

SUPPLEMENT
TO
FERTILISER STATISTICS 1960



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Prepared in the Statistical Division of The Fertiliser Association of India
by
D. M. Rao, Statistician,
and
A. N. Kulkarni, Statistical Assistant.

PREFACE

The last edition of Fertiliser Statistics, published in June 1961, related to the calendar year 1960. It has now been decided to present annual statistics in future for the fertiliser year (July-June) in conformity with international practice. The present publication is designed to bridge the gap between the calendar year 1960 and the fertiliser year July 1960—June 1961.

This should be regarded as a supplement to Fertiliser Statistics 1960. As such, it is limited to bring forward up to the end of June 1961 statistical information contained in Part I of Fertiliser Statistics 1960.

C. R. RANGANATHAN,
Executive Director.

New Delhi,
January 9, 1962.

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NOTES, ABBREVIATIONS AND SIGNS

The source from which the data have been derived is indicated at the bottom of each table. Where no source is given for a particular table, it should be understood that the data have been collected and tabulated by the F.A.I.

In all tables, unless otherwise stated, the years refer to calendar or fertiliser years, as the case may be. For example, the year 1958 refers to the calendar year ending December 31, 1958 and 1957-58 refers to the fertiliser year ending June 30, 1958.

Wherever special notes are required with reference to a particular table, they are given at the bottom of the table. The following abbreviations and symbols are used :

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I. NITROGENOUS FERTILISERS

I.1 MANUFACTURERS AND INSTALLED CAPACITY

Name of the factory	Installed capacity in metric tonnes	
	Material	Nutrient (N)
<i>Existing Factories</i>		
Ammonium Sulphate		
ZONE II		
1. The Hindustan Steel Ltd., Bhilai	20,117	4,064
ZONE III		
1. The Bararee Coke Co., Ltd., Loyabad	1,174	241
2. The Barrakur Coal Co., Ltd., Bansjora	1,270	260
3. The Hindustan Steel Ltd., Durgapur	20,117	4,064
4. The Indian Iron & Steel Co., Ltd., Burnpur	9,388	1,925
5. The Indian Iron & Steel Co., Ltd., Kulti	1,676	344
6. The Fertiliser Corporation of India Ltd., Unit : Sindri	355,617	72,901
7. The Tata Iron & Steel Co., Ltd., Jamshedpur	16,765	3,437
ZONE IV		
1. The Fertilisers & Chemicals, Travancore, Ltd., Alwaye	67,059	13,747
2. The Mysore Chemicals & Fertilisers, Ltd., Belagula	6,604	1,354
Total	499,787	102,337

(Continued)

I.1 MANUFACTURERS AND INSTALLED CAPACITY

(Continued)

Name of the Factory	Installed capacity in metric tonnes	
	Material	Nutrient
<i>Other Fertilisers</i>		
ZONE I		
1. The Fertiliser Corporation of India, Ltd. Unit : Nangal—		
calcium ammonium nitrate	396,507	81,284
2. The New Central Jute Mills Co., Ltd., Varanasi.		
ammonium chloride	40,642	10,160
ZONE III		
The Fertiliser Corporation of India Ltd., Unit : Sindri		
Urea	24,385	11,177
Ammonium sulphate nitrate	150,375	36,578
ZONE IV		
The Fertilisers & Chemicals Travancore Ltd., Alwaye		
Ammonium phosphate	16,765	2,683
Ammonium chloride	8,128	2,032
Total :	—	143,914
Grand Total :	—	246,251

(Continued)

I.I MANUFACTURERS AND INSTALLED CAPACITY

(Continued)

(Metric tonnes)

Name of the factory	Nitrogen capacity per annum	Type of product	Expected time of starting production
<i>Factories under construction</i>			
1. The New Central Jute Mills Ltd., Varanasi (expansion)	10,160	Ammonium chloride	1963
2. The Fertiliser Corporation of India Ltd., Unit : Trombay	45,735 45,735	Urea Nitrophosphate	1963
3. Rourkela Fertiliser, Rourkela	121,960	Calcium ammonium nitrate	1963
4. Neyveli Fertilisers, Neyveli	71,140	Urea	1963
5. The Fertilisers And Chemicals Travancore Ltd., Alwaye (expansion)	24,900 21,850	Ammonium sulphate Ammonium phosphate	1962
	4,065	Ammonium chloride	
6. The East India Distilleries & Sugar Factories Ltd., Ennore	8,130	Ammonium phosphate	1963
Total	<u>353,675</u>		
<i>Factories licensed</i>			
1. Sri B. L. Jalan & Co., location : Hanumanagarh	79,200	Ammonium sulphate	1964
2. The Fertiliser Corporation of India Ltd., Unit : Gorakhpur	82,500	Urea	1965

(Continued)

I.1 MANUFACTURERS AND INSTALLED CAPACITY
(Continued)

(Metric tonnes)

Name of the factory	Nitrogen capacity per annum	Type of product	Expected time of starting production
3. Khandelwal Bros. (P) Ltd., location : Itarsi or Katni.	46,600	Urea	1964
4. The Fertiliser Corporation of India Ltd., Unit : Namrup ¹	22,868	Urea	1964
	10,162	Ammonium sulphate	
5. The Andhra Sugars Ltd., location : Kothagudam	80,000	Urea	1965
6. M/s Parry & Co. Ltd., location : Visakhapatnam	73,684	Ammonium phosphate	1965
	7,165	Urea	
7. M/s Kothari & Sons, location : Tuticorin	33,030 ²	Ammonium phosphate	1965
	66,060 ³	Ammonium phosphate	
Total	<u>468,239</u>		

Note : ¹ The actual capacity is expected to be double the licensed capacity of ammonium sulphate.

² First stage.

³ After completion of second stage.

I.1 MANUFACTURERS AND INSTALLED CAPACITY

(Concluded)

(Metric tonnes)

Name of the factory	Nitrogen capacity per annum	Type of product	Expected time of starting production
<i>Factories to be licensed</i>			
1. Mysore Fertiliser Project, location Mangalore ⁴	52,000	Urea	1966
	26,000	Ammonium phosphate	
	22,000	Ammonium sulphate	
2. The Gujarat State Fertilisers Co., Ltd. location : Koyli	40,500	Urea	1966
	20,000	Ammonium phosphate	
	41,000	Ammonium sulphate	
3. West Bengal Fertiliser Project, location : Durgapur	45,735	Urea	1966
	30,490	Nitrophosphate	
	5,080	Nitrogen solution	
Total	<u>282,805</u>		

PROGRAMME OF NITROGEN PRODUCTION

(Metric tonnes)

	<i>Nitrogen N</i>
1. Existing factories	246,251
2. Factories under construction	353,675
3. Factories licensed	468,239
4. Factories to be licensed	282,805
	<u>1,350,970</u>

⁴ Licence for the Mysore Fertiliser Project is expected to be granted shortly in favour of Messrs. Shaw Wallace & Co. Ltd. and Messrs. Rallis India Ltd.

