

FORTY-FOURTH REPORT

**STANDING COMMITTEE ON
PETROLEUM & CHEMICALS
(2003)**

(THIRTEENTH LOK SABHA)

**MINISTRY OF CHEMICALS AND FERTILISERS
(DEPARTMENT OF FERTILISERS)**

**DEMAND, AVAILABILITY AND
DISTRIBUTION OF FERTILISERS**

Presented to Lok Sabha on 08.05.2003

Laid in Rajya Sabha on 08.05.2003



**LOK SABHA SECRETARIAT
NEW DELHI**

May, 2003/Vaisakha, 1925 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM AND CHEMICALS
(2001)

Shri Mulayam Singh Yadav

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Chairman

Members

Lok Sabha

2. Shri Ashok Argal
3. Shri Ramchander Baina
4. Shri Ananda Mohan Biswas
5. Shri Ajay Singh Chautala
6. Dr. (Smt.) C. Suguna Kumari
7. Shri Padam Sen Choudhary
8. Shri T.T.V. Dhinakaran
9. Shri Dilipkumar Mansukhlal Gandhi
10. Shrimati Sheela Gautam
11. Shri Pawan Singh Ghatowar
12. Shri Bijoy Krishna Handique
13. Shri Shriprakash Jaiswal
14. Shrimati Nivedita Mane
15. Shri Punnilal Mohale
16. Shri P. Mohan
17. Shri Ashok Pradhan
18. Shri Mohan Rawale
19. Dr. Bikram Sarkar
20. Shri Shyama Charan Shukla
21. Shrimati Kanti Singh
22. Shri Prabhunath Singh
23. Shri D.C. Srikantappa
24. Dr. Ramesh Chandra Tomar
25. Shri Tarlochan Singh Tur
26. Shri Shankersinh Vaghela
27. Shri Ratilal Kalidas Varma
28. Shri B. Venkateshwarlu
29. Shri Rajesh Verma
30. Dr. Girija Vyas

(iv)

Rajya Sabha

31. Shri Anil Kumar
32. Shri Gaya Singh
33. Shri Ram Nath Kovind
34. Dr. (Smt.) Joyasree Goswami Mahanta
35. Shri Moolchand Meena
36. Shri Dipankar Mukherjee
37. Shri Suresh Pachouri
38. Shri Ahmed Patel
39. Shri Mukesh R. Patel
40. Shri Ravishankar Prasad
41. Shri K. Kalavenkata Rao
42. Shrimati Basanti Sarma
43. Shri Rajiv Ranjan Singh 'Lalan'
44. Shri P. Soundararajan
45. Prof. Ram Gopal Yadav

SECRETARIAT

- | | | | |
|----|--------------------|---|-------------------|
| 1. | Shri Ram Autar Ram | - | Joint Secretary |
| 2. | Shri Brahm Dutt | - | Deputy Secretary |
| 3. | Shri J.N. Oberoi | - | Under Secretary |
| 4. | Shri A.K. Shah | - | Committee Officer |

**COMPOSITION OF THE STANDING COMMITTEE ON
PETROLEUM AND CHEMICALS
(2002)**

SHRI MULAYAM SINGH YADAV- Chairman

**Members
Lok Sabha**

- | | |
|----|-----------------------------------|
| 2 | Shri Ashok Argal |
| 3 | Dr. Chellamella Suguna Kumari |
| 4 | Shri Ram Chander Baina |
| 5 | Shri Ananda Mohan Biswas |
| 6 | Shri Padam Sen Choudhry |
| 7 | Prof. Kailasho Devi |
| 8 | Shri P.D. Elangovan |
| 9 | Shri Dilipkumar Mansukhlal Gandhi |
| 10 | Smt. Sheela Gautam |
| 11 | Shri Paban Singh Ghatowar |
| 12 | Shri Bijoy Handique |
| 13 | Shri Shriprakash Jaiswal |
| 14 | Shri C. Kuppusami |
| 15 | Shri Jagannath Mallick |
| 16 | Shri Punnulal Mohale |
| 17 | Shri P. Mohan |
| 18 | Shri Ashok N. Mohol |
| 19 | Dr. Debendra Pradhan |
| 20 | Shri Ram Sajivan |
| 21 | Shri Mohan Rawale |
| 22 | Shri Shyama Charan Shukla |
| 23 | Dr. V. Saroja |
| 24 | Dr. Chhatrapal Singh |
| 25 | Shri Prabhunath Singh |
| 26 | Shri Ramjiwan Singh |
| 27 | Dr. Ram Lakhan Singh |
| 28 | Shri Shankersinh Vaghela |
| 29 | Shri Ratilal Kalidas Varma |
| 30 | Dr. Girija Vyas |

Rajya Sabha

31	Shri Balkavi Bairagi
***32	Shri Ram Nath Kovind
33	Shri Anil Kumar
****34	Vacant
35	Shri Rajiv Ranjan Singh 'Lalan'
36	Shri Mool Chand Meena
37	Shri Deepankar Mukherjee
**38	Shri Pritish Nandy
39	Shri Ahmed Patel
***40	Shri Keshubhai Sadasbhai Patel
41	Shri Yadlapati Venkat Rao
42	Ms. Mabel Rebello
43	Shri Gaya Singh
* 44	Shri Thanga Tamilselvan
45	Prof. Ram Gopal Yadav

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1. Shri P.D.T. Achary	-	Additional Secretary
2. Shri K.V. Rao	-	Joint Secretary
3. Shri P.K. Grover	-	Director
4. Shri R.K. Saxena	-	Under Secretary
5. Shri A.K. Shah	-	Committee Officer

* *Nominated w.e.f. 8th April, 2002.*

** *Nominated w.e.f. 8th May, 2002.*

*** *Nominated w.e.f. 14th May, 2002.*

**** *Vacancy caused consequent upon retirement of Shri Shyam Lal, MP (RS) from the membership of Rajya Sabha w.e.f. 25.11.2002*

**COMPOSITION OF THE
STANDING COMMITTEE ON PETROLEUM AND CHEMICALS (2003)**

SHRI MULAYAM SINGH YADAV - Chairman

MEMBERS

LOK SABHA

2	Shri Ashok Argal
3	Shri Ramchander Baidia
4	Dr.(Smt.) Suguna Kumari Chellamella
5	Shri Padam Sen Choudhary
6	Shri Khagen Das
7	Smt. Sheela Gautam
8	Shri Paban Singh Ghatowar
9	Shri Bijoy Handique
10	Shri Shriprakash Jaiswal
11	Shri Jagannath Mallick
12	Shri Punnilal Mohale
13	Shri P. Mohan
14	Shri Ashok N. Mohol
15	Dr. Debendra Pradhan
16	Shri Rajesh Ranjan
17	Shri Mohan Rawale
18	Shri Ram Sajivan
19	Dr. Bikram Sarkar
20	Dr. (Smt.) V. Saroja
* 21	Shri Harpal Singh Sathi
22	Shri Shyamacharan Shukla
23	Shri Prabhunath Singh
24	Dr. Ram Lakhan Singh
** 25	Dr. Ramesh Chand Tomar
26	Shri Shankersinh Vaghela
27	Shri Rathilal Kalidas Varma
28	Shri A.K.S. Vijayan
29	Dr. Girija Vyas
30	Shri Dinesh Chandra Yadav

* Nominated w.e.f. 21st February, 2003.

** Nominated w.e.f. 26th February, 2003.

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RAJYA SABHA

- | | |
|----|---------------------------------|
| 31 | Shri Balkavi Bairagi |
| 32 | Shri Ram Nath Kovind |
| 33 | Shri Anil Kumar |
| 34 | Shri Rajiv Ranjan Singh 'Lalan' |
| 35 | Shri Moolchand Meena |
| 36 | Shri Dipankar Mukherjee |
| 37 | Shri Pritish Nandy |
| 38 | Shri Kripal Parmar |
| 39 | Shri Ahmed Patel |
| 40 | Shri Keshubhai S. Patel |
| 41 | Shri V.V. Raghavan |
| 42 | Ms. Mabel Rebello |
| 43 | Shri Yadlapati Venkat Rao |
| 44 | Shri Thanga Tamilselvan |
| 45 | Prof. Ram Gopal Yadav |

SECRETARIAT

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| 1. | Shri P.D.T. Achary | - | <i>Additional Secretary</i> |
| 2. | Shri P.K. Grover | - | <i>Director</i> |
| 3. | Shri J.N. Oberoi | - | <i>Officer on Special Duty</i> |
| 4. | Shri A.K. Shah | - | <i>Assistant Director</i> |

COMPOSITION OF SUB-COMMITTEE ON FERTILISERS

A Sub-Committee of the Standing Committee on Petroleum and Chemicals (2001)

- | | | | |
|-----------|-----------------------------------|----------|-----------------|
| | Shri Mulayam Singh Yadav | - | Chairman |
| 2. | Shri Dipankar Mukherjee | - | Convenor |
| 3. | Shri Ramchander Baidia | | |
| 4. | Shri Ananda Mohan Biswas | | |
| 5. | Shri Ajay Singh Chautala | | |
| 6. | Shri Padam Sen Choudhary | | |
| 7. | Shri Dilipkumar Mansukhlal Gandhi | | |
| 8. | Shri Rajiv Ranjan Singh 'Lalan' | | |
| 9. | Shri Punmulal Mohale | | |
| 10. | Shri Suresh Pachouri | | |
| 11. | Shri Ravi Shankar Prasad | | |
| 12. | Shri K. Kalavenkata Rao | | |
| 13. | Shri P. Soundararajan | | |
| 14. | Shri D.C. Srikantappa | | |
| 15. | Dr. Bikram Sarkar | | |
| 16. | Shri Rajesh Verma | | |

COMPOSITION OF SUB-COMMITTEE ON FERTILISERS
A SUB-COMMITTEE OF THE STANDING COMMITTEE
ON
PETROLEUM & CHEMICALS
(2002)

Shri Mulayam Singh Yadav - Chairman

Members

- | | | | |
|-----------|----------------------------------|----------|-----------------|
| 2. | Dr. Debendra Pradhan | - | Convenor |
| 3. | Sh. Ram Chander Binda | | |
| 4. | Sh. Ananda Mohan Biswas | | |
| 5. | Sh. Balkavi Bairagi | | |
| 6. | Sh. Padam Sen Choudhry | | |
| 7. | Prof. Kailasho Devi | | |
| 8. | Sh. Dilipkumar Mansukhlal Gandhi | | |
| *9 | Vacant | | |
| 10. | Sh. Jagannath Mallick | | |
| 11. | Sh. Punnulal Mohale | | |
| 12. | Sh. Keshubhai Sadasbhai Patel | | |
| 13. | Ms. Mabel Rebello | | |
| 14. | Dr. Chhatrapal Singh | | |
| 15. | Shri Thanga Tamilselvan | | |

* *Vacancy caused consequent upon retirement of Shri Shyam Lal, MP (RS) from the membership of Rajya Sabha w.e.f. 25.11.2002.*

**Composition of Sub-Committee on Fertilisers of the
Standing Committee on Petroleum & Chemicals (2003)**

- | | | | |
|-----------|---------------------------------|----------|-----------------|
| | Shri Mulayam Singh Yadav | - | Chairman |
| 2. | Sh. Ram Nath Kovind | - | Convenor |
| 3. | Sh. Ram Chander Baidia | | |
| 4. | Sh. Balkavi Bairagi | | |
| 5. | Sh. Padam Sen Choudhry | | |
| 6. | Sh. Khagen Das | | |
| 7. | Sh. Harpal Singh Sathi | | |
| 8. | Sh. Rajesh Ranjan | | |
| 9. | Sh. Jagannath Mallick | | |
| 10. | Sh. Punnulal Mohale | | |
| 11. | Sh. Kripal Parmar | | |
| 12. | Sh. Keshubhai S. Patel | | |
| 13. | Ms. Mabel Rebello | | |
| 14. | Dr. Ramesh Chand Tomar | | |
| 15. | Sh. Thanga Tamilselvan | | |

INTRODUCTION

I, the Chairman, Standing Committee on Petroleum and Chemicals (2003) having been authorised by the Committee to submit the Report on their behalf present this Forty Fourth Report on 'Demand, Availability and Distribution of Fertilisers'.

2. This subject was selected for examination by the Standing Committee on Petroleum & Chemicals (2001). The Committee decided to refer this subject to the Sub-Committee on Fertilisers for detailed examination. The Sub-Committee took evidence of the representatives of Fertiliser Association of India (FAI) on 13th February, 2002. The Sub-Committee took evidence of representatives of Department of Fertilisers/ Department of Agriculture and Cooperation on 11th September, 2002 subject was however deferred.

3. The Committee appreciate the commendable work done by the Members of the Sub-Committee on Fertilisers (2001 and 2002) in examining the subject.

4. The Committee wish to express their thanks to officers of the Ministry of Chemicals and Fertilisers (Department of Fertilisers) and Ministry of Agriculture (Department of Agriculture and Cooperation) as also representatives of Fertiliser Association of India (FAI) for placing their views before them and for furnishing the information desired in connection with examination of the subject.

5. The Sub-Committee on Fertilisers considered and adopted this Report at their sitting held on 6th May, 2003.

6. The Standing Committee on Petroleum and Chemicals (2003) considered and adopted this Report at their Sitting held on 6th May, 2003. The Committee place on record their appreciation of the work done by the Sub-Committee on Fertilisers.

7. The Committee also place on record their sense of deep appreciation for the invaluable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

NEW DELHI
May 7, 2003
Vaisakha 17, 1925 (Saka)

MULAYAM SINGH YADAV
Chairman
Standing Committee on
Petroleum & Chemicals.

REPORT

CHAPTER-I

DEMAND OF FERTILISERS

A. Demand assessment and procurement

(a) Responsibility of Government

The Department of Fertilisers (DOF) in the Ministry of Chemicals and Fertilisers and the Department of Agriculture & Cooperation (DOAC) in the Ministry of Agriculture are jointly responsible for Demand, Availability and Distribution of Fertilisers. The DOAC is responsible for assessment of demand of various fertilisers nutrients like urea , DAP, MOP and SSP whereas availability and distribution of the fertilisers have been classified under two categories viz. controlled and decontrolled fertilisers. Urea is a controlled fertiliser and its availability and distribution is the responsibility of DOF. Availability and Distribution of decontrolled fertilisers viz. DAP, MOP and SSP is managed by market forces.

