5 - Fertilizer Production, Import and Consumption

5.1 Overview

A summary of assessed requirement, production, import and consumption of major fertilizers (Urea, DAP, MOP and NPK complexes) from 1998-99 to 2008-09 is given below:

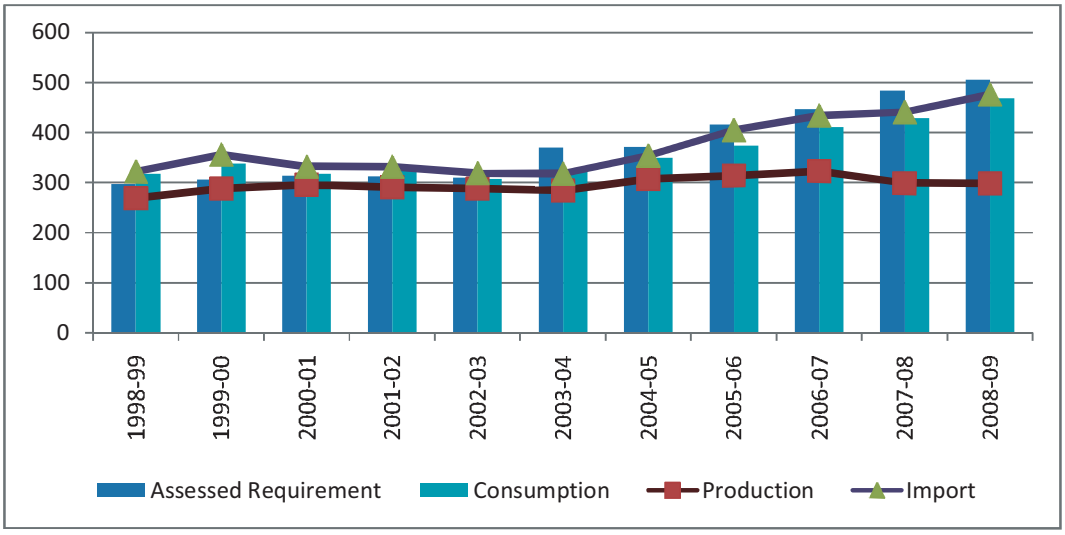
Table 5.1 - Fertilizer Requirement, Production, Import and Consumption

(In lakh MT)

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Assessed Requirement	297	306	314	312	310	370	371	416	447	484	506
Production	269	288	296	291	288	284	307	314	323	299	298
Import	53	68	36	41	31	34	47	91	111	142	178
Total (Prod. + import)	322	356	332	332	319	318	354	405	434	441	476
Consumption	317	338	317	331	307	321	350	374	411	429	468

Note:-Figures from 1998-99 to 2002-03 do not include requirement of NPK fertilizers

Chart 5.1 Requirement, consumption and total availability of fertilizers



As can be seen from the above, while the assessed requirement of fertilizers went up by more than 70 per cent during the 11 year period from 1998-99 to 2008-09, production went up by less than 11 per cent. During the same period, imports went up by nearly 236 per cent. The correlation between availability (production + import) and consumption was,

however, high, indicating that whatever fertilizer was available was readily consumed; this is most likely on account of the highly subsidised price.

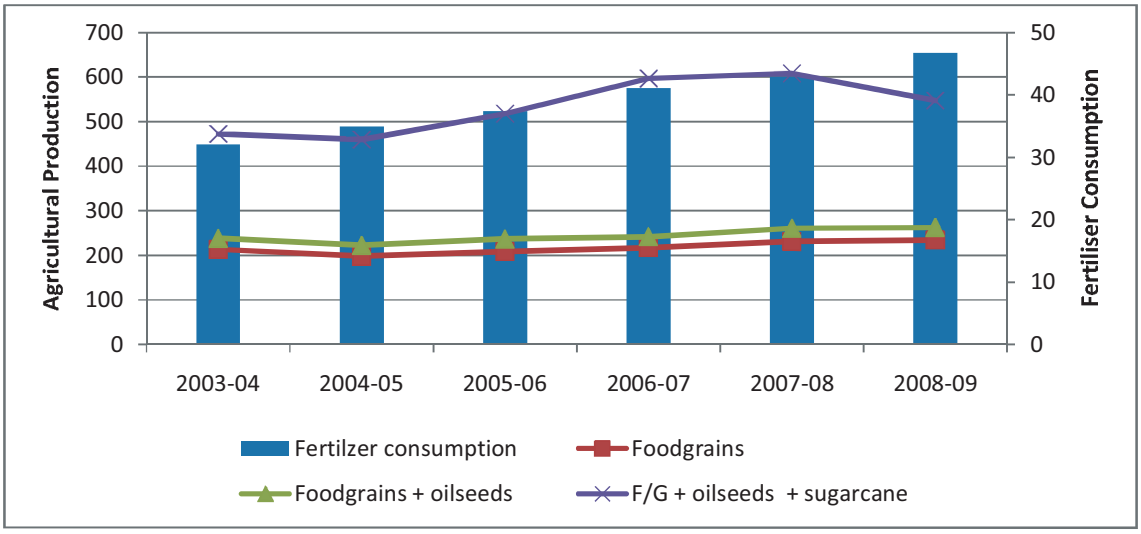
Table 5.2 Fertilizer consumption and major agriculture crops growth during 2003-04 to 2008-09