**1.2 STOCKS, PRODUCTION AND DESPATCHES OF NITROGENOUS FERTILISERS
(1960-61)**

(Metric tonnes)

Month	Ammonium sulphate				Urea				Ammonium sulphate-nitrate			
	Open- ing stock	Pro- duc- tion	Des- patch- es	Clos- ing stock	Open- ing stock	Pro- duc- tion	Des- patch- es	Clos- ing stock	Open- ing stock	Pro- duc- tion	Des- patch- es	Clos- ing stock
July	30,707	33,611	21,757	42,561	4,087	349	350	4,086	22,895	1,691	825	23,761
August	42,561	29,880	29,154	43,284	4,086	1,010	501	4,595	23,761	3,424	1,749	25,436
September	43,284	31,342	29,706	44,920	4,595	865	724	4,736	25,436	2,459	1,263	26,632
October	52,788	33,872	45,593	41,067	4,736	663	123	5,276	26,871	2,172	2,765	26,278
November	41,067	32,993	33,949	40,111	5,276	1,170	2,125	4,321	26,278	3,824	6,240	23,762
December	40,111	38,415	36,053	42,473	4,321	1,971	2,777	3,515	23,762	4,140	9,024	18,878
January	42,429	36,986	34,159	45,256	3,515	1,086	1,142	3,459	18,878	4,057	6,624	16,311
February	45,256	33,681	27,146	51,791	3,459	930	1,363	3,026	16,311	3,394	5,677	14,028
March	51,791	39,079	36,357	54,475	3,026	1,201	1,276	2,951	14,028	747	4,341	10,434
April	54,475	28,877	36,148	47,204	2,951	1,056	269	3,732	10,434	5,289	5,254	10,469
May	47,204	27,358	29,480	45,082	3,732	1,067	1,038	3,761	10,469	4,393	5,792	9,070
June	45,082	34,552	32,203	47,641	3,761	1,162	751	4,172	9,070	4,415	4,869	8,616
Total :		400,646	391,705			12,530	12,439		40,005	54,523		

Note : Certain differences between closing and opening stocks are due to stock taking, etc.

1.2 STOCKS, PRODUCTION AND DESPATCHES OF NITRO-GENOUS FERTILISERS 1960-61
(Metric tonnes)

Month	Calcium ammonium nitrate			
	Opening stock	Production	Despatches	Closing stock
February	...	2,075	1,911	164
March	164	9,257	9,410	11
April	11	10,706	9,525	1,192
May	1,192	12,717	10,934	2,975
June	2,975	16,551	11,424	8,102
Total :		51,306	43,204	

Note : ¹ Started production in February, 1961.

² Calcium ammonium nitrate data are received in weekly statements. The monthly figures are calculated from the weekly statements & are therefore approximate.

1.3 STOCKS, PRODUCTION AND DESPATCHES OF COMPLEX FERTILISERS 1960-61
(Metric tonnes)

Month	(16-20-0) Ammonium phosphate			
	Opening stock	Production	Despatches	Closing stock
December	...	126	60	66
January	66	844	529	381
February	381	985	1,149	217
March	217	748	759	206
April	206	1,159	854	511
May	511	881	1,068	324
June	324	1,910	1,428	806
Total :		6,653	5,847	

Note : Started production in December, 1960.

**1.4 PRODUCTION OF AMMONIUM SULPHATE
1952-53 TO 1960-61**

(Metric tonnes)

Year	Material	Nutrient (N)
1952-53	257,609	52,810
1953-54	256,819	52,648
1954-55	332,417	68,145
1955-56	373,103	76,486
1956-57	382,466	78,405
1957-58	393,905	80,751
1958-59	392,069	80,374
1959-60	383,366	78,590
1960-61	400,646	82,132

**1.4 PRODUCTION OF AMMONIUM SULPHATE—1960-61
(MONTHWISE)**

(Metric tonnes)

Month	By-product	Synthetic	Total material	Nutrient N
July	3,739	29,872	33,611	6,890
August	3,863	26,017	29,880	6,125
September	4,030	27,312	31,342	6,425
October	3,312	30,560	33,872	6,944
November	3,701	29,292	32,993	6,763
December	3,930	34,485	38,415	7,875
January	6,202	30,784	36,986	7,582
February	4,683	28,998	33,681	6,905
March	5,019	34,060	39,079	8,012
April	4,597	24,280	28,877	5,920
May	4,351	23,007	27,358	5,608
June	4,659	29,893	34,552	7,083
	52,086	348,560	400,646	82,132

1.5 DISTRIBUTION OF AMMONIUM SULPHATE
(1958-59 to 1960-61) (April—March)

(Metric tonnes)

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Distributed to ¹	1958-59	1959-60	1960-61
Andhra Pradesh	70,107	80,776	82,856
Assam	12,459	5,791	—
Bihar	30,481	58,423	52,696
Maharashtra	58,826 ²	83,234 ²	83,416
Gujarat	—	—	27,724
Jammu & Kashmir	2,047	4,475	4,200
Kerala	15,962	17,659	21,815
Madhya Pradesh	28,256	42,369	24,555
Madras	83,926	85,043	85,000
Mysore	27,637	19,488	53,720
Orissa	15,647	21,007	17,458
Punjab	15,241	7,316	17,800
Rajasthan	2,896	3,414	10,821
Uttar Pradesh	111,054	155,760	124,268
West Bengal	23,928	38,153	31,425
Delhi	1,039	1,402	1,333
Himachal Pradesh	559	701	608
Manipur	20	62	44
Tripura	—	—	—
Pondicherry	1,709	1,910	2,085
Andaman	—	1	—
Coffee Board	5,016	11,865	34,010
U.P.A.S.I.	11,849	17,832	28,505
Rubber Board	4,064	5,334	3,315
Tea N.E. India	37,476	52,293	52,516
Industrial users	2,713	2,615	5,437
Dairy Research Institute, Karnal	—	—	44
Demonstrations	—	—	137
Sea Island Cotton crop	152	—	—
Total	563,064	716,922	765,788

Note : ¹The quantity shown as distributed actually refers to the allotment under the Fertiliser Pool.

²These figures are for composite Bombay State.

Source : Ministry of Food and Agriculture.

**I.6 DISTRIBUTION OF UREA, AMMONIUM SULPHATE
1958-59 to 1960-61**

Distributed to ¹ :	74.5	1958-59 26.0	20.5
	UREA	A.S.N.	C.A.N.
Andhra Pradesh	11,685	15,850	7,167
Assam	214	1,190	—
Bihar	—	—	—
Maharashtra	5,131 ^a	9,866 ^a	5,487 ²
Gujarat	—	—	—
Delhi	—	—	—
Jammu & Kashmir	188	—	—
Kerala	1,412	585	508
Madhya Pradesh	663	875	43
Madras	14,479	9,551	—
Manipur	—	—	—
Mysore	4,362	1,555	2,032
Orissa	163	30	2,023
Pondicherry	—	86	—
Punjab	2,978	3,473	20,260
Rajasthan	4,06	2,428	2,235
Uttar Pradesh	7,151	7,629	41
West Bengal	1,829	1,566	—
Tea	3,360	3,654	—
U. P. A. S. I.	4,668	2,247	1,829
Coffee	4,654	4,857	4,979
Rubber	—	—	—
Industrial users	—	—	—
TOTAL	63,343	65,442	46,604

Note: ¹ The quantity shown as distributed actually refers to the allotment under the Fertiliser Pool. The figures of distribution of ammonium chloride and ammonium phosphate are not available.