1.2 Phosphatic and Potassic fertilisers were decontrolled w.e.f. 25th August, 1992. The objective of decontrol was to save on subsidy. Till 1992 Potassic fertilisers were also covered by the subsidy scheme administered by the Ministry/Department of Fertilisers. While Potash is wholly imported, in the case of Phosphatic fertilisers, a part of it is imported. The balance is domestically manufactured, mainly based on imported rock Phosphate/Sulphur/Phosphoric acid and imported ammonia. As a result of removal of subsidies in 1992 on Phosphatic and Potassic fertilisers, there was substantial increase in prices of these fertilisers which led to a sharp drop in consumption of these fertilisers, thus unsettling the NPK balance built up over the years.

1.3 *The Government having realised the impact of increase in prices of decontrolled fertilisers, decided to cushion the impact of increase in prices of these fertilisers from Rabi 1992-93. The Government introduced a scheme of concession on sale of decontrolled fertilisers. In a major policy initiative taken by the Government on 6 July 1996, the scale and coverage of the special*

concession was substantially increased to give impetus to the stagnating demand for imbalance in the soil which is essential for sustaining the desired growth in agricultural productivity.

1.4 The actual amount disbursed under the Concession Scheme since 1992-1993 to 2003-2004 (Estimated) is as under:-

Rs. in crore

Year	Amount of concession disbursed
1992-93	339.73
1993-94	517.34
1994-95	527.95
1995-96	500.00
1996-97	1671.77
1997-98	2596.00
1998-99	3789.94
1999-2000	4500.00
2000-01	4319.00
2001-02	4503.52
2002-03	3250.00
2003-04 (Estimated)	4456.00

(b) Importance of Fertilisers

1.5 Fertilisers have played a dominant role in accelerating the growth of agricultural production in the country. The main reason for this growth is enhanced use of fertiliser during the 70s and 80s. For instance the foodgrain production in the country during 1950-51, was 52 million tonnes and this reached to level of 108.42 million tonnes in 1970-71 mainly due to increased use of fertilisers. Conducive policy environment during 70s and 80s further enhanced it to 150.44 million tonnes. By 1990-91 it rose to 176.39 million tonnes and by 1999-2000 it further rose to a 206 million tonnes.

1.6 Fertiliser industry has been delicensed. Setting up of fertiliser plants is not subject to any licensing requirements and entrepreneurs are free to set up/expand fertiliser plants anywhere in the country subject to environmental clearance.

(c) Organisational set up

(i) Department of Fertilisers

1.7 Department of fertilisers is broadly divided into following three divisions:-

- (i) Fertiliser Projects & Planning
- (ii) Fertiliser Imports and Movement and Distribution
- (iii) Administrative and Vigilance

1.8 The following are the major fertiliser producing units in public, private and cooperative sectors of the country togetherwith fertiliser produced. Public and cooperative sector units are under administrative control of DOF whereas coordination between public and private sector is provided by DOF:

Sl. No.	Units of Public Sector	Produced category of fertilisers
1	National Fertilisers Limited (NFL)	Nitrogenous
2	Rashtriya Chemicals & Fertilisers Ltd. (RCF)	Nitrogenous and Phosphate
3	Madras Fertilisers Limited (MFL)	-do-
4	Fertilisers & Chemicals Travancore Ltd. (FACT)	-do-
5**	Brahmaputra Valley Fertilisers Corporation Ltd. (BVFCL)	Nitrogenous
6*	Hindustan Fertiliser Corporation Ltd. (HFC)	-do-
7*	Fertiliser Corporation of India (FCI)	-do-
8*	Pyrites, Phosphates and Chemicals (PPCL)	Single Sulphur Phosphate (SSP)

* All the plants of HFC and FCI companies have been closed w.e.f. 5.9.2002 except Jodhpur Mining Organisation of FCI and of the plants of PPCL have been closed w.e.f. July, 2002 but final decision on Amjhore unit is yet to be taken

** It is new company after closure of erstwhile HFC for Namrup I, II and III units.

Sl. No.	Units of Cooperative Sector	Produced category of fertilisers
1	Indian Farmers' Fertiliser Cooperative Ltd. (IFFCO)	Nitrogenous and Phosphate
2	Krishak Bharati Cooperative Ltd. (KRIBHCO)	Nitrogenous

Sl. No.	Major Units of Private Sector	Produced category of fertilisers
1	Nagarjuna Fertiliser Chemicals Ltd. (NFCL)	Nitrogenous
2	Duncan Industries Ltd. (DIL)	-do-
3	Oswal Chemicals & Fertilisers Ltd. (OCFL)	Nitrogenous & Phosphates
4	Indo-Gulf Fertiliser Ltd. (IGFL)	-do-
5	Gujarat Narmada Fertiliser Ltd. (GNFC)	-do-
6	Southern Petro-chemicals Industries Ltd. (SPIC)	-do-
7	Zuayr Industries Ltd. (ZIL)	-do-
8	HLL Haldia	-do-
9	Gujarat State Fertiliser Corporation (GSFC)	-do-
10	Paradeep Phosphate Limited (PPL)	-do-

1.9 *The major producers of fertiliser along with their production are indicated at **Appendix VI**.*

1.10 *The Department of Fertilisers is responsible for Planning for fertiliser production including import of fertiliser through a designated canalising agency. Department's other important responsibilities are:*

- (i) Allocation and supply linkages for movement and distribution of urea in terms of assessment made by Department of Agriculture & Cooperation;*
- (ii) Administration of Concession Scheme and management of financial support for controlled as well as decontrolled fertilisers including determination of retention price for urea, quantum of support to decontrolled fertilisers and costing of such fertilisers; and*
- (iii) Administration of the Fertilisers (Movement Control) Order, 1973.*

(ii) Department of Agriculture & Cooperation

1.11 The Department of Agriculture & Cooperation in the Ministry of Agriculture is responsible for assessment of demand of major fertilisers, namely, Urea, DAP and MOP of each State. The assessment is made in the Zonal Conference held before the beginning of each crop season. It is done in consultation with the representatives of the State Governments, Urea manufacturers and the Department of Fertilisers. The Department of Agriculture & Cooperation is also responsible for fixation of maximum retail price of urea under Fertiliser (Control) Order 1985.

(a) Mechanism for controlled fertilisers

1.12 At present Urea is under statutory price and distribution control of Government of India. For this allocations are made under Essential Commodities Act, 1955 for each State against the demand assessed by the Department of Agriculture & Cooperation. Govt. has implemented a new Pricing Scheme for urea units which includes phased decontrol of urea distribution. The new scheme envisages 25% decontrol over movement and distribution of urea during Kharif (April-Sept.) 2003, 50% during Rabi (Oct.- March)2003-04 and full

decontrol thereafter, but after a review during 2003-04 for urea both for Rabi (April-Sept.) and Kharif (Oct.-March) crop seasons.

(b) Mechanism for decontrolled fertilisers

1.13 DAP, MOP complexes and SSP are decontrolled fertilisers. Consequent upon their decontrol in 1992 the prices of these fertilisers increased considerably. The Government introduced the scheme of payment of concessions on decontrolled fertilisers in 1992-93 and continued it subsequently to lower the prices of these fertilisers. Prior to 27.9.2000 it was under Department of Agriculture & Cooperation. However, subsequent to that it has been transferred to DOF. Responsibility of fixing maximum retail price of DAP and MOP is of DOF whereas the price fixation of SSP fertiliser is done by State Governments. Besides this under Concession Scheme DOF is entrusted with the responsibility of maintaining a buffer stock of DAP and MOP to meet emergent requirement of decontrolled fertilisers.

1.14 The Committee wanted to know the system to access the demand of Fertilisers and the distribution. The DOF in a written note informed as under:-

“The demand of major fertilizer namely Urea, DAP and MOP of each State is assessed by the Department of Agriculture and Cooperation (DAC) in the Zonal Conference held before the beginning of each crop season. The assessment is made in consultation with the representatives of the State Governments, urea manufacturers and the Department of Fertilisers (DOF). In the case of urea, the only fertilizer which is under statutory price and distribution control of Government of India, allocations are made under Clause 3 of the Essential Commodities Act, 1955 for each State against the demand assessed by the DAC. For DAP, MOP complexes and SSP which have been decontrolled since August 1992, no such EC allocations are issued by the Department and their distribution is managed by market forces themselves.

In the case of urea there are two sources to arrange supply as per ECA allocation to each State. The first is manufacturer's opening stock available in various States as on 1st April for Kharif and 1st October for Rabi. The second source is indigenous production of urea by various companies/ societies during the respective crop season. After covering the opening manufacturers stocks under allocation, the balance demand is met through indigenous production. The gap between the demand and indigenous availability, if any, is managed through imports on Government account.”

1.15 It also came out during the course of examination that prior to 27.9.2000 the work of allocation of urea was under Department of Agriculture & Cooperation which was later entrusted to Deptt. of Fertilisers. The Committee wanted to know the reasons for this change, the DOF in a written note clarified:-

“Prior to transfer of work of allocation of urea to DOF, the DAC was assessing demand for urea in the Zonal Conferences held prior to each crop season and followed it up with the determination of manufacture-wise linkages. However, in actual operations, the linkages between various fertiliser companies/societies and State Governments were undergoing frequent changes due to demand variation, which occurred on account of variety of reasons such as pattern and distribution of rainfall and un-anticipated increase/ decrease of cropping areas. In these situations, the supply plan linkages were to be altered/ modified frequently to meet the requirement of the States as per evolution of demand. Since these changes take place carry fast without adequate notice, DAC was to be approached at later stage for making adjustments in EC allocation by DOF. As a result, the revised EC allocations were being issued in many cases after a prolonged period by DAC and in case of difference of opinion/ perception on this issue between DAC/ DOF, this took even longer time.

Another peculiarity of the arrangements at that time was that under Clause 6 of the fertilizer (Control) Order 1985, EC allocation was issued by DAC while Movement Orders to Fertilizer manufacturers were issued under Clause 3 of the Fertilizer (Movement Control) Order, 1973. A queer situation resulted in which Movement Orders were issued by DOF while EC allocation came later particularly in the case of imported urea. Legally speaking the company/ handling agent could not sell urea without the cover of EC allocation. But had they waited, farmers would not have got urea even though it was physically available in the States. At the same time by selling urea without ECA, the companies could have been accused of violating provision of ECA. Hence, the Government considered the difficulties and decided to transfer the work of allocation and supply linkages for movement and distribution of urea in terms of assessment made by the DAC to DOF w.e.f. September, 2000.

1.16 On being further pointed out by the Committee whether the present system is working satisfactorily or it needs to be changed and whether entire assessment of demand should be transferred to DOF for greater cohesive action, the DOF in a written note informed:-

“The present system of assessment of fertilisers by DAC is working satisfactorily as the assessment of major fertilizers for each state is carried out in close association and consultation with the concerned State Governments and the Lead Fertilizer Supplier of that State and the Department of Fertilisers. However, since the assessment is made on the State's request assuming optimum weather

like drought and drastic change in cropping pattern, the actual consumption falls far below the assessed level. This situation then results in carrying over of higher inventory stocks by urea manufacturers to the next season. However, periodical review of availability of fertilizers in different States by the Department of Fertilisers is helping in reducing the inventory carrying cost on stocks by urea manufacturers.

Under the circumstances, no change is required to be made in the existing system of assessment of major fertilizers.”

1.17 The Committee observed that there was huge inventory of fertilisers and wanted to know the reasons for this build up, the Secretary (Fertilisers) clarified the position during evidence:-

“I shall come to the demand-supply position. I shall read out the figures of two years only. The production in 2000-01 was 19.6 million tonnes and the consumption was 19.1 million tonnes. In 2001-02, the production was 19.2 million tonnes and the consumption was 19.9 million tonnes. Here, one may say that the production is less than the consumption, but there was a lot of very over stock. In fact, there is a huge inventory even today, largely, as you have observed, because of the drought conditions, because the consumption has not really gone up as anticipated. But the fact is that today, in the country, without imports, the urea stock position in silos and in warehouses is more and the inventory carry over of the companies is building up. The question would naturally arise what is our production if we produce to 100 per cent capacity. Our position is that we can produce 21 million tonnes and our present estimates are that there is no demand for it. Even this year we are anticipating that a good crop season will not create a demand for more than 19.8 to 20 million tonnes of urea - through it is not a happy picture. In fact, we are going to request the Agriculture Ministry that they may kindly look into this plateau which has come about the urea consumption. But that is the picture.”

1.18 Fertilisers have played a crucial role in accelerating the production of foodgrains from 52 million tonnes in 1950-51 to the level of 206 million tonnes during 1999-2000 indicating a four fold increase. The Committee feel that this crucial role of fertiliser has to be maintained. In this connection, the Committee find that for maintaining assured supply of fertilisers the role of two Ministries of Government comes into play viz Ministry of Agriculture and Ministry of Chemicals and Fertilisers. The former assesses the demand of fertilisers in the country whereas the latter ensure their availability and distribution. There are mainly three kinds of fertilisers for agriculture viz. Nitrogen, Phosphate and Potash. Urea is controlled fertiliser and is under price and distribution control whereas DAP and MOP are decontrolled fertilisers. Therefore, availability and system of distribution of urea is different from DAP and MOP. For urea official machinery is available right from its sourcing from manufacturing units in all the three sectors viz. public, private and cooperative to

making it available to consumer centres through allocations made under Essential Commodities Act, 1955. No such apparatus is available for DAP and MOP fertilisers after these were decontrolled in August 2002. The Government have introduced New Pricing Policy for urea, units which has come into operation from 1st April 2003 under which the distribution of urea has been deregulated in phases. Since the demand of fertilisers is assessed at the beginning of the crop seasons viz. Kharif (April- Sept.) and Rabi (March- Oct.) every year, the Government under new policy has restricted allocations under ECA for kharif 2003 upto 75% and for Rabi 2003-04 upto 50% for a period of one year 01.04.2003 to 31.3.2003 (Stage I). For next two years (1.4.03 to 31.3.06) based on experience of stage I, the Government would be deregulating the entire distribution of urea.