(Million Tonnes)

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Percent growth
Fertilizer consumption	32.1	35	37.4	41.1	42.9	46.8	46%
Foodgrains	213.19	198.36	208.6	217.28	230.78	234.47	10%
Oilseeds	25.19	24.35	27.98	24.29	29.76	27.72	10%
Sugarcane	233.86	237.09	281.17	355.52	348.19	285.03	22%
Foodgrains + Oilseeds + Sugarcane	472.24	459.8	517.75	597.09	608.73	547.22	16%

Source: Agriculture at a glance -2010

Chart 5.2 Growth of fertilizer consumption & production of major agricultural crops



While fertilizer consumption increased by 46 per cent from 2003-04 to 2008-09, major components of agricultural production (Food grains, Oilseeds and Sugarcane) increased by just 16 per cent during the same period. This indicates that the correlation between increased fertilizer consumption and increased agriculture production is relatively weak.

5.2 Import of Fertilizers

The position of import of fertilizers during the period from 2003-04 to 2008-09 was as under:

Table 5.3 Quantity of Fertilizer Imports

(In lakh MT)

Year	Urea	DAP	MAP	MOP	Total imports
2003-04	0	7.34	0.65	25.79	33.78
2004-05	6.41	6.44	0.22	34.09	47.16
2005-06	20.57	24.38	0.45	45.78	91.18
2006-07	47.19	28.75	0.97	34.48	111.39
2007-08	69.28	27.24	1.50	44.21	142.23
2008-09	56.67	61.92	2.67	56.72	177.91
Total	200.12	156.57	6.46	241.07	603.65

*MAP was included in subsidy scheme with effect from 1.4.2007

Table 5.4 - Monetary value of Fertilizer Imports

(In Million US $)

Year	Value of Urea imported	Value of DAP imported	Value of MAP	Value of MOP imported
2003-04	0	NA	NA	NA
2004-05	152.48	NA	NA	NA
2005-06	394.76	NA	NA	NA
2006-07	1027.01	846.40	NA	753.32
2007-08	1213.29	1317.57	72.03	1130.52
2008-09	2416	6805.34	297.32	3153.03
Total	**5203.54**	**8969.32**	**369.35**	**5036.87**

*Value relating to DAP, MOP and MAP is provisional data provided by the DoF

Over the six year period from 2003-04, the imports of fertilizers increased almost six-fold in quantitative terms, the main jump being in DAP/MAP which increased more than eight fold. Urea was not imported at all in 2003-04, but by 2008-09, imported urea constituted 22 per cent of total availability of urea. There was an increase in imports of all categories of fertilizers. This reflected:

- the inability of the subsidy scheme to incentivize increase in production and
- also scope for diversion/leakage, considering the huge differences between the international and subsidised prices of imported Fertilizers.

Despite the huge amount of subsidy (increasing from Rs. 11387 crore in 1998-99 to Rs. 96603 crore during 1998-99 to 2008-09), the production of fertilizers has increased only marginally only from 269 lakh MT to 298 lakh MT during the same period. Changes in the subsidy regime, including NPS Stages I to III, have failed to incentivize increase in domestic production of fertilizer. Increased consumption of fertilizers is largely met through increased fertilizer import. This leaves the country dependent on imports, whose pricing is volatile. By contrast, the subsidy/ concession on imported fertilizers over 1998-99 to 2008-09 has increased from 3 per cent to 47 per cent of the total subsidy.