NITRATE AND CALCIUM AMMONIUM NITRATE
(April-March)

(Metric tonnes)

1959-60			1960-61		
UREA	A.S.N.	C.A.N.	UREA	A.S.N.	C.A.N.
16,281	12,252	8,193	4,300	13,000	15,230
—	—	—	—	—	—
4,956	875	1,985	500	1,000	70
32,737 ²	18,441 ²	9,144 ²	7,120	7,450	9,200
—	—	—	1,380	4,950	1,500
81	—	—	—	—	—
—	—	—	—	—	—
2,256	902	1,719	2,500	1,000	500
1,778	698	102	—	2,000	—
21,766	10,289	4,293	8,000	9,000	2,000
—	—	—	20	—	—
7,954	1,500	5,298	5,500	2,000	3,500
—	465	4,061	—	1,500	2,000
203	41	—	—	—	—
—	—	15,241	—	—	14,540
1,715	1,891	4,166	—	500	500
13,692	11,166	9,652	5,896	13,000	24,900
1,175	1,380	—	1,576	1,500	—
1,843	1,390	—	2,000	16,847	—
2,962	7,827	2,332	2,750	7,250	1,000
5,933	7,511	6,428	2,750	7,250	2,000
305	—	—	—	—	—
—	—	—	202	—	—
115,637	76,228	72,614	44,494	88,247	76,940

A. S. N.—Ammonium sulphate nitrate. C. A. N.—Calcium ammonium nitrate.
Note : ² These figures are for composite State of Bombay.
Source : Ministry of Food and Agriculture.

**1.7 IMPORTS & DISTRIBUTION OF CHILEAN NATURAL
NITRATE OF SODA**

(Metric tonnes)

	1958-59	1959-60	1960-61
Imports			
Total imports for agricultural purposes	9,732	13,000	14,650
Total :	9,732	13,000	14,650
Distribution			
Distributed to :			
Andhra Pradesh	—	300	450
Assam	—	150	—
Bombay	3,582 ¹	4,050 ¹	—
Gujarat	—	—	2,460
Kerala	400	950	900
Madras	350	500	1,000
Maharashtra	—	—	3,540
Mysore	—	100	300
Pondicherry	—	100	50
Punjab/Delhi	150	—	—
U.P./Bihar	500	400	100
West Bengal	2,000	2,850	3,050
Coffee plantations	2,250	3,600	2,800
Tea plantations	500	—	—
Total :	9,732	13,000	14,650

¹ These figures are for composite Bombay State.

Source : Messrs. Rallis India Ltd., Bombay.

**1.8 IMPORTS OF NITROGENOUS FERTILISERS ON
GOVERNMENT ACCOUNT
1958-59 to 1960-61 (July—June)**

Name of fertiliser	Measure	Year		
		1958-59	1959-60	1960-61
Ammonium sulphate	Quantity (metric tonnes)	227.000	303,981	416,995
	Value (Lakh Rs.)	372.3	410.0	857.7
Urea	Quantity (metric tonnes)	79,811	80,980	123,243
	Value (Lakh Rs.)	340.2	280.0	557.2
Ammonium sulphate nitrate	Quantity (metric tonnes)	39,616	82,661	49,511
	Value (Lakh Rs.)	84.6	204.9	129.2
Calcium ammonium nitrate	Quantity (metric tonnes)	15,547	82,060	80,258
	Value (Lakh Rs.)	34.9	158.57	168.28
Ammonium phosphate	Quantity (metric tonnes)	362	11,834	—
	Value (Lakh Rs.)	2.1	56.4	—
Di-ammonium phosphate	Quantity (metric tonnes)	316	—	—
	Value (Lakh Rs.)	2.58	—	—
Ammonium nitrate	Quantity (metric tonnes)	1,473	—	—
	Value (Lakh Rs.)	6.87	—	—
Nitrophosphate	Quantity (metric tonnes)	—	11,257	994
	Value (Lakh Rs.)	—	34.99	3.4

Source : Ministry of Food and Agriculture.

2. PHOSPHATIC FERTILISERS

2.1 PRODUCTION OF SUPERPHOSPHATE (16% P₂O₅) 1953-54 to 1960-61

(Metric tonnes)

Year/Month	Material	Nutrient
1953-54	86,282	13,805
1954-55	89,659	14,345
1955-56	77,279	12,365
1956-57	109,564	17,530
1957-58	161,228	25,796
1958-59	193,621	30,979
1959-60	321,343	51,415
1960-61 July	26,127	4,180
August	23,549	3,768
September	20,691	3,311
October	22,148	3,544
November	26,512	4,242
December	30,001	4,800
January	27,739	4,438
February	28,977	4,592
March	33,607	5,377
April	27,219	4,355
May	30,383	4,861
June	30,866	4,939
1960-61 Total :	327,819	52,451

NOTE : The figures exclude information in respect of M/s Krishna Industrial Corporation, Madras and M/s The Jay Shree Tea Gardens Ltd., Calcutta, who have not yet supplied the data.

**2.2 STOCKS, PRODUCTION AND DESPATCHES OF
SUPERPHOSPHATE (16% P₂O₅)—1960-61**
(Metric tonnes)

Month	Opening stock	Production	Despatches	Closing stock
July	38,941	26,127	24,939	40,129
August	40,129	23,549	28,976	34,702
September	34,702	20,691	23,411	31,982
October	31,982	22,148	23,488	30,642
November	30,642	26,512	22,444	34,710
December	34,710	30,001	26,822	37,889
January	37,630	27,739	22,382	42,987
February	42,987	28,977	21,066	50,898
March	50,898	33,607	32,522	51,983
April	51,983	27,219	23,301	55,901
May	55,901	30,383	33,019	53,265
June	53,265	30,866	45,724	38,407
Total :		317,819	328,094	

Notes : ¹ Certain differences between closing stocks and opening stocks is due to stock taking.

² The figures exclude information in respect of M/s. Krishna Industrial Corporation, Madras and M/s. The Jay Shree Tea Gardens Ltd., Calcutta, who have not yet supplied the data.

**2.3 DISTRIBUTION OF SUPERPHOSPHATE (16% P₂O₅)
1958-59 to 1960-61**

(Metric tonnes)

State	1958-59	1959-60	1960-61
Andhra Pradesh	40,228	87,659	87,840
Assam	757	803	1,018
Bihar	10,559	12,446	15,676
Bombay ¹	29,185	68,625	73,918
Jammu & Kashmir	—	8	—
Kerala	2,930	5,633	7,642
Madhya Pradesh	4,958	7,291	5,309
Madras	23,947	39,815	46,062
Mysore	14,683	18,799	27,005
Orissa	1,571	1,322	2,405
Punjab	2,462	1,129	3,075
Rajasthan	2,717	3,396	1,628
U. P.	11,827	23,526	5,768
West Bengal	18,995	14,033	20,957
Delhi	109	204	118
Himachal Pradesh	512	450	432
Manipur	—	57	100
Tripura	407	—	3
Andaman	—	3	—
Pondicherry	209	352	593
Total :	166,056	285,551	299,549
Used in mixtures	17,488	27,494	26,375
Wastage	—	—	2,239
GOI purchases	770	148	—
Grand Total :	184,314	313,193	328,163

¹Maharashtra and Gujarat.