1.19 As regards demand assessment of fertilisers the Committee find that it is done by the Department of Agriculture & Cooperation before the commencement of every crop season viz. kharif (April to Sept.) and Rabi (Oct. to March) at Zonal Conferences based on consultations with the State Governments, urea manufacturers Department of Fertilisers etc. The DOF is satisfied with the present system of demand assessment. The Committee however, find that since in the current system huge inventories are already available in opening stock of urea for next seasons, the present system should be reviewed and assessment of demand should be made on more realistic basis to reduce the inventory cost on stocks by urea manufacturers in the light of concern expressed by Secretary (Fertilisers) in this regard.

(Recommendation Sl.No.1)

1.20 As regards decontrolled fertilisers viz. DAP and MOP the Committee find that since these are decontrolled fertilisers and therefore costlier as compared to urea, the Government in order to cushion the impact of their prices started under Department of Agriculture & Cooperation a Scheme in 1992-93 for concessions to manufacturers on these fertilisers and it has continued to the present day. After 27.9.2000 it has been transferred to DOF. The supply of DAP/ MOP, DSP and other complex fertilisers is generally administered under this scheme based on certification of sales from different State Governments. Besides, in order to maintain supply, DOF is responsible to maintain Buffer stocks of DAP and MOP at national level. The Committee feel that a study be conducted to assess the demand

of DAP and MOP in a scientific manner based on real requirement of per hectare of land under cultivation in different States.

(Recommendation No.2)

1.21 The Committee note that objective of decontrol on Phosphatic and Potassic fertilisers in 1992 was to reduce subsidies. Later, the Government introduced Concessional Scheme to lower the prices of Potassic fertilisers to make it affordable for the farmers. In the year 1992-93, the amount disbursed under the Concessional Scheme was Rs. 339.73 crore only which is likely to reach Rs. 4456.00 crore in the current financial year. The Committee feel that time has come to evaluate whether the objective of decontrolling Phosphatic and Potassic fertilisers has been achieved and whether subsidies on this have really gone down as expected. The Committee also feel that Concessional Scheme is not working well as it entails various procedure such as certification of sales by various agencies. The Committee recommend that Concessional Scheme should be reviewed and for this purpose an expert group with representatives from dealers, farmers and State Governments be constituted.

(Recommendation Sl.No.3)

(d) Government Strategy for Self-sufficiency

1.22 There are three main fertiliser nutrient required for various crops. These are Nitrogen (N), Phosphate(P) and Potash (K). Out of these, indigenous raw material is available mainly for Nitrogen. For this fertiliser, country is self-sufficient. The major requirement of phosphates either in the form of raw materials (viz. rock phosphate) or finished fertilisers is imported. Therefore, a deliberate policy has been adopted which involves mix of following three options:-

- (i) Option I: Domestic Production based on indigenous/ imported rock phosphates and imported sulphur;**
- (ii) Option II: Domestic Production based on imported intermediate viz. ammonia and phosphoric acid;**
- (iii) Option III: Import of finished fertilisers.**

1.23 The country has achieved self-sufficiency in DAP also by use of first two options. The entire requirement of Potash is met through imports as there are no known exploitable reserves of Potash in the country. For urea limited import has been the policy of Government. During the course of examination the Committee have also took the evidence

of Fertiliser Association of India (FAI) which is an apex body of manufacturers of fertilisers. It came out during the course of evidence of FAI that they believe that instead of policy of limited imports of urea the Government policy should have been creation of capacities. The Committee sought the views of DOF on this issue and the DOF in a written note informed:-

“The policy of the Government has been aimed in the past at achieving the maximum possible degree of self-sufficiency in the production of nitrogenous fertilizer based on the utilisation of indigenous feedstocks. As of now the country is almost self-sufficient in case of nitrogen. The result is that while India could manage its total requirement of urea from indigenous industry during 2000-01, in the last year merely to supplement pipeline stock for peak months of Rabi season, 2.2 LMT (1.1% of total sales during the year) had to be imported.....”

1.24 About self-sufficiency in phosphates the Committee pointed out that although two options have been exercised by the Government in this regard, yet according to FAI this sector has been largely unattended by Government in term of policy. The Committee sought the views of DOF. The DOF in a written note explained:-

“In case of phosphatic fertilizers, the constraints in availability of domestic raw-materials and intermediates such as rock phosphate, sulphur and phosphoric acid have limited the attainment of total self-sufficiency in the country. That is the reason, why the Government had to adopt a policy mix of Option I and II, wherein domestic production of DAP based on imported raw materials and/ or intermediates was encouraged. Resultantly, India has now able to achieve a level of nearly self-sufficiency in terms of installed capacity (nearly 70 lakh MT) for fully meeting the present DAP requirement. Five years back DAP installed capacity was less than half what it is now.”:

1.25 About procurement of rock phosphate and sulphur and intermediates viz. ammonia and phosphoric acid for indigenous production of phosphate the Government have encouraged the companies to set up joint ventures abroad. In this direction three joint ventures in Senegal, Jordan and Morocco have been set up. Government of India, IFFCO and SPIC have set up a Joint Venture in Senegal with Industries Chimique du Senegal (ICS). SPIC with Jordan Phosphate Mine company Ltd. has set up another joint ventures in Jordan. Chambal Fertilisers and Chemicals Ltd. with office Cherian Des Phosphates (OCP) Morocco has set up the third Joint Venture in Morocco. The total installed capacity of these joint ventures is around 12 lakh tonnes of raw material for Phosphatic fertilisers.

1.26 With regard to setting up Joint Ventures abroad, the Minister of Chemicals and Fertilisers gave the following information in response to a Parliamentary Question on 3rd December, 2002:-

“A Task Force headed by Secretary, Department of Fertilisers, with representatives of other concerned Ministries/ Departments and the domestic Fertiliser industry, was set up by the government to finalise a long term policy for setting up joint ventures in fertilizer sector abroad. The draft report of the Task Force has been circulated for finalisation.”

1.27 The Committee find that there is requirement of three main nutrients viz. Nitrogen (N), Phosphate (P) and Potash (K) in the country. Since indigenous raw material is available only for Nitrogen, the country is self-sufficient in Nitrogen. For Phosphate (P) and Potash (K) since raw material is not available within the country, the country has to depend on imported raw materials viz rock phosphates and sulphur and imported intermediates like ammonia and phosphoric acid. With this the country has achieved near self-sufficiency in DAP production. The present installed capacity is 70 lakh tonne of DAP in the country. The Committee also note that three Joint Ventures engaged in production of phosphoric acid and finished products in Senegal, Jordan and Morocco are meeting our requirements.

1.28 The Committee are glad to note that the country is self-sufficient in the production of Nitrogen and has attained near self-sufficiency in production of phosphate at present. The Committee however feel that there is an urgent need to maintain this level of self-sufficiency to match the future demand of both these fertilisers specially phosphates. The Committee feel that there is need to add to phosphate capacity in the country. This can be done either by importing raw material and adding capacity in manufacturing units or by setting up Joint Ventures abroad on the pattern as are already operating. The Committee have taken note of the statement of the concerned Minister in Parliament that one task force under Secretary (Fertilisers) was set up by the Government to finalise a long term policy for setting up joint ventures in fertiliser sector abroad. The draft Report of the task force has been circulated for finalisation. In view of the foregoing the Committee recommend expeditious finalisation of the above draft report so that clear policy emerges on the subject for setting up such ventures early.

(Recommendation S.No.4)

B. Demand of Fertilisers during 10th and 11th Five Year Plans

(a) Demand of Fertilisers during 10th Plan (2002-2007) Period

1.29 As per the DOF estimates Demand of N,P and K fertilisers during the 10th Plan period is estimated as follows:-

(in lakh tonnes)

Five Year Plan		Demand			
		N	P	K	Total
10 th Plan Period (2002-2003 to 2006-2007)					
(i)	2002-03(1 st year of the plan)	123.00	55.05	18.64	196.69
(ii)	2006-07 (Terminal year of Xth Plan)	139.23	70.27	21.83	231.33

1.30 As against the above demand, the supply of fertilisers would be as under:-

10 th Plan period (2002-03 to 2006-07)				Supply (in lakh tonnes)
Year	N	P	K	Total
(i) 2002-03 1 st year of the Plan	120.58	52.31	Nil	172.89
(ii) 2006-07 (Terminal year of Xth Plan)	130.05	54.13	nil	181.59

1.31 The Committee during the course of examination found that there would be a gap of 5.16 lakh tonnes in demand and supply of fertilisers comprising 2.42 lakh tonnes of Nitrogen and 2.74 lakh tonnes of Phosphate in 2002-03. This may go further to 25.32 lakh tonnes by 2006-2007 comprising of 9.18 lakh tonnes of Nitrogen and 16.14 lakh tonnes of phosphates. About Potash there would be gap of 18.64 lakh tonnes in 2002-03 which may go upto 21.83 lakh tonnes by 2006-07 since there is no availability of Potash in the country and the quantity is imported.

1.32 About meeting this gap between demand and supply the DOF in a written note has stated as under:-

“The above figures assume continued production from existing fertilizer plants at 100% capacity utilization throughout the 10th plan and additional supply from projects under implementation (Namrup revamp project & GSFC's DAP project) from 2003-04 and Oman India Fertilizer Project from 2006-07 at 100% capacity. Supply from no other projects has been considered till 2006-07. The actual fertilizer demand/consumption in 2002-03 is likely to be lower than the demand projected by the Working Group as above, thereby reducing the demand-supply gap further.”

1.33 The Department further informed about its plans to meet the gap between demand and supply in Phosphates by the end of the current Plan and stated in a written note:-

“India has also achieved near self-sufficiency in case of DAP as its annual installed capacity has reached to a level of nearly 70 lakh MT while the maximum DAP consumption was 69 lakh MT achieved so far in 1999-2000. In 2000-01 and 2001-02, DAP consumption was to the tune of Rs. 58.8 lakh MT and 61.9 lakh MT (estimated).

In the Tenth Plan period, in the first year, i.e. 2002-03, there has been about 25% less demand of fertilizer as compared to projected estimates mainly due to drought conditions in many parts of the country. Therefore, in 2002-03, the projected gap of 51.6 lakh MT is not likely to be materialised and the supply is expected to be in excess of the demand. In the phosphate sector, although in the first year 2002-03, the expected import of DAP is unlikely to exceed 3 lakh MT as actual import, so far, has been of the tune of 1.5 lakh MT. However, the extent of actual imports for each year depends on monsoon performance, resultant cropping pattern in each crop season and general economic scenario in agricultural sector. Moreover, considering the current WTO regime, this will also be dependent upon the domestic DAP price and international price vis-a-vis the price of imported raw materials/intermediates for DAP.”

1.34 In view of current stagnation in demand of Fertilizers, the Committee during the course of examination of Demands for Grants wanted to know from DOF what would be the demand in the coming three years and how it would be met, the DOF in a written note stated as under:-

“As per the Working Group on fertilizers for the Tenth Five Year Plan, the projection of demand and production for the next three years in respect of urea are as under:-

(LMT)

Year	Demand of urea	Production under alternative – I at 90% Cap utilisation	Production under alternative-II at 100% cap. Utilization
2003-04	221.18	193.33	215.22
2004-05	228.10	194.75	216.51
2005-06	235.03	196.16	217.94

The demand supply gap will be met from imports. However, in view of stagnation in growth of urea consumption in last three years, demand projections as envisaged by Working Group of Xth Five Year Plan seem to be on the higher side. In any case, given the availability of production from Oman India Fertilizer Company (OMIFCO) from 2004-05 onwards, the demand-supply gap will further be reduced by 16.52 lakh MTs in Alternative-I in 2005-06 and 2006-07 and there would actually be some surplus in the year in Alternative-II.”

Since gestation period for new/major expansion of fertilizer projects is 3 years, supply projections for other fertiliser nutrients beyond 2006-07 has not been discussed by the Working Group.”

(b) Demand Projections during 11th Plan (2007-2012)

1.35 As per FAI estimates the demand projections for different fertilisers during 11th Plan (2007-2012) would be as under:-

In lakh tonnes

Five Year Plan		Demand Projections			
		N	P	K	Total
11 th Plan period (2007-08 to 2011-12)					
(i)	2007-08 (1 st year of the Plan)	143.72	74.32	22.66	240.45
(ii)	2011-12 (terminal year of the 11 th Plan)	161.17	92.84	26.30	280.85

1.36 The Committee observed that as against the demand of fertilisers during Xth Plan period, the demand for N, P and K during 11th plan period (2007-12) may go still higher. The Committee, therefore, wanted to know as to how the Department proposed to fill the gap. In response the Department apprised as under:-

“Normally, gestation period for new/major expansion of fertilizer projects is 3 years. Hence, supply projections beyond 2006-07 has not been indicated. Entire requirement of K is imported.”

1.37 Regarding creating new capacities in the urea sector the Committee have noted the reply tabled in Lok Sabha in response to Question No. 3777 dated 8th April, 2003 which reads as under:-

“At present, there is no proposal for setting up any new gas based fertilisers plants in the Public Sector in this country. However, KRIBHCO, a Multi-State Cooperative Society under the administrative control of Department of Fertilisers has revived its proposal for expansion of its existing urea production capacity at Hazira in Gujarat by setting up an additional Ammonia-Urea stream.”

1.38 However, in some other context, the Department has submitted before the Committee that IFFCO and RCF proposed to revive their pending grassroot Nellore and Thal plants. Approval in principle for these plants was accorded in 1999 but their implementation could not commence as the promoters had rethinking on the economic

viability of these plants. Government have rather retained these plants in 10th Plan for implementation.

1.39 The Committee after having examined the demand of fertilisers during 10th Plan (2002-07) and 11th Plan (2008-2012) period, find that as against the demand during the first year of 10th Plan i.e. 2002-2003 of 123 lakh tonnes of nitrogen and 55.05 lakh tonnes of phosphates, the supply position is 120.58 lakh tonnes and 52.31 lakh tonnes respectively which means there is a gap of 2.42 lakh tonnes of Nitrogen and 2.74 lakh tonnes of phosphate during the first year of the current Plan. The total gap comes to 5.16 lakh tonnes. Similarly the Committee find this gap may further rise to 25.32 lakh tonnes by the end of the Plan i.e. by 2006-07. Out of this 25.32 lakh tonnes the gap for Nitrogen would be of the order of 9.18 lakh tonnes and for Phosphates it would be 16.14 lakh tonnes. For bridging the gap between demand and supply of Nitrogen the DOF has informed that additional supply from Namrup Revamp Project by 2003-04 and from Indo-Oman Fertiliser Project by 2006-07 at 100% capacity is expected. Similarly for Phosphate, supply from Gujarat State Fertiliser Corporation Limited (GSFC)'s DAP project is expected by 2003-04. The Committee have been informed that supply from no other project is expected till 2006-07. The actual demand during 2002-03 is stated to be 25% lower than the projected demand thereby reducing demand-supply gap further mainly due to drought conditions in many parts of the country. Similarly for phosphate sector the Committee has been informed that the demand of DAP may also not materialise due to various reasons like poor monsoon and general economic scenario in agricultural sector.