5.3 Urea

5.3.1 Overall Position

A profile of the assessed requirement, production, import and consumption of urea during the period 2003-09 is given below:

Table 5.5 – Requirement, Production, Import and Consumption of Urea

(In lakh MT)

Year	Assessed Requirement	Production	Import	Total Availability	Consumption[13]	Gap between requirement and consumption	Gap between total availability and consumption
2003-04	211.60	192.02	0.00	192.02	197.67	13.9	-5.65
2004-05	214.08	203.13	6.41	209.54	206.65	7.4	2.89
2005-06	234.26	200.91	20.57	221.48	222.98	11.3	-1.50
2006-07	249.46	203.21	47.19	250.40	243.38	6.1	7.02
2007-08	271.71	198.88	69.28	268.16	259.63	12.1	8.53
2008-09	281.34	199.67	56.67	256.34	266.49	14.9	-10.15
Total	1462.45	1197.82	200.12	1397.94	1396.8	65.7	1.14

[13] Based on the sale figures at Ist sale point.

As can be seen above, while there is a consistent gap between consumption and the assessed requirement, the consumption figures broadly track the total availability of urea (production + import). This serves to further confirm our view that the assessment of requirement was not done on a scientific basis

5.3.2 Urea Production and Capacity

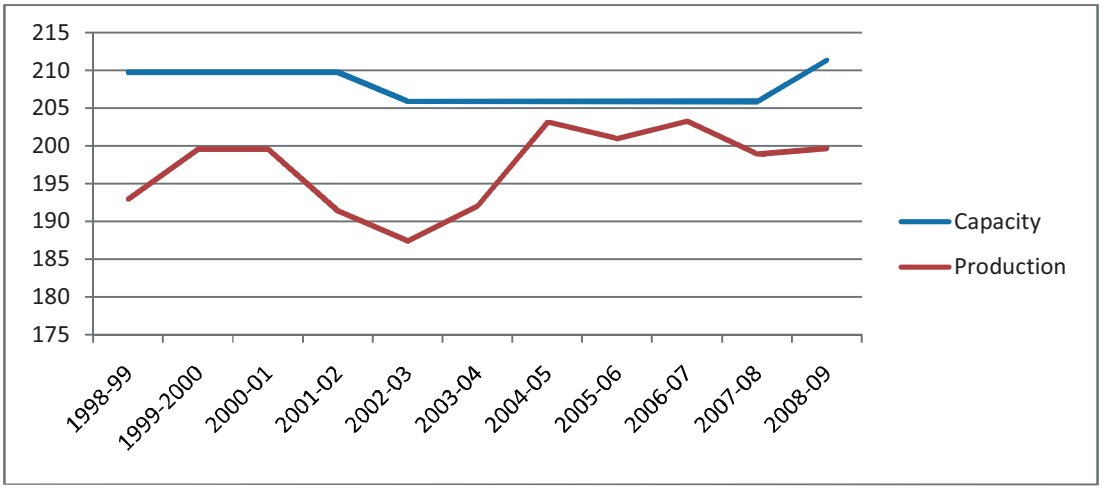
The capacity and actual production of urea for the period from 1998-99 to 2008-09 is summarized below:

Table 5.6 – Capacity and Production of Urea

(In lakh MT)

Year	Capacity	Production
1998-99	209.73	192.93
1999-2000	209.73	199.52
2000-01	209.73	199.53
2001-02	209.73	191.33
2002-03	205.84	187.37
2003-04	205.84	192.02
2004-05	205.84	203.13
2005-06	205.84	200.91
2006-07	205.84	203.21
2007-08	205.84	198.88
2008-09	211.37	199.67

Chart 5.5 - Capacity and Production of Urea



As can be seen above, production of urea during the 11 year period from 1998-99 to 2008-09 registered a negligible increase of 3.5 per cent, with a marginal decrease of 3 per cent during the period from 1998-99 to 2002-03 (the period covered by the erstwhile RPS) and an increase of 7 per cent thereafter till 2008-09 (during the NPS regime). Further, the increase in capacity was negligible. Clearly, the change in urea subsidy policy from individual unit-based pricing (RPS) to group based pricing (NPS) did not result in a significant increase in either capacity or production of urea.

5.3.3 Impact on cost of production

One of the prime objectives of introduction of the New Pricing Scheme (NPS) and group based concession was to gradually migrate from Naphtha/FO/LSHS, which is more cost effective to gas based feedstock so as to minimise the cost of the production. Analysis of pre-NPS and post-NPS production data, representing the share of different groups in total urea production, revealed the following position:

Table 5.7- Group wise Pre-NPS and Post-NPS Production of Urea

(In lakh MT)

Name of Group	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Group I Pre 1992 Gas based	46.41	47.85	47.87	47.50	46.48	47.94
Group II Post 1992 Gas based	55.54	59.94	60.08	78.58	91.20	90.36
Group III Pre 1992 Naphtha	26.47	28.81	27.22	18.56	12.16	11.98
Group IV Post 1992 Naphtha	17.06	17.59	18.16	9.52	0	0
Group V FO/LSHS	21.36	21.99	21.44	21.28	21.72	21.33
Group VI Mixed feedstock	25.16	26.95	26.14	27.77	27.32	28.06
Total	192	203.13	200.91	203.21	198.88	199.67

As can be seen above, there was a substantial increase in gas-based urea production which represents most cost-effective, which was matched by a corresponding reduction in naphtha-based urea production. However, this did not result in a significant increase in overall production; increased consumption of urea was met primarily through imports.