Note : The figures exclude superphosphate distributed by M/s Krishna Industrial Corporation, Madras and M/s The Jay Shree Tea Gardens, Calcutta, who have not yet supplied the data.

2.3 DISTRIBUTION OF SUPERPHOSPHATE (16% P₂O₅—1960-61)

(Metric tonnes)

State	July to September	October to December	January to March	April to June	Total
Andhra Pradesh	23,527	13,947	17,049	33,217	87,840
Assam	158	257	560	43	1,018
Bihar	4,568	4,152	4,854	2,102	15,676
Bombay ¹	10,709	13,660	18,207	31,342	73,918
Jammu & Kashmir	—	—	—	—	—
Kerala	2,140	2,415	703	2,384	7,642
Madhya Pradesh	43	720	4,546	—	5,309
Madras	16,232	11,622	8,366	9,842	46,062
Mysore	6,176	6,293	6,427	8,109	27,005
Orissa	244	96	245	1,820	2,405
Punjab	1,013	427	767	868	3,075
Rajasthan	666	37	460	465	1,628
Uttar Pradesh	2,358	996	745	1,669	5,768
West Bengal	3,524	10,279	3,206	3,948	20,957
Delhi	41	40	5	32	118
Himachal Pradesh	1	199	92	140	432
Manipur	25	25	—	50	100
Tripura	3	—	—	—	—
Andamans & Nicobar	—	—	—	—	—
Pondicherry	159	104	100	230	593
Total :	71,687	65,269	66,332	96,261	299,549*
Used in mixtures	5,398	7,795	8,563	4,619	26,375
Wastage	—	—	1,075	1,164	2,239
Grand Total :	77,085	73,064	75,970	102,044	328,163 ¹

¹ Maharashtra and Gujarat ; Maharashtra—January to March : 14,191 and April to June 14,460 ; Gujarat—January to March : 4,016 and April to June 16,882.

Note : (i) No explanation for discrepancy in figures of despatches given in tables 2.2 and 2.3, is available. These figures exclude the superphosphates distributed by M/s Krishna Industrial Corporation Madras and M/s The Jay shree Tea Gardens, Calcutta, who have not yet supplied the data.

(ii) Figures of s/p used in mixtures represent only the quantity utilised by s/p manufacturers.

2.4 IMPORTS 1958-59

Articles and country from which imported	Quantity (metric tonnes)	Value Rs.
Phosphatic fertilisers and phosphatic fertiliser materials		
Mono-ammonium phosphate		
United Kingdom	12	14,749
Germany West	...	830
Total :	12	15,579
Diammonium phosphate		
United Kingdom	82	130,291
Germany West	157	110,634
Total :	239	240,925
Basic slag		
Belgium	1	178
Total :	1	178
Calcium phosphate disintegrated		
United Kingdom	...	767
Netherlands	1	2,440
Total :	1	3,207
Superphosphate¹		
United Kingdom	30	7,497
Netherlands	4,467	1,865,509
Belgium	105	49,379
Italy	53	23,036
Total :	4,655	1,945,421

¹ Single and concentrated

(Continued)

2.4 IMPORTS 1958-59
(Continued)

Articles and country from which imported	Quantity (metric tonnes)	Value (Rs.)
Others		
U.S.A.	85	106,201
Total :	85	106,201
Natural phosphate (ground or unground)		
Rock phosphate		
United Kingdom	5,082	611,973
France	10,946	1,378,899
Jordan	28,602	2,734,558
Egypt	74,353	5,904,720
Morocco	48,293	4,412,342
Iceland	76	9,445
Fr. Oceania	6,098	755,600
Total :	173,450	15,807,537
Other mineral phosphates		
United Kingdom	8	11,611
Germany West	5	488
Egypt	254	35,410
U.S.A.	...	2,508
Jordan	4,553	409,400
Total :	4,820	459,417
Sulphur		
United Kingdom	472	213,342
Sweden	11	4,765
Germany West	730	260,115
Netherlands	48	17,775

(Continued)

2.4 IMPORTS 1958-59
(Continued)

Articles and country from which imported	Quantity (metric tonnes)	Value (Rs.)
Italy	29	10,169
Bulgaria	40	13,373
China	8,516	210,558
U.S.A.	101,008	17,311,079
Mexico	3,938	603,364
Total :	114,792	18,644,540
Grand Total :	...	37,223,005

(Continued)

2.4 IMPORTS 1959-60
(Continued)

Articles and country from which imported	Quantity (metric tonnes)	Value (Rs.)
Phosphatic fertilisers and phosphatic fertiliser materials		
Mono-ammonium phosphate		
United Kingdom	15	19,026
Germany West	...	1,611
Total :	15	20,637
Diammonium phosphate		
United Kingdom	6	9,319
Germany West	...	376
Total :	6	9,695
Superphosphate¹		
United Kingdom	...	144
Netherlands	382	233,485
Belgium	626	256,268
Italy	24	9,546
Total :	1,032	499,443
Others		
United Kingdom	...	40
Germany West	1	1,658
France	2	4,065
Egypt	4,065	376,275
Total :	4,068	382,038

¹ Single and concentrated.

(Continued)

2.4 IMPORTS 1959-60
(Continued)

Articles and country from which imported	Quantity (metric tonnes)	Value (Rs.)
Natural phosphate (Ground and unground)		
Rock phosphate		
United Kingdom	1	150
Lebanon	...	124
Jordan	27,120	1,877,337
Egypt	71,744	6,016,394
Morocco	87,372	8,516,289
U.S.A.	15,503	1,381,387
Total :	201,740	17,791,681
Other mineral phosphates		
France	1	1,160
Germany West	—	529
Netherlands	30	31,441
Egypt	4,065	31,261
Total :	4,096	64,391
Sulphur		
United Kingdom	1,990	425,613
U. S. S. R.	53	8,823
Sweden	24	9,025
Germany West	183	65,853
Italy	12	4,874
Canada	—	20
U. S. A.	127,105	19,769,681
Mexico	26,325	3,928,930
Total :	155,692	24,212,819

(Continued)

2.4 IMPORTS (1960-61)
(Continued)

Articles and country from which imported	Quantity (metric tonnes)	Value (Rs.)
Phosphatic fertiliser and phosphatic fertiliser materials		
Mono-ammonium phosphate		
United Kingdom	5	4,851
Sam Val Trans	1	2,146
Total :	6	69,97
Diammonium phosphate		
United Kingdom	2	3,496
U. S. A.	1	1,619
Sam Val Trans	1	4,824
Total :	4	9,939
Superphosphate¹		
Netherlands	637	245,236
Belgium	30	13,219
Total :	667	258,455
Others		
United Kingdom	6	11,573
Tunis	2,032	335,033
Sam Val Trans	3	2,030
Total :	2,041	348,636
Natural phosphates (ground and unground)		
Netherlands	150	15,263
Jordan	61,923	5,858,048
Japan	3,048	279,055
Egypt	116,678	9,387,972
Tunis	21,656	1,934,804

¹ Single and concentrated

(Continued)

2.4 IMPORTS 1960-61
(Concluded)

Articles and country from which imported	Quantity (metric tonnes)	Value (Rs.)
Morocco	32,774	2,744,544
U. S. A.	22,142	1,950,545
Sam Val Trans	3	534
Total :	258,370	22,170,675
Other mineral phosphates		
United Kingdom	—	1,009
Netherlands	542	129,973
Egypt	387	31,192
Tunis	1,422	227,523
Sam Val Trans	1	610
Total :	2,352	390,307
Sulphur		
France	5,714	853,273
Germany West	278	109,610
Mexico	22,512	4,373,814
Sweden	47	17,929
United Kingdom	539	227,660
U. S. A.	171,655	25,720,034
U. S. S. R.	400	67,430
Belgium	120	40,200
Sam Val Trans	6	2,322
Total :	201,281	31,412,272
	—	54,597,371

Source: Monthly Statistics of Foreign Trade of India.