1.40 The Committee do not find the Government serious in making plans for meeting the fertiliser requirements ten years hence. The demand and supply projections for 11th Plan (2007-2012) indicate that the gap between demand and supply is expected to be around 70 lakh tonnes approximately for Nitrogen and Phosphates. The Government do not have exact figures regarding availability of fertilisers at the end of 11th Plan. This Committee had in their earlier reports recommended that Government should accord final investment approval in respect of those mega plants for which in principle approval has been given. The Committee note the Minister's statement in Lok Sabha made on 8th April, 2003 that at present there was no proposal for setting up new gas based fertiliser plants in Public Sector. As against this, the Department has informed the Committee that there was proposal to revive pending grassroot urea plants namely, Nellore and Thal. From these two statements, the Committee infer that Government are taking this issue casually. The

Committee, therefore, observe that Government should announce their final decision on the future of pending mega projects. This will help to end uncertainty.

(Recommendation No.5)

1.41 The Committee had also observed that Department of Fertilisers should facilitate setting up urea plant in Tripura since there is availability of gas in that area. The Committee are glad that the Department has responded positively to the Committee's observations viewing the impending gap between demand and supply of Urea, the Committee's observation assumes more importance. The Committee, therefore, desire that Department of Fertilisers should extend all necessary help in setting up gas based fertiliser plant in Tripura.

(Recommendation No. 5 A)

The Committee note that with increased capacity utilisation of the existing plants in the country, the production can increase further by 10 to 20%. the Committee are aware of the feedstock problem. They learn that if permitted by the Government, Urea can be exported at remunerative price. It is hoped that by next year, there will be sufficient availability of LNG in the country and obviously for fertiliser sector also. The Committee desire that Government should explore the possibility of exporting Urea if not now after 5 to 7 years when the country starts getting urea from Oman Project and our internal feedstock position improves.

(Recommendation No. 6)

CHAPTER II

CONSUMPTION OF FERTILISERS

(A) Global Consumption of fertilisers vis-à-vis that of India

According to the Fertiliser Association of India (FAI) statistics the following are the global per hectare fertiliser consumption figures under permanent crops vis-à-vis that of India:-

Continent/ Country	Fertiliser consumption of (N+P ₂ O ₅ +K ₂ O) during 200-01 (in kg.) per hectare
In Africa	
Egypt	385.8
Morocco	37.2
South Africa	48.2
In North & Central America	
Canada	54.2
Maxico	67.1
USA	103.4
South America	
Brazil	114.0
Chile	212.9
Columbia	144.8
Asia	
China	254.2
India	90.0
Pakistan	135.1
Sri Lanka	128.9
Europe	
France	211.7
U.K.	285.8
Germany	228.2

2.2 On perusal of the above figures the Committee found that fertiliser consumption is very very low in India as compared to other nations. For instance in Egypt it is 385.8 kg whereas in South American nations of Chile and Brazil it is 212.9 and 114 kg. Finally in Asia whereas the fertiliser consumption of China and Pakistan is 254.2 and 135.1 kg respectively, in India it is as low as 90 kg. per hectare.

2.3 However, the growth rate in fertiliser consumption rose steeply along with increase in irrigation area. The following statistics bear out the fact:-

Year	Fertiliser Consumption (in lakh tonnes)	Gross Area irrigated (million hectare)
1950-51	0.07	23.1
1960-61	0.29	27.98
1970-71	22.5	38.19
1975-76	28.9	43.36
1980-81	55.1	49.77
1985-86	84.7	54.28
1990-91	125.4	62.47
1991-92	127.2	65.1
2000-01	167.02	65.1

2.4 The estimated per hectare consumption of fertiliser nutrients for cropped urea during 2001-02 in some of the major States is as under:-

S.No.	State	Per hectare Nutrient (N+P+K) consumption in kgs.
1.	Andhra Pradesh	143
2.	Karnataka	101
3.	Tamil Nadu	142
4.	Gujarat	86
5.	Madhya Pradesh (including Chhattisgarh)	40
6.	Maharashtra	76
7.	Rajasthan	37
8.	Uttar Pradesh (including Uttranchal)	130
9.	Bihar (including Jharkhand)	87
10.	West Bengal	127
	All India	90

2.5 The per hectare consumption figures of fertilisers in India vis-à-vis those in some other countries have made the Committee to note with concern that ground situation of fertiliser consumption in India is not satisfactory. As against consumption level in Egypt and U.K. of around

385.8 kg. and 285 kg. per hectare and that in neighbouring China of 254 kg., the per hectare consumption of fertilisers in India is as low as 90 kg which is even lower than the level of 135 kg and 128.9 kg in Pakistan and Sri Lanka respectively. The Committee, therefore, feel that there is greater scope of increased consumption of fertilisers in India but it depends on various factors such as irrigation facilities, farmers education etc. The Committee are aware that various official and non-official organisations are engaged in educating the farmers but it needs to be broadened. The Committee would like the Department of Fertilisers to expand the farmers education programmes by involving Agricultural Universities.

(Recommendation No. 7)

2.6 The Committee regret to note that barring some States like Andhra Pradesh, Tamil Nadu and Uttar Pradesh, the per hectare consumption of fertilisers is far from satisfactory. For instance, in large States of Maharashtra, Rajasthan, Madhya Pradesh it is as low as 76, 37 and 40 kilograms respectively. The Committee feel that this position needs to be improved. Although State Governments are already doing their best in this regard but the Committee recommend that an integrated plan be drawn to identify the hurdles in the way of increased consumption of fertilisers. The Committee wish that Department of Fertilisers should perform the role of facilitator in this task.

(Recommendation Sl.No.8)

(a) Consumption trends of Fertilisers

2.7 The Committee pointed out that consumption level of fertilisers during the last five years viz. 1996-97 to 2000-01 has remained stagnant the range between 190.25 lakh tonnes to 2001 lakh tonnes. The Committee then wanted to know the season wise break-up of the assessed demand and consumption of fertilisers, during these years. The DOF in a written note informed:-

(in lakh MT)

YEAR	SEASON	ASSESSED REQUIREMENT	CONSUMPTIO N	% VARIATION
1996-97	KHARIF	100.94	92.28	-8.58
	RABI	103.44	97.97	-5.29

1997-98	KHARIF	101.88	94.79	-6.96
	RABI	109.18	101.40	-7.13
1998-99	KHARIF	104.80	98.93	-5.60
	RABI	110.74	105.03	-5.16
1999-00	KHARIF	106.19	101.34	-4.57
	RABI	110.99	101.44	-8.60
2000-01	KHARIF	107.60	96.96	-9.89
	RABI	99.41	94.91	-4.53
2001-02	KHARIF	105.62	97.06	-8.10
	RABI	107.44	104.71*	-2.54

* Estimated

2.8 The Committee further wanted to know the nutrient wise consumption of urea, DAP and MOP fertilisers in the country during the last ten years, the DOF in a written note supplied the following data:-

(lakh MTs)			
YEAR	UREA	DAP	MOP
1991-92	140.04	45.18	17.01
1992-93	149.06	40.52	9.74
1993-94	158.10	34.80	10.52
1994-95	171.12	35.86	12.70
1995-96	179.09	34.51	13.92
1996-97	190.25	36.24	11.98
1997-98	196.16	53.76	17.29
1998-99	203.96	58.28	16.21
1999-00	202.78	69.37	20.49
2000-01	191.87	58.85	18.29
2001-02 (Estimated)	199.17	61.91	19.92

(i) **Extent of Stagnation in Consumption of Urea, DAP and MOP**

Extent of stagnation in consumption of Urea

2.9 As regards the consumption of urea it may be seen that it has risen from 140.4 lakh tonnes in 1991-92 to 196.16 lakh tonnes in 1996-97 whereas from 1997-98 to 2001-02 it has stagnated between 196.16 lakh tonnes to 191.87 lakh tonnes (Estimated).

Stagnation in Consumption of DAP

2.10 Similarly about consumption of DAP in the country it may be seen that it has risen from 45.18 lakh tonnes in 1991-92 to 53.76 lakh tonnes in 1997-98 . However, thereafter it has stagnated to the level of around 58.28 to 61.91 lakh tonnes from 1998-99 to 2001-02 (estimated).

Stagnation in Consumption of MOP Potash

2.11 As regards stagnation in consumption of MOP it may be seen that it has remained between 17.01 lakh tonnes in 1991-92 to 20.34 lakh tonnes in 2001-02.

2.12 Asked about the reasons behind less consumption of DAP and MOP during the last three years, the DOF in a written note stated as under:-

“The consumption level of fertilizers is dependent significantly upon the weather conditions, cropping pattern and fertility of the soil. The overall consumption in the country also varies with the pattern and extent of rainfall during monsoon season specially when more than 60% of the agricultural area in the country is rainfed. It may be noticed that the DAP and MOP consumption has been increasing steadily from 1996-97 onwards except for the year 1999-2000 when the overall fertilizer consumption was quite high. However, consumption of all the major fertilisers was adversely affected during the last year on account of drought like conditions in many parts of the country.”

(ii) Reasons for stagnation in Consumption

2.13 In order to go into the reasons of stagnation in demand of fertilisers, a discussion was conducted by an accredited Association viz. Fertilisers Association of India (FAI). It bifurcated the entire period from (1950 to 2002) in terms of Pre-Reform and Post-Reform periods. Pre-Reform Period is (1950-92) and Post Reform Period is 1992-2002. This Association has attributed uncertain policy environment and hike in price of fertilisers during Post Reform Period (1992-2002) as a major reason for stagnation in Demand of Fertilisers. This is discussed in subsequent paragraphs.

Demand scenario during Pre-Reform Period (1950-92)

2.14 Demand scenario during this period is characterised and influenced by various factors like irrigation, introduction of High Yielding Variety (HYVs) and favourable investment in fertilisers sector. The following is fertiliser consumption and foodgrain production during the pre-reform period (1950-92) in India:-

Year	Fertilizer consumption (lakh tonnes)	Foodgrain production (mt)	Gross area irrigated (million ha.)	Gross area HYV (million ha.)
1950-51	0.7	50.82	23.1	-
1960-61	2.9	82.02	27.98	-
1970-71	22.5	108.42	38.19	15.38
1975-76	28.9	121.03	43.36	31.89
1980-81	55.1	129.59	49.77	43.08
1985-86	84.7	150.44	54.28	55.42
1990-91	125.4	176.39	62.47	64.98
1991-92	127.2	168.37	65.1	64.72

2.15 The Committee found that fertiliser consumption has increased both in terms of cropped area and consumption. For instance fertiliser consumption rose from 70,000 tonnes in 1950-51 to 2.89 million tonnes in 1975-76. With the introduction of Retention Price Scheme in 1979 it increased to 5.51 million tonnes in 1980-81 and 12.54 million tonnes in 1990-91.

Demand Scenario during Post Reform Period (1991-92 to 2001-2002)

2.16 The Committee found that during this period with the start of reforms by the Government, uncertain pricing environment and various non-pricing factors influenced consumption. During this period, decontrolled P&K fertilisers resulted in steep hike in their prices adversely affecting their consumption. In order to understand the demand scenario during the Post-Reform Period, the Association mentioned earlier has sub-divided this into two Phases i.e. Phase I(1991-92 to 1995-96) and Phase II (1996-97 to 2000-2001).

Fertiliser Consumption in Phase I (1991-92 to 1995-96)

2.17 In this phase as the prices of P&K rose sharply and with their consumption declining, their ratio to Nitrogen got distorted. Recognising this Government introduced adhoc concession scheme. The All India consumption of N, P and K during 1991-92 to 1995-96 has been as under:-

(in lakh tonnes)

All India consumption of N, P₂O₅, K₂O , N+P+K urea and DAP

Year	N	P₂O₅	K₂O	Total	Urea	DAP
1991-92	80.46	33.21	13.60	127.28	140.03	45.17
1992-93	84.26	28.43	8.83	121.54	149.05	40.52
1993-94	87.88	26.69	9.08	123.66	157.76	34.80
1994-95	95.07	29.31	11.24	135.63	171.11	35.89
1995-96	98.22	28.97	11.55	138.76	179.09	34.51

2.18 It came out during the course of examination that in 1995-96 the total fertiliser consumption was 138.76 lakh tonnes as against 127.28 lakh tonnes in 1991-92 representing a growth of 1.2%. However, in the case of P&K it dropped to 29 lakh tonnes and 11.55 lakh tonnes from the level of 33.21 lakh tonnes and 13.6 lakh tonnes in the corresponding period.

2.19 The extent of stagnation in consumption could be seen from the following statement showing zone-wise compound growth rate of fertilisers consumption during 1991-92 to 1995-96:-

Zone-wise consumption

(In Percentage)

Fertiliser nutrient	East	North	South	West	India
N	2.8	2.2	1.6	2.9	2.3
P	-1.4	-1.2	-1.3	-0.5	-1.0
K	-0.1	-1.2	-0.2	-0.7	-0.4
Total	1.4	1.4	0.5	1.6	1.2

2.20 The Committee found that as compared to growth of 2.3% of nitrogen the growth of P and K was -1.0 and -0.4. This was due to steep price-hike due to their decontrol in 1992.

2.21 The zone-wise consumption trends show that South Zone registered compound growth of only 0.5% in total fertiliser consumption as against 1.4% in East and North Zones and 1.6% in West Zone. The reduction in consumption of P and K led to distortion of N:P:K ratio at the following magnitude from 1991-92 to 1995-96.