An analysis of the weighted average cost of production per MT in different groups from 2003-04 to 2008-09 revealed the following position:

Table 5.8- Group wise Pre and Post NPS Weighted Average Cost of Production of Urea

(Rs/MT)

Name of Unit	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	% Increase in cost of production in six years
Group I Pre-1992 Gas	4777	5052	5096	6025	7175	8646	81
Group II Post-1992 Gas	5860	6584	6521	8799	9234	10699	83
Group III: Pre - 1992 Naphtha	12251	15077	17895	21775	23792	27004	120
Group IV: Post-1992 Naphtha	10168	12750	12153	10686	--	--	--
Group V: FO/LSHS	10276	10550	12725	13924	15628	20871	103
Group VI: Mixed Feedstock	7462	8129	8752	10593	12700	14917	100

One objective of the introduction of NPS was to promote cost cutting measures by using international standards, state of art technology and efficient use of feedstock. However, the above analysis shows that the weighted average cost of production of urea increased substantially by 81 per cent to 120 per cent, post NPS. Even the conversion of naphtha units to gas-based units (described subsequently) did not result in a reduction in the cost of production.

5.3.4 Conversion of Naphtha/FO/LSHS to Gas

For urea production, gas as the feedstock represents the most efficient method of production, particularly in terms of its impact on subsidy especially through this feedstock (gas/naphtha) represents 70 to 80 per cent of the cost of fertilizer production. As per the DOF guidelines of March 2007, all functional naphtha and FO/LSHS based units were to be converted into Natural Gas (NG)/ Liquefied Natural Gas (LNG) within a period of 3 years; this was targeted to create subsidy savings of Rs.3300 crore per annum.

In all, 12 Naphtha/FO/LSHS units were to be converted to gas-based units. However, as of May 2010, only four units had been converted to gas-based units. Further, even after conversion of these four units, the cost of production as well as the subsidy burden actually

went up (except a marginal reduction of cost of production – though not total subsidy – in the case of IFFCO Phulpur-II) as detailed below:

Table 5.9- Cost of Production of Urea for Four Units converted to gas based production

Sl.No.	Details	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Date of conversion
1	**SFC, Kota – Capacity (In MT) 379500**							
	Production (MT)	363948	379000	381300	361156	379000	394533	Sep. 2006
	Cost of Prodn (Rs/MT)	10719	14268	15786	18199	18916	20500	
	Subsidy (In crore)	299.37	310.48	436.36	402.40	684.10	649.46	
2	**IFFCO, Phulpur I- Capacity (In MT) 551100**							
	Production (MT)	540765	565056.10	551100	573603	629757	662536	July 2006
	Cost of Prodn (Rs./MT)	10733.25	13031.23	15985.63	11085.11	10148.2	11354.54	
	Subsidy (Rs.in crore)	460.95	526.58	536.03	754.97	551.22	604.96	
3	**IFFCO, Phulpur II- Capacity (In MT) 864600**							
	Production (MT)	850882	864022	884600	882600	924223	840584	May 2006
	Cost of Prodn (Rs./MT)	10615.44	13243.70	15693.99	12625.22	11192.04	12469.22	
	Subsidy (Rs.in crore)	577.55	865.60	913.65	1078.78	1253.73	702.84	
4	**CFCL, Gadepan II – Capacity(In MT) 864600**							
	Production (MT)	854646	894627	931443	951956	995596	1008255	April 2007
	Cost of Prodn (Rs/MT)	9723.46	12273.10	8790.91	10685.77	8400.33	10814.34	
	Subsidy (Rs.in crore)	617.47	821.19	828.45	527.02	994.67	842.34	

Despite conversion of four naphtha units to gas-based units, the overall cost of production and subsidy burden actual went up post-conversion. While one could argue that this would

have gone up even further had naphtha continued as the feedstock for these units, the ultimate objective of NPS of reduction of cost of production and subsidy burden has not been achieved.