3. FERTILISER USE

3.1 PROGRESS OF FERTILISER PRODUCTION AND DISTRIBUTION 1958-59 to 1960-61 (July—June)

(Metric tonnes)

Year	Nitrogen ¹ (N)			Phosphoric acid (P ₂ O ₅)		Potash ² (K ₂ O)
	Produced	Imported	Distributed	Produced	Distributed	Distributed
1958-59	80,374	98,104	174,518	30,979	24,490	18,961
1959-60	78,590	143,301	241,544	51,415	50,111	30,858
1960-61	82,132	172,811	215,315	52,451	52,507	28,244

Note : ¹ Excludes distribution of ammonium chloride figures for which data are not available.

² All K₂O is imported and it is presumed that all is distributed.

**3.2 CONSUMPTION OF N, P₂O₅, K₂O STATEWISE
(1960-61)**

(Metric tonnes)

State	N	P ₂ O ₅	K ₂ O
Andhra Pradesh	25,486	14,055	...
Assam	...	163	...
Bihar	11,305	2,508	...
Maharashtra	24,693	11,828 ¹	...
Gujarat	8,291	...	...
Jammu & Kashmir	861	...	...
Kerala	6,103	1,223	...
Madhya Pradesh	5,554	849	...
Madras	23,440	7,370	...
Mysore	14,773	4,321	...
Orissa	4,379	385	...
Punjab	6,630	492	...
Rajasthan	2,313	260	...
Uttar Pradesh	33,582	923	...
West Bengal	8,029	3,353	...
Delhi	273	19	...
Himachal Pradesh	125	69	...
Manipur	18	16	...
Tripura	...	...	...
Pondicherry	443	95	...
Andamans	...	...	...
Coffee Board	10,952	...	...
U. P. A. S. I.	9,171	...	...
Rubber Board	680	...	...
Tea North East India	16,046	...	...
Industrial Users	1,205	...	...
Dairy Research Institute, Karnal	9	...	...
Demonstrations	28	...	...
Used in mixtures	...	4,220	...
Wastages	...	358	...
INDIA	214,389	52,507	28,244

Note : ¹ Bombay—Gujarat & Maharashtra.
Calculated on the basis of distribution figures.

3.3 CONSUMPTION PER ACRE OF AGRICULTURAL LAND
(1960-61)

(Pounds per acre)

State	N	P ₂ O ₅	K ₂ O
Andhra Pradesh	1.80	0.98	...
Assam	...	0.6	...
Bihar	1.00	0.22	...
Bombay ¹	1.03	0.35	...
Jammu & Kashmir	1.00	...	...
Kerala	2.50	0.49	...
Madhya Pradesh	0.28	0.04	...
Madras	3.01	0.95	...
Mysore	1.27	0.37	...
Orissa	0.64	0.05	...
Punjab	0.61	0.46	...
Rajasthan	0.15	0.08	...
Uttar Pradesh	1.49	0.39	...
West Bengal	1.18	0.49	...
Delhi	1.86	0.13	...
Himachal Pradesh	0.26	0.14	...
Manipur	0.18	0.16	...
Pondicherry	...	...	...
INDIA	1.28	0.30	0.16

¹ Bombay—Gujarat & Maharashtra
Calculated on the basis of distribution figures.

3.4 RATIO OF N, P₂O₅, K₂O, CONSUMPTION
(1960—61)

State	N	P ₂ O ₅	K ₂ O
Andhra Pradesh	1	0.56	...
Assam	...	...	...
Bihar	1	0.22	...
Bombay ¹	1	0.36	...
Jammu & Kashmir	1	...	...
Kerala	1	0.20	...
Madhya Pradesh	1	0.15	...
Madras	1	0.31	...
Mysore	1	0.29	...
Orissa	1	0.08	...
Punjab	1	0.07	...
Rajasthan	1	0.11	...
Uttar Pradesh	1	0.03	...
West Bengal	1	0.42	...
Delhi	1	0.07	...
Himachal Pradesh	1	0.55	...
Manipur	1	0.89	...
Tripura	...	...	...
Pondicherry	1	0.21	...
INDIA	1	0.24	0.13

¹ Bombay—Gujarat & Maharashtra.
Calculated on the basis of distribution figures.

4. PRICES

4.1 PRICES OF FERTILISERS

(in Rs. per metric tonne)

Fertiliser	Period	Price	Remarks
Ammonium sulphate	Prior to 1st December '61	345.50	Any rail head destination
	From 1st December '61	330.00	"
Urea	Prior to 1st December '61	684.10	"
	From 1st December '61	670.00	"
Ammonium sulphate nitrate	Prior to 1st December '61	408.50	"
	From 1st December '61	400.00	"
Calcium ammonium nitrate	Prior to 1st December '61	324.80	"
	From 1st December '61	310.00	"
Superphosphate	As on 1st December '61	182.40 (100 kg. packing)	} Ex-factory for factories situated within 100 miles of the port
	December '61	187.40 (50 kg. packing)	
Ammonium phosphate	As on 1st December '61	550.00	Ex-factory
Muriate of potash	As on 1st December '61	300.00	Ex-godown
Sulphate of potash	As on 1st December '61	360.00	Ex-godown

**4.2 PRICES OF NITROGENOUS FERTILISERS
TO THE CULTIVATORS**

(Rs. per metric tonne)

Name of the fertiliser	Period	In Uttar Pradesh	in Madras	in Orissa	in any other State or Union Territory
Ammonium sulphate	Prior to 1st December, '61	380.00	385.14	384.50	374.50
	From 1st December, '61	366.00	371.00	370.00	360.00
Urea	Prior to 1st December, '61	733.00	724.93	729.10	729.10
	From 1st December, '61	719.00	711.00	715.00	715.00
Ammonium sulphate nitrate	Prior to 1st December, '61	446.00	432.06	443.50	443.50
	From 1st December, '61	438.00	432.00	435.00	435.00
Calcium ammonium nitrate	Prior to 1st December, '61	359.00	354.54	354.80	354.80
	From 1st December, '61	346.00	342.00	342.00	342.00

Explanation: The maximum prices specified above are exclusive of sales tax and other local taxes wherever levied except in the case of Madras where the prices are inclusive of sales tax and other local taxes.

