ₅)	2,136.1	2,006.1	—	—	2,080.3	2,028.9
2) Triple superphosphate (46% P ₂ O ₅)	1.1	—	—	—	2.6	0.5
III. Straight 'K₂O'						
1) Muriate of Potash (60% K ₂ O)	—	—	1,489.6	1,469.2	1,411.8	1,434.7
2) Sulphate of Potash (50% K ₂ O)	—	—	—	16.2	14.1	14.5
IV. NP/NPK Complexes						
16-20-0	60.1	70.9	—	—	57.7	73.3
20-20-0	452.0	512.6	—	—	451.7	498.5
20.7-20.7-0	250.5	298.0	—	—	234.2	306.0
15-15-15	265.3	264.6	—	—	263.7	265.6
14-35-14	21.7	14.6	—	—	21.6	14.4

18-46-0 (DAP)	891.9	1,562.7	1,749.6	607.2	2,253.8	2,710.0
28-28-0	288.9	259.0	—	—	290.7	259.4
19-19-19	186.0	172.3	—	—	177.1	176.0
17-17-17	509.1	572.3	—	—	526.6	572.5
12-32-16	598.4	382.4	—	—	584.7	392.8
14-28-14	23.0	21.2	—	—	23.0	21.2
10-26-26	290.6	259.9	—	—	287.1	268.0
I. Total Material	14,445.8	17,489.4	6,067.1	4,258.5	19,744.4	21,600.2
II(a). Total (Straight) N	3,663.1	4,635.0	1,300.8	996.3	4,847.0	5,547.1
	(84.8)	(85.7)	(80.5)	(90.1)	(84.2)	(84.9)
P ₂ O ₅	341.0	321.0	—	—	334.0	324.9
	(23.9)	(19.3)			(16.3)	(14.8)
K ₂ O	—	—	993.8	889.6	516.9*	555.1*
			(100.0)	(100.0)	(60.5)	(63.9)
II(b). Total (through NP/NPKs) N	659.8	776.4	314.9	102.2	903.0	983.7
	(15.2)	(14.3)	(19.5)	(9.9)	(15.8)	(15.1)
P ₂ O ₅	1,089.1	1,340.9	804.8	279.3	1,707.2	1,872.8
	(76.1)	(80.7)	(100.0)	(100.0)	(83.7)	(85.2)
K ₂ O	—	—	—	—	337.2	313.0
					(39.5)	(36.1)
III. Grand Total (IIa + IIb) N	4,322.9	5,412.2	1,615.7	1,105.5	5,750.0	6,528.7
	+84.0@	+63.8@				
P ₂ O ₅	1,430.1	1,661.9	804.8	279.3	2,041.2	2,197.7
K ₂ O	—	—	893.8	889.6	854.1	868.1

()=Percentage share to total nutrient,

@=Meant for non agricultural purposes.

* =Despatches through NPKs, balance in straight form.

**10.03. CAPACITY, PRODUCTION AND CONSUMPTION OF N, P₂O₅ AND K₂O CLOTH SURPLUS/DEFICIT— STATEWISE
1986-87 (April-March)**

('000 tonnes)

Zone/State	N				P ₂ O ₅				Total (N+P ₂ O ₅)				K ₂ O	Total N+ P ₂ O ₅ + K ₂ O
	Capacity	Production	Consump- tion@	Surplus/ deficit@	Capacity	Production	Consump- tion@	Surplus/ deficit@	Capacity	Production	Consump- tion@	Surplus/ deficit@	Consump- tion@	Consump- tion@
East	1,253	549.3	766.8	-217.5	461.2	259.9	2,85	-8.6	1714.2	809.2	1035.3	-226.1	151.0	1186.0
Arunachal Pradesh	—	—	0.08	-0.08	—	—	0.07	-0.07	—	—	0.15	-0.15	0.40	0.19
Assam	197	91.1	8.7	82.4	5.4	1.2	3.2	-2.0	202.4	92.3	11.9	-80.4	4.9	16.8
Bihar	383	204.5	360.8	-156.3	11.0	1.5	116.0	-114.5	394.0	206.0	476.8	-270.8	50.6	527.4
Manipur	—	—	43.3	-43.3	—	—	1.14	-11.4	—	—	5.47	-5.47	0.19	5.66
Meghalaya	—	—	1.87	-1.87	—	—	1.39	-1.39	—	—	3.26	-3.26	0.22	3.48
Mizoram	—	—	0.05	-0.05	—	—	0.069	-0.069	—	—	0.119	-0.119	0.03	0.15
Nagaland	—	—	0.18	-0.18	—	—	0.15	-0.15	—	—	0.33	-0.33	0.002	0.35
Orissa	484	176.8	81.5	95.3	331.0	193.1	30.8	190.02	815.0	369.9	112.3	257.6	12.5	124.8
Sikkim	—	—	0.70	-0.70	—	—	1.30	-1.30	—	—	2.0	-2.0	0.11	1.36
Tripura	—	—	4.55	-4.55	—	—	0.55	-0.55	—	—	5.10	-5.10	0.98	6.83
West Bengal	189	76.9	304.0	-227.1	113.8	64.1	113.8	-49.7	302.8	141.0	417.8	-276.8	81.4	499.2
A & N Islands	—	—	0.04	-0.04	—	—	0.029	-0.029	—	—	0.07	-0.07	0.03	0.10
North	1,397	1135.2	2511.4	-1376.2	213.5	108.5	727.7	-619.2	1610.5	1243.7	3239.1	-1995.4	131.0	3370.1
Haryana	23.5	189.9	327.1	137.2	42.7	17.6	82.0	64.4	227.7	207.5	409.1	-201.6	5.8	414.7
Himachal Pradesh	—	—	19.3	-19.3	—	—	4.0	-4.0	—	—	23.3	-23.3	2.8	26.1
Jammu & Kashmir	—	—	22.6	-22.6	—	—	6.5	-6.5	—	—	29.1	-29.1	1.2	30.3
Punjab	483	367.6	802.9	-435.3	61.0	46.2	289.5	-243.3	544.0	413.8	1092.4	-678.6	23.1	1115.5
Uttar Pradesh	679	577.7	1329.9	-752.2	109.8	44.7	343.9	-299.2	788.8	622.4	1673.8	-1051.4	97.9	1771.7
Chandigarh	—	—	0.9	-0.9	—	—	0.25	-0.25	—	—	11.5	-1.15	0.04	1.19
Delhi	—	—	8.7	-8.7	—	—	1.51	-1.51	—	—	10.21	-10.21	0.17	10.38

South	1,380	1146.7	1339.0	- 192.3	669.2	522.5	584.4	- 61.9	2048.2	1669.2	1923.4	- 254.2	395.6	2309.0
Andhra Pradesh	312	187.8	583.2	-395.4	137.5	89.4	241.4	-152.0	449.5	277.2	824.6	-547.4	76.9	901.5
Karnataka	18.1	147.1	301.6	-154.5	71.8	16.9	161.0	-144.1	252.8	164.0	462.6	-298.6	103.0	565.6
Kerala	311	237.6	60.7	176.9	151.2	120.6	35.8	84.8	462.2	358.2	96.5	261.7	54.7	151.2
Tamil Nadu	576	574.2	384.8	189.4	307.7	295.6	143.2	112.4	883.7	869.8	528.0	341.8	146.4	474.4
Pondicherry	—	—	8.7	-8.7	—	—	3.0	-3.0	—	—	11.7	-11.7	4.6	16.3
West	2,838	2581.0	1123.8	1457.2	871.2	771.0	511.4	259.6	3709.2	3352.0	1435.2	1716.8	168.3	1803.5
Gujarat	1,481	1432.8	255.7	1177.1	409.8	422.8	111.8	304.0	1890.8	1855.6	367.5	1488.1	34.9	402.4
Madhya Pradesh	7	5.7	289.5	-283.8	51.1	41.1	173.8	-132.7	58.1	46.8	463.3	-416.5	30.3	493.6
Maharashtra	1,000	780.3	397.9	382.4	219.0	157.1	159.4	-2.3	1219.0	937.4	557.3	380.1	98.3	655.6
Rajasthan	152	147.2	1784	31.2	80.3	35.3	64.9	-29.6	232.3	182.5	243.3	-60.8	3.8	247.1
Goa, Daman & Diu	198	215.0	2.0	213.0	111.0	114.7	1.4	113.3	309.0	329.7	8.4	326.3	1.0	4.4
Dadra & Nagar Haveli	—	—	0.26	-0.26	—	—	—	—	—	—	0.26	-0.26	0.02	0.43
Others	—	—	55.0	-55.0	—	—	20.7	-20.7	—	—	75.7	-75.7	35.3	111.0
All-India	6,880	5412.2	5796.0	-383.8	2214.1	1661.9	2112.7	-450.8	9094.1	7074.1	7906.7	-834.6	871.2	8779.9
		+63.8@@								+63.8@@				

@ Provisional.

@@ Used for new-agricultural purposes.

\$ The capacity of by product A/S plants have been upgraded by 12 thousand tonnes of N with effect from 1.4.1986 whose plantwise/statewise breakup is not available.

Note: 1. K₂O consumption is treated as deficit since entire requirement is met through imports.

2. Consumption take into account both sources of availability viz. import and indigenous production including interstate entmovenof matertals.

11.00 SOIL TEST AND FERTILISER QUALITY CONTROL

**11.01. STATEWISE NUMBER OF SOIL TESTING LABORATORIES,
ANALYSING CAPACITY AND CAPACITY UTILISATION
(Position as on 31-1-1987)**

Name of State/U.T.	No. of soil testing laboratories	Annual analysing capacity ('000 Nos.)	Capacity utilisation (1986-87) (per cent)	No. of district not yet having soil testing laboratories
1. Andhra Pradesh	31 (6)	296	73	—
2. Assam	13 (8)	84	60	4
3. Bihar	42 (7)	428	N.A.	2
4. Gujarat	23 (8)	267	129	—
5. Haryana	30 (2)	344	95	—
6. Himachal Pradesh	12 (1)	68	91	1
7. Jammu & Kashmir	7 (1)	58	52	9
8. Karnataka	21 (2)	582	81	—
9. Kerala	14 (2)	230	75	3
10. Madhya Pradesh	29 (7)	279	N.A.	21
11. Maharashtra	22 (5)	324	95	17
12. Manipur	2 (1)	10	38	5
13. Meghalaya	1 (1)	8	83	2
14. Nagaland	1 (1)	10	N.A.	6
15. Orissa	11 (0)	330	39	1
16. Punjab	49 (9)	480	98	—
17. Rajasthan	9 (5)	130	96	19
18. Sikkim	1 (0)	3	N.A.	3
19. Tamil Nadu	(32 (15))	966	72	3
20. Tripura	2 (1)	16	95	2
21. Uttar Pradesh	71 (13)	1,185	106	—
22. West Bengal	10 (3)	82	40	2
23. Pondicherry	2 (1)	20	93	—
24. Mizoram	1 (1)	5	72	2
25. Andaman & Nicobar Islands	1 (0)	7	51	1
26. Arunachal Pradesh	1 (0)	5	52	9
27. Goa	2 (1)	18	59	—
28. Delhi	1 (0)	3	N.A.	—
Total All-India	441 (101)	6,235	84	112

Figures in paranthesis indicate the number of Mobile Soil Testing Vans.

Note: For the list of Research Institution & Agricultural Universities see "Fertiliser Statistics 1982-83" pages I-187 to I-195.

**11.02. STATEWISE NUMBER OF FERTILISER QUALITY CONTROL LABORATORIES,
THEIR LOCATION AND ANALYSING CAPACITY**

Sl. No.	State/Union Territory	No. of labs.	Location of labs.	Total analysing capacity (No. of samples)
1.	Andhra Pradesh	5	Anantpur Bapatla (Guntur) Hyderabad Tadepalligudam (West Godavari) Warangal	6,300
2.	Assam	1	Guwahati	120
3.	Bihar	1	Patna	2,000
4.	Gujarat	2	Junagadh Gandhinagar	4,000
5.	Himachal Pradesh	2	Sundernagar Shimla	1,500
6.	Haryana	1	Karnal	1,200
7.	Jammu & Kashmir	2	Talab tillo Jammu Srinagar	1,000
8.	Karnataka	2	Bangalore Dharwar	4,800
9.	Kerala	2	Trivandrum Pattambi	4,000
10.	Madhya Pradesh	3	Jabalpur Raipur Bhopal	4,000
11.	Maharashtra	4	Pune Nasik Amravati Aurangabad	5,500
12.	Orissa	2	Bhubaneswar Sampalpur	3,000
13.	Punjab	1	Ludhiana	1,000
14.	Rajasthan	2	Jaipur (Durgapur) Jodhpur	4,000
15.	Tamil Nadu	6	Coimbatore Kovilpatti Pudukottai Madurai Parankudi Trichi	8,000
16.	Uttar Pradesh	3	Lucknow Varanasi Meerut	4,000
17.	West Bengal	2	Behrampore Calcutta	2,500
18.	Pondicherry	1	Pondicherry	500
19.	Central Fertilisers Quality Control & Training Institute (GOI)	1	Faridabad	5,000
20.	Other	1	Location not known	8,580
All India		44		71,000

12.00. NUTRIENT CONTENT/REMOVAL/PESTICIDES COMPOST

12.01 PRIMARY NUTRIENTS REMOVED BY CROPS

Crop	Variety/soil/location		Nutrients removed (kg/tonne)		
			Nitrogen (as N)	Phosphate (as P ₂ O ₅)	Potash (as K ₂ O)
A. GRAIN CROPS					
1. Paddy	Sona	Grain	9.74	3.12	3.26
		Straw	4.56	0.27	14.50
	Jaya	Grain	14.9	6.9	10.0
		Straw	12.8	1.25	19.2
	Rasi	Grain	11.6	5.08	9.20
		—	—	—	—
2. Wheat	Arjun	Grain	15.96	1.89	3.43
		Atraw	4.34	0.09	17.50
3. Sorghum	--	Grain + Straw	9.28	3.21	15.35
4. Pearl-millet (<i>Bajra</i>)	—	Grain + Straw	6.69	2.45	22.54
5. Maize	Ganga 4	Grain + Straw	8.2	3.1	17.7
	Malan	Grain + Straw	8.1	1.7	13.2
6. Barley	—	Grain + Straw	7.30	3.92	16.91
B. OIL SEEDS					
1. Groundnut	—	Seed	41.05	11.57	23.68
2. Mustard	—	Seed	32.83	16.41	41.79
3. Castor	—	Seed	30.00	12.00	10.00
4. Linseed	—	—	19.00	12.00	33.00
C. SUGARCANE					
in Andhra Pradesh	Co. 419	Cane	0.67	0.30	1.34
In Maharashtra	Co. 740	Cane	1.22	0.79	1.55
in Bihar	Bo. 70	Cane	3.08	0.26	3.13

(Continued)

12.01. PRIMARY NUTRIENTS REMOVED BY CROPS (Concluded)

Crop	Variety/soil/location	Nutrients removed (kg/tonne)		
		Nitrogen (as N)	Phosphate (as P ₂ O ₅)	Potash (as K ₂ O)
D. FIBRE CROPS				
1. Cotton (Rainfed)	Seed	75.34	20.69	129.06
2. Jute	JRO-623 Fibre	9.22	0.06	0.45
E. PLANTATION CROPS				
1. Rubber	Latex	143.75	17.50	66.56
2. Coffee	Chemier	22.25	8.06	27.25
3. Tea	Made tea	45.4	5.0	20.0
4. Coconut Palms (70 nuts)		55.5	27.1	84.4
F. OTHER CROPS				
1. Potato	<i>Kufri Jyoti</i> (Acid brown Tropical Soil, Simla)	4.70	1.31	9.26
	<i>Kufri Chandramukhi</i> (Alluvial soil, Ludhiana)	4.66	0.71	5.91
2. Tobacco (Flue cured virginia)	Coarse textured soil	13.5	16.0	20.9
	Fine textured soil	19.6	22.6	23.0

- Source: 1. Sharma S. N. and Prasad, Rajendra *Fert. News*, 25(10), 34-36 & 44 (1980).
 2. Mandal A.K., Roy, A.B. and Gaswami, N.N. *Fert. News*, 25(9), 60-65 (1980).
 3. All India Coordinated Rice improvement Project, Hyderabad.
 4. All India Coordinated Rice improvement Project, Udaipur.
 5. Sugarcane, The Fertiliser Association of India, New Delhi.
 6. Gopalachari, N.C., *Fert. News*, 25(9), 25(9), 69-73 (1980).

12.02. SULPHUR UPTAKE PER TONNE OF CROP YIELD

Crop	kgs/tonne of crop
Cereals	3-4
Millets	5-8
Pulses	8
Oil Seeds	12

Source: Kanwar, J.S. and Mudahar, M.S., *Fert. News*, 30(11) 37-54 (1985).

12.03. MICRONUTRIENTS REQUIREMENTS OF DIFFERENT CROPS

Crop	Fe	Mn	B	Zn	Cu	Mo
←-----g/tonne dry matter-----→						
Cotton	106	14	15	16	8	0.77
Cowpea	260	89	53	17	11	1.31
Greengram (Mung)	170	18	32	13	11	1.05
Sorghum (Jowar)	360	27	27	36	3	0.98
Cabbage	205	28	25	21	8	0.98
Guar	71	15	29	15	9	1.14
Castor	223	41	31	14	2	1.01
Pearlmillet (Bajra)	349	44	—	50	12	—
Hy Bajra	264	23	27	22	9	0.84
Groundnut	499	39	44	9	5	1.32
Wheat	232	26	18	21	8	0.87
Potato	160	12	50	9	9	0.80
Brinjal	320	36	45	23	12	0.23
Tobacco leaves	692	132	96	21	11	0.60
Lucerne	420	41	36	21	10	2.59
Wheat	222	36	—	19	10	—
Maize (Fodder)	217	74	—	30	31	—

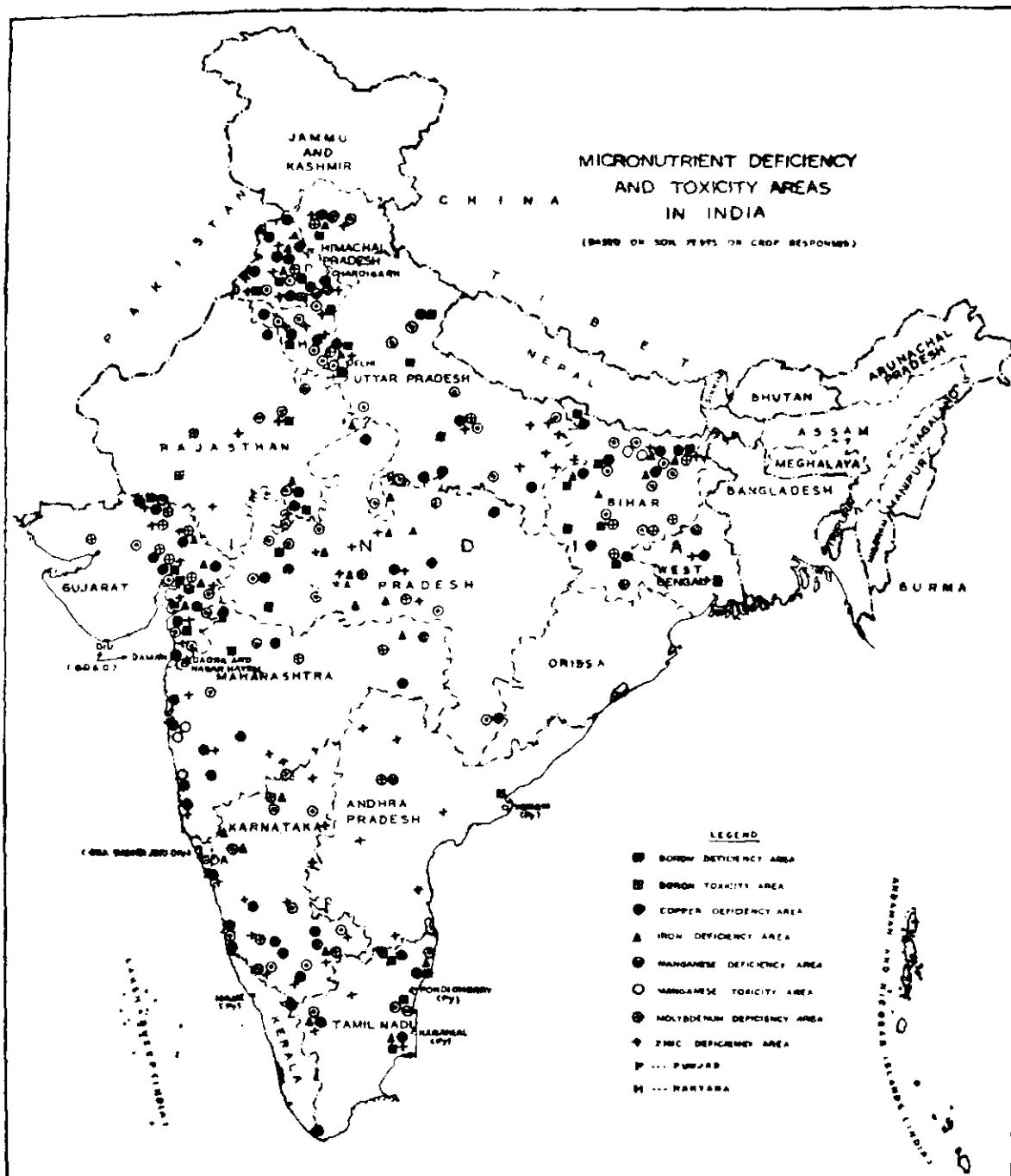
Source: 11th Annual Report of All India Coordinated Scheme of Micronutrients in Soils and Plants (1977-78).

12.04. CROP YIELDS AND NUTRIENT REMOVAL IN TWO CROPPING SEQUENCES INVOLVING WHEAT AT LUDHIANA (1974-75)

Crop	Grain (q/ha)	Total uptake* kg/ha			
		N	P	K	Total
Maize	31.3	105	8	98	211
Wheat	42.5	125	13	144	282
Greengram (Mung)	7.8	65	6	29	100
Total	81.6	295	27	271	593
Paddy	69.5	224	18	236	478
Wheat	38.6	92	10	101	203
Greengram (Mung)	5.8	67	5	27	99
Total	113.9	383	33	364	780

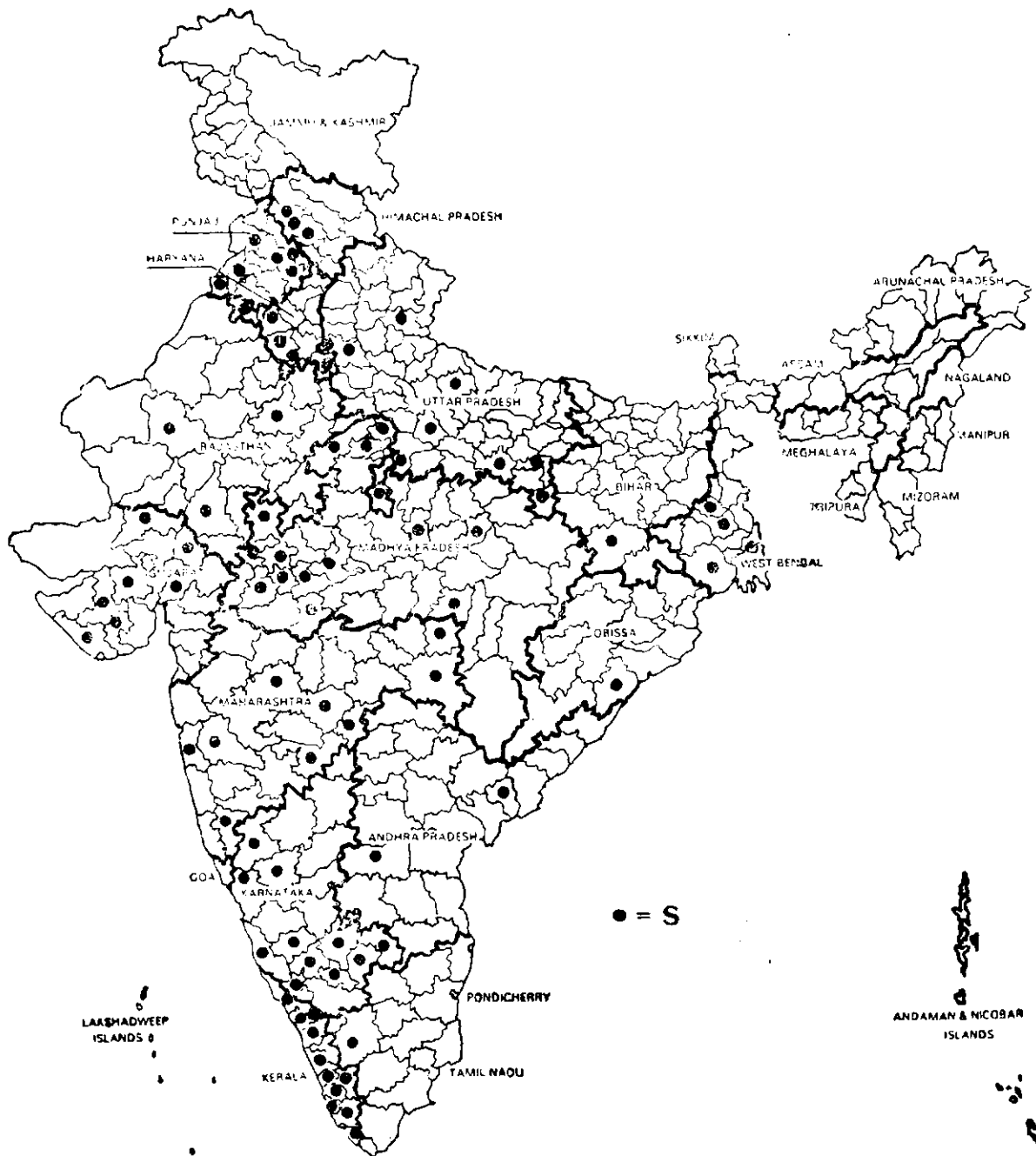
*Nutrient removal in elemental form.

Source: Tandon, H.L.S., *Fert. News*, 25(10), 45-78 (1980).

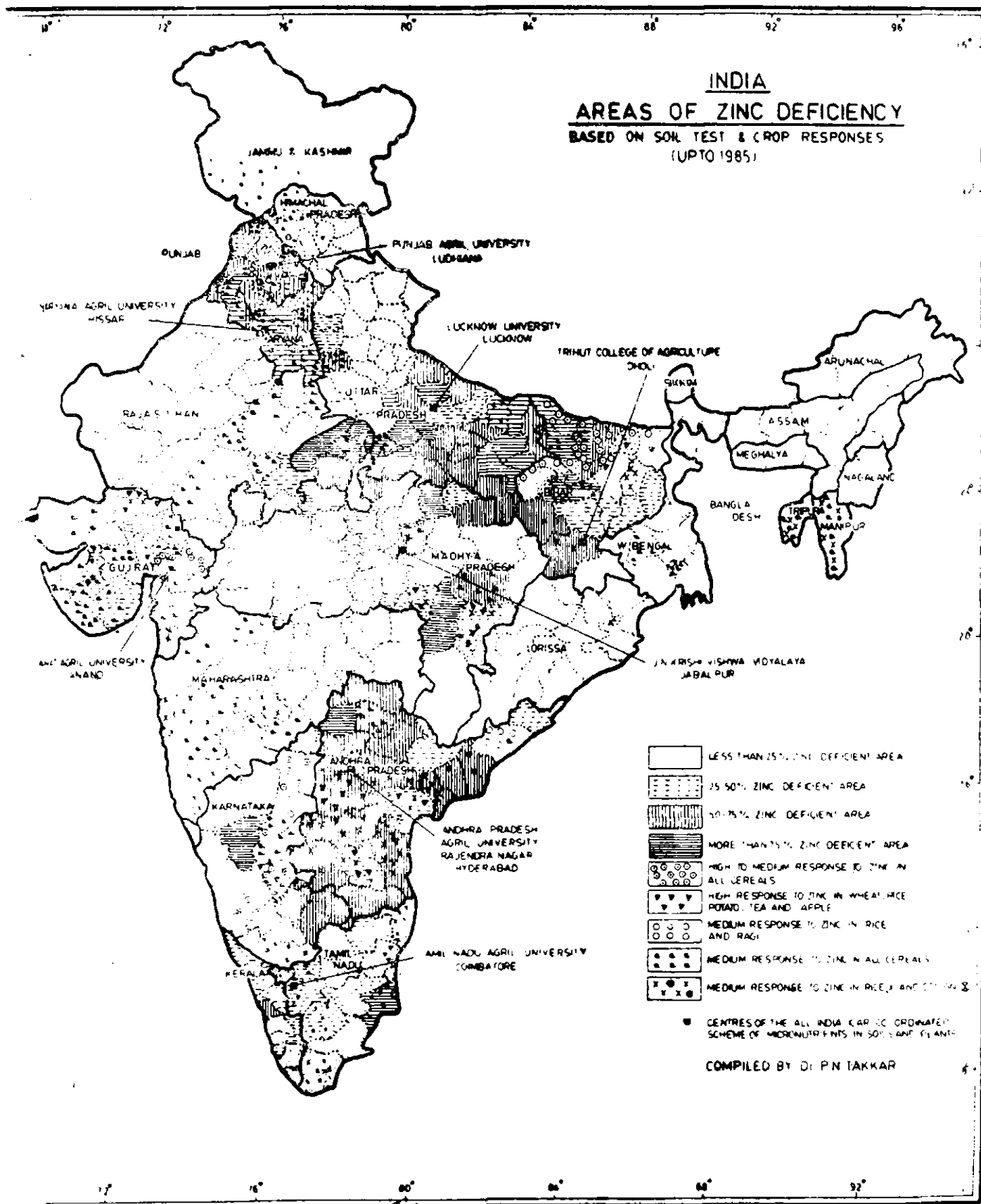


Source: J.S. Kanwar and N.S. Randhawa, Micronutrient Research in Soils and Plants in India. I.C.A.R., New Delhi (Dec. 1974).

A PRELIMINARY SULPHUR-DEFICIENCY



Source: Tandon, H.L.S. "Sulphur Research and Agricultural Production in India—1987". Fertiliser Development and Consultation Organisation, New Delhi.



Source: 18th Annual Report (1984-85) of All India Coordinated Scheme of Micronutrients in Soils and Plants, ICAR, New Delhi.

12.05. AGRO-CLIMATIC ZONES IN INDIA

Zone No.	Name of the Zone	Area under Zone
I.	Humid Western Zone	Jammu & Kashmir, Himachal Pradesh, Kumaon and Garhwal division of Uttar Pradesh.
II.	Humid Bengal-Assam Zone	West Bengal and Assam
III.	Humid Eastern Himalayan Zone	Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Sikkim, Meghalaya and Andaman & Nicobar Islands.
IV.	Sub-Humid Sutlej-Ganga alluvial plains	Punjab, Delhi, Uttar Pradesh plains and Bihar.
V.	Sub-Humid Eastern and South Eastern uplands	Eastern Madhya Pradesh. (Districts of Balaghat, Mandla, Shahdol, Sidhi, Surguja, Raigarh, Bilaspur, Rajpur, Durg and Bastar), Orissa and Andhra Pradesh.
VI.	Arid Western plains	Haryana, Rajasthan, Gujarat, and Dadra and Nagar Haveli.
VII.	Semi-arid lava Plateau and Central Highland	Maharashtra, Western and Central Madhya Pradesh and Goa Daman & Diu.
VIII.	Humid to semi-arid Western Ghats of Karnataka plateau	Karnataka, Tamil Nadu, Kerala, Pondicherry and Lakshadweep Islands

Source: Annual Report—1980-81, All India Coordinated Agronomic Research Project (ICAR) UAS Bangalore.

**12.06. MICRONUTRIENT CONTENTS OF SOME IMPORTANT
FERTILISERS AND MANURES**

(parts per million)

Fertiliser	Copper	Zinc	Manganese	Boron	Molybde- num
NITROGENOUS FERTILISERS					
Ammonium sulphate	Tr-0.5	0.33	70	6.0	0.1
Urea	0-3.6	0.5	0.5	0.5	0.7-6.2
Calcium ammonium nitrate	Tr-18.0	8.35	10.50	Tr.	—
PHOSPHATIC FERTILISERS					
Single superphosphate	26.0	59-165	65.270	9.5	3.3
Triple superphosphate	2-12	53-100	165.245	529	9.1
Basic slag	9.2-56.4	4-59	68 000	33.4	10.0
	9.3-85.0	19-29	28,000	—	—
Rockphosphate	5.6-9.5	24-137	130,3 0	16	5.6
Bonemeal	270	660	500	715	—
POTASSIC FERTILISERS					
Potassium chloride	3.0	3.0	8.0	14.0	0.2
Potassium sulphate	5.6-10.4	2.0	2.2-13.0	4.0	0.2
Farmyard manure	10	43-247	201	17.4	0.13
Compost	300-600	9.40	1,24	5.8	0.10
COMPLEX FERTILISERS					
Ammonium phosphate	3-4	above 80	115-220	—	2.2

Tr=Traces

Sources: Micronutrients: New Dimensions in Agriculture, J.S. Kanwar, *Indian Farming* 18 (10), 5-8 (Jan. 1979).

12.07(a). NUTRIENT CONTENTS

Sl. No.	Material	Total nitrogen	Ammoniacal nitrogen	Nitrate nitrogen	Amide nitrogen
NITROGENOUS MATERIALS					
1.	Ammonia anhydrous ^a	81.5	81.5	—	—
2.	Ammonium chloride ^b	25.0	25.0 ^a	—	—
3.	Ammonium sulphate ^{b*}	20.6 ^a	20.6 ^a	—	—
4.	Calcium ammonium nitrate ^b 25% N	25.0 ^a	12.50	12.50	—
5.	Calcium ammonium nitrate ^b 26% N	26.0 ^a	1.0	13.0	—
6.	Urea ^h	46.0 ^a	—	—	46.0
PHOSPHATIC MATERIALS					
7.	Single superphosphate ^b (grade I, 16% P ₂ O ₅) [*]	—	—	—	—
8.	Single superphosphate ^b (grade II, 14% P ₂ O ₅)	—	—	—	—
9.	Triple superphosphate ^b	—	—	—	—
10.	(a) Rockphosphate (Imported)	—	—	—	—
	(b) Udaipur rockphosphate	—	—	—	—
	(c) Mussorie rockphosphate	—	—	—	—
	(d) Jhabua rockphosphate	—	—	—	—
POTASSIC MATERIALS					
11.	Potassium chloride ^b (Muriate of potash)	—	—	—	—
12.	Potassium sulphate ^{d*}	—	—	—	—
COMPLEXES					
13.	Diammonium phosphate (18-60-0) ^{b*}	18.0 ^a	18.0 ^a	—	—
14.	Ammonium phosphate sulphate (16-20-0) ^{b*}	16.0	16.0	—	—
15.	Ammonium phosphate sulphate (20-20-0) ^b	20.0	18.0 ^a	—	2.0 ^a
16.	Ammonium phosphate sulphate nitrate (20-20-0) ^b	20.0 ^a	17.0 ^a	3.0 ^a	—
17.	Urea ammonium phosphate (28-28-0) ^b	28.0 ^a	9.0 ^a	—	19.0
18.	Urea ammonium phosphate (24-24-0) ^b	24.0 ^a	7.5 ^a	9.0	16.5 ^a
19.	Nitrophosphate (20-20-0) ^b	20.0 ^a	10.6	9.4	—
NITROGEN-POTASSIUM MATERIALS					
20.	Potassium nitrate	13.0	—	13.0	—
COMPLEXES					
21.	Nitrophosphate with potash (15-15-15) ^b	15.0 ^a	—	—	—
22.	NPK (10-26-26) ^b	10.0 ^a	10.0	—	—
23.	NPK (12-32-16) ^b	12.2 ^a	12.0 ^a	—	—
24.	NPK (14-35-14) ^b	14.0 ^a	14.0 ^a	14.0 ^a	—
25.	NPK (17-17-17) ^b	17.0 ^a	5.0 ^a	—	12.0 ^a
26.	NPK (14-28-14) ^b	14.4 ^a	8.0 ^a	—	6.0 ^a
27.	NPK Complex (19-19-19) ^b	19.0 ^a	5.6 ^a	—	13.4 ^a

^a Specifications prescribed in the Fertiliser (Control) Order.

^b Fertilisers manufactured in India.

^c Fertilisers to be manufactured in India.

^d Fertilisers imported.

^e Equivalent acidity is the number of parts by weight of calcium carbonate (CaCO₃) required to neutralise the acidity resulting from the use of 100 parts of fertiliser material

^f Equivalent basicity is the number of parts by weight of calcium carbonate (CaCO₃) that corresponds in acid neutralising power of 100 parts of fertiliser material.

OF FERTILISERS

(per cent)

Available phosphate (P ₂ O ₅)	Water soluble phosphate (P ₂ O ₅)	Total phosphate (P ₂ O ₅)	Water soluble potash	Total (lime) (CaO)	Total magnesia (MgO)	Equivalent acidity ^a	Equivalent basicity ^f
—	—	—	—	—	—	148	—
—	—	—	—	—	—	128-140	—
—	—	—	—	—	—	110	—
—	—	—	—	10-20	0-7.5	Neutral	—
—	—	—	—	—	—	Neutral	—
—	—	—	—	—	—	80	—
16.5-17.0	16.0 ^a	18.0-20.0	—	25.0-30.0	0.5	—	—
14.5-16.0	14.0 ^a	16.0-18.0	—	—	—	—	—
43.0	42.5 ^a	46.0	—	17.0-20.0	0.5	—	—
—	—	30.0-40.0 ^a	—	—	—	—	—
—	—	20.0-35.0	—	—	—	—	—
—	—	23.0-34.0	—	—	—	—	—
—	—	31.0-38.0	—	—	—	—	—
—	—	—	60.0 ^a	—	—	—	—
—	—	—	48.0 ^a	—	—	—	—
—	46.0	46.9 ^a	—	—	—	—	—
—	19.5 ^a	20.0 ^a	—	—	—	—	—
20.0 ^a	17.0 ^a	—	—	—	—	—	—
20.0 ^a	17.0 ^a	—	—	—	—	—	—
28.0 ^a	25.2 ^a	—	—	—	—	—	—
24.0 ^a	20.4 ^a	—	—	—	—	—	—
20.0 ^a	5.4 ^a	—	—	—	—	—	—
—	—	—	44.0	0.5	0.5	—	—
15.0 ^a	4.9 ^a	15.0	15.0 ^a	—	—	—	—
26.0 ^a	22.1 ^a	26.0	26.0 ^a	—	—	—	—
32.0 ^a	27.2 ^a	32.0	16.0 ^a	—	—	—	—
35.0 ^a	29.6 ^a	35.0	14.0 ^a	—	—	—	—
17.0 ^a	15.3 ^a	17.0	17.0 ^a	—	—	—	—
28.0 ^a	26.2 ^a	28.0	14.0 ^a	—	—	—	—
19.0 ^a	16.2 ^a	—	19.0 ^a	—	—	—	—

^a Average Sulphur content in— (i) A/Sulphate 24% (ii) SSP 12% (iii) Pot. Sulphate 18% (iv) DAP upto 3% (v) A/P/Sulphate 15% and (vi) Gypsum 20%.

Source: (i) Fertiliser (Control) Order, 1985 as amended upto February 1986.

(ii) Efficient Use of Fertiliser—FAO Agricultural Studies No. 43.

"Essential plant nutrient" as per G.S.R. 758(E) of 25th September, 1985, issued by the Ministry of Agriculture, New Delhi are— "Boron, Calcium, Carbon, Chlorine, Copper, Hydrogen, Iron, Manganese, Magnesium, Molybdenum, Nitrogen, Oxygen, Phosphorous, Potassium, Sulphur and Zinc. [Fertiliser (control) Order, 1985].

12.07(b). NUTRIENT CONTENTS OF MICRONUTRIENT FERTILISERS@

Sl. No.	Materials	Element/Forms	Content (%)
1.	Zinc ϕ Sulphate*	Zn	21.0
2.	Manganese Sulphate*	Mn	30.5
3.	Ammonium Molybdate	Mo	52.0
4.	Borax (For soil application)	B	10.5
5.	Solubor (follar spray)	B	19.0
6.	Copper Sulphate*	Cu	24.0
7.	Ferrous Sulphate*	Total Fe	19.5
		Ferrous	19.0
		Ferric	0.5
8.	Chelated Zn (EDTA form)	Zn	12.0
9.	Chelated Fe (EDTA form)	Fe	12.0

*Average sulphur content in: (i) ZnSO₄, 15% (ii) MnSO₄, 17%
 (iii) CuSO₄, 13% (iv) FeSO₄, 19%

ϕ Specifications as per FCO amendment (1987).

12.08. AVERAGE CHEMICAL COMPOSITION OF SOME ORGANIC MANURES

Material	Nitrogen (As N)	Phosphate (As P ₂ O ₅)	Potash (As K ₂ O)
I. Bulky organic manures			
Farmyard manure	0.5—1.5	0.4—0.8	0.5—1.9
Compost (Urban)	1.0—2.0	1.0	1.5
Compost (Rural)	0.4—0.4	0.8—0.6	0.7—1.0
Green manures (various averages)	0.5—0.7	0.1—0.2	0.6—0.8
II. Oil cake			
(a) Non-edible cakes			
Castor cake	5.5—5.8	1.8—1.9	1.0—1.0
Mahua cake	25—26	1.8—1.9	1.8—1.9
Karanj cake	3.9—4.0	0.9—0.1	1.3—1.4
Neem cake	5.2—5.3	1.0—1.1	1.4—1.5
Safflower cake (undecorticated)	4.8—4.9	1.4—1.5	1.2—1.3
(b) Edible cakes			
Coconut	3.0—3.2	1.8—1.9	1.7—1.8
Cotton seed (Decorticated) cake	6.4—6.5	2.8—2.9	2.1—2.2
Cotton seed (Undecorticated) cake	3.9—3.4	1.8—1.9	1.6—1.7
Groundnut cake	7.0—7.2	1.5—1.6	1.3—1.4
Linseed cake	5.5—5.6	1.1—1.5	1.2—1.3
Niger cake	4.7—4.8	1.8—1.9	1.3—1.4
Rapeseed cake	5.1—5.2	1.8—1.9	1.1—1.3
Sesamum or <i>til</i> cake	6.2—6.3	2.0—2.1	1.2—1.3
III. Manure of animal origin			
Dried blood	10.0—12.0	1.0—1.5	0.6—0.8
Fish manure	4.0—10.0	3.0—9.0	0.3—1.5
Bird guano	7.0—8.0	11.0—14.0	2.0—3.0
Bonemeal (Raw)	3—4	20—25	—
Bonemeal (Steamed)	1.0—2.0	25—33	—
Activated sludge (Dry)	5.0—6.5	3.0—3.5	0.5—0.7
Settled sludge (Dry)	2.0—2.5	1.0—1.2	0.4—0.5
Night soil	1.2—1.3	0.8—1.0	0.4—0.5
Human urine	1.1—1.2	0.1—0.2	0.2—0.3
Cattle dung and urine mixed	0.60	0.15	0.45
Horse dung and urine mixed	0.70	0.25	0.55
Sheep dung and urine mixed	0.95	0.35	1.00

Source: (1) C.N. Acharya (1957), Organic Manures, I.C.A.R. Review Series No. 2.

(2) J.A. Doji (1955), Manures Manuring, I.C.A.R. Farm Bulletin No. 7.

(3) Van Slyke (1953), Fertiliser and Crop Production, Published by Orange Jodd. Publishing Co. New York.

12.09. APPROVED GRADES OF FERTILISER MIXTURES—STATEWISE

Zone/State	Grade			Crops for which recommended
	N	P ₂ O ₅	K ₂ O	
East				
Assam	8	8	8	} For agriculture crop mainly HYV paddy, sugarcane, wheat and potato.
	16	8	8	
	12	6	6	
	10	2	4	} For tea
	10	5	10	
	10	5	15	
Bihar	20	10	10	
	8	8	8	
	6	12	6	
	16	15	15	
	18	18	6	
	13	13	20	
Orissa	15	15	15	
West Bengal	8	8	8	
	10	5	10	
North				
Haryana	10	10	10	
	15	15	7.5	
	16	9	0	
	12	32	0	
Himachal Pradesh	15	15	15	
	12	32	16	
Jammu & Kashmir	12	32	16	
Punjab	15	15	7.5	
	12	25	6	
Uttar Pradesh	20	20	10	
	15	15	7.5	
	16	9	0	
	12	32	0	
	12	6	0	
	10	10	10	
	7	10	0	

(Continued)

12.09. APPROVED GRADES OF FERTILISER MIXTURES—STATEWISE (Continued)

Zone/State	Grade			Crops for which recommended
	N	P ₂ O ₅	K ₂ O	
North (Concluded)				
Chandigarh	12	32	16	
Delhi	15	15	7.5	
	12	32	16	
	12	32	6	
	8	8	8	
South				
Andhra Pradesh	14	7	0	Paddy mixture
	22	0	11	Paddy top dressing
	14	6	4	Sugarcane
	12	6	6	Chillies & general
	4	12	8 (S)	FCV virginia mixture, tobacco mixture
	6	8	12 (S)	FCV tobacco
	18	18	9 (M)	Cotton, hybrid (seed production)
	5	15	15 (S) ⁺ 2 MgO	Tobacco in collaboration with M/s. Indian Leaf Tobacco Dev. Co.
	7	10	5	Grape
	4	12	12	Groundnut
	20	10	10	Sugarcane special
	6	12	6 (S)	Natu tobacco
Karnataka	9	9 (9)	9	
	12	6 (6)	6	
	6	12 (12)	6	
	15	5 (5)	5	
	15	0	15	
	3 (A.S.)	9 (9)	9 (S)	
	20	0	10	
	11	11	11	
	12	9	12	
	7*	10	5	
	17	17 (17)	17	

(S) = Sulphate of potash.

(M) = Muriate of potash.

The figures within brackets denote water soluble P₂O₅.

(A.S.) = Ammonium sulphate.

* = Entire 'N' in organic form.

(Continued)

12.09. APPROVED GRADES OF FERTILISER MIXTURES—STATEWISE (Continued)

Zone/State	No.	Grade			Crops for which recommended
		N	P ₂ O ₅	K ₂ O	
South (Continued)					
Kerala	I	9	9 (4.5)	9	Paddy & tapioca
	II	20	0	20	Paddy & vegetable
	III	10	5 (2.5)	20	Coconut with or without 1.5 MgO
	IV	24	0	12	Sugarcane
	V	8	8 (4)	16	Banana & sesamum
	VI	10	4 (2)	14	Arecanut, pepper & cocoa
	VII	12	6 (3)	6	Cashew
	VIII	7	10 (5)	5	Vegetables & pulses
		18	18	18	Higher analysis mixture
		12	12	12	} Rubber
		10	10	4	
		15	10	6	
		10	10	10	
		12	12 (6)	6	
		10	10 (5)	4	} Candamom
		12	12	6	
	A.	6.4	12.9	12.9	
	B.	5.4	10.9	10.9	
	C.	6.9	10.3	10.8	J
Tamil Nadu	1	14	7 (1.4)	0	Milletts, rainfed cotton in black soils
	2	12	6 (1.2)	6	Paddy, ragi, cotton, chillies, tobacco and vegetables
	2(a)	12	6	6	Fruits
	3	8	8	16	Coconut, tapioca, arecanut
	4	6	12 (2.4)	6	Potato, paddy, hybrid millets, and basal dressing mixture
	4(a)	6 (1)	12 (2.4)	6	Potato
	5	9	9 (1.8)	9	Paddy, millets, vegetables and basal dressing mixture
	7	4	8 (1.6)	12	Groundnut
	9	10	0	30	Banana
	10	15	5	5	Sugarcane
	12	16	0	12	Top dressing mixture
	14	12	4	12	Coconut sandy loam
	16	20	0	10	Sugarcane (N and K, at higher level)

Note: Kerala—Figures in the brackets denote water soluble P₂O₅.

Tamil Nadu—1. Figures in the brackets in respect of 'N' denote organic nitrogen in the form of oil-cakes only.

2. Figures in the brackets in respect of P₂O₅ denote water soluble P₂O₅ in the form of SSP, DAP and in other water soluble forms. The balance portions of non-water soluble P₂O₅ should be in the form of powdered rockphosphate.

(Continued)

12.09. APPROVED GRADES OF FERTILISER MIXTURES—STATEWISE (Continued)

Zone/State	Grade			Crops for which recommended
	N	P ₂ O ₅	K ₂ O	
South (Concluded)				
Pondicherry	12	6	6	Paddy, ragi, cotton, chillies, tobacco and vegetables
	8	8	16	Coconut, tapioca, arecanut
	9	9	9	Paddy, millets, vegetables, basal dressing mixtures
	4	8	12	Groundnut
	7	14	21	Irrigated groundnut
	15	5	5	Sugarcane
	16	0	12	Top dressing mixture
	20	0	10	Sugarcane
	17	17	17	Paddy, millets as basal dressing mixture
West				
Gujarat	10	20	5	
	15	5	5	
	10	5	5	
	20	10	10	
	5	10	5	
Madhya Pradesh	18	18	10	
	8	32	8	
	12	32	6	
	20	20	10	
Maharashtra	15	15	7.5	
	10	5	5	
	5	10	10	
	20	20	10	
	9	20	20	
	15	5	5	
	15	15	15	
	12	32	6	
	10	26	26	
	10	10	0	
	7	10	0	
	7	10	5	
	20	10	10	
	20	10	0	
	20	20	0	
9	9	5		
18	18	10		

(Continued)

12.03. APPROVED GRADES OF FERTILISER MIXTURES—STATEWISE (Concluded)

Zone/State	Grade			Crops for which recommended
	N	P ₂ O ₅	K ₂ O	
West (Concluded)				
Goa	15	5	5	
	15	0	15	
	20	0	20	
	10	5	5	
	5	10	5	
	7	10	5	
	9	9	9	
	6	6	12	
	5	10	10	

Source: State Departments of Agriculture.

()=The figures within brackets denote water soluble P₂O₅.

Note: The production and distribution of fertiliser mixtures shall be according to the F.C.O., 1985 as amended upto February 1986 under GSR 758 (E).

12.10. PRODUCTION OF PESTICIDES IN INDIA

1980-81 to 1984-85

Technical grade (tonnes)

Sl. No.	Pesticide	1980-81	1981-82	1982-83	1983-84	1984-85
A. Insecticides						
1.	BHC	28,760	28,366	32,378	32,389	28,760
2.	Carbaryl	1,178	3,072	2,337	1,497	1,265
3.	Endosulphan	499	1,138	2,098	2,492	2,504
4.	Dimethoate	817	1,031	896	1,057	717
5.	Malathion	1,247	3,161	4,027	3,316	3,391
6.	Methyl parathion	1,213	2,092	3,030	1,836	2,116
B. Fungicides						
7.	Cooper Oxychloride	1,147	1,058	1,032	1,082	1,201
8.	Carbondazim (Bavistin)	28	45	65	102	199
9.	Thiocarbamates	1,159	1,465	1,683	1,507	2,272
C. Weedicides						
10.	2, 4-D	338	398	438	558	767
11.	Nitrogen/Propanil	1.5	—	—	—	—
12.	Paraquat	77	128	478	160	125
13.	Fluchloralin (Basalin)	12.5	27	45	60	98
14.	Dalapon	—	4	6	5	12
15.	Diuron	—	—	23	189	123
16.	Isoproturon	—	—	—	9	372
D. Rodenticides & Fumigants						
17.	Aluminium phosphide	710	515	616	952	1,094
18.	Ethylene dibromide	25	12	56	69	54
19.	Zinc phosphide	207	238	302	338	350
E. Acaricides						
20.	Dicofol	—	—	—	6	6
G. Plant Growth Regulators						
21.	Cycocel	5.4	3	77	2	35
Total		43,284	48,658	57,926	58,798	58,578

Note: Only selected items have been adopted in this table, therefore, the total will not tally.

Source: "Indian Agriculture in Brief" 21st Edition, Ministry of Agriculture, New Delhi.

**12.11. PRODUCTION OF URBAN COMPOST, RURAL COMPOST AND
AREA GREEN MANURED 1984-85 & 1985-86**

Sl. No.	Name of the State/U. Ts.	Urban Compost (Lakh tonnes)		Rural Compost (Lakh tonnes)		Area green manured (lakh hectares)	
		1984-85	1985-86	1984-85	1985-86	1984-85	1985-86
1.	Andhra Pradesh	2.55	3.25	400.000*	403.000*	18.000*	20.000*
2.	Assam	—	—	—	—	—	—
3.	Bihar	1.60*	1.60*	145.342*	10.000	—	—
4.	Gujarat	1.82	1.41	10.680	8.15	1.040	0.70*
5.	Haryana	2.40	2.50	94.090*	95.000	0.360	0.400
6.	Himachal Pradesh	0.10	0.12*	46.346*	47.000*	0.338*	0.400*
7.	Jammu & Kashmir	—	—	0.680*	0.680*	—	—
8.	Karnataka	8.86	8.96	90.410	99.394	6.273	5.837
9.	Kerala	0.96	1.00*	4.646	0.500*	2.767	0.400*
10.	Madhya Pradesh	4.89	5.00*	13.891	14.000*	2.435	2.500*
11.	Maharashtra	8.00*	8.00*	12.000*	12.000*	1.000*	1.000*
12.	Manipur	—	—	—	0.096	—	—
13.	Meghalaya	—	—	—	—	—	—
14.	Nagaland	—	—	0.006	0.006*	—	—
15.	Orissa	0.16	0.16	125.489	128.169	2.822	2.981
16.	Punjab	4.86	5.00*	207.900	214.920	4.120	4.550
17.	Rajasthan	3.29	3.95	36.500	37.420	0.420	0.403
18.	Sikkim	—	—	0.300	0.400*	—	—
19.	Tamil Nadu	4.50*	4.50*	93.680	81.520	3.120	1.180
20.	Tripura	—	—	0.100*	0.140*	—	—
21.	Uttar Pradesh	15.59	16.00*	942.000	950.000*	9.476	10.000*
22.	West Bengal	0.16*	0.20*	191.000	195.000*	0.200	0.250*
23.	Andaman & Nicobar	—	—	0.015	0.021	0.160	0.027
24.	Arunachal Pradesh	—	—	—	—	—	—
25.	Chandigarh	—	—	0.002	0.002	—	—
26.	Dadra & Nagar Haveli	—	—	0.020	0.020	0.005	0.005
27.	Delhi	0.50*	0.50*	—	—	—	—
28.	Goa, Daman & Diu	—	—	1.285	1.328	0.221	0.200
29.	Lakshdweep	—	—	0.006	0.008*	0.003	0.004*
30.	Mizoram	—	—	0.006	0.006	—	—
31.	Pondicherry	0.51	0.54	1.530	1.258	0.108	0.078
32.	Misc.	4.50	4.00	—	—	—	—
Total		65.25	66.69	2,418.024	2,297.038	52.868	50.915

* Anticipated.

Source: Ministry of Agriculture, Department of Agriculture, New Delhi.