5.3.5 Pre-set Energy Norms for Urea Production

Energy consumption represents the single largest component of the cost of production of urea. One of the objectives of NPS in general, and NPS stages II and III in particular, was to incentivize a shift towards lower energy consumption, through creation of group energy norms; this was also envisaged by the Expenditure Reforms Commission (ERC). This would penalize inefficient producers, since energy consumption above the specified norms would not be eligible for subsidy. By contrast, efficient producers who managed to consume less energy than the pre-set norms would get the benefit of the difference, provided that these savings resulted in additional investment in the units, which would, hopefully, also increase capacity and production in the medium to long term.

However, audit scrutiny revealed that despite the group approach of NPS, the pre-set energy consumption norms prescribed by DoF varied from unit to unit even within the same group, as detailed in ***Annexe 5.1.***

Furthermore, BVFCL-Namrup II, which commenced production in 2005-06 (November 2005), is also not an efficient unit on the basis of its energy consumption level, because production went up from 21695 MT in 2005-06 to 61858 MT in 2008-09 and its energy consumption of 22.624 G cal/MT is the highest for any gas based urea manufacturing units and has still not been placed in any of the six groups.

It is apparently evident that the production never reached upto the capacity level. More over the production drastically came down in 2008-09 to 39 per cent of the total capacity but the cost of production increased by 41.37 per cent from 2008-09. The energy consumption level has also gone up from 12.102 to 17.679 G cal/pmt.

Clearly, the objective of group-based energy norms of NPS was not being achieved in practice. Even, excluding the case of BVFCL- Namrup III (which is a peculiar case on account of the technology used, on which the DoF may take a view as to whether its continuation is worthwhile, at all due to the exorbitant cost of production and subsidy per MT), there were variations amongst different units in the same group. Further, the objective of reinvestment of energy savings (vis-à-vis the preset norms) of increased capacity/production has not been achieved.

Recommendation - 2

In line with the spirit of NPS, DoF should set timelines for formulating a uniform energy norm across all units within the group.

5.4 DAP/ MAP and NPK complexes

5.4.1 Overall Position

The overall position of assessed requirement, production, import and consumption of DAP/ MAP and NPK complexes is summarized below:

Table 5.10-Requirement, Production, Import and Consumption of DAP/ MAP

(in lakh MT)

Year	Requirement	Production	Import of DAP and MAP	Total availability (Col.3-Col.4)	Consump-tion	Difference (Col.2 - Col.6)	Gap between (Col.5 – Col.6)
1	2	3	4	5	6	7	8
2003-04	71.89	47.19	7.99	55.18	56.24	15.65	-1.06
2004-05	70.60	51.59	6.66	58.25	62.56	8.04	-4.31
2005-06	78.03	45.05	24.83	69.88	67.64	10.39	2.24
2006-07	81.30	46.78	29.72	76.50	73.81	7.49	2.69
2007-08	89.22	42.04	29.90	71.94	74.97	14.25	-3.03
2008-09	94.83	29.70	64.59	94.29	92.31	2.52	1.98
Total	485.87	262.35	163.69	426.04	427.53	58.34	-1.49

Table 5.11- Requirement, Production, and Consumption of NPK complexes

(Figures in lakh MT)

Year	Requirement	Production	Consumption	Gap between requirement and consumption
2003-04	63.14	45.03	47.57	15.57
2004-05	63.42	52.65	56.80	6.62
2005-06	74.40	67.68	66.94	7.46
2006-07	82.90	72.98	67.99	14.91
2007-08	87.40	58.30	65.71	21.69
2008-09	92.32	68.64	68.05	24.27
	463.58	365.28	373.06	90.52

Table 5.12 Indigenous production and import of DAP/MAP

(In Lakh MT)

Year	DAP Production	Import of DAP	Import of MAP	Total Import
2003-04	47.19	7.34	0.65	7.99
2004-05	51.59	6.44	0.22	6.66
2005-06	45.05	24.38	0.45	24.83
2006-07	46.78	28.75	0.97	29.72
2007-08	42.04	27.24	1.50	28.74
2008-09	29.70	61.92	2.67	64.59
Total	262.35	156.07	6.46	162.53

As in the case of urea, while there is a consistent gap between consumption and the assessed requirement, the consumption figures broadly track the total availability of fertilizers (production + import). This serves to further confirm the fact that the assessment of requirement was not done on a scientific basis.