5. WORLD STATISTICS**5.1 FERTILISER PRODUCTION**

Nitrogen (N) ('000 Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Europe			
Austria	157.3	154.2	162.0
Belgium	259.7	295.1	304.7
Bulgaria	42.1	56.9	...
Czechoslovakia	83.0	130.7	...
Finland	22.1	28.3	30.7
France	510.0	538.5	573.8
Germany East	305.4	320.0	329.1
Germany West	1047.4	1050.7	1051.0
Italy	408.7	530.9	589.8
Netherlands	380.3	393.7	406.1
Norway	218.9	227.9	244.5
Poland	227.5	255.6	269.0
Spain	49.7	59.6	81.0
Sweden	36.9	33.7	42.2
United Kingdom	347.0	355.7	400.0
U.S.S.R.	630.0*	715.0*	740.0*
North America			
Canada	220.1	223.3	239.2
U.S.A.	2141.0	2448.0	2605.0
South America			
Chile	257.6	202.0	148.2
Peru	16.9	36.6	45.8
Asia			
India	80.8	80.8	—
Japan	882.8	986.3	932.3
Pakistan	7.4	10.1	10.1
Taiwan	22.8	30.3	39.2
Africa			
U.A.R. (Egypt)	32.2	34.3	38.1
Union of South Africa	16.2	21.0	20.6
Oceania			
Australia	25.3	25.1	22.0
New Zealand	2.8	3.4	3.4
World Total	8600.0	9400.0	9800.0

(Continued)

5.1 FERTILISER PRODUCTION (Continued)
Phosphoric Acid (P₂O₅) ('000 Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Europe			
Austria	14.0	27.8	24.0
Belgium	302.7	327.8	344.7
Czechoslovakia	112.0	128.2	...
Denmark	84.2	88.2	87.8
Finland	73.4	73.2	78.5
France	723.1	769.2	717.7
Germany East	128.8	136.3	138.8
Germany West	615.8	641.6	787.4
Italy	407.8	406.8	440.4
Netherlands	168.4	173.8	198.6
Poland	154.3	173.8	207.0
Spain	273.0	302.8	311.9
Sweden	103.3	102.7	108.0
United Kingdom	319.1	359.6	384.1
U.S.S.R.	850.0+	840.0+	860.0+
North America			
Canada	158.9	158.8	163.5
U.S.A.	2330.0	2487.0	2545.0
South America			
Brazil	20.7	24.6	37.5
Chile	27.9	10.2	8.0
Peru	9.8	44.7	39.8
Asia			
India	25.5	30.7	...
Japan	320.7	415.9	458.0
Pakistan	0.4	0.4	1.1
Taiwan	21.2	24.4	24.5
Africa			
U.A.R. (Egypt)	27.5	27.7	25.0
Union of South Africa	124.7	125.4	125.2
Oceania			
Australia	499.3	474.9	536.6
New Zealand	174.6	171.4	192.9
World Total	8600.0	9100.0	9600.0

(continued)

5.1 FERTILISER PRODUCTION (Concluded)
Potash (K₂O)

Continent/Country	('000 Metric tonnes)		
	1957-58	1958-59	1959-60
Europe			
Austria	...	...	...
Belgium	...	...	...
Czechoslovakia	...	...	...
Denmark	...	...	...
Finland	...	...	...
France	1437.8	1449.0	1529.5
Germany East	1604.0	1650.0	1644.0
Germany West	1624.4	1707.8	1845.8
Italy	2.6	2.6	11.5
Netherlands	0.6	0.8	0.8
Poland	...	...	...
Spain	266.4	245.0	249.0
Sweden	1.5	0.8	2.1
United Kingdom	...	...	...
U.S.S.R.	930.0†	910.0†	970.0†
North America			
Canada	...	...	...
U.S.A.	1764.0	2107.0	2285.0
South America			
Chile	12.8	14.0	11.4
Peru	2.5	2.1	2.2
Asia			
India	1.2	1.2	...
Israel	63.2	70.6	75.8
Japan	...	...	...
Pakistan	...	...	...
Taiwan	...	...	...
Africa			
U.A.R. (Egypt)	...	...	...
Union of South Africa	0.6	...	...
Oceania			
Australia	...	...	...
New Zealand	...	...	...
World Total	7700.0	8200.0	8600.0

Source: FAO Year Book—1960.

5.2 PRODUCTION OF ROCK PHOSPHATE

(Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Europe			
France ¹	72,400	68,900	...
Poland ²	52,222	71,283	41,015
North and Central America			
Netherlands Antilles (Curcao)	107,100	86,637	98,161
U.S.A.	10,778,000	10,965,000	10,970,000
South America			
Brazil	128,414	193,393	233,592
Asia			
Israel ³	213,973	204,996	226,190
Jordan	261,896	293,938	337,624
Africa			
Algeria	613,100	560,900	531,400
Former French West Africa			
Senegal ⁴	89,800	104,600	95,300
Madagascar	3,515	2,000	...
Morocco	5,567,000	6,336,000	7,164,000
Tunisia	2,067,400	2,278,532	2,184,963
Union of South Africa ⁵	134,214	124,177	123,158
U.A.R. (Egypt)	484,118	523,817	560,362
Oceania			
French Polynesia (Makatea)	347,000	368,000	369,000
Nauru	1,201,138	1,222,977	1,255,500
World Total	26,980,000	28,600,000	29,660,000

Notes: ¹Low grade 10-18 P₂O₅; ²Low grade 14% P₂O₅; ³24-28% P₂O₅; ⁴Mainly aluminium phosphate; ⁵Mainly low grade rock containing 17% total and 7% citric soluble P₂O₅;

Source: Fertilisers, An Annual Review of World Production, Consumption And Trade 1960, FAO.

5.3 FERTILISER CONSUMPTION

Nitrogen (N) ('000 Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Europe			
Austria	39.5	42.7	45.0
Belgium	88.6	97.5	99.1
Czechoslovakia	92.1	129.3	...
Denmark	98.5	104.2	122.3
Finland	41.0	43.1	52.3+
France	488.9	480.8	504.8
Germany East	223.7	226.2	...
Germany West	566.6	574.8	624.1
Italy	268.7	298.3	360.8
Netherlands	209.1	209.1	212.0
Norway	45.3	45.4	48.8
Poland	197.7	224.4	269.0
Spain	185.9	273.8	235.0
Sweden	85.5	88.8	102.7
United Kingdom	314.8	345.7	420.2
U.S.S.R.	609.0	686.0	709.0
North America			
Canada	56.9	62.2	...
U.S.A.	2072.3	2424.3	2533.3
South America			
Chile	...	4.7	47.7
Peru	31.4	55.3	44.4
Asia			
India	178.7	179.9	...
Japan	629.1	681.7	594.1
Korea (South)	143.6	171.1	166.6
Pakistan	10.6	13.3	33.0
Philippines	15.4	20.2	...
Taiwan	112.6	98.1	110.5
Africa			
U.A.R. (Egypt)	157.3	177.1	105.7
Union of South Africa	30.2	36.1	43.5
Oceania			
Australia	36.1	34.8	26.2
New Zealand	4.9	5.5	5.9+
World Total	7900.0	8800.0	9200.0