Ratio of Consumption of nutrients in India

<u>Year</u>	<u>N:P:K</u>
1990-91	4:1.60:0.67
1991-92	4:1.63:0.64
1992-93	4:1.35:0.42
1993-94	4:1.21:0.42
1994-95	4:1.24:0.8
1995-96	4:1.18:0.47

2.22 The zone-wise break-up of fertiliser consumption during Phase I (1991-92 to 1995-96) is as follows:-

(In percentage)

State	N	P	K	Total
East	2.8	-1.4	-0.1	1.4
Assam	3.2	-4.3	11.4	4.4
Bihar	2.7	-0.8	1.8	1.9
Orissa	3.4	-2.1	0.5	2.0
West Bengal	2.7	-1.4	0.2	1.1
North	2.2	-1.2	-1.2	1.4
Haryana	2.8	-1.4	-4.1	1.8
Himachal Pradesh	0.5	-8.9	-5.9	-1.3
Jammu & Kashmir	2.7	-5.7	-11.0	0.7
Punjab	1.3	-2.8	0.7	0.4
Uttar Pradesh	2.4	0.1	-1.1	1.9
South	1.6	-1.3	-0.2	0.5
Andhra Pradesh	2.0	-0.9	2.6	1.2
Karnataka	2.3	-2.2	-0.4	0.5
Kerala	0.4	-0.2	-1.6	-0.9
Tamil Nadu	-0.1	-0.8	-1.0	-0.5
West	2.9	-0.5	-0.7	1.6
Gujarat	2.3	-2.3	-2.1	0.8
Madhya Pradesh	2.2	-1.4	-3.0	0.7
Maharashtra	2.4	0.7	0.3	1.6
Rajasthan	5.7	0.8	-1.1	4.2

All India	2.3	-1.0	-0.4	1.2
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Fertiliser Consumption Phase II (1997-2001)

2.23 In the second half of 1991-2001, after the adhoc concessions were enhanced for P&K fertilisers the total fertiliser consumption increased to 167 lakhs tonnes in 2000-01 as against 143.1 lakh tonnes in 1996-97 as may be seen from the following figures:

All India Consumption of N, P₂O₅, K₂O total urea and DAP
(in lakh tonnes)

Year	N	P	K	Total	Urea	DAP
1996-97	103.01	29.76	10.29	143.08	190.24	36.24
1997-98	109.01	39.13	13.72	161.87	196.21	53.76
1998-99	113.53	41.12	13.31	167.97	203.96	58.28
1999-2000	115.92	47.97	16.78	180.68	203.96	69.36
2000-2001	109.20	42.14	15.67	167.02	191.86	58.89

2.24 The higher growth of P&K in second half was mainly due to price reduction because of increased concessions for P&K to remove the imbalance in N:P:K ratio.

2.25 The Committee are anguished to note that as against the assessed requirement of urea during 1998-99 to 2001-02 of around 213.06 lakh tonnes to 215 lakh tonnes, the consumption during the corresponding period has not matched as it is hovering around 199 lakh tonnes to 204 lakh tonnes. Coming to season-wise (Rabi and Kharif seasons) figures of assessed requirement vis-à-vis consumption, the Committee find that during the last five years the level of consumption has not matched assessed demand at all. Thus, the Committee find that there is stagnation in the consumption of Urea in the country during 1998-99 to 2001-2002. Similarly with regard to DAP the consumption stagnated at around 58 lakh

tonnes to 61 lakh tonnes except for 1999-2000 when it increased to 69 lakh tonnes during the same period. Like-wise for MOP the consumption remained at around 13 lakh tonnes to 17 lakh tonnes during this period.

2.26 As regards reasons for the above stagnation in fertiliser consumption the Committee agree with the findings of a study conducted by an independent Association that uncertain policy environment and hike in price of fertilisers during Post Reform Period 1992-2001 were the basic causes for this. In the light of these findings, the Committee recommend that at least uncertainty in policy matters be removed.

(Recommendation No. 9)

(B) Present Installed Capacity and Production and Availability during 10th Plan (2002-207)

2.27 The installed capacity and production of fertilizers in the country at the end of Eighth Five Year Plan, in the terminal year of the Ninth Plan and at the beginning of Tenth Plan (2002-03) are indicated below:-

(In lakh tonnes)

S.No.	Particulars	At the end of Fifth Plan (1996-97)	At the end of Ninth Plan (2001-02)	At the beginning of Tenth Plan (2002-03)
1.	Capacity			
	i) Nitrogen	97.77	120.58	121.10
	ii) Phosphates	29.05	52.31	53.60
2.	Production			
	i) Nitrogen	85.99	107.68	105.54
	ii) Phosphates	25.56	38.60	38.85 estimated

2.28 The Committee wanted to know the present installed capacity and actual production of each type of fertilizers. The DOF in a written note informed as under:-

“Details of product-wise, nutrient-wise annual installed capacity and production of various chemical fertilizers during 2001-02 are given below:

(in lakh tonnes)

Name of the product	Annual installed capacity			Production (2001-02)		
	Qty.	N	P	Qty.	N	P
Urea	210.79	96.96	0.0	191.72	88.19	-
A/S	6.71	1.41	0.0	5.54	1.16	-
CAN	9.42	23.5	0.0	1.80	.45	-
A/C	12.8	3.2	0.0	.80	.20	-
DAP	69.81	12.56	32.11	50.94	9.16	23.43
SSP	62.62	0.0	10.02	26.24	0.0	4.20
complexes	50.98	8.57	11.62	49.08	8.50	10.96
Total	411.63	122.19	53.76	326.16	107.68	38.60

The sector-wise share of N and P

2.29 The Sector-wise Installed capacity vis-à-vis their share in total installed capacity of fertilisers (as on 28.2.2003) is as under:-

S.No.	Sector	Capacity (lakh MT)		Share in % tage	
		N	P	N	P
1.	Public Sector	36.19	4.75	29.90	8.90
2.	Cooperative Sector	27.72	7.25	22.90	13.50
3.	Private sector	57.19	41.60	47.20	77.60
	Total	121.10	53.60	100.00	100.00

2.30 It may be seen that for Nitrogen around 47% comes from private sector, followed by 30% and 23% from Public and Cooperative sectors respectively. Similarly for phosphate 78% comes from Private sector followed by around 9% from Public and around 13% from Cooperative sectors. In other words private sector plays a dominant role both for Nitrogen and Phosphate.

(a) Production Constraints for Urea and DAP

2.31 The Committee pointed out that as against the present demand and installed capacity both for Nitrogen and Phosphate, their production is very low. The Committee wanted to know the reasons for low production. The DOF in a written note submitted as under:-

“The main reasons for low production of fertilizers during 2001 –02 were:-

- Inadequate and poor quality/leanness of natural gas supply mainly to gas-based urea plants.

- ii) *Equipment breakdowns in urea plant of FACT:Cochin-I, IFFCO:Aonla-I and SPIC:Tuticorin.*
- iii) Non-stabilization of production of DAP/complex fertilizer plant of IFFCO at Kandla during April-May, 2001 as a fallout of Gujarat earthquake.
- iv) Labour strike and shortage of phosphoric acid in Paradeep plant of PPL.
- v) Shortage of raw-materials and marketing constraints of DAP fertilizer.
- vi) Delay in commissioning of GSFC:Sikka-II DAP unit.
- vii) Non stability of DAP production in Paradeep plant of Oswal Chemicals & Fertilizers Limited and Dahej plant of Indo Gulf Corporation Limited during the year.”

2.32 The Committee further enquired about the steps being taken to match the production with demand/installed capacity, the DOF in a written note stated as under:-

“Fertilizer Industry is facing problems on 2 fronts for matching the production with installed capacity, first; limitation in availability of natural gas specially for gas based urea plants such as RCF Thal and KRIBHCO Hazira; second; on account of frequent shut down/break down of old vintage plants. Department of Fertilizer is pursuing with Ministry of Petroleum and Natural Gas to make available adequate and qualitative gas to fertilizer plants. Fertilizer companies are being advised to examine the possibility of adopting alternate source of LNG and to take steps for long term tie-up with prospective suppliers to overcome constraints in the domestic availability of gas. Many urea units have also installed dual fuel facility of naphtha for supplementing alternate feed. Capital additions are also recognized under Retention-cum-Price Subsidy Scheme (RPS) so as to encourage urea units to undertake investment for improving their efficiency by expansion/retrofitting/revamping of existing plants to overcome equipment breakdowns etc.

To encourage investment for increasing production capacity in the fertilizer sector, the following facilities/ concessions have also been made available to the fertilizer industry by the Government:-

- i) *Deemed Export Benefit to indigenous suppliers of capital goods to fertilizer projects provided such supplies are made under the procedure of international competitive bidding.*
- ii) Reasonable return on investment to the entrepreneurs under the Retention Price-cum-Subsidy Scheme, at present applicable to existing urea capacity.

- iii) Concession on sale of decontrolled Phosphatic and Potassic fertilizers.
- iv) Import of capital goods for setting up of new fertilizer plant/modernisation of existing units at a concessional rate of customs duty.
- v) Import of fertilizer raw materials and intermediates at a concessional rate of customs duty.”

(b) Steps for Availability of Urea

2.33 As per DOF sources production in public/ private and cooperative sector have been less than targets due to variety of reasons. These include gas limitations, equipment problem, production fluctuation etc. The Committee wanted to know the steps taken in the past and steps being taken for improving the production performance of Public Sector units, togetherwith a sector-wise and company-wise status of steps taken during the last three years for fertilizer production. The DOF in a written note informed as under:-

“The major problem being faced by the gas-based public sector fertilizer units in achieving the targetted production is the requisite quantity and quality of the gas. DOF has been constantly pursuing with the Ministry of Petroleum and Natural Gas to address this problem. The PSUs are also undertaking energy saving measures to reduce cost of production and to improve the production of fertilizers. Under the Retention Price Scheme (RPS), the capital investment made by a urea unit on specified energy saving devices is recognized soon after commissioning, while the energy savings achieved thereby is recognized three years later. This scheme has been introduced as an incentive for the urea units to go in for energy saving devices.

Apart from the above, Government has been extending plan loans to the fertilizer PSUs which need financial assistance for carrying out the renewal and replacements of the old and worn out equipment in their plants for improving their production. Such renewal and replacements are also carried out by the other fertilizer PSUs out of their own internal/external resources.”

(c) Steps for Availability of decontrolled fertilisers viz. DAP and MOP and SSP Fertilisers

2.34 To ensure availability of DAP and MOP when their movement and distribution is decontrolled in the country, besides, monitoring their availability position regularly at the State level by the DOF in close association with State Governments, the Government is currently implementing Buffer Stocking Scheme to tide over artificial shortages or sudden spurt in demand. Government has nominated IPL to maintain buffer

stock of MOP. Regarding the supply of DAP, their availability and demand is assessed regularly during the Zonal Conference of Kharif and Rabi season organized by Department of Agriculture & Cooperation (DAC). The regular monitoring of availability in different states, an interaction with FAI and State authorities also ensures that there is no shortage of DAP, MOP and other decontrolled fertilizers.

Apart from this, the Government is running Special Freight Scheme for States like J&K, Himachal Pradesh and such other inaccessible areas where additional transport subsidy is being provided to State Marketing Federations. This Scheme helps these Federations to distribute fertilizer taking away from the rail heads and other bulk depots of various companies.

2.35 About availability of DAP the installed capacity has also reached to the level of nearly 70 lakh MTs which can meet the present demand of the country. Due to constraint in availability of gas and near total dependence of the country on imported raw materials for production of Phosphatic fertilisers, the Government have been encouraging Indian Companies to establish joint venture production fertilisers with buy back arrangement, in other countries which have reserves of natural gas and rock phosphates.

Joint Ventures Abroad

2.36 In this connection joint ventures in Senegal, Jordan and Morocco are already in operation. Joint Venture in Senegal has been set up with participation of Government of India, IFFCO and SPIC for production of phosphoric acid and finished Phosphatic fertilisers. At present its installed capacity is 7 lakh tonnes. Similarly in Jordan a Joint Venture is between SPIC and Jordan Phosphate Mixture Company Ltd./ for production of phosphoric acid of 2.24 lakh tonne per annum. In Morocco another joint venture is between Chambal Fertilisers & Chemicals Ltd. (CFCL) and Office Cherifien Du Phosphates (OCP) Morocco to produce 3.30 lakh tonne of phosphoric acid.

2.37 Besides, the demand of complex fertilizers and Single Super Phosphate (SSP) in the country is met wholly through indigenous production. Since, there is no production of Muriate of Potash (MOP) in the absence of its exploitable reserves, the entire MOP requirement of the country is met through import.

Sources of Availability

2.38 Availability of controlled fertilisers viz. urea is done under ECA allocations system. In the case of urea there are two sources to arrange supply as per ECA allocation to each State. The first is manufacturer's opening stock available in various States as on 1st April for Kharif and 1st October for Rabi. The second source is indigenous production of urea by various companies/societies during the respective crop season. After covering the opening manufacturers stocks under allocation, the balance demand is met through indigenous production. The gap between the demand and indigenous availability, if any, is managed through imports on Government accounts.

Present Availability of Urea

2.39 The demand and availability of urea is done on zone-wise basis., For this purpose entire country has been divided into five zones for two crop seasons Rabi season (Oct.- March) and Kharif (July-Sept.) every year. Given below are names of zones and major States covered thereunder:-

S.No.	Name of zone	Major States covered
1.	South	A.P., Karnataka, Kerala and Tamil Nadu
2.	North	Haryana, Punjab, U.P.
3.	West	Gujarat, M.P. Maharashtra, Rajasthan
4.	East	Bihar, Orissa and West Bengal
5.	North East	Assam and other North Eastern states

2.40 Deptt. of Fertilisers has given the following figure about the demand and availability of major fertilisers during 2002-03:-

(in lakh MTs)

Product	Season	Assessed Demand	Projected Availability	Likely sales
Urea	Kharif 2002	107	108.2	88.00
	Rabi 2002-03	106.7	123.0	-
DAP	Kharif 2002	31.98	35.45	22.00
	Rabi 2002-03	40.9	45.37	-
MOP	Kharif 2002	14.5*	16.0	11.00
	Rabi 2002-03	15.2*	16.50	-

* Including requirement of 3 LMTs of MOP for complex.

Thus, no problem is envisaged in meeting the requirement of major fertilizers in the country during the current year of 2002-03.

2.41 The latest State-wise Demand, availability and sales of urea, DAP and MOP during 2001-02 has been indicated at **Appendix VII**.