5.4.2 Production of Phosphatic Fertilizers

There are 19 DAP and NPK complex manufacturing units; the year wise capacity and production of phosphatic (DAP+NPK) fertilizers are depicted below:

Table 5.13 - Capacity and Production of DAP and NPK Complexes

(In Lakh MT)

Year	Capacity of DAP+NPK	Production of DAP	Production of NPK	Total production of DAP+ NPK
1998-99	67.14	38.68	37.07	75.75
1999-2000	74.14	38.63	50.01	88.64
2000-01	84.08	48.89	47.44	96.33
2001-02	117.47	50.94	49.09	100.03
2002-03	120.90	52.36	48.59	100.95
2003-04	122.68	47.19	45.03	92.22
2004-05	127.94	51.59	52.65	104.25
2005-06	130.24	45.05	67.68	112.73

Year	Capacity of DAP+NPK	Production of DAP	Production of NPK	Total production of DAP+ NPK
2006-07	130.59	46.78	72.98	119.76
2007-08	130.61	42.04	58.30	100.33
2008-09	134.04	29.70	68.64	98.34

As can be seen above, although the capacity for phosphatic fertilizers nearly doubled from 1998-99 to 2008-09, actual production increased by only 30 per cent. The production of DAP actually came down substantially. It may however be noted that indigenous production of phosphatic fertilizers is largely based on imported raw materials/intermediates. The increase in consumption of DAP/MAP/NPK complexes over this period was met primarily through imports at very high prices, which led to multi-fold increases in the subsidy burden.

5.5 MOP

The country's requirement for potassic fertilizers is met fully through imports. The table below summarises requirement, import and consumption of MOP.

Table 5.14-Requirement, Import, and Consumption of MOP

(In lakh MT)

Year	Requirement	Import	Consumption	Gap +/- (Col.2 -Col.4)	Import value of MOP
1	2	3	4	5	6
2003-04	23.73	25.79	19.12	4.61	NA
2004-05	23.21	34.09	24.06	-0.85	NA
2005-06	28.89	45.78	16.57	12.32	NA
2006-07	33.24	34.48	25.86	7.38	7533.20
2007-08	36.13	44.21	28.81	7.32	11305.15
Total		**184.35**	**114.42**	**69.94**	
2008-09	37.86	56.72	40.77	15.95	31530.30
G. Total	183.06	241.07	155.19	85.88	

The import of MOP during the period 2003-08 was 184.35 lakh MT, while actual consumption was only 114.42 lakh MT resulting in surplus stock of 70 lakh MT as of March 2008. The requirement of MOP for 2008-09 was 38.86 lakh MT, including one lakh MT of buffer stock to be maintained by IPL. This could have been easily met out of the surplus

stock of 70 lakh MT of MOP already lying in the stock as of March 2008. Further, during 2008-09, the international price of MOP, (which is completely imported in India) increased enormously and was almost four times its normal cost. (Rs.7595/MT in April 2008 to Rs. 28410/MT in December 2008). However, the DoF, instead of curbing further imports of MOP and drawing down on available stock, imported an additional 56.72 lakh MT (43.29 Lakh MT as per expenditure figures). This resulted in an avoidable addition to the subsidy burden of Rs. 10,000 crore. In fact, even without taking into account the available stock from earlier imports, the imports during 2008-09 were substantially higher than the assessed requirements and the consumption for the year.

5.6 Fertilizer Consumption

Fertilizer consumption has gone up substantially from 317 lakh MT to 468 lakh MT over the 11 year period and from 1998-99 to 2008-09. However, the pattern of fertilizer consumption (per hectare of gross cropped area) across different States is highly skewed. States like Andhra Pradesh, Punjab, Haryana and Bihar have high consumption rates of 240, 221, 202 and 179 Kg per Ha respectively, while States like Madhya Pradesh, Orissa, Assam and Jharkhand have very low consumption rates of 71, 62, 62, and 56 Kg per Ha respectively. There was a fairly high degree of correlation between the consumption rate and the proportion of irrigated area; the higher the proportion of irrigated area, the higher the rate of consumption of fertilizers[14]. For example, Punjab with 98 per cent irrigated area consumed 221 kg/ha in 2008-09, while Jharkhand with 10 per cent irrigated area consumed only 56 kg/ha. Details of the State-wise consumption rates are given below:

Table 5.15 - State-wise per hectare fertilizer consumption (N+P+K) to gross cropped area for the period 2003-04 to 2008-09

(Kg/ hectare)

Sl.No.	State/UT	2008-09 Kg/hectare consumption*	Per centage of gross irrigated to total cultivated area**
1.	Andhra Pradesh	240	46
2.	Punjab	221	98
3.	Tamil Nadu	217	56
4.	Haryana	202	86
5.	Bihar	179	61
6.	West Bengal	158	57
7.	Uttar Pradesh	156	75
8.	Karnataka	147	29
9.	Gujarat	141	42

[14] The coefficient of correlation, (a statistical measure) between the fertilizer consumption (in 2008-09) and proportion of irrigation area was 0.76, which is fairly high.