(Continued)

5.3 FERTILISER CONSUMPTION (Continued)**Phosphoric Acid (P₂O₅)**

('000 Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Europe			
Austria	71.4	79.5	74.9
Belgium	119.3	91.7	84.0
Czechoslovakia	112.0	131.5	...
Denmark	102.1	109.1	115.9
Finland	73.8	74.7	87.4
France	760.2	764.4	783.0
Germany East	184.4	214.8	...
Germany West	584.0	607.9	706.9
Italy	384.3	380.9	389.0
Netherlands	109.8	111.5	110.9
Poland	148.8	256.9	295.0
Spain	282.0	316.0	278.1
Sweden	100.7	97.9	107.8
United Kingdom	354.9	372.0	428.0
U.S.S.R.	830.0	820.0	840.0
North America			
Canada	126.0	124.5	...
U.S.A.	2163.1	2406.8	2314.0
South America			
Brazil	...	81.3	61.0
Chile	34.0	27.5	29.6
Peru	8.9	7.3	7.8
Asia			
India	26.0	34.6	...
Japan	290.4	389.4	436.5
Korea (South)	68.5	66.8	119.4
Pakistan	0.4	0.4	4.8
Philippines	4.2	7.1	...
Taiwan	35.0	37.3	31.5
Africa			
U.A.R. (Egypt)	27.5	27.7	25.0
Union of South Africa	132.4	134.8	132.1

(Continued)

5.3 FERTILISER CONSUMPTION (Concluded)
Phosphoric Acid (P₂O₅)

('000 Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Oceania			
Australia	495.8	476.0	537.5
New Zealand	184.4	181.1	198.2
World Total	8500.0	9100.0	9500.0

5.3 FERTILISER CONSUMPTION (Potash K₂O)

('000 Metric tonnes)

Continent/Country	1957-58	1958-59	1959-60
Europe			
Austria	76.7	81.5	84.0
Belgium	144.2	152.3	149.4
Denmark	159.9	167.8	174.9
Finland	57.2	48.5	66.7
France	684.6	705.4	685.9
Germany East	492.6	511.6	...
Germany West	986.3	1003.8	1046.1
Italy	69.4	79.2	112.2
Netherlands	151.4	146.2	152.6
Poland	231.0	291.4	290.0
Spain	90.4	89.7	78.0
Sweden	85.0	79.0	91.6
United Kingdom	354.1	381.7	431.6
U.S.S.R.	839.0	744.0	787.0
North America			
Canada	76.7	95.3	...
U.S.A.	1755.5	1988.6	2008.9
South America			
Brazil	...	65.7	55.7
Peru	4.0	3.2	2.0
Asia			
India	19.9	19.2	...
Japan	320.9	437.4	524.1
Korea (South)	6.5	5.0	6.4
Pakistan	0.1	0.1	0.2
Philippines	6.5	9.2	...
Taiwan	24.7	28.6	26.4
Africa			
U.A.R. (Egypt)	1.5	2.3	...
Union of South Africa	21.1	28.3	32.1
Oceania			
Australia	31.2	27.6	22.7
New Zealand	35.0	32.5	51.8
World Total	7400.0	7900.0	8400.0

Source: F.A.O. Year Book 1960.

**5.4 FERTILISER CONSUMPTION PER ACRE OF ARABLE
LAND (1959-60)**

(Pounds)				
Continent/Country	N	P ₂ O ₅	K ₂ O	Total
Europe				
Austria	22.88	38.08	42.70	103.66
Belgium	91.81	77.82	138.41	308.04
Denmark	39.29	37.24	56.19	132.72
France	20.93	32.47	28.44	81.84
Germany West	64.44	72.99	108.02	245.45
Italy	20.31	21.90	6.31	48.52
Netherlands	182.74	95.60	131.54	409.88
Norway	51.89	51.04	48.06	150.99
Sweden	24.99	26.23	22.29	73.51
United Kingdom	52.16	53.13	53.57	158.86
U.S.S.R.	2.85	3.39	3.17	9.41
North America				
Canada	1.36 ¹	2.71 ¹	2.09	6.16
U.S.A.	12.00	10.97	2.52	32.49
South America				
Chile	7.26	4.79	2.62	14.67
Peru	22.89	4.02	1.03	27.94
Asia				
India	1.01 ¹	0.19 ¹	0.11 ¹	1.31 ¹
Japan	92.43	64.13	77.01	233.59
Korea (South)	73.73	52.84	2.83	129.40
Pakistan	1.18	0.17	0.01	1.36
Africa				
U.A.R. (Egypt)	36.13	8.55	0.78	45.46
Oceania				
Australia	0.86	17.74	0.75	19.35
New Zealand	10.70	358.67	108.22	477.59
World	5.84	6.03	5.33	17.20

¹Based on 1958-59 consumption.

Source: Calculated from FAO Year Book, 1960.

5.5 FERTILISER CONSUMPTION PER ACRE OF AGRICULTURAL LAND (1959-60)

(Pounds)

Continent/Country	N	P ₂ O ₅	K ₂ O	Total
Europe				
Austria	9.91	16.49	16.49	44.89
Belgium	50.99	43.22	76.87	171.08
Denmark	34.72	32.91	49.66	117.29
France	13.00	20.17	17.67	50.84
Germany West	38.85	44.00	65.12	147.97
Italy	15.35	16.55	4.77	36.67
Netherlands	81.88	42.83	56.46	181.77
Norway	42.27	41.58	39.15	123.00
Sweden	21.06	22.11	18.79	61.96
United Kingdom	18.83	19.18	19.34	57.35
U.S.S.R.	1.07	1.27	1.19	3.53
North America				
Canada	0.89 ¹	1.78 ¹	1.36 ¹	4.03 ¹
U.S.A.	5.09	4.65	4.20	13.94
South America				
Chile	6.71	4.42	2.42	13.55
Peru	2.90	0.51	0.13	3.54
Asia				
India	0.93 ¹	0.18 ¹	0.10	1.27
Japan	...	...	...	...
Korea (South)	...	...	...	...
Pakistan	...	...	...	...
Africa				
U.A.R (Egypt)	...	...	...	...
Oceania				
Australia	0.05	1.04	0.04	1.13
New Zealand	0.50	13.47	3.52	17.49
World	2.06	2.13	1.89	6.08

¹Based on consumption figures of 1958-59.

Source : Calculated from FAO Year Book, 1960.

5.6 RATIO OF N, P₂O₅, K₂O CONSUMPTION (1959-60)

Continent/Country	N	P ₂ O ₅	K ₂ O
Europe			
Austria	1	1.66	1.87
Belgium	1	0.86	1.51
Denmark	1	0.95	1.43
France	1	1.55	1.35
Germany (West)	1	1.13	1.68
Italy	1	1.08	0.31
Netherlands	1	0.52	0.72
Norway	1	0.98	0.92
Sweden	1	1.05	0.89
United Kingdom	1	1.02	1.03
U.S.S.R.	1	1.19	1.11
North America			
Canada ¹	1	1.99	1.54
U.S.A.	1	0.91	0.79
South America			
Chile	1	0.66	0.36
Peru	1	0.18	0.04
Asia			
India	1	0.19	0.08
Japan	1	0.69	0.83
Korea (South)	1	0.72	0.04
Pakistan	1	0.14	0.01
Africa			
U.A.R. (Egypt)	1	0.24	0.02
Oceania			
Australia	1	20.63	0.87
New Zealand	1	33.52	10.11
World	1	1.03	0.91

¹ Based on consumption figures of 1958-59.