(d) Shortages of Fertilisers

2.42 During the course of examination the Committee pointed out that the availability has been more than assessed demand yet in some of the following States, the availability is less than the demand during Kharif 2000 and Rabi 2000-2001.

(in 000 tonnes)

Name of States	Kharif 2000		Rabi 2000-01	
	Assessed Demand	Availability	Assessed Demand	Availability
Delhi	10.00	09.52	20.00	13.11
Himachal Pradesh	32.00	31.54	22.00	16.40
Tripura	13.00	12.49	16.35	13.07
Meghalaya	03.00	02.43	02.75	02.03

2.43 The Committee wanted to know the reasons for less availability in States like Delhi, Himachal Pradesh, Tripura and Meghalaya and what steps taken to meet the demand in these States, to normalise the supplies, DOF in a written note clarified as under:-

"In Himachal Pradesh, Tripura and Meghalaya, the demand assessment of urea is generally made on a far higher side to encourage more consumption in these States. Further, urea is marketed mainly by State institutional agencies in these States and they tend to lift urea from the allocated quantity from manufacturers only to the extent of actual requirement/sale to farmers and do not keep surplus stocks because of fund constraints. As a result, the availability in these States happens to be lower compared to their assessed demand but sufficient to meet the requirement/sale of urea. In addition, the manufacturers also keep stock of urea in Assam for supply to Tripura and Meghalaya, which is not accounted as availability to these States.

As regards Delhi State, there is 4% tax on sales of urea while there is no such tax in the neighbouring Haryana State. Because of this price difference, the farmers of Delhi prefer to purchase urea from Haryana and this lead to lower procurement from the allotment made to Delhi, thus resulting in lower availability.

The availability of urea in these States during Kharif 2000 and Rabi 2000-01 seasons were, however, sufficient to support the sales as can be seen from the following table:

(LMTs)

Name of the State	Kharif 2000		Rabi 2000-01	
	Availability	Sales	Availability	Sales
Delhi	9.52	3.20	13.11	6.76
Himachal Pradesh	31.54	28.07	16.40	15.50
Tripura	12.49	5.61	13.07	6.33
Meghalaya	2.43	2.12	2.03	1.83

There were no reports of shortage of urea from these States during the season.”

(e) Impact of Closure of fertiliser plants of HFC/ FCI on availability of fertilisers

2.44 The Government decided on 5th September, 2002 to close down fertiliser plants of Hindustan Fertiliser Corporation and Fertiliser Corporation of India. About closure of these plants, the Minister has given the following information, in Lok Sabha and Rajya Sabha:-

“The Government have decided to close down the following units of Hindustan Fertiliser Corporation (HFC) and Fertiliser Corporation of India (FCI) and Pyrites Phosphates and Chemicals Ltd. (PPCL) as they have not been found techno-economically viable-

Sl. No.	Name and Location of the Plant	State	Installed capacity	
			Nitrogen	Phosphates
1	Ramagundam (FCI)	Andhra Pradesh	1.51	0.00
2	Barauni (HFC)	Bihar	0.85	0.00
3	Sindri (FCI)	Jharkhand	1.51	0.00
4	Korba Project (FCI)	Chhatisgarh	-	-
5	Talcher (FCI)	Orissa	1.52	0.00
6	Saladipura (PPCL)	Rajasthan	0.00	0.15
7	Dehradun (PPCL)	Uttaranchal	-	-
8	Gorakhpur (FCI)	Uttar Pradesh	1.31	-
9	Drugapur, Haldia & Fertiliser Promotion & Agriculture Research Division (HFC)	West Bengal	0.80	0.00

2.45 This issue also came up for discussion during evidence while examining Demand for Grants (2003-04) of Department of Fertilisers. The Committee pointed out whether the above closure would not adversely affect availability of fertilisers in the country, the Secretary (Fertilisers) deposed as under:-

“I come to the first observation that some of the units are closed – I am talking of urea mainly. There are today two major and the oldest units in the urea sector – Fertiliser Corporation of India and Hindustan Fertiliser Corporation. These two PSUs had units at various places which are closed. These units closed down for various reasons – not very recently. In fact, another unit which never functioned after all the expenditure, is Haldia. It never went into commercial production since,

1977 except a few grains of urea. Then, there are some other units which closed, and those units closed between 1990 and 1997. The Sindri Unit, which last produced about 75,000 tonnes of urea, closed in March, 2002. I am not, for a minute, rejoicing with this that these units are closed, but what I wanted to convey was that this has not really affected adversely the demand-supply position."

(f) Likely Availability during 10th Plan (2002-2007)

2.46 As regards likely availability during 10th Plan (2002-2007) period, the DOF has stated that the following would be Demand-supply and likely gap of fertilisers:-

(lakh MTs)

YEAR	DEMAND			SUPPLY		GAP		
	N	P	K	N	P	N	P	K
2002-03	123.00	55.05	18.64	120.58	52.31	2.42	2.74	18.64
2003-04	127.18	59.07	19.48	122.45	54.13	4.73	4.94	19.48
2004-05	131.16	62.77	20.26	122.45	54.13	8.71	8.64	20.26
2005-06	135.14	66.46	21.04	126.25	54.13	8.89	12.33	21.04
2006-07	139.23	70.27	21.83	130.05	54.13	9.18	16.14	21.83

2.47 Accordingly to DOF the above figures assume continued production from existing fertilizer plants at 100% capacity utilization throughout the 10th plan and additional supply from projects under implementation (Namrup revamp project & GSFC's DAP project) from 2003-04 and Oman India Fertilizer Project from 2006-07 at 100% capacity supply from no other projects has been considered till 2006-07.

2.48 Asked about new fertiliser plants that have been set up during the last five years in Public or Private Sector and whether DOF is satisfied with this place of setting up new units in the country, DOF in a written note stated:

"The following are major (new/expansion) fertilizer projects commissioned during the last 5 years (1997-2001) in the country :-

S N	Name	Location	Sector	Product	Addl. Cap. (in lakh TPA)	Year of Commissi- oning
1	Indian Farmers Fertilizer Cooperative Ltd. (IFFCO)'s Kalol Exp. Project	Kalol, Gujarat	Cooperative	Urea	1.50	Aug., 97
2	IFFCO's Phulpur Expansion Project	Phulpur, UP	Cooperative	Urea	7.26	Dec., 97
3	Madras Fertilizers Limited's Revamp Project	Chennai, Tamil Nadu	Public	Urea NPK	0.76 1.84	March, 98
4	Nagarjuna Fertilizers & Chemicals Ltd.'s Kakinada Expansion Project.	Kakinada, AP	Private	Urea	4.95	March, 98
5	Zuari Agro Chemicals Ltd. Goa DAP Expansion.	Goa	Private	DAP NPK	1.80 1.50	June 98 Nov., 98

6	IFFCO's Kandla, (Phase-II) Expansion project	Kandla, Gujarat	Cooperative	DAP NPK	3.70 2.27	August, 99
7	Hind Lever Chemicals Ltd.'s DAP/NPK project	Haldia, West Bengal	Private	DAP/ NPK	4.00	April, 99
8	Expansion project of Chambal Fertilizers and Chemicals Ltd., (Ph-II).	Gadepan, Rajasthan	Private	Urea	7.75	Oct., 99
9	Indo Gulf Corporation Ltd.'s DAP project	Dahej Gujarat	Private	DAP	4.00	October, 2000
10	Coromandel Fertilizers Ltd.'s, NPK expansion project	Vizag A.P	Private	NPK	1.25	July, 2000
11	National Fertilizers Ltd.'s Nangal expansion project	Nangal, Punjab	Public	Urea	1.48	1.2.2001
12	Oswal Chemicals & Fertilizers Ltd.'s phosphatic fertilizer project	Paradeep, Orissa	Private	DAP NPK NP	15.00 3.20 1.00	1.4.2001
13	Godavari Fertilizers & Chemicals Ltd.'s DAP project	Kakinada, A.P.	Jt. Sector	DAP	2.8	22.9.2001

There has, therefore, been steady build up of indigenous fertilizer production capacity during the last 5 years, which has resulted in the country achieving near self-sufficiency in N & P nutrients. “

2.49 The Minister of Chemicals and Fertiliser gave the following information in reply to a question in Lok Sabha which dealt with commissioning of projects during the next three years:-

Projects under implementation

Sl. No.	Name	Location	Sector	Product	Additional Capacity (In lakh tonnes)	Month/year of commissioning
1	Gujarat State Fertilisers & Chemicals Ltd. (DAP Expansion Project)	Sikka, Gujarat	Jt. Sector	DAP	3.96	Under trial commissioning since June 2002
2	Revamp of Namrup Plants of Brahmaputra Valley Fertiliser Corporation (BVFC)	Namrup, Assam	Public Sector	Urea	3.80	Units III and I commissioned in March, 2002. Unit II is expected top be commissioned by August 2003.
3	Oman Indian Fertiliser Project	Oman	Joint Venture	Urea	16.52	July, 2005

2.50 The issue of availability of gas as feedstock for fertiliser production came up for discussion during evidence when Secretary in the Department of Fertilisers apprised the Committee:-

“All subjects connected with the Long Term Policy on fertilisers including feedstock policy is currently under examination by a Committee under the Chairmanship of secretary (Fertilisers). We would be seeking guidance from this august Committee which is linked with feedstock policy which is most important issue associated with fertilisers. In this country there are three kind of fertilisers units. The initial units were started were fuel LSHS based. Subsequently consequently upon upgradation of technology and with production of naphtha, unit based on naphtha also started production. Thereafter gas was made available units based on gas also started production.”

2.51 About price of gas the Secretary (Fertilisers) stated:-

“Today price of gas in Arab countries is around 50 cents per MMBTU and in India it is US\$ 2.5 per tonne and price of naphtha is US \$5 per MMBTU in India. Therefore question arises that whether we should set up units on 50 cents per MMBTU basis at Arab or supply urea in the country from there or set up gas based units here in India. Or we should think of units which are getting gas from HBJ pipeline or units which are naphtha based.”

2.52 About difficulty in availability of gas, the Secretary (Fertilisers) further added:-

“Difficulties are being faced on availability of gas which is the domain of Ministry of Petroleum and Natural Gas. Whatever gas is available that is getting depleted. Indications are that nearly 30% cut in gas allocation to fertiliser sector is to be made, The major crisis is the units which are gas based if they do not get gas what they should do? The only alternate before them is to reduce their production but it is difficult to reduce production in chemicals plants off and on since they run 24 hours or these units should invest for use of naphtha and start production on mixed feedstock. If they produce by mixed feedstocks their cost of production increases. About naphtha based units after dismantling of APM. There is no control of Government on naphtha and as such the oil companies would themselves determine their prices. Since 40% of the total naphtha consumption of the country is done by fertiliser sector, we do not have any option to negotiate the price of naphtha and we can't import since we do not have infrastructure. We have to depend on Indian Oil company.”

2.53 Secretary (Fertilisers) further stated:-

“Today one thing is to be decided which is a policy matter on which guidance of august Committee is needed is in what way we give priority to fertiliser units in gas allocation. Meanwhile Hon'ble Supreme Court has given a judgement. In that judgement Hon'ble Supreme Court has directed that first of all transport sector be given gas. Due to this preference in allocation of gas supply to fertiliser sector has further been reduced. Today KRIBHCO, IFFCO and RCF plants are running on gas but these are not getting adequate gas. Therefore their most units run for some hours or one of their stream is closed. On one side we are pressuring these units to run efficiently on the other side the major crisis before these units is gas. Meanwhile an alternative also emerged that since there is no availability of gas within the country import of LNG be the solution. For this basically gas to be imported on liquefied form and be converted subsequently units gas in India. In this field only one proposal of setting up a plant at western Sector. After import of LNG. The gas would be put in HBJ pipelines. In rest of Eastern sector there is neither proposal of LNG import nor there are indications whatever gas would be available from Petronet that would be only after 2005.

Here two issues are pending before the Ministry of Petroleum and Natural Gas, one relates to what would be the infrastructure and other relates with investment. Even if suppose gas is imported is to be solved where it is to be put on HBJ pipelines particularly where there are naphtha units there is no pipelines

and if pipelines are laid whether so much of gas would be available. On investment part for existing fertiliser units the Gas Authority of India Ltd. (GAIL) and Indian Oil Corporation Ltd. (IOC) say they are unable to make huge investment. They say they want contract and payment in advance. These are issues which need to be discussed.”

2.54 The issue of restricted gas supply to RCF caught the attention of Bombay High Court. The Minister of Fertilisers and Chemicals stated in Lok Sabha on 8.4.2003 as under:-

“Pursuant to the directions of the Hon’ble High Court at Bombay in Writ Petition No. 3161 of 2002 between RCF Officers Association versus Union of India and others, a meeting was convened between the Ministry of Petroleum and Natural Gas and the Department of Fertilisers wherein it was decided that the available gas in the Uran region will be distributed among the consumers on prorata basis with special dispensation for a limited period to the Maharashtra State Electricity Board.”

Fertiliser Subsidy

2.55 The concept of fertiliser subsidy has been matter of discussion. One section of the people feel that subsidy is wasteful expenditure and should be removed whereas the other section has a strong feeling that fertiliser subsidy is not an obligation but essential for agricultural growth in the country. The following table indicates share of Agricultural subsidies in selected countries including India:-

Year 1999

Country	Total Subsidy US\$ billion	Per farmer In US \$	Per hectare In US \$
Canada	3.093	9000	52
EC	114.450	17000	831
Japan	58.885	26000	11792
USA	54.009	21000	129
OECD	282.780	11000	218
India	7.247	66	53

2.56 The Committee have the impression that even this subsidy is not reaching farmers. For the purpose of ascertaining whether the benefit of subsidy goes and industry or to farmers it is estimated how much price farmer has to pay for purchase of fertilisers assuming that import of fertilisers is open. It is believed that in India the subsidy estimates are influenced by domestic cost of fertilisers vis-à-vis what farmer actually pay.

Importance of Biofertilisers

2.57 Biofertilizers are cheap, renewable and eco-friendly bacterial inoculants which fixes atmospheric Nitrogen or solubilizes the native insoluble phosphates into the soluble form. The major biofertilizers are Rhizobium (for pulses and leguminous oilseeds), Azotobacter (for cereals and sugarcane), Azospirillum (for smaller millets), Blue Green Algae (for rice) and the Phosphate solubilizing organisms (for all crops). Depending upon the strain and the ecological conditions, it provides about 15-40 kg of Nitrogen per hectare and around 25 kg of Phosphate per hectare. It is observed that the Biofertilizers can supplement upto 25% of nutrient requirements of the crops.