Sl.No.	State/UT	2008-09 Kg/hectare consumption*	Per centage of gross irrigated to total cultivated area**
10.	Uttarakhand	123	46
11.	Maharashtra	114	20
12.	J&K	93	41
13.	Kerala	89	16
14.	Chhattisgarh	81	26
15.	Madhya Pradesh	71	32
16.	Orissa	62	37
17.	Assam	62	2
18.	Himachal Pradesh	61	19
19.	Manipur	57	22
20.	Jharkhand	56	10
21.	Rajasthan	49	36
22.	Tripura	47	35
23.	Mizoram	47	10
24.	Meghalaya	14	26
25.	Arunachal Pradesh	3	20
26.	Nagaland	2	29
27.	Sikkim	0	8
	All India	129	44.56

Kg/hectare consumption based on 2006-07 provisional gross cropped area

*Source: **FS-55, Page II-25 for gross cultivated area and gross irrigated area*

5.7 *Non availability/ shortage of fertilizers*

Despite huge amounts of subsidy/concession on controlled and de-controlled fertilizer, there were numerous instances of non-availability/shortage of fertilizers as summarized below:

Table 5.16– State-wise instances of non-availability/ shortage of fertilizers

Sl.No.	Name of State	Summary of findings
1.	Andhra Pradesh	• In Guntur district during 2008-09 (Kharif and Rabi seasons), adequate quantities of fertilizer were not supplied in time to the farmers, which led to agitations by farmers. • In the remaining three tests checked districts (Kadapa, Karimnagar and Warangal), delay in supply of fertilizer was

Sl.No.	Name of State	Summary of findings
		noticed. • Even after issue of instructions by the district collector, Guntur regarding equitable distribution of fertilizers (DAP, MOP and other complex fertilizers) to all the dealers for easy access to farmers in remote areas also, the ManaGromor Centres of Coromandal Fertilizers Ltd. (CFL) were allotted fertilizers more than the prescribed percentage. Consequently, the farmers were forced to rush to mandal headquarters where ManaGromor Centres existed, incurring additional expenditure on travel and transportation of fertilizer.
2.	Assam	• There was excess availability of 5,35,927 MT of different categories of fertilizer as compared to quantity procured during 2006-09 which ranged between 1 and 87 per cent.
3.	Bihar	• Farmers/ dealers complained that there were shortages and they had problem in procuring fertilizer during crop period. However, no norms were fixed to regulate the sale of fertilizers. • Dealers complained that there were shortages in procuring fertilizers during the crop period. Farmers also complained that they had to pay much higher rates for purchase of fertilizer, and were not getting the required quantity, which affected the crop adversely.
4.	Chhattisgarh	• There were excess/short supply of fertilizers against the targets in three of the four selected districts. • No rationing system was followed for sale of fertilizers.
5.	Gujarat	• The variation between requirement and actual supply ranged between 1% (Urea Kharif 2008-09) to 23% (DAP Kharif 2008-09). During survey of dealers, farmers and the Co-operative societies, the farmers complained of short supply and stated that they had to purchase fertilizer from other blocks.
6.	Haryana	• The availability of Urea and DAP in the State was more than the projected requirement, and consumption was more or less equal to requirement during 2006-09. In respect of NPK and MOP, except in 2007-08, availability was lower than the projected requirement, and consumption was far below the requirement.
7.	Himachal Pradesh	• During 2006-09, against the requirement of 3,53,400 MTs of different types of Fertilizers, actual supply was 3,21,133 MTs