Source: Calculated from FAO Year Book, 1960.

5.7 DENSITY OF FARM POPULATION, FERTILISER CONSUMPTION AND YIELDS (1959-60)

Country	Fertiliser consumption per acre of agricultural land (lb.)	Density of population per acre	Yield per acre in pounds						
			Paddy	Wheat	Maize	Barley	Gram ¹	Potatoes	Cotton (Lint)
Japan	233.57	6.18	4,237	2,106	1,936	2,302	3,547	14,542	—
Netherlands	181.77	5.56	—	3,658	2,088	3,310	2,835	20,609	—
Belgium	171.08	3.82	—	3,479	3,845	3,239	3,111	15,345	—
Germany West	147.97	2.57	—	3,016	2,534	2,668	2,620	19,271	—
United Kingdom	57.35	2.94	—	3,230	—	2,944	2,870	18,736	—
France	50.84	0.84	3,658	2,320	2,855	2,213	2,153	12,133	553
U. A. R. (Egypt)	45.46	3.93	4,479	2,070	1,713	2,141	2,387	15,077	—
Austria	44.89	1.69	—	1,963	2,801	2,016	1,907	15,345	—
Italy	36.67	1.25	4,675	1,615	2,900	1,124	1,863	9,992	285
U. S. A.	13.94	0.38	3,346	1,276	2,890	1,338	2,029	17,486	464
Canada	4.03	0.17	—	1,080	2,926	1,303	1,189	12,311	—
U. S. S. R.	3.53	0.14	1,972	981	1,231	937	950	8,118	651 ²
India	1.27	1.05	1,213	705	776	722	682	6,334	80
Australia	1.13	0.15	—	990	2,079	687	1,016	10,706	—

Note: ¹ Grain includes wheat, rye, barley, oats, maize, millets and sorghum and paddy. (2) Based on figures of 1958-59.
Source: Calculated from F. A. O. Year Book—1960.

5.8 FARMER'S PRICE OF FERTILISERS—1959-60
(In rupees per metric tonne of bagged plant nutrient)

Country	Ammonium sulphate	Ammonium phosphate	Ammonium nitrate	Sodium nitrate	Urea	Single superphosphate	Phosphate rock	Sulphate of potash	Muriate of potash*
Austria	1214.31	—	1066.69	—	—	604.67	—	485.72	—
Belgium	1295.26	—	1304.79	1780.98	—	780.97	—	533.34	395.25
Denmark	1238.12	—	—	1647.65	—	752.40	—	576.20	390.86
France	1476.22	—	1433.36	2019.09	—	1023.83	—	576.20	385.72
Italy	1257.17	—	1071.45	1904.80	—	819.06	—	761.92	—
Netherlands**	1209.55	—	1271.45	1814.32	—	866.68	—	652.39	—
U. S. A.	1466.70	2876.25	1276.22	1947.66	1385.74	980.97+ 938.11@	314.29	—	452.39
Japan	1323.87	3304.83	1242.88	—	1176.21	1042.88+	—	661.92	438.10
Korea (South)	1461.93	—	1409.8	1547.65	—	895.26+ 809.54@	—	690.49	514.30
Pakistan (West)	1133.36	—	—	—	—	942.88+	—	—	—
Pakistan (East)	938.11	—	—	—	—	533.34@	—	—	—
U. A. R. (Egypt)	2090.52	—	2104.80	2804.82	—	628.58+	—	819.06	—
Australia	1652.41	—	2100.04	2623.86	1685.75	585.73+	—	876.21	566.68

**Price for bulk ; + below 25 per cent P₂O₅ ; @ Over 25 per cent P₂O₅ ; * Exceeding 45% K₂O.
Source : FAO Year Book, 1960.

5.9 FERTILISER PRICES AND SUBSIDY IN UNITED KINGDOM

Article	Price per m. tonne in Rs.	Subsidy in Rs.	Net price Rs.
Ammonium sulphate (20% N)	249.00	114.82	134.18
Nitro chalk (15.5% N)	228.99	84.74	144.25
Nitro chalk (21% N)	360.88	114.82	246.06
Nitro-shell (23% N)	323.47	125.76	197.71
Muriate of potash (60% K ₂ O)	265.73	none	265.73
Superphosphate powdered (18% P ₂ O ₅)	177.16	77.75	99.41
Basic slag (15% P ₂ O ₅)	98.42	38.71	59.71
Bone meal (3.7% N + 20.5% P ₂ O ₅)	380.55	none	380.55
Hoof and hornmeal (13% N)	643.01	none	643.01

Source : Fertiliser and Feeding Stuffs Journal.

5.10 WORLD TRADE IN FERTILISERS

A. Imports 1959—60

(Metric tonnes)

Continent/Country	N	P ₂ O ₅	K ₂ O
Europe			
Austria	604	49,818	83,305
Belgium	11,653	21,202	152,767
Czechoslovakia	115,050	—	246,755 ¹
Denmark	21,668	29,596	180,226
France	19,000	127,500	—
Germany West	4,300	82,700	—
Greece	86,783	9,966	6,405
Italy	5,900	15,900	108,000
Netherlands	24,500	52,900	175,300
Poland	8,400	—	290,000
Spain	189,300	16,200	—
Sweden	61,877	2,980	83,276
U.K.	68,700	31,400	414,200
North America			
United States	270,000	67,000	258,000
South America			
Brazil	33,910	23,494	55,740
Asia			
Ceylon	31,289	1,790	25,368
China, Taiwan	71,289	6,920	26,436
Japan	1,760	—	525,900
Korea (South)	166,636	119,443	6,434
Pakistan	22,880	3,680	177
Africa			
Union of South Africa	22,912	7,090	32,106
U.A.R. (Egypt)	67,759	—	—
Oceania			
Australia	8,449	984	22,659
Newzealand	2,971	5,828	51,799
World Total	2,180,000	1,200,000	3,480,000

(Continued)

¹ Refers to 1958-59.

5.10 WORLD TRADE IN FERTILISERS (Concluded)
B. Exports 1959-60

(Metric tonnes)

Continent/country	N	P ₂ O ₅	K ₂ O
Europe			
Austria	116,120	—	—
Belgium	226,908	282,615	—
France	45,000	68,100	761,200
Germany East	102,272	—	1,041,000
Germany West	479,500	111,400	790,200
Italy	252,260	43,000	—
Netherlands	216,500	156,500	700
Norway	201,000	6,800	—
Spain	—	—	176,000
U.K.	52,000	—	—
North America			
U. S. A.	169,000	157,000	363,000
South America			
Chile	100,800	—	3,840
Asia			
Israel	225	—	65,389
Japan	339,910	21,485	—
Oceania			
Australia	4,327	139	—
World Total	2,560,000	1,170,000	3,390,000

Source: Fertilisers, an annual Review of World Production, Consumption and Trade—1960, F.A.O.