13.00. CRUDE OIL, PETROLEUM PRODUCTS

13.01. PRODUCTION, CONSUMPTION, IMPORT AND EXPORT OF PETROLEUM PRODUCTS, COAL AND LIGNITE 1984-85 to 1986-87

Product	Unit	Production			Consumption			Import			Export		
		1984-85	1985-86	1986-87@	1984-85	1985-86	1986-87@	1984-85	1985-86	1986-87@	1984-85	1985-86	1986-87@
1. Natural Gas ¹	Million cubic meters	7,241	8,134	9,839	4,141	4,950	7,058	—	—	—	—	—	—
2. Naphtha ¹	Thousand tonnes	3,470	4,955	5,426	3,125	3,106	3,231	338	—	33	612	1796	2220
								(99.42)	(—)	(5.67)	(167.48)	(448.52)	(346.76)
3. Fuel Oil ¹	Thousand tonnes	7,886	7,955	7,997	7,944	7,900	7,937	175	20	—	170	14	99
								(39.02)	(4.39)	(—)	(33.5)	(3.81)	(11.67)
4. Coal & Lignite	Million tonnes	154.54	161.40@										
(i) Coal	Million tonnes	147.43	N.A.										
(ii) Lignite	Million tonnes	7.11											

@=Provisional.

()=Value in Rs. tonnes.

N.A.=Not available.

¹=Source: "Indian Petroleum & Natural Gas Statistics"—1986-87 Economics & Statistics Division Ministry of Petroleum & Natural Gas Government of India, New Delhi.

14.00. SEVENTH FIVE YEAR PLAN

**14.01(a). GROWTH IN CAPACITY, PRODUCTION AND DEMAND OF
N, P₂O₅ & K₂O—VII PLAN (1985-86 to 1989-90) and 1999-2000**

('000 tonnes)

Item	1985-86	1986-87	1987-88	1988-89	1989-90 ⁺	1999-2000 ⁺
1. Nitrogen (N)						
i. Capacity	5,910	6,737	7,021	8,023	9,253	
ii. Production	4,415	5,085	5,470	6,231	6,560	11,400
iii. Demand	6,950	7,090	7,830	8,570	9,100-9,300	
iv. Gap@ (III-ii)	1,935	2,005	2,360	2,339	2,540-2,740*	
2. Phosphate (P₂O₅)						
i. Capacity	1,575	1,979	2,315	2,453	2,891	
ii. Production	1,319	1,625	1,908	2,109	2,190	4,180
iii. Demand	2,200	2,456	2,713	2,969	3000-3200	
iv. Gap@ (III-ii)	881	831	805	860	810-1010*	
3. Potash (K₂O)						
i. Demand	1,000	1,117	1,233	1,350	1400-1500	
ii. Gap@ (ii-i)	1,000	1,117	1,233	1,350	1400-1500	
Total:						
i. Capacity	7,485	8,716	9,336	10,476	12,144	
ii. Production	5,734	6,710	7,378	8,340	8,750	15,580
iii. Demand	9,550	10,663	11,776	12,882	13,500-14,000	20,000
iv. Gap@ (III-II)	3,816	3,953	4,398	4,549	4,750-5,250*	4,420

@=To be met through imports. There is no Indigenous production of K₂O.

*=Estimated (as per VII plan document).

+ =Source: "Seventh Five year plan—1985-90". Planning Commission, Govt. of India, New Delhi.

Note: Estimates for the first four years of the VII Plan, viz., 1985-86 to 1988-89 have been taken from "The Fertiliser Production and Raw Material Position in India" 1985 by D. Swarup Director, Department of Fertilisers, Ministry of Agriculture, Govt. of India, New Delhi (Oct. 1985).

14.01(b). YEARWISE TARGET OF CONSUMPTION OF FERTILISERS—1974-75 to 1987-88
(‘000 tonnes)

Nutrient	1974-75@	1975-76	1976-77	1977-78	1978-79@	1979-80@	1980-81@	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87/ 1987-88
N	—	2,500	2,650	2,970	—	—	—	4,400	4,803	4,800	5,600	6,350	6,800
P ₂ O ₅	—	700	550	880	—	—	—	1,470	1,573	1,600	1,900	2,200	2,400
K ₂ O	—	400	400	400	—	—	—	730	828	800	900	1,000	1,100
Total	3,400	3,600	3,600	4,250	5,000	5,900	6,100	6,600	7,204	7,200	8,400	9,550	10,300

@Nutrientwise break-up is not available.

Note: The figures from 1974-75 to 1984-85 are the revised targets as were finally adopted by the Govt. of India.

Source: Ministry of Agriculture, New Delhi.

14.01(c). STATEWISE TARGETS OF CONSUMPTION OF N, P₂O₅ & K₂O—1989-90
(‘000 tonnes)

Zone/State	N	P ₂ O ₅	K ₂ O	Total
East*	1,311	496	253	2,062
Assam	76	40	24	140
Bihar	595	250	82	927
Orissa	142	40	24	206
West Bengal	476	160	119	755
Manipur	10	2	1	13
Meghalaya	4	2	1	7
Nagaland	1	1	Neg	2
Sikkim	2	1	Neg	3
Tripura	5	2	2	9
North*	3,427	1,031	459	4,917
Haryana	405	112	28	545
Himachal Pradesh	18	3	3	24
Jammu & Kashmir	45	9	5	59
Punjab	953	345	28	1,326
Uttar Pradesh	2,006	562	395	2,963
South*	2,196	836	465	1,497
Andhra Pradesh	1,143	481	158	1,782
Karnataka	475	184	137	796
Kerala	102	51	51	204
Tamil Nadu	476	120	119	715
West*	2,352	828	323	3,503
Gujarat	478	197	51	746
Madhya Pradesh	521	241	77	839
Maharashtra	980	307	182	1,469
Rajasthan	353	83	13	449
Total States	9,286	3,191	1,500	13,977
Union Territories	19	6	5	30
Grand Total (States & UTs)	9,304	3,197	1,505	14,007

* Excludes U.Ts, shown separately.

Note: All India Target for 1989-90 has been fixed in the range of 13 500 to 14,000 thousand tonnes of N+P₂O₅+K₂O.

Source: "Seventh Five Year Plan—1985-90" Planning Commission, New Delhi.

14.02. TARGETS OF PRODUCTION FOR AGRICULTURAL COMMODITIES

Crop	Unit	1984-85 (assumed base level)	1989-90	Compound annual growth rate (%)
I. Foodgrains				
a) Rice	Million tonne	60.00	73.00-75.00	4.00-4.56
b) Wheat	"	45.00	56.00-57.00	4.47-4.84
c) Coarse cereals	"	32.00	34.00-35.00	1.22-1.81
d) Pulses	"	13.00	15.00-16.00	2.90-4.25
Total Foodgrains	"	150.00	178.00-183.00*	3.48-4.06
II. Oilseeds				
a) Groundnut	"	7.30	9.37	5.11
b) Rapeseed & mustard	"	2.70	3.82	8.03
c) Other oilseeds (Sesamum, safflower Niger, soybean sunflower, linseed castor)	"	3.10	4.81	9.10
Total Oilseeds	"	13.00	18.00	6.72
iii. Sugarcane	"	180.00	917.00	3.81
iv. Cotton	Million bales of 170 kg. each	7.50	9.50	4.84
v. Jute & Mesta	Million bales of 180 kg. each	7.50	9.50	4.84
vi. Tea	Million kgs.	645.00	766.00	3.50
vii. Coffee	"	165	180	1.80
viii. Rubber	'000 tonnes	187	265	7.23
ix. Cardamom	tonnes	3,500	6,500	13.18
x. Fruits	Million tonnes	23.50	28.00	3.50
xi. Vegetables	"	34.00	40.00	3.50
xii. Potatoes	"	12.50	16.00	5.10
xiii. Coconut	Million nuts	6000	8000	5.90
xiv. Cashewnut	Million tonnes	0.22	0.32	7.70

*Foodgrains production target for 1999-2000 has been fixed at 235-240 million tonnes (VII Plan document).

Note: According to Sixth Plan document foodgrains production target for 1994-95 was fixed at 205 million tonnes.

Source: "Seventh Five Year Plan 1985-90", Planning Commission, New Delhi.

14.03. TARGETS OF CROPPED AREA AND COVERAGE UNDER HYV PROGRAMME

(Million hectares)

Crops	1984-85	1989-90	1994-95
(i) Gross cropped area	180.00	190.00	
(ii) Gross Irrigated area*			
Potential	67.89	80.79	
Utilisation	60.47	71.37	86.90+
(iii) HYV programme			
1. Paddy	25.00	32.00	
2. Wheat	19.00	22.00	
3. Maize	2.00	3.00	
4. Jowar	5.00	6.50	
5. Bajra	5.00	6.50	
Total	56.00	70.00	
(iv) Area under soil conservation	29.4		

(Cumulative)

*By 1999-2000, 100 million hectares (VII Plan document).

+Source: "Sixth Five Year Plan 1980-1985-90", Planning Commission, New Delhi.

Source: "Seventh Five Year Plan—1985-90", Planning Commission, New Delhi.

14.04. IRRIGATION POTENTIAL AND UTILISATION—VII PLAN

(Million hectares)

Type	1984-85 (base year)		1989-90	
	Potential	Utilisation	Potential	Utilisation
Major & medium	30.49	25.32	34.79	29.22
Minor	37.40	35.15	46.00	42.15
Total	67.89	60.47	80.79	71.37

Source: "Seventh Five Year Plan—1985-90", Planning Commission, New Delhi.

14.05(a). TARGETS OF AGRICULTURAL CREDIT BY DIFFERENT INSTITUTIONS
1984-85 and 1989-90

(Rs. crores)

Agency	1984-85 (Anticipated advances)	1989-90
I. Cooperatives	3,250	7,070
—Short term	2,500	5,540
—Medium term	250	500
—Long term	500	1,030
II. Commercial Banks (including Regional Rural Banks)	2,560	5,500
—Short term	1,110	2,500
—Term loan	1,450	3,000
Total	5,810	12,370

Source "Seventh Five Year Plan—1985-90", Planning Commission, New Delhi.

14.05(b). TARGETS OF COOPERATIVE PROGRAMMES

Programme	Unit	Base level 1984-85	Plan target 1989-90
I. Agricultural Credit			
(a) Short-term loans	Rs. crores	2,500	5,540
(b) Medium-term loans	Rs. crores	250	500
(c) Long-term loans	Rs. crores	500	1,030
II. Value of agricultural produce marketed/ targeted through cooperatives	Rs. crores	2,700	5,000
III. Retail sale of fertiliser through cooperatives			
(a) Quantity	Million tonnes	3.63	8.33
(b) Value	Rs. crores	1,500	3,400
IV. Capacity of cooperative godowns constructed/targeted	Million tonnes	8.00	10,00

Source: "Seventh Five Year Plan—1985-90", Planning Commission, New Delhi.

14.06. OTHER AGRICULTURE/FERTILISER RELATED TARGETS

Items	Unit	Assumed base level 1984-85	1989-90
1. Seeds (consumption requirements)		7.52	12.44
(i) Certified	Million quintals	7.04*	11.74**
(ii) Foundation	Million quintals	0.45	0.60
(iii) Breeder	Million quintals	0.03	0.10
2. Pesticides (Technical grade)	Thousand tonnes	50.00	75.00
3. Agricultural tractors			
(i) Capacity	Thousand No.	102	175
(ii) Production	Thousand No.	85	135
4. Non-coking coal for fertiliser production	Million tonnes	3.86	6.50

* This includes both certified seeds and quality seeds.

** This stands for only certified seeds of all crops except oilseeds, pulses and potato.

Source: "Seventh Five Year Plan—1985-90"—Planning Commission, New Delhi.

14.07. PRODUCTION TARGETS OF SOME IMPORTANT ITEMS

Item	Unit	1984-85	1989-90
1. Coal	Million tonnes	147.45	226.00
2. Lignite	"	7.79	15.20
3. Crude Oil	"	28.99	34.53
4. Petroleum Products	"	33.29	45.47
5. Caustic soda			
(i) Capacity	thousand tonnes	966.00	1200.00
(ii) Production	"	687.90	950.00
6. Soda ash			
(i) Capacity	thousand tonnes	1005.00	1330.00
(ii) Production	"	801.00	1140.00

Source: "Seventh Five Year Plan—1985-90", Planning Commission, New Delhi.

14.08. DOMESTIC CRUDE PRODUCTION VII PLAN

(in million tonnes)

Item	1985-86	1986-87	1987-88	1988-89	1989-90	Total 1985-90
A. ONGC						
1. ONLAND						
Cambay basin	4.10	4.50	4.90	5.50	6.00	25.00
Upper Assam and Nagaland	2.84	3.03	3.03	3.03	4.40	16.33
Sub-Total	6.94	7.53	7.93	8.53	10.40	41.33
2. OFFSHORE	20.17	20.52	20.52	20.35	20.75	102.31
Total ONGC (1+2)	27.11	28.05	28.45	28.88	31.15	143.64
B. OIL	3.03	3.03	3.03	3.03	3.38	15.50
Grand Total (A + B)	30.14	31.08	31.48	31.91	34.53	159.14

Source: "Seventh Five Year Plan 1985-90" Planning Commission, New Delhi.

14.09. GAS PRODUCTION PROFILE VII PLAN

(in billion cu m.)

Item	1985-86	1986-87	1987-88	1988-89	1989-90	Total 1985-90
A. ONGC						
1. ONLAND						
Cambay	1.06	1.09	1.11	1.11	1.11	5.48
Upper Assam	0.42	0.45	0.45	0.45	0.61	2.38
Assam-Arahan fold Belt	0.03	0.05	0.08	0.10	0.11	0.37
Sub-total (1)	1.51	1.59	1.64	1.66	1.83	8.23
2. OFFSHORE						
Bombay (associated)	4.20	4.60	4.74	4.09	4.05	21.68
Bombay (free)	—	—	7.30	7.30	7.67	22.27
Sub-Total (2)	4.20	4.60	12.04	11.39	11.72	43.95
Total ONGC (1+2)	5.71	6.19	13.68	13.05	13.55	52.18
B. OIL	1.66	1.59	1.49	1.40	1.36	7.50
Grand Total (A+B) (equivalent million cu. metres/day)	7.37 (20.2)	7.78 (21.5)	15.17 (41.6)	14.45 (39.6)	14.91 (40.8)	59.68

Source: "Seventh Five Year Plan 1985-90"
Planning Commission, New Delhi.

**14.10(a). DEMAND FOR RAIL FREIGHT TRAFFIC
FOR FOODGRAINS AND FERTILISERS**

Commodity	1984-85 (base year)		1989-90	
	Originating traffic (Million tonnes)	% of total traffic	Originating traffic (Million tonnes)	% of total traffic
Foodgrains	20.7	7.8	24.0	7.1
Fertilisers	12.2	4.6	15.0	4.4
Others *	23.5	87.6	301.0	88.5
Total	26.4	100.0	340.0	100.0

*=Steel (including raw materials), Coal, Iron Ore, Cement POL Products, Other goods, railway materials.

Source: "Seventh Five Year Plan—1985-90" Planning Commission, New Delhi.

**14.10(b). PORT CAPACITIES AND TRAFFIC PROJECTIONS FOR
FOODGRAINS AND FERTILISERS**

(Million tonnes)

Commodity	1984-85 (base year)		1989-90	
	Capacity as on 31-3-85	Traffic	Capacity as on 31-3-90	Projected traffic for VIIth Plan
Foodgrains		1.10		
Fertilisers (Including raw materials)	3.90	6.00	8.00	12.18
Others*	128.83	99.63	153.45	134.85
Total	132.73	106.73	161.45	147.03

*=POL, Iron Ore, Coal, Other Break Bulk, Container.

Source: "Seventh Five Year Plan—1985-90" Planning Commission, New Delhi.

PART II

**AGRICULTURAL AND
ALLIED STATISTICS**

1.00. CLASSIFICATION OF AREA

1.01. ALL-INDIA CULTIVATED AND IRRIGATED AREA—GROSS AND NET (1951-52 to 1986-87)

Sl. No.	Year	Area sown			Area irrigated			Gross area under HYV** (actual)	Share of gross irrigated to gross sown area	Increase (+)/decrease (-) over previous year	
		Gross	Net	More than once	Gross	Net	More than once			Gross sown area	Gross irrigated area

←————— ('000 hectares) —————→								←----- per cent -----→			
1.	1951-52	133,234	119,400	13,834	23,180	21,049	2,131	—	17.4	1.0	2.7
2.	1952-53	137,675	123,442	14,223	23,305	21,122	2,183	—	16.9	3.3	0.5
3.	1953-54	142,480	126,806	15,674	24,303	21,869	2,494	—	17.1	3.4	4.5
4.	1954-55	144,087	127,845	16,242	24,948	22,080	2,860	—	17.3	1.1	2.4
5.	1955-56	147,311	129,156	18,155	25,642	22,758	2,884	—	17.4	2.2	2.8
6.	1956-57	149,492	130,848	18,644	25,707	22,533	3,174	—	17.2	1.5	-0.3
7.	1957-58	145,832	129,080	16,752	26,628	23,156	3,472	—	18.3	-2.4	3.5
8.	1958-59	151,629	131,826	19,801	26,948	23,401	3,547	—	17.8	3.7	1.2
9.	1959-60	152,824	132,939	19,885	27,454	24,037	3,417	—	18.0	0.7	1.8
10.	1960-61	152,772	133,199	19,573	27,980	24,661	3,319	—	17.3	-0.1	1.9
11.	1961-62	156,209	135,399	20,810	28,460	24,884	3,576	—	18.2	2.2	1.7
12.	1962-63	156,760	136,341	20,419	29,453	25,665	3,788	—	18.8	0.3	3.5
13.	1963-64	156,963	136,488	20,480	29,707	25,888	3,819	—	18.9	0.1	0.8
14.	1964-65	159,229	138,120	21,109	30,705	26,600	4,105	—	19.3	1.4	3.3

15.	1965-66	155,276	136,198	19,078	30,901	29,344	4,557	—	19.9	-2.5	0.6
16.	1966-67	157,355	137,232	20,123	32,683	26,907	5,776	1,886	20.8	1.3	5.7
17.	1967-68	163,736	139,876	23,860	33,207	27,193	6,014	6,036	20.3	4.0	1.6
18.	1968-69	159,529	137,313	22,216	35,483	29,009	6,474	9,297	22.2	-2.6	6.8
19.	1969-70	162,265	138,772	23,493	36,970	30,197	6,777	11,413	22.8	1.7	4.2
20.	1970-71	165,791	140,784	25,007	38,194	31,103	7,091	15,383	23.0	2.2	3.3
21.	1971-72	165,194	140,040	25,154	38,431	31,546	6,885	18,173	23.3	-0.4	0.6
22.	1972-73	162,150	137,570	24,580	39,059	31,837	7,222	22,321	24.1	-1.9	1.6
23.	1973-74	169,870	143,060	26,810	40,280	32,550	7,730	26,038	23.7	4.8	3.1
24.	1974-75	164,190	138,380	25,810	41,740	33,710	8,030	27,327	2.4	-3.3	3.6
25.	1975-76	170,994	142,224	28,770	43,363	34,491	8,872	31,888	25.4	4.1	3.9
26.	1976-77	167,280	140,180	27,100	43,552	35,147	8,405	33,560	26.0	-2.2	0.4
27.	1977-78	172,305	141,936	30,369	46,030	36,553	9,477	32,930	26.7	3.0	5.7
28.	1978-79	174,764	143,008	31,756	48,306	38,060	10,246	40,130	27.6	1.4	4.9
29.	1979-80	169,657	139,015	30,642	49,178	38,478	10,700	38,383	29.0	-2.9	1.8
30.	1980-81	173,096	140,299	32,797	49,875	38,806	11,069	43,058	28.8	2.0	1.4
31.	1981-82	177,042	142,003	35,039	51,554	39,924	11,630	46,493	29.1	2.3	3.4
32.	1982-83*	173,396	140,794	32,602	52,121	40,721	11,400	47,493	30.1	-2.1	1.1
33.	1983-84*	180,361	142,744	37,617	53,937	41,955	11,982	53,740	29.9	4.0	3.5
34.	1984-85							54,140			
35.	1985-86							55,420			
36.	1986-87							54,040 ⁺			

*Provisional.

⁺ Anticipated achievement.

**Total area covered under HYVs of wheat, maize, bajra, jowar and paddy.

Note: HYV programme was launched in 1966-67.

Source: Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

1.02. LAND UTILISATION

Zone/State	Geographical area	Reporting area for land utilisation statistics	Classification of reporting				
			Forests	Not available for cultivation			Other Permanent pastures and other grazing land
				Area put to non-agricultural uses	Barren and unculturable land	Total (5+6)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
East	68,878	65,305	22,333	5,096	5,244	10,340	1,014
Assam (d)	7,844	7,852	1,985	912	1,541	2,453	184
Bihar	17,386	17,330	2,923	1,856	1,014	2,870	142
Orissa (r)	15,571	15,540	6,640	650	265	915	559
West Bengal (k) (d)	8,875	8,846	1,091	1,444	187	1,631	7
Manipur (l)	2,233	2,211	602	26	1,419@	1,445@	(j)
Meghalaya (d)	2,243	2,249	812	85	231	316	17
Nagaland	1,658	1,122	288	28	—	28	—
Sikkim (r)	710	729	265	70	209	279	97
Tripura (c)	1,049	1,048	578	(i)	120	120	(J)
Arunachal Pradesh	8,374	5,486	5,150	—	55	55	—
A.N. Islands	825	790	696	15	2	17	4
Mizoram (q)	2,108	2,102	1,303	10	201	211	4
North	68,848	47,036	9,085	3,638	1,723	5,361	1,614
Haryana	4,421	4,394	130	299	106	405	27
Himachal Pradesh	5,567	3,186	862 (o)	177	165	342	1,161
Jammu & Kashmir	22,224	4,506 (s, t)	2,759 (e)	305	255	560	123
Punjab	5,006	5,033	221	445	80	525	4
Uttar Pradesh	29,441	29,759 (h)	5,121	2,351	1,106	3,457	298
Delhi	148	147	1	54	11	65	1
Chandigarh (g)	11	11	1	7	(a)	7	—
South	63,630	63,419	12,341	5,446	3,766	9,232	2,303
Andhra Pradesh	27,507	27,440	6,200	2,218	2,298	4,516	901
Karnataka	19,179	19,050	3,030	1,143	826	1,969	1,246
Kerala	3,886	3,885	1,081	278	87	365	5
Tamil Nadu	13,006	12,994	2,030	1,796	575	2,371	151
Pondicherry	49	47	—	11	(a)	11	a
Lakshadweep	3	3	—	(a)	(a)	(a)	—
West	129,370	128,453	23,565	5,861	9,554	15,415	1,071
Gujarat (r)	19,602	18,829	1,966	1,081	2,560	3,641	845
Madhya Pradesh	44,345	44,211	14,006	2,223	2,369	4,592	2,806
Maharashtra (n)	30,769	30,758	5,305	1,014	1,729	2,743	1,572
Rajasthan	34,224	34,235	2,163	1,519	2,880	4,399	1,846
Goa, Daman & Diu	381	371	105	21	16	37	1
Dadra & Nagar Haveli	49	49	20	3	—	3	1
All India 1983-84	328,726	304,213	67,334	20,041	20,307	40,348	12,002
1982-83 (Revised)	328,726	304,113	67,349	19,704	20,245	39,949	11,959

PATTERN - 1983-84 (Provisional)

('000 hectares)

area excluding fallow land			Fallow land			Net area sown	Area sown more than once	Total cropped area (15+16)			
uncultivated land			Fallow land other than current fallows	Current fallows	Total (12+13)						
Land under misc tree crops	Culturable waste land	Total (8 to 10)				(9)	(10)	(11)	(12)	(13)	(14)
1,481	1,596	4,081	2,298	3,580	5,878	22,663	9,933	32,596			
250	107	541	86	91	177	2,696	881	3,577**			
232	418	792	1,075	2,090	3,165	7,580	2,679	10,259✓			
409	245	1,213	197	585	782	5,990✓	3,573	9,563 (f)✓			
57	176	240	86	457	543	5,341	2,501	7,842			
24	(J)	24	—	(a)	(a)	140	44	184**			
145	454	616	261	51	312	193	21	214**			
200	62	262	264	95	359	185	10	195			
2	1	100	7	2	9	76	35	111			
98	2	100	2	2	4	246	129	375**			
35	47	82	58	23	81	118	59	177**			
26	10	40	3	1	4	33	1	34			
3	74	81	259	183	442	65	—	65**			
689	1,485	3,788	810	1,509	2,319	26,473	13,334	39,807			
(a)	47	74	—	185	185	3,600	2,088	5,688✓			
40	129	1,330	14	45	59	593	378	971			
94	145	362	8	88	96	729	282	1,011			
5	33	42	4	29	33	4,212	2,765	6,977✓			
549	1,129	1,976	773	1,159	1,932	17,273	7,794	25,067✓			
1	2	4	11	3	14	63	26	89			
(a)	(a)	(a)	—	(a)	(a)	3	1	4			
853	1,826	4,982	2,414	4,351	6,765	30,099	4,623	34,722			
276	894	2,071	1,379	1,838	3,217	11,436	1,957	13,393✓			
337	485	2,068	459	919	1,378	10,605	871	11,476			
55	129	189	27	43	70	2,180	681	2,861			
183	316	650	548	1,549	2,097	5,846	1,099	6,945			
2	2	4	1	2	3	29	15	44			
—	—	—	—	—	—	3	(a)	3			
439	10,544	18,054	3,657	4,253	7,910	63,509	9,727	73,236✓			
4	1,989	2,838	75	726	801	9,583	840	10,423**✓			
167	1,742	4,715	934	741	1,675	19,223	3,405	22,628			
185	987	2,744	793	871	1,664	18,302	2,828	21,130**			
82	5,741	7,669	1,855	1,915	3,770	16,234	2,643	18,777✓			
1	84	86	—	—	—	143	10	153			
—	1	2	(a)	(a)	(a)	24	1	25			
3,462	15,451	30,915	9,179	13,693	22,872	142,744	37,617	180,361			
3,552	16,336	31,847	9,356	14,818	24,174	140,794	32,602	173,396			

(Continued)

1.02. LAND UTILISATION PATTERN - 1983-84 (Provisional)
(Continued)

- (a) Below 500 hectares.
- (c) Relates to the year 1977-78.
- (d) Relates to the year 1980-81.
- (e) Includes forest area reported by the Chief Conservator of Forests of the State.
- (f) Relates to the year 1983-84.
- (g) Relates to the year 1981-82.
- (h) Reporting area is more than the geographical area in case of Uttar Pradesh, and these variations are under verification.
- (i) Ad-hoc estimates-except total cropped area.
- (j) Included under the head 'Land under miscellaneous tree crops and groves etc.'
- (k) Includes data for 1973-74 in respect of Darjeeling district.
- (l) Included under the head 'Barren and unculturable land'.
- (n) Relates to T.R.S. Data.
- (o) As per the existing village records, the figures of forest area reported by the Chief Conservator of Forests for the years 1982-83 and 1983-84 is 1300 thousand hectares. The large variations between the two sets of figures (as per land-use and as per Chief Conservator of Forests) are under examination.
- (q) Relates to the year 1974-75.
- (r) Relates to the year 1982-83.
- (s) Excludes area under the illegal occupation of China & Pakistan.
- (t) Area under forests in Jammu & Kashmir declined during 1982-83 and 1983-84 as compared to 1981-82 as per the State Chief Conservator of Forests. This has also resulted in decline of reporting area for the State/All-India during the year 1982-83 and 1983-84.

**Forecast data has been utilised in estimating gross cropped area.

@Adjusted.

⇒ Not available separately, included under 'Culturable waste'.

N.A.: Not available.

Note: Figures for the year 1982-93 given out earlier have undergone revision due to changes reported by some of the States.

**EXPLANATORY NOTES ON LAND
USE CLASSIFICATION**

Column (2) Geographical Area: The latest figure of geographical area for the State/Union Territory/District as furnished by the Central Statistical Organisation based on the Surveyor General of India's data, should only be used.

Column (3) Reporting Area for Land Utilisation Statistics: The reporting area stands for the area for which data on land use classification of area are available. In areas where land utilisation figures are based on land records, reporting area is the area according to village papers i.e. the papers prepared by the village accountants. In some cases, the village papers may not be maintained in respect of the entire area of the State. For example, village papers are not prepared for forest area but the magnitude of such areas is known, also there are tracts in many States for which no village paper exists but, for which ad-hoc estimates of classification of area etc. are framed to complete the coverage. In such cases, column (3) should give the summation of the area for which village papers actually exist and the area for which ad-hoc estimates are available.

It may be observed that the reporting area for land utilisation statistics for a District/State is not larger than the corresponding area given in column (2). In case the position is otherwise, the reasons for the same may be indicated.

The sum of columns No. (4), (7), (11), (14), and (15) should be equal to column No. (3).

Column (4) Forests: This should include all lands classed as forests under any legal enactment dealing with forests or administered as forests, whether State-owned or private, and whether wooded or maintained as potential forests land. The area of crops raised

(Continued)

1.02. LAND UTILISATION PATTERN—1983-84 (Provisional)
(Concluded)

In the forests and grazing lands areas open for grazing within the forests should remain included under the forest area.

Column (5) **Area under Non-agricultural Uses:** This should include all lands occupied by buildings, roads and railways or under water, e.g. rivers and canals and other lands put to uses other than agricultural.

Column (6) **Barren and Un-culturable Land:** This should include all barren and unculturable land like mountains, deserts, etc. Land which cannot be brought under cultivation except at an exorbitant cost, should be classed as unculturable whether such land is in isolated blocks or within cultivated holdings.

Column (8) **Permanent Pastures and other Grazing Lands:** This should include all grazing lands whether they are permanent pastures and meadows or not. Village common grazing land shall be included under this head.

Column (9) **Land under Miscellaneous Tree Crops, etc.:** This should include all cultivable land which is not included in net area sown but is put to some agricultural uses. Lands under Casuarine trees, thatching grasses, bamboo bushes and other groves for fuel, etc. which are not included under 'Orchards' should be classed under this category.

Column (10) **Culturable Waste:** This should include lands available for cultivation, whether not taken up for cultivation or taken up for cultivation once but not cultivated during the current year and the last five years or more in succession for one reason or the other. Such lands may be either fallow or covered with shrubs and jungles which are not put to any use. They may be assessed

or unassessed and may lie in isolated blocks within cultivated holdings. Land once cultivated but not cultivated for five years in succession should also be included in this category at the end of the five years.

Column (12) **Fallow lands other than Current Fallows:** This should include all lands which were taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years. The reasons for keeping such lands fallow may be one or more of the following:—

- 1) Poverty of the Cultivators;
- 2) Inadequate supply of water;
- 3) Malarial climate;
- 4) Silting of canals and rivers; and
- 5) Unremunerative nature of farming.

Column (13) **Current Fallow:** This should represent cropped area which are kept fallow during the current year. For example, if any seeding area is not cropped against the same year it may be treated as current fallows:

Column (15) **Net Area Sown:** This should represent the total area sown with crops and orchard counting area sown more than once in the same year only once.

Column (16) **Area Sown more than Once:** This should represent the areas on which crops are cultivated more than once during the agricultural year. This should be obtained by deducting 'Net Area Sown' from 'Total Cropped Area.'

Column (17) **Total Cropped Area:** This should represent the total area covered with crops i.e. the sum total of covered by all the individual crops; area sown with crops more than once during the year being counted as separate areas for each crop.

1.03(a). AREA UNDER DIFFERENT SOIL TYPES—ALL INDIA

(million hectares)

Sl. No.	Type of soils	Approximate area
1.	Alluvial Soils	101.2
2.	Alluvial Soils Highly Calcareous	8.9
3.	Coastal Alluvium	8.5
4.	Deltaic Alluvium (occasionally saline)	17.0
5.	Alluvial Soils Affected by Salinity and Alkalinity	6.9
6.	Desert Soils	14.6
7.	Deep Black Soils	6.9
8.	Medium Black Soils	18.6
9.	Shallow Black Soils	4.9
10.	Black Soils Affected by Salinity and Alkalinity	6.9
11.	Black Soils Undifferentiated	12.5
12.	Mixed Red and Black Soils	10.5
13.	Red Soils	30.4
14.	Red Gravelly Soils	1.6
15.	Red and Yellow Soils	17.8
16.	Laterite Soils	10.1
17.	Laterite and Lateritic Soils	2.0
18.	Brown Soils under Deciduous	1.6
19.	Grey and Brown Soils	3.6
20.	Hill Soils	2.4
21.	Podsolid Soils	3.6
22.	Forest Soils Laterited	6.5
23.	Foothill Terai Hill Soils	5.7
24.	Mountain Meadow Soils	11.7
25.	Skeletal Soils	2.4
26.	Peat Muck, Very Humus Soils; Also Called Bog Soils, Organic Soils and Half Bog Soils	0.2
27.	Other Soils (viz. Mountain Soils Undifferentiated, Glaciers and Eternal Snow)	11.0
	Total	328.0

Note: Information on areas of occurrence of different types of soils given in Indian Crop Calendar, 1967.

Source: Report of the Committee on Natural Resources (Planning Commission) on a study on waste lands of India including saline and alkaline and waterlogged lands and their reclamation measures.

1.03(b) PROBLEMS OF SOIL EROSION AND LAND DEGRADATION

1. Geographical area		329 m.ha.
2. Area subject to water and wind erosion		150 m.ha. (includes 2.1 & 2.2)
2.1 Area subject to wind erosion and aridity	38.74 m.ha. }	
2.2 Area affected by sand dunes out of 38.74 m.ha.	7.00 m.ha. }	
3. Area degraded through special problems		25 m.ha.
3.1 Waterlogged area	6.00 m.ha. }	
3.2 Alkali soil	2.50 m.ha. }	
3.3 Saline soil including coastal sandy areas	5.50 m.ha. }	
3.4 Ravines and gullies	3.97 m.ha. }	
3.5 Area subject to shifting cultivation	4.36 m.ha. }	
3.6 Riverine and torrents	2.73 m.ha. }	
4. Total problem area (2+3)		1.75 m.ha.
4.1 Annual average loss of nutrients from land estimated at		5.37 to 8.4 m. tonnes
5. Average annual loss of production for not developing ravines estimated at		3 m. tonnes
6. Average annual rate of encroachment of table lands by ravines		8,000 ha.
7. Average are annually subject to damages through shifting cultivation		1 m.ha.
8. Total flood prone area		40 m.ha.
8.1 Annual average area affected by floods		9 m.ha.
8.2 Annual average cropped area affected by floods		3.8. m.ha.
9. Total drought prone area		260 m.ha.
10. Additional land needed 2000 A.D.		60. m.ha.
10.1 For crop production	10 m.ha. }	
10.2 For production of fuel wood	40 m.ha. }	
10.3 For production of fodder	10 m.ha. }	

m.ha. = million hectares

Source: Indian Agriculture in Brief—21st edition,
Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

**1.04. GROSS CROPPED AND IRRIGATED AREA AND AREA UNDER FOODGRAINS WITH CROPPING INTENSITY
1983-84**

(Area in '000 hectares)

Zone/State	Cultivated area		Cropping intensity (%)	Irrigated area		Percentage of net irrigated area to net cultivated area (%)	Area under foodgrains ('000 hectares)	Share of area under foodgrains to total cropped area (%)
	Net	Gross		Net	Gross			
East	22663	32506	143.8	7168	8408	31.6	25846	79.3
Assam(d)	2696	3577	132.6	572 ^m	572 ^m	21.2	2570	71.8
Bihar	7580	10259	135.3	2517	3570	33.2	9175	89.4
Orissa(r)	5990	9563	159.6	1845	2006(g)	30.8	6866	71.8
West Bengal	5341	7842	146.8	1980	1980	37.1	6206	79.1
Manipur	140	184	131.4	65	75	46.4	166	90.2
Meghalaya	193	214	110.9	50(g)	51(g)	25.9	138	64.5
Nagaland	185	195	105.4	68	73	36.7	138	70.8
Sikkim(r)	78	111	146.1	12	12	15.8	72	64.9
Tripura(c)	246	375	152.4	29	38	11.8	295	78.7
Arunachal Pradesh	118	177	150.0	22	23	18.6	155	87.6
A.N. Islands	33	34	103.0	—	—	—	12	35.3
Mizoram	65	65	100.0	8	8	12.3	53	81.5
North	26473	39807	150.4	16143	22643	60.9	31684	79.6
Haryana	3600	5683	157.9	2190	3594	60.8	4158	73.1
Himachal Pradesh	593	971	163.7	93	159	15.7	851	87.6
Jammu & Kashmir	729	1011	138.7	321	413	44.0	860	85.1
Punjab	4212	6977	165.6	3609	6273	85.7	5203	74.6

Uttar Pradesh	17273	25067	145.1	9879	12148	57.2	20536	81.9
Chandigarh (g)	3	4	133.3	N.A.	N.A.	N.A.	N.A.	—
Delhi	63	89	141.3	51	56	81.0	76	85.4
South	30099	34722	115.4	8377	10685	27.8	22343	64.3
Andhra Pradesh	11436	13393	117.1	3878	5058	33.9	9220	68.8
Karnataka	10605	11476	108.2	1590	1945	15.0	7594	66.2
Kerala	2180	2861	131.2	266	306	12.2	777	27.2
Tamil Nadu	5846	6945	118.8	2618	3249	44.8	4719	67.9
Pondicherry	29	44	151.7	25	37	86.2	33	75.0
Lakshadweep	3	3	100.0	(a)	(a)	N.A.	N.A.	—
West	63509	73225	115.3	10266	12195	16.2	51286	70.0
Gujarat (v)	9583	10423	108.8	2240	2614	23.3	4954	47.5
Madhya Pradesh	19223	22628	117.7	2772	2867	14.4	18458	81.6
Maharashtra(n)	18302	21130	115.5	1964 (b)	2686 (g)	10.7	14554	68.9
Rajasthan	16234	18877	116.3	3276	4014	20.2	13241	70.1
Goa, Daman & Diu	143	153	107.0	13	13	9.1	60	39.2
Dadra & Nagar Haveli	24	25	4.2	1	1	4.2	19	76.0
All India	142744	180361	126.4	41955	53937	29.4	131159	72.7

(a)=Below 500 hectares.

(b)=Relates to the year 1979-80.

(c)=Relates to the year 1977-78.

(d)=Relates to the year 1980-81.

(g)=Relates to the year 1981-82.

(m)=Relates to the year 1953-54.

(n)=Relates to T.R.S. data.

(v)=Relates to the year 1974-75.

(r)=Relates to the year 1982-83.

Source: Directorate of Economic & Statistics, Ministry of Agriculture, New Delhi.

**1.05. NET AREA IRRIGATED BY SOURCE—STATEWISE
1983-84 (Provisional)**

('000 hectares)

Zone/State	Canals			Tanks	Wells		Other Sources	Total net irrigated area
	Govt.	Private	Total		Tube wells	Other wells		
East	2991	291	3282	690	1591	426	1179	7168
Assam	71	291	362	—	—	—	210	572
Bihar	1009	—	1009	98	814	142	454	2517 ✓
Orissa @ (j)	1187	—	1187	314	90	254	—	1845
West Bengal	724	—	724	278	687	30	261	1980
Manipur (e)	—	—	—	—	—	—	65	65
Meghalaya (u)	—	—	—	—	—	—	50	50
Mizoram (q)	—	—	—	—	—	—	8	8
Nagaland	—	—	—	—	—	—	68	68
Sikkim (j)	—	—	—	—	—	—	12	12
Tripura (g)	—	—	—	—	—	—	29	29
Arunachal Pradesh (i)	—	—	—	—	—	—	22	22
A & N Islands	—	—	—	—	—	—	—	—
North	6125	172	6304	158	8572	684	426	16144
Haryana	1185	—	1185	1	990	10	4	2190 ✓
Himachal Pradesh	3	—	3	1	4	—	86	94
Jammu & Kashmir	132	172	304	3	2	1	11	321

Punjab	1478	—	1478	—	2077	45	9	3609
Uttar Pradesh	3330	—	3330	152	5467	614	316	9879
Delhi	4	—	4	1	32	14	(a)	51
South	3475	5	3480	2248	324	1920	405	8377
Andhra Pradesh	1839	—	1839	1087	170	668	114	3878
Karnataka	661	—	661	317	5	431	176	1590
Kerala	100	4	104	36	31	**	95	266
Tamil Nadu	864	1	865	807	165	821	20	2618
Pondicherry	11	—	11	1	13	—	(a)	25
Lakshadweep	—	—	—	—	—	—	(a)	(a)
West	2028	27	2055	473	346	3752	364	6990
Gujarat (j)	430	—	480	41	299	1465	5	2240
Madhya Pradesh	1209	3	1212	149	47	1145	219	2772
Maharashtra (d)	389	24	413	283	—	1141	127	1964
Rajasthan	1119	—	1119	214	140	1766	37	3276
Goa, Daman & Diu	—	—	—	—	—	—	13	13
Dadra & Nagar Haveli	—	—	—	—	—	1	(a)	1
All India	15745	495	16240	3783	10973	8548	2411	41955

a=Below 500 hectares.

b=Relates to the year 1953-54.

d=Relates to the year 1979-80.

e=Ad-hoc estimate.

g=Relates to the year 1977-78.

@=Relates to major, medium and minor for canals, tanks and wells respectively.

+ =Included under Government canals as separate break-up for private canals is not available.

Source: Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

i=Based on Agricultural Census 1976-77.

j=Relates to the year 1982-83.

q=Relates to the year 1974-75.

u=Relates to the year 1981-82.

**=Included under tube wells.

1.06. GROSS IRRIGATED AREA
1983-84

Zone/State	Rice	Jowar	Bajra	Malze	Ragi or marau	Wheat	Barley	Other cereals and millets	Total cereals and millets
East	4,945	(a)	(a)	227	24	1,764	13	5	6,978
Assam (b)	532	—	—	—	—	—	—	—	532
Bihar	1,603	(a)	(a)	223	2	1,469	—	5	3,315
Orissa (c)	1,192	—	—	4	22	67	13	—	1,285
West Bengal	1,368	—	—	(a)	—	223	(a)	—	1,591
Manipur (e)	75	—	—	—	—	—	—	—	75
Meghalaya (u)	51	—	—	—	—	—	—	—	51
Nagaland	63(m)	—	—	—	—	3(j)	—	—	66
Sikkim (j)	12	—	—	—	—	—	—	—	12
Tripura (g)	18	—	—	—	—	2	—	—	20
Arunachal Pradesh	23	—	—	(a)	—	(a)	—	—	23
A & N Islands	—	—	—	—	—	—	—	—	—
Mizoram (g)	8	—	—	—	—	—	—	—	8
North	3,771	49	167	441	1	11,897	371	29	16,726
Haryana	509	40	121	15	—	1,686	49	(a)	2,420
Himachal Pradesh	53	—	—	22	(a)	61	5	3	144
Jammu & Kashmir	243	(a)	—	17	—	56	1	10	328
Punjab	1,462	2	35	187	(a)	2,921	48	(a)	4,655
Uttar Pradesh	1,501	5	10	200	1	7,130	268	16	9,131
Delhi	3	2	(a)	(a)	—	43	(a)	—	48
South	7,178	202	131	222	253	81	—	10	8,077
Andhra Pradesh	3,924	18	54	75	84	13	—	4	4,172
Karnataka	742	103	28	133	98	68	—	4	1,176
Kerala	287	—	—	—	—	—	—	—	287
Tamil Nadu	2,196	81	48	14	70	(a)	—	2	2,411
Pondicherry	29	(a)	1	—	1	—	—	(a)	31
Laksha Dweep (u)	—	—	—	—	—	—	—	—	—
West	1,536	397	262	87	(a)	4,144	274	7	6,707
Gujarat (j)	237	34	134	25	—	516	12	5	963
Madhya Pradesh	867	2	(a)	6	—	1,272	38	(a)	2,185
Maharashtra	367(k)	356(k)	43(k)	11(k)	(a)	576(k)	1	1	1,355
Rajasthan	55	5	85	45	—	1,780	223	1	2,194
Goa, Daman & Diu	10	—	—	—	—	(a)	—	—	10
Dadra & Nagar Haveli	(a)	—	—	—	—	(a)	—	—	(a)
All-India	17,430	648	560	977	278	17,886	658	51	38,488

- (a) = Below 500 hectares
(b) = Relates to the year 1953-54
(c) = Relates to the year 1980-81
(e) = Adhoc estimates
(f) = Includes 295 thousand hectares for which cropwise details are not available
(g) = Relates to the year 1977-78
(j) = Relates to the year 1982-83
(k) = Relates to the area reported under TRS
(l) = Total net irrigated area for the year 1978-79 has been used

BY CROPS—STATEWISE
(Provisional)

('000 hectares)

Gram	Tur or arhar	Other pulses (excluding tur & arhar)	Total pulses	Total food-grains	Ground-nut	Rapeseed and mustard	Total oil-seeds	Sugar-cane	Cotton	Tobacco	Total irrigated area under all crops (gross)
6	1	96	103	7,081	46	117	235	62	(a)	7	8,408
—	(a)	6	6	538	—	—	—	—	—	—	572
5	(a)	17	17	3,332	—	18	23	31	(a)	7	3,570
—	—	73	73	1,358	46	14	81	28	—	—	2,006(f+t)
1	1	7	7	1,598	—	85	131	3	—	—	1,980(s)
—	—	—	—	75	—	—	—	—	—	—	75
—	—	—	—	51	—	—	—	—	—	—	51
—	—	—	—	66	—	—	—	—	—	—	73
—	—	—	—	12	—	—	—	—	—	—	12
—	—	—	—	20	—	—	—	(a)	—	—	38(p+t)
—	—	—	—	23	—	—	—	(a)	—	—	23
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	8	—	—	—	—	—	—	8
395	61	411	857	17,593	23	398	436	1,514	1,349	14	22,649
171	10	16	197	2,617	2	123	126	121	390	(a)	3,594
(a)	(a)	1	1	145	(a)	(a)	5	1	(a)	(a)	165
(a)	—	4	4	332	(a)	39	40	1	(a)	(a)	6,273
16	33	38	84	4,739	20	74	97	76	637	—	56
208	21	35	580	9,711	1	162	168	1,315	22	14	12,148
(a)	(a)	1	1	49	(a)	(a)	(a)	(a)	(a)	—	56
12	3	32	47	8,124	721	8	994	498	254	57	10,685
(a)	1	1	2	4,174	336	—	369	168	38	43	5,058
11	1	16	28	1,204	143	(a)	213	171	130	3	1,945
—	—	—	—	287	—	—	68	1	—	—	396
1	1	15	17	2,428	240	(a)	342	156	85	11	3,249
—	—	(a)	(a)	31	2	—	2	2	1	—	37
—	—	—	—	—	—	—	—	(a)	—	—	(a)
614	21	66	701	7,408	487	762	1,392	519	968	79	12,195
25	16	4	45	1,008	247	195	538	119	446	74	2,614
204	1	29	234	2,419	6	66	79	85	52	1	2,867
100(k)	3	9	112	1,467	222	(a)	235	281(k)	89(k)	2	2,686
285	1	24	310	3,504	12	501	540	32	381	2	4,014
—	—	—	—	10	—	—	—	2	—	—	13
—	—	(a)	(a)	(a)	—	—	—	(a)	—	—	1
1,027	86	605	1,718	40,206	1,277	1,277	3,057	2,593	2,271	157	3,937(r)

- (r) = Includes 786 and 660 thousand hectares for 1982-83 and 1983-84 respectively for which cropwise details are not available
- (s) = Includes 87 thousand hectares for which cropwise details are not available
- (u) = Relates to the year 1981-82
- (p) = Includes 9 thousand hectares in 1982-83 and 1983-84 respectively for which cropwise details are not available
- (t) = Gross irrigated area for 1981-82 as furnished by State Govt. in connection with some parliament question has been utilised

Source: Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

**1.07. PERCENTAGE OF IRRIGATED AREA TO
1983-84**

Zone/State	Rice	Jowar	Bajra	Maize	Wheat	Barley	Total cereals
East							
Assam	23.0	—	—	—	—	—	21.8
Bihar	32.8	—	—	28.6	77.7	13.3	41.6
Orissa	27.4	—	—	2.1	85.2	—	25.0
West Bengal	25.5	—	—	—	67.8	—	27.4
Manipur	46.5	—	—	—	—	—	45.2
Meghalaya	45.7	—	—	—	—	—	37.7
Nagaland	54.3	—	—	—	—	—	49.1
Sikkim	78.4	—	—	—	—	—	18.8
Tripura	6.3	—	—	—	—	—	6.9
Arunachal Pradesh	22.1	—	—	—	—	—	14.8
Mizoram	16.8	—	—	—	—	—	15.1
Andaman & Nicobar Islands	—	—	—	—	—	—	—
North							
Haryana	95.5	26.5	14.4	25.4	94.5	63.6	70.2
Himachal Pradesh	57.1	—	—	7.5	17.1	15.5	17.8
Jammu & Kashmir	88.2	—	4.5	6.2	26.3	10.0	40.3
Punjab	98.7	—	79.5	67.0	93.4	80.0	93.0
Uttar Pradesh	28.0	0.1	1.0	18.1	83.6	44.1	51.5
Delhi	88.2	15.7	—	—	96.8	—	66.9
South							
Andhra Pradesh	94.2	0.9	11.0	22.0	66.3	—	54.0
Karnataka	62.1	4.6	4.8	80.3	21.3	—	19.5
Kerala	38.8	—	—	—	—	—	38.5
Tamil Nadu	93.3	10.8	13.6	55.5	—	—	60.1
Pondicherry	101.4	—	—	—	—	—	98.7
West							
Gujarat	43.9	3.6	9.3	7.8	69.6	176.5	23.2
Madhya Pradesh	17.5	0.1	—	0.7	33.7	23.8	16.2
Maharashtra	24.1	5.4	2.4	11.3	48.5	10.2	11.7
Rajasthan	34.3	0.5	1.7	5.0	82.5	74.6	23.0
Goa, Daman & Diu	18.6	—	—	—	—	—	16.6
Dadra & Nagar Haveli	—	—	—	—	—	—	—
All India	42.3	3.9	4.7	16.7	72.5	47.5	35.8

@ = Not available

— = Nil

Note: Calculated in FAI.

TOTAL AREA UNDER PRINCIPAL CROPS
(provisional)

(Percentage)

Gram	Total pulses	Total food-grains	Ground-nut	Rape-seed & mustard	Total oilseeds	Cotton	Sugar-cane	All crops
—	4.6	20.9	—	—	—	—	—	18.7
2.6	1.4	36.3	—	20.2	9.3	—	24.3	35.8
—	4.2	19.8	17.8	13.1	8.6	—	66.2	24.2
1.6	1.8	25.7	—	44.9	36.5	—	14.8	27.4
—	—	45.2	—	—	—	—	—	41.7
—	—	36.9	—	—	—	—	—	24.3
—	—	47.9	—	—	—	—	—	48.7
—	—	16.6	—	—	—	—	—	@
—	—	6.8	—	—	—	—	—	3.5
—	—	14.8	—	—	—	—	—	@
—	—	14.8	—	—	—	—	—	@
—	—	—	—	—	—	—	—	@
26.4	27.6	62.9	27.0	63.1	61.1	95.1	90.3	68.3
—	2.3	17.0	—	—	24.0	—	27.0	18.5
—	8.4	38.6	—	75.9	67.1	—	142.8	44.4
16.5	42.5	91.1	34.5	89.2	62.3	98.0	90.5	101.3
15.3	20.7	47.3	0.4	10.7	6.6	73.8	77.9	48.1
—	23.3	64.5	—	—	—	—	—	@
—	0.1	45.3	20.1	—	16.3	8.0	118.7	39.5
7.1	1.8	15.8	16.3	—	12.7	14.4	99.0	17.7
—	—	36.9	—	—	275.3	—	12.3	19.8
7.4	2.4	51.5	25.1	—	30.5	47.8	102.8	49.2
—	—	93.4	—	—	64.5	90.9	105.3	@
20.5	5.6	20.3	11.5	112.3	20.2	31.9	115.9	27.7
9.7	4.7	13.1	1.9	21.2	3.4	9.6	190.6	13.3
20.2	3.8	10.1	27.4	—	10.5	3.3	95.6	18.3
15.9	8.4	18.9	6.5	61.1	35.8	91.6	95.2	22.8
—	—	16.6	—	—	—	—	—	@
—	—	—	—	—	—	—	—	@
14.3	7.3	30.6	16.9	33.0	16.4	29.4	93.4	31.7

1.08. SOWING SEASONS OF PRINCIPAL

Zone/State	Rice			Jowar		Bajra	Maize
	Autumn	Winter	Summer	Kharif	Rabi		
East							
Assam	Mid Feb.- April	May-July	—	—	—	—	April-May
Bihar	May-July	July-Sept.	Jan.-Feb.	April- Aug.	—	April- Aug.	June-July
Meghalaya	Mid Feb.- April	March- July	—	—	—	—	April-May
Nagaland	March- May	May- July	—	—	—	—	—
Orissa	May-June	June-Aug.	Dec.-Jan.	June-July	—	—	June-July
West Bengal	March- June ^B May- June ^T	April- June ^B June- Aug. ^T	— Oct.-Feb ^T	—	—	—	April- June
North							
Haryana	May-Aug.	—	—	June- July	—	June- Aug.	June-July
Himachal Pradesh	June-July	—	—	—	—	—	April- June
Jammu & Kashmir	—	April- July	—	—	—	June- July	April- June
Punjab	May-Aug.	—	—	June- July	—	June- Aug.	June- July
Uttar Pradesh	May- July	June- Aug.	Jan.- Feb.	June- July	—	June- Aug.	June-July
South							
Andhra Pradesh	March- May	June- Oct.	Dec.- Feb.	June- Oct.	Nov.- Dec.	June- Aug.	June- Aug. ^K Oct.- Dec. ^R
Karnataka	May- Aug.	June- Oct.	Dec.- Feb.	May- July	Sept.- Nov.	June- Aug.	April-July Nov ^R

CROPS IN MAJOR GROWING STATES

Wheat	Gram	Potatoes (Winter)		Potatoes (Summer)		Sugar-cane	Tobacco	Ground-nut	Cotton	Jute
		Hills	Plains	Hills	Plains					
Nov.- Dec.	—	Oct.- Nov.	Oct.- Nov.	Feb.- March	—	March- April	Oct. Nov.	—	April- May	Feb.- March
Oct.- Dec.	Oct.- Dec.	—	Oct.- Feb.	—	—	Dec.- Feb.	—	July- Aug.	June- July	March- July
—	—	Oct.- Nov.	Oct.- Nov.	Feb.- March	—	—	Oct.- Nov.	—	April- May	Feb.- March
—	—	—	—	—	—	—	—	—	—	—
Oct.- Nov.	—	—	Oct.- Nov.	—	July- Aug.	Feb.- May	Sept.- Oct.	June July	—	May- June
Oct.- Dec.	Nov.- Dec.	—	Sept.- Nov.	—	—	Dec.- April	Sept.- Oct.	—	—	March- June
Oct.- Dec.	Sept.- Nov.	{ Sept.- Oct. Jan.- April }	{ Sept.- Oct. Dec.- Jan. }	Jan.- Feb.	Sept.- Oct.	Feb.- April	Nov.- March	June- July	May- June	—
Oct.- Nov.	Sept. Nov.	Jan.- Feb.	—	April- May	—	March- May	May- June	June	—	—
Oct.- Nov.	—	{ June- July Sept.- Oct. }	{ Sept.- Oct. June- July }	March- June	March- June	Feb.- March	March- July	—	—	—
Oct.- Dec.	Sept. Nov.	{ Sept.- Oct. Jan.- April }	{ Sept.- Oct. Dec.- Jan. }	Jan.- Feb.	Sept.- Oct.	Feb.- April	Nov.- March	June- July	May- June	—
Oct.- Dec.	Sept.- Nov.	Nov.- Dec.	Sept.- Oct.	Sept.- Oct.	Sept.- Oct.	Sept.- April	Sept.- Feb.	May- July	April- June	Jan.- July
—	Nov. Dec.	—	Oct. Nov.	—	—	June- May	Oct.-	May- Oct.	June Oct.	July
Sept.- Nov.	Sept.- Dec.	—	July- Jan.	April- May	June- Jan.	Dec.- March	April- Sept.	June- Aug.	May- Sept.	—

(Continued)

1.08. SOWING SEASONS OF PRINCIPAL

Zone/State	Rice			Jowar		Bajra	Maize
	Autumn	Winter	Summer	Kharif	Rabi		
South (Concluded)							
Kerala	April-June	Aug.-Oct.	Nov.-Feb.	—	—	—	—
Tamil Nadu	May-Nov.	Oct.-Jan.	Feb.-April	June- Oct.	Nov.- May	May- Dec.	—
West							
Gujarat	June- Aug.	—	—	June- July	Sept.- Oct.	June- July	June- July
Madhya Pradesh	10th June- 15th Aug.	—	—	10th June- 7th Aug.	20th Sept.- Oct.	15th June- 8th Aug.	June- July
Maharashtra	June- July	—	—	June- July	Sept.- Nov.	June- July	June- July ^K Nov.- Dec. ^R
Rajasthan	July-Aug.	—	—	June- Aug.	—	June- July	June- July
All India	March- Aug.	June- Oct.	Nov.- Feb	April Aug.	Sept.- Dec.	June- Aug.	June- Aug^K Oct.- Dec.^R

Source: "Area and production of principal crops in India 1981-84", Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

CROPS IN MAJOR GROWING STATES (Concluded)

Wheat	Gram	Potatoes (Winter)		Potatoes (Summer)		Sugar cane	Tobacco	Ground-nut	Cotton	Jute
		Hills	Plains	Hills	Plains					
—	—	—	—	—	—	Nov.- Feb. Jan.- March	—	—	Aug. Sept.	—
—	Sept. Nov.	Sept.- Dec.	Oct.- Nov.	April- July	April- July	Dec.- Sept.	Sept.- Jan.	June- May July- Oct.	Feb.- Nov.	—
Oct.- Nov.	Oct.- Nov.	Nov. Dec.	Oct.- Nov.	—	—	Oct.- May	July- Sept.	June- July	June- Sept.	—
Oct.- Nov.	Oct.- Nov.	Oct. 7th Dec.	15th Oct.- Nov.	June- 15th Aug.	10th June- 15th Aug.	15th Dec.- 8th May	10th June- July	20th May- July	—	—
Oct.- Nov.	Sept.- Nov.	—	Nov.	—	July	Dec.- Aprii	July- Sept.	June- July	June- Sept.	—
Oct.- Dec.	Sept.- Nov.	—	Aug. Nov.	—	—	Jan.- May	June- Aug. Nov.- Jan.	June- Aug.	May- July	—
Sept.- Dec.	Sept.- Dec.	Aug.- Dec. (Sowing)	Feb.- July (Sowing)	Dec.- May	July- Dec.	May- Aug.	March- Sept.	Feb.- July	—	—

1.09. DISTRIBUTION OF AREA ACCORDING TO ANNUAL RAINFALL IN INDIA

Rainfall amount		Approximate percentage of area receiving rainfall
Dry	0-750 mm	30.0
Medium	750-1,150 mm	42.0
Assured	{ 1,150-2,000 mm	20.0
	{ above 2,000 mm	8.0
Total		100.0

1.10. DISTRIBUTION OF ANNUAL RAINFALL ACCORDING TO SEASONS IN INDIA

Rainfall	Duration	Approximation percentage to annual rainfall
South-West Monsoon	June-September	73.3
Post-Monsoon	October-December	13.3
Winter or North-East Monsoon	January-February	2.6
Pre-Monsoon	March-May	10.4
Total		100.0

Source: Reported from Indian Meteorological Department, Pune.