Sl.No.	Name of State	Summary of findings
		resulting in an overall shortage of 32,267 MTs. • Supply of 19430 MTs of NPK 10:26:26 was received during Rabi 2007-08 (7221 MTs) and Kharif-Rabi 2008-09 (12209 MTs) without any requirement. During Rabi 2008-09 against the requirement of 7500 MTs of NPK 15:15:15, actual supply received was 12863 MTs. This indicates that the farmers were compelled to purchase these categories against short supply of NPK 12:32:16.
8.	Karnataka	• There were no norms to regulate sale of fertilizers. Only during short / delayed supply, were the sales monitored by the staff of the Agriculture Department. • There was substantial variation between the assessed requirement and supply of fertilizers during the period 2006-07 to 2008-09. The shortfall in respect of supply of Urea, DAP, MOP, and Complexes ranged from 5 per cent to 59 per cent and the excess supply over requirement ranged between minus 2.34 per cent to minus 26.37 per cent. • In some districts, shortages of fertilizers were reported.
9.	Kerala	• Shortfall in DAP and MOP ranged between 5 per cent and 25 per cent, and excess ranged between 12 per cent and 33 per cent of the requirement during 2006-09. Shortfall in other complex fertilizers was more pronounced, ranging between 44 to 76 per cent.
10.	Maharashtra	• The companies did not supply fertilizers as per the supply plan during the years 2006-07 to 2008-09, which resulted in uneven supply of various kinds of fertilizers.
11.	Madhya Pradesh	• During dealer/farmer's survey, the cooperative societies and the farmers complained that during the peak season, farmers faced a shortage of fertilizers and they had to rush from one block to another and had to pay higher prices (Rs.350 to Rs. 500 per bag of Urea) for purchasing the fertilizers.
12.	Manipur	• The shortfall in availability of urea during 2006-07 to 2008-09 ranged from 31 to 45 per cent.
13.	Meghalaya	• There were substantial variations between the assessed requirement and actual supply of fertilizers during 2006-09. • The variation/shortfall between the requirement and actual supply of Urea, DAP and MOP during 2006-07 to 2008-09 ranged between 5.73 per cent and 25.41 per cent in respect of Urea, 7.23 per cent and 58.72 per cent in respect of DAP and

Sl.No.	Name of State	Summary of findings
		34.50 per cent and 41.18 per cent in respect of MOP.
14.	Rajasthan	• No norms were prescribed to regulate sale of fertilizer. • The farmers were advised to use fertilizers as per recommendations made in the Soil Health Card. However, Soil Health Cards were issued only to five per cent of farmers (300345) against total number of land holders (58,19,203) of the State during 2008-09.
15.	Tamil Nadu	• During 2007-08 there was acute shortage of DAP in the State due to stoppage of production and reduction in import of DAP. Hence, based on GoI direction, Tamil Nadu Marketing Federation (TANFED) was nominated as the nodal agency for procuring the DAP from the importers and DAP was distributed to the farmers through Primary Agricultural Co-operative Banks (PACBs). PACBs insisted on production of land holdings certificate from the revenue officials each season for the purchase of DAP by farmers. Farmers found it very difficult in getting the certificate as the land possessed by the farmers was on lease, and certificate was issued in the name of the land owner. Hence, though DAP was available, farmers could not get the same and had to use complexes in the place of DAP. In certain PACBs, only members of the PACB were given the fertilizer.
16.	Tripura	• During surveys, retail dealers and farmers complained that due to delay in supply of fertilizer, the farmers had to buy fertilizers, at higher rate than MRP from the market.
17.	Uttar Pradesh	• Short supply of DAP in Barabanki and Lakhimpur Kheri ranged between 7 to 78 per cent and excess supply of DAP in Aligarh, Bulandshahr, Gorakhpur Moradabad and Varanasi ranged between 6 to 139 per cent. • Short supply of urea against supply plan in Barabanki, Bulandshahar Gorakhpur and Lakhimpur Kheri ranged between 8 to 71 per cent, and excess supply of urea in Aligarh, Moradabad and Varanasi ranged between 6 to 75 per cent. • Short supply of MOP in Barabanki, Lakhimpur Kheri and Moradabad ranged between 41 to 100 per cent and excess supply of MOP in Aligarh, Bulandshahar, Gorakhpur and Varanasi ranged between 159 to 722 per cent. • Short supply of NPK in Aligarh, Barabanki, Bulandshahr, Lakhimpur Kheri and Moradabad ranged between 18 to 100

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		per cent and excess supply of NPK in Gorakhpur and Varanasi ranged between 126 to 148 per cent. • In seven test checked districts, the actual supply of DAP was in excess of the supply plan by 6 per cent to 139 per cent. In case of urea in these districts, excess actual supply against the supply plan ranging from 6 per cent 75 per cent during April 2008 to December 2008. Likewise in MOP, the excess actual supply ranging from 41 per cent to 722 per cent. Excess actual supply of NPK was ranging from 18 per cent to 148 per cent.
18.	West Bengal	• There was short supply in respect of each item of fertilizer during each of the years 2006-07 to 2008-09 (except in case of MOP during 2008-09) as compared to the requirements. • In case of complex fertilizer (NPK), the shortfall in supply was less significant during 2006-07 while in other cases, the shortfall varied from 3 to 33 per cent of requirement during each of the years 2006-07 to 2008-09. • There was skewed distribution i.e. lesser supply in distant and disjointed districts having no rake points in comparison to requirement, and in sharp contrast, higher supply in districts having better accessibility. • All the districts, except one, (Uttar Dinajpur-border district) received fertilizers much less than the requirements, irrespective of availability of rake points.