Schemes and Institution for Promotion of biofertilisers

2.58 The Government of India have made efforts for production and promotion of Biofertilizers and launched a Central Sector Scheme, 'National Project on Development and Use of Biofertilizers' since the end of 6th Plan, which has continued till IX Plan. Under the scheme, a National Biofertilizer Development Centre (NBDC) has been established at Ghaziabad as a subordinate office of Department of Agriculture & Cooperation and 6 Regional Biofertilizer Development Centres (RBDC) each at Hissar, Jabalpur, Bangalore, Nagpur, Bhubaneswar and Imphal. The main objectives of the scheme are as under:-

- Production and distribution of biofertilizers like Rhizobium, Azotobacter, Azospirillum, phosphate solubilising micro-organisms and blue-green algae (which has been discontinued since October 2000). However, the NBDC and RBDCs are maintaining culture banks of different microbial strains for further production and uses.
- To organize training courses for extension workers/agriculture officers for increasing awareness about importance and use of biofertilizers.
- To organize field demonstrations/farmers' fairs for creating awareness about the use of biofertilizers among farming community.
- To create biofertilizers production facilities by providing central financial assistance.
- Quality control of biofertilizers.

Under this scheme, the Government provided non-recurring grants up to Rs.20.00 lakhs for setting up biofertilizer production unit of 150 metric tonnes (MT) capacity. The

grant-in-aid was given to public sector undertakings of fertilizers, cooperatives, NGOs and private agencies. This scheme has since been discontinued.

2.59 The NBDC/RBDCs have been organizing different types of training programmes for State Governments, Extension officers, industry and dealers, field demonstrations on farmers' fields and also publicity through print and electronic media to popularize the biofertilizers among the farmers.

Demand of Biofertilizers

2.60 Since biofertilizers can successfully be used in all major crops grown under different agro ecologies, their potential requirement is quite large. The estimated potential demand is around 66500 MT with the assumption of biofertilizers application in 25% of the gross cropped areas under different crops

Programme during X Plan

2.61 The production, promotion, quality control of biofertilizers has been made an important component of the new proposed scheme of 'National Project on Organic Farming' during X Plan. This includes provision for financial assistance for setting up of new biofertilizer production units to the extent of Rs.20 lakh for 150 metric tonnes capacity through back-ended capital subsidy of NABARD/NCDC, training, demonstration, promotion of biofertilizers and also its quality control.

Production Scenario

2.62 Though the authentic data is not available, the estimated production of biofertilizers in the country was 1000 MT when the National Project was effectively started during 1990-91. With sustained efforts, the number of production units and also the production capacity increased substantially and reached to the level of 18275 MT during 2001-02. Till now Government of India (both by DAC and DOF), has given financial assistance to 83 Biofertilizer Production Units (which includes 37 units during IX Plan). However, since 2 units did not avail the facility, presently there are only 81 Government of India assisted units with an annual production capacity of about 10,300 MT and the production is about

5155 MT during 2001-2002. Besides, there are 39 production units under public/private sector without GOI support with annual production capacity of around 8000 MT and their estimated production is around 5000 MT. Thus making a total production capacity of 18,275 MT and the likely production of 10,000 MT per annum. The State-wise number of Biofertilizer production units, their capacity and production have been indicated below:

	GOI financed unit			Other units	
	No. of units	Capacity (ton)	Production	No. of units	Capacity (ton)
Andhra Pradesh	3	250	80.17	2	77
Arunahcal Pradesh	1	75	-	-	-
Assam	4	525	62.32	-	-
Bihar	4	450	33.90	1	11
Gujarat	4	1300	661.94	-	-
Haryana	1	75	16.76	-	-
Himachal Pradesh	1	75	5.88	-	-
Karnataka	10	1350	517.55	5	680
Kerala	3	300	57.97	-	-
Madhya Pradesh	7	1125	1449.46	-	-
Maharashtra	17	2400	1089.88	6	4596
Orissa	4	525	100.62	-	-
Rajasthan	2	225	61.13	3	1052
Tamil Nadu	7	800	781.44	7	1009
Uttar Pradesh	4	300	161.62	10	300
West Bengal	4	375	42.68	2	234
Pondicherry	1	75	31.40	-	-
Meghalaya	1	75	-	-	-
Mizoram	1	75	0.17	-	-
Nagaland	1	75	-	-	-
Punjab	1	75	-	1	3
Delhi	-	-	-	1	3
Tripura	-	-	-	1	10
Total	81	10300	5154.89	39	7975

Total BF production capacity of GOI & other units, i.e., 10,300 + 7,975 = 18,275 tons

Estimated biofertilizer production by private entrepreneurs = 5000 tons

Estimated biofertilizers production by GOI & other units = 10154.89 tons

2.63 Details of State-wise Biofertilizer Production for last three years are as under:-

(in tonnes)

Name of States	1999-2000	2000-01	2001-02
Andhra Pradesh	128.67	84.14	170.62
Assam	234.78	64.02	62.32
Bihar	49.37	50.37	33.90
Delhi	95.13	199.84	0.74
Gujarat	654.68	776.32	662.51
Haryana	3.58	6.66	23.21
Himachal Pradesh	2.38	3.61	5.88
Jharkhand	34.24	38.06	29.21
Karnataka	503.84	637.11	702.07

Kerala	245.40	304.49	294.22
Madhya Pradesh	1713.07	1491.09	1756.21
Maharashtra	1125.29	1411.83	2547.58
Manipur	11.40	1.67	0.23
Orissa	33.07	74.21	100.62
Punjab	1.70	2.03	2.0
Rajasthan	220.52	317.25	326.13
Tamil Nadu	1808.81	1771.30	1946.34
Uttar Pradesh	449.15	520.76	203.61
West Bengal	281.73	367.78	184.72
Pondicherry	37.85	26.08	31.40
Total	7631.66	8148.62	9083.52

Constraints in promotion of biofertilizers and remedial measures

2.64 Biofertilizer being a living product, utmost care is needed at all the steps beginning from the production till the end use to preserve their microbial load and quality for effective response. The main constraints in its production are short shelf life, lack of quality control, lack of effective strains, poor storage facilities, unawareness and inconsistent crop response.

Since biofertilizer production is always demand driven, creation of demand among the farmers is one of the most important steps required towards promotion of biofertilizers. The problem of unawareness can be overcome by strengthening the ongoing publicity programmes. Use of efficient microbial strains, enhancement of shelf life through adoption of aseptic production technology and use of appropriate carriers as well as packaging material and strict adherence to quality control measures are some important ways to ensure effectiveness of biofertilizers and its promotion. Thus the R&D agencies need to be further strengthened so as to enable them devise suitable strategies to address these vital issues. This is proposed to be taken up during X Plan

Quality Control of Biofertilizers

2.65 The quality control of Biofertilizer is most crucial for effective response to the field crops. Presently, there is no regulatory mechanism to control the quality of biofertilizers. However, with the assistance of Bureau of Indian Standards, the specification of following 4 important biofertilizers have since been notified for ensuring their quality check by State Governments as well as the NBDC/RBDCs:-

Rhizobium	-	IS 8268:2000
Azotobacter	-	IS 9138:2000
Azospirillum	-	IS 14806:2000
Phosphate Solubilising Micro-organisms	-	IS 14807:2000

2.66 The issue of granting subsidy for agricultural sector has been attracting the attention of common man. Whereas one section of the society feels that it is wasteful and avoidable expenditure the other section feels that for agricultural security, subsidy is must. The Committee are of the firm opinion that subsidy should not be taken as donation but society's contribution, towards a cause which is, ensuring food security. The Committee in their earlier recommendations have emphasized that the mind set relating to concept of subsidy needs to be changed. The Committee are aware that the Expenditure Reforms Commission have also recommended phased removal of subsidy in agricultural sector. The Committee do not agree with this recommendation and strongly recommend that fertiliser subsidy should continue.

(Recommendation No. 10)

2.67 The Committee have reviewed the installed capacity vis-à-vis production of Nitrogen and Phosphates at the end of 8th Plan (1996-97) and 9th Plan (2001-02) and the beginning of 10th Plan (2002-2003). In this connection, the Committee find that production of Nitrogen and Phosphates has not reached the installed capacity under the period under review. For instance in Nitrogen, by the end of 8th Plan, 9th Plan and beginning of 10th Plan against the installed capacity of 97.77 lakh tonnes, 120.58 lakh tonnes and 121.10 lakh tonnes the production was as low as 85.99 lakh tonne, 107.68 lakh tonnes and 105.54 lakh tonnes. Similarly, for Phosphates as against the 29.05 lakh tonnes, 52.31 lakh tonnes and 53.60 lakh tonnes the production level was as low as 25.56 lakh tonnes, 38.60 lakh tonnes and 38.85 lakh tonnes (estimated). The Committee find that main reason for lower production for Nitrogenous fertilisers has been gas shortage whereas shortage of raw materials is main reason for lower production of Phosphate in the country. In this connection, the Committee have examined the sector-wise share in installed capacity and found that role of private sector in the industry is predominant being around 47% in Nitrogen and 77% in Phosphates. About gas shortage the Secretary (Fertilisers) has explained in detail the uncertain scenario before the Fertiliser industry. The Committee find that Naphtha as feedstock is not economically viable in view of its increased cost of production. The Committee have been informed that in view of gas shortage, Urea Units have been asked to search for alternative suppliers of gas in place of existing supplier. The Committee, therefore, feel that a clear policy in this regard is of paramount important. The Committee would recall that in their previous reports they had advised fertiliser units to explore the possibility of importing gas on exclusive

basis. However, the fertiliser industry did not pay heed to this advice. The Committee reiterate their earlier recommendation that Public Sector fertiliser units and cooperative societies should in combination form a separate body to import gas.

(Recommendation No.11)

2.68 The Committee find that in the absence of feedstock policy the present scenario still fluid since the feedstock policy is not yet finalised and as such status quo like situation prevailing in fertiliser sector. The Committee find that mater of finalisation of feedstock policy has been recommended by the Committee quite often and also in their latest Forty-First Report. The Committee reiterate their recommendation and urge the Government to finalise the feed stock policy quickly.

(Recommendation No. 12)

2.69 As regards production constraints for Phosphates production, the Committee find that it is mainly due to the following reasons mentioned against each unit:-

Unit	Reasons
IFFCO, Kandla	Non-stabilization of DAP production and earthquake in Gujarat.
Paradeep Plant of Oswal Chemicals & Fertilisers Ltd. (OCFL)	Non-stabilization of DAP production
Dahej Plant of Indo-Gulf Corporation Ltd. (IGCL)	-do-
Paradeep Plant of Paradeep Phosphate Ltd. (PPL)	Shortage of Phosphoric acid and labour problem

The Committee find that these constraints have to be resolved by DOF and the private units. The Committee, therefore, hope that Government would soon be tiding over these difficulties.

(Recommendation No. 13)

2.70 The Committee visualise that LNG shall start reaching India early next year. Fertiliser industry is expected to be the bulk consumer of this gas. But the basic problem is of providing infrastructure to transport it from port to the sites. The Committee learn that this issue has not been settled so far as GAIL and IOCL are reluctant to make huge investments to provide transportation facilities. The Committee feel that this issue should have been resolved by now. However, the Committee recommend that GAIL be directed to finalise a scheme for transportation of LNG from ports to consuming sites. Further, Secretaries in the Ministries of Petroleum and Natural Gas and Department of Fertilisers should hold joint meetings to ensure that issue of providing infrastructure for transportation of gas to fertiliser units is resolved during this calendar year.

(Recommendation No.14)

2.71 As regards impact of closure of various units of Hindustan Fertiliser Corporation Ltd. (HFC), Fertiliser Corporation of India (FCI) and Pyrites and Phosphates Chemicals Ltd. (PPCL) on the overall availability of fertilisers, the Committee find that although the Secretary (Fertilisers) has assured the Committee that such closure will not affect the availability scenario, yet the Committee feel that closure has various implications. The closure has deprived the eastern sector of the country of any fertiliser unit. Eastern India is backward in industrialisation and the closure of fertiliser units has further aggravated this position. Thousands of employees working in these units have been rendered jobless. This closure has also added to the unemployment. With the closure, the overall freight charges would also go up. The Committee feel that now that these units have been closed, the least the Government should do is to utilise the plants sites for industrialisation. The Committee had earlier recommended that Government should set up power generating units at the sites where fertiliser plants were located. The Committee reiterate their earlier recommendation.

(Recommendation No.15)

2.72 The Committee note that role of bio-fertilisers in supplying Nitrogen and Phosphate to the soil is very important since they supply 15-40 kg. of Nitrogen per hectare and 25 kg. of phosphate per hectare if applied properly. Main Bio-fertilisers are Rhizobium for pulses, Azotobacter for cereals, Azospirium for millets and Blue Green Algae for rice besides phosphates soluble organism for all crops. The Committee find that for their promotion a Central sector scheme, National Project on Development and use of biofertilisers had been in operation. The Committee also find that these fertilisers can be used in major crops and their potential is quite large at around 65 thousand tonnes if 25% of cropped area is put under their use. As regards, production of these fertilisers, the Committee find with dissatisfaction that as against the capacity of 18275 tonnes in 2001-02 their present production is only 10300 tonnes under 83 production units. The Committee find that in view of the importance of biofertilisers their both installed capacity as also production need to be substantially enhanced. In this connection the constraints like short shelf life, lack of quality control and poor storage facilities have been highlighted before the Committee. The Committee feel that these are small problems and DOAC is capable of addressing these. The Committee hope that the Department would initiate necessary action in this regard. The Committee feel that

Chemical fertiliser is being replaced by bio-fertilisers but find that Government are not proactive to the desired extent to popularise the use of this fertiliser extensively. The Committee learn that the Government have withdrawn Central Sector Scheme which was launched for production and distribution of bio-fertilisers. The Committee recommend that Government should prepare a new scheme on the pattern of earlier scheme and provide all financial assistance to make it successful.