1.11. RAINFALL IN INDIA

Sl. No.	Name of the sub-division	Annual rainfall (mm)	Rainfall as percentage of annual			
			Jan. to Feb.	March to May	June to Sep.	October to December
1.	Bay Islands	2,994.5	2.7	15.0	59.3	23.0
2.	Assam (including Manipur & Tripura)	2,516.5	2.3	25.1	65.3	7.3
3.	Sub-Himalayan West Bengal	3,126.2	1.0	15.4	78.0	5.6
4.	Gangetic West Bengal	1,425.3	2.7	12.4	75.6	9.8
5.	Orissa	1,482.2	2.7	8.6	76.7	12.0
6.	Bihar Plateau	1,372.9	3.9	6.5	82.0	7.6
7.	Bihar Plains	1,202.9	2.9	6.1	85.0	6.0
8.	Uttar Pradesh, East	1,007.7	3.4	3.0	82.2	5.6
9.	Uttar Pradesh, West	964.2	5.1	3.9	87.0	4.0
10.	Punjab (including Delhi & Haryana)	624.7	8.6	7.2	80.0	4.2
11.	Jammu & Kashmir	994.6	19.2	24.0	47.5	9.3
12.	Rajasthan, East	704.1	2.1	2.3	92.5	3.0
13.	Rajasthan, West	311.1	3.6	4.9	89.1	2.4
14.	Madhya Pradesh, West	1,004.9	2.2	2.2	90.7	5.1
15.	Madhya Pradesh, East	1,401.7	3.1	3.5	87.7	5.7
16.	Gujarat Region	976.5	0.4	1.3	95.2	3.2
17.	Saurashtra and Kutch	482.6	0.9	2.1	93.1	3.8
18.	Konkan	2,872.0	0.1	1.2	93.9	4.8

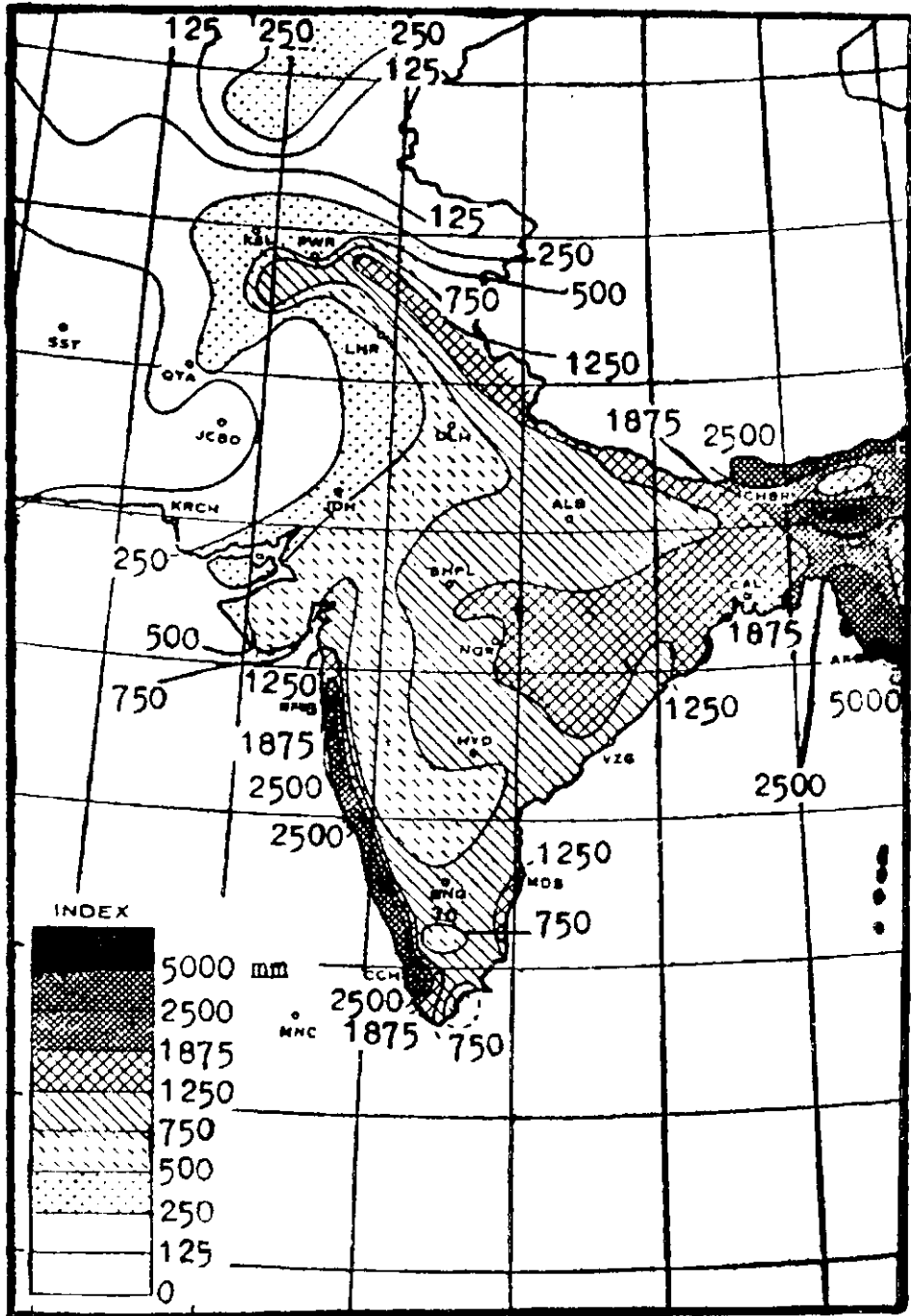
(Continued)

1.11. RAINFALL IN INDIA (Concluded)

Sl. No.	Name of the sub-division	Annual rainfall (mm)	Rainfall as percentage of annual			
			Jan. to Feb.	March to May	June to Sep.	October to December
19.	Madhya Maharashtra	920.7	0.8	4.1	83.6	11.5
20.	Marathwada	773.6	1.5	4.0	83.3	11.0
21.	Vidarbha	1,099.6	2.9	3.1	87.0	7.0
22.	Coastal Andhra Pradesh	1,008.3	2.3	8.8	56.6	32.3
23.	Telengana	926.4	2.1	11.3	81.7	10.0
24.	Rayalaseema	677.8	2.2	8.8	54.4	32.0
25.	Tamil Nadu	1,008.1	5.3	14.6	33.0	47.1
26.	Coastal Karnataka	3,264.8	0.1	4.4	87.7	7.8
27.	Interior Karnataka, North	675.0	0.9	12.7	65.2	19.1
28.	Interior Karnataka, South	1,244.9	0.8	13.0	97.6	18.5
29.	Kerala	2,996.1	1.2	13.5	66.9	18.3
30.	Arabian Sea Islands	1,572.4	2.8	13.0	62.3	21.4

Note: The rainfall figures presented in this Table are based on data for the period 1901-50.

Source: Koteswaram, P., *Meteorological and Climatological Aspects of Dryland Farming of India*. Paper presented at the I.C.A.R. workshop on "Dryland Agricultural Research", Indian Agricultural Research Institute, New Delhi (September 28-October 1, 1970).



Annual rainfall in India in mm
(50 years' average)

**1.12. RAINFALL IN INDIA DURING 1986-87 (March 1986 to Feb. 1987)—
ACTUAL COMPARED TO NORMAL—SEASONWISE**

Sub-Division	Pre-monsoon period (1st March '86 to 31st May '86)			South-West monsoon period (1st June '86 to 30th Sept. '86)			Post-monsoon period (1st Oct. 86 to 31st Dec. 86)			Winter-monsoon period (1st Jan. to 28th Feb. 87)		
	Actual (mm)	Normal (mm)	Excess/ deficient (%)	Actual (mm)	Normal (mm)	Excess/ deficient (%)	Actual (mm)	Normal (mm)	Excess/ deficient (%)	Actual (mm)	Normal (mm)	Excess/ deficient (%)
1. Andaman & Nicobar Islands	460	549	-16	1,213	1,584	-23	438	74	-41	91	147	-38
2. Arunachal Pradesh	485	783	-38	1,503	2,060	-27	175	193	-9	23	121	-81
3. Assam & Meghalaya	328	635	-48	1,088	1,614	-33	233	157	48	37	53	-30
4. Nagaland, Manipur, Mizoram and Tripura	444	503	-12	819	1,084	-25	405	237	71	28	44	-37
5. Sub-Himalayan, West Bengal & Sikkim	434	623	-30	1,767	1,961	-10	206	193	7	17	48	-65
6. Gangetic West Bengal	280	195	43	1,113	1,061	5	335	178	89	18	35	-49
7. Orissa	110	119	-8	1,056	1,116	-8	311	198	57	14	37	-62
8. Bihar Plateau	105	108	-3	717	1,088	-34	305	111	174	17	47	-63
9. Bihar Plains	131	95	37	755	1,015	-26	117	77	52	3	29	-91
10. East Uttar Pradesh	33	37	-10	792	884	-10	68	68	0	17	34	-50
11. Plains of West Uttar Pradesh	42	37	15	614	790	-22	47	47	—	35	39	-11
12. Hills of West Uttar Pradesh	123	162	-24	1,071	1,166	-8	105	94	13	87	121	-28
13. Haryana, Chandigarh & Delhi	52	43	20	379	485	-22	41	35	19	54	40	33
14. Punjab	104	48	116	482	485	-1	27	36	-25	62	57	9
15. Himachal Pradesh	289	212	36	928	973	-5	211	100	111	151	155	-2
16. Jammu & Kashmir	348	363	-4	542	573	-5	376	127	195	156	216	-28

17. West Rajasthan	26	20	33	166	291	-43	2	14	-83	8	9	-13
18. East Rajasthan	33	21	55	51	636	-18	6	36	-83	22	12	84
19. West Madhya Pradesh	16	24	-36	891	926	-4	65	54	21	59	23	163
20. East Madhya Pradesh	54	62	-13	1,000	1,168	-15	68	82	-17	49	39	24
21. Gujarat Region, Daman, Dadra & Nagar Haveli	5	12	-55	622	897	-31	4	38	-90	1	4	-88
22. Saurashtra, Kutch & Diu	0	6	-93	316	528	-40	2	35	-95	0	3	-100
23. Konkan & Goa	1	59	-99	1,857	2,706	-31	36	135	-73	0	1	-87
24. Madhya Maharashtra	33	57	-41	816	833	-2	55	115	-51	6	5	33
25. Marathwada	10	36	-71	492	709	-31	46	85	-46	23	11	107
26. Vidarbha	23	44	-47	943	968	-3	83	81	3	31	21	45
27. Coastal Andhra Pradesh	53	80	-34	616	614	-1	370	315	17	14	16	-12
28. Telangana	41	74	-45	712	757	-6	86	100	-14	16	11	-43
29. Rayalaseema	32	78	-59	339	382	-11	154	223	-31	3	8	-57
30. Tamil Nadu & Pondicherry	69	138	-50	274	322	-15	363	487	-25	15	44	-67
31. Coastal Karnataka	42	181	-77	2,644	3,062	-14	227	263	-14	0	8	-100
32. North Interior Karnataka	71	92	-23	455	520	-13	122	135	-10	5	8	-43
33. South Interior Karnataka	95	191	-50	887	819	8	220	223	-2	1	10	-92
34. Kerala	360	594	-39	1,687	2,139	-21	405	504	-20	6	42	-86
35. Lakshadweep	143	195	-27	921	946	-3	276	328	-16	2	37	-94

Note: In calculation of excess/deficient rainfall and their percentages figures are taken correct to 0.1 mm.

Source: Indian Meteorological Department, Govt. of India, New Delhi.

2.00. AREA AND PRODUCTION

2.01. GROSS AREA UNDER SELECTED CROPS—ALL INDIA (1951-52 to 1964-65)

('000 hectares)

Year	Rice	Wheat	Jowar	Bajra	Maize	Total Cereals	Gram	Total pulses (including gram)	Total food-grains	Ground-nut	Cotton	Jute	Sugar-cane
1951-52	29,830	9,471	15,944	9,519	3,310	78,186	6,830	18,775	96,961	4,017	6,556	790	1,939
1952-53	29,969	9,828	17,539	10,769	3,605	82,243	7,256	19,845	102,088	4,796	6,359	733	1,729
1953-54	31,289	10,681	17,758	12,199	3,869	87,336	7,968	21,729	109,065	4,247	6,967	754	1,410
1954-55	30,764	11,259	17,464	11,366	3,749	85,944	9,248	21,914	107,856	5,541	7,546	503	1,618
1955-56	31,521	12,367	17,362	11,338	3,696	87,344	9,779	23,216	110,560	5,133	8,086	704	1,847
1956-57	32,277	13,524	16,237	11,251	3,758	87,828	9,674	23,316	111,136	5,532	8,019	772	2,050
1957-58	32,298	11,730	17,311	11,169	4,079	86,942	9,091	22,538	109,480	6,420	8,014	705	2,073
1958-59	33,172	12,617	17,960	11,428	4,265	90,453	10,080	24,311	114,764	6,251	7,964	733	1,948
1959-60	33,820	13,380	17,707	10,695	4,344	90,550	10,326	24,233	115,223	6,442	7,255	622	2,137
1960-61	34,128	12,927	18,412	11,469	4,407	92,018	9,269	23,563	115,581	6,463	7,510	629	2,415
1961-62	34,694	13,570	18,249	11,278	4,507	92,989	9,566	24,243	117,232	6,896	7,978	917	2,455
1962-63	35,695	13,590	18,414	10,962	4,643	93,579	9,153	24,265	117,844	7,283	7,750	547	2,242
1963-64	35,809	13,490	18,376	11,103	4,582	93,235	9,354	24,186	117,421	6,886	8,221	869	2,249
1964-65	36,462	13,422	11,356	11,827	4,618	94,237	8,870	23,875	118,112	7,376	8,365	845	2,603

1965-66	35,470	12,571	17,679	11,965	4,799	92,385	8,015	21,718	114,103	7,698	7,962	758	2,836
1966-67	35,251	12,838	18,054	12,239	5,074	93,181	8,003	22,161	115,302	7,299	7,836	727	2,801
1967-68	36,437	14,998	18,423	12,808	5,583	98,772	8,257	22,649	121,421	7,553	7,995	880	2,047
1968-69	36,967	15,958	18,731	12,052	5,716	99,166	7,105	21,264	120,430	7,028	7,506	527	2,532
1969-70	37,680	16,626	18,605	12,493	5,862	101,547	7,751	22,023	123,570	7,125	7,731	768	2,749
1970-71	37,592	18,241	17,374	12,913	5,852	101,782	7,839	22,534	124,316	7,326	7,605	749	2,615
1971-72	37,758	19,139	16,777	11,773	5,668	100,472	7,912	22,151	122,623	7,510	7,800	815	2,390
1972-73	36,688	19,463	15,513	11,817	5,838	91,362	6,967	20,915	119,277	6,990	7,679	700	2,452
1973-74	38,286	18,583	16,716	13,934	6,015	103,111	7,761	23,427	126,538	7,024	7,574	793	2,752
1974-75	37,889	18,010	16,189	11,285	5,863	99,051	7,041	22,024	121,075	7,063	7,562	694	2,894
1975-76	39,475	20,454	16,092	11,571	6,031	103,727	8,320	24,454	128,181	7,222	7,350	585	2,762
1976-77	38,511	20,922	15,772	10,751	6,000	101,373	7,974	22,883	124,356	7,043	6,885	737	2,866
1977-78	40,283	21,456	15,318	11,104	5,688	104,018	7,974	23,497	127,515	7,028	7,866	797	3,151
1978-79	40,482	22,641	16,146	11,393	5,760	105,352	7,708	23,657	129,009	7,433	8,119	884	3,088
1979-80	39,414	22,172	16,674	10,579	5,720	102,947	6,985	22,259	125,206	7,165	8,078	834	2,610
1980-81	40,152	22,279	15,809	11,657	6,005	104,210	6,584	22,457	126,667	6,801	7,823	941	2,667
1981-82	40,708	22,144	16,599	11,784	5,935	105,295	7,868	23,843	129,138	7,429	8,057	826	3,193
1982-83	38,262	23,567	16,376	10,942	5,720	102,262	7,399	22,833	125,095	7,215	7,871	734	3,358
1983-84	41,244	24,672	16,432	11,832	5,859	107,621	7,161	23,542	131,163	7,539	7,721	760	3,110
1984-85	41,159	23,565	15,939	10,619	5,800	103,936	6,904	22,737	126,683	7,168	7,382	833	2,953
1985-86*	40,912	23,074	15,789	10,689	5,879	103,244	7,654	23,818	127,062	7,311	7,581	1148	2,862

* Provisional.

Source: Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

2.02. PRODUCTION OF SELECTED CROPS—ALL INDIA
(1951-52 to 1986-87)

													('000 tonnes)
Year	Rice	Wheat	Jowar	Bajra	Maize	Total cereals	Gram	Total pulses (including gram)	Total food-grains	Ground-nut	Cotton @	Jute+	Sugar-cane (cane)
1951-52	21,300	6,183	6,077	2,346	2,076	48,576	3,387	3,420	51,996	3,192	3,276	4,715	61,634
1952-53	22,892	7,501	7,359	3,192	2,870	50,012	4,208	9,189	59,201	2,929	3,341	4,629	50,996
1953-54	21,214	8,017	8,082	4,547	3,039	59,203	4,832	14,918	69,821	3,445	4,125	3,116	44,411
1954-55	25,219	9,043	9,201	3,519	2,975	57,085	5,621	10,950	68,035	4,245	4,445	2,952	58,739
1955-56	27,557	8,760	6,726	3,428	2,602	55,805	5,418	11,045	68,850	3,862	4,181	4,232	60,543
1956-57	29,037	9,403	7,237	2,873	3,078	58,304	6,231	11,551	69,855	4,369	4,924	4,323	69,051
1957-58	25,525	7,998	8,635	3,620	3,150	54,745	4,890	9,562	64,311	4,710	4,962	4,015	71,155
1958-59	30,847	9,958	9,033	3,868	3,463	63,992	7,023	13,149	77,141	5,178	4,879	5,199	73,358
1959-60	31,676	10,324	8,579	3,493	4,073	64,872	5,618	11,799	76,672	4,562	3,676	4,534	77,817
1960-61	34,574	10,997	9,814	3,283	4,080	69,314	6,250	12,704	82,018	4,812	5,604	4,134	110,001
1961-62	35,663	12,072	8,029	3,645	4,312	70,951	5,785	11,755	82,706	4,994	4,850	6,358	103,967
1962-63	33,217	10,776	9,748	3,959	4,607	68,623	5,362	11,528	80,151	5,036	5,536	5,442	91,913
1963-64	36,998	9,853	9,198	3,878	4,561	70,569	4,502	10,073	80,642	5,298	5,747	6,079	104,225

1965-66	30,589	10,395	7,581	3,752	4,823	62,403	4,224	9,944	72,347	4,263	4,852	4,476	123,990
1966-67	30,438	11,393	9,224	4,463	4,894	65,884	3,622	8,347	74,231	4,411	5,266	5,358	92,686
1967-68	37,612	16,540	10,048	5,185	6,270	82,950	5,971	12,102	95,052	5,731	5,777	6,320	95,500
1968-69	39,761	18,615	9,805	3,802	5,701	83,595	4,309	10,418	93,013	4,681	5,447	2,931	124,676
1969-70	40,430	20,093	9,721	5,327	5,674	87,810	5,546	11,691	99,501	5,130	5,564	7,618	135,024
1970-71	42,225	23,832	8,105	8,029	7,486	96,604	5,199	11,818	108,422	6,111	4,773	4,928	126,368
1971-72	43,068	26,410	7,722	5,319	5,101	94,074	5,081	11,094	105,168	6,181	6,950	5,684	113,570
1972-73	39,245	24,735	6,968	3,928	6,388	87,119	4,537	9,907	97,029	4,092	5,735	4,978	124,867
1973-74	44,051	21,778	9,097	7,519	5,803	94,657	4,099	10,008	104,665	5,932	6,309	6,220	140,289
1974-75	39,579	24,104	10,414	3,272	5,559	89,812	4,015	10,104	99,826	5,111	7,156	4,471	144,289
1975-76	48,470	28,846	9,504	5,736	7,256	107,995	5,879	13,039	121,034	6,754	5,950	4,440	140,604
1976-77	41,917	29,010	10,524	5,853	6,461	99,806	5,424	11,361	111,167	5,264	5,839	5,353	153,007
1977-78	52,671	31,328	12,064	4,730	5,973	114,434	5,410	11,973	126,407	6,087	7,242	5,261	176,966
1978-79	53,773	35,508	11,436	5,567	6,199	119,719	5,739	12,183	131,902	6,208	7,958	6,470	151,655
1979-80	42,330	31,830	11,648	3,948	5,603	101,129	3,356	8,572	109,701	5,768	7,698	6,072	128,833

(Continued)

2.02. PRODUCTION OF SELECTED CROPS—ALL INDIA
(1951-52 to 1986-87) (Concluded)

('000 tonnes)

Year	Rice	Wheat	Jowar	Bajra	Maize	Total cereals	Gram	Total pulses including gram	Total food-grains	Ground-net	Cotton @	Jute+	Sugar-cane (cane)
1980-81	53,631	36,313	10,431	5,243	6,957	118,962	4,328	10,627	129,589	5,005	7,010	6,508	154,248
1981-82	53,248	37,452	12,062	5,537	6,897	121,788	4,642	11,507	133,295	7,223	7,884	6,788	186,358
1982-83	47,116	42,794	10,753	5,131	6,549	117,662	5,290	11,857	129,519	5,282	7,534	5,946	189,506
1983-84	60,097	45,476	11,919	7,726	7,922	139,480	4,751	12,894	152,374	7,085	6,387	6,325	174,016
1984-85	58,336	44,069	11,402	6,047	8,442	133,576	4,562	11,963	145,539	6,436	8,507	6,531	170,319
1985-86*	64,153	46,885	10,123	3,683	6,890	137,505	5,683	12,964	150,469	5,547	8,610	10,952	171,681
1986-87	59,500 to 60,000	49,000						13,000	{ 149,000 to 151,000		{ 7,800 to 8,000		{ 172,000 to 175,000

*Provisional.

@'000 bales of 170 kg. each.

+'000 bales of 180 kg. each.

Source: Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

2.03. AVERAGE YIELD PER HECTARE OF SELECTED CROPS—ALL INDIA
(1951-52 to 1985-86)

(kilograms)

Year	Rice	Wheat	Jowar	Bajra	Maize	Total cereals	Gram	Total pulses (including gram)	Total food-grains	Ground-nut	Cotton (lint)	Jute	Sugar-cane (cane)
1951-52	714	653	381	246	627	557	496	448	536	649	85	1,074	31,786
1952-53	764	763	420	296	796	608	580	463	580	611	89	1,135	29,495
1953-54	902	750	455	373	785	678	606	489	640	811	100	1,129	31,497
1954-55	820	803	527	310	794	664	608	500	631	766	100	1,056	36,203
1955-56	874	708	387	302	704	639	504	476	605	752	88	1,082	32,779
1956-57	800	695	451	255	819	664	644	495	629	783	104	1,008	33,683
1957-58	790	682	499	324	772	630	538	424	587	734	105	1,025	34,325
1958-59	930	789	503	338	812	707	697	541	672	828	104	1,277	37,658
1959-60	937	772	484	327	938	713	544	475	662	708	86	1,197	36,414
1960-61	1,013	851	533	286	926	753	674	539	710	745	125	1,183	45,549
1961-62	1,028	890	440	323	957	763	609	485	705	725	103	1,248	42,349
1962-63	931	793	529	361	992	733	483	475	680	695	122	1,156	40,996
1963-64	1,034	730	501	349	995	757	481	416	687	769	119	1,260	46,353
1964-65	1,078	913	536	383	1,010	816	651	520	757	814	122	1,292	46,838
1965-66	862	827	429	314	1,005	675	527	438	629	554	104	1,062	43,717
1966-67	863	887	511	365	964	707	453	377	644	604	114	1,210	40,336
1967-68	1,032	1,103	545	405	1,123	840	721	534	783	759	123	1,293	76,665
1968-69	1,076	1,169	528	316	997	843	607	490	781	653	122	1,002	49,236

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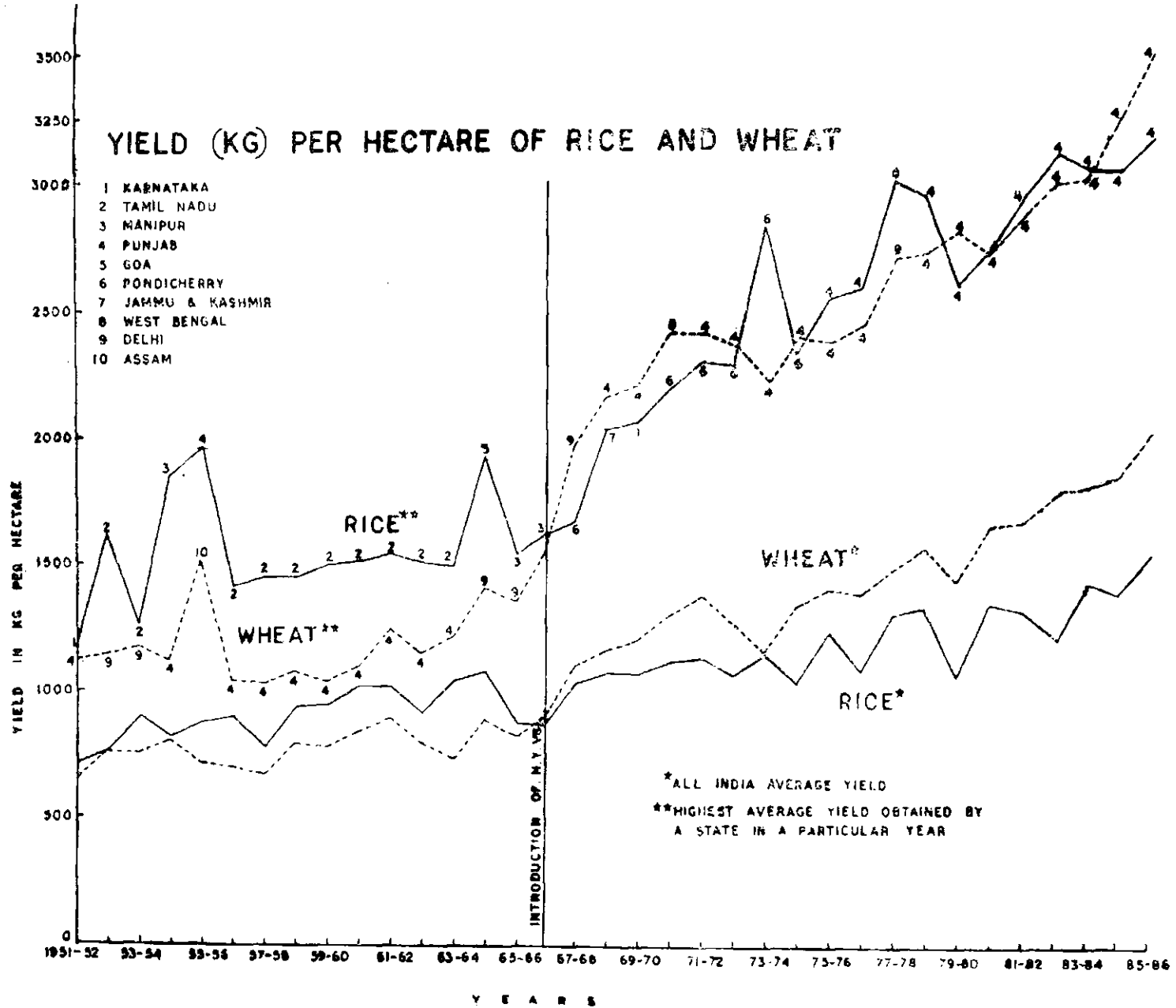
**2.03. AVERAGE YIELD PER HECTARE OF SELECTED CROPS—ALL INDIA
(1951-52 to 1985-86) (Concluded)**

(kilograms)

Year	Rice	Wheat	Jowar	Bajra	Maize	Total cereals	Gram	Total pulses (including gram)	Total food-grains	Ground-nut	Cotton (lint)	Jute	Sugar-cane (cane)
1969-70	1,073	1,209	522	426	968	865	715	531	805	720	122	1,326	49,121
1970-71	1,123	1,307	466	622	1,279	949	663	524	872	834	106	1,186	48,322
1971-72	1,141	1,380	460	432	900	936	642	501	858	823	151	1,255	47,511
1972-73	1,070	1,271	449	333	1,094	886	651	474	813	585	127	1,280	50,933
1973-74	1,151	1,172	544	540	965	918	528	427	827	845	142	1,412	51,163
1974-75	1,045	1,388	643	290	948	907	570	455	824	724	161	1,211	49,855
1975-76	1,235	1,410	591	496	1,203	1,041	707	533	944	935	138	1,367	50,903
1976-77	1,088	1,387	667	544	1,060	985	680	494	894	747	144	1,307	53,383
1977-78	1,308	1,480	739	426	1,051	1,100	678	510	991	886	157	1,210	56,160
1978-79	1,328	1,568	768	489	1,076	1,136	745	515	1,022	835	167	1,317	49,141
1979-80	1,074	1,436	699	373	979	982	481	385	876	805	162	1,310	49,354
1980-81	1,336	1,630	660	458	1,159	1,142	657	473	1,023	736	152	1,245	57,844
1981-82	1,308	1,691	727	470	1,162	1,157	590	483	1,032	972	166	1,480	53,859
1982-83	1,231	1,816	657	469	1,145	1,151	715	519	1,035	732	163	1,458	56,441
1983-84	1,457	1,843	725	653	1,352	1,296	663	548	1,162	940	141	1,498	55,978
1984-85	1,417	1,870	716	569	1,456	1,285	661	526	1,147	898	196	1,411	57,673
1985-86*	1,568	2,032	641	345	1,172	1,332	743	544	1,184	759	193	1,717	59,986

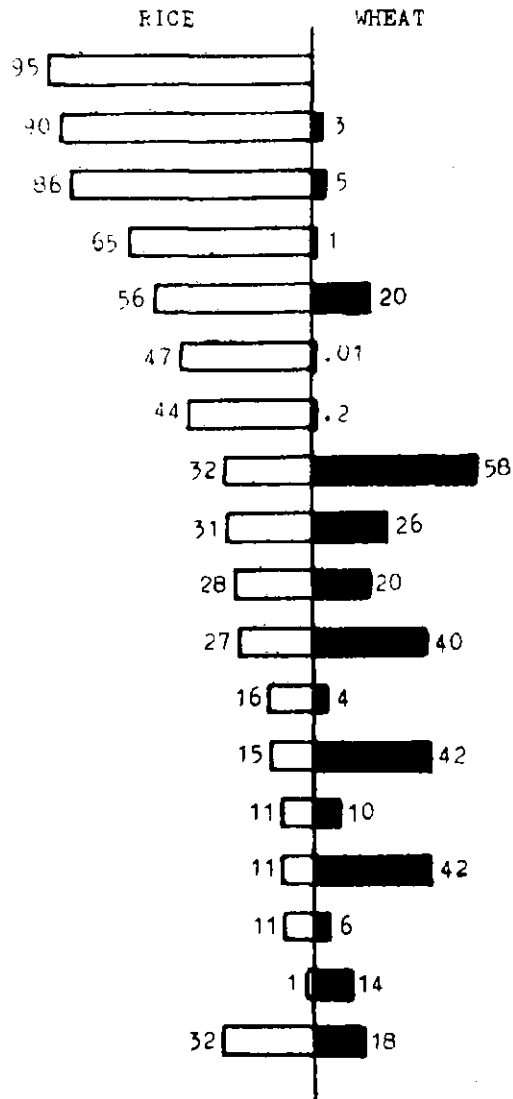
* Provisional.

Source: Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.



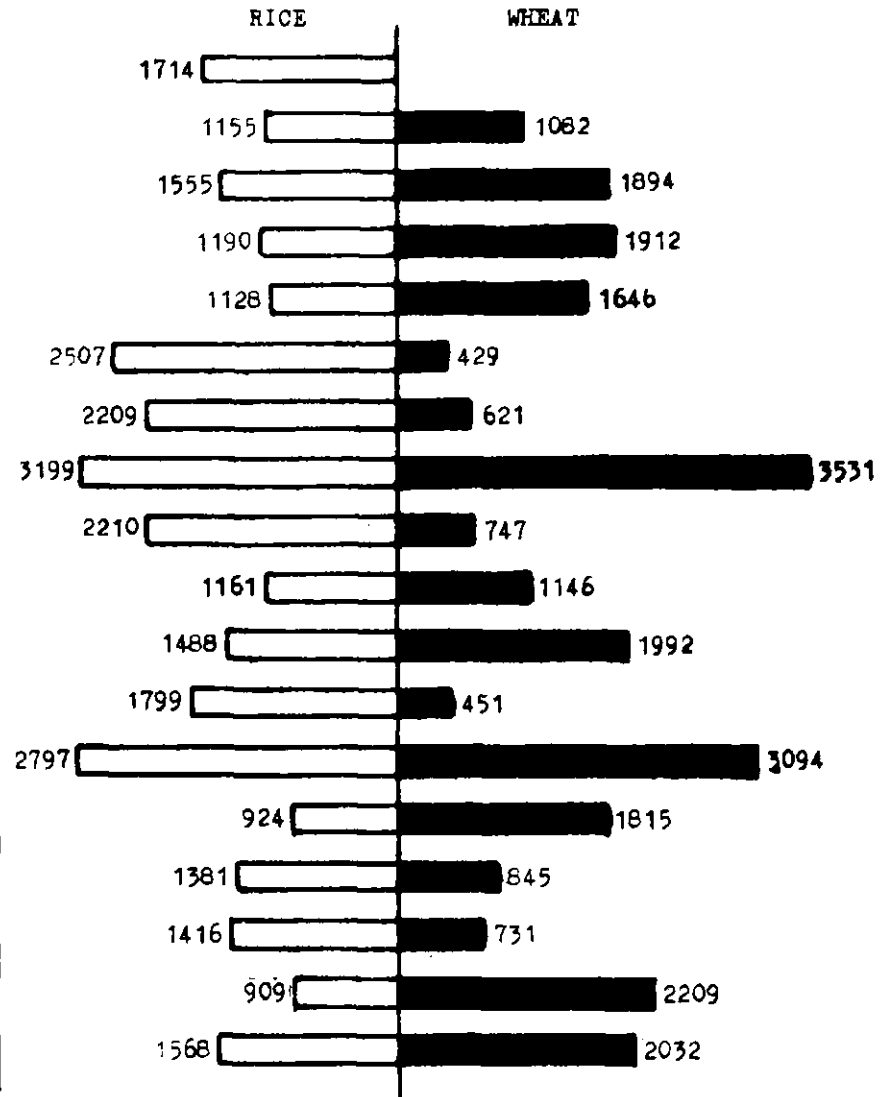
Area under Rice and Wheat to Total Area under Foodgrains and yield per hectare—1985-86

AREA UNDER RICE AND WHEAT (PER CENT)



KERALA
ASSAM
WEST BENGAL
ORISSA
BIHAR
TAMIL NADU
ANDHRA PRADESH
PUNJAB
JAMMU & KASHMIR
MADHYA PRADESH
UTTAR PRADESH
KARNATAKA
HARYANA
GUJARAT
HIMACHAL PRADESH
MAHARASHTRA
RAJASTHAN
ALL INDIA

YIELD PER HECTARE (KG)



**2.04. SEASONWISE AREA, PRODUCTION AND AVERAGE YIELD OF FOODGRAINS—ALL INDIA
1966-67 to 1985-86**

Year	Kharif foodgrains					Rabi foodgrains					Total foodgrains		
	Area (million hectares)	Percentage to total area	Production (million tonnes)	Percentage to total prodn.	Yield (kg/hectare)	Area (million hectares)	Percentage to total area	Production (million tonnes)	Percentage to total production	Yield (kg/hectare)	Area (million hectares)	Production (million tonnes)	Yield (kg/hectare)
1966-67	78.21	67.8	48.89	65.9	625	37.09	32.2	23.54	34.1	683	115.30	74.23	644
1967-68	81.49	67.1	60.76	63.9	746	39.93	32.9	34.29	36.1	859	121.42	95.05	783
1968-69	80.40	66.8	59.57	63.4	741	40.03	33.2	34.44	36.6	860	120.43	94.01	781
1969-70	82.30	66.6	62.35	62.7	758	41.27	33.4	37.15	37.8	900	123.57	99.50	805
1970-71	82.36	66.2	68.92	63.6	837	41.96	33.8	39.51	36.4	942	124.32	108.42	872
1971-72	79.22	64.6	62.99	59.9	795	43.40	35.4	42.18	40.1	972	122.62	105.17	858
1972-73	78.34	65.7	59.64	60.4	749	40.94	34.3	38.39	39.6	932	119.28	97.03	813
1973-74	84.12	66.5	67.83	64.8	806	42.42	33.5	36.83	35.2	868	126.54	104.66	827
1974-75	79.73	65.9	59.10	59.2	741	41.34	34.1	40.73	40.8	985	121.07	99.83	824
1975-76	83.15	64.9	73.89	61.1	889	45.03	35.1	47.15	38.9	1047	128.18	121.03	944
1976-77	81.18	65.3	66.53	59.8	819	43.17	34.7	44.64	40.2	1034	124.36	111.17	894
1977-78	82.88	65.0	77.72	61.5	938	44.64	35.0	48.69	38.5	1091	127.51	126.41	991
1978-79	82.85	64.2	78.08	59.2	942	46.16	35.8	53.83	40.8	1166	129.01	131.90	1022
1979-80	80.79	64.5	63.25	57.7	783	44.41	35.5	46.45	42.3	1046	125.21	109.70	876
1980-81	83.21	65.7	77.65	59.6	933	43.46	34.3	51.94	40.4	1195	126.67	129.59	1023
1981-82	83.93	65.0	79.38	59.6	946	45.21	35.0	53.92	40.4	1193	129.19	133.50	1032
1982-83	79.08	63.2	69.90	54.0	884	46.01	36.8	59.62	46.0	1296	125.09	129.52	1035
1983-84	84.14	64.2	89.23	58.6	1061	47.02	35.8	63.14	41.4	1343	131.16	152.37	1162
1984-85	81.18	64.1	84.52	58.1	1041	45.50	35.9	61.02	41.9	1341	126.67	145.54	1149
1985-86*	81.55	64.2	85.99	57.1	1054	45.51	35.8	64.48	42.9	1417	127.06	150.47	1184

*=Provisional

- Note:* 1. Kharif foodgrains include rice (Autumn & Winter), Jowar (Kharif), bajra, maize, ragi, small millets and other Kharif pulses.
2. Rabi foodgrains include rice (Summer), jowar (Rabi), barley, gram and other Rabi pulses.

Source: 'Area and production of principal In India',
Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

2.05. STATEWISE AREA, PRODUCTION AND AVERAGE YIELD PER

State/Area/ Production/Yield		Rice	Wheat	Jowar	Bajra	Maize	Ragi	Small millets	Barley
Andhra Pradesh	A	3467.7	13.2	1691.5	364.7	310.2	225.5	372.8	—
	P	7658.6	8.2	1120.8	218.7	476.3	225.7	151.9	—
	Y	2209	621	663	600	1535	1001	407	—
Assam	A	2464.1	92.9	—	—	19.5	—	9.9	—
	P	2846.1	100.5	—	—	12.1	—	5.1	—
	Y	1155	1082	—	—	621	—	515	—
Bihar	A	5383.6	1909.2	6.8	11.0	671.1	125.5	107.8	92.6
	P	6074.6	3143.2	5.8	6.7	956.1	94.9	67.7	70.2
	Y	1128.3	1646	853	609	1425	756	628	758
Gujarat	A	491.7	431.4	762.0	1315.5	316.5	44.8	112.0	6.7
	P	454.2	782.8	235.0	634.8	114.3	33.4	47.6	6.8
	Y	924	1815	308	483	361	746	425	1015
Haryana	A	585.0	1699.0	115.0	650.0	55.0	—	—	87.0
	P	1636.0	5257.0	28.0	317.0	69.0	—	—	156.0
	Y	2797	3094	243	488	1255	—	—	1793
Himachal Pradesh	A	90.8	359.6	0.2	—	299.5	7.4	19.8	32.6
	P	125.4	304.0	0.1	—	521.1	4.7	8.0	27.3
	Y	1381	845	500	—	1740	635	404	837
J & K	A	265.6	225.4	0.1	17.0	287.0	—	15.8	9.1
	P	587.1	168.7	0.1	6.2	493.9	—	12.1	5.1
	Y	2210	747	1000	365	1721	—	766	560
Karnataka	A	1040.7	272.9	749.6	458.7	163.7	998.7	265.0	—
	P	1871.8	123.0	738.1	216.5	406.5	1125.0	82.3	—
	Y	1799	451	985	472	2483	1126	311	—
Kerala	A	678.4	—	1.5	—	—	1.4	2.4	—
	P	1163.1	—	0.8	—	—	1.1	1.9	—
	Y	1714	—	533	—	—	786	792	—
Madhya Pradesh	A	4960.8	3602.3	1968.0	166.6	832.4	19.6	1375.3	148.2
	P	5759.4	4126.9	1816.2	90.0	702.7	5.4	373.0	129.6
	Y	1161	1146	923	540	844	276	271	874
Maharashtra	A	1540.6	881.5	6625.6	1702.8	75.9	221.7	173.1	9.3
	P	2181.8	644.4	3922.7	419.8	102.7	261.1	75.5	6.9
	Y	1416	731	592	247	1336	1178	436	742
Manipur	A	164.6	—	35.7	—	5.7	—	2.7	—
	P	332.5	—	35.0	—	14.6	—	2.6	—
	Y	2020	—	980	—	2561	—	963	—

HECTARE OF PRINCIPAL CROPS—1985-86 (Provisional)

A=Area in '000 hectares

P=Production in '000 tonnes

Y=Yield in kg/hectare

Total cereals	Gram	Tur (Arhar)	Total pulses	Total food-grains	Groundnut	Soya-bean	Total oil-seeds	Sugar-cane (cane)	Cotton @	Jute *
6445.6	46.8	262.7	1342.9	7788.5	1678.7	—	2199.1	131.8	600.0	—
9860.2	14.3	84.4	607.9	10468.1	1325.0	—	1429.5	5574.6	719.2	—
1530	306	321	453	1344	789	—	650	72645	204	—
2586.4	5.3	10.2	140.5	2726.9	—	—	317.4	47.8	4.3	129.6
2964.3	2.5	7.5	66.2	3030.5	—	—	150.1	1971.4	2.0	1178.2
1146	472	735	471	1111	—	—	473	41243	79	1636
8307.6	192.0	81.0	1216.2	9523.8	5.1	—	239.9	119.0	0.3	212.9
10419.2	161.0	94.0	821.5	11240.7	4.7	—	138.3	3937.0	0.5	1714.0
1254	839	1160	675	1180	922	—	576	33084	283	1449
3612.1	80.8	302.5	759.7	4371.3	1793.5	11.0	2363.6	90.8	1404.0	—
2428.8	45.5	223.4	343.2	2772.0	448.0	4.5	883.5	6489.6	1986.7	—
672	563	739	452	634	250	409	374	71471	241	—
3191.0	758.0	21.4	830.0	4021.0	6.2	—	354.2	106.0	344.0	—
7463.0	622.0	15.5	667.7	8130.7	5.6	—	282.3	5150.0	745.0	—
2339	821	724	804	2022	903	—	797	48585	3681	—
809.9	7.2	—	42.5	852.4	0.8	0.5	18.8	2.7	0.3	—
990.6	3.8	—	11.4	1002.0	0.9	0.1	4.7	30.3	0.4	—
1223	528	—	268	1176	1125	20.0	250	11222	2267	—
820.0	0.5	—	44.7	864.7	0.9	—	66.5	0.6	0.3	—
1272.9	0.2	—	27.7	1300.6	0.9	—	62.2	18.1	0.7	—
1552	400	—	620	1504	1000	—	935	30167	397	—
5242.1	169.9	387.5	1339.5	6581.6	856.1	—	11614.2	160.4	747.0	—
5157.4	53.1	164.7	432.4	5589.8	1031.8	—	1283.1	12574.0	502.8	—
984	313	425	323	849	1205	—	795	78392	114	—
683.7	—	0.2	28.5	712.2	10.1	—	24.2	7.8	6.3	—
1166.9	—	0.2	20.4	1187.3	10.4	—	13.9	421.9	10.2	—
1707	—	1000	716	1667	1030	—	574	54090	275	—
13073.2	2150.2	488.2	4928.4	18001.6	285.8	1047.0	2740.6	47.1	524.2	—
13003.2	1465.2	397.3	2477.5	14480.7	168.1	783.1	1368.7	1519.0	278.8	—
995	681	814	503	860	588	748	499	32251	90	—
11231.5	533.8	756.4	2859.7	14091.2	736.3	—	1259.6	265.3	2753.0	—
7614.9	175.6	451.3	1164.1	8779.0	578.9	—	1090.6	23705.6	1894.7	—
678	329	597	407	623	786	—	483	89354	117	—
170.3	—	—	—	170.3	—	—	4.1	1.7\$	0.6†	—
347.1	—	—	—	347.1	—	—	2.1	60.0\$	1.7†	—
2038	—	—	—	2038	—	—	512	35294	482	—

(Continued)

2.05. STATEWISE AREA, PRODUCTION AND AVERAGE YIELD PER

State/Area/ Production/Yield		Rice	Wheat	Jowar	Bajra	Maize	Ragi	Small millets	Barley
Meghalaya	A	111.4	3.7	—	—	17.8	—	—	—
	P	125.2	5.2	—	—	24.2	—	—	—
	Y	1124	1405	—	—	1360	—	—	—
Nagaland	A	120.8	—	—	—	17.5	—	—	—
	P	130.0	—	—	—	15.0	—	—	—
	Y	1076	—	—	—	857	—	—	—
Orissa	A	4369.7	55.9	—	8.8	163.7	285.8	138.5	—
	P	5202.2	106.9	—	10.1	172.6	211.9	89.0	—
	Y	1190	1912	—	1148	1054	741	643	—
Punjab	A	1703.0	3113.0	—	31.0	260.0	—	—	48.0
	P	5448.0	10992.0	—	27.0	412.0	—	—	105.0
	Y	3199	3531	—	871	1585	—	—	2188
Rajasthan	A	131.4	1773.5	983.6	4764.2	973.0	—	34.4	326.4
	P	119.4	3918.0	375.0	731.0	643.5	—	1.0	574.2
	Y	909	2209	381	153	661	—	29	1759
Sikkim	A	15.9	10.1	—	—	38.1	5.0	—	1.0
	P	16.5	16.2	—	—	47.6	4.3	—	1.4
	Y	1038	1604	—	—	1249	860	—	1400
Tamil Nadu	A	2233.3	0.7	759.0	330.0	19.6	244.4	273.2	—
	P	5599.9	0.3	692.8	367.6	42.0	358.4	148.3	—
	Y	2507	429	213	1114	2143	1466	543	—
Tripura	A	280.6	2.1	—	—	—	—	—	—
	P	389.6	3.3	—	—	—	—	—	—
	Y	1388	1571	—	—	—	—	—	—
Uttar Pradesh	A	5510.2	8275.2	656.1	864.2	1261.7	148.9	234.6	599.5
	P	8197.9	16482.7	433.9	633.4	1521.5	170.0	209.7	852.5
	Y	1488	1992	661	733	1206	1142	894	1422
West Bengal	A	5037.1	305.1	0.3	0.3	56.3	13.9	9.0	17.5
	P	7833.7	578.0	0.2	0.1	103.4	9.6	4.5	16.2
	Y	1555	1894	667	333	1837	691	500	926
Andaman & Nicobar Islands	A	12.7	—	—	—	—	—	—	—
	P	28.2	—	—	—	—	—	—	—
	Y	2220	—	—	—	—	—	—	—
Arunachal Pradesh	A	108.0	3.8	—	—	28.1	—	21.7	—
	P	117.6	6.6	—	—	32.6	—	16.2	—
	Y	1089	1737	—	—	1160	—	747	—

HECTARE OF PRINCIPAL CROPS—1985-86 (Provisional) (Continued)

A=Area in '000 hectares

P=Production in '000 tonnes

Y=Yield in kg/hectare

Total cereals	Gram	Tur (Arhar)	Total pulses	Total food-grains	Ground-nut	Soya-bean	Total oil-seeds	Sugar-cane (cane)	Cotton @	Jute •
135.6	0.2	1.5	3.3	138.9	—	1.2	8.5	0.2	8.8	6.3
157.2	0.1	1.4	2.8	160.0	—	1.0	5.3	7.2	5.2	48.1
1159	500	933	848	1152	—	833	624	36000	100	1374
138.3	—	—	9.6	147.9	0.5	0.7	7.8	3.2	—	0.1
145.0	—	—	7.2	152.2	0.5	0.3	6.0	96.0	—	0.6
1048	—	—	750	1029	1000	429	769	30000	—	1080
5058.1	46.9	118.2	1649.8	6707.9	348.4	—	1048.0	57.0†	3.2	55.0
5827.7	25.7	92.9	910.8	6738.5	493.8	—	850.0	3700.0†	3.2	484.0
1152	548	786	552	1005	1417	—	811	64912	170	1584
5155.0	108.0	39.6	224.3	5379.3	46.0	—	207.2	78.0	558.0	—
16984.0	98.0	43.5	203.1	17187.1	44.0	—	198.4	5050.0	1402.0	—
3295	907	1098	905	3195	957	—	958	64744	427	—
8986.5	1940.7	23.1	3878.9	12865.4	245.0	42.7	1727.9	26.5	331.1	—
6362.1	1623.1	5.9	1756.2	8118.3	149.6	31.8	841.7	1009.6	474.3	—
708	836	255	453	631	611	744	487	38098	242	—
70.1	—	—	9.5	79.5	—	4.1	10.6	—	—	—
86.0	—	—	9.5	95.5	—	5.3	9.2	—	—	—
1227	—	—	1000	1201	—	1293	868	—	—	—
3860.2	8.8	155.5	914.8	4775.0	1141.3	—	1321.8	205.3	260.7	—
7200.3	5.5	90.9	355.2	7564.0	1151.2	—	1225.6	22165.0	549.0	—
1865	625	585	388	1524	1009	—	927	107963	358	—
282.7	0.4	0.5	5.7	288.4	1.0	—	6.8	1.8	1.4	3.9
392.9	0.2	0.3	2.5	395.4	0.7	—	3.8	64.9	1.5	28.5
1390	500	600	438	1371	700	—	559	36056	182	1315
17550.4	1534.7	539.4	3158.9	20709.3	143.6	193.0	1937.9	1490.4	28.4	9.4
28501.7	1326.7	737.8	2807.3	31309.0	120.7	155.0	1056.3	73058.1	26.9	108.5
1624	864	1368	889	1512	840	803	545	49019	161	2078
5439.5	68.7	15.5	418.2	5857.7	8.2	0.3	371.6	12.9	0.1	730.7
8545.7	59.8	14.0	261.9	8807.6	7.2	0.2	233.8	812.1	0.2	7389.8
1571	870	903	626	1504	878	667	629	62953	340	1820
12.7	—	—	0.6	13.3	—	—	—	—	—	—
28.2	—	—	0.3	28.5	—	—	—	—	—	—
2220	—	—	500	2143	—	—	—	—	—	—
161.6	—	—	—	161.6	—	0.9	11.3	—	0.2S	—
173.0	—	—	—	173.0	—	0.6	8.1	—	0.1S	—
1070	—	—	—	1070	—	667	717	—	85	—

(Continued)

2.05. STATEWISE AREA, PRODUCTION AND AVERAGE YIELD PER

State/Area/ Production/Yield		Rice	Wheat	Jowar	Bajra	Maize	Ragi	Small millets	Barley
Dadra & Nagar Haveli	A	11.0	0.1	0.8	—	—	2.5	0.7	—
	P	18.8	0.2	0.6	—	—	3.7	0.5	—
	Y	1709	2000	750	—	—	1480	714	—
Delhi	A	3.7	43.1	8.8	2.9	0.1	—	—	0.6
	P	8.1	116.9	3.8	1.9	0.1	—	—	1.0
	Y	2189	2712	432	655	1000	—	—	1667
Goa, Daman & Diu	A	53.8	—	—	0.3	—	8.6	—	—
	P	130.4	—	—	0.4	—	10.6	—	—
	Y	2424	—	—	1333	—	1209	—	—
Mizoram	A	49.0	—	—	—	5.6	—	—	—
	P	45.3	—	—	—	5.8	—	—	—
	Y	924	—	—	—	1036	—	—	—
Pondicherry	A	26.2	—	—	0.6	—	0.8	0.1	—
	P	51.0	—	—	2.3	—	2.4	0.1	—
	Y	1947	—	—	3833	—	3000	1000	—
All-India	A	40911.6	23073.7	15788.9	10688.6	5879.0	2354.5	3168.5	1378.5
	P	64152.9	46884.7	10123.0	3683.5	6889.6	2522.1	1297.0	1952.2
	Y	1568	2032	641	345	1172	1071	409	1416

@ = Production in '000 bales of 170 kg. each.

* = Production in '000 bales of 180 kg. each.

† = Relates to 1984-85.

HECTARE OF PRINCIPAL CROPS—1985-86 (Provisional) (Concluded)

A=Area in '000 hectares

P=Production in '000 tonnes

Y=Yield in kg/hectare

Total cereals	Gram	Tur (Arhar)	Total pulses	Total food-grains	Ground-nut	Soya-bean	Total oil-seeds	Sugar-cane (cane)	Cotton @	Jute *
15.3	0.2	2.0	5.0	20.3	—	—	0.3	—	—	—
23.8	0.2	1.2	3.3	27.1	—	—	0.1	—	—	—
1556	1000	600	660	1335	—	—	333	—	—	—
59.2	0.7	0.6	3.0	62.2	—	—	1.5	0.1†	—	—
131.8	0.6	0.2	1.4	133.2	—	—	0.2	Neg†	—	—
2226	857	333	467	2141	—	—	133	Neg	—	—
62.7	—	—	—	62.7	—	—	—	1.6	—	—
141.2	—	—	—	141.2	—	—	—	67.2	—	—
2252	—	—	—	2252	—	—	—	42000	—	—
54.6	—	—	0.9	55.5	—	—	3.7	1.0†	—	—
51.1	—	—	0.3	51.4	—	—	1.3	3.5†	—	—
936	—	—	333	926	—	—	351	3500	—	—
22.7	—	—	3.1	30.8	3.3	—	4.0	2.9	1.7	—
55.8	—	—	2.2	58.0	4.6	—	5.1	195.4	7.5	—
2014	—	—	710	1883	1394	—	1275	67379	750	—
103243.6	7653.8	3206.0	23818.2	127061.8	7310.8	1301.4	18871.1	2862.0	7581.1	1147.9
137505.0	5683.1	2426.4	12964.0	150469.0	5546.9	981.9	11153.9	171681.0	8612.4	10951.7
1332	743	757	544	1184	759	754	591	59986	193	1717

§ = Relates to 1982-83.

Source: Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

2.06. TEA- AREA, PRODUCTION AND AVERAGE YIELD PER HECTARE—1984, 1985 and 1986

	Area (in hectares)			Production ('000 kg)			Average yield (kg/ha)		
	1984	1985*	1986	1984	1985	1986*	1984	1985*	1986@*
Assam	214,741	216,117		338,533	352,538	335,977	1,576	1,631	1,555
West Bengal	97,518	98,015		148,293	157,371	142,842	1,521	1,606	1,457
Tripura	6,239			3,273			525		
Bihar	460			11			24		
Uttar Pradesh	1,804			407			226		
Himachal Pradesh	3,212			865			269		
Manipur	89	12,128	N. A.	—	7,238	6,323	—	597	521
Sikkim	228			46			202		
Arunachal Pradesh	5			—			—		
Nagaland	8			—			—		
Orissa	10			—			—		
Total North India	324,314	326,260		491,428	517,147	485,142	1,515	1,585	1,487
Tamil Nadu	36,888	36,978		86,127	84,853	86,742	2,335	2,295	2,346
Kerala	35,003	34,760		58,179	53,104	48,616	1,662	1,528	1,399
Karnataka	1,924	1,931		4,130	3,910	4,146	2,147	2,025	2,147
Total South India	73,815	73,669		148,436	141,867	139,504	2,011	1,926	1,894
Total all India	398,129	399,929		639,864	659,014	624,646	1,607	1,648	1,562

* Provisional.

@Based on 1985 area.

Source: Tea Board, Calcutta.

2.07. COFFEE—AREA, PRODUCTION AND AVERAGE YIELD PER HECTARE
1981-82 to 1984-85

State	T.A.=Total area in '000 ha P.A.=Plucked area in '000 ha P=Production in '000 MT Y=Yield in kg/ha	1981-82	1982-83	1983-84	1984-85
Andhra Pradesh	TA	5.7	5.8	7.4	
	PA	—	—	—	
	P	0.4	0.5	0.5	
	Y	@	@	@	
Karnataka	TA	115.0	119.9	122.9	
	PA	108.4	110.2	113.1	
	P	101.9	100.0	79.3	128.0
	Y	940	907	701	
Kerala	TA	57.9	62.4	64.0	
	PA	55.1	60.0	61.6	
	P	32.7	15.4	9.6	46.9
	Y	59.3	25.7	15.6	
Tamil Nadu	TA	32.8	32.4	31.6	
	PA	28.4	28.7	28.7	
	P	14.9	14.0	15.5	14.5
	Y	525	488	546	
Other States	TA	5.6	6.3	6.5	
	PA	2.0	2.1	4.0	
	P	0.1	0.1	0.1	0.6
	Y	@	@	@	
All-India	TA	217.0	226.8	232.4	
	PA	193.9	201.0	207.1	N.A.
	P	150.0	130.0	105.0	190.0
	Y	774	647	507	

@=Negligible.

N.A.=Not available.

Source: 'Area and Production of Principal Crops in India—1984-85; Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

**2.00. RUBBER-- AREA, PRODUCTION AND AVERAGE YIELD PER HECTARE
1983-84 to 1985-86**

State	Total area ('000 hectares)			Tappable area ('000 hectares)			Production (tonnes)			Average yield (kg/hectare)		
	1983-84	1984-85	1985-86*	1983-84	1984-85	1985-86*	1983-84	1984-85	1985-86*	1983-84	1984-85	1985-86*
Kerala	294.3	312.0	326.7	187.7	193.3	205.8	162,212	172,092	184,563	864	890	897
Tamil Nadu	16.3	16.5	16.7	10.6	10.7	10.5	9,736	10,603	11,025	917	991	1,044
Karnataka	10.1	10.8	11.2	5.2	5.4	5.6	2,785	3,095	4,090	538	577	729
Others	11.0	12.5	14.7	1.0	1.1	1.4	547	660	787	—	—	563
All India	331.7	351.8	369.3	204.5	210.5	223.3	175,280	186,450	200,465	857	886	898

* Provisional.

Source: Rubber Board, Kottayam, Kerala.

**2.09. AREA, PRODUCTION AND YIELD PER HECTARE OF FRUITS AND
CONDIMENTS—1982-83 to 1985-86**

Crop	A=Area in '000 hectares P=Production in '000 tonnes Y=Yield in kg/ha	1982-83	1983-84	1984-85	1985-86
Arecanut@	A	184	186	186	186
	P	202	189	219	224
	Y	858	822	1,179	1,202
Banana	A	285	283	302	302
	P	4,221	4,648	5,248	5,292
	Y	14,817	16,429	17,388	17,506
Black Pepper	A	110	107	109	108
	P	27	23	18	30
	Y	214	212	167	280
Cardamom	A	103	113	114	115
	P	8	9	9	9
	Y	74	79	81	82
Chillies (Dry)	A	818	808	795	878
	P	539	566	630	709
	Y	659	701	793	808
Coconut*	A	1,149	1,166	1,183	1,209
	P	6,356	5,808	6,913	6,620
	Y	5,531	4,983	5,841	5,476
Coriander	A	423	436	388	360
	P	189	164	120	107
	Y	447	375	309	298
Garlic	A	63	81	73	58
	P	245	311	269	187
	Y	3,864	3,854	3,701	3,224
Guarseed	A	2,451	2,723	2,516	2,198
	P	610	1,015	702	390
	Y	249	373	279	177
Ginger (Dry)	A	44	49	52	53
	P	94	121	134	130
	Y	2,149	2,478	2,600	2,439
Onion	A	235	270	278	268
	P	2,427	2,699	3,099	2,870
	Y	10,330	9,982	11,139	10,728
Opium	A	31	19	25	N.A.
	P	1.3	0.6	1.0	N.A.
	Y	41	30	39	—
Sweet Potato	A	217	216	192	183
	P	1,587	1,586	1,628	1,508
	Y	7,323	7,351	8,468	8,224
Tapioca	A	302	319	305	270
	P	5,341	5,886	5,662	4,472
	Y	17,709	18,429	18,546	16,577
Turmeric	A	86	94	102	105
	P	168	212	259	324
	Y	1,938	2,255	2,534	3,099

* = Production of coconut is in terms of million nuts, while its yield is in term of number of nuts per hectare.

@ = Production of arecanut is in '000 tonnes of dried nuts without husk (Processed nuts), while yield of arecanut has been calculated in kgs per thousand bearing palms.

Source: Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

**2.10. STATEWISE IRRIGATED AND UNIRRIGATED YIELD OF PRINCIPAL CROPS—
1981-82 to 1983-84**

(kg/hectare)

Zone/State	Crop Season	Irrigated			Unirrigated		
		1981-82	1982-83	1983-84	1981-82	1982-83	1983-84
I. Rice							
East							
Assam	Autumn	1,296	1,274	2,217	814	912	847
	Winter	1,524	1,266	1,275	1,107	1,278	1,237
	Summer	944	948	1,089	965	824	1,272
Bihar	Autumn	—	—	—	—	—	—
	Winter	—	—	901	—	—	—
	Summer	—	—	453	—	—	—
Orissa	Autumn	922	—	1,220	670	—	727
	Winter	1,281	—	1,637	925	—	1,195
	Summer	1,399	—	1,739	—	—	—
West Bengal	Aus	1,741	—	2,620	936	—	1,270
	Early Aman	1,208	—	2,676	835	—	1,647
	Aman Winter	1,301	—	2,662	940	—	1,949
	Summer	2,537	—	3,857	1,563	—	2,738
North							
Himachal Pradesh		1,456	1,226	1,546	980	673	1,269
Punjab	Autumn	2,997	3,116	3,070	844	822	1,726
Uttar Pradesh	Early	1,463(KH)	—	—	967(KH)	—	—
	Late	—	—	1,623	—	—	—
South							
Andhra Pradesh	Kharif	2,104	2,195	2,154	1,036	857	1,193
	Rabi	2,338	2,329	2,370	—	—	—
Karnataka	Kharif	1,565	1,608	2,214	1,449	1,295	1,664
	Rabi	1,463	1,135	1,873	1,457	1,379	—
	Summer	2,622	2,419	2,369	—	—	—
Kerala	Autumn	1,491	2,316	1,797	1,637	1,651	1,521
	Winter	1,821	1,746	—	1,539	1,502	—
	Summer	1,707	1,749	1,787	2,439	2,709	2,175
Tamil Nadu	I+II	—	—	2,098	—	—	906
	Crop	—	—	1,939	—	—	1,227
West							
Gujarat		1,972	1,772	1,932	1,195	631	1,091
Madhya Pradesh	Autumn	1,123	1,054	1,458	776	690	935
Maharashtra	Autumn	1,559	1,230	1,806	1,625	1,325	1,561
	Summer	1,529	1,726	—	—	—	—
Rajasthan	Kharif	2,001	—	1,818	687	—	1,073
II. Wheat							
East							
Assam		—	—	2,073	1,151	1,173	1,301
Bihar		—	—	—	—	—	—
West Bengal		1,428	—	1,982	878	—	1,339

(Continued)

**2.10. STATEWISE IRRIGATED AND UNIRRIGATED YIELD OF
PRINCIPAL CROPS (Continued)
1981-82 to 1983-84**

(kg/hectare)

Zone/State	Crop Season	Irrigated			Unirrigated		
		1981-82	1982-83	1983-84	1981-82	1982-83	1983-84
North							
Haryana		2,402	2,574	2,546	1,537	1,556	1,492
Himachal Pradesh		1,672	—	1,524	1,351	—	848
Jammu & Kashmir		—	—	—	—	—	—
Punjab		3,028	3,082	3,093	1,560	1,753	1,597
Uttar Pradesh		1,755	—	2,027	1,115	—	1,249
South							
Karnataka		1,038	832	1,458	444	360	354
West							
Gujarat		2,402	2,574	2,546	1,537	1,556	1,492
Madhya Pradesh		1,600	1,694	1,753	812	877	910
Maharashtra		1,168	1,075	1,288	530	464	571
Rajasthan		1,895	—	1,681	871	—	956
III. Jowar							
North							
Haryana		344	313	235	167	202	45
South							
Andhra Pradesh	Kharif	1,011	1,957	2,371	579	628	505
	Rabi	1,657	1,950	1,713	600	701	612
Karnataka	Kharif	354	960	2,645	689	475	1,137
	Rabi	1,102	573	1,107	573	445	525
Tamil Nadu		—	—	1,529	—	—	582
West							
Gujarat	Kharif	1,348	990	944	511	339	497
	Rabi	—	1,409	1,485	938	1,032	764
Madhya Pradesh		934	—	—	827	656	946
Maharashtra	Kharif	—	—	—	1,074	—	—
	Rabi	—	891	956	—	316	385
IV. Bajra							
North							
Haryana		898	1,001	866	411	480	563
Punjab		1,080	1,174	1,235	672	889	1,114
South							
Andhra Pradesh		1,357	838	1,573	715	484	632
Karnataka		237(K)	316	1,353(K)	435(K)	336	525(K)
Tamil Nadu		—	—	2 085	—	—	747

(Continued)

**2.10. STATEWISE IRRIGATED AND UNIRRIGATED YIELD OF
PRINCIPAL CROPS (Continued)
1981-82 to 1983-84**

(kg/hectare)

Zone/State	Crop Season	Irrigated			Unirrigated		
		1981-82	1982-83	1983-84	1981-82	1982-83	1983-84
West							
Gujarat	Kharif	1,248	1,103	1,544	924	656	1,008
	Summer	—	—	—	—	—	—
Madhya Pradesh		1,719	1,776	473	397	524	638
Maharashtra		865	570	1,123	433	313	483
Rajasthan	Kharif	1,048	—	774	160	—	480
V. Maize							
East							
West Bengal		—	—	—	1,169	—	1,182
North							
Haryana		1,044	1,033	1,077	946	786	1,066
Himachal Pradesh		1,606	2,125	1,867	1,764	1,505	2,231
Punjab		1,899	2,050	1,905	1,170	855	1,459
South							
Andhra Pradesh	Kharif	2,430	2,937	2,151	1,662	2,034	1,162
	Rabi	2,786	—	2,733	—	—	—
Karnataka	Kharif	—	—	3,052	—	—	3,162
	Rabi	—	—	2,984	—	—	—
West							
Gujarat		2,112	1,362	—	1,193	929	1,477
Madhya Pradesh		1,034	1,711	—	995	1,076	1,403
Maharashtra	Kharif	1,018	1,316	1,197	834	685	687
	Rabi	1,358	1,400	—	1,893	590	—
Rajasthan		1,136	—	836	833	—	1,399
VI. Groundnut							
East							
Orissa	Kharif	1,019	—	—	752	—	—
	Rabi	865	—	—	844	—	—
North							
Punjab		1,002	943	751	891	659	682
South							
Andhra Pradesh	Kharif	—	1,363	1,001	—	601	880
	Rabi	1,432	1,355	1,493	1,232	1,014	1,226
Karnataka	Kharif	875	794	1,108	655	—	700
	Rabi/Summer	1,746	1,774	1,799	1,509	—	1,592
Tamil Nadu		1,722	—	1,381	1,020	—	922

(Continued)

**2.10. STATEWISE IRRIGATED AND UNIRRIGATED YIELD OF
PRINCIPAL CROPS (Concluded)
1981-82 to 1983-84**

(kg/hectare)

Zone/State	Crop Season	Irrigated			Unirrigated		
		1981-82	1982-83	1983-84	1981-82	1982-83	1983-84
West							
Gujarat	Kharif	1,119	1,780	856	865	767	766
Madhya Pradesh		899	781	—	734	476	745
Maharashtra		1,753(S)	1,331(S)	—	643(Kh)	594(Kh)	859
Rajasthan		1,671(K)	—	844	993(Kh)	918	—
VII. Sugarcane							
East							
Assam		—	—	—	41,250	38,379	—
Bihar		—	—	—	—	—	39,185
West Bengal		64,940	—	53,947	52,778	—	42,249
North							
Punjab		53,078	53,348	56,092	39,343	41,424	38,054
South							
Andhra Pradesh	Planted	87,649	76,486	66,230	49,542	40,810	48,220
	Ratoon	76,589	71,976	67,380	48,400	44,000	37,520
Karnataka		85,000	84,000	78,000	—	—	52,000
Tamil Nadu		100,000	—	91,574	—	—	—
West							
Maharashtra		96,870(Kh)	96,300	90,000	—	—	—
Rajasthan		38,473	—	42,431	26,240	—	28,761
VIII. Cotton (Lint)							
North							
Punjab		296	270	518	100	164	406
South							
Andhra Pradesh		—	—	518	—	—	328
Karnataka		121	374	495	32	76	76
Tamil Nadu		387	—	474	68	—	71
West							
Gujarat		370	339	—	143	110	—
Maharashtra		163(Kh)	160	103	82(Kh)	95	46
Rajasthan		212(Kh)	—	726	79(Kh)	—	271

Kh = Kharif

R = Rabi

S = Summer

Source: Area and production of principal crops in India 1984-85, DES, Govt. of India, New Delhi.

**2.11 CONVERSION RATIOS BETWEEN AGRICULTURAL RAW MATERIALS
AND PROCESSED PRODUCTS**

Raw materials	Processed products
Rice	
Rice (cleaned) production	2/3 of paddy production
Cotton	
Cotton lint production	1/3 of <i>kapas</i> production
Cotton seed production	2/3 of <i>kapas</i> production
	2 times of cotton lint production
Jute	
100 yards of hessian	54 lb. of raw jute
4,148 yards of hessian	1 ton of raw jute
	5.55 bales of raw jute (of 180 kg each)
1 ton of sacking	1.11 tons of raw jute
	6.17 bales of raw jute (of 180 kg each)
1 ton of hessian, sacking	1.05 tonnes of raw jute
	5.85 bales of raw jute (of 180 kg each)
Groundnut	
Kernel to nuts in shell	70 per cent
Oil nuts in shell	28 " "
Oil to kernels crushed	40 " "
Cake to kernels	60 " "
Sesamum	
Oil seeds to crushed	40 " "
Cake to seeds crushed	60 " "
Rape and mustard	
Oil to seeds crushed	33 " "
Cake to seeds crushed	67 " "
Linseed	
Oil to seeds crushed	33 " "
Cake to seeds crushed	67 " "
Caster seed	
Oil to seeds crushed	37 " "
Cake to seeds crushed	63 " "
Cotton seed	
Oil to seeds crushed	14 to 18 per cent
Cake to seeds crushed	82 to 86 " "
Coconut	
Copra to nuts	One tonne of copra 6,773 nuts
Oil to copra crushed	62 per cent
Cake to copra crushed	38 " "

(Continued)

**2.11. CONVERSION RATIOS BETWEEN AGRICULTURAL RAW MATERIALS
AND PROCESSED PRODUCTS (Concluded)**

Raw materials	Processed products		
<i>Niger seed</i>			
Oil to seeds crushed	28	per	cent
Cake to seeds crushed	72	"	"
<i>Kardi seed</i>			
Oil to seeds crushed	40	"	"
Cake to seeds crushed	60	"	"
<i>Mahuwa seed</i>			
Oil to seeds crushed	36	"	"
Cake to seeds crushed	64	"	"
<i>Neem seed</i>			
Oil to kernels crushed	45 to 50	per	cent
Cake to kernel crushed	50 to 55	per	cent
<i>Soyabean seed</i>			
Oil to soyabean seed crushed	18	per	cent
Meal to soyabean seed crushed	73	"	"
Hull from soyabean seed crushed	8	"	"
Wastage from soyabean crushed	1	"	"
<i>Sugar</i>			
Gur from cane crushed	10	per	cent
Crystal sugar from gur refined (gur refineries)	62.4	"	"
Crystal sugar from cane crushed (cane factories)	9.97	"	"
Khandsari sugar from gur refined	37.5	"	"
Molasses from cane crushed	3.5	"	"
Cane thrash from cane harvested	10.0	"	"
<i>Lac</i>			
Seed lac	66.0	per cent of	stick lac
Shellac	57.4	per cent of	stick lac or 87.0 per cent of seed lac
<i>Cashew nuts</i>			
Cashew	25	per cent of	cashew nuts
<i>Butter and ghee</i>			
Butter from mixed milk	6.9	per	cent
Ghee from mixed milk	5.5	"	"

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

Source: *Indian Agriculture in Brief*, Nineteenth Edition, Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

3.00. INDEX NUMBER

3.01. ALL INDIA INDEX NUMBERS OF AREA PRODUCTION & YIELD OF PRINCIPAL CROPS 1970-71, 83-84 to 85-86

(Base: Triennium ending 1969-70=100)

Crops	Area				Production				Yield			
	1970-71	83-84	84-85	85-86*	1970-71	83-84	84-85	85-86*	1970-71	83-84	84-85	85-86*
Rice	101.5	111.6	111.4	110.7	107.4	153.7	149.2	164.1	105.8	137.7	133.9	148.2
Jowar	93.5	88.3	85.7	84.8	82.3	120.7	115.5	102.5	88.0	126.7	134.8	120.9
Bajra	103.7	95.1	85.3	85.9	168.2	161.9	126.7	77.2	162.2	170.2	148.5	89.9
Malze	102.3	100.1	99.1	100.4	126.1	128.8	137.2	112.0	123.3	128.7	138.4	111.6
Small Millets	100.0	75.5	66.7	65.8	109.6	92.0	65.6	71.2	109.6	121.9	98.4	108.2
Wheat	114.9	155.4	148.4	145.3	132.1	251.9	244.1	259.7	115.0	162.1	164.5	178.7
Barley	86.1	47.1	42.6	46.8	96.6	63.7	54.1	67.8	112.2	135.2	127.0	144.9
Cereals	102.0	107.7	104.1	103.3	114.1	167.1	160.5	167.8	110.4	145.2	142.8	150.6
Gram	101.7	93.1	89.8	99.5	99.7	91.2	87.6	109.1	98.0	98.0	97.6	109.6
Tur	101.2	121.6	119.2	121.1	105.8	144.8	145.3	136.4	104.5	119.1	121.9	112.6
Others Pulses	103.3	115.0	110.8	113.2	109.3	133.3	116.3	115.3	105.8	115.9	105.0	101.9
Total Pulses	102.5	108.1	104.4	109.3	104.4	116.5	108.4	116.1	102.0	109.5	103.3	107.1
Foodgrains	102.0	107.8	104.2	104.4	112.9	161.1	154.3	161.7	109.4	149.6	148.2	155.5
Groundnut	101.0	103.9	98.8	100.8	118.4	137.4	124.8	107.6	117.2	132.2	123.3	106.7
Seasamum	98.9	89.4	85.9	91.0	128.2	127.0	118.3	112.6	129.6	142.1	137.7	123.7
Rapeseed & Mustard	107.3	121.8	125.4	119.6	132.3	173.9	204.9	176.0	123.3	142.8	163.4	147.2
Linseed	107.8	84.6	79.4	79.5	114.9	107.7	94.3	90.3	106.6	127.3	118.8	113.6
Castorseed	106.5	151.1	162.5	155.0	113.4	336.8	391.1	254.1	106.5	222.9	140.7	163.9

Oil seeds	101.8	104.7	102.1	103.1	116.1	138.5	144.6	128.9	112.8	128.5	136.2	120.4
Cotton Lint	97.8	99.2	94.8	97.4	85.1	114.0	151.8	153.7	87.0	114.9	160.1	157.8
Jute	103.3	104.8	114.9	158.3	99.6	127.4	131.6	220.6	96.4	121.6	114.5	139.4
Mesta	107.5	95.4	96.1	113.0	113.7	120.4	108.1	152.8	105.8	126.2	112.5	135.2
Fibres	98.5	98.8	95.8	102.2	89.3	116.2	145.1	166.1	89.9	117.0	148.5	153.7
Tea	101.8	113.9	114.5	114.5@	106.4	147.7	162.5	167.0	104.5	129.7	141.9	145.9
Coffee	105.0	180.2	181.8	181.8@	170.1	161.9	303.8	303.8@	162.0	89.8	167.1	167.1@
Rubber	113.3	163.9	168.7	179.0	127.1	242.0	257.5	276.8	112.2	147.7	152.6	154.6
Plantation Crops	104.9	140.8	142.8	145.7	114.8	157.1	185.3	190.6	111.3	125.7	146.9	150.1
Pepper (Black)	88.5	95.8	97.6	96.4	94.6	98.1	78.7	131.3	106.9	102.4	80.6	136.2
Chillies (Dry)	101.5	112.9	111.0	122.6	96.9	130.7	145.5	163.6	95.5	115.8	131.1	133.4
Ginger (Dry)	110.1	138.0	197.8	204.8	108.7	428.8	473.2	459.6	98.7	228.1	239.2	224.4
Potatoes	95.0	166.6	178.1	177.9	112.0	291.2	301.2	256.3	117.9	174.8	169.1	144.1
Fruit & Vegetables	98.7	134.8	137.8	133.3	103.4	118.9	197.5	169.1	105.3	142.1	143.4	128.2
Sugarcane (Gur)	107.1	128.9	122.4	118.6	106.4	146.0	142.8	144.0	99.3	113.3	116.7	121.4
Tobacco	103.0	101.3	100.6	92.3	101.8	138.3	136.4	123.4	98.8	136.5	135.6	133.7
Non-Foodgrains	104.1	111.4	108.3	109.3	108.6	146.4	155.3	150.0	104.8	124.3	133.5	128.9
All Crops	102.5	108.7	105.2	105.6	111.5	156.4	154.8	158.0	107.9	141.0	143.1	146.3

Source: Directorate of Economic & Statistics; Ministry of Agriculture, New Delhi.

*Provisional, @=Repeated & provisional.

3.02. INDEX NUMBERS OF WHOLESALE PRICES
(Base: 1970-71=100)

Weight	Primary Articles						Manufactured Products							All Commodities
	Total	Food Articles		Non-food articles	Minerals	Fuel Power, Light & Lubricants	Total	Food Products	Textiles	Chemicals & Chemical Products	Basic Metals Alloys & Metal Products	Machinery & Transport Equipment		
1	2	3	4	5			6	7	8	9	10	11	12	13	14
41.67	29.80	12.92	10.62	1.25	8.46	49.87	13.32	11.03	5.55	5.97	6.72	100.00		

Last week of

1971-72	100	101	108	95	120	110	115	129	112	103	111	108	108.2
1972-73	119	116	127	124	140	112	125	151	119	107	118	115	121.5
1973-74	160	150	160	158	414	189	151	166	153	135	174	135	158.0
1974-75	172	171	199	146	423	206	170	175	158	178	178	168	173.9
1975-76	149	142	146	133	449	229	163	154	145	168	187	172	162.6
1976-77	179	165	161	181	469	232	177	185	167	172	191	169	182.1
1977-78	179	172	172	165	481	243	176	160	176	175	198	177	182.7
1978-79	182	170	171	177	506	251	189	166	187	181	221	196	191.1
1979-80	217	189	192	203	1000	304	232	247	212	215	260	227	232.0
1980-81	249	218	225	228	1175	400	267	313	219	251	302	249	270.7
1981-82	261	235	235	233	1115	438	264	248	228	264	334	273	277.1
1982-83	282	263	264	250	989	484	275	247	241	273	367	282	295.3
1983-84	308	281	267	301	1011	509	301	298	264	285	389	291	321.7
1984-85	322	297	276	307	1025	559	331	322	286	304	469	313	346.3
1985-86	331	321	303	277	1031	609	391	339	264	319	479	347	359.2

(Continued)

3.02. INDEX NUMBERS OF WHOLESALE PRICES (Concluded)

(Base: 1970-71=100)

	Primary articles						Manufactured products						All commodities
	Total	Food articles		Non-food articles	Minerals	Fuel power, light & lubricants	Total	Food products	Textiles	Chemicals & chemical products	Basic metals alloys & metal products	Machinery & transport equipment	
		Total	Food-grains										
Weight	41.77	29.80	12.92	10.62	1.25	8.46	49.87	13.32	11.03	5.55	5.97	6.72	100.00
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1985-86													
April	325	300	275	314	1030	560	336	326	288	307	475	328	350.5
May	328	306	278	307	1030	566	339	333	287	309	477	333	353.7
June	334	317	282	297	1030	569	342	343	284	309	478	335	357.5
July	340	327	292	293	1030	569	346	362	281	309	478	336	362.3
August	340	330	300	287	1030	572	347	366	280	309	477	337	363.1
September	329	320	303	274	1030	572	345	358	276	309	478	337	357.6
October	332	320	305	282	1030	573	348	366	272	308	477	338	350.0
November	331	320	304	278	1030	573	342	348	272	308	476	338	357.9
December	330	319	300	277	1030	588	340	338	268	310	477	341	356.4
January	329	316	299	283	1030	594	342	341	270	311	479	341	357.5
February	330	318	303	282	1030	606	341	337	267	319	476	343	356.9
March	331	321	306	280	1031	609	341	339	265	319	473	346	359.8
1986-87													
April	335	326	296	277	1031	612	345	343	266	320	472	350	368.0
May	341	333	291	282	1032	614	350	359	268	321	476	351	368.6
June	343	335	293	287	1032	618	356	379	268	323	476	352	372.1
July	352	343	297	296	1032	618	360	390	268	326	476	354	378.3
August	357	345	301	306	1024	618	362	397	267	327	476	354	381.6
September	353	341	301	308	1024	618	365	409	266	329	477	355	381.5
October	359	347	304	314	1024	620	366	413	266	331	477	355	384.8
November	357	346	308	308	1024	620	361	330	267	320	477	355	381.0
December	353	339	299	315	1024	620	358	375	270	332	476	355	378.0

Note: Figures from April 1986 are provisional.

Source: "Economic Survey 1986-87", Government of India, New Delhi.

4.00. IMPORT AND AVAILABILITY

4.01. IMPORTS OF PRINCIPAL COMMODITIES
1983-84 to 1985-86

(Rs. Crores)

Commodity	1983-84	1984-85(P)	1985-86(P)
I. Food and Live animals chiefly for Food (excl. cashew raw) of which:	1018.1	694.8	N.A.
Cereals and cereals preparations	808.5	242.0	88.9
II. Raw Materials Intermediate Manufactures	11094.5	12895.8	N.A.
(a) Cashew nuts (unprocessed)	22.1	38.8	21.7
(b) Crude rubber including synthetic & reclaimed	82.5	87.2	81.8
(c) Fibres of which:	250.7	233.9	N.A.
(i) Synthetic & regenerated fibres (man-made fibres)	104.8	60.3	55.7
(ii) Raw wool	62.8	71.2	79.1
(iii) Raw cotton	1.3	—	6.6
(iv) Raw jute	4.6	31.8	5.0
(d) Petroleum oil and lubricants	4832.0	5409.1	4990.0
(e) Animal and vegetable oils and fats of which:	798.2	1007.8	N.A.
(i) Edible oils	727.5	921.1	614.3
(f) Fertilisers and chemical products of which:	1458.5	2771.6	N.A.
(i) Fertilisers and fertiliser materials	256.5	1346.1	1340.77
(ii) Chemical elements and compounds	659.9	856.7	879.4
(iii) Dyeing, tanning and colouring material	31.5	41.5	68.0
(iv) Medicinal and pharmaceutical products	146.9	137.1	163.6
(v) Plastic materials, regenerated cellulose and artificial resins	198.9	222.8	291.5
(g) Pulp and waste paper	95.0	176.2	236.0
(h) Paper, paper board and manufactures thereof	156.6	195.5	195.2
(i) Non-metallic mineral manufactures of which:	1277.3	1114.3	1187.7
Pearls, precious and semi-precious stones, unworked or worked	1097.9	1032.1	1106.3
(j) Iron and steel	1048.7	941.1	1230.9
(k) Non-ferrous metals	390.6	411.7	468.5
III. Capital Goods	3322.3	3167.8	3683.7
(a) Manufactures of metals	148.7	140.8	185.8
(b) Non-electrical machinery, apparatus and appliances	2051.3	1927.7	2478.57
(c) Electrical machinery, apparatus and appliances	675.4	730.4	567.14
(d) Transport equipment	446.9	368.9	452.22
IV. Others (Unclassified)	396.6	375.8	N.A.
Total	15831.5	17134.2	19746.8

(P) = Provisional

NA = Not available.

Source: "Economic Survey 1986-87"—Govt. of India, New Delhi.

Commodity	Unit of quantity	1983-84(P)		1984-85(P)		1985-86(P)	
		Qty.	Value	Qty.	Value	Qty.	Value
I. Agricultural & Allied Products¹		—	2621.85	—	2996.33	—	N.A.
of which:							
1. Coffee	Mill. kgs.	71.0	181.74	67.5	210.22	84.2	235.64
2. Tea and mate	Mill. kgs.	193.9	515.17	213.9	766.69	213.8	611.91
3. Oil cakes	'000 tonnes	978.8	151.58	828.9	136.92	665.1	123.54
4. Tobacco	Mill. kgs.	93.8	178.09	93.7	178.34	71.3	146.69
5. Cashew Kernels	'000 tonnes	36.9	150.79	32.7	179.68	37.5	215.33
6. Spices	'000 tonnes	58.0	116.67	103.0	206.67	84.2	255.00
7. Sugar & Sugar preparations	'000 tonnes	983.4	175.30	278.4	36.13	19.6	10.99
8. Raw Cotton	'000 tonnes	115.1	157.00	40.7	59.73	32.4	65.82
9. Rice	'000 tonnes	175.6	113.63	247.7	169.19	245.1	192.94
10. Fish & fish preparations	'000 tonnes	85.4	359.31	90.4	381.37	93.4	388.60
11. Meat & meat preparations	Value	—	71.71	—	82.50	—	72.19
12. Vegetable oils	Value	—	29.96	—	55.18	—	38.09
13. Fruits, vegetables & pulses Excluding cashew Kernels	Value	—	129.99	—	183.13	—	175.16
II. Ores and Minerals of which:		—	506.23	—	637.61	—	N.A.
14. Manganese ore	'000 tonnes	358.4	13.42	621.4	23.61	379.2	16.88
15. Mica	Mill. kgs.	48.8	19.16	16.4	19.57	18.2	20.90
16. Iron ore	Mill. kgs.	22.1	401.56	25.5	459.44	27.0	554.59
Total	Value	—	9770.71	—	11743.68	—	11011.96

(P) Provisional.

¹ Also includes plantations and other agricultural based items.

Source: Extracted from "Economic Survey—1986-87" Govt. of India, New Delhi.

Note: Total includes the items not listed here.

4.03. IMPORT AND VALUE OF CEREALS
(on Govt. of India account)

Quantity : '000 tonnes

Value : Rs. crores

Year	Rice	Wheat	Total cereals*	C&F value**
1955	265	435	711	33.11
1956	325	1,095	1,443	56.34
1957	748	2,898	3,646	162.39
1958	397	2,716	3,224	120.51
1959	295	3,553	3,864	141.41
1960	699	4,386	5,137	192.84
1961	384	3,092	3,495	129.56
1962	390	3,250	3,640	141.09
1963	483	4,073	4,556	183.60
1964	645	5,621	6,266	266.25
1965	783	6,183	7,462	290.32
1966	787	7,784 + 48‡	10,358	523.13@
1967	453	6,348 + 52‡	8,672	532.16@
1968	446	4,766	5,694	361.20@
1969	487	3,090	3,872	253.01@
1970	206	3,425	3,631	207.55@
1971	240	1,814	2,054	123.46@
1972	131	314	445	24.29@
1973	—	2,414	3,614	319.52@
1974	—	4,203	4,874	463.04@
1975	130	7,016	7,407	1,057.50@
1976	244	6,95‡	6,515	982.24@
1977	NA	NA	555	78.16@
1978	—	—	—	—
1979	—	—	—	—
1980	5	19‡	48	5.83@
1981	78	114	855	166.55@
1982	—	1,952	2,091	408.02@
1983	465	3,729	4,104	821.36@
1984	381	689	2369	473.59@
1985	—	—	—	—

* Besides rice and wheat, it includes wheat flour, milo (sorghum) and maize (corn).

** C&F value is for total cereals.

@ The relatively higher value of imports is due to the devaluation of rupee on 6-6-1966.

N.A. = Not available.

Source: *Bulletin on Food Statistics 1985* - Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi

4.04. EXPORT OF FOODGRAINS FROM INDIA AND THEIR VALUE

Quantity : '000 tonnes
Value ; Rs. crores

Year	Rice	Wheat flour & atta	Total cereals		Total foodgrains	
			Quantity*	Value	Quantity	Value
1955	101.90	2.08	113.06	5.94	113.06	5.94
1956	42.55	0.34	44.34	2.27	44.34	2.27
1957	0.18	0.03	0.21	0.02	6.16	0.35
1958	0.65	—	0.65	0.08	6.53	0.45
1959	0.12	Neg.	0.24	0.02	6.84	0.52
1960	0.02	Neg.	0.03	Neg.	7.34	0.59
1961	0.02	Neg.	0.03	Neg.	6.85	0.51
1962	0.16	—	0.17	0.02	9.77	0.81
1963	2.85	—	2.16	0.30	18.42	1.56
1964	2.83	0.03	3.06	0.28	14.33	1.22
1965	2.77	1.11	5.34	0.67	12.89	1.49
1966	2.29	0.21	8.56	0.95	33.15	4.03
1967	4.42	0.10	6.64	1.00	13.17	2.00
1968	2.61	0.23	6.49	0.91	22.83	3.44
1969	15.44	0.28	26.03	4.11	48.45	7.44
1970	27.29	18.57	52.09	6.95	83.89	11.46
1971	15.85	3.34	27.67	2.92	44.41	6.67
1972	15.18	1.24	26.55	4.48	33.66	5.98
1973	17.59	1.43	23.68	4.27	27.31	5.12
1974	41.43	—	45.12	22.10	48.03	22.67
1975	18.68	—	20.35	10.50	24.50	11.94
1976	37.90	—	43.02	13.80	48.25	15.59
1977	17.48	—	17.59	4.90	18.04	4.91
1978	143.00	683.00	830.00	135.20	832.10	135.60
1979	333.00	14.00	347.00	93.80	347.00	94.00
1980-81	727.35	64.36	797.59	35.10	798.68	35.45
1981-82	872.53	1.42	918.37	376.28	919.32	376.72
1982-83	35.57	Neg.	41.79	218.91	43.77	219.76
1983-84@	—	24.35	24.35	—	—	—
1984-85@	—	32.41	32.41	NA	NA	NA
1985-86@	—	336.95	336.95	—	—	—

*Besides rice and wheat flour, it includes jowar, bajra, milo. (sorghum) and other sorts of grain and flour.

N.A. = Not available.

Neg. = Negligible.

@ = On GOI's account only.

Note: Difference between "Total foodgrains" and "Total cereals" accounts for Pulses in respective category of "quantity" and "Value".

Source: "Bulletin on Food Statistics—1985" Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

4.05. INTERNAL PROCUREMENT, PUBLIC DISTRIBUTION, SUPPLIES AND STOCKS OF FOODGRAINS

'000 tonnes

Year	Internal procurement	Public distribution			Total supplies of foodgrains from Central Pool	Closing stock		
		Through State Govt.	From Central Depot	Total		With State Govt.	With Central Depot	Total
1951	3,826	7,991	—	7,991	N. A.	1,330	—	1,330
1956	37	570	1,512	2,082	2,049	108	211	319
1961	541	1,348	2,629	3,977	3,386	330	2,306	2,636
1966	4,009	9,580	4,505	14,085	11,481	1,332	884	2,216
1971	8,857	3,243	4,573	7,816	6,395	1,498	6,639	8,137
1972	7,665	4,693	5,794 +909*	10,487 +909*	9,801	968	2,475	3,443
1973	8,424	6,622	4,792	11,414	9,803	1,175	1,959	3,134
1974	5,645	6,782	4,008	10,790	8,513	1,116	1,614	2,730
1975	9,563	6,993	4,260	11,253	9,178	2,647	5,642	8,289
1976	12,853	4,840	4,334	9,174	6,822	4,265	1,4697	16,964
1977	9,974	5,743	5,986	11,729	9,297	3,493	13,853	17,346
1978	11,098	4,328	5,855	10,183	8,742	3,232	13,928	17,160
1979	13,837	5,463	6,200	11,663	10,045	2,982	14,537	17,519
1980	11,171	6,639	8,354	14,993	13,867	3,119	8,620	11,739
1981	12,975			13,014	11,855	3,217	8,281	11,498
1982	15,419			14,768	13,060	3,140	9,626	12,766
1983	15,571			16,206	14,661	3,397	12,092	15,489
1984‡	18,723			13,326	12,133	4,916	17,635	22,551
1985‡	20,079			15,447	14,366	7,374	16,805	24,179

* Exports to Bangladesh

‡ Provisional

Source: "Bulletin on Food Statistics, 1985", Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

4.06. NET AVAILABILITY OF CEREALS AND PULSES (1956-1986)

Year	Population (million)	Cereals				Pulses	Per capita net availability per day (in gms)		
		Net production million tonnes)	Net Import (million tonnes	Change in government stocks (million tonnes)	Net availability** (million tonnes)	Net availability (million tonnes)	Cereals	Pulses	Total
1	2	3	4	5	6	7	8	9	10
1956	397.3	50.43	1.39	(-) 0.60	52.42	10.23	360.5	70.4	430.9
1961	442.4	60.89	3.49	(-) 0.17	64.55	11.14	399.7	69.0	468.7
1962	452.2	61.85	3.64	(-) 0.36	65.85	10.24	399.0	62.0	461.1
1963	462.0	60.19	4.55	(-) 0.02	64.76	10.08	384.0	59.8	443.8
1964	472.1	61.79	6.26	(-) 1.24	69.29	8.81	401.0	51.0	452.0
1965	482.6	67.33	7.45	(+) 1.06	73.72	10.85	418.6	61.6	480.2
1966	493.2	54.60	10.34	(+) 0.14	64.80	8.68	360.0	48.2	408.2
1967	504.2	57.65	8.66	(-) 0.26	66.57	7.30	361.7	39.7	401.4
1968	515.4	72.58	5.69	(-) 2.04	76.23	10.57	404.1	56.0	460.1
1969	527.0	73.14	3.85	(+) 0.46	76.53	9.09	397.9	47.3	445.2
1970	538.9	76.83	3.58	(+) 1.12	79.29	10.20	403.1	51.9	455.0
1971	551.3	84.53	2.21	(+) 2.57	83.99	10.32	417.5	51.2	486.8
1972	563.9	82.32	(-) 0.49	(-) 4.69	86.52	9.70	419.1	47.0	466.1
1973	576.8	76.23	3.59	(-) 0.31	80.13	8.66	380.5	41.1	421.6
1974	590.0	82.82	5.16	(-) 0.40	88.38	8.76	410.4	40.8	451.2
1975	603.5	78.59	7.54	(+) 5.56	80.56	8.76	365.1	39.7	405.5
1976	617.2	94.50	0.67	(+) 10.74	84.42	11.42	373.8	50.5	424.3
1977	631.3	87.33	0.08	(-) 1.63	83.03	9.96	386.4	43.3	429.6
1978	645.7	100.13	(-) 0.82	(-) 0.65	99.56	10.69	422.5	45.5	468.0

(Continued)

4.06. NET AVAILABILITY OF CEREALS AND PULSES (1956-1986) (Concluded)

Year	Population (million)	Cereals				Pulses	Per capita net availability per day (in gms)		
		Net production (million tonnes)	Net import (million tonnes)	Change in government stocks (million tonnes)	Net availability** (million tonnes)	Net availability (million tonnes)	Cereals	Pulses	Total
1	2	3	4	5	6	7	8	9	10
1979	660.3	104.75	(-) 0.33	(+) 0.36	104.07	10.79	431.8	44.7	476.5
1980	675.2	88.49	(-) 0.48	(-) 5.78	93.79	7.63	379.5	30.9	410.4
1981*	690.1	104.09	0.52	(-) 0.24	104.85	9.44	416.2	37.5	453.7
1982*	705.2	106.56	1.58	(+) 1.33	106.81	10.07	414.8	39.2	455.0
1983*	720.3	102.95	4.07	(-) 2.66	104.36	10.38	396.9	39.5	436.4
1984*	735.6	122.05	2.37	(+) 7.06	117.35	11.28	436.1	41.8	477.9
1985*	750.9	116.88	(-) 0.34	(+) 2.58	113.96	10.47	415.9	38.1	454.0
1986*	766.1	120.32	(-) 0.03	(-) 2.03	122.32	11.34	437.5	40.6	478.1

* Provisional.

** Net availability = (Col. 3 + 4 - 5).

- Notes:*
1. Population figures from 1971 to 1980 are based on the latest projections made by the office of the Registrar General of India. Estimates from 1981 onwards are based on the Expert Committee's population projections as approved by the Planning Commission.
 2. Production figures relate to agricultural year July-June: 1956 figures correspond to the production of 1955-56 and so on for subsequent years.
 3. Net production has been taken as 87.5% of the gross production, 12.5% being provided for feed, seed requirements and wastage.
 4. Figures in respect of change in stocks with traders and producers are not known. The estimates of net availability above should not, therefore, be taken to be strictly equivalent to consumption.
 5. Per capita net availability for 1985 has been calculated taking into consideration the figures of the net imports and change in stocks as on 1-12-1986.

Source: "Economic Survey 1986-87", Govt. of India, New Delhi

**4.07. NET AVAILABILITY, PROCUREMENT AND PUBLIC DISTRIBUTION OF
FOODGRAINS (1956 to 1986)**

Year	Net production of food-grains (million tonnes)	Net imports (million tonnes)	Net@ availability of food-grains (million tonnes)	Procurement (million tonnes)	Public distribution (million tonnes)	Col. 3 as % of Col 4	Col. 5 as % of Col. 2	Col. 6 as % of Col. 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1956	60.67	1.37	62.64	0.04	2.08	2.2	0.1	3.3
1961	72.04	34.9	75.69	0.54	3.98	4.6	0.7	5.3
1962	72.10	3.63	76.08	0.48	4.37	4.8	0.7	5.7
1963	72.29	4.54	74.85	0.75	5.18	6.1	1.1	6.9
1964	70.61	6.25	78.11	1.43	8.67	8.0	2.0	11.1
1965	78.20	7.44	84.57	4.03	10.08	8.8	5.2	11.9
1966	63.30	10.31	73.48	4.01	14.09	14.1	6.3	19.2
1967	64.95	8.66	73.87	4.46	13.17	11.7	6.9	17.8
1968	83.17	5.67	86.81	6.81	10.22	6.6	8.2	11.8
1969	82.26	3.82	85.62	6.38	9.39	4.5	7.8	11.0
1970	87.06	3.55	89.49	6.71	8.84	4.0	7.7	9.9
1971	94.87	2.01	94.31	8.86	7.82	2.1	9.3	8.3
1972	92.02	(-)0.50	96.22	7.67	10.49	(-)0.5	8.3	10.9
1973	84.90	3.59	88.79	8.42	11.41	4.0	9.9	12.8
1974	91.58	5.16	97.14	5.65	10.97	5.3	6.2	11.1
1975	87.35	7.54	89.33	9.56	11.25	8.4	10.9	12.6
1976	105.90	0.67	95.83	12.85	9.17	6.6	12.1	9.0
1977	97.27	0.10	59.00	9.87	11.73	0.1	10.2	11.8
1978	110.61	(-)0.60	110.25	11.10	10.18†	(-)0.5	10.0	9.2
1979	114.41	(-)0.20	114.85	13.84	11.66†	(-)0.2	12.0	10.2
1980	95.99	(-)0.34	101.43	11.17	14.99†	(-)0.3	11.6	14.8
1981	113.39	0.63	114.29	12.98	13.01†	0.6	11.4	11.4
1982	116.63	1.58	116.88	15.42	14.77†	1.4	13.2	12.6
1983*	113.33	4.07	114.74	15.67	16.21†	3.6	13.8	14.1
1984*	133.33	2.37	128.63	18.72	13.34†	1.8	14.0	10.4
1985*	127.35	(-)0.34	124.42	20.09	15.80†	(-)0.3	15.8	12.7
1986*	131.66	(-)0.03	133.66	17.82£	15.81†	neg	13.5	11.8

*Provisional.

£=Up to Nov. 1986

@Net availability=Net production + Net imports - change in Government stocks.

† Includes quantities released under the Food for Work Programme.

Note: Production figures relate to agricultural year; 1956 figures correspond to 1955-56, and so on.
Figures for procurement and public distribution relate to calendar years.

Source: "Economic Survey 1986-87", Government of India, New Delhi.

5.00. STORAGE CAPACITY

5.01. CENTRAL AND STATE WAREHOUSES AND THEIR CAPACITY
(as on 30-9-1985)

State/Union Territory	No. of warehouses		Capacity ('000 tonnes)	
	Central	State	Central	State
Andhra Pradesh	52	70*	879	419*
Assam	5	30	33	151
Bihar	17	38	137	255
Gujarat	26	49	234	158
Haryana	16	79**	193	758**
Karnataka	19	93**	140	265**
Kerala	5	69*	49	151*
Madhya Pradesh	25	172**	389	789**
Maharashtra	60	117	569	523
Orissa	8	47	93	125
Punjab	35	127	534	1,637
Rajasthan	7	82	108	394
Tamil Nadu	30	70	496	442
Uttar Pradesh	53	117	695	1,258
West Bengal	44	39@	482	214@
Meghalaya	Nil	2**	Nil	4**
Mizoram	1	Nil	1	Nil
Nagaland	1	Nil	11	Nil
Tripura	1	Nil	17	Nil
Union Territories	14	Nil	171	Nil
Total	419	1,201	5,211	7,513

- @ = Relates to June 1985
 * = Relates to July 1985
 ** = Relates to August 1985
 Neg. = Negligible

Source: "Bulletin of Food Statistics 1985", Ministry of Agriculture, New Delhi.

5.02. STORAGE ACCOMMODATION AVAILABLE WITH THE FOOD CORPORATION OF INDIA—STATEWISE

('000 tonnes)

State	1-1-84			28-10-85			C.A.P. storage available with FCI
	Owred	Hired	Total	Owred	Hired	Total	
Andhra Pradesh	520	953	1,473	581	964	1,544	364
Assam	201	167	368	185	100	285	—
Bihar	338	348	686	340	285	625	—
Delhi	168	15	183	169	15	184	23
Gujarat + Kandla	158	334 + 38	492 + 38	197 + 35	427 + 16	624 + 51	599 + 94
Haryana	382	582	964	634	1,178	1,812	169
Himachal Pradesh	—	15	15	—	17	17	—
Jammu & Kashmir	24	9	33	33	12	45	—
Karnataka	95	198	293	98	189	287	15
Kerala	386	34	420	445	31	476	—
Madhya Pradesh	663	554	1,217	691	875	1,566	219
Maharashtra	952	351	1,033	941	456	1,397	213
NEF Region	27	32	59	22	39	61	—
Orissa	202	126	328	212	137	349	—
Punjab	1,700	1,968	3,668	1,831	2,489	4,320	732
Rajasthan	405	482	887	431	578	1,009	259
Tamil Nadu	524	458	982	576	337	913	45
Uttar Pradesh	1,072	1,233	2,305	1,112	1,995	3,017	1,241
West Bengal	705	754	1,459	715	727	1,442	—
Sikkim	—	1	1	—	1	1	—
Total	8,522	8,652	17,174	9,248	10,867	20,115	3,973

C. A.P. = Covered and Plinth

Source: "Bulletin on Food Statistics 1985", Ministry of Agriculture, New Delhi.

**5.03 AGENCYWISE STORAGE ACCOMMODATION AVAILABLE WITH
THE FOOD CORPORATION OF INDIA**

('000 tonnes)

Agency	As on				
	1-1-1981	1-1-1982	1-1-1983	1-1-1984	28-10-1985
F.C.I.					
a) Owned	7,745.55	7,875.61	8,064.02	8,521.73	9,247.59
b) Hired from					
i) State Govt.	684.13	693.75	720.08	758.66	894.27
ii) ARDC	5,118.32	5,025.92	4,547.97	3,937.18	2,756.38
iii) Private Party	642.43	508.81	505.19	1,328.60	2,872.48
iv) C.W.C.	804.60	942.98	1,188.55	1,672.73	2,033.57
v) S.W.S.	777.34	774.94	705.93	960.36	2,310.93
Total	15,772.37	15,792.01	15,731.74	17,174.26	10,867.73
C.A.P.					
Owned	1,239.47	1,296.01	1,164.23	1,015.52	1,418.01
Hired	4,292.89	1,512.13	1,204.23	526.61	2,554.81
Total	5,532.36	2,808.14	2,368.46	1,542.13	3,972.82
Grand Total	21,304.73	18,600.15	18,100.20	18,716.39	24,088.04

C.A.P. = Covered and Plinth

Source: "Bulletin on Food Statistics 1985", DES, Ministry of Agriculture, New Delhi.

5.04. STATEWISE COOPERATIVE GODOWNS AS ON 31-3-87

Sl. No.	Name of the States/UTs/others	No. of godowns sanctioned			No. of godowns completed		
		Rural	Marketing	Capacity (in tonnes)	Rural	Marketing	Capacity (in tonnes)
1.	Andhra Pradesh	3,797	619	667,650	3,490	532	609,000
2.	Assam	1,020	282	356,940	516	183	149,330
3.	Bihar	1,511	579	504,250	834	428	357,850
4.	Gujarat	1,930	444	384,250	1,787	390	366,560
5.	Haryana	1,589	355	611,600	1,434	323	516,960
6.	Himachal Pradesh	1,727	206	205,400	1,438	151	166,050
7.	Jammu & Kashmir	170	58	32,750	99	38	20,450
8.	Karnataka	4,659	929	876,620	3,246	746	647,320
9.	Kerala	1,859	129	261,928	1,547	111	193,375
10.	Madhya Pradesh	5,507	826	1,020,600	3,877	726	796,100
11.	Maharashtra	4,163	1,380	1,396,300	3,356	1,061	958,770
12.	Manipur	227	18	33,530	129	14	21,980
13.	Meghalaya	81	68	41,400	49	53	30,450
14.	Mizoram	—	5	825	—	—	—
15.	Nagaland	10	12	9,000	10	7	5,250
16.	Orissa	2,227	636	480,780	1,728	488	353,190
17.	Punjab	4,649	849	2,086,940	3,865	793	1,856,390
18.	Rajasthan	4,365	314	475,920	3,871	249	409,770
19.	Tripura	225	24	29,700	112	16	15,150
20.	Tamil Nadu	4,363	341	681,660	4,232	332	6 0,769
21.	Uttar Pradesh	8,746	768	1,814,750	8,454	284	1,102,100
22.	West Bengal	2,536	483	378,560	1 206	313	196,060
23.	Union Territories	10	23	27,700	—	8	12,150
Total		55,361	9,348	12,379,053	45,280	7,246	9,425,014

Source: National Cooperative Development Corporation, New Delhi.

6.00. POPULATION AND AGRICULTURAL ECONOMY

6.01. AREA, POPULATION, PERCENTAGE SHARE OF RURAL TO TOTAL POPULATION AND DENSITY (1961, 1971 and 1981 Census)

State/Union Territory	Area ('000 sq. km.)	1961*		1971**		1981**	
		Total popula- tion ('000)	%age of rural to total population	Total popula- tion ('000)	%age of rural to total population	Total popula- tion ('000)	%age of rural to total population
Andhra Pradesh	275£	35,983	82.56	43,503	80.69	53,550	76.68
Assamφ	78	10,837	92.79	14,625	91.13	19,897	89.71
Bihar	174£	46,448	91.57	56,353	90.00	69,915	87.53
Gujarat	196£	20,633	74.23	26,697	71.92	34,086	68.90
Haryana	44£	7,591	82.77	10,037	82.34	12,922	78.12
Himachal Pradesh	56	2,812	92.66	3,460	93.01	4,281	92.39
Jammu & Kashmir ^{++@}	222	3,561	83.33	4,617	81.41	5,987	78.95@
Karnataka	192	23,587	77.67	27,299	75.90	37,136	71.11
Kerala	39£	16,904	84.39	21,347	83.76	25,454	81.26
Madhya Pradesh	443£	32,372	85.71	41,654	83.71	52,179	79.71
Maharashtra	308£	39,554	71.78	50,412	68.83	62,784	64.97
Manipur	22	780	91.32	7,073	86.87	1,421	73.58
Meghalaya	22£	769	84.73	1,012	85.45	1,336	81.93
Nagaland	17	369	94.81	516	90.05	775	84.48
Orissa	156	17,549	93.68	21,945	91.59	26,370	88.21
Punjab	50	11,135	76.94	13,551	76.27	16,789	72.32
Rajasthan	342	20,156	83.72	25,766	82.37	34,262	78.95
Sikkim	7	162	95.78	210	90.63	316	83.85
Tamil Nadu	130£	33,687	73.31	41,199	69.74	48,408	67.05
Tripura	10	1,142	90.98	1,556	89.57	2,053	89.01
Uttar Pradesh	249£	73,755	87.15	88,341	85.98	110,862	82.05
West Bengal	89£	34,926	75.55	44,312	75.25	54,581	73.53
Andaman & Nicobar Islands	8	64	77.85	115	77.23	189	73.70
Arunachal Pradesh	84£	337	100.00	468	96.30	932	93.44
Chandigarh	0.1	120	17.20	257	9.45	451	6.37
Dadra & Nagar Haveli	0.5	58	100.00	74	100.00	104	93.33
Delhi	1.5	2,659	11.25	4,066	10.30	6,220	7.27
Goa, Daman & Diu	4	627	83.94	858	73.56	1,087	67.63
Lakshadweep	0.03	24	100.00	32	100.00	40	53.72
Mizoram	21	266	N.A.	332	91.13	494	75.53
Pondicherry	0.5	369	75.89	472	57.96	604	47.72
All India^{++@@}	3,287	439,235	82.03	548,160	80.09	685,185	73.30

φ Projected figures for 1981.

++ Area figures include the area under unlawful occupation of Pakistan and China where the census could not be taken.

@@ Includes projected figures of Assam where census could not be held due to disturbed conditions prevailing there at the time of 1981 census.

£ Provisional

@ In J&K census was conducted in May '81

* As on 1st March.

** As on 1st April.

Source : Census of India, 1981, Registrar General of India.

**8.02 DISTRIBUTION OF MAIN WORKERS BY CULTIVATORS,
AGRICULTURAL LABOURERS AND OTHER WORKERS
(1971 & 1981 Census)**

('000)

Zone/State/Union Territory	Workers in Agriculture			Other workers	Total
	As cultivators	As agricultural labourers	Total		
South					
Andhra Pradesh					
1971	5,795	6,829	12,623	5,383	18,006
1981	7,408	8,325	15,733	6,896	22,629
Karnataka					
1971	4,073	2,718	6,790	3,389	10,179
1981	5,222	3,655	8,877	4,774	13,651
Kerala					
1971	1,107	1,908	3,015	3,202	6,217
1981	887	1,917	2,804	3,987	6,791
Tamil Nadu					
1971	4,608	4,490	9,098	5,644	14,742
1981	5,339	6,037	11,596	7,430	19,026
Pondicherry					
1971	17	46	63	78	141
1981	16	55	71	102	173
Lakshadweep					
1971	—	—	—	8	8
1981	—	—	—	8	8
West					
Gujarat					
1971	3,620	1,888	5,508	2,888	8,396
1981	4,115	2,488	6,603	4,381	10,984
Madhya Pradesh					
1971	8,084	4,062	12,147	3,149	15,296
1981	10,414	4,858	15,272	4,770	20,042
Maharashtra					
1971	6,537	5,393	11,930	6,460	18,390
1981	8,536	6,471	15,007	9,295	24,302
Goa, Daman & Diu					
1971	65	41	106	166	272
1981	63	32	95	237	382
Dadra & Nagar Haveli					
1971	25	6	31	4	35
1981	26	5	31	11	42
North					
Haryana					
1971	1,303	430	1,733	921	2,654
1981	1,637	590	2,227	1,437	3,664

(Continued)

**6.02. DISTRIBUTION OF MAIN WORKERS BY CULTIVATORS,
AGRICULTURAL LABOURERS AND OTHER WORKERS
(1971 & 1981 Census) (Continued)**

('000)

Zone/State/Union Territory	Workers in Agriculture			Other workers	Total	
	As cultivators	As agricultural labourers	Total			
North (Concluded)						
Himachal Pradesh	1971	903	53	956	322	1,279
	1981	1,002	40	1,042	429	1,471
Jammu & Kashmir	1971	N.A.	N.A.	N.A.	N.A.	N.A.
	1981	1,034	64	1,098	721	1,819
Punjab	1971	1,665	787	2,453	1,461	3,914
	1981	1,767	1,092	2,859	2,069	4,928
Rajasthan	1971	5,225	749	2,859	2,069	4,928
	1981	6,431	765	7,196	3,246	10,442
Uttar Pradesh	1971	15,698	5,454	21,152	6,183	27,335
	1981	18,958	5,177	24,135	8,262	32,397
Delhi	1971	32	15	48	1,181	1,228
	1981	35	16	51	1,935	1,986
Chandigarh	1971	3	1	4	82	86
	1981	2	1	3	154	157
East						
Bihar	1971	7,580	6,806	14,386	3,103	17,489
	1981	9,042	7,367	16,409	4,344	20,753
Orissa	1971	3,368	1,938	5,306	1,545	6,851
	1981	4,053	2,397	6,450	2,185	8,635
West Bengal	1971	3,955	3,272	7,227	5,142	12,369
	1981	4,591	3,892	8,483	6,941	15,424
Manipur	1971	240	13	262	109	391
	1981	365	29	394	179	573
Meghalaya	1971	309	44	353	94	447
	1981	363	58	421	159	580
Nagaland	1971	203	4	207	55	262
	1981	266	3	269	99	368

(Continued)

**6.02. DISTRIBUTION OF MAIN WORKERS BY CULTIVATORS,
AGRICULTURAL LABOURERS AND OTHER WORKERS
(1971 & 1981 Census) (Concluded)**

('000)

Zone/State/Union Territory	Workers in Agriculture			Other workers	Total	
	As cultivators	As agricultural labourers	Total			
East (Concluded)						
Sikkim	1971	90	4	94	17	111
	1981	89	5	94	54	148
Tripura	1971	23	86	322	111	432
	1981	263	146	409	200	609
Andaman & Nicobar Islands	1971	6	2	8	37	45
	1981	10	2	12	51	63
Arunachal Pradesh	1971	211	5	216	53	269
	1981	223	8	231	83	314
Mizoram	1971	127	1	128	24	152
	1981	146	5	151	55	206
All India	1971**	75,093	47,046	122,140	52,288	174,428
	1981*	92,523	55,500	148,023	74,494	222,517

*Excludes figures for Assam.

**Excludes figures for Assam and J & K.

Source: Census of India, 1981.

**6.03(a). TOTAL NUMBER AND AREA OF OPERATIONAL HOLDINGS—SIZEWISE
1976-77 and 1980-81**

Size class (ha)	Number ('000)		Percentage		Area ('000 ha)		Percentage	
	1976-77	1980-81	1976-77	1980-81	1976-77	1980-81	1976-77	1980-81
Below 0.5	30,050	50,580	36.8	56.6	7,009	19,727	4.3	12.1
0.5—1.0	14,473		17.7		10,501		6.4	
1.0—2.0	14,728	16,102	18.1	18.0	20,905	23,010	12.8	14.2
2.0—3.0	7,497	12,476	9.2	14.0	18,133	34,533	11.1	21.2
3.0—4.0	4,169		5.1		14,295		8.8	
4.0—5.0	2,831	8,078	3.5	9.0	12,561	48,314	7.7	29.7
5.0—10.0	5,381		6.6		37,067		22.7	
10.0—20.0	1,943	2,157	2.4	2.4	26,035	37,174	15.9	22.8
20.0—30.0	323		0.4		7,648		4.7	
30.0—40.0	91		0.1		3,090		1.9	
40.0—50.0	36		Neg		1,572		0.9	
50.0 and above	47		0.1		4,528		2.8	
Total	81,569	89,393	100.0	100.0	163,344	162,758	100.0	100.0

Note: Holding Size (ha)

- | | |
|----------------|-------------|
| 1. Below 1.0 | Marginal |
| 2. 1.0 to 2.0 | Small |
| 3. 2.0 to 4.0 | Semi-medium |
| 4. 4.0 to 10.0 | Medium |
| 5. above 10.0 | Large |

Source: 'Indian Agriculture in Brief',
Directorate of Economics & Statistics,
Ministry of Agriculture, New Delhi.

**8.03(b). STATEWISE NUMBER AND AREA OF OPERATIONAL HOLDINGS—SIZEWISE
1976-77 and 1980-81**

State	Size class (hectares)	No. of holdings ('00 No.)					Area ('00 hectares)				
		0-2	2-4	4-10	Above 10	Total	0-2	2-4	4-10	Above 10	Total
East*	1976-77	180,410	24,970	10,451	1,569	217,398	111,025	66,509	58,359	31,593	267,522
	1980-81	198,829	25,157	9,760	1,431	235,177	117,525	67,590	54,572	28,471	268,112
Assam	1976-77	18,535	2,960	964	78	22,537	13,116	8,083	5,281	4,312	30,792
	1980-81	18,863	3,136	920	57	22,976	13,311	8,600	4,871	4,423	31,205
Bihar	1976-77	84,064	9,277	5,190	833	99,364	41,700	24,958	29,391	14,678	110,727
	1980-81	97,385	9,512	4,718	681	112,296	45,993	25,941	27,093	11,649	110,676
Orissa	1976-77	27,186	6,021	2,333	361	35,901	23,183	15,999	13,045	5,285	57,512
	1980-81	24,486	6,106	2,389	285	33,266	20,124	15,810	13,181	3,927	53,042
West Bengal	1976-77	45,847	5,457	1,344	19	52,667	29,074	14,144	6,918	2,074	52,210
	1980-81	52,449	5,194	1,119	14	58,776	33,532	14,032	5,949	2,035	55,548
Manipur	1976-77	1,196	200	21	Neg	1,417	990	488	99	5	1,582
	1980-81	1,127	206	28	Neg	1,361	1,006	534	150	4	1,694
Meghalaya	1976-77	1,102	452	138	10	1,702	986	1,145	691	134	2,956
	1980-81	1,105	450	138	10	1,703	993	1,150	684	133	2,960
Nagaland	1976-77	245	200	337	253	1,033	286	601	2,283	4,686	7,856
	1980-81	303	156	330	371	1,160	308	415	2,026	5,846	8,595
Sikkim	1976-77	185	74	43	9	311	169	210	252	166	795
	1980-81	386	109	58	9	562	308	305	335	143	1,091
Tripura	1976-77	2,050	329	81	6	2,466	1,523	881	435	253	3,092
	1980-81	2,725	288	60	4	3,077	1,950	803	337	211	3,301
North*	1976-77	172,781	23,093	12,491	2,295	210,660	100,652	63,961	73,223	38,333	276,169
	1980-81	177,822	23,123	12,154	2,196	215,295	104,517	63,720	70,771	35,311	274,319
Haryana	1976-77	4,948	2,103	2,213	723	9,987	4,075	6,039	13,646	12,028	35,788
	1980-81	5,197	2,109	2,161	649	10,116	4,757	6,207	13,492	11,161	35,617
Himachal Pradesh	1976-77	4,762	950	425	77	6,214	3,396	2,632	2,475	1,595	10,098
	1980-81	4,928	965	419	69	6,381	3,465	2,650	2,434	1,246	9,795
Jammu & Kashmir	1976-77	8,419	987	278	25	9,709	5,423	2,762	1,554	685	10,424
	1980-81	9,027	1,038	271	18	10,354	5,519	2,825	1,508	444	10,296
Punjab	1976-77	9,104	2,787	2,533	614	15,038	6,570	8,152	15,713	10,820	41,255
	1980-81	3,967	2,874	2,691	739	10,271	3,991	7,909	15,659	11,347	38,904

(Continued)

6.03(b). STATEWISE NUMBER AND AREA OF OPERATIONAL HOLDINGS—SIZEWISE
1976-77 and 1980-81 (Concluded)

State	Size class (hectares)	No. of holdings ('00 No.)					Area ('00 hectares)				
		0-2	2-4	4-10	Above 10	Total	0-2	2-4	4-10	Above 10	Total
Uttar Pradesh	1976-77	145,548	16,266	7,042	856	169,712	81,188	44,376	39,835	13,205	178,604
	1980-81	154,703	16,137	6,612	721	178,173	86,785	44,129	37,680	11,113	179,707
South*	1976-77	147,079	26,875	17,236	4,583	195,773	93,936	74,632	104,559	79,714	350,841
	1980-81	183,598	29,275	16,602	3,895	233,370	112,346	80,651	98,847	64,024	353,868
Andhra Pradesh	1976-77	41,197	10,725	7,526	2,092	61,540	31,716	29,925	46,467	35,689	143,797
	1980-81	55,723	12,723	6,933	1,624	76,563	41,937	33,358	41,162	26,782	143,279
Karnataka	1976-77	21,622	8,181	6,314	1,990	38,107	19,569	22,875	38,582	32,542	113,568
	1980-81	25,460	9,177	6,620	1,836	43,093	22,758	25,723	40,178	28,708	117,457
Kerala	1976-77	33,490	1,138	341	41	35,010	10,712	3,074	1,879	1,526	17,191
	1980-81	40,178	1,236	358	37	41,809	11,486	3,314	1,953	1,200	18,053
Tamil Nadu	1976-77	50,770	6,831	3,055	460	61,116	31,939	18,758	17,631	7,957	76,285
	1980-81†	62,237	6,579	2,691	398	71,905	36,165	18,216	15,554	7,144	77,079
West*	1976-77	90,363	41,241	41,630	15,805	189,039	77,095	117,866	258,218	278,536	731,715
	1980-81	164,504	46,699	41,118	13,973	207,094	91,472	132,023	256,887	242,325	722,707
Gujarat	1976-77	11,866	6,517	6,708	1,940	27,131	11,208	18,709	41,563	29,266	100,746
	1980-81	13,450	7,279	6,856	1,716	29,301	13,056	20,834	42,091	25,062	101,043
Madhya Pradesh	1976-77	30,734	12,657	12,667	4,553	60,611	24,750	35,996	78,352	77,814	216,912
	1980-81	33,289	13,715	12,758	4,350	64,109	27,217	38,715	78,759	74,620	219,311
Maharashtra	1976-77	26,475	13,395	13,518	4,255	57,643	23,818	83,328	83,378	65,524	211,048
	1980-81	35,817	16,529	13,416	3,009	68,815	32,164	46,270	80,756	43,803	203,033
Rajasthan	1976-77	21,188	8,672	8,737	5,057	43,654	17,319	24,833	54,925	105,932	203,009
	1980-81	21,948	9,176	8,847	4,898	44,869	19,035	26,204	55,241	98,840	199,320
Union Territories	1976-77	1,882	482	317	138	2,819	1,433	1,310	1,889	2,564	7,196
	1980-81	2,055	508	345	72	2,990	1,508	1,346	2,011	1,705	6,570
All India	1976-77	592,513	116,661	82,125	24,390	815,682	384,141	324,278	496,284	428,740	1,633,443
	1980-81	666,818	124,762	80,779	21,567	893,926	427,368	345,330	483,142	371,736	1,627,576

*Excludes UTs whose aggregate is shown separately.

†Data for the year 1979-80.

Source: Agricultural Situation in India - August 1985, Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

6.03(c). DISTRIBUTION OF HOLDING ACCORDING TO IRRIGATION—SIZEWISE
(1976-77)

Size-group	Wholly Irrigated		Partly Irrigated		Wholly Unirrigated		Total	
	Number ('000)	Area ('000 ha)	Number ('000)	Area ('000 ha)	Number ('000)	Area ('000 ha)	Number ('000)	Area ('000 ha)
Less than 1.0	11,471	3,947	6,837	3,137	24,750	7,857	43,058	14,941
1.0-2.0	2,494	3,054	3,714	4,877	8,069	9,802	14,277	17,733
2.0-4.0	1,419	3,321	3,455	8,598	6,333	14,917	11,227	26,836
Sub-Total (1.0-4.0)	3,913	63,755	7,169	13,475	14,422	24,719	25,504	41,569
4.0-10.0	613	2,837	2,772	14,227	4,462	22,293	7,847	39,357
10.0 and above	97	931	830	10,094	1,417	18,152	2,344	29,677
All Groups	16,094	14,090	17,608	41,433	45,051	73,021	78,753	128,544

Note: Due to exclusion of purely current fallow holdings total number of holdings in this table do not tally with the figures given in Table 6.07(a).

Source: *Indian Agriculture in Brief*—19th edition, Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

6.04. NUMBER OF PUMPSETS ENERGISED AND VILLAGES ELECTRIFIED

Sl. No.	State	No. of villages (as per 1971 censuses)	% villages electrified upto		Number of pumpsets/ tubewells energised upto	
			31.3.87	31.6.87	31.3.87	31.6.87
1.	Andhra Pradesh	27,221	90.3	90.7	830,465	837,937
2.	Arunachal Pradesh	2,973	32.2	32.3	—	—
3.	Assam	21,995	71.5	71.7	2,998	2,998
4.	Bihar	67,566	57.3	57.5	217,689	218,437
5.	Gujarat	18,275	96.6	97.1	338,046	341,682
6.	Goa	384	92.4	92.4	2,941	2,262
7.	Haryana	6,731	100.0	100.0	298,756	309,152
8.	Himachal Pradesh	16,916	95.4	96.2	2,623	2,676
9.	Jammu & Kashmir	6,503	90.8	90.9	1,454	1,463
10.	Karnataka	26,826	95.9	96.3	537,408	547,146
11.	Kerala	1,268	100.0	100.0	160,985	164,334
12.	Madhya Pradesh	70,883	67.2	67.7	553,309	558,402
13.	Maharashtra	35,778	96.1	96.2	118,923	1136,129
14.	Manipur	1,949	39.3	40.5	45	45
15.	Meghalaya	4,583	30.5	30.7	65	65
16.	Mizoram	229	94.3	96.9	—	—
17.	Nagaland	960	87.8	88.6	—	NIL
18.	Orissa	46,992	56.0	56.2	34,817	35,146
19.	Punjab	12,188	100.0	100.0	491,454	497,905
20.	Rajasthan	33,305	66.1	66.3	296,874	297,869
21.	Sikkim	405	62.7	63.7	—	—
22.	Tamil Nadu	15,735	100.0	100.0	1116,177	1123,271
23.	Tripura	4,727	46.0	46.3	1,115	1,117
24.	Uttar Pradesh	112,561	63.6	63.9	569,911	571,964
25.	West Bengal	38,074	57.5	57.9	52,398	52,857
Total States		575,027	71.5	71.8	6628,453	6703,557
Total (U.T.S.)		1,099	91.1	93.6	28,088	28,344
All-India		576,126	71.5	71.8	6656,541	6731,901

Source: Central Electricity Authority, New Delhi.

**6.05(a). ESTIMATES OF NET NATIONAL PRODUCT BY INDUSTRY OF ORIGIN—PERCENTAGE DISTRIBUTION
(At 1970-71 prices)**

Industry group	1975-76	1978-79	1979-80*	1980-81*	1981-82*	1982-83*	1983-84*	1984-85*	1985-86‡
1. Agriculture, forestry and logging, fishing, mining and quarrying	47.9	44.4	40.7	42.5	42.2	9.39	41.1	39.4	38.0
2. Manufacturing, construction, electricity, gas and water supply	19.8	21.6	22.2	20.9	20.8	21.4	20.7	21.1	21.4
3. Transport, communications and trade	17.1	18.0	18.9	18.4	18.6	19.5	19.0	19.3	19.5
4. Banking and insurance, real estate and ownership dwelling and business services	5.2	5.8	6.1	5.9	5.9	6.3	6.2	6.5	6.7
5. Public administration and defence and other services	10.2	10.3	12.0	12.1	12.5	13.3	13.4	14.4	15.1
6. Net domestic product and factor cost	100.2	100.1	99.9	99.8	100.0	100.4	100.5	100.7	100.7
7. Net factor income from abroad	(-)0.2	(-)0.1	(+)0.1	(+)0.2	(+)Neg	(-)0.4	(-)0.5	(-)0.7	(-)0.7
8. Net national product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Provisional estimates.

‡ Quick estimates.

Neg—Negligible.

Note: Calculated in FAI.

**6.05(b). ESTIMATES OF NET DOMESTIC PRODUCT AT FACTOR COST BY INDUSTRY OF ORIGIN—
PERCENTAGE DISTRIBUTION
(At 1970-71 prices)**

Industry group	1975-76	1978-79	1979-80*	1980-81*	1981-82*	1982-83*	1983-84*	1984-85†
1. Agriculture, forestry and logging, fishing, mining and quarrying	47.8	44.4	40.8	42.8	42.8	39.8	40.8	39.0
2. Manufacturing construction, electricity, gas and water supply	19.8	21.5	22.2	20.9	20.7	21.3	20.7	21.0
3. Transport, communications and trade	17.2	18.0	18.8	18.4	18.6	19.3	18.8	19.2
4. Banking and insurance, real estate and ownership of dwelling and business services	5.0	5.8	6.2	5.9	5.9	6.3	6.2	6.4
5. Public administration and defence and other services	10.2	10.3	12.0	12.0	12.5	13.3	13.5	14.4
6. Net domestic product at factor cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Provisional estimates.

† Quick estimates.

Source: Calculated in FAI.

7.00. PRICES

7.01. PROCUREMENT/MINIMUM SUPPORT PRICES OF FOODGRAINS

Commodity	(Rs. per quintal)													
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1. Paddy (common variety)	74	74	74	77	85	95	105	115	122	132	137	142	146	150
2. Jowar														
3. Bajra	74	74	74	74	85	95	105	116	118	124	124	130	132	135
4. Maize														
5. Ragi														
6. Wheat	105	105	105	110	112.50	115	117	130	142	151	152	157	162	166
7. Gram ⁺		90	90	95	125	140	145	@	@	235	240	@	260	280
8. Groundnut in shell F.A.Q. ⁺			140	160	175	190	206	270	295	315	340	350	370	—
9. Sugarcane §			8.50	8.50	10.00	12.50	13.00	13.00	13.00	13.50	14.00	16.40	17.00	18.00
10. Cotton (Kapas 320F) ⁺				255	255	275	304	@	380£	400£	410‡	425‡	430‡	440‡
11. Jute (W-5 grade)				141	150	155	160	175	175	185	195	215	225	240

Note: Marketing year (April-March) for wheat, gram, barley and mustard; (July-June) for jute; (September-August) for cotton and (November-October) for paddy and other kharif crops.

⁺ Minimum support price.

§ Statutory minimum price.

@ Not announced.

£ J-34/F variety.

‡ 414-F and H-777 varieties.

Source: Ministry of Agriculture, New Delhi.

8.00. CREDIT

8 01. MULTIPURPOSE COOPERATIVE PRIMARY AGRICULTURAL CREDIT SOCIETIES— ALL INDIA 1965-66 to 1981-82 (As on June 1982)

Year	No of societies	Member-ship ('000)	Loan advanced (Rs. '000)	No. of societies undertaking distribution of inputs	Distribution operation					
					Value of goods distributed (Rs. '000)					
					Seeds	Fertilisers	Pesticides	Agricultural implements	Others	Total
1965-66	191,904	26,135	3,379,394	49,164	46,265	437,076		103,327*	1441,543‡	2,028,211
1966-67	200,324	38,431	3,647,092	45,949	67,690	528,582		129,751*	1631,886‡	2,351,953
1967-68	193,428	40,250	4,253,894	66,408	68,165	848,068	13,235	70,642@		1,000,114
1968-69	189,330	42,192	5,016,260	67,259	70,241	992,929	13,986	80,877@		1,158,033
1969-70	162,700	29,765	5,400,324	64,777	66,564	1,041,017	16,865	91,965@		1,216,411
1970-71	160,780	30,963	5,778,131	62,467	69,983	1,111,789	23,678	80,811		1,286,261
1971-72	157,454	32,009	6,111,751	61,556	82,231	1,313,788	35,475	14,782	94,927	1,541,112
1972-73	154,670	33,528	7,721,710	57,036	85,480	1,501,331	65,826	12,383	98,879	1,763,899
1973-74	153,808	34,956	7,579,073	51,304	125,941	1,777,619	128,797	38,938	169,810	2,241,105
1974-75	152,572	36,442	8,991,380	59,256	114,124	2,510,612	97,170	14,972	159,030	2,895,908
1975-76	134,835	39,521	10,217,764	52,436	98,657	2,703,473	95,178	17,418	181,141	3,095,867
1976-77	1,33,56	44,832	12,105,432	51,917	117,668	3,352,425	88,006	10,872	332,852	3,902,823
1977-78	116,125	47,860	12,704,549	43,605	136,815	4,249,990	167,097	19,054	308,661	4,881,617
1978-79	95,782	52,569	14,584,466	38,630	146,522	5,113,165	233,257	14,735	286,955	5,794,664
1979-80	94,592	54,836	16,286,734	40,722	164,569	5,649,904	213,080	20,561	453,825	6,502,339
1980-81	94,484	57,653	17,692,764 ^{aa}	42,947	174,137	6,182,501	212,983	33,291	573,785	7,176,697
1981-82	93,889	63,171	2,223,372 ^{2a}	45,789	220,622	8,121,733	292,275	29,878	782,972	9,447,480

* Other agricultural operation.

‡ Consumer goods.

@=Agricultural implements including "others".

^a=Break up of Rs. 65,123,000 not available.

^{aa}=Break up of Rs. 36,006,000 not available.

Source: Various issues of "Statistical statements relating to the Cooperative Movement in India", Reserve Bank of India, Bombay

8.02. MULTIPURPOSE COOPERATIVE AND PRIMARY AGRICULTURAL CREDIT SOCIETIES - STATEWISE
(As on June 1982)

Zone/State	No. of societies	Member-ship ('000)	Loan advanced (Rs. '000)	No. of societies undertaking supply works	Distribution operation					
					Value of goods distributed (Rs. '000)					
					Seeds	Fertilisers	Pesticides	Machinery/ implements	Others	Total
East	21,098	13,23	1,432,687	4,506	6,375	199,855	4,609	1,242	23,179	235,260
Assam	2,429	2,318	10,143	100	710	707	46	6	2	1,471
Bihar	6,757	5,662	277,100	187	1,321	18,923	125	488	238	21,095
Orissa	2,793	2,419	696,437	2,569	3,049	116,976	3,724	250	15,601	139,600
West Bengal	7,574	2,391	428,757	1,540	1,234	63,087	774	457	7,217	72,709
Manipur	698	181	10,503	107	61	73	0	41	121	296
Meghalaya	180	62	2,939	3	0	89	0	0	0	89
Nagaland	229	12	355	0	0	0	0	0	0	0
Tripura	378	187	6,176	0	0	0	0	0	0	0
A & N Islands	45	4	180	0	0	0	0	0	0	0
Arunachal Pradesh	15	1	97	0	0	0	0	0	0	0
North	17,882	13,077	6,690,864	14,649	8,891	3,995,419	62	160	117,795	4,122,327
Haryana	2,382	1,196	15,146,43	1,402	1,884	353,540	0	0	0	355,424
Himachal Pradesh	2,152	625	85,110	1,694	208	54,518	13	2	8	54,749
Jammu & Kashmir	1,473	417	37,113	1,111	1,238	55,684	0	0	793	57,715
Punjab	3,042	1,733	28,32,057	2,810	99	2,132,586	6	0	114,703	2,247,394
Uttar Pradesh	8,607	9,062	22,12,746	7,570	5,462	1,399,091	43	158	240	1,404,994
Chandigarh	32	4	283@@	0	0	0	0	0	0	0
Delhi	194	40	7,912	62	0	0	0	0	2,051	2,051
South	18,118	21,834	6,379,556	8,912	28,870	1,187,633	87,784	10,535	213,782	1,528,604
Andhra Pradesh	6,873	7,998	1,382,905	587	5,776	64,479	7,146	2,524	24,234	104,159
Karnataka	4,870	3,801	1,202,295	3,708	12,887	467,236	16,860	3,744	89,361	590,088

(Continued)

8.02. MULTIPURPOSE COOPERATIVE AND PRIMARY AGRICULTURAL CREDIT SOCIETIES – STATEWISE (Concluded)
(As on June 1982)

Zone/State	No. of societies	Member-ship ('000)	Loan advanced (Rs. '000)	No. of societies undertaking supply works	Distribution operation					
					Value of goods distributed (Rs. '000)					
					Seeds	Fertilisers	Pesticides	Machinery/ implements	Others	Total
Kerala	1,574	4,667	2,394,979	1,246	4,359	244,000	43,113	877	96,131	388,480
Tamil Nadu	4,736	5,330	1,390,556	3,312	5,841	398,175	20,171	3,390	4,056	431,640
Pondicherry	59	34	7,439	59	0	13,743	494	0	0	14,237
Lakshadweep	7	4	1,382	0	0	0	0	0	0	0
West	36,790	15,023	7,731,565	17,722	176,486	2,738,826	199,820	17,941	428,216	3,561,289
Gujarat	7,473	1,827	1,880,446	4,192	76,809	1,074,689	152,847	8,287	1,5,584	1,508,613
Madhya Pradesh	5,572	3,935	1,467,675	4,191	28,516	628,435	11,051	2,390	80,334	750,726
Maharashtra	18,406	5,586	3,020,899	5,439	54,692	784,947	32,275	7,208	45,820	924,942
Rajasthan	5,222	3,602	1,353,655	3,844	16,395	245,526	3,646	56	103,197	368,823
Goa, Daman & Diu	107	68	8,762	56	74	5,229	1	0	2,881	8,185
Dadra & Nagar Haveli	10	5	128	0	0	0	0	0	0	0
Total 1981-82ϕ	93,889	63,171	22,223,722*	45,789	220,622	8,121,733	292,275	2,98,78	7,2,972	9,447,480
1980-11ϕ	94,484	57,653	17,692,764**	42,941	174,137	6,182,501	212,983	33,291	573,785	7,176,697

@Data relate to 1980-81

@@Data relate to 1979-81

*Break up of Rs. 65123 (000) not available.

**Break up of Rs. 36006 (000) not available.

Source: 'Statistical statements relating to the Cooperative Movement in India 1980-82, Part I Credit Societies'. National Bank for Agriculture and Rural Development, Bombay.

ϕ =Data in respect of Mizoram is not available.

8.03. PRIMARY AGRICULTURAL CREDIT COOPERATIVES

Item	1960-61	1970-71	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81 (P)	1981-82 (P)	1982-83 (P)	1983-85 (P)
A. Primary Agricultural Credit Societies (Short and Medium-term loans)											
1. No. of Societies (In lakhs)	2.12	1.61	1.35	1.23	1.16	0.96	0.96	0.94	0.94	0.94	0.94
2. Percentage of villages covered	75	94	97	96	96	97	98	97	97(R)	97(R)	97(R)
3. Membership (No. In lakhs)	170.41	309.63	395.21	488.32	478.60	525.07	548.36	576.53	610.00	633.1	666.2
4. Percentage of rural population covered (Est.)	30	36.1	42	44	50	52	53	55.9	59.3	61.5	62.0
5. Average membership per society (No.)	80	193	293	397	412	548	577	613	649	673	725
6. Paid up share capital (Rs. crores)	57.75	205.74	327.31	377.31	420.68	466.43	519.62	571.09	621.05	661.56	720.75
7. Deposits (Rs. crores)	14.59	69.46	113.31	142.32	165.16	216.38	249.52	290.58	313.75	381.49	463.93
8. Working capital (Rs. crores)	273.92	1153.40	1989.70	2394.29	2712.42	3092.66	3576.82	4035.98	4470.93	4841.16	5916.79
9. Loans advanced during the year (Rs. crores)	202.75	577.88	1023.45	1210.59	1271.69	1454.58	1623.97	1763.55	2100.57	2291.19	2499.31
10. Percentage loans overdue to loans outstanding	20	41	43	43	45	45.4	46.0	41.6	41.0	42.0	45.0
B. Land Development Banks (Longterm loans)											
1. Number of Banks											
(a) Central	18	19	19	19	19	19	19	19	19	19	19
(b) Primary	463	865	890	892	889	890	896	858	1072	1165	1185
2. Loans advanced during the year to individuals (Rs. crores)	11.62	170.36	215.37	278.08	237.90	240.57	326.00	363.00	369.28	425.83	438.74
3. Loans outstanding with individuals (Rs. crores)	37.74	636.16	1057.92	1193.36	1276.00	1333.7	1494.9	1697.00	1854.71	2047.26	2236.41

Source: Indian Agriculture in Brief, 21st edition, Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi
 (R)=relates to the year 1980-81, (P)=Provisional.

8.04. FLOW OF INSTITUTIONAL CREDIT FOR AGRICULTURE

(Rs. in crores)

Item	1950-51	1960-61	1970-71	1980-81	1981-82	1982-83@	1983-84@	1984-85@	1985-86@	1986-87 (Target)
Cooperative										
Short Term	22.90	182.82	519.34	1526.32	1795.85	1957.10	2241.73	2333.55	2418.75	3415.00
Medium Term	Included in short term	19.93	58.54	237.27	313.82	382.95	224.87	209.07	258.03	300.00
Long term	1.33	11.60	100.91	362.72	369.28	425.83	438.74	453.37	539.28	665.00
Total	24.23	214.35	678.79	2126.3	2478.95	2765.88	2905.34	2995.99	3206.06	4380.00
Commercial Banks/Regional Rural Bank										
Short Term	N.A.	N.A.	N.A.	517.00\$	623.00\$	800.00	940.00	1110.00	3680.00*	1825.00
Term Loan	N.A.	N.A.	N.A.	745.80	872.50	1810.00	1210.00	1450.00	—	2630.00
Total	N.A.	N.A.	206.37	1262.80	1495.60	2610.00	2150.00	2560.00	3680.00	4455.00
Grand Total	24.23	214.35	885.16	3389.11	3974.55	5375.88	5055.34	5555.99	6886.06	8835.00

@=Provisional.

NA=Not available.

*=Includes Term Loan.

\$=Excludes figures of Regional Rural Banks.

Source: Ministry of Agriculture, New Delhi.

9.00. FIVE YEAR PLANS

9.01. AGRICULTURAL PRODUCTION—SIXTH & SEVENTH PLANS

Commodity	Unit	1978-79 (V P an end)	1979-80	Sixth Plan					Seventh Plan		
				1980-81	1981-82	1982-83	1983-84	1984-85	1985-86 (anticipated achievement)	1986-87	
										Target	Anticipated achievement
Foodgrains	Million tonnes	131.9	109.7	129.6	133.3	129.5	152.4	145.5	150.5	160.0	149.0-151.0
Oil seeds of white	" "	10.1	8.7	9.4	12.1	10.0	12.7	13.9	11.2	14.8	12.2-12.5
Groundnut	" "	6.2	5.8	5.0	7.2	5.3	7.1	6.4	5.5		
Sugarcane (Gur)	" "	15.2	12.9	15.4	18.6	18.9	17.4	17.0	17.2	18.5-19.0	7.2-17
Cotton (Lint)	Million bales (170 kg each)	8.0	7.6	7.0	7.9	7.5	6.4	8.5	8.6	8.8	7.8-8.0
Jute	Million bales (180 kg each)	6.5	6.1	6.5	6.8	5.9	6.3	6.5	11.0	8.5	7.5-7.8
Mesta	Million bales (180 kg each)	1.9	1.9	1.7	1.6	1.2	1.4	1.3	1.8		
Tobacco	Thousand tonnes	453.8	438.5	481.2	520.0	582.0	493.0	486.0	439.0		
Tea	" "	564.0	544.0	570.0	560.0	561.0	581.5	639.9	657.3		
Coffee	" "	110.5	149.8	118.6	150.0	130.0	105.0	197.0	140.0		
Rubber	" "	135.3	148.5	153.1	152.9	165.9	175.3	186.5	201.0		
Coconut	Million nuts	5730.0	5636.0	5720.0	5573.0	5664.0	5808.0	6912.8	6620.0		
Arecanut	Thousand tonnes	181.9	190.0	196.0	194.0	185.0	189.0	218.7	224.2		
Cashewnut	" "	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.		
Pepper	" "	22.0	28.0	30.0	29.0	29.0	23.0	18.2	30.4		
Lac	" "	9.1	15.3	20.5	21.5	13.4					

Source: (1) Indian Agriculture in Brief, 21st Edition, Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.
(2) Area and Production of Principal Crops in India 1981-84, D.E.&S., Ministry of Agriculture, New Delhi.

9.02. ACHIEVEMENTS OF AGRICULTURAL DEVELOPMENT PROGRAMMES DURING FIFTH, SIXTH AND SEVENTH PLANS

Programmes	1978-79	1979-80	Sixth Plan					Seventh Plan		
			1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87 anticipated achievement	1987-88 (Target)
I. Irrigation										
(Cumulative levels)										
(Million hectares)										
i) Major and medium	22.05	22.20	22.70	23.20	24.00	24.60	25.32	25.90‡	26.4‡	
ii) Minor @	28.60	30.00	32.77	32.77	34.20	34.00	35.14	36.30‡	37.7‡	
Total (i + ii)	50.65	52.20	54.10	55.90	58.20	58.60	60.46	62.20‡	64.1‡	
II. High yielding varieties										
(Million hectares)										
i) Paddy	16.9	16.0	18.2	19.7	18.8	21.7	22.8	23.4	23.5	26.4
ii) Wheat	15.9	15.0	16.1	16.8	17.8	19.4	19.1	19.2	19.0	21.1
iii) Jowar	3.1	3.1	3.5	3.9	4.4	5.3	5.1	6.1	4.9	6.5
iv) Bajra	2.9	3.0	3.6	4.6	4.7	5.4	5.2	5.0	4.7	5.9
v) Maize	1.4	1.4	1.6	1.6	1.7	1.9	2.0	1.8	1.9	2.4
Total (i to v)	40.1	38.4	43.1	46.5	47.5	53.7	54.2	55.5	54.0	62.3
III. Consumption of chemical fertilisers										
(Million tonnes)										
i) Nitrogenous (N)	3.42	3.50	3.68	4.07	4.22	5.20	5.49	5.82*	5.80*	6.80
ii) Phosphatic (P ₂ O ₅)	1.11	1.15	1.21	1.32	1.44	1.73	1.89	2.07*	2.11*	2.40
iii) Potassic (K ₂ O)	0.59	0.61	0.62	0.67	0.73	0.78	0.84	0.85*	0.87*	1.10
Total (N + P₂O₅ + K₂O)	5.12	5.26	5.52	6.06	6.39	7.71	8.21	8.74*	8.78*	10.30
IV. Gross cropped area										
(Million hectares)										
	174.8	169.7	173.1	177.0	172.6	180.4				
V. Soil conservation										
(Million hectares)										
	22.57	23.40	24.37	25.39	26.52	27.98	29.38	30.48	31.22	
VI. Use of pesticides										
(Technical grade material)										
('000 tonnes)										
	—	—	45.0	47.0	50.0	55.0	56.0	60.0	70.00	

‡=Target.

* Provisional.

@ The figures for minor irrigation indicate the benefit after allowing seepage.

Source: Ministry of Agriculture, New Delhi.

9.03. BENEFITS FROM MAJOR AND MEDIUM IRRIGATION SCHEMES

(Thousand hectares gross)

Sl. No.	States/Union Territories	Ultimate Irrigation Potential	Irrigation benefits to the end of 1984-85		Target of additional benefits during Seventh Plan	
			Potential	Utilisation	Potential	Utilisation
1.	Andhra Pradesh	5000	3268	3017	418	300
2.	Assam	970	129	78	110	115
3.	Bihar	6500	2879	2176	315	500
4.	Gujarat	3000	1264	748	247	217
5.	Haryana	3000	1929	1745	260	300
6.	Himachal Pradesh	50	6	4	2	2
7.	Jammu & Kashmir	250	138	113	40	30
8.	Karnataka	2500	1269	1076	324	250
9.	Kerala	1000	564	543	190	200
10.	Madhya Pradesh	6000	1802	1305	380	370
11.	Maharashtra	4100	1700	832	365	230
12.	Manipur	135	43	26	25	30
13.	Meghalaya	20	—	—	—	—
14.	Nagaland	10	—	—	—	—
15.	Orissa	3600	1568	1508	180	140
16.	Punjab	3000	2462	2444	138	127
17.	Rajasthan	2750	1812	1476	390	250
18.	Sikkim	20	—	—	—	—
19.	Tamil Nadu	1500	1244	1225	38	22
20.	Tripura	100	—	—	15	8
21.	Uttar Pradesh	12500	6813	5513	637	600
22.	West Bengal	2310	1587	1475	220	205
Total States		58315	30477	25304	4249	3904
Total UTs.		160	20	15	3	2
Grand total (States & UTs.)		58475	30497	25319	4297	3206

Source: "Seventh Five Year Plan 1985-90, Vol. II", Planning Commission, Govt. of India.

9 04. BENEFITS FROM MINOR IRRIGATION SCHEMES

('000 hectares gross)

Sl. No.	State/Union Territories	Ultimate Irrigation potential	Irrigation benefits to the end of 1984-85		Anticipated achievement to the end of 1985-86		Targets of additional benefits during Seventh Plan	
			Potential	Utilisation	Potential	Utilisation	Potential	Utilisation
States								
1.	Andhra Pradesh	4200	2340.6	2196	2389.6	2226.0	515	380
2.	Assam	1700	391	349	421.0	371.0	150	105
3.	Bihar	5900	3422	3150	3672.8	3340.0	1140	840
4.	Gujarat	1750	1674	1609	1715.7	1640.0	300	200
5.	Haryana	1550	1387	1361	1417.0	1386.5	109	87
6.	Himachal Pradesh	285	116.5	105.4	117.82	106.1	18	10
7.	Jammu & Kashmir	550	337	327	342.36	330.2	27	17
8.	Karnataka	2100	1128.4	1105	1142.9	114.5	140	112
9.	Kerala	1100	390	365	408.5	379.2	90	70
10.	Madhya Pradesh	4200	1992	1870	2104.0	1949.0	700	525
11.	Maharashtra	3200	1997	1832	2052.0	1870.75	380	275
12.	Manipur	105	39.1	34	41.10	35.2	14.5	8.8
13.	Meghalaya	100	34.5	32	36.5	33.7	14	11.5
14.	Nagaland	80	50.5	47	53.2	48.61	12	7.3
15.	Orissa	2300	1060	980	1121.0	1030.0	526	462
16.	Punjab	3550	3174	3139	3223.8	3184.0	266	229
17.	Rajasthan	2400	1987	1937	2025.0	1963.0	180	130
18.	Sikkim	22	14.1	10	15.1	10.6	8	6
19.	Tamil Nadu	2400	1950.4	1942.7	1967.4	1957.5	95	80
20.	Tripura	115	58	50.2	60.6	51.6	20	12
21.	Uttar Pradesh	13200	11990	10977	12795.0	11620.0	3660	2480
22.	West Bengal	3800	1712	1600	1800.3	1661.0	250	180
Sub-total: States		54607	37245.1	35018.3	38922.68	36316.46	6554.5	6227.6

Union Territories								
1.	A & N Islands		0.45	0.35		1.0	0.6	
2.	Arunachal Pradesh		40.2	34.20		15.0	9.0	
3.	Chandigarh		1.20	1.18		0.7	0.5	
4.	Dadra and Nagar Haveli		0.63	0.60		0.4	0.2	
5.	Delhi	250	41.17	40.72		3.5	2.5	
6.	Goa, Daman & Diu		14.30	13.60		2.0	1.25	
7.	Lakshadweep		—	—		—	—	
8.	Mizoram		6.44	5.84		7.0	4.0	
9.	Pondicherry		28.78	28.70		0.4	0.3	
Sub-total: UTs		250	133.12	125.19	141.08	130.39	30.0	18.35
Total (States and UTs)		54857	37378.22	35143.49	39063.76	36446.85	8584.5	6245.95
Rounded to		55000	37400	35150	39100	36500	8600	6250

Source: 1. "Indian Agriculture in Brief", 21st edition, Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi.

2. "Seventh Five Year Plan 1985-90", Vol. II, Planning Commission, G.O.I, New Delhi.

10.00. HIGH YIELDING VARIETIES—CROP & SEED
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**10 01. ALL INDIA AREA UNDER HYVP - 1966-67 to 1986-87
AND TARGET FOR 1987-88**

('000 hectares)

Year	Paddy	Wheat	Jowar	Bajra	Maize	Total
1966-67	888	541	191	59	207	1,886
1967-68	1,785	2,942	603	419	287	6,036
1968-69	2,681	4,793	690	745	388	9,297
1969-70	4,342	4,910	555	1,155	451	11,413
1970-71	5,588	6,480	802	205	462	15,383
1971-72	7,412	7,861	688	1,775	437	18,173
1972-73	8,168	10,177	868	2,503	605	22,321
1973-74	9,981	11,027	1,155	3,003	872	26,038
1974-75	11,208	11,194	1,312	2,529	1,094	27,337
1975-76	12,443	13,458	1,958	2,897	1,132	31,888
1976-77	13,337	14,522	2,370	2,268	1,063	33,560
1977-78	16,122	15,803	3,140	2,631	1,234	38,930
1978-79	16,882	15,899	3,069	2,938	1,346	40,134
1979-80	15,991	15,027	3,052	2,961	1,352	38,383
1980-81	18,234	16,104	3,500	3,600	1,601	43,039
1981-82	19,687	16,751	3,882	4,573	1,598	46,491
1982-83	18,842	17,837	4,373	4,713	1,726	47,491
1983-84	21,736	19,387	5,283	5,422	1,911	53,739
1984-85	22,778	19,090	5,077	5,168	2,027	54,140
1985-86	23,374	19,175	6,082	4,992	1,799	55,422
1986-87(a.a)	23,480	19,019	4,945	4,675	1,919	54,038
1987-88 (target)	26,425	21,079	6,455	5,897	2,599	62,255

a.a. = Anticipated achievement.

Source: Ministry of Agriculture, New Delhi.

**10.02. STATEWISE TOTAL* AREA UNDER HYVP—
1982-83 to 1986-87**

('000 hectares)

Zone/State	1982-83	1983-84	1984-85	1985-86	1986-87 anticipated achievement
East	9,100	9,901	10,450	10,275	11,592
Assam	1,060	1,115	1,176	1,117	1,199
Bihar	3,875	4,500	5,000	4,718	5,478
Orissa	1,824	1,607	1,668	1,777	1,837
West Bengal	2,021	2,339	2,257	2,306	2,745
Manipur	79	88	92	92	96
Meghalaya	33	40	46	48	52
Nagaland	21	22	24	26	23
Sikkim	32	36	37	38	39
Tripura	155	154	150	153	123
North	16,928	18,423	19,330	19,828	19,631
Haryana	2,549	2,661	2,565	2,537	2,495
Himachal Pradesh	447	460	488	490	500
Jammu & Kashmir	464	479	501	520	546
Punjab	4,436	4,678	4,860	4,884	4,820
Uttar Pradesh	9,032	10,145	10,916	11,397	11,270
South	8,057	9,366	9,016	8,621	8,960
Andhra Pradesh	4,073	4,229	3,928	3,660	3,805
Kerala	465	200	250	250	350
Karnataka	1,879	2,067	1,867	1,751	2,000
Tamil Nadu	1,640	2,870	2,971	2,960	2,805
West	13,332	15,895	15,194	16,540	13,623
Gujarat	2,194	2,410	2,330	2,125	1,538
Madhya Pradesh	3,851	4,071	4,366	4,957	3,490
Maharashtra	4,733	6,523	5,810	6,713	5,665
Rajasthan	2,559	2,891	2,688	2,745	3,000
Total States	47,422	53,585	53,990	55,264	53,876
Union Territories	69	154	150	158	162
All-India	47,491	53,739	54,140	55,422	54,038

*Paddy, wheat, jowar, bajra and maize crops.

Source: Ministry of Agriculture, New Delhi.

10.03(a) STATEWISE AREA UNDER HYVP-PADDY
1982-83 to 1986-87

('000 hectares)

Zone/State	1982-83	1983-84	1984-85	1985-86	1986-87 anticipated achievement
East	6,103	6,706	7,065	7,731	8,000
Assam	945	990	1,033	1,016	1,085
Bihar	1,460	2,000	2,300	2,778	2,748
Orissa	1,702	1,427	1,529	1,647	1,676
West Bengal	1,729	2,010	1,921	2,001	2 245
Manipur	72	77	80	80	83
Meghalaya	22	28	30	33	35
Nagaland	13	14	15	16	18
Sikkim	8	9	10	10	10
Tripura	152	151	147	150	120
North	4,445	5,169	5,903	6,127	6,072
Haryana	430	435	470	495	405
Himachal Pradesh	86	87	90	90	91
Jammu & Kashmir	235	243	247	249	256
Punjab	1,252	1,414	1,584	1,630	1,620
Uttar Pradesh	2,442	2,990	3,512	3,663	3,700
South	5,530	6,825	6,534	5,972	6,292
Andhra Pradesh	3,075	3,466	3,046	2,812	2,982
Karnataka	790	877	870	756	800
Kerala	465	200	250	250	350
Tamil Nadu	1,200	2,282	2,368	2,154	2,160
West	2,757	2,908	3,184	3,449	3,021
Gujarat	318	376	380	292	203
Madhya Pradesh	1,487	1,500	1,751	2,046	1,800
Maharashtra	922	1,032	1,012	1,064	980
Rajasthan	30	43	41	47	38
Total States	18,335	21,651	22,686	23,279	23,385
Union Territories	7	85	92	95	95
All India	18,642	21,736	22,778	23,374	23,480

Source Ministry of Agriculture, New Delhi.

**10.03(b). STATEWISE AREA UNDER HYVP—WHEAT
1982-83 to 1986-87**

('000 hectares)

Zone/State	1982-83	1983-84	1984-85	1985-86	1986-87 (ant. achievement)
East	2,306	2,458	2,541	1,985	2,836
Assam	105	110	121	93	125
Bihar	1,850	1,900	2,000	1,500	2,100
Orissa	63	92	53	56	83
West Bengal	266	329	336	305	500
Manipur	3	8	8	8	9
Meghalaya	4	3	6	5	6
Nagaland	4	4	5	5	0.04
Sikkim	8	9	9	10	10
Tripura	3	3	3	3	3
North	11,502	12,190	12,304	12,630	12,474
Haryana	1,584	1,675	1,610	1,612	1,615
Himachal Pradesh	284	285	310	310	320
Jammu & Kashmir	189	179	194	190	199
Punjab	3,036	3,107	3,090	3,110	3,040
Uttar Pradesh	6,409	6,944	7,100	7,408	7,300
South	153	141	147	103	157
Andhra Pradesh	27	27	15	13	27
Karnataka	126	114	132	90	130
West	3,835	4,549	4,056	4,407	3,500
Gujarat	454	546	450	393	250
Madhya Pradesh	1,418	1,515	1,598	1,840	800
Maharashtra	793	1,097	728	841	800
Rajasthan	1,170	1,391	1,274	1,333	1,650
Total States	17,796	19,338	19,042	19,125	18,967
Union Territories	41	49	48	50	52
All India	17,837	19,387	19,090	19,175	19,019

Source: Ministry of Agriculture, New Delhi.

10.03(c). STATEWISE AREA UNDER HYVP—JOWAR
1982-83 to 1986-87

('000 hectares)

Zone/State	1982-83	1983-84	1984-85	1985-86	1986-87 (anticipated achievement)
East	4	7	7	6	6
Orissa	4	7	7	6	6
North	2	5	2	—	—
Uttar Pradesh	2	5	2	—	—
South	1,236	1,130	1,130	1,392	1,301
Andhra Pradesh	500	294	391	419	381
Karnataka	536	551	465	496	620
Tamil Nadu	200	285	274	477	300
West	3,131	4,141	3,938	4,684	3,638
Gujarat	122	100	95	137	80
Madhya Pradesh	743	809	763	790	700
Maharashtra	2,234	3,201	3,067	3,730	2,825
Rajasthan	32	31	13	27	33
Total States	4,373	5,283	5,077	6,082	4,945
Total Union Territories	—	—	—	neg	neg
All India	4,373	5,283	5,077	6,082	4,945

Neg = Negligible

Source: Ministry of Agriculture, New Delhi.

10.03(d) STATEWISE AREA UNDER HYVP—BAJRA
1982-83 to 1986-87

('000 hectares) †

Zone/State	1982-83	1983-84	1984-85	1985-86	1986-87 (anticipated achievement)
East	1	1	1	1	1
Orissa	1	1	1	1	1
North	683	709	694	617	596
Haryana	515	526	460	410	456
Punjab	32	30	37	17	21
Uttar Pradesh	136	153	197	186	120
Jammu & Kashmir	—	—	—	4	6
South	757	862	858	813	861
Andhra Pradesh	371	273	317	282	286
Karnataka	176	311	234	224	256
Tamil Nadu	210	278	307	307	325
West	3,263	3,836	3,606	3,554	3,208
Gujarat	1,185	1,278	1,300	1,148	905
Madhya Pradesh	38	43	45	88	48
Maharashtra	743	1,118	921	1,008	1,008
Rajasthan	1,297	1,397	1,340	1,310	1,264
Total States	4,704	5,408	5,159	4,985	4,667
Union Territories	9	14	9	7	8
All India	4,713	5,422	5,168	4,992	4,675

Source: Ministry of Agriculture, New Delhi.

10.03(e). STATEWISE AREA UNDER HYVP—MAIZE
1982-83 to 1986-87

('000 hectares)

Zone/State	1982-83	1983-84	1984-85	1985-86	1986-87 (anticipated achievement)
East	686	729	836	551	749
Assam	10	15	22	8	9
Bihar	565	600	700	440	630
Orissa	54	80	78	67	71
West Bengal	26	—	—	—	—
Manipur	4	3	4	4	4
Meghalaya	7	9	10	10	11
Nagaland	4	4	4	4	5
Sikkim	16	18	18	18	19
North	296	350	427	454	489
Haryana	20	25	25	20	25
Himachal Pradesh	77	88	88	90	89
Jammu & Kashmir	40	57	60	77	85
Punjab	116	127	149	127	140
Uttar Pradesh	43	53	105	140	150
South	381	408	347	341	349
Andhra Pradesh	100	169	159	134	129
Karnataka	251	214	166	185	200
Tamil Nadu	30	25	22	22	20
West	351	418	416	446	325
Gujarat	115	110	103	155	100
Madhya Pradesh	165	204	209	113	150
Maharashtra	41	75	82	70	60
Rajasthan	31	29	20	28	15
Total States	1,714	1,905	2,026	1,792	1,912
Total Union Territories	12	6	1	7	7
All-India	1,726	1,911	2,027	1,799	1,919

Source: Ministry of Agriculture, New Delhi.

**10.04. STATEWISE YIELD OF HIGH YIELDING VARIETIES OF PRINCIPAL CROPS
(1980-81 to 1983-84)**

(kg/hectare)

Crop/State	Season	1980-81	1981-82	1982-83	1983-84
I. Rice					
Andhra Pradesh	Kharif	—	2336*	2196	2235
	Rabi	—	2357	2354	2341
Assam	Autumn	1592	1466	—	1295
	Winter	1965	784	—	1813
	Summer	1076	1239	—	1305
Bihar	Winter	1360	—	—	—
	Summer	—	—	—	—
Gujarat		1589	1852	1813*	1950*
Haryana		2660	2494	2600	2681
Himachal Pradesh		1549	1502	—	1720
Karnataka	Autumn	—	2526 (K)*	2528*	2404
	Winter	—	2302 (R)	2148*	2232
	Summer	—	2926	2716	2536
Kerala	Autumn	—	2107	2283	2009
	Winter	—	1952	2103	2220
	Summer	—	2171	2175	1710
Madhya Pradesh		1591	1252	1490	1710
Maharashtra	Autumn	1852	1847	1490	1793
	Summer	1878	1571	1901	1696
Orissa	Autumn	—	873	—	1226
	Summer	—	1728	—	2187
	Winter	—	1423	—	1755
Punjab	Autumn	2940	3102	3264	3026
Tamil Nadu	I & II Crop }	1963 I	—	—	2164 II
		2198 II	—	—	1954 III
Uttar Pradesh	Autumn	1196	1291 (K)	—	
	Winter	1505	—	—	1508
	Aus	1648	1705	—	2471

(Continued)

**10.04. STATEWISE YIELD OF HIGH YIELDING VARIETIES OF PRINCIPAL CROPS
(1980-81 to 1983-84) (Continued)**

(kg/hectare)

Crop/State	Season	1980-81	1981-82	1982-83	1983-84
West Bengal	(W) Early Aman	—	1674	—	2993
	(W) Aman	1945	1579	—	2985
	Summer	2564	2555	—	3876
II. Jowar					
Andhra Pradesh	Kharif	—	1154	1774	987
	Rabi	—	1380	1838	1601
Gujarat	Kharif	1008	1300	888	991
	Rabi	491	992	1385	1440
Karnataka	Kharif	—	2496*	1858*	2026
	Rabi	—	1824	2166*	1399
	Summer	—	2353	2008	1339
Madhya Pradesh		1199	1241	1117	1468
	Kharif	1301	1426	1385	1397
Maharashtra	Rabi	—	—	—	—
Tamil Nadu		2464	—	—	2446
III. Bajra					
Andhra Pradesh		—	1412	843	1118
Gujarat	Kharif	876	997	741	1016
Haryana		894	843	819	680
Karnataka		—	1154 (S)	988*	1088 (S)
Madhya Pradesh		505	836	861	1139
Maharashtra		617	682	395	626
Tamil Nadu		2581	—	—	1648
Punjab		1302	1076	1224	1369
Rajasthan	Kharif	838	680*	—	—

(Continued)

**10.04. STATEWISE YIELD OF HIGH YIELDING VARIETIES OF PRINCIPAL CROPS
(1980-81 to 1983-84) (Concluded)**

		(kg/hectare)			
Crop/State	Season	1980-81	1981-82	1982-83	1983-84
IV. Maize					
Andhra Pradesh	Kharif	—	2564	2866	2062
	Rabi	—	3434	—	3155
Bihar	Bhadoi	881	—	—	—
	Garma	—	—	—	—
Gujarat		1020	1509	1243	2262
Karnataka	Kharif	—	2822*	2429*	3033
	Rabi	—	2503	2037*	3016
	Summer	—	2856	2208*	3058
Haryana		1435	1220	1338	1218
Himachal Pradesh		2657	2684	—	3356
Madhya Pradesh		1239	1617	1912	1788
Maharashtra	Kharif	2091	1471	1613	1475
	Rabi	2368	1061	2304	—
Punjab		1771	1960	2050	2192
V. Wheat					
Assam		1202	1151	—	1310
Bihar		1431	—	—	—
Gujarat		2433*	2434*	2532*	2719
Haryana		2392	2287	2501	2483
Himachal Pradesh		1665	1535	—	1166
Karnataka		—	1460*	1401*	1707
Madhya Pradesh		1860	1870	1714*	1889
Maharashtra		984	991	875	1008
Punjab		2692	2948	3022	3032
Rajasthan		1750	2097*	—	1885
Uttar Pradesh		1746	1714	—	1973
West Bengal		1269	1351	—	1887

*=H.Y.V. irrigated, (K)=Kharif, (R)=Rabi

Source: "Area and Production of Principal Crops in India—1984-85", Ministry of Agriculture, New Delhi.

10.05, PRODUCTION OF CERTIFIED/QUALITY SEED
1980-81 to 1984-85

(in lakh quintals)

Crops	1980-81	1981-82	1982-83	1983-84	1984-85
Cereals					
Wheat	9.83	9.10	15.70	17.29	18.60
Paddy	5.02	6.53	6.74	8.88	12.03
Maize	1.05	0.92	1.23	1.14	1.55
Jowar	1.20	1.90	3.45	1.42	2.72
Bajra	1.57	1.59	2.00	1.47	2.14
Ragi	0.01	0.01	0.09	0.10	0.20
Barley	0.06	0.08	0.08	0.07	0.05
Total	18.74	20.13	29.29	30.37	37.29
Pulses					
Gram	0.55	0.52	0.84	0.44	0.84
Lentil	0.02	0.02	0.07	0.04	0.03
Peas	0.01	0.04	0.09	0.12	0.17
Urad	0.17	0.18	0.38	0.43	0.49
Moong	0.05	0.09	0.39	0.26	0.44
Arhar	0.05	0.06	0.17	0.16	0.24
Cowpea	0.03	0.03	0.11	0.15	0.18
Moth	—	—	—	Neg	0.01
Others	0.14	0.25	0.02	—	—
Total	1.02	1.19	2.07	1.60	2.40
Oilseeds					
Groundnut	0.01	0.14	0.81	3.49	2.59
Rapeseed & Mustard	0.01	0.07	0.36	0.31	0.65
Seasamum	—	0.02	0.03	0.02	0.04
Sunflower	0.01	0.04	0.14	0.26	0.48
Soyabean	0.01	0.02	0.11	0.75	0.65
Linseed	—	—	—	—	0.01
Casterseed	0.03	0.02	0.15	0.07	0.23
Negerseed	—	—	—	—	—
Safflower	—	—	0.04	0.05	0.06
Others	0.07	0.13	0.01	—	—
Total	0.14	0.44	1.65	4.95	4.71
Fibres					
Cotton	0.64	0.88	1.23	0.67	1.45
Jute	0.01	0.01	0.12	0.09	0.28
Mesta	—	—	—	0.04	0.05
Sannhemp	—	—	—	—	—
Others	0.05	0.07	—	—	—
Total	0.70	0.96	1.35	0.80	1.78
Potato	1.18	1.34	2.00	3.24	3.51
Others	0.08	0.12	0.25	0.30	0.28
Grand Total	21.86	24.18	36.61	41.26	49.97

Source: *Indian Agriculture in Brief*, 21st edition. DES, Ministry of Agriculture, New Delhi.

11.00. AGRICULTURAL DEVELOPMENT PROGRAMMES

11.01. PROGRESS UNDER IRDP
(As on 31-3-1985)

Heads	Achievements during					Total 6th plan
	1980-81	1981-82	1982-83	1983-84	1984-85	
1. Total allocation (Rs. in crores)	250.55	300.66	400.88	407.36	407.36	1,766.81
2. Central allocation (Rs. in crores)	127.80	153.36	204.48	207.72	207.72	901.08
3. Central release (Rs. in crores)	82.58	128.45	176.18	194.23	206.96	788.40
4. Total expenditure (Rs. in crores)	158.64	264.65	359.59	406.09	472.21	1,661.18
5. Total term credit mobilised (Rs. in crores)	289.05	467.59	713.98	773.51	857.48	3,101.61
6. Total investment (Rs. in crores)	447.69	732.24	1,073.57	1,179.60	1,329.69	4,762.79
7. Total No. of beneficiaries to be covered (Nos. in lakhs)	30.07	30.07	30.07	30.54	30.27	151.02
8. Total No. of beneficiaries covered (Nos. in lakhs)	27.27	27.13	34.55	36.85	39.82	165.62
9. No. of SC/ST beneficiaries covered (Nos. in lakhs)	7.81	10.01	14.06	15.37	17.38	64.63

Note: This programme was initiated in 1978-79 in 2300 development blocks as a Central Sector Scheme, with 100% assistance. Since 2nd Oct., 1980, this was extended to all the development blocks in the country. It is being operated on the basis of 50:50 sharing of funds between Centre and States since 1979-80.

Source: "Indian Agriculture In Brief" 21st Edition, Ministry of Agriculture, New Delhi.

11.02. PROGRESS OF FOOD FOR WORK/NATIONAL RURAL EMPLOYMENT PROGRAMME

Head	Food for work programme			National rural employment programme					
	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	Total 6th Plan (1980-81 to 1984-85)
1. Foodgrains allocated (lakh tonnes)	2.05	16.19	28.05	14.20	3.00	3.13	3.22	3.09	26.64
2. Foodgrains released (lakh tonnes)	2.05	14.74	30.33	13.27	2.78	2.48	2.36	3.08	23.97
3. Foodgrains utilised (lakh tonnes)	1.30	13.99	24.76	13.34	2.33	1.72	1.47	1.71	20.57
4. Employment generated mandays (lakhs)	444.34	3538.46	5911.80	4135.81	3545.19	3512.03	3027.60	3530.68	17751.31

Note: This scheme was known as Food for Work Programme till October, 1980 and started as a non-plan scheme during 1977-78. From 1978-79 it was being operated as the Central Sector plan scheme with 100% assistance in the form of foodgrains by the Central Govt. for wage component only. From 1-4-81 this programme is being implemented on 50:50 sharing basis between the Centre and States. Union Territories are provided 100% financial assistance.

Source: "Indian Agriculture in Brief" 21st Edition, Ministry of Agriculture, New Delhi.

Reference: For details regarding (i) Districts covered under SFDA projects,

(ii) Districts covered under DPAP programme,

and (iii) Districts selected under IFPC (Kharif 1981),

See "Fertiliser Statistics—1982-83 (pp 109-117)".

PART III

**SELECTED WORLD
FERTILISER AND AGRICULTURAL
STATISTICS**

1.00. WORLD STATISTICS—FERTILISERS

1.01. CAPACITY AND PRODUCTION OF N, P₂O₅ AND K₂O IN SELECTED COUNTRIES 1985-86

('000 tonnes of nutrients)

Continent/Country	N			P ₂ O ₅			K ₂ O
	Capacity ¹		Production 1985-86	Capacity ²		Production 1985-86	Production 1985-86
	Existing*	Planned		Existing*	Planned		
Africa							
Egypt	834	380	576	66	—	138	—
Morocco	—	—	64	1,650	1,155	469	—
South Africa	775	—	420	1,000	—	445	—
Tunisia	272	—	120	1,137	420	567 ³	—
North & Central America							
Canada	3,211	3,650	2,825	1,079	—	630	6,521
Mexico	2,519	1,600	1,305	826	665	268	—
U.S.A.	14,480	190	9,410	10,624	1,345	7,786	955
South America							
Brazil	1,019	245	724	820	25	1,282 ³	—
Chile	—	735	113	50	—	4	—
Venezuela	651	810	196	133	—	71	—
Asia							
Afghanistan	58	—	55	—	—	—	—
Bangladesh	486	544	386	56	—	46	—
Burma	215	272	115	—	—	—	—
China	15,157	1,980	11,649	65	—	1,830	24
India	6,695 ⁴	—	4,323	1,952 ⁵	—	1,460 ³	—
	(6,880) ⁴	[3,122] ⁴	(5,412)	(2,214) ⁵	[958] ⁵	(1,686) ⁶	—
Indonesia	1,648	405	1,749	180	180	463 ²	—
Iran	304	—	20	158	—	—	—

Iraq	81	815	39	400	—	198	—
Israel	66	—	79	227	270	128	1,139
Japan	2,324	—	1,054	802	—	623	—
Korea, Rep. of	527	—	675	450	—	482	—
Korea, Dem. Rep.	755	—	630	—	—	135	—
Kuwait	791	—	316	—	—	—	—
Pakistan	1,327	—	1,033	—	—	93	—
Philippines	84	—	89	428	—	110	—
Qatar	488	410	342	—	—	—	—
Saudi Arabia	685	410	421	—	330	—	—
Sri Lanka	121	—	5	—	—	3 ⁸	—
Turkey	1,541	840	783	696	115	620	—
Europe							
Austria	500	—	240	74	—	75	—
Belgium-Lux.	617	—	750	534	—	361	—
Bulgaria	1,064	365	838	740	—	172	—
Czechoslovakia	845	—	690	12	—	360	—
France	2,771	722	1,690	1,225	—	1,023	1,719
German, Dem. Rep.	1,319	—	1,078	—	—	299	3,465
Germany, Fed. Rep.	2,148	—	1,172	202	—	446	2,380
Italy	1,589	—	1,242	302	260	382	140
Netherlands	2,145	490	1,650	413	—	360	—
Norway	647	—	408	—	—	165	—
Poland	2,607	—	1,254	616	280	889	—
Romania	3,717	—	2,230	392	—	767	—
Spain	843	—	982	683	—	481	687
United Kingdom	1,933	640	1,213	697	—	281 ³	687
Oceania							344
Australia	452	1,217	210	327	100	545	—
U.S.S.R.	23,991	1,105	14,000	6,182	685	7,831²	10,367

() = For 1986-87 [] = Beyond 1986-87

¹ = Capacity of ammonia expressed as N.

² = Capacity of wet-process phosphoric acid expressed as P₂O₅—as in 1984-85.

³ = Production of P₂O₅ includes ground rockphosphate.

⁴ = Total capacity of N including those based on external ammonia.

⁵ = Total capacity of P₂O₅ including those based on external phosphoric acid.

* = Compiled from the data available in FAI, New Delhi.

Source: 1986 "FAO Fertiliser Year Book", Vol. 36, FAO, Rome.

1 02. PRODUCTION AND CONSUMPTION OF N, P₂O₅ & K₂O BY ECONOMIC CLASSES AND REGIONS
1983-84 to 1985-86

('000 tonnes)

Economic Classes and Regions	Production			Consumption		
	1983-84	1984-85	1985-86	1983-84	1984-85	1985-86
	N					
I. Developed Market Economies	24,621.4	27,753.2	25,344.6	22,961.8	23,782.8	22,897.0
N. America	11,772.0	13,913.0	12,235.3	11,219.8	11,680.9	10,694.9
W. Europe	11,072.4	11,797.7	11,286.3	10,325.7	10,572.8	10,715.6
Oceania	221.3	269.0	270.0	300.4	370.0	360.0
Other Developed Market Economies	1,535.7	1,773.5	1,553.0	1,115.9	1,159.2	1,126.5
II. Developing Market Economies	11,729.9	13,729.0	14,883.5	14,405.9	15,793.2	16,795.0
Africa	289.1	365.6	400.8	670.6	690.5	858.5
Latin America	2,140.2	2,618.9	2,838.4	2,679.4	3,203.9	3,409.3
Near East	2,614.9	3,180.7	3,208.5	2,789.3	2,638.3	2,720.0
Far East	6,685.6	7,563.8	8,435.8	8,254.5	9,245.9	9,794.4
Other Developing Market Economies	—	—	—	12.2	14.7	12.8
III. Centrally Planned Economies	31,458.3	33,022.8	33,158.3	29,751.8	30,937.5	30,292.4
Asian CPE	11,912.0	13,053.0	12,293.6	14,626.0	15,994.3	14,577.6
E. Europe + USSR	19,546.3	19,969.8	20,864.7	15,125.8	14,943.2	15,714.8
A. All Developed Countries	44,167.7	47,723.0	46,209.3	38,087.4	38,726.0	38,611.8
B. All Developing Countries	23,641.9	26,782.0	21,177.1	29,031.9	31,787.5	31,372.6
World Total (I+II+III)=(A+B)	67,809.6	74,505.0	73,386.4	67,119.5	70,513.6	69,984.5
	P₂O₅					
I. Developed Market Economies	16,920.2	17,692.8	15,216.0	12,874.4	12,577.9	11,733.4
N. America	9,374.0	10,320.8	8,416.0	5,159.2	4,953.0	4,480.3
W. Europe	5,346.8	5,242.0	4,782.8	5,396.9	5,316.3	5,145.6
Oceania	1,035.4	870.0	821.4	1,147.2	1,096.0	985.0
Other Developed Market Economies	1,164.0	1,260.0	1,195.8	1,171.1	1,212.6	1,122.5
II. Developing Market Economies	5,697.0	6,441.5	6,868.6	6,559.5	7,766.3	7,915.8
Africa	1,158.5	970.8	1,201.1	535.4	538.1	642.2
Latin America	1,404.9	1,787.1	1,706.0	1,799.3	2,416.2	2,304.8

Near East	1,046.5	1 228.5	1,277.9	1,497.3	1,520.3	1,469.0
Far East	2,067.7	2,425.5	2,658.3	2,743.1	3,286.5	3,496.5
Other Developing Market Economies	19.4	29.6	25.3	4.3	5.2	3.3
III. Centrally Planned Economies	12,477.4	12,423.3	12,542.4	13,274.8	13,599.5	13,417.8
Asian CPE	2 888.2	2,591.9	2,015.3	3,907.2	4,070.9	2,955.1
E. Europe + USSR	9,589.2	9,831.4	10,527.1	9,367.6	9,528.6	10,462.7
A. All Developed Countries	26,509.3	27,524.2	25,743.1	22,242.0	22,106.5	22,196.1
B. All Developing Countries	8,585.2	9,033.4	8,883.9	10,467.7	11,837.1	10,870.9
World Total (I+II+III)=(A+B)	35,094.6	36,557.6	34,627.0	32,708.7	33,943.6	33,067.0
				K ₂ O		
I. Developed Market Economies	14,954.1	15,093.8	13,884.3	12,183.6	12,030.5	11,334.7
N. America	8,654.0	8,567.0	7,476.0	5,629.1	5,433.6	4,957.2
W. Europe	5,344.3	5,487.8	5,269.7	5,517.0	5,524.1	5,365.7
Oceania	—	—	—	264.5	280.0	242.0
Other Developed Market Economies	955.8	1,039.0	1,138.6	773.1	792.9	769.8
II. Developing Market Economies	169.7	291.6	544.9	3,018.5	3,704.8	3,852.5
Africa	—	—	—	265.5	252.1	316.8
Latin America	—	—	—	1,244.8	1,675.9	1,680.2
Near East	169.7	291.6	544.9	99.4	98.0	127.3
Far East	—	—	—	1,405.3	1,672.7	1,726.1
Other Developing Market Economies	—	—	—	3.4	5.3	3.2
III. Centrally Planned Economies	12,754.0	13,273.0	13,856.0	10,207.3	10,164.6	10,432.4
Asian CPE	29.0	32.0	24.0	915.7	909.0	591.1
E. Europe + USSR	12,725.0	13,241.0	13,832.0	9,291.6	9,255.6	9,841.3
A. All Developed Countries	27,679.1	28,334.8	27,716.3	21,475.2	21,286.1	21,176.0
B. All Developing Countries	198.7	323.6	568.9	3,934.1	4,613.0	4,444.6
World Total (I+II+III)=(A+B)	27,877.8	28,658.4	28,285.2	25,409.3	25,899.1	25,620.6

1. All Developed Countries = Developed Market Economy (Including Israel, Japan & South Africa) + Eastern Europe and USSR
2. All Developing Countries = Developing Market Economy + Asia (Excluding Israel and Japan)

Source: 1986 "FAO Fertilizer Year Book," Vol. 36, FAO, Rome.

1.03. RANKING OF MAJOR PRODUCING COUNTRIES—NITROGEN
1975-76 to 1985-86

('000 tonnes N)

Year	World production	Ranking					
		Other countries					India
		I	II	III	IV	V	
1975-76	43,896.0	USA 9,591.0	USSR 8,467.0	China 3,172.1	Japan 1,557.0	Poland 1,532.6	VI 1,508.0 (3.4)
1976-77	47,628.4	USA 9,787.9	USSR 8,531.0	China 3,842.0			IV 1,862.4 (4.0)
1977-78	51,332.5	USA 9,495.0	USSR 9,250.0	China 6,602.0			IV 1,999.8 (3.9)
1978-79	55,889.6	USA 10,076.0	USSR 9,220.0	China 7,903.1			IV 2,173.0 (3.9)
1979-80	59,711.6	USA 11,180.0	China 9,095.9	USSR 9,074.0			IV 2,224.3 (3.7)
1980-81	62,765.5	USA 11,825.0	China 10,286.0	USSR 10,155.6			IV 2,163.9 (3.4)
1981-82	62,285.7	USSR 10,581.0	USA 10,523.0	China 10,154.6			IV 3,143.3 (5.0)
1982-83	63,430.5	USSR 11,481.0	China 10,456.0	USA 9,000.0			IV 3,429.7 (5.4)
1983-84	67,809.6	USSR 12,874.0	China 11,289.0	USA 9,401.0			IV 3,491.5 (5.1)
1984-85	74,505.0	USSR 13,143.0	China 12,418.0	USA 11,370.0			IV 3,917.3 (5.3)
1985-86	73,386.4	USSR 14,000.0	China 11,648.6	USA 9,410.0			IV 4,322.9 (5.9)

() = India's share in the world production of N (percentage).

1.04. RANKING OF MAJOR PRODUCING COUNTRIES—PHOSPHATE

1975-76 to 1985-86

('000 tonnes P₂O₅)

Year	World production	Ranking								India
		Other countries								
		I	II	III	IV	V	VI	VII	VIII	
1975-76	26,125.9	USA 6,531.0	USSR 5,165.0	France 1,258.8	China 1,246.2	Poland 929.4	GFR 649.0	Belgium 625.0	Canada 610.0	XXII 319.7 (1.2)
1976-77	27,673.0	USA 7,070.4	USSR 5,226.0	France 1,490.4	Poland 928.8	Brazil 926.1	China 847.0	GFR 733.4	Australia 721.6	XIV 478.3 (1.7)
1977-78	30,422.4	USA 7,480.9	USSR 5,586.0	China 1,741.0	France 1,560.0	Brazil 1,122.4	Poland 966.2	Australia 754.6	GFR 722.5	X 679.8 (2.2)
1978-79	32,227.2	USA 8,556.9	USSR 5,811.0	China 1,816.4	France 1,357.0	Brazil 1,185.8	Poland 1,026.4	Australia 809.6		VII 792.0 (2.4)
1979-80	33,392.1	USA 9,083.0	USSR 5,930.0	China 1,869.9	France 1,364.0	Brazil 1,256.6	Poland 931.0	Australia 919.4		VIII 780.6 (2.3)
1980-81	34,505.8	USA 9,500.0	USSR 6,023.0	China 2,368.0	Brazil 1,582.5	France 1,351.0				VI 858.0 (2.5)
1981-82	31,687.1	USA 7,092.0	USSR 6,343.0	China 2,593.9	France 1,300.0	Brazil 1,186.6				VI 967.1 (3.05)
1982-83	32,112.8	USA 7,296.0	USSR 6,560.0	China 2,589.1	France 1,200.0	Brazil 1,115.2				VI 1,002.3 (3.1)
1983-84	35,094.6	USA 8,719.0	USSR 6,881.0	China 2,723.2	France 1,230.0					V 1,084.5 (3.1)
1984-85	36,557.6	USA 9,676.0	USSR 7,096.0	China 2,421.9	Brazil 1,419.5					V 1,341.9 (3.7)
1985-86	34,627.0	USSR 7,831.0	USA 7,786.0	China 1,830.3						IV 1,460.3 (4.2)

()=India's share in world production of P₂O₅ (percentage).

1.05. RANKING OF MAJOR CONSUMING COUNTRIES - NITROGEN
1975-76 to 1985-86

('000 tonnes N)

Year	World consumption	Ranking			
		Other countries			India
		I	II	III	
1975-76	42,908.3	USA 9,445.2	USSR 7,339.0	China 4,360.6	IV 2,148.6 (5.0)
1976-77	46,383.9	USA 9,639.1	USSR 7,252.0	China 5,940.0	IV 2,457.1 (5.3)
1977-78	49,783.9	USA 9,039.7	China 7,924.0	USSR 7,522.0	IV 2,813.4 (5.7)
1978-79	53,748.8	USA 9,720.2	China 9,280.4	USSR 7,658.0	IV 2,989.3 (5.6)
1979-80	57,168.5	China 10,641.0	USA 10,347.9	USSR 7,467.0	IV 3,444.2 (6.0)
1980-81	60,690.2	China 12,112.1	USA 10,817.0	USSR 8,262.0	IV 3,522.0 (5.8)
1981-82	60,273.1	China 11,528.3	USA 9,963.6	USSR 8,383.0	IV 3,881.7 (6.4)
1982-83	61,040.2	China 12,210.7	USSR 9,038.0	USA 8,279.8	IV 4,043.0 (6.6)
1983-84	67,119.5	China 13,678.9	USSR 10,302.0	USA 10,062.6	IV 4,627.3 (6.9)
1984-85	70,513.6	China 15,075.0	USA 10,425.8	USSR 10,279.0	IV 5,333.8 (7.6)
1985-86	69,984.5	China 13,676.5	USSR 10,950.0	USA 9,469.6	IV 5,701.9 (8.1)

() = India's share in the world consumption of N (percentage).

1.06. RANKING OF MAJOR CONSUMING COUNTRIES—PHOSPHATE
1975-76 to 1985-86

('000 tonnes P₂O₅)

Year	World consumption	Ranking								
		Other countries								India
		I	II	III	IV	V	VI	VII	VIII	
1975-76	25,181.8	USA 4,742.3	USSR 4,728.0	France 1,664.3	China 1,253.4	Brazil 1,013.8	Poland 947.2	GFR 779.7	Japan 623.3	XII 468.8 (1.9)
1976-77	26,839.2	USA 5,107.2	USSR 4,903.0	France 1,796.2	Brazil 1,308.3	Poland 933.1	GFR 887.4	China 853.0	Australia 739.3	X 635.3 (2.4)
1977-78	28,528.9	USSR 5,104.0	USA 4,623.1	France 1,839.7	China 1,832.7	Brazil 1,545.5	Poland 947.6	GFR 873.2		VIII 783.0 (2.7)
1978-79	30,626.3	USSR 5,360.0	USA 5,085.5	China 2,055.2	France 1,949.9	Brazil 1,519.6				VI 964.6 (3.8)
1979-80	31,089.1	USSR 5,480.0	USA 4,927.4	China 2,049.0	France 1,983.8	Brazil 1,685.0				VI 1,015.4 (3.3)
1980-81	31,557.2	USSR 5,590.0	USA 4,930.0	China 2,744.4	Brazil 1,988.5	France 1,773.0				VI 1,091.1 (3.5)
1981-82	30,797.5	USSR 5,879.0	USA 4,367.1	China 2,931.3	France 1,677.1	Brazil 1,318.3				VI 1,172.1 (3.8)
1982-83	30,582.6	USSR 6,115.0	USA 3,753.5	China 3,208.8	France 1,630.7	Brazil 1,210.0				VI 1,200.9 (3.9)
1983-84	32,708.7	USSR 6,465.0	USA 4,446.2	China 3,728.9	France 1,679.4					V 1,371.7 (4.2)
1984-85	33,943.6	USSR 6,625.0	USA 4,225.3	China 3,869.0						IV 1,819.1 (5.4)
1985-86	33,067.0	USSR 7,615.0	USA 3,773.5	China 2,760.0						IV 1,942.1 (5.9)

() = India's share in world consumption of P₂O₅ (percentage)

1.07. RANKING OF MAJOR CONSUMING COUNTRIES—POTASH
1975-76 to 1985-86

('000 tonnes K₂O)

Year	World consumption	Ranking								
		Other countries								India
		I	II	III	IV	V	VI	VII	VIII	
1975-76		USSR	USA	Poland	France	GFR	GDR	Czechoslovakia	Brazil	XIII
	21,440.3	5,176.0	4,726.2	1,496.3	1,314.2	1,099.0	706.5	695.6	557.5	278.3 (1.3)
1976-77		USSR	USA	France	Poland	GFR	Brazil	Japan	Czechoslovakia	XIII
	22,950.6	5,577.0	5,292.3	1,494.2	1,440.2	1,195.1	721.5	647.0	634.0	318.6 (1.4)
1977-78		USSR	USA	France	Poland	GFR	Brazil	Japan	Czechoslovakia	X
	22,904.3	5,400.0	5,013.2	1,558.4	1,407.6	1,183.2	962.9	661.0	597.0	482.7 (2.1)
1978-79		USA	USSR	France	Poland	GFR	Brazil	Japan	Czechoslovakia	IX
	24,457.0	5,664.9	5,394.0	1,689.6	1,331.6	1,178.4	990.9	723.0	656.0	560.1 (2.3)
1979-80		USA	USSR	France	Poland	GFR	Brazil	Japan	Czechoslovakia	IX
	23,942.9	6,665.4	4,411.0	1,785.9	1,354.3	1,206.4	1,103.4	736.0	624.0	545.5 (2.3)
1980-81		USA	USSR	France	Brazil	Poland	GFR			VII
	24,225.7	5,733.0	4,904.0	1,689.2	1,306.5	1,270.5	1,144.0			617.6 (2.5)
1981-82		USA	USSR	France	Poland	GFR	Brazil	China		VII
	23,741.4	5,108.3	4,905.0	1,699.5	1,315.3	1,054.9	766.6	692.9		670.4 (2.8)
1982-83		USSR	USA	France	Poland	GFR	Brazil			VII
	22,877.1	4,991.0	4,382.6	1,744.3	1,110.9	1,041.8	876.4			621.7 (2.7)
1983-84		USSR	USA	France	Poland	GFR	China	Brazil	Japan	IX
	25,409.3	6,201.0	5,258.8	1,833.6	1,202.1	1,013.9	810.3	727.1	632.0	628.6 (2.5)
1984-85		USSR	USA	France	Poland	Brazil	GFR			VII
	25,899.1	6,167.0	5,037.1	1,863.1	1,156.5	1,073.5	988.1			846.4 (3.3)
1985-86		USSR	USA	France	Poland	Brazil	GFR			VII
	25,620.6	6,822.0	4,560.9	1,820.7	1,167.8	1,058.7	932.0			854.1 (3.3)

() = India's share in world consumption of K₂O (percentage).

1.07. RANKING OF MAJOR CONSUMING COUNTRIES—POTASH
1975-76 to 1985-86

1.08. PRODUCTION & CONSUMPTION OF N, P₂O₅ & K₂O
1984-85 & 1985-86

('000 tonnes)

Continent/Country	Production						Consumption					
	1984-85			1985-86			1984-85			1985-86		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Africa	1804.9	1582.8		1674.6	1784.5		1844.1	1192.4	418.2	1991.4	1239.6	478.3
Algeria	101.8	77.5		105.8	71.1		87.7	91.9	24.3	98.2	135.6	49.0
Egypt	625.9	112.0		575.5	138.4		649.2	181.0	21.0	640.3	198.2	25.0
Morocco	42.7	335.7		63.5	468.5		103.6	100.7	43.8	136.5	109.8	52.8
Senegal	10.0	30.0		12.0	37.5		8.0	5.3	5.0	12.0	7.5	9.0
South Africa	482.0	500.0		420.0	445.0		406.7	416.1	140.9	379.7	363.2	135.8
Tunisia	124.2	475.8		120.1	567.4		41.5	41.7	3.5	44.9	47.2	3.2
North & Central America	15386.4	10579.3	8567.0	13909.5	8712.8	7476.0	13450.1	5514.5	5831.6	12549.3	5033.2	5333.9
Canada	2543.0	644.8	7285.0	2825.3	630.0	6521.0	1255.1	727.7	396.5	1225.3	706.8	396.3
Cuba	169.1	16.2		175.5	19.1		294.4	84.1	201.4	293.6	75.9	215.8
Mexico	1188.0	232.3		1304.8	267.7		1193.1	382.0	85.5	1262.6	382.8	68.7
U.S.A.	11370.0	9676.0	1282.0	9410.0	7786.0	955.0	10425.8	4225.3	5037.1	9469.6	3773.5	4560.9
South America	1145.5	1528.6		1164.2	1409.2		1434.8	1854.7	1278.1	1554.9	1751.9	1303.5
Brazil	670.2	1419.5		723.6	1281.7		813.8	1476.4	1073.5	852.3	1612.4	1058.7
Chile	113.6	3.7		113.0	3.7		86.3	80.3	13.8	106.1	95.6	14.6
Colombia	60.4	40.0		65.1	36.9		180.9	90.5	91.5	184.9	85.4	95.7
Peru	18.7	1.3		37.0	1.4		53.8	14.5	9.7	50.6	14.2	9.4
Venezuela	254.7	53.7		195.8	71.4		123.1	84.0	60.5	184.0	126.8	97.2

(Continued)

1.08. PRODUCTION & CONSUMPTION OF N, P₂O₅, K₂O (Concluded)

1984-85 & 1985-86

('000 tonnes)

Continent/Country	Production						Consumption					
	1984-85			1985-86			1984-85			1985-86		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Asia	24131.7	6893.9	1362.6	24217.0	6563.9	1707.5	27883.9	9436.0	3306.5	27085.6	8445.7	3052.7
Afghanistan	48.8	—	—	55.2	—	—	52.8	19.8	—	51.9	19.8	—
Bangladesh	343.1	26.5	—	386.2	46.3	—	386.4	160.9	43.3	367.8	136.9	36.0
Burma	86.5	—	—	115.0	—	—	127.4	46.9	13.9	134.0	50.0	15.0
China	12418.0	2421.9	32.0	11648.5	1830.3	24.0	15075.0	3869.0	831.0	13676.5	2760.0	443.0
India	3917.3	1341.9	—	4322.9	1460.3	—	5333.3	1819.4	846.4	5701.9	1942.1	854.1
Indonesia	1402.4	461.0	—	1749.1	463.3	—	1285.4	437.7	151.2	1299.0	500.0	178.0
Iran	13.3	N.A.	—	20.0	N.A.	—	489.5	432.5	3.7	465.3	434.6	2.7
Israel	80.5	119.0	1039.0	79.0	127.8	1138.6	55.5	19.5	21.0	52.8	18.3	21.0
Japan	1211.0	641.0	—	1054.0	623.0	—	697.0	777.0	631.0	694.0	741.0	613.0
Jordan	97.4	248.9	291.6	91.9	234.8	544.9	6.9	6.5	1.6	10.7	3.2	1.6
Korea, Dem. Rep.	620.0	132.0	—	630.0	135.0	—	597.0	132.0	45.0	623.0	135.0	86.4
Korea, Rep.	659.9	487.5	—	675.0	482.3	—	401.8	181.2	195.1	426.1	197.1	218.0
Pakistan	1027.9	90.0	—	1033.1	93.0	—	934.8	293.8	24.7	1128.1	349.8	33.2
Philippines	15.4	14.2	—	88.9	109.7	—	177.9	45.4	38.6	205.4	42.8	35.0
Qatar	341.0	—	—	342.3	—	—	0.6	—	—	0.5	0.06	—
Saudi Arabia	396.7	—	—	421.3	—	—	138.6	109.6	13.2	169.0	142.3	32.0
Sri Lanka	64.3	4.4	—	5.5	3.4	—	100.3	37.5	53.1	101.7	38.6	55.2
Turkey	759.5	580.1	—	783.4	620.0	—	954.8	554.8	31.4	968.0	476.1	38.0

Europe	18624.5	7977.4	8952.8	18151.0	7478.9	8734.7	15237.0	8219.9	8612.6	15480.4	7993.3	8385.0
Austria	232.5	99.1		240.0	75.3		161.1	95.1	134.2	165.1	90.5	132.9
Belgium-Lux.	760.0	364.0		750.0	361.0		199.0	93.6	124.5	195.0	91.0	135.0
Czechoslovakia	687.5	343.7		689.6	359.6		691.5	524.4	533.1	670.8	536.6	526.6
Denmark	186.7	170.2		169.3	151.2		398.1	111.3	149.9	382.1	105.6	145.9
Finland	302.7	250.4		182.2	243.3		186.1	158.4	153.2	202.2	154.8	149.9
France	1695.0	1168.0	1729.0	1690.0	1023.0	1719.0	2336.8	1580.0	1863.1	2408.0	1466.0	1820.7
German, Dem. Rep.	959.1	308.4	3465.0	1078.2	209.2	3465.0	697.0	319.0	550.0	770.0	318.0	550.0
Germany, Fed. Rep.	1195.1	492.5	2627.0	1117.2	446.3	2380.2	1451.7	732.2	988.1	1515.7	736.8	932.0
Hungary	687.8	220.4		700.5	192.4		625.9	431.1	467.0	558.4	335.9	443.7
Italy	1332.8	477.2	140.6	1242.4	381.5	139.9	1026.3	694.0	370.4	1654.4	652.2	355.5
Netherlands	1739.2	400.0		1650.0	360.0		505.3	89.2	125.4	497.7	81.3	119.7
Norway	478.6	164.0		408.3	165.3		113.3	56.2	82.3	106.4	53.3	77.3
Poland	1369.3	868.7		1253.7	888.9		1238.5	885.1	1156.5	1336.6	908.2	1167.8
Spain	980.2	463.9	662.2	982.2	480.7	686.5	916.8	436.1	285.9	899.1	461.7	310.8
Sweden	200.6	139.9		196.2	112.7		253.2	101.3	101.9	246.0	85.5	88.0
United Kingdom	1360.0	347.0	329.0	1213.0	281.0	344.0	1580.0	469.0	541.0	1572.0	424.0	510.0
Yugoslavia	470.0	430.0		471.9	404.0		469.0	255.0	252.0	477.0	261.0	254.0
U. S. S. R.	13143.0	7096.0	9776.0	14000.0	7831.0	10367.0	10279.0	6625.0	6167.0	10550.0	7615.9	6822.0
Oceania	269.0	899.6		270.0	846.6		384.6	1101.1	285.2	372.8	988.3	245.0
Australia	214.0	568.4		210.0	545.4		330.0	764.0	136.0	328.0	685.0	127.0
Fiji	--	--		--	--		10.1	2.7	2.9	6.8	1.2	1.1
New Zealand	55.0	302.0		60.0	276.0		40.0	332.0	144.0	30.0	300.0	155.0
World Total	74505.0	36557.6	28658.4	73386.4	34627.0	28285.0	70513.6	33943.6	25899.1	69984.5	33067.0	25620.6

Source: 1986 "FAO Fertilizer Year Book", Vol. 36, FAO Rome.

1.09. PRODUCTION OF
1985-88

Continent/Country	Ammonium Sulphate (N)	Ammonium Nitrate (N)	Calcium Nitrate (N)	Urea (N)	Ammonium Phosphate		Other
					N	P ₂ O ₅	N
Africa							
Algeria	—	85.5	—	—	—	—	20.3
Egypt	—	575.5	—	—	—	—	—
Morocco	—	—	—	—	42.5	—	21.0
North & Central America							
Canada	59.0	63.0	—	973.0	164.9	619.0	—
Mexico	331.0	37.2	—	628.4	16.4	41.8	55.9
U.S.A.	437.0	639.0	—	1473.0	—	4522.0	—
South America							
Brazil	—	—	—	—	—	—	—
Chile	—	—	—	—	—	—	—
Colombia	8.9	5.7	—	4.3	—	—	46.2
Asia							
Afghanistan	—	—	—	55.2	—	—	—
Bangladesh	2.1	—	—	384.1	—	—	—
Burma	—	—	—	115.0	—	—	—
India	107.0	95.1	—	3431.8	393.6	645.7	269.4
Japan	336.0	10.0	—	355.0	—	—	249.0
Jordan	—	—	—	—	91.9	234.8	—
Pakistan	19.4	102.5	—	837.3	—	—	73.9
Philippines	31.4	—	—	—	52.0	103.1	5.5
Qatar	—	—	—	342.2	—	—	—
Saudi Arabia	—	—	—	421.3	—	—	—
Sri Lanka	—	—	—	5.5	—	—	—
Turkey	58.1	283.0	—	197.3	76.9	196.5	168.0
Europe							
Bulgaria	29.1	435.9	—	359.1	—	—	—
Denmark	—	41.6	—	—	—	—	127.6
Finland	—	22.0	—	10.0	—	—	250.0
Germany, Fed. Rep.	123.0	563.0	—	—	—	—	317.3
Hungary	6.8	374.8	—	204.8	—	—	112.7
Italy	184.9	264.6	13.8	525.3	—	—	247.7
Netherlands	—	—	—	—	—	—	—
Poland	104.3	789.8	0.2	240.3	118.9	321.1	—
Spain	71.9	400.7	—	166.4	—	—	226.5
Sweden	0.9	104.6	10.5	8.7	—	—	71.4
Oceania							
Australia	—	—	—	—	—	—	—
New Zealand	—	—	—	60.0	—	—	—
U.S.S.R.							
	—	—	—	—	—	—	—

‡=Includes ground rockphosphate.

Note: Some of the fertilisers have not been listed here, therefore, 'total' is not always equal to the sum of constituent items.

FERTILISERS—MATERIALWISE

('000 tonnes of nutrients)

Complexes		Single super-phosphate (P ₂ O ₅)	Concentrated-super-phosphate (P ₂ O ₅)	Muriate of potash (K ₂ O)	Total		
P ₂ O ₅	K ₂ O				N	P ₂ O ₅	K ₂ O
32.0	—	—	39.2	—	105.8	71.1	—
—	—	138.4	—	—	575.5	138.4	—
—	—	—	—	—	63.5	468.5	—
—	—	—	—	6521.0	2825.3	630.0	6521.0
46.6	—	62.7	116.6	—	1304.8	267.7	—
—	—	63.0	992.0	691.0	9410.0	7786.0	955.0
—	—	—	—	—	723.6	1281.7†	—
—	—	—	—	—	113.0	3.7	—
36.9	—	—	—	—	65.1	36.9	—
—	—	—	—	—	55.2	—	—
—	—	—	46.3	—	386.2	46.3	—
—	—	—	—	—	115.0	—	—
442.6	—	341.6	0.1	—	4322.9	1460.3‡	—
395.0	—	77.0	18.0	—	1054.0	623.0	—
—	—	—	—	544.9	91.9	234.8	544.9
73.9	—	19.0	—	—	1033.1	93.0	—
5.5	—	1.1	—	—	88.9	109.7	—
—	—	—	—	—	342.2	—	—
—	—	—	—	—	421.3	—	—
—	—	—	—	—	5.5	3.4‡	—
165.4	—	1.7	256.5	—	783.4	620.0	—
—	—	—	171.7	—	837.7	171.7	—
117.2	—	0.7	33.3	—	169.3	151.3	—
232.0	—	3.3	—	—	282.2	243.2	—
287.6	—	6.3	—	1793.5	1117.2	446.3	2380.2
—	—	—	—	—	700.5	192.4	—
230.5	46.6	109.0	42.0	—	1242.4	381.0	139.9
—	—	—	—	—	1650.0	360.0	—
—	—	518.8	—	—	1253.7	888.8	—
385.0	—	84.5	11.1	686.5	982.2	480.7	686.5
66.3	—	6.7	17.7	—	196.2	112.7	—
—	—	545.4	—	—	210.0	545.4	—
—	—	276.0	—	—	60.0	276.0	—
—	—	—	—	—	14000.0	7831.0‡	10367.0

Source: 1986, 'FAO Fertiliser Year Book, Vook, Vol. 36, FAO Rome'.

1.10. PRODUCTION OF ROCK PHOSPHATE
(1984 to 1986)

('000 tonnes)

Continent/Country	1984	1985	1986
World/Total	149,792	145,075	141,130
Western Europe	701	740	721
Finland	477	510	NA
France	—	—	—
Sweden	128	193	NA
Turkey	96	37	NA
Eastern Europe	29,000	30,500	32,000
U.S.S.R.	29,000	30,500	32,000
Africa	36,065	34,361	36,966
Algeria	1,002	1,208	1,203
Egypt	1,043	1,074	1,272
Morocco	21,133	20,737	21,178
Senegal	2,123	1,781	1,982
South Africa	2,585	2,421	2,923
Togo	2,696	2,452	2,314
Tunisia	5,346	4,530	5,951
North America	49,197	50,835	37,870
U.S.A.	49,197	50,835	37,870
Central America	415	589	640
Mexico	375	549	600
South America	3,893	4,252	4,727
Brazil	3,855	4,214	4,509
Asia	29,146	22,255	26,689
China P.R.	14,210	6,970	11,000
Christmas Islands	1,257	1,187	880
India	883	929	1,000
Iraq	1,000	1,000	1,500
Israel	3,312	4,076	3,673
Jordan	6,263	6,067	6,249
Philippines	5	5	5
Syria	1,514	1,270	1,606
Oceania	1,376	1,542	1,528
Australia	17	34	34
Nauru	1,359	1,508	1,494

Source: "Statistical Supplement—World Phosphate Rock and Phosphoric Acid Statistics 1986".
Number 150 July—August 1987. The British Sulphur Corporation Ltd., London.

1.11. PRODUCTION OF SULPHUR-IN-ALL-FORMS

1984—1986

(thousand tonnes S/S—equivalent)

Continent/Country	1984		1985		1986	
	All forms	Brim-stone	All forms	Brim-stone	All forms	Brim-stone
World	54,557	33,854	56,203	35,609	56,790	36,159
Western World	34,772	23,986	36,800	25,600	36,674	25,524
Western Europe	7,760	3,620	7,854	3,555	7,786	3,381
Belgium	245	101	257	110	259	110
Finland	519	45	525	45	545	42
France	1,934	1,751	1,723	1,546	1,326	1,147
Germany, F.R.	1,746	1,130	1,778	1,218	1,836	1,276
Greece	204	148	240	175	234	160
Italy	436	112	551	121	637	230
Netherlands	201	100	214	90	248	125
Norway	273	8	263	10	261	12
Spain	1,343	20	1,390	20	1,461	25
Sweden	360	25	356	25	400	25
Africa	949	87	1,043	95	1,005	120
South Africa	771	85	842	85	814	110
Asia	4,909	2,879	5,639	3,473	6,046	3,898
Iran	130	130	150	150	180	180
Iraq	410	410	620	620	800	800
Japan	2,762	1,145	2,671	1,068	2,541	998
Kuwait	151	151	198	198	268	268
Philippines	145	—	234	—	268	—
Saudi Arabia	847	847	1,162	1,162	1,350	1,350
Oceania	264	40	221	20	244	38
North America	18,180	15,092	19,255	16,152	18,623	15,609
Canada	6,612	5,685	6,679	5,828	6,636	5,750
United States	11,568	9,407	12,576	10,324	11,987	9,859
Latin America	2,710	2,267	2,788	2,304	2,970	2,480
Brazil	221	70	242	59	270	85
Chile	164	54	198	79	200	80
Mexico	1,941	1,856	2,022	1,937	2,190	2,105
Centrally Planned Economies	19,785	9,868	19,402	10,080	20,115	10,635
Eastern Europe	6,855	5,188	6,578	5,079	6,663	5,105
German, D.R.	418	100	417	100	418	100
Poland	5,756	4,990	5,044	4,876	5,061	4,893
Romania	406	30	371	30	381	30
Yugoslavia	507	4	472	4	525	5
U.S.S.R.	9,394	4,510	9,686	4,760	10,150	5,230
Other Centrally Planned Economies	3,536	170	3,138	170	3,303	300
China, P.R.	3,307	170	2,928	170	3,092	300

Source: "Sulphur", Number 190, May-June 1987, The British Sulphur Corporation Ltd., London.

1.12. PRODUCTION OF SULPHURIC ACID
(100% H₂SO₄)
(1984 to 1986)

('000 tonnes)

Continent/Country	1984	1985	1986
World Total	148,432	146,428	145,335
Western World	103,886	102,880	98,955
Western Europe	26,287	26,082	24,825
Belgium	2,226	2,086	1,959
Finland	1,419	1,400	1,290
France	4,499	4,410	3,955
Germany, Fed. Rep.	3,800	3,630	3,600
Greece	1,152	1,086	900
Italy	2,500	2,620	2,485
Netherlands	1,609	1,500	1,325
Spain	3,428	3,550	3,577
Sweden	902	960	1,001
Turkey	399	765	850
United Kingdom	2,654	2,525	2,330
Africa	12,055	11,816	13,069
Morocco	4,295	3,960	4,980
South Africa	3,679	3,590	3,223
Tunisia	2,360	2,320	2,800
Asia	15,197	15,839	16,616
India	2,809	2,709	2,925
Indonesia	490	648	680
Japan	6,458	6,581	6,565
Korea, South	1,959	2,050	1,865
Philippines	452	707	800
Taiwan	762	733	838
Oceania	2,428	2,420	1,955
Australia	1,853	1,860	1,695
New Zealand	575	560	260

(Continued)

1.12. PRODUCTION OF SULPHURIC ACID
(100% H₂SO₄) (Concluded)
(1984 to 1986)

('000 tonnes)

Continent/Country	1984	1985	1986
North America	39,951	38,468	34,755
Canada	4,053	3,890	3,575
United States	35,898	34,578	31,180
Latin America	7,969	8,254	7,734
Brazil	3,476	3,660	3,408
Chile	572	609	614
Mexico	3,160	3,248	2,966
Centrally Planned Economies	44,546	43,548	46,388
Eastern Europe	9,748	978	10,606
Bulgaria	908	810	806
Czechoslovakia	1,246	1,298	1,300
German, D.R.	885	892	895
Poland	2,770	2,863	2,900
Romania	1,915	1,920	1,925
Yugoslavia	1,425	1,435	1,595
U.S.S.R.	25,338	26,000	27,900
Other Centrally Planned Economies	9,460	7,763	8,474
China, P.R.	8,471	6,710	7,510
Cuba	336	373	286
Korea, North	599	599	604

Source: "Sulphur", No. 190, May-June 1987, The British Sulphur Corporation, London.

1.13. CONSUMPTION OF
1985-86

Continent/Country	Ammonium sulphate (N)	Ammonium nitrate (N)	Calcium nitrate (N)	Urea (N)	Ammonium phosphate	
					N	P ₂ O ₅
Africa						
Algeria	—	76.0	—	—	—	—
Egypt	—	—	—	—	—	—
North & Central America						
Canada	18.9	121.5	—	456.3	176.4	666.4
Mexico	361.6	21.9	—	539.3	55.1	140.8
U.S.A.	125.0	523.1	—	1418.7	—	—
South America						
Brazil	—	—	—	—	—	—
Chile	—	—	—	44.0	—	—
Peru	4.3	6.4	—	36.5	2.6	6.7
Asia						
Bangladesh	2.1	—	—	365.7	0.01	0.02
Burma	—	—	—	134.0	—	—
India	104.3	110.9	—	4607.0	622.2	1234.1
Japan	194.0	10.0	—	116.0	—	—
Pakistan	19.4	131.7	—	794.9	89.0	227.5
Philippines	25.2	—	—	144.4	—	22.9
Saudi Arabia	—	—	—	97.8	—	—
Sri Lanka	15.9	—	—	84.6	—	—
Turkey	92.1	396.1	—	234.4	67.8	173.2
Europe						
Denmark	0.4	24.9	2.2	5.2	—	—
Finland	0.01	23.7	0.6	4.3	—	—
Germany, Fed. Rep.	95.9	928.8	0.8	—	—	—
Hungary	1.7	322.2	—	160.5	—	—
Italy	74.9	211.7	12.2	425.1	—	—
Netherlands	—	—	—	—	—	—
Poland	89.2	817.3	—	310.9	76.3	195.5
Spain	77.6	341.8	2.3	177.2	—	—
Sweden	0.04	73.7	67.7	—	3.8	—
Oceania						
Fiji	6.8	—	—	—	—	—

Note: Some of the fertilisers have not been listed here, therefore, 'total' is not always equal to the sum of constituent items.

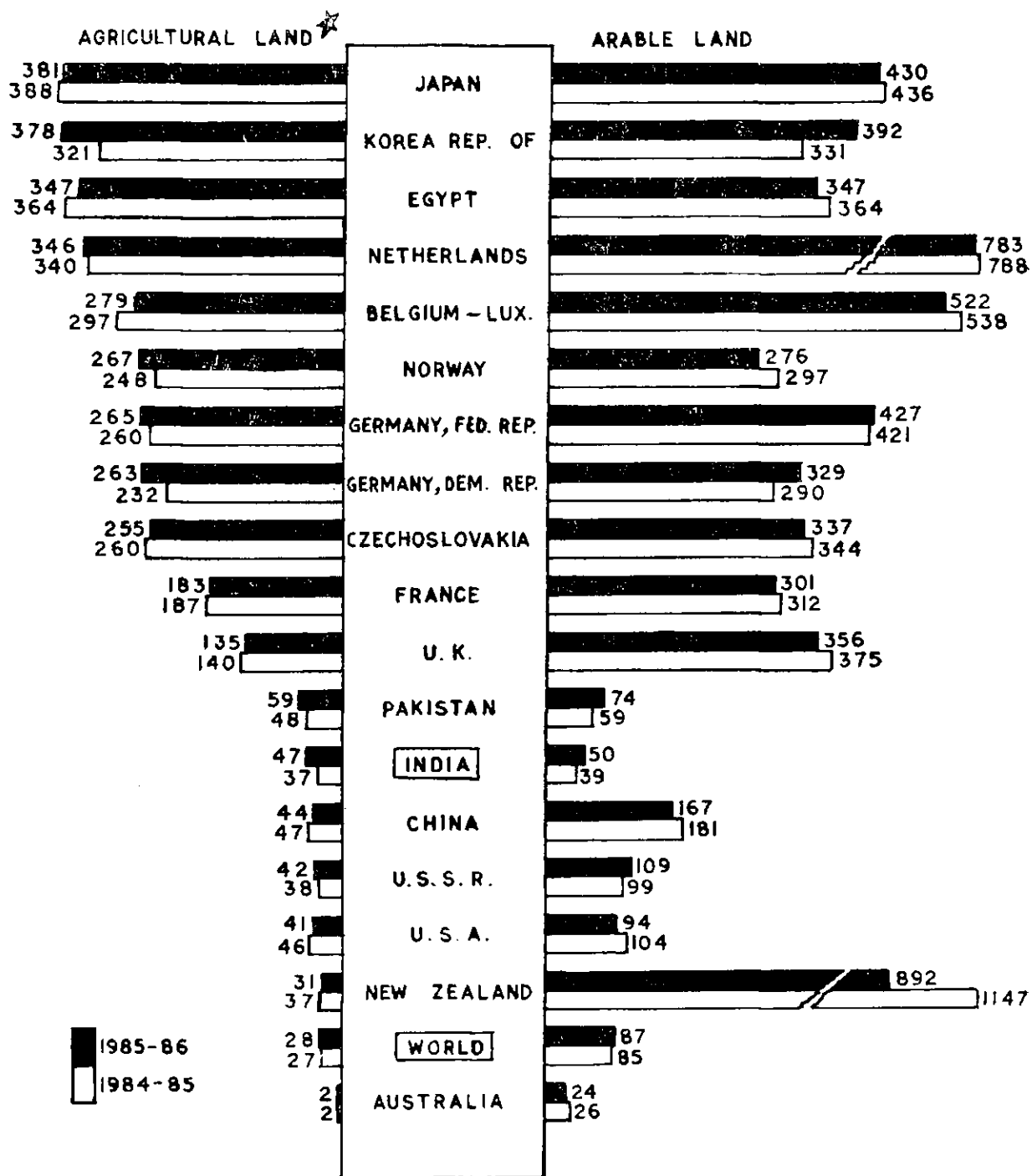
Source: 1986 "FAO Fertiliser Year Book," Vol. 36 FAO, Rome.

FERTILISERS—MATERIALWISE

('000 tonnes of nutrients)

Other complexes			Single super-phosphate (P ₂ O ₅)	Concentrated super-phosphate (P ₂ O ₅)	Muriate of potash (K ₂ O)	Total		
N	P ₂ O ₅	K ₂ O				N	P ₂ O ₅	K ₂ O
22.1	45.2	48.2	—	90.4	—	98.2	135.6	49.0
—	—	—	198.2	—	—	640.3	198.2	25.0
—	—	—	—	37.0	389.5	1225.3	706.8	396.3
48.8	40.7	35.3	60.6	140.7	23.8	1262.6	382.8	68.7
40.7	—	21.1	—	288.4	2723.0	9469.6	3773.5	4560.9
—	—	—	—	—	—	852.3	1312.4	1058.7
9.9	—	5.9	3.7	91.9	—	106.1	95.6	14.6
0.7	1.0	0.5	0.4	6.1	7.2	50.8	14.2	9.4
—	—	—	—	136.8	35.9	367.8	136.9	36.3
—	—	—	—	50.0	15.0	134.0	50.0	15.0
234.2	348.8	—	327.5	1.4	847.1	5701.9	1942.1	854.1
300.0	505.0	—	79.0	31.0	474.0	694.0	741.0	613.0
93.0	94.7	9.3	20.7	6.8	—	1128.1	349.8	33.2
18.3	18.3	18.3	0.4	1.2	16.7	205.4	42.8	35.0
71.1	142.3	32.5	—	—	—	169.0	142.3	32.5
1.2	27.0	3.6	—	11.6	51.6	101.7	38.6	55.2
177.6	176.1	33.2	3.0	123.8	—	968.0	476.1	38.0
187.5	101.6	139.1	0.8	3.3	6.5	382.1	105.6	145.9
172.9	145.4	140.8	1.3	0.02	0.9	202.2	159.8	149.9
371.0	419.7	376.2	47.6	—	281.3	1515.7	736.8	932.0
55.0	114.7	110.8	132.2	89.0	324.1	558.4	335.9	443.7
315.6	512.9	276.8	113.6	60.1	36.6	1054.4	692.2	355.5
—	—	—	—	—	—	497.7	81.3	119.7
42.6	127.2	127.8	453.2	77.2	955.4	1376.6	908.2	1167.8
200.6	365.8	260.7	84.5	11.1	33.2	899.1	461.7	310.8
99.8	57.7	59.2	3.8	—	1.6	246.0	85.5	88.0
—	—	—	1.2	—	1.1	6.8	1.2	1.1

Consumption of plant nutrients on agriculture and arable land in selected countries (kg/ha) 1985-86 and 1984-85



★ COUNTRIES ARRANGED IN DESCENDING ORDER OF AGRICULTURAL LAND 1985-86

1.14. FERTILISER CONSUMPTION PER HECTARE OF ARABLE LAND AND LAND UNDER PERMANENT CROPS*

1984-85 and 1985-86

(kg/hectare)

Continent/Country	1984-85				1985-86			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
Africa	10.0	6.2	2.2	18.5	10.8	6.7	2.6	20.1
Egypt	292.3	64.6	7.1	363.9	257.6	79.7	10.1	347.3
Morocco	13.4	11.5	44.6	29.5	16.2	13.1	6.3	35.6
South Africa	27.0	28.4	9.0	64.4	28.8	27.6	10.3	66.7
North & Central America	46.9	20.6	21.8	89.3	45.7	18.3	19.4	83.4
Canada	25.0	15.4	8.0	48.4	26.2	15.1	8.5	49.8
Mexico	44.1	13.4	2.7	60.2	51.0	15.5	2.8	69.3
U.S.A.	53.0	23.4	27.4	104.1	49.9	19.9	24.0	93.7
South America	7.6	9.4	6.4	23.4	11.1	12.5	9.3	32.8
Chile	11.7	11.0	2.1	24.9	19.2	17.3	2.6	39.1
Peru	15.0	4.6	2.8	22.4	18.7	3.8	2.6	20.1
Asia	56.4	19.1	6.7	82.2	59.6	18.6	6.7	84.9
Bangladesh	39.1	17.9	4.2	61.1	40.3	15.0	3.9	59.2
China	135.6	37.0	8.0	180.6	135.6	27.4	4.4	167.3
India	27.5	8.1	3.7	39.4	33.7	11.5	5.1	50.3
Israel	107.8	41.4	42.3	191.5	126.3	43.8	50.2	220.3
Japan	145.9	159.2	131.5	436.5	145.9	155.7	128.8	430.4
Korea, Dem. Rep.	254.5	56.8	34.0	345.2	263.8	57.2	36.6	357.5
Korea, Rep.	169.5	79.0	82.6	331.1	198.7	91.9	101.7	392.4
Pakistan	45.1	12.9	1.4	59.4	55.0	17.1	1.6	73.7
Philippines	21.4	4.9	5.7	31.9	26.0	5.4	4.4	35.8
Europe	107.9	60.4	61.3	229.6	110.9	57.2	60.1	228.2
Austria	100.6	62.4	89.1	252.2	108.2	59.3	87.1	254.7
Belgium-Lux.	240.4	118.5	179.3	538.2	241.9	112.9	167.5	522.3
Czechoslovakia	131.9	102.3	109.3	343.5	130.2	104.1	102.2	336.5
Denmark	160.6	45.5	60.0	266.0	145.8	40.3	55.7	241.8
Finland	86.9	69.1	66.1	222.0	83.9	64.2	62.2	210.3
France	123.9	89.7	97.9	311.5	127.2	77.5	96.2	300.9
German, Dem. Rep.	138.8	66.6	84.8	290.1	154.8	63.9	110.6	329.4
Germany, Fed. Rep.	185.0	100.0	136.1	421.1	203.4	98.9	125.1	427.3
Italy	81.2	55.6	31.5	168.4	86.4	56.7	29.1	172.3
Netherlands	552.3	99.9	135.6	787.9	558.0	91.1	134.2	783.3
Norway	129.3	70.2	91.4	297.0	124.0	62.1	90.1	276.2
Poland	89.3	60.8	81.2	231.4	90.0	61.2	78.7	229.9
Spain	39.4	19.4	12.2	71.0	44.0	22.6	15.2	81.9
Sweden	85.9	37.3	37.1	160.3	82.4	28.7	29.5	140.6
United Kingdom	229.2	67.8	77.6	374.6	222.1	61.3	72.1	355.5
Yugoslavia	56.7	30.8	30.2	117.8	61.3	33.5	32.6	127.5
U.S.S.R.	44.3	27.8	26.7	98.8	47.2	32.8	29.4	109.3
Oceania	6.7	24.7	5.7	37.1	7.4	19.7	4.9	31.9
Australia	6.0	17.2	3.0	26.2	6.7	14.1	2.6	23.5
Fiji	31.8	8.1	6.4	46.2	28.3	5.0	4.6	37.9
New Zealand	67.4	803.9	275.5	1146.8	63.9	598.8	229.5	892.2
World	45.7	22.4	17.3	85.3	47.4	22.4	17.4	87.1

* Arable land and land under permanent crops: This definition is used in calculating per hectare consumption and includes land under temporary crops (double cropped areas are counted once), temporary meadows for mowing or pastures, land under market and kitchen garden, land temporary fallow or lying idle and also land under permanent crops.

Source: 1986 "FAO Fertilizer Year Book", Vol. 36, FAO, Rome.

1.15. FERTILISER CONSUMPTION PER HECTARE OF AGRICULTURAL LAND*
1984-85 & 1985-86

(kg/hectare)

Continent/Country	1984-85				1985-86			
	N	P ₂ O ₅	K ₂ O	Total	N	P ₂ O ₅	K ₂ O	Total
Africa	1.9	1.2	0.4	3.5	2.0	1.3	0.5	3.8
Egypt	292.3	64.6	7.1	363.9	257.6	79.7	10.1	347.3
Morocco	5.4	4.6	1.9	11.8	4.7	3.7	1.8	10.2
South Africa	3.9	4.1	1.3	9.4	4.0	3.8	1.4	9.3
North & Central America	20.3	8.9	9.4	38.6	19.6	7.8	8.3	35.7
Canada	16.5	10.2	5.3	31.9	15.8	9.1	5.1	29.9
Mexico	11.0	3.3	0.7	15.0	12.7	3.9	0.7	17.3
U.S.A.	23.3	10.3	12.2	45.8	22.0	8.7	10.6	41.3
South America	1.8	2.2	1.5	5.5	2.6	2.9	2.2	7.7
Chile	3.7	3.5	0.7	7.9	6.1	5.5	0.8	12.4
Peru	1.7	0.5	0.3	2.6	1.6	0.5	0.3	2.4
Asia	23.3	7.9	2.8	34.0	24.6	7.7	2.8	35.1
Bangladesh	36.6	16.8	4.0	57.4	37.8	14.1	3.7	55.5
China	35.4	9.6	2.1	47.1	35.4	7.1	1.1	43.7
India	25.7	7.6	3.5	36.8	31.5	10.7	4.7	47.0
Israel	37.5	14.4	14.7	66.7	42.7	14.8	17.0	74.5
Japan	129.6	141.4	116.8	387.7	129.0	137.8	114.0	380.7
Korea, Dem. Rep.	249.1	55.6	33.2	337.9	258.3	56.0	35.8	350.1
Korea, Rep.	164.3	76.5	80.1	320.9	191.6	88.6	98.0	378.2
Pakistan	36.2	10.3	1.1	47.6	44.2	13.7	1.3	59.3
Philippines	19.4	4.4	5.2	29.0	22.7	4.7	3.9	31.3
Europe	67.1	37.5	38.1	142.7	69.1	35.7	37.5	142.3
Austria	43.5	27.0	38.6	109.2	47.0	25.8	37.9	110.6
Belgium-Lux.	132.6	65.4	98.9	296.9	129.1	60.2	89.3	278.6
Czechoslovakia	99.8	77.4	82.7	259.8	98.7	79.0	77.5	255.2
Denmark	147.2	41.7	55.0	44.0	134.5	37.2	51.4	223.1
Finland	82.2	65.4	62.6	210.2	79.6	60.9	59.0	199.5
France	74.2	53.7	58.7	186.6	77.2	47.0	58.4	182.6
German, Dem. Rep.	111.0	53.3	67.8	232.1	123.7	51.1	88.4	263.1
Germany, Fed. Rep.	114.1	61.7	83.9	259.7	126.1	61.3	77.5	265.0
Italy	57.7	39.5	22.4	119.7	61.3	40.2	20.6	122.1
Netherlands	238.1	43.1	58.4	339.6	246.5	40.3	59.3	346.1
Norway	116.2	63.1	87.6	266.9	111.2	55.7	80.8	247.6
Poland	70.0	47.7	63.7	181.4	70.7	48.0	61.7	180.4
Spain	25.9	12.8	8.0	46.7	29.6	15.2	10.2	55.0
Sweden	70.3	30.5	30.4	131.2	69.2	24.0	24.7	118.0
United Kingdom	85.7	25.4	29.0	140.0	84.3	23.3	27.4	134.9
Yugoslavia	31.2	17.0	16.6	64.8	33.7	18.5	18.0	70.2
U.S.S.R.	17.0	10.7	10.2	37.9	18.0	12.5	11.2	41.8
Oceania	0.6	2.3	0.5	3.5	0.7	2.0	0.5	3.2
Australia	0.6	1.6	0.3	2.4	0.7	1.4	0.3	2.3
New Zealand	2.2	25.7	8.8	36.7	2.2	20.9	8.0	31.0
World	14.5	7.1	5.5	27.1	15.1	7.1	5.5	27.7

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

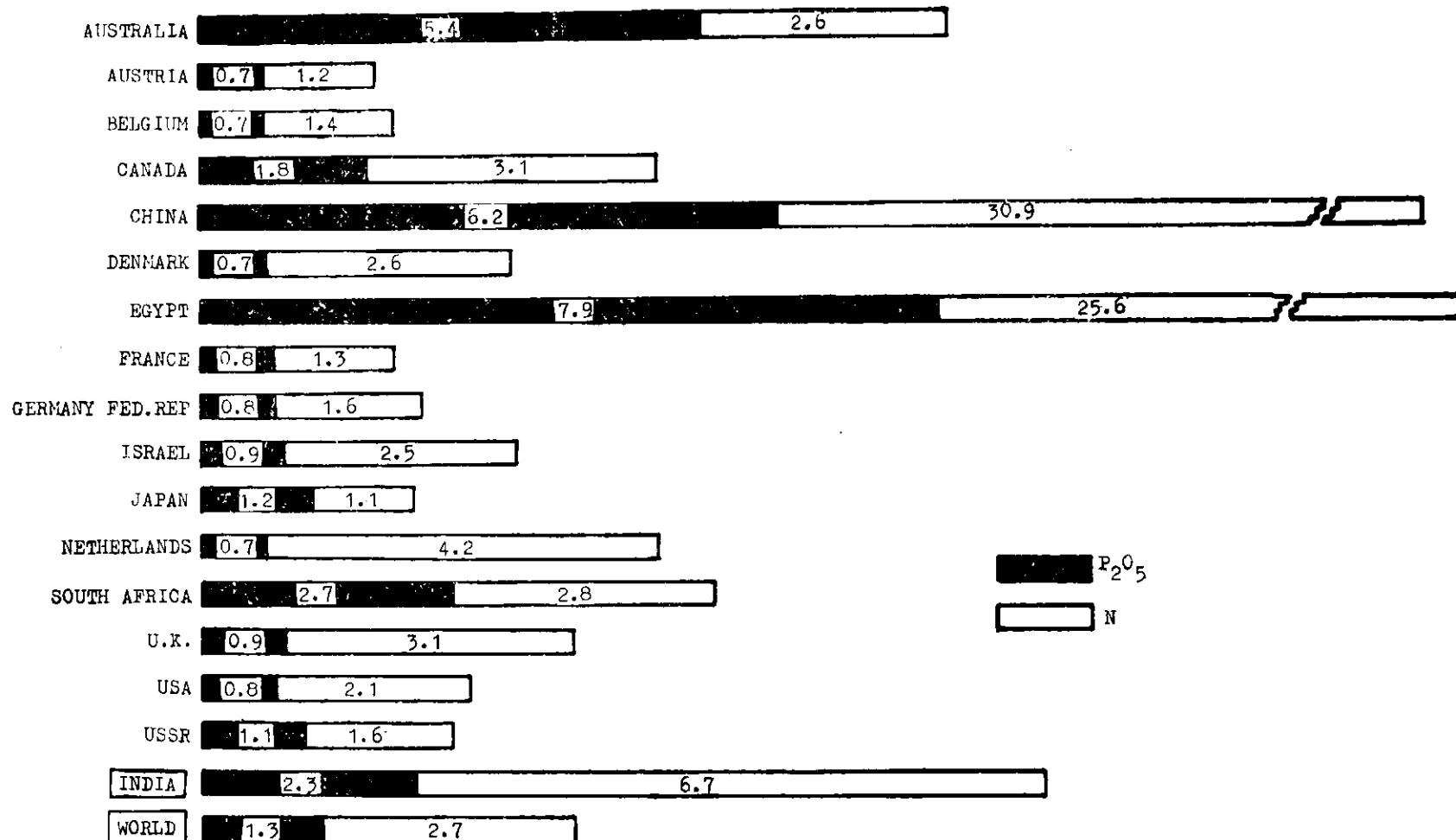
Source: 1986 "FAO Fertiliser Year Book", Vol. 36, FAO, Rome.

**1.16. CONSUMPTION RATIO OF N & P₂O IN RELATION TO K₂O
AND N IN RELATION TO P₂O₅
1984-85 & 1985-86**

Continent/Country	1984-85			1985-86		
	N/K ₂ O	P ₂ O ₅ /K ₂ O	N/P ₂ O ₅	N/K ₂ O	P ₂ O ₅ /K ₂ O	N/P ₂ O ₅
Africa	4.4	2.9	1.5	4.2	2.6	1.6
Algeria	3.6	3.8	1.0	2.0	2.8	0.7
Egypt	30.9	8.6	3.6	25.6	7.9	3.2
Morocco	2.4	2.3	1.0	2.6	2.1	1.2
Senegal	1.6	1.1	1.5	1.3	0.8	1.6
South Africa	2.9	2.9	1.0	2.8	2.7	1.0
Tunisia	11.9	11.9	1.0	14.0	14.7	1.0
North & Central America	2.3	0.9	2.4	2.4	0.9	2.5
Canada	3.2	1.8	1.7	3.1	1.8	1.7
Mexico	14.0	4.5	5.1	18.4	5.6	3.3
USA	2.1	0.8	2.5	2.1	0.8	2.5
South America	1.1	1.5	0.8	1.2	1.3	0.8
Brazil	0.8	1.4	0.6	0.8	1.2	0.6
Chile	6.3	5.8	1.1	7.3	6.5	1.1
Colombia	2.0	1.0	2.0	1.9	0.9	2.2
Peru	5.5	1.5	3.7	5.4	1.5	3.6
Asia	8.4	2.9	2.9	8.9	2.8	3.2
Bangladesh	8.9	3.7	2.4	10.2	2.3	2.7
China	18.1	4.7	3.9	30.9	6.2	5.0
India	6.3	2.1	2.9	6.7	2.3	2.9
Israel	2.6	0.9	2.8	2.5	.9	2.9
Japan	1.1	1.2	0.9	1.1	1.2	0.9
Korea Rep.	2.1	0.9	2.2	2.0	0.9	2.2
Pakistan	37.8	11.9	3.2	34.0	10.5	3.2
Philippines	4.6	1.2	3.9	5.9	1.2	4.8
Sri Lanka	1.9	0.7	2.7	1.8	0.7	2.6
Turkey	30.4	17.7	1.7	25.5	12.5	2.0
Europe	1.8	0.9	1.9	1.8	0.9	1.8
Austria	1.2	0.7	1.7	1.2	0.7	1.8
Belgium-Lux.	1.6	0.8	2.1	1.4	0.7	2.1
Czechoslovakia	1.3	1.0	1.3	1.3	1.0	1.3
Denmark	2.7	0.7	3.6	2.6	0.7	3.6
Finland	1.3	1.0	1.2	1.3	1.0	1.3
France	1.3	0.8	1.5	1.3	0.8	1.6
German Dem. Rep.	1.3	0.6	2.2	1.4	0.6	2.4
German Fed. Rep.	1.5	0.7	2.0	1.6	0.8	2.1
Italy	2.8	1.9	1.5	3.0	1.9	1.5
Netherlands	4.0	0.7	5.7	4.2	0.7	6.1
Poland	1.1	0.8	1.4	1.1	0.8	1.5
Spain	3.2	1.5	2.1	2.9	1.5	1.9
Sweden	2.5	1.0	2.5	2.8	1.0	2.9
United Kingdom	2.0	0.9	3.4	3.1	0.9	3.6
Yugoslavia	1.9	1.0	1.8	1.9	1.0	1.8
U.S.S.R.	1.7	1.1	1.6	1.6	1.1	1.4
Oceania	1.3	3.9	0.3	1.5	4.0	0.4
Australia	2.4	5.6	0.4	2.6	5.4	0.5
New Zealand	0.3	2.3	0.1	0.3	2.6	0.1
World	2.7	1.3	2.1	2.7	1.3	2.1

Source: Calculated from Table 1.08 part III.

Consumption Ratio of N₂ and P₂O₅ In Relation to K₂O—1985-86



NOTE: K₂O IS TAKEN AS UNITY

SOURCE: BASED ON TABLE 1.16

**1.17. FERTILISER CONSUMPTION PER CAPITA, PER HECTARE AND YIELD OF
PRINCIPAL CROPS—1985-86**

(Kg.)

Continent/Country	Fertiliser consumption (N+P ₂ O ₅ +K ₂ O)		Yield per hectare			
	Per hectare of arable land	Per ¹ capita	Rice	Maize	Wheat	Potato
Africa						
Egypt	347.3	18.4	5,947	4,995	3,805	17,466
South Africa	66.7	27.1	—	1,997	1,057	14,933
North & Central America						
Canada	49.8	91.7	—	6,156	2,240	25,119
U.S.A.	93.7	74.5	6,330	7 487	2,312	32,692
South America						
Brazil	42.5	23.8	1,860	1,645	1,390	11,405
Asia						
Bangladesh	59.2	5.3	2,350	—	1 930	10,165
China	167.3	15.9	5,285	3,547	3,041	10,716
India	50.3	11.2	2,195	1,476	2,032	12,610
Israel	220.3	21.5	—	—	2,122	38,398
Japan	430.4	17.0	6,322	—	3,567	29,237
Korea, Rep. of	392.4	20.4	6,369	—	—	20,214
Pakistan	73.7	15.1	2,523	1,362	1,881	10,096
Philippines	35.8	5.2	2,694	1,145	—	—
Europe						
Belgium—Lux	522.3	41.2	—	—	6,812	33,678
France	300.9	103.2	—	5,818	5,452	31,297
German, Dem. Rep.	329.4	98.3	—	—	5,601	21,478
Germany, Fed. Rep.	427.3	52.2	—	6,959	6,314	37,021
Italy	172.3	36.8	5,744	7,416	2,895	19,562
Netherlands	783.3	48.2	—	—	8,122	41,207
Poland	229.9	91.7	—	—	3,649	18,615
United Kingdom	355.5	44.3	—	—	6,947	36,723
U.S.S.R.	109.3	91.5	4,240	2,955	1,894	13,365
Oceania						
Australia	23.5	72.7	6,625	3,301	1,480	25,216
New Zealand	892.2	136.7	—	—	—	—
World	87.1	26.6	3,247	3,724	2,343	15,392

¹=Based on total population.

Source: 1986 "FAO Fertilizer Year Book", Vol. 36, FAO, Rome and various issues of "Monthly Bulletin of Statistics" FAO-Rome.

1.18 WORLD TRADE IN FERTILISERS
1985-86

('000 tonnes)

Continent/Country	Imports			Exports		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Africa	887.9	470.0	533.2	475.6	1007.3	—
Algeria	3.5	61.9	50.0	4.3	—	—
Egypt	146.9	59.8	14.3	9.2	10.7	—
Morocco	104.6	—	54.9	18.7	372.8	—
South Africa	37.6	0.2	154.0	70.0	82.0	—
Tunisia	0.9	0.9	6.5	77.6	509.1	—
North & Central America	4351.5	633.0	4776.5	3574.9	2996.9	6660.2
Canada	180.7	197.4	17.8	1510.0	78.9	6213.2
Cuba	192.6	67.3	246.5	NA	—	—
Mexico	81.7	162.7	82.1	7.2	—	—
U.S.A.	3621.0	97.0	4317.0	188.0	2878.0	447.0
South America	431.8	382.2	1334.3	152.1	9.8	—
Brazil	131.7	34.1	1058.7	3.3	3.7	—
Chile	57.3	94.6	39.2	76.5	—	—
Colombia	121.2	61.3	92.1	4.7	5.4	—
Peru	8.1	15.9	10.4	—	—	—
Asia	5893.3	3408.7	313.6	2238.2	1231.5	1631.5
Bangladesh	90.0	164.0	52.5	10.0	—	—
China	2090.0	953.1	391.8	3.1	12.0	—
India	1615.8	804.8	893.8	—	—	—
Indonesia	8.0	12.8	180.0	338.0	0.8	—
Israel	2.8	—	—	28.3	103.7	1071.7
Japan	101.0	158.0	968.0	208.0	29.0	—
Pakistan	83.9	206.7	40.4	171.8	—	—
Philippines	181.6	33.5	31.2	31.4	67.5	—
Sri Lanka	84.5	40.3	66.6	—	—	—
Turkey	180.7	77.6	37.8	38.0	312.6	—

(Continued)

**1.18. WORLD TRADE FERTILISERS
1985-86**

('000 tonnes)

Continent/Country	Imports			Exports		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Europe	4518.6	2790.5	6999.9	6746.3	2107.6	5262.0
Austria	60.0	40.7	171.3	130.0	25.6	—
Belgium-Lux	358.3	185.2	390.0	985.3	490.9	—
Czechoslovakia	174.5	167.2	556.0	170.0	—	—
Denmark	258.4	55.2	226.0	48.8	103.8	—
France	970.0	575.0	817.2	250.0	132.0	570.8
German Dem. Rep.	7.0	24.0	—	291.3	—	2791.0
Germany Fed. Rep.	795.1	397.7	279.2	339.5	84.7	1374.5
Hungary	210.5	192.6	514.6	321.2	41.6	—
Italy	300.4	391.1	525.4	346.2	75.6	130.6
Netherlands	238.0	62.7	222.0	1250.0	315.2	—
Poland	31.6	—	1222.0	67.2	14.4	—
Spain	32.0	0.5	6.3	79.3	16.1	313.0
Sweden	158.3	32.6	126.0	98.7	71.8	—
United Kingdom	431.0	185.0	421.0	110.0	37.0	82.0
Yugoslavia	130.5	90.1	370.9	57.1	150.8	—
U.S.S.R.	42.7	358.0	17.4	2042.0	279.8	3126.3
Oceania	167.1	177.7	234.9	46.3	25.4	—
Australia	131.3	150.4	116.7	1.3	0.2	—
Fiji	6.8	1.2	1.1	—	—	—
New Zealand	23.0	24.0	115.0	45.0	—	—
World	16342.9	8220.2	17026.6	15275.6	7628.3	16680.0

Source: 1986 "FAO Fertilizer Year Book." Vol. 36, FAO, Rome.

1.19. FERTILISER PRICES PAID BY FARMERS AND SUBSIDY
1984-85 & 1985-86

I. Fertiliser Prices
(a) Straight Fertilisers

(US\$/tonne of Nutrient)

Continent/Country	Year	Ammonium sulphate	Calcium Nitrate	Calcium ammonium nitrate	Urea	Ammonium nitrate	Single superphosphate	Concentrated superphosphate	Muriate of potash	Sulphate of potash
Africa										
Egypt ^{1 2 5 6}	1984-85	420	463	—	377	400	—	291	—	177
Tunisia ^{2 4 7}	1984-85	—	—	—	—	307	317	199	—	660
	1985-86	—	—	—	—	320	916	228	—	681
North and Central America										
Canada ^{1 12}	1984-85	—	—	—	531	550	696	457	204	—
	1985-86	—	—	—	411	442	—	427	174	—
Mexico ^{1 @}	1984-85	224	—	—	241	261	220	284	166	291
	1985-86	199	—	—	233	203	199	271	199	345
U.S.A. @	1984-85	798	—	—	520	622	—	486	235	—
	1985-86	782	—	—	417	563	—	455	204	—
South America										
Brazil @	1984-85	1037	—	626	595	—	986	652	369	—
	1985-86	—	—	—	549	—	—	—	—	—
Chile ^{1 @}	1984-85	—	—	—	1,164	—	1,552	929	—	1,127
	1985-86	—	—	—	766	—	862	587	—	807
Peru @	1984-85	661	—	—	469	745	571	537	293	547
	1985-86	587	—	—	473	667	500	481	220	504
Asia										
Afghanistan ^{1 2 4 5}	1984-85	—	—	—	344	—	—	309	329	—
	1985-86	—	—	—	344	—	—	309	329	—
Bangladesh ¹	1984-85	—	—	—	389	—	—	350	222	—
	1985-86	—	—	—	363	—	—	363	223	—

India ^{1 2} @	1984-85	601	—	522	393	—	447	439	168	328
	1985-86	605	—	536	388	—	519	432	166	323
Indonesia ^{2 4 5 7}	1984-85	443	—	—	202	—	—	202	155	—
	1985-86	525	—	—	240	—	—	240	184	—
Iran ^{2 4 5}	1984-85	280	—	—	217	320	—	241	—	231
	1985-86	277	—	—	215	317	—	239	—	229
Israel ¹⁰	1983-84	1,266	—	—	1,157 ⁹	—	1,159	—	149 ¹	—
Japan@	1984-85	762	—	—	701	—	1,068	—	384	658
	1985-86	936	—	—	859	—	1,341	—	484	835
Korea, Rep. of ²	1984-85	665	—	—	664	—	—	—	176	—
	1985-86	602	—	—	624	—	—	—	163	—
Malaysia	1984-85	—	—	—	410	—	—	—	217	—
	1985-86	—	—	—	359	—	—	—	—	—
Nepal ^{2 4 7}	1984-85	643	—	—	428	—	—	316	147	—
	1985-86	731	—	—	467	—	—	359	179	—
Pakistan ^{2 5 7 8}	1984-85	371	—	304	367	—	271	—	—	106
	1985-86	384	—	129	345	—	255	—	—	—
Phillippines ^{2 11}	1984-85	891	—	—	722	—	614	—	400	—
	1985-86	792	—	—	615	—	731	—	359	—
Sri Lanka ^{1 2}	1984-85	674	—	—	244	—	—	244	180	—
	1985-86	631	—	—	228	—	—	228	169	—
Turkey ^{1 2}	1984-85	273	—	285	251	264	233	254	172	223
	1985-86	297	—	235	282	288	238	274	191	249
Europe										
Belgium-Lux ¹⁰ @	1984-85	406	—	—	373	445	561	—	220	346
	1985-86	405	—	—	426	469	565	—	229	363
Czechoslovakia ^{2 5 8}	1984-85	354	—	422	388	392	404	466	116	166
	1985-86	360	—	458	418	424	432	478	—	178
Denmark ² @	1984-85	480	767	493 ¹²	—	—	535 ¹²	—	245 ¹²	397
	1985-86	582	930	598 ¹²	—	—	650 ¹²	—	297 ¹²	481
Finland ^{2 3} @	1984-85	—	1,106	670	512	—	652	—	326	—
	1985-86	—	—	838	627	—	860	—	433	—

(Continued)

1.10. FERTILISER PRICES PAID BY FARMERS AND SUBSIDY (Continued)

1984-85 & 1985-86

I. Fertiliser Prices (Continued)

(a) Straight Fertilisers (Concluded)

(US\$/tonne of nutrient)

Continent/Country	Year	Ammonium sulphate	Calcium nitrate	Calcium ammonium nitrate	Urea	Ammonium nitrate	Single super phosphate	Concentrated super phosphate	Muriate of potash	Sulphate of potash
France ¹	1984-85	436	791	—	—	481	567	—	206	344
	1985-86	552	1,165	—	—	600	701	—	250	434
Germany, Fed. Rep. of ² @	1984-85	583	853	587	558	—	731	—	255	353
	1985-86	747	1,491	752	711	—	875	—	318	492
Hungary ^{2 4 13 14}	1984-85	234	—	237	235	192	164 ¹²	270 ¹²	68 ¹²	118 ¹²
	1985-86	241	—	246	225	215	226 ¹²	278 ¹²	76 ¹²	130 ¹²
Italy@	1984-85	475	698	—	406	449	590	—	233	334
	1985-86	478	703	—	391	453	607	—	246	352
Netherlands ¹ @	1984-85	631	792	523	509	—	653	491	249	420
	1985-86	649	—	563	546	—	661	458	274	475
Norway ⁵	1984-85	—	801	—	—	—	714	—	352	504
	1985-86	—	824	—	—	—	735	—	348	479
Portugal ^{2 3 5}	1984-85	586	649	580	494	558	486	515	196	355
Poland ^{1 2} @	1984-85	59 ¹²	—	215	216	209	117 ¹²	174	55 ¹²	76 ¹²
	1985-86	47 ¹²	320	288	185	169	89 ¹²	157	43 ¹²	69 ¹²
Spain ^{2 5}	1984-85	633	811	607	499	569	483	439	191	337
	1985-86	711	1,096	742	596	683	573	531	221	417
Sweden ³ @	1984-85	712	902	752	652	—	—	646	361	578
	1985-86	851	1,118	900	782	—	—	786	428	709
U.K. ¹⁸	1984-85	—	558	577	—	679	666	418	218	—
	1985-86	—	598	575	—	696	709	448	230	—
Oceania										
Australia ⁵	1984-85	687 ¹²	—	—	599	654	412 ¹²	—	365	864
Newzealand	1984-85	—	—	—	490	—	348	449	225	807
	1985-86	—	—	—	393	—	—	—	—	—

(Continued)

1.19. FERTILISER PRICES PAID BY FARMERS AND SUBSIDY (Continued)
1984-85 and 1985-86

I. Fertiliser Prices (Continued)
(b) Mixed and Complex Fertilisers

(US\$/tonne of product)

Continent/Country	Year	18-46-0	20-20-0	15-15-15	17-17-17
Africa					
Ethiopia	1984-85	390	—	—	—
	1985-86	393	—	—	—
Kenya ^{1 2 5 6}	1984-85	348	—	—	—
	1985-86	—	—	—	—
Togo ^{2 4 6}	1984-85	114	—	114	—
	1985-86	111	—	111	—
North & Central America					
Canada ^{1 13}	1984-85	271	—	—	—
	1985-86	—	—	—	—
Mexico ^{1 @}	1984-85	179	—	—	—
	1985-86	182	—	—	—
USA @	1984-85	265	—	—	—
	1985-86	247	—	—	—
South America					
Chile ^{1 @}	1984-85	559	—	—	—
	1985-86	374	—	—	—
Colombia ²	1984-85	—	—	222	—
	1985-86	—	—	213	—
Peru @	1984-85	301	—	—	—
	1985-86	285	—	—	—
Asia					
Bangladesh ¹	1984-85	179	—	—	—
	1985-86	167	—	—	—
India ^{1 2*}	1984-85	282	185	164	—
	1985-86	277	199	161	—

(Continued)

1.19. FERTILISER PRICES PAID BY FARMERS AND SUBSIDY (Continued)
1984-85 and 1985-1986

i. Fertiliser Prices (Concluded)

(b) Mixed and Complex Fertilisers (Concluded)

(US\$/tonne of product)

Continent/Country	Year	18-46-0	20-20-0	15-15-15	17-17-17
Japan @	1984-85	—	—	419	—
	1985-86	—	—	521	—
Nepal ^{2 4 7}	1984-85	254	183	190	—
	1985-86	288	215	—	—
Pakistan ^{2 6 7 8}	1984-85	176	—	—	—
Philippines ^{2 11}	1984-85	434	—	—	—
	1985-86	365	—	—	—
Saudi Arabia ^{1 6}	1984-85	312	—	—	—
Europe					
Austria ³	1984-85	—	—	228	—
	1985-86	—	—	301	—
France ¹	1984-85	—	—	—	190
	1985-86	—	—	—	241
Germany, Fed. Rep. of ³ @	1985-85	—	—	198	—
	1985-86	—	—	255	—
Netherlands ¹ @	1984-85	—	199	—	—
	1985-86	—	211	—	—
Poland ^{1 2} @	1984-85	98	—	—	—
	1985-86	91	—	—	—
Portugal ^{2 3 5}	1984-85	—	—	203	—
Yugoslavia ²	1984-85	—	—	79	—
Oceania					
New Zealand	1984-85	326	—	—	—
	1985-86	285	—	—	—

(Continued)

1.19. FERTILISER PRICES PAID BY FARMERS AND SUBSIDY (Continued)

1984-85 & 1985-86

II. Subsidy

Continent/Country	Year	Straight fertilisers									Mixed and complex fertilisers		
		Ammonium sulphate	Ammonium nitrate	Calcium nitrate	Urea	Calcium ammonium nitrate	Single super phosphate	Concentrated super phosphate	Muriate of potash	Sulphate of potash	18-46-0	15-15-15	20-20-0
-----US\$/tonne of nutrient----- US\$/tonne of product-----													
Africa													
Algeria	1984-85	—	434	—	—	—	—	327	—	—	—	—	—
	1985-86	—	297	—	—	—	—	208	—	—	—	—	—
Niger ¹⁶	1984-85	—	—	—	80	—	143	373	—	—	—	52	—
	1985-86	—	—	—	86	—	160	326	—	—	—	55	—
Togo ^{4 6}	1984-85	296	—	—	276	—	356	369	165	389	244	122	—
	1985-86	313	—	—	382	—	346	412	182	432	222	156	—
Asia													
Afghanistan ^{4 5}	1984-85	—	—	—	81	—	—	—	82	—	—	—	—
	1985-86	—	—	—	81	—	—	—	82	—	—	—	—
Bangladesh	1984-85	—	—	—	9	—	—	154	66	—	—	—	—
	1985-86	—	—	—	8	—	—	102	30	—	—	—	—
Iran ^{4 5}	1984-85	429	453	—	346	—	—	341	—	393	188	—	—
	1985-86	593	544	—	397	—	—	392	—	452	217	—	—
Nepal ^{4 7}	1984-85	—	—	—	126	—	—	—	250	—	—	—	95
Pakistan ^{5 7 8}	1984-85	439	—	—	133	231	333	—	—	437	48	—	—
	1985-86	525	—	—	154	277	406	—	—	—	—	—	—
Sri Lanka	1984-85	—	—	—	293	—	—	239	90	—	—	—	—
	1985-86	—	—	—	139	—	—	233	98	—	—	—	—
Europe													
Czechoslovakia ^{5 6}	1984-85	—	—	—	—	—	166	189	27	40	—	—	—
	1985-86	—	—	—	—	—	—	—	12	32	—	—	—
Hungary ^{4 11}	1984-85	80	64	—	79	86	108	215	—	—	—	—	—
	1985-86	80	68	—	76	83	121	189	—	—	—	—	—
Portugal ⁵	1984-85	452	326	564	265	337	217	257	—	—	—	94	—
Spain ⁵	1984-85	68	66	—	62	67	14	10	—	2	—	—	—
	1985-86	96	93	—	88	95	—	—	—	2	—	—	—
Oceania													
Australia ⁵	1984-85	16	16	—	16	—	44	—	—	—	—	—	—
New Zealand	1984-85	—	—	—	12	—	25	12	10	12	6	—	—

(Continued)

1.19. FERTILISER PRICES PAID BY FARMERS AND SUBSIDY (Concluded)
1984-85 and 1985-86

NOTES

- | | |
|---|--------------------------------|
| * For details see Price Chapter in Part-I | For \$ Re. conversion rate; |
| @ No subsidy | \$1=Rs. 11.8931 |
| ¹ Retail price | for 1984-85 |
| ² Prices Fixed by the Government | and \$1=Rs 12.2320 for 1985-86 |
| ³ Prices at nearest railway station | has been adopted |
| ⁴ Subsidies paid to transport agencies | |
| ⁵ Subsidies paid to manufacturers | |
| ⁶ Subsidies paid to cooperatives, farmers' organisations or special agricultural suppliers | |
| ⁷ Subsidies paid directly to farmers | |
| ⁸ Subsidies paid to importers | |
| ⁹ Price at port | |
| ²⁰ Ex-factory price | |
| ²¹ Ex-warehouse price | |
| ²² Prices in bulk | |
| ²³ Wholesale price | |
| ²⁴ Subsidies paid to marketing organisations | |
| ²⁵ Subsidies paid to cooperatives only | |

Note:—Prices those are paid by farmers at the farm-gate (generally bagged) and relate to twelve-month period. They are shown with subsidies deducted wherever possible.

COUNTRY NOTES

- | | |
|------------------------------|---|
| Afghanistan | : Subsidy programme started in March 1975. |
| Australia | : Prices F.O.B. factory. A new subsidy programme started in 1982. |
| Bangladesh | : Subsidy paid to Agricultural Development Corporation |
| Canada | : Prices during spring months. Prices are strictly for Ontario province. |
| Chile | : Retail price includes value added tax at 20%. |
| Finland | : Prices include an excise tax of 12 Markkaa (\$1.87) per metric tonne. Subsidies terminated in June 1976. |
| Germany, Fed. Rep. of | : Prices include value added tax. |
| India | : Prices do not include sales-tax and other local taxes. Excise duty withdrawn w.e.f. 7-6-80. Subsidy programme started in 1977 for indigenous nitrogenous fertilisers and in 1979 for indigenous phosphatic fertilisers. |
| Hungary | : A new subsidy programme started in January 1981. |
| Netherlands | : Farm-gate prices include value added tax at 4%. |
| New Zealand | : Subsidies include that on transport. |
| Norway | : Special subsidies to small holders are not deducted. |
| Peru | : Subsidy programme ended in January 1979. |
| Philippines | : The subsidy programme ended in May 1982. |
| Sri Lanka | : Subsidies paid on c.i.f. value: 1983—Urea (65%), TSP (60%), Ground rock-phosphate (30%), MOP (40%). |
| Tunisia | : New programme of subsidies started in 1973. |
| Venezuela | : Subsidy programme terminated in 1981. |

Source: 1986 "FAO Fertiliser Year Book", Vol. 36 FAO, Rome.

**1.20. TOTAL AMOUNT OF FERTILISER SUBSIDY
1981-82 to 1984-85**

(US\$ million)

Continent/Country	1981-82	1982-83	1983-84	1984-85
Africa				
Niger	—	0.91	1.44	0.69
Togo	5.09	2.60	1.19	
Tunisia	26.54	25.69	21.13	
Zambia	100.81	72.01	36.13	
Asia				
Afghanistan	1.93	2.33	1.39	4.85
Bangladesh	54.06	35.79	57.23	32.53
India*	307.99	571.67	873.11	1,009.00
Indonesia	414.24	430.28	296.86	
Iran	306.67	299.00	348.07	
Nepal	4.94	2.77	4.13	9.20
Pakistan		153.06	143.28	98.96
Saudi Arabia	22.16	27.10		
Sri Lanka	49.01	43.07	42.45	39.38
Europe				
Greece	216.52	209.36	147.35	124.03
Iceland				130.00@
Norway	16.41	8.89		
Portugal	91.01	89.89	96.68	
Spain	—	0.08	0.07	0.07
Oceania				
Australia	53.70	44.51	44.47	40.31
New Zealand	—	35.86	30.73	20.3

*Subsidy on indigenous fertilisers.

@In terms of local currency Kronur.

Note: The above lists all those countries in respect of which information on subsidy amount is published in the FAO Book.

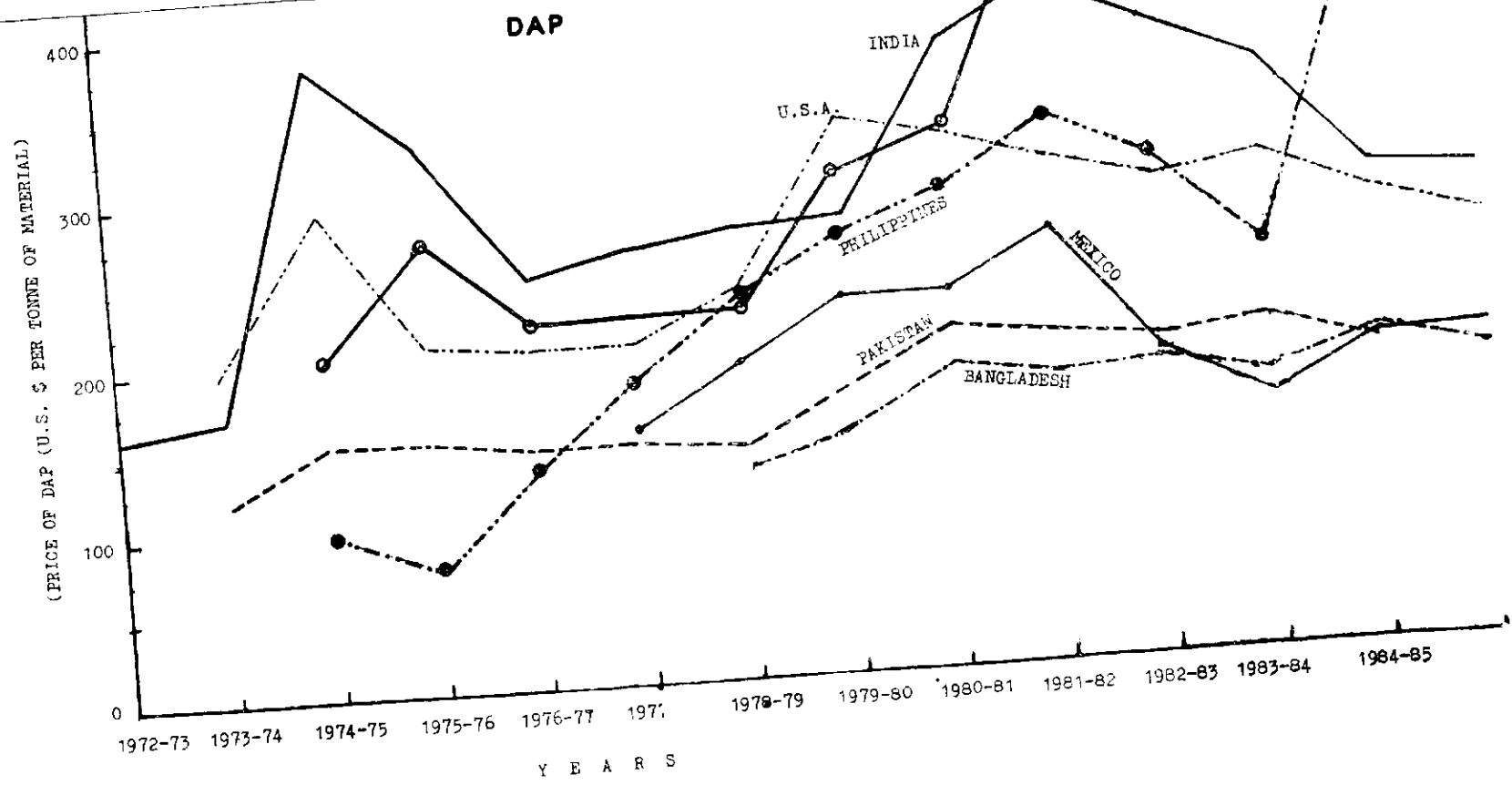
Source: 1985 FAO "Fertilizer Year Book," Vol. 35, FAO, Rome.

**1.21. INDEX NUMBERS OF PRICES RECEIVED BY FARMERS FOR CROPS AND
PRICES PAID BY FARMERS FOR FERTILISERS
1983 to 1986**

Continent/Country	Base period as 100	Prices paid for fertilisers				Prices received for crops			
		1983	1984	1985	1986	1983	1984	1985	1986
Africa									
Algeria	1980	128	182	217	—	115	143	157	—
Kenya	1982	104	105	142	—	117	140	171	—
Togo	1976	267	333	333	333	239	212	181	172
North & Central America									
U.S.A.	1977	137	143	135	124	128	138	120	126
Canada	1981	90	94	95	91	92	99	89	73
South America									
Argentina	1970	48,370	160,168	—	—	85,387	—	—	—
Brazil	1979	2,674	8 469	—	—	587	1,899	—	—
Asia									
Hongkong	1970-1974	189	211	210	—	297	242	236	—
Indonesia	1976	124	129	139	—	258	284	300	—
Israel	1975-76	8,223	32,858	159,700	278,200	10,435	42,097	184,700	280,100
Japan	1980	104	103	103	101	105	107	107	106
Korea, Rep. of	1980	164	164	164	156	124	127	138	149
Europe									
Austria	1976	135	134	142	—	106	105	119	119
Belgium	1974-75-76	169	182	192	—	1 2	143	137	—
Czechoslovakia	1967	150	151	151	—	133	136	139	—
Denmark	1970-71—1972-73	393	443	399	—	306	270	272	—
Finland	1980	133	144	156	156	148	157	172	180
France	1975, 1980	196	210	230	210	137	141	137	141
Germany, Fed. Rep. of	1980	111	110	115	111	107	106	101	99
Hungary	1975	147	169	184	—	139	152	156	—
Italy	1980	180	177	181	—	143	151	150	—
Netherlands	1980	104	106	117	108	116	121	113	106
Poland	Previous year	108	99	101	—	101	113	106	112
Spain	1976	293	328	349	—	234	249	251	—
United Kingdom	1980	117	120	128	115	137	132	121	127
Yugoslavia	1978;79	491	783	—	—	382	634	1,047	1,801
Oceania									
Australia	1980-81	117	123	131	149	103	103	106	104

Source: 1986 "FAO Fertilizer Year Book". Vol. 36, FAO, Rome.

FARMER'S PRICE OF UREA, MURIATE OF POTASH AND DIAMMONIUM PHOSPHATE 1972-73 to 1985-86



SOURCE : BASED ON "FERTILISER PRICES" IN FERTILIZER YEAR BOOK, FAO, ROME

2.00. WORLD STATISTICS—AGRICULTURE

2.01. AGRICULTURAL, ARABLE AND IRRIGATED AREA BY ECONOMIC CLASSES AND REGIONS 1982 and 1984

(Area in '000 hectares)

Region/Continent	1982				1985			
	Agricul- tural area	Arable land and land under permanent crops	Irrigated area	% of irriga- ted area of agricultural area	Agricul- tural area	Arable land and land under permanent crops	Irrigated area	% of irriga- ted area of agricultural area
I. Developed Market Economies	1,253,188	377,016	37,405	2.98	1,267,574	398,657	37,639	2.97
1. North America	501,562	236,095	20,446	4.08	501,762	236,495	20,461	4.08
2. Western Europe	165,903	95,021	10,514	6.34	164,752	94,737	10,712	6.50
3. Oceania	505,392	47,014	1,863	0.46	501,109	48,578	1,868	0.37
4. Other Developed Market Economies	100,331	18,886	4,582	4.57	99,951	18,847	4,598	4.60
II. Developing Market Economies	2,163,870	641,494	107,405	4.96	2,170,161	685,892	109,328	5.08
1. Africa	781,722	151,875	4,489	5.74	793,624	153,517	4,856	0.61
2. Latin America	725,923	176,548	14,545	2.00	728,541	177,107	14,932	2.05
3. Near East	349,690	82,122	18,115	5.18	349,613	82,338	18,287	5.23
4. Far East	304,595	269,786	70,255	23.07	306,416	271,753	71,252	2.32
5. Other Developing Market Economies	1,938	1,163	1	0.52	1,967	1,177	1	0.51
III. Centrally Planned Economies	1,190,271	392,050	70,644	5.93	1,190,362	392,211	72,749	6.11
1. Asia	523,974	114,108	47,480	9.06	524,129	114,325	48,359	9.23
2. Eastern Europe & USSR	666,297	277,942	23,164	3.48	666,173	277,886	24,389	3.66
A. All Developed Countries	1,939,485	674,958	60,569	3.12	1,933,751	676,544	62,028	3.21
B. All Developing Countries	2,687,842	795,602	154,885	5.76	2,694,350	800,217	157,687	5.85
World (I+II+III)=(A+B)	4,627,377	1,470,560	215,454	4.67	4,628,098	1,476,761	219,715	4.75

Note: All Developed Countries=Developed Market Economies (including Israel, Japan and South Africa)+ Eastern Europe and USSR.
All Developing Countries=Developing Market Economies + Asia.

Sources: 1985 FAO Production Year Book, Vol. 39, F.A.O., Rome.

2.02. LAND USE AND IRRIGATION
1984

('000 hectares)

Continent/Country	Total area	Land area	Agricultural area				Forest and woodland	Other land	Irrigated area	Irrigated area to total agricultural area (%)
			Arable land	Land under permanent crops	Permanent meadows and pastures	Total				
1	2	3	4	5	6	7=4+5+6	8	9	10	11=10/7
Africa	3033,106	2966,450	165,761	18,423	779,077	963,261	700,223	1302,666	10,390	1.08
Algeria	238,174	238,174	6,800	640	32,100	39,540	4,384	194,250	298	0.93
Egypt	100,145	99,545	2,310	164	—	2,474	2	97,069	2,474	100.0
Kenya	58,265	56,925	1,850	485	3,750	6,085	3,740	47,100	40	0.66
Morocco	124,000	122,000	2,050	3	30,000	32,053	8,640	81,307	340	1.06
South Africa	122,104	122,104	12,830	800	79,670	93,300	4,150	24,654	1,128	1.21
Sudan	250,581	237,060	12,390	58	56,000	68,448	47,700	121,452	1,700	2.48
Tanzania	94,509	88,604	4,130	1,060	35,000	40,190	42,785	5,629	140	0.35
Tunisia	16,361	15,536	3,167	1,520	3,024	7,711	555	7,270	210	2.72
Uganda	23,604	19,971	4,800	1,700	5,000	11,500	5,860	2,611	16	0.14
North & Central America	2242,075	2139,185	267,593	6,824	359,524	633,941	659,497	845,747	27,414	4.32
Canada	997,614	922,097	36,500	80	23,800	70,380	326,129	525,588	630	0.89
Cuba	11,086	11,086	2,560	676	2,480	5,716	1,940	3,430	1,030	18.02
Mexico	197,255	192,304	23,150	1,550	74,500	99,200	45,700	47,404	5,100	5.14
U.S.A.	937,261	91,666	187,881	2,034	241,467	431,382	265,188	220,090	19,831	4.60
South America	1781,851	1753,454	113,421	25,767	457,412	496,600	922,671	234,183	7,979	1.60
Argentina	276,689	273,669	25,850	9,750	142,800	178,400	59,800	35,469	1,660	0.93
Brazil	851,197	845,651	63,500	11,750	65,000	240,250	565,280	40,121	2,200	0.92
Chile	75,695	74,880	5,330	198	11,900	17,428	15,480	41,972	1,257	7.21
Peru	128,522	128,000	3,200	317	27,120	30,637	69,900	27,463	1,200	3.92
Venezuela	91,205	88,205	3,080	678	17,400	21,158	31,915	35,132	322	1.52
Asia	2757,496	2679,071	426,742	29,854	643,936	1100,532	561,273	1017,266	136,962	12.45
Afghanistan	64,750	64,750	7,910	144	30,000	38,054	1,900	24,796	2,660	6.99
Bangladesh	14,400	13,391	8,891	220	600	9,711	2,106	1,574	1,920	19.88
Bhutan	4,700	4,700	94	6	218	318	3,285	1,097	N.A.	—
Burma	67,655	65,774	9,593	468	361	10,422	32,148	23,204	1,064	10.21
China	959,696	932,641	97,430	3,462	285,600	386,582	134,865	411,194	45,420	11.75

India	328,759	297,319	164,850	3,500	11,900	180,250	67,420	49,649	39,700	22.02
Indonesia	190,457	181,157	15,500	5,350	11,850	32,700	121,800	26,657	5,420	16.57
Iran	164,800	163,600	14,100	730	44,000	58,830	18,020	86,750	5,730	9.74
Iraq	43,492	43,397	5,250	200	4,000	9,450	1,900	32,047	1,750	18.52
Israel	2,077	2,033	345	92	818	1,255	116	662	220	17.53
Japan	37,231	37,103	4,220	560	616	5,396	25,198	6,509	3,250	60.23
Jordan	9,774	9,718	378	37	100	515	41	9,162	38	7.38
Korea Dem. Rep.	12,054	12,041	2,220	92	50	2,362	8,970	709	1,060	44.88
Korea Republic	9,848	9,819	2,019	147	76	2,242	6,547	1,030	1,200	53.52
Laos	23,680	23,080	870	20	800	1,620	13,300	8,090	118	6.98
Malaysia	32,975	32,855	1,020	3,333	27	4,377	20,300	8,178	336	7.68
Nepal	14,080	13,680	2,290	29	1,786	4,105	2,308	7,267	640	15.59
Pakistan	80,394	77,872	19,911	369	5,000	25,280	3,050	49,542	15,320	60.60
Philippines	30,000	28,817	7,900	3,400	1,140	12,440	11,950	5,427	1,430	11.50
Saudi Arabia	214,969	214,969	1,080	76	85,000	86,156	1,200	127,613	410	0.48
Syria	18,518	18,406	5,104	550	8,319	13,973	498	3,935	617	4.42
Sri Lanka	6,561	6,474	1,080	1,122	439	2,641	2,383	1,450	550	20.83
Thailand	51,400	51,177	17,700	1,970	308	19,978	15,300	15,899	3,550	17.77
Turkey	78,058	77,076	24,500	2,911	9,000	36,411	20,199	20,466	2,140	5.88
Vietnam	32,956	32,536	6,150	590	272	7,012	13,100	12,424	1,750	24.95
Yemen AR	19,500	19,500	1,261	90	7,000	8,351	1,600	9,549	245	2.93
Yemen Dem.	33,297	33,297	147	20	9,065	9,232	1,560	22,508	62	0.67
Europe	487,081	472,735	126,218	14,190	85,102	225,510	155,250	91,974	15,616	6.92
Albania	2,875	2,740	592	121	400	1,113	1,038	589	399	35.04
Austria	838	8,273	1,445	77	1,986	3,508	3,221	1,543	4	0.11
Belgium-Lux.	3,310	3,310	797	27	665	1,489	702	1,091	1	Neg
Bulgaria	11,091	11,055	3,807	328	2,037	6,172	3,864	1,019	1,210	19.60
Czechoslovakia	12,787	12,545	5,030	135	1,661	5,826	4,582	1,137	193	2.83
Denmark	4,307	4,237	2,624	3	228	2,855	493	889	400	14.01
France	54,703	54,563	17,468	1,344	12,385	31,197	14,603	8,763	1,160	3.72
Finland	33,703	35,547	2,335	--	130	2,465	23,321	4,761	60	2.43
German Dem. Rep.	10,133	10,588	4,729	262	1,249	6,240	2,965	1,383	165	2.64
Germany Fed. Rep.	24,858	24,428	7,223	214	4,607	12,044	7,328	5,056	320	2.66
Hungary	9,303	9,234	5,036	257	1,246	6,539	1,648	1,047	234	3.58
Italy	30,123	29,402	9,100	3,133	4,930	17,163	6,410	5,829	2,970	17.30
Netherlands	3,731	3,394	846	29	1,141	2,016	297	1,081	520	25.79
Norway	32,422	30,786	855	--	90	945	8,330	21,511	80	8.47

(Continued)

2.02. LAND USE AND IRRIGATION (Concluded)
1984

('000,hectares)

Continent/Country	Total area	Land area	Agricultural area				Forest and wood land	Other land	Irrigated area	Irrigated area to total agricultural area (%)
			Arable land	Land under permanent crops	Permanent meadows and pastures	Total				
1	2	3	4	5	6	7=4+5+6	8	9	10	11=10/7
Poland	31,268	30,451	14,535	265	4,076	18,876	8,723	2,852	100	0.53
Portugal	9,208	9,164	2,960	585	530	4,075	3,641	1,448	632	15.51
Romania	23,750	23,034	9,935	635	4,418	14,988	6,338	1,704	2,612	17.43
Spain	50,475	49,940	15,620	4,920	10,640	31,180	15,625	3,135	3,145	10.09
Sweden	44,996	41,162	2,995	—	620	3,615	26,424	11,123	53	1.47
Switzerland	4,129	3,977	391	21	1,609	2,021	1,052	904	25	1.24
United Kingdom	24,482	24,059	6,930	61	11,650	18,641	2,258	3,260	150	0.80
Yugoslavia	25,580	25,540	7,018	740	6,379	14,137	9,294	2,109	161	1.14
U.S.S.R.	2,240,220	2,227,200	237,700	4,515	373,200	615,415	932,000	689,785	19,485	3.17
Oceania	850,969	842,919	48,755	997	453,086	502,838	159,707	180,375	1,869	0.37
Australia	768,685	761,793	47,936	172	438,451	486,559	106,000	169,234	1,628	0.33
Fiji	1,827	1,827	150	88	60	298	1,185	344	N.A.	—
New Zealand	26,868	26,867	450	20	14,180	14,550	10,600	1,717	240	1.65
Papua N. Guinea	46,169	15,171	26	350	100	476	38,310	6,385	N.A.	—
Soloman Islands	2,845	2,754	40	14	39	93	2,560	101	N.A.	—
World Total	13,392,798	13,081,014	1,376,190	100,570	3,151,337	4,628,097	4,090,621	4,362,296	219,715	4.75

- Note:* 1. Land under permanent crops: Land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest such as cocoa, coffee and rubber; it includes land under shrubs, nut trees and vines, but excludes land under trees grown for wood or timber.
2. Arable land and land under permanent crops: Includes land under temporary crops (double cropped area are counted only once), temporary meadows for mowing or pastures, land under market and kitchen gardens, land temporary fallowing or lying idle and also land under permanent crops.
3. Agricultural land includes in addition to "arable land and land under permanent crops", "and under permanent meadows and pastures".

Source: 1985 FAO Production Year Book, Vol. 39, FAO Rome.

2.03. AREA AND NUMBER OF AGRICULTURAL HOLDINGS

Continent/Country	Year	Number ('000)	Area ('000 hectares)
Africa			
Egypt	1960-61	1,642.2	2,614.1
Morocco	1961	1,106.8	5,117.0
Sierra-Leone	1970-71	286.1	520.6
South Africa	1960	110.4	105,944.9
North & Central America			
Canada	1971	366.1	68,663.2
Mexico	1970	1,016.1	144,637.1
U.S.A.	1969	2,730.3	430,321.4
South America			
Brazil	1970	4,632.2	293,012.2
Chile	1965	258.6	30,644.1
Peru	1971-72	1,390.9	23,545.1
Asia			
India*	1970-71	70,493.0	162,124.6
Indonesia	1963	12,286.5	12,883.9
Japan	1970	5,354.6	5,388.6
Korea, Rep.	1970	2,421.4	2,132.2
Pakistan	1960	12,154.9	21,592.8
Philippines	1960	2,166.2	7,772.5
Sri Lanka	1962	1,169.8	1,838.5
Europe			
Austria	1960	396.5	7,683.9
Belgium	1970	184.6	1,542.3
Denmark	1970	140.2	2,941.3
France	1970	1,587.6	35,039.2
Germany, Fed. Rep.	1960	1,761.1	21,360.7
Italy	1970	3,620.8	25,091.3
Netherlands	1970	184.6	2,142.6
Norway	1969	482.1	8,504.6
Poland	1970	3,398.1	16,427.5
Spain	1972	2,558.8	45,633.5
U.K.	1970	326.7	17,992.3
Oceania			
Australia	1970	249.5	497,118.2
New Zealand	1971-72	62.6	19,030.4

*Agricultural Census—1970, Ministry of Agriculture and Irrigation, New Delhi.

Source: 1975, *Production Year Book*, Vol. 29, FAO, Rome.

2.04. PATTERN OF LAND UTILISATION AND FERTILISER

1984

Sl. No.	Country	Total geographical area	Agricultural area				Area under		Irrigated area
			Total	Out of which			Rice*	Wheat*	
				Arable land	Land under permanent crops	Land under permanent meadows and pastures			
← million hectares →									
1.	U.S.S.R.	2240.2	605.5	227.7	4.5	373.2	0.67	50.4	19.5
2.	Canada	997.6	70.4	46.5	0.08	23.8	—	13.7	0.6
3.	China	959.7	386.6	97.4	3.5	285.7	32.1	28.9	45.4
4.	U.S.A.	937.3	431.4	187.9	2.0	241.5	1.01	26.2	19.8
5.	Brazil	851.2	240.2	63.5	11.7	165.0	4.8	2.7	2.2
6.	Australia	768.7	486.6	47.9	0.2	438.5	0.13	12.0	1.6
7.	India	328.8	180.2	164.8	3.5	11.9	42.1	23.6	39.7
8.	Argentina	276.7	178.4	25.8	9.8	142.8	0.12	5.3	1.66
9.	Mexico	197.3	99.2	23.1	1.6	74.5	0.28	1.2	5.1
10.	Indonesia	190.5	32.7	15.5	5.3	11.9	9.5	—	5.4
11.	Egypt	100.1	2.46	2.3	0.16	—	0.4	0.5	2.5
12.	Pakistan	80.4	25.3	19.9	0.4	5.0	2.0	7.3	15.3
13.	Burma	67.7	10.5	9.6	0.5	0.4	4.8	0.12	1.1
14.	France	54.7	31.2	17.5	1.3	12.4	0.01	4.8	1.16
15.	Thailand	51.4	20.0	17.7	2.0	0.3	9.6	—	3.55
16.	Japan	37.2	5.4	4.2	0.6	0.6	2.34	0.2	3.2
17.	Philippines	30.0	12.4	7.9	3.4	1.1	3.4	—	1.4
18.	United Kingdom	24.5	18.66	6.9	0.06	11.7	—	1.9	0.15
19.	Bangladesh	14.4	9.7	8.9	0.2	0.6	10.4	0.68	1.9
20.	Korea Dem. Rep.	12.1	2.3	2.2	0.09	0.05	0.8	0.1	1.06
21.	Korea Rep.	9.8	2.2	2.0	0.1	0.07	1.24	0.003	1.2
World		13,392.8	4,628.1	1,376.2	100.6	3,151.3	144.7	230.1	219.7

Note: 1. Agricultural area is defined as to include arable land, land under permanent crops and land under permanent meadows and pastures.

2. Agricultural population is defined as all persons depending for their livelihood on agriculture. This comprises all persons actively engaged in agriculture and their non-working dependents.

Source: 1985. *FAO Production Year Book* Vol. 39, FAO Rome.
1985. *FAO Fertilizer Year Book*, Vol. 35, FAO Rome.

CONSUMPTION IN SELECTED COUNTRIES

Share to agricultural area						Fertiliser consumption (N+P+K) per hec. of agric. area	Agricultural population*	Country	Sl. No.
Arable land	Land under permanent crops	Land under permanent meadows and pastures	Rice	Wheat	Irrigation				
← per cent →						→ kg million			
37.6	0.7	61.7	0.11	8.3	3.2	37.9	48.7	U.S.S.R.	1.
66.1	0.1	33.8	—	19.5	0.9	31.9	1.1	Canada	2.
25.2	0.9	73.9	8.3	7.5	11.7	47.1	763.0	China	3.
43.6	0.5	55.9	0.2	6.1	4.6	45.8	7.4	U.S.A.	4.
26.4	4.9	68.7	2.0	1.1	0.9	9.5	24.2	Brazil	5.
9.8	0.05	90.1	0.02	2.5	0.3	2.4	1.0	Australia	6.
91.5	1.9	6.6	23.4	13.1	22.8	36.8	521.4	India	7.
14.5	5.5	80.0	0.06	3.0	0.9	0.7	3.6	Argentina	8.
23.3	1.6	75.1	0.3	1.2	23.5	15.0	26.0	Mexico	9.
47.4	16.2	36.4	29.1	—	16.5	47.1	87.3	Indonesia	10.
93.5	6.5	—	16.3	20.3	100.0	363.9	20.0	Egypt	11.
78.7	1.5	19.8	7.9	28.9	60.5	47.6	52.6	Pakistan	12.
91.4	4.8	3.8	45.7	11.4	10.5	15.3	18.5	Burma	13.
56.1	4.2	39.7	Neg.	15.4	3.7	186.6	3.7	France	14.
88.5	10.0	1.5	48.0	—	17.8	24.6	33.8	Thailand	15.
77.8	11.1	11.2	43.3	3.8	59.3	387.7	9.8	Japan	16.
33.7	27.4	8.9	27.4	—	11.3	29.0	27.2	Philippines	17.
37.0	0.3	62.7	—	10.2	0.8	140.0	1.4	United Kingdom	18.
91.8	2.1	6.1	107.2	7.0	19.6	57.4	71.8	Bangladesh	19.
107.2	93.9	3.9	2.2	4.3	46.1	337.9	7.7	Korea Dem. Rep.	20.
92.2	4.6	3.2	57.1	0.14	55.3	320.9	12.6	Korea Rep. of	21.
29.7	2.2	68.1	3.1	5.0	4.7	27.1	2,323.4	World	

*For the year 1985.

2 05. TOTAL, AGRICULTURAL AND ECONOMICALLY ACTIVE POPULATION
1980 and 1985

(In thousand)

Continent/Country	Population				Economically active population				Per cent in Agriculture	
	Total		Agricultural		Total		In agriculture		1980	1985
	1980	1985	1980	1985	1980	1985	1980	1985		
Africa	479,937	555,116	313,221	345,743	189,235	213,857	129,961	140,013	65.7	65.5
Algeria	18,666	21,718	5,755	5,216	4,051	4,834	1,262	1,175	31.1	24.3
Egypt	41,520	46,909	18,956	19,958	11,298	12,837	5,158	5,461	45.7	42.5
Kenya	16,766	20,600	13,542	16,242	7,072	8,389	5,729	6,614	81.0	78.8
Morocco	19,382	21,941	8,841	8,712	5,688	6,676	2,595	2,651	45.6	39.7
South Africa	28,612	32,392	4,714	3,603	9,449	10,831	1,557	1,205	16.5	11.1
Sudan	18,681	21,550	13,291	14,637	6,086	6,991	4,336	4,748	71.1	67.9
Tanzania	18,867	22,499	16,151	18,574	9,508	10,913	8,141	9,009	85.6	82.6
Uganda	13,106	15,477	11,253	12,976	6,163	7,054	5,292	5,915	85.9	83.8
North and Central America	373,482	401,416	55,576	56,544	161,848	176,446	19,721	20,373	12.2	11.6
Canada	24,070	25,379	1,270	1,099	11,839	12,700	625	550	5.3	4.3
Cuba	9,732	10,038	2,315	2,102	3,567	3,987	848	835	23.8	20.9
Mexico	69,393	68,996	25,352	26,036	22,248	26,080	8,128	8,596	36.5	33.0
U.S.A.	227,738	238,840	7,878	7,418	109,872	117,203	3,801	3,640	3.5	3.1
South America	239,823	267,749	69,965	66,765	83,402	93,776	23,970	22,959	28.7	24.5
Argentina	28,237	30,564	3,683	3,588	10,308	10,884	1,344	1,278	13.0	11.7
Brazil	121,286	135,564	37,788	34,186	44,240	49,642	13,783	12,519	31.2	25.2
Chile	11,127	12,038	1,835	1,691	3,795	4,276	619	586	16.5	13.7
Peru	17,295	19,698	7,340	7,680	5,374	6,204	2,152	2,273	40.0	36.6
Venezuela	15,024	17,317	2,409	2,140	4,947	5,871	793	725	16.0	12.4
Asia	253,855	2,818,260	1,671,205	1,750,738	1,157,820	1,299,156	760,638	823,142	65.7	63.4
Afghanistan	16,063	16,519	9,801	9,644	4,797	4,971	2,927	2,902	61.0	58.4
Bangladesh	88,219	10,147	65,998	71,774	25,133	28,845	18,802	20,469	74.8	71.0
Bhutan	1,281	1,417	1,184	1,295	574	632	531	578	92.4	91.4
Burma	33,714	37,153	17,866	18,540	15,170	16,699	8,039	8,333	53.0	49.9
China	996,134	105,954	739,517	762,964	547,061	617,906	406,131	444,956	74.2	72.0

India	688,856	758,927	480,556	521,426	265,320	293,193	185,017	201,441	69.7	68.7
Indonesia	150,958	166,440	86,357	87,258	56,253	63,430	32,180	33,254	57.2	52.4
Iran	38,635	44,632	13,698	14,285	11,073	13,023	4,026	4,281	36.4	32.9
Iraq	13,291	15,890	4,044	3,732	3,551	4,259	1,081	1,000	30.4	23.5
Israel	3,078	4,289	241	212	1,446	1,624	90	80	6.2	5.0
Japan	116,782	120,754	12,795	9,786	57,085	59,778	6,368	4,935	11.2	8.3
Jordan	2,923	3,515	299	205	645	799	66	47	10.2	5.8
Korea Dem. Rep.	18,025	20,385	7,715	7,741	7,838	9,084	3,355	3,450	42.8	38.0
Korea Rep.	38,124	41,258	13,873	12,610	14,729	16,790	5,360	5,132	36.4	30.6
Malaysia	13,763	15,557	5,611	5,446	5,337	6,171	2,220	2,207	41.6	35.8
Nepal	14,667	16,482	13,635	15,264	6,139	6,870	5,707	6,362	93.0	92.6
Pakistan	86,143	100,380	47,029	52,634	25,415	29,801	13,875	15,626	54.6	52.4
Philippines	48,317	54,458	24,876	27,233	17,533	19,874	9,076	9,969	51.8	50.3
Syria	8,800	10,505	2,844	2,599	2,188	2,596	701	642	32.3	24.7
Sri Lanka	14,819	16,205	7,907	8,491	5,457	5,920	2,912	3,102	53.4	52.4
Thailand	46,516	51,411	32,976	33,775	23,582	26,657	16,717	17,513	70.9	65.7
Turkey	44,468	49,289	25,963	25,477	19,090	21,385	11,146	11,054	58.4	51.7
Vietnam	54,175	59,713	36,555	37,192	24,930	28,755	16,822	17,910	67.5	62.3
Yemen Arab Rep.	5,981	6,848	4,116	4,420	1,473	1,676	1,013	1,082	68.8	64.5
Yemen Dem. Rep.	1,861	2,137	764	778	485	558	199	203	41.1	36.4
Europe	484,388	492,251	66,061	55,439	217,948	226,567	29,826	25,447	13.7	11.3
Austria	7,549	7,555	690	526	3,384	3,529	305	246	9.0	7.0
Belgium-Lux	10,224	10,230	298	228	4,103	4,232	120	94	2.9	2.2
Bulgaria	8,862	8,980	1,602	1,117	4,480	4,438	810	552	18.1	12.4
Czechoslovakia	15,311	15,498	2,033	1,818	8,025	8,139	1,066	955	13.3	11.7
Denmark	5,123	5,113	374	300	2,704	2,779	198	163	7.3	5.9
Finland	4,780	4,910	609	484	2,381	2,498	286	232	12.0	9.3
France	53,880	55,162	4,620	3,722	23,622	24,883	2,026	1,679	8.6	6.7
Germany Dem. Rep.	16,740	16,660	1,774	1,619	9,118	9,458	966	919	10.6	9.7
Germany Fed. Rep.	61,566	61,015	3,553	3,087	28,336	29,470	1,635	1,491	5.8	5.1
Italy	56,434	57,128	6,783	5,427	21,691	22,695	2,607	2,156	12.0	9.5
Netherlands	14,144	14,484	781	720	5,459	5,854	302	291	5.5	5.0
Norway	4,086	4,150	341	290	1,962	2,043	174	143	8.3	7.0
Poland	35,578	37,203	10,148	8,928	18,522	19,229	5,283	4,615	28.5	24.0
Portugal	9,884	10,212	2,545	2,350	4,346	4,563	1,119	1,050	25.8	23.0

(Continued)

2.05. TOTAL, AGRICULTURAL ECONOMY ACTIVE POPULATION (Concluded)

1980 and 1985

(In thousands)

Continent/Country	Population				Economically active population				Per cent in Agriculture	
	Total		Agricultural		Total		In Agriculture		1980	1985
	1980	1985	1980	1985	1980	1985	1980	1985		
Spain	37,251	38,350	6,166	5,065	12,833	13,659	2,198	1,868	17.1	13.7
Sweden	8,310	8,351	530	439	4,163	4,237	236	198	5.7	4.7
Switzerland	6,385	6,520	394	357	3,090	3,246	191	178	6.2	5.5
United Kingdom	56,514	56,807	1,475	1,426	27,038	27,765	706	697	2.6	2.5
Yugoslavia	22,304	23,120	7,195	5,734	9,960	10,469	3,213	2,596	32.3	24.8
U S.S.R.	265,542	227,570	53 078	48,654	136,959	142,750	27,376	25,022	20.0	17.5
Oceania	22,824	24,598	4,420	4,560	10,209	11,193	1,998	2,057	19.6	18.4
Australia	14,689	15,691	1,013	1,000	6,744	7,364	465	469	6.9	6.4
Fiji	629	691	290	301	306	231	95	100	46.2	43.5
New Zealand	3,144	3,271	354	358	1,323	1,438	149	157	11.2	11.0
Popua N. Guinea	3,086	3,511	2,354	2,504	1,514	1,685	1,155	1,202	76.3	71.3
World Total	4,449,557	4,836,960	2,233,526	2,328,441	1,957,421	2,163,745	983,490	1,059,013	50.8	49.0

Note: (i) 'Economically active population' is defined as all persons engaged or seeking employment in an economic activity, whether as employers, own-account workers, salaried employees, or unpaid workers assisting in the operation of a family farm or business.

(ii) 'Economically active population in agriculture' includes all economically active persons engaged principally in agriculture, forestry, hunting or fishing.

Source 1985, *FAO Production Year Book*, Vol. 39, FAO, Rome.

**2.06. AREA UNDER RICE, WHEAT, CEREALS AND PULSES BY ECONOMIC CLASSES AND REGIONS
1984 & 1985**

('000 hectares)

Region/Continent	1984					1985			
	Agril. area	Rice	Wheat	Total Cereals	Total pulses	Rice	Wheat	Total Cereals	Total pulses
I. Developed Market Economies	1,267,575	3,886	73,232	165,905	3,236	3,808	71,732	167,583	3,617
1. North America	501,762	1,134	4,243	93,048	894	1,013	39,885	94,709	939
2. Western Europe	164,753	316	18,657	45,349	1,641	326	17,609	44,676	1,701
3. Oceania	501,109	119	12,090	17,963	529	126	12,027	18,064	802
4. Other Developed Market Economies	99,951	2,316	2,241	9,545	172	2,343	2,212	10,133	176
II. Developing Marketing Economies	2,170,161	98,968	68,353	318,527	50,013	99,772	69,754	325,493	50,826
1. Africa	783,624	4,838	5,506	58,200	11,818	5,041	6,107	61,259	12,127
2. Latin America	728,541	7,507	9,778	53,880	9,593	7,023	10,352	52,859	9,484
3. Near East	349,613	1,226	19,903	36,990	2,304	1,134	21,119	40,733	2,372
4. Far East	575,051	85,384	33,165	169,935	16,890	86,561	32,176	170,652	26,834
5. Other Developing Market Economies	1,967	14	1	21	8	14	—	21	9
III. Centrally Planned Economies	1,190,302	42,724	89,976	241,037	13,290	41,094	88,579	236,743	13,065
1. Asian CPE	524,189	41,970	30,223	103,353	5,278	40,365	29,578	99,813	4,987
2. Eastern Europe+USSR	666,173	754	59,752	137,685	8,012	729	59,001	136,93	8,078
A. All Developed Countries	1,933,748	4,640	132,984	303,590	11,248	4,537	130,733	304,513	11,695
B. All Developing Countries	2,694,350	140,938	98,576	421,879	55,892	140,137	99,333	425,305	55,813
World (I+II+III)=(A+B)	4,628,098	145,578	231,560	725,469	67,140	144,674	230,066	729,818	67,508

Note: (1) All Developed Countries=Developed Market Economies (including Israel, Japan and South Africa)+Eastern Europe & USSR.
All Developing Countries=Developing Market Economies+Asia CPE.

(2) Agricultural area for 1985 is not yet available.

CPC=Centrally Planned Economies.

Source: 1985, *FAO Production Year Book*, Vol. 39, FAO Rome.

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2.07. AREA, PRODUCTION AND YIELD PER HECTARE OF
(1984 and

Continent/Country	Area ('000 tonnes)						Cereals
	1984			1985			
	Cereals	Pulses	Total	Cereals	Pulses	Total	
1	2	3	4	5	6	7	8
Africa	72,253	12,140	84,393	77,910	12,486	90,387	62,669
Egypt	1,951	178	2,129	2,051	193	2,244	7,926
Morocco	4,516	370	4,886	4,592	370	4,962	3,754
Nigeria	13,751	4,120	17,871	14,308	4,120	18,428	9,005
South Africa	6,745	65	6,810	7,328	80	7,408	7,254
North & Central America	108,772	4,065	112,837	109,995	3,982	113,977	387,814
Canada	21,230	186	21,416	21,957	208	22,165	43,213
Mexico	12,576	2,364	14,940	12,269	2,228	14,497	24,199
U.S.A.	71,817	708	72,525	72,752	731	73,483	314,981
South America	37,656	6,421	44,077	37,572	6,440	44,012	77,301
Argentina	12,290	234	12,524	11,722	205	11,927	31,712
Brazil	19,508	5,455	24,963	19,674	5,459	25,133	32,711
Chile	782	137	919	800	149	949	2,116
Asia	305,770	34,323	340,093	304,658	34,010	338,668	774,955
Bangladesh	10,712	283	10,995	11,153	285	11,438	23,179
Burma	5,170	765	5,935	5,314	823	6,137	15,215
China	92,549	4,722	97,271	88,836	4,422	93,258	65,975
India	105,130	23,030	128,160	105,466	22,830	128,296	164,920
Indonesia	12,857	348	13,205	12,348	352	12,700	43,429
Israel	112	8	120	93	8	101	171
Japan	2,688	9	2,787	2,712	88	2,800	16,013
Korea Dem. Rep.	2,360	330	2,690	2,422	335	2,757	10,230
Korea Rep.	1,622	55	1,678	1,521	55	1,576	8,943
Pakistan	11,353	1,585	12,938	11,345	1,614	12,959	17,536
Philippines	6,536	52	6,588	6,816	96	6,882	11,639
Sri Lanka	937	48	985	915	49	964	2,464
Thailand	11,586	546	12,132	11,781	571	12,352	24,516
Vietnam	6,093	186	6,279	6,132	190	6,322	16,104
Europe	70,124	2,951	73,075	69,068	3,012	72,080	309,140
Belgium-Lux	39	2	397	399	2	381	2,503
Denmark	1,671	57	1,728	1,615	105	1,720	9,283
France	9,734	224	9,958	9,707	244	9,951	58,196
German DR	2,518	57	2,575	2,515	53	2,568	11,349
Germany, Fed. Rep.	4,995	16	5,011	4,888	23	4,911	26,489
Netherlands	197	16	213	183	25	208	1,409
Poland	8,159	272	8,644	8,205	274	8,479	24,392
United Kingdom	4,038	90	4,128	4,022	90	4,112	26,591
U.S.S.R.	112,910	6,702	119,612	112,539	6,766	119,305	162,588
Oceania	17,985	537	18,522	18,085	810	18,895	29,589
Australia	17,706	507	18,213	17,797	778	18,575	28,232
New Zealand	257	22	279	268	24	292	1,313
World Total	725,469	67,140	792,609	729,818	67,508	797,326	1803,975

Source: 1985 FAO Production Year Book, Vol. 39, FAO, Rome.

**CEREALS AND PULSES IN MAJOR PRODUCING COUNTRIES
1985)**

Production ('000 tonnes)					Yield (kg/ha)					
1984		1985			1984			1985		
Pulses	Total	Cereals	Pulses	Total	Cereals	Pulses	Total	Cereals	Pulses	Total
9	10	11	12	13	14	15	16=10/4	17	18	19=13/7
5,455	68,124	84,005	5,861	29,866	1,075	821	807	1,078	469	994
379	8,305	8,968	398	9,366	1,075	2,127	3,901	4,373	2,063	4,174
226	3,982	4,878	231	5,109	1,075	616	815	1,062	626	1,030
900	9,905	11,630	900	12,530	1,075	218	554	813	218	680
60	7,314	10,141	74	10,215	1,075	921	1,074	1,384	923	1,379
3,387	391,201	429,516	3,351	432,867	3,565	833	3,467	3,905	841	3,798
232	143,445	48,605	315	48,920	2,065	1,251	2,029	2,214	1,516	2,207
1,488	25,687	28,602	1,288	29,890	1,924	630	1,719	2,331	578	2,062
1,132	316,113	316,877	1,202	348,077	4,386	1,599	4,359	4,768	1,645	4,737
3,493	80,794	78,355	3,436	81,791	2,053	544	1,833	2,085	534	1,858
263	31,975	28,792	228	29,020	2,580	1,125	2,553	2,456	1,112	2,433
2,670	35,381	35,908	2,592	38,500	1,677	469	1,417	1,825	475	1,532
137	2,253	2,360	159	2,519	2,704	1,004	2,452	2,949	1,071	2,583
23,748	798,703	753,325	23,110	776,435	2,534	692	2,348	2,473	679	2,293
213	23,392	23,402	213	23,615	2,164	753	2,128	2,098	746	2,065
571	15,785	16,113	626	16,739	2,943	747	2,660	3,032	761	2,728
6,361	372,336	339,452	5,840	345,292	3,954	1,247	3,828	3,821	1,321	3,703
12,401	177,321	164,573	12,085	176,658	1,569	538	1,364	1,560	529	1,377
299	45,728	43,965	303	44,268	3,378	860	3,463	3,561	860	3,486
7	178	167	7	174	1,529	860	1,483	1,791	893	1,723
173	16,186	15,858	145	16,003	5,958	542	5,808	5,848	670	5,715
280	10,510	10,495	290	10,785	4,335	848	3,907	4,333	866	3,912
62	9,005	8,587	63	8,650	5,514	1,109	5,367	5,647	1,134	5,489
811	18,347	17,811	824	18,635	1,545	512	1,418	1,570	510	1,438
41	11,680	11,842	47	11,889	1,781	790	1,773	1,737	716	1,728
38	2,502	2,689	39	2,728	2,629	800	2,540	2,940	805	2,830
366	24,862	24,610	380	24,990	2,116	669	2,051	2,089	666	2,023
161	16,265	16,150	150	16,300	2,643	867	2,590	2,634	689	2,578
4,163	313,303	287,707	4,678	292,385	4,408	1,411	4,287	4,166	1,553	4,056
6	2,509	2,195	6	2,201	6,337	3,472	6,320	5,793	3,523	5,777
285	9,568	7,979	522	8,501	5,556	5,039	5,537	4,941	4,971	4,942
881	59,077	55,325	1,058	56,383	5,978	3,933	5,933	5,699	4,343	5,666
99	11,448	11,542	85	11,627	4,507	1,748	4,446	4,589	1,607	4,528
43	26,532	25,925	75	26,000	5,303	2,592	5,295	5,304	3,254	5,294
74	1,483	1,130	91	1,221	7,141	4,593	6,962	6,156	3,638	5,876
431	24,823	23,795	440	24,235	2,990	1,566	2,871	2,900	1,608	2,658
350	26,931	22,144	460	22,604	6,585	3,889	6,526	5,506	5,111	5,497
7,079	169,587	180,608	7,929	188,537	1,439	1,056	1,408	1,605	1,172	1,586
615	30,204	27,486	860	28,346	1,645	1,115	1,631	1,520	1,061	1,506
532	28,764	26,017	776	26,793	1,594	1,050	1,579	1,462	997	1,442
76	1,389	1,424	78	1,502	5,108	3,464	4,978	5,322	3,250	5,144
47,940	1351,915	1241,002	49,226	1890,228	2,487	714	2,336	2,523	729	2,370

**2.08. AREA, PRODUCTION AND YIELD PER HECTARE OF PADDY, WHEAT AND MAIZE
IN MAJOR PRODUCING COUNTRIES
(1984-85)**

A=Area in '000 hectares
P=Production in '000 tonnes
Y=Yield, kg/hectare

Country		Paddy			Wheat			Maize		
		1984	1985	1986	1984	1985	1986	1984	1985	1986
Argentina	A	129	105	100	5,900	5,382	4,900	3,025	3,340	3,500
	P	476	379	378	13,600	8,700	8,900	9,500	11,900	12,800
	Y	3,679	3,599	3,784	2,305	1,617	1,816	3,141	3,563	3,657
Australia	A	119	122	107	12,078	11,736	11,255	68	103	84
	P	632	866	706	18,666	16,167	16,656	238	291	278
	Y	5,311	7,093	6,625	1,545	1,378	1,480	3,481	2,833	3,301
Brazil	A	5,351	4,760	5,590	1,742	2,670	3,908	12,018	11,802	12,465
	P	9,027	9,019	10,399	1,983	4,323	5,433	21,164	22,020	20,510
	Y	1,687	1,895	1,860	1,139	1,619	1,390	1,761	1,866	1,645
Bangladesh	A	10,223	10,406	10,320	526	676	540	—	—	—
	P	21,930	22,916	24,247	1,211	1,463	1,042	—	—	—
	Y	2,145	2,202	2,350	2,302	2,164	1,930	—	—	—
Canada	A	—	—	—	13,158	13,729	14,217	1,192	1,197	1,087
	P	—	—	—	21,199	24,252	31,850	7,024	7,472	6,694
	Y	—	—	—	1,611	1,766	2,240	5,894	6,244	6,156
China	A	33,765	32,634	32,948	29,577	29,219	29,697	18,589	17,758	19,219
	P	181,193	171,416	174,126	87,817	85,807	90,297	73,600	64,052	68,160
	Y	5,366	5,253	5,295	2,967	2,937	3,041	3,959	3,607	3,547
Egypt	A	414	308	412	495	498	507	830	900	761
	P	2,236	2,310	2,450	1,815	1,872	1,929	7,170	3,982	3,801
	Y	5,406	7,500	5,947	3,667	3,759	3,805	3,819	4,424	4,995
France	A	—	—	—	5,105	4,805	4,877	1,743	1,887	1,855
	P	—	—	—	32,977	28,890	26,587	10,493	12,409	10,792
	Y	—	—	—	6,460	6,012	5,452	6,020	6,576	5,818
Hungary	A	—	—	—	1,361	1,358	1,318	1,133	1,082	1,149
	P	—	—	—	7,392	6,578	5,803	6,686	6,818	7,214
	Y	—	—	—	5,433	4,845	4,403	5,902	6,303	6,281
India	A	41,159	40,912	41,000	24,672	23,565	23,074	5,800	5,879	5,421
	P	87,553	96,300	90,000	45,476	44,069	46,885	8,442	6,890	8,000
	Y	2,127	2,354	2,195	1,843	1,870	2,032	1,456	1,172	1,476
Indonesia	A	9,764	9,902	9,896	—	—	—	3,086	2,440	3,052
	P	38,136	39,033	39,388	—	—	—	5,288	4,330	5,931
	Y	3,906	3,942	3,980	—	—	—	1,713	1,774	1,943

Iraq	A	39	53	50	493	1,540	1,100	—	—	—
	P	109	149	145	471	1,406	1,100	—	—	—
	Y	2,777	2,835	2,900	956	913	1,000	—	—	—
Italy	A	180	186	188	3,274	3,034	3,133	961	923	866
	P	1,009	1,123	1,082	10,057	8,461	9,070	6,672	6,357	6,424
	Y	5,592	6,052	5,744	3,072	2,789	2,895	6,946	6,889	7,416
Japan	A	2,315	2,342	2,303	232	234	245	—	—	—
	P	14,848	14,578	14,559	741	874	876	—	—	—
	Y	6,414	6,225	6,322	3,193	3,736	3,567	—	—	—
Mexico	A	153	279	151	1,033	1,224	1,206	6,972	7,499	6,818
	P	484	809	523	4,505	5,207	4,772	12,910	13,957	12,154
	Y	3,171	2,896	3,456	4,361	4,254	3,957	1,852	1,861	1,783
Pakistan	A	1,999	1,863	2,082	7,343	7,259	7,403	809	804	815
	P	4,973	4,357	5,254	10,882	11,703	13,923	1,028	1,009	1,110
	Y	2,488	2,309	2,523	1,482	1,612	1,881	1,271	1,255	1,362
Philippines	A	3,222	3,403	3,471	—	—	—	3,315	3,545	3,629
	P	8,200	9,097	9,350	—	—	—	3,439	3,922	4,155
	Y	2,545	2,674	2,694	—	—	—	1,037	1,106	1,145
Romania	A	33	38	50	2,360	2,366	2,450	3,091	3,090	3,200
	P	110	138	169	7,510	5,666	7,900	13,274	15,238	18,000
	Y	3,333	3,632	3,380	3,212	2,395	3,224	4,295	4,931	5,625
Spain	A	73	75	79	2,306	2,043	2,096	440	526	525
	P	440	463	494	6,052	5,329	4,292	2,529	3,414	3,405
	Y	6,033	6,206	6,253	2,625	2,608	2,048	1,746	6,488	6,486
Thailand	A	9,630	9,833	9,970	—	—	—	1,660	1,861	1,789
	P	19,905	20,264	19,100	—	—	—	4,226	4,934	4,197
	Y	2,067	2,061	1,916	—	—	—	2,546	2,651	2,346
Turkey	A	—	—	—	9,026	9,375	10,000	550	567	620
	P	—	—	—	17,235	17,032	19,032	1,500	1,900	2,300
	Y	—	—	—	1,909	1,817	1,908	2,727	3,351	3,710
U.K.	A	—	—	—	1,939	1,902	1,997	—	—	—
	P	—	—	—	14,970	12,046	13,874	—	—	—
	Y	—	—	—	7,720	6,333	6,947	—	—	—
U.S.A.	A	1,134	1,009	963	27,085	26,197	24,560	29,103	30,442	28,000
	P	6,296	6,120	6,097	70,618	65,999	56,792	194,928	225,478	209,632
	Y	5,552	6,068	6,330	2,607	2,519	2,312	6,698	7,407	7,487
U.S.S.R.	A	688	671	621	51,067	50,265	48,728	3,919	4,482	4,223
	P	2,720	2,570	2,633	89,859	68,600	78,100	13,600	14,400	12,479
	Y	3,953	3,830	4,240	1,345	1,554	1,894	3,470	3,213	2,955
Yugoslavia	A	—	—	—	1,458	1,348	1,349	2,331	2,402	2,298
	P	—	—	—	5,595	4,859	4,782	11,312	9,901	12,348
	Y	—	—	—	3,837	3,605	3,545	4,852	4,122	5,374
World	A	145,644	144,345	145,728	231,631	230,905	228,998	126,841	129,102	129,121
	P	469,975	473,626	473,131	516,898	506,097	636,457	452,764	488,723	480,894
	Y	3,227	3,281	3,247	2,232	2,192	2,343	3,570	3,786	3,724

Source: Various issues of "FAO Monthly Bulletin of Statistics", 1987, FAO, Rome.

2.09. YIELD PER-HECTARE OF DIFFERENT CROPS IN SELECTED COUNTRIES

1986

(kg/ha)

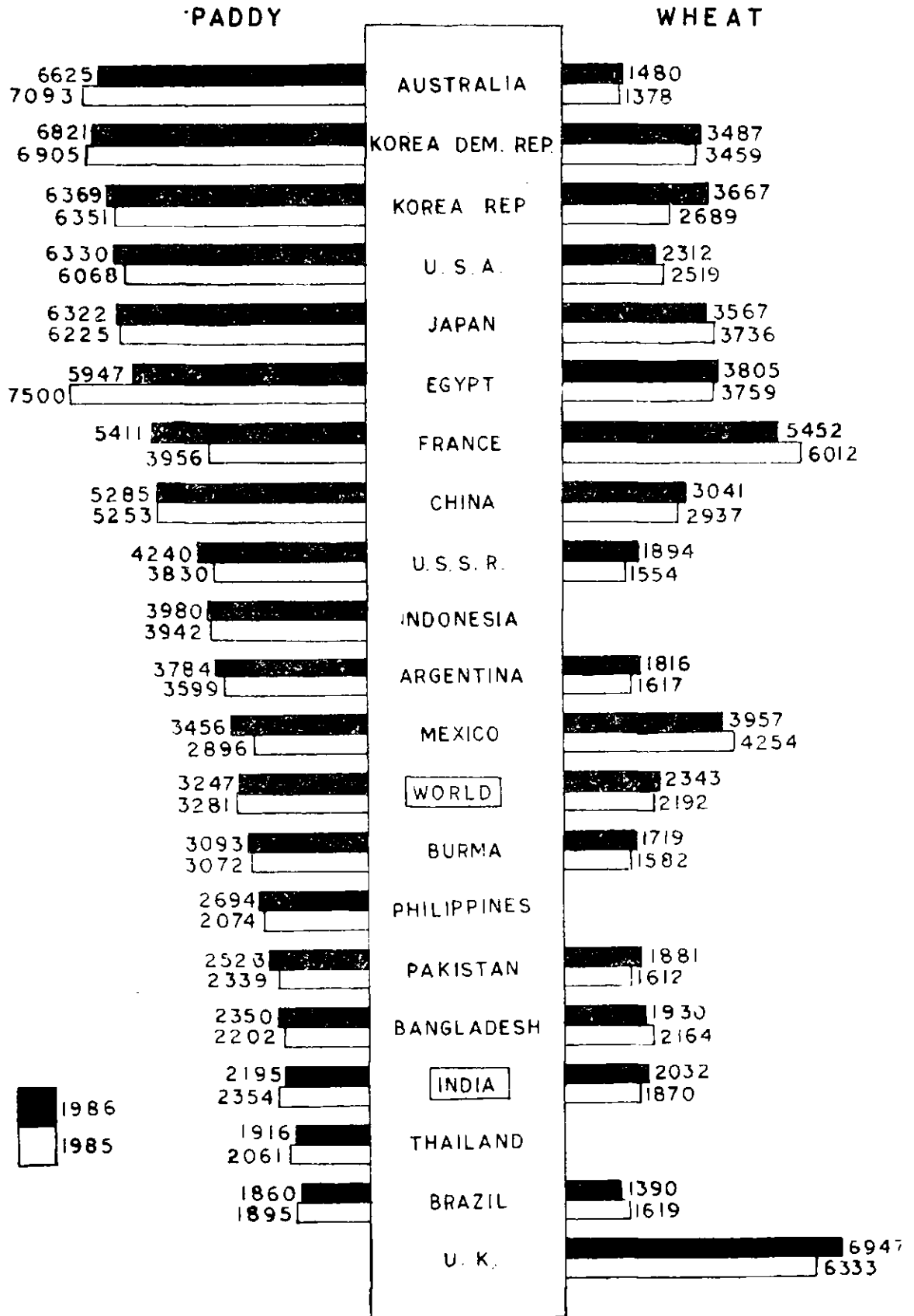
Continent/Country	Paddy	Wheat	Maize	Cereals (Total)	Pulses	Sugar-cane*	Tea*	Coffee* (Green)	Tobacco	Potato	Soyabean
Africa	1,833	1,418	1,583	1,174	492	67,358	1,453	385	1,011	7,910	959
Algeria	—	932	—	953	—	—	—	—	—	7,083	—
Egypt	5,947	3,805	4,995	4,687	2,077	79,478	—	—	—	17,466	—
Madagascar	1,831	—	—	1,737	—	28,131	1,846	367	833	—	—
Morocco	—	1,714	818	1,419	1,005	89,655	—	—	—	1,333	—
Sierra Leone	1,500	—	—	—	—	—	—	385	—	—	—
South Africa	—	1,057	1,997	1,579	1,137	82,944	1,000	—	1,182	14,933	1,086
Tanzania	1,731	—	1,154	1,108	539	100,769	939	513	429	—	240
Tunisia	—	878	—	—	873	—	—	—	—	—	—
Zaire	896	—	838	—	634	38,800	833	346	—	—	—
Zimbabwe	—	—	1,938	1,708	—	121,212	3,659	1,500	1,333	—	—
North & Central America	5,023	2,336	6,112	3,928	814	58,431	—	658	1,889	28,673	2,261
Canada	—	2,240	6,156	2,626	1,210	—	—	—	2,250	25,119	2,440
Cuba	3,484	—	6,156	—	—	50,143	—	450	836	—	—
Mexico	3,456	3,957	1,782	2,344	546	6,8727	—	655	1,564	13,380	1,467
U.S.A.	6,330	2,312	7,487	4,706	1,689	82,036	—	894	2,249	32,692	2,271
South America	2,216	1,675	2,039	1,984	487	65,043	1,122	680	1,398	11,335	1,660
Argentina	3,784	1,816	3,657	2,550	1,020	55,000	1,000	756	1,319	18,421	2,237
Brazil	1,860	1,390	1,645	1,652	418	63,846	2,200	—	1,380	11,405	1,448
Chile	—	2,856	6,886	—	946	—	—	733	2,984	15,039	—
Colombia	4,905	—	1,332	2,570	702	86,207	—	—	1,549	13,408	2,133
Peru	4,414	—	2,066	—	862	137,493	916	724	—	8,779	1,793
Uruguay	4,965	1,247	—	—	—	53,181	—	—	—	—	1,762
Venezuela	2,590	—	1,804	—	—	65,207	—	238	1,808	13,889	—
Asia	3,323	2,261	2,693	2,537	698	55,051	755	711	1,411	11,867	1,269
Afghanistan	2,162	1,190	1,596	1,294	—	18,919	—	—	—	—	—
Bangladesh	2,350	1,930	—	2,323	—	42,209	915	—	963	10,165	—
Bhutan	2,086	—	—	—	—	—	—	—	1,204	—	—
Burma	3,093	—	—	2,913	—	61,242	—	433	—	—	815
China	5,285	3,041	3,547	3,868	1,321	70,006	338	1,175	1,802	10,716	1,336
India	2,195	2,032	1,476	1,608	550	59,845	1,615	884	1,097	12,610	963
Israel	—	2,122	—	—	—	—	—	—	—	38,398	—
Indonesia	3,980	—	1,943	3,498	829	84,410	1,356	606	846	—	978
Iran	3464	1,104	—	1,230	731	71,667	1,176	—	1,222	—	1,800

Iraq	2,900	1,000	—	—	—	19,318	—	—	1,286	—	—
Japan	6,322	3,567	—	5,898	1,655	73,501	1,576	—	2,524	2,9231	1,701
Korea Dem. Rep.	6,821	—	6,164	4,406	866	—	—	—	1,412	12,961	1,317
Korea Rep.	6,369	—	—	4,765	—	—	329	—	2,471	20,214	1,360
Malaysia	2,884	—	—	—	—	54,545	1,387	978	800	—	1,603
Nepal	1,779	1,239	1,384	1,525	—	23,356	—	—	539	5,096	—
Pakistan	2,523	1,881	1,362	1,846	529	35,553	—	—	1,827	10,096	—
Philippines	2,624	—	1,145	1,902	—	34,093	—	800	987	—	—
Sri Lanka	3,099	—	—	—	—	38,667	856	1,957	—	—	600
Syria	—	—	—	1,170	723	37,500	—	—	1,250	—	—
Thailand	1,916	—	2,346	1,967	665	4,6634	167	786	934	—	1,340
Turkey	—	1,903	3,710	2,004	1,120	—	1,875	—	964	19,500	2,667
Vietnam	2,857	—	—	2,761	748	42,343	567	375	972	—	805
Europe	5,366	4,302	5,798	4,166	1,568	63,019	1,074	346	1,488	21,735	1,911
Austria	—	4,360	8,017	4,824	—	—	—	—	—	28,188	—
Belgium-Lux	—	6,812	—	—	—	—	—	—	—	33,673	—
Bulgaria	—	3,750	4,091	3,740	983	—	—	—	1,112	10,000	533
Czechoslovakia	—	4,403	4,718	4,301	2,159	—	—	—	—	19,388	—
France	—	5,452	5,818	5,241	3,660	—	—	—	2,422	19,624	—
German Dem. Rep.	—	5,601	—	4,639	—	—	—	—	—	21,478	—
Germany Fed. Rep.	—	6,314	6,959	5,292	—	—	—	—	2,759	37,021	—
Italy	5,744	2,895	7,416	3,829	1,361	—	—	—	1,955	19,562	3,778
Netherlands	—	8,122	—	—	—	—	—	—	—	41,207	—
Portugal	4,935	1,586	2,288	—	303	26,154	1,074	—	—	8,654	—
Spain	6,253	2,048	6,486	2,123	760	75,000	—	346	1,955	16,806	—
United Kingdom	—	6,947	—	6,667	5,290	—	—	—	—	36,723	2,000
Yugoslavia	—	3,545	5,374	4,414	1,320	—	—	—	1,205	8,901	1,481
U. S. S. R.	4,240	1,894	2,955	1,842	1,514	—	1,928	—	1,964	13,655	653
Oceania	6,059	1,502	4,384	1,592	1,145	75,608	2,072	1,184	1,913	24,700	1,342
Australia	6,625	1,480	3,301	1,543	905	79,479	—	—	2,167	2,5216	1,342
Fiji	—	—	—	—	—	54,545	902	N.A.	—	—	—
New Zealand	—	3,992	—	—	3,876	—	—	—	—	—	—
World Total	3,247	2,343	3,724	2,596	776	60,056	847	578	1,460	15,392	1,844

Source: FAO "Monthly Bulletin of Statistics—December 1986, April 1987 & June 1987.

* 1985 FAO Production Year Book, Vol. 39, FAO Rome.

Yield of Paddy and Wheat in Selected Countries (Kg/ha) 1985 and 1986



CONVERSION FACTORS AND TABLES

1. CONVERSION FACTORS
Handy Equivalent

	AREA		WEIGHT
1 hectare	= 2.47100 acres = 100 × 100 sq. metres	1 metric ton	= 2,204.7 pounds = 0.98421 long tons
1 acre	= 0.40468 hectare = 4,840 sq. yd. = 43,660 sq. ft. = .00156 sq. miles = 4,048 sq. metres	1 long ton	= 1.10231 short tons = 1,000 kilograms = 2,240 pounds = 1.01605 metric tons
1 sq. mile	= 640 acres = 259 hectares = 2.59 sq. kilometres	1 short ton	= 2,000 pounds = 0.90781 metric ton
1 sq. kilometre	= 0.3861 sq. miles = 100 hectares	1 kilogram 1 pound 1 mound	= 2.20462 pounds = 0.45359 kilogram = 81.2857 pounds = 37.324210 kg.
	YIELD		DISTANCE
100 kg. per hectare	= 1.4869 bushels (60 lb.) per acre	1 mile	= 8 furlongs or 1,760 yards = 1.609 kilometres
1 bushels (60 lb.) per acre	= 67.253 kg. per hectare	1 kilometre	= 5/8 mile = 0.6214 mile (3,280.89 ft)
1 kg. per hectare	= 0.892169 lb. per acre	1 metre	= 1.0936 yards
1 lb. per acre	= 1.129864 kg per hectare	1 inch	= 25.4 millimetres = 2.54 centimetres
		1 foot	= 30.48 centimetres = 0.3048 metres
		1 yard	= 91.44 centimetres

2. CONVERSION TABLES

To Convert	Multiply by
Atmospheres to lbs. per sq. inch	14.73
British thermal units to calories	.252
Cubic centimetres to cubic inches	.06103
Cubic feet to cubic metres	.02832
Cubic feet to gallons	6.228
Cubic inches to litres	.01639
Cubic metres to cubic yards	1.308
Foot lbs. per second to horse power	.001818
Foot lbs. to kilogrammetres	.1383
Force de cheval to horse power	.9863
Gallons Imp. to litres	4.536
Grams to grains	15.43
Grams to ounces	.03527
Grams to lbs.	.002205
Horse power to watts	.746

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