(Recommendation No.16)

(C) Availability of fertilisers during 11th Plan (2007-2012) period

2.73 The Committee wanted to know the demand and availability position of fertilisers nutrients-wise during the XIth Plan period. The DOF furnished the following information:-

“If supply projections made by the Working Group at 100% capacity utilisation of existing domestic fertiliser plants in updated considering expected supply from Oman India Fertiliser Project and status of domestic projects under implementation/ consideration, the projections made by the Working Group for 10th Plan till 2011-12 would be as below:-

<i><u>In lakh tonnes</u></i>						
XIth Plan Period (2007-2012)	Demand Projections			Supply		
Year	N	P	K	N	P	K
2007-08	143.47	74.32	22.66	1. Normally, gestation period for new/major expansion of fertilizer projects is 3 years. Hence, supply projections beyond 2006-07 has not been indicated. 2. Entire requirement of K is imported.		
2008-09	147.83	78.55	23.51			
2009-10	152.31	83.03	24.41			
2010-11	156.93	87.80	25.34			
2011-12	161.71	92.84	26.30			

2.74 The Committee noted that in principle approved for four mega projects envisaging a capacity of 30.72 lakh tonnes of urea was accorded in June 2002 but the investment approval has been hold up since then. These projects are Hazira expansion, New Plant of Gorakhpur by KRIBHCO, Thal Expansion of RCF and New Plant at Nellore by IFFCO. The Committee wanted to know whether the Government is reviewing these projects for implementation purpose during 11th Plan period (2007-12), the DOF in a written note stated as under:-

“After the consideration of the four indigenous urea projects was deferred by the Government in June, 2000, DOF periodically held discussions with the promoters of these projects. The promoters

indicated that these projects will have to be considered afresh keeping in view the long term fertilizer pricing policy, impact of opening up of this sector under WTO commitments, updated demand-supply gap projections for fertilizers, feedstock policy for fertilizer production and viability of the proposed projects in the changed circumstances. An investment decision for planning availability of urea during the XIth Plan period (2007-12) through supplies from the deferred project proposals of PSUs/cooperative societies would have to await adequate demand-supply gap based on the trend of growth in urea consumption during the initial years of the Xth plan period, the viability of the investments under de-controlled environment envisaged under the proposed long term fertilizer policy, and availability and price of feedstock particularly natural gas/LNG.

2.75 On being further asked by the Committee about how do the Government plan to meet the projected demands of Nitrogen during 11th Plan Period particularly when these four mega projects stand deferred as on today, the DOF in a written note (Sept. 2002) informed:-

“The Government has not firmed up its policy to meet the projected demands of Nitrogen in the 11th Plan Period as the fertilizer industry is currently witnessing dynamic changes. The future policy of meeting the demand will be affected by the factors, such as, pricing and availability of feedstock including Liquefied Natural Gas (LNG), pricing policy for urea and change in regulating scenario in urea. Emerging WTO regime and global competition would also have bearing on the method of making up demand supply gap in the case of nitrogenous fertilizers. These factors are likely to crystallize in another two or three years then the Government proposes to review the demand and supply gap further. Moreover, the demand projected is also need to be reviewed as the first year demand projected for 10th Plan Period has also been found substantially on the lower side.

2.76 During the course of examination of Demands for Grants of DOF 2003-04 (March, 2003) the DOF has informed that in view of the reported new discoveries of gas the Government will review the proposal of Urea projects of Nellore, Thal and Hazira.

2.77 The Committee note with concern that projected supply of fertilisers during the XIth Plan Period (2007-12) is not available with the Deptt. of Fertilisers. The Committee find that the demand of fertilisers would be around 143 lakh tonnes for nitrogen and around 74 lakh tonnes for phosphates at the commencement of the plan. It may go further to around 162 lakh tonnes and around 93 lakh tonnes by the end of the Plan. The Committee have been informed that the Department of Fertilisers have not firmed up its policy to meet the projected demand of nitrogen as industry

is witnessing dynamic changes. The Committee were earlier informed that the future of pending mega projects was uncertain as their economic viability was under review. However, now the Government have again revived two out of four projects in view of new discoveries. The Committee are happy to note this. The Committee hope that Government will take early decisions on these projects and with their implementation, there will be enhanced availability of urea.

(Recommendation No.17)

CHAPTER III

DISTRIBUTION OF FERTILISERS

(A) Mechanism for controlled and decontrolled fertilisers

Distribution of different fertilisers viz. urea, DAP and MOP is done differentially. Since urea is controlled fertiliser, its distribution is done as per allocations made under Essential Commodities Act, 1955 and as per Retention Price Scheme (RPS) supported by Equity Freight Scheme (EFS) of Department of Fertilisers. DAP and MOP being decontrolled fertilisers (decontrolled w.e.f. August, 1992) these are outside the purview of Essential Commodities Act, 1955. Their availability is dependent on market forces of demand and supply operating within the parameters of Concession Scheme administered by Department of fertilisers.

3.2 In January 2003, Government announced New Pricing Policy which came into operation w.e.f. 1.4.2003. This new policy has changed the distribution of Urea. The new policy inter-alia envisages phased deregulation of distribution of urea. The following table shows old system vis-à-vis new system of distribution of urea:-

Old System (Prior to 1.4.2003)	New System (w.e.f. 1.4.2003)
1. Allocation of urea under Essential Commodities Act (ECA) 1955 to different States for Rabi and Kharif season based on demand assessed by Deptt. of Agriculture and Cooperation at the beginning of each cropping season in Zonal Conferences. These conferences are attended by representatives of State Governments, Fertiliser industry, Ministry of Railways besides Department of Fertilisers. The allocation on demand so assessed are then made to each State and supply linkages are made from each plant to each State. The system is based on multiple source of supply to States vis-a-vis diversified market to manufacturers.	<p>1. Restriction on ECA allocation for Kharif (April- Sept. 2003) upto 75% and upto 50% for Rabi (Oct. to March 2003-04) for one year period from 1.4.03 to 31.3.04 (stage I) has been imposed.</p> <p>2. After having evaluated Stage I scheme allocation of urea would be decontrolled for two years period from 1.4.04 to 31.3.2006 (Stage II) with the concurrence of the Ministry of Agriculture.</p> <p>3. The remaining urea production will be available to manufacturers for sale to farmers at MRP anywhere in the country.</p>
	4. The manufacturers would be entitled to sell urea to complex manufacturing units on the principle of import parity price to export with the condition that no subsidy / concession would be given on that quantity.
2. <u>Schemes for Support Freight two</u>	During 2003-04 the equated freight rate

schemes (i) Equated Freight Scheme and (ii) Special Reimbursement scheme for hilly states are functional.

(i) Equated Freight Scheme

Under this Scheme Equated Freight support is paid to manufacturers of urea to cover the cost of transportation from production point to consumer centres by rail and road.

The other rate is primary freight rate applicable from consumers Distt. level to block level.

(ii) Special Freight Reimbursement Scheme for hilly States

In order to ensure availability of urea in difficult hilly and remote areas this schemes is under implementation in addition to the Equated Freight Scheme.

would be worked out for the quantity of urea under ECA based on normative lead and rail road mix of each unit for the last three years i.e. 2000-01, 2001-02 and 2002-03. The average equated freight rate is Rs.467 per tonne for 2002-03.

For quantity outside ECA a reduction of Rs. 100 per tonne will be made on equated freight. The same level will apply to stage II.

Road component of the primary freight will be appropriately adjusted as per annual increase/ decrease in price of diesel in previous year.

No change. The Govt. will also have the right to issue special movement order under the EC Act as per demand and supply situation, particularly for difficult and remote areas.

3.3 The Committee note that the mechanism for distribution of controlled fertilisers viz. urea and decontrolled fertilisers viz. DAP, MOP and SSP fertilisers is not uniform. For instance urea being under price and distribution control, its distribution has been under Retention Price Scheme which includes two Schemes for distribution one 'Equated Freight Scheme' for the whole country and the other 'Special Freight Reimbursement Scheme' for remote and hilly areas. Distribution of urea to different States from various plants throughout the country is done under Essential Commodities Act 1955 by making specific allocations for States. As against this, distribution of decontrolled fertilisers is administered under the Concession Scheme. Under this scheme concessions are paid to the manufacturers after certification of sales from different State Governments. The Committee find that for urea the Government have brought out a new scheme de-regulating distribution control in phases. For instance ECA allocation for Kharif 2003 has been restricted upto 75% and for Rabi 2003-04 upto 50% under the New Policy for a period of one year (Stage I) and rest of allocation has been deregulated. Based on the review of this stage the entire distribution control is proposed to be decontrolled during the coming two years 2004 to 2006 (Stage II). The Committee apprehend that decontrol in distribution of urea would adversely affect its availability by and large. The Committee have already recommended in their Forty First Report (April 2003) that a regular system should be established through which availability of urea and other

fertilisers can be assured across the country at affordable prices. Thus, the Committee had recommended review of the de-regulation of urea. The Committee reiterate their recommendation.

(Recommendation No.18)

(i) Norms for distribution of Fertilisers

3.4 The Committee wanted to know the norm governing distribution for different fertilizers in the country. The DOF in a written note informed:-

“At present, urea is the only fertilizer which is under price, movement and distribution control of Government of India. All other fertilizers are decontrolled and their distribution is dependent on market forces of demand and supply.

In the case of urea, the requirement of each State is assessed by the Department of Agriculture Cooperation (DAC) and EC allocations by the DOF are made to meet the requirement so assessed. As regards norms governing distribution of fertilizers among various channels such as cooperative network, private or Government agencies within the State, this falls within the purview of the State Governments, who are responsible for distribution of urea within the State.”

3.5 The Committee also enquired whether the norms differ from State to State, if so whether different distribution mechanism for different States did not lead to shortage of fertilizers. The DOF in a written note explained:-

“ While the Department of Fertilizers in Central Government is responsible for making available timely and adequate quantity of fertilizer through out the country, the distribution within the State is ensured by the concerned State Government. Some States prefer to distribute fertilizer only through their State institutional agencies including cooperative network while in others, it is distributed both through State agencies and the private trade. However, different distribution mechanisms adopted by the State Governments do not affect the supply position within the State for making these fertilizers available to the farmers. No complaint of shortage of fertilizers including due to this reason has been reported from any State/UT in recent times.

3.6 The Committee noted that controlled fertiliser is also distributed under Equated Freight Scheme and wanted to know the percentage of fertilisers transported by road and rail and at what rate. DOF furnished the information as under:-

“The statement below gives the movement of fertilizers by rail and road during the last six years:

Year	Rail (lakh MTs)	Percentage of total lead	Road (lakh MTs)	<u>Percentage</u> of total lead	Total	Average lead by Rail (KMs)
1996-97	208.8	67	100.4	33	308.6	881
1997-98	265.9	75	97.4	25	363.3	854
1998-99	276.9	76	89.8	24	366.7	826
1999-00	310.4	78	86.0	22	396.4	846
2000-01	271.4	75	92.8	25	364.2	862
2001-02	270.9	74	95.0	26	365.9	855

The rate of transportation both for rail and road (equated freight) in respect of urea in worked out on weighted average basis and it was Rs. 446 per tonne for the year 2000-01. The equated freight is not worked out separately for road and rail and for each Kilometer.”

3.7 Another aspect regarding distribution of urea pertains to review of freight rates during the Stage I (2003-04) of the new Pricing Policy. The Committee find that the present freight rate is Rs. 467 per tonne of urea. This rate is to be revised based upon the experience during the last years i.e. 2000-01, 2001-02 and 2002-03 on normative lead and rail-road mix of each unit. The Committee find that during the last five years the percentage of distribution of urea by rail has been in the range of around 74% against 26% by road. The Committee note with satisfaction that percentage of transportation by road is gradually being reduced which presumably is in economic interest. The Committee would like the fertiliser industry to make transportation more cost-efficient.

(Recommendation No.19)

3.8 The Committee are glad to note that under the new policy no change has been made in Special Freight Reimbursement Scheme for hilly States. The Committee are also pleased to note that in the event of any shortage of urea in difficult and remote areas special movement orders have been envisaged. Needless to say that these areas must get unhindered supply of urea even in decontrolled scenario. Thus, the Committee would like to be assured on this count.

(Recommendation No. 20)

(ii) **Arrangement of Warehouses**

3.9 The Committee desired to know whether the present ware-housing facilities are adequate as per the needs, or DOF has plans to create more ware-housing capacities. The DOF in a written note informed:-

“The manufacturers of fertilizers themselves arrange storage facilities, by way of hiring space from warehouses under the control of Central Warehousing Corporation, State Warehousing Corporation and/or private godowns, depending on the economic and market considerations at State/District level. The DOF has not received any report on in-adequate storage/warehousing facilities for fertilizers from manufacturer. DOF has no plans, at present, to create warehousing capacities for storing fertilizers in the country.

(iii) **Feasibility of distribution of fertilisers to small and marginal farmers**

3.10 During the course of evidence the Committee wanted to know whether any study has been conducted to distribution of fertilisers to small and marginal farmers. The Secretary (Fertilisers) informed as under:-

“Madam, that is not available. But if it is so desired we could do that. At the moment we get information from the State Governments. But if an independent study is required, then we would do it.....that is not available. But if it is so desired we could do that. At the moment we get information from the State Governments . But if an independent study is required we would do if we are open to suggestion”:

3.11 Later the Deptt. of Agriculture and Cooperation furnished the following information:-

“Various aspects pertaining to distribution of fertilisers are covered in the Annual Input Survey conducted by Department of Agriculture & Cooperation since 1996-97. The report also gives usage of inputs by major groups for the country as a whole. It is seen that marginal farmers with a holding size below 1 hectare and small farmers i.e. upto 2 hectares combined use of about 21% of total urea consumed in the country.

Price of urea, which is statutory controlled and fixed by GOI is the same for all categories of farmers throughout the country.

Further vide sub-clause 3 of the Fertilizer Control Order (FCO), 1985 no dealer, manufacturers, importer or pool handling agency shall sell or offer for sale any fertilizer at a price exceeding the maximum price or rate fixed under this clause. The offenders under the FCO provisions are prosecuted under Section 7 of the Essential Commodities Act, 1955 and the penalties prescribed are as under:-

1. 3 months to 7 years imprisonment with fine under Section 7(i) a (ii);
2. The FCO officer are treated as cognizable and non-bailable offences under Section 10A; and
3. The Registration Certificate of dealers can be suspended/cancelled under Clause 31 of FCO.

While DOF allocates urea to the States, fertilizer distribution within States is looked after and controlled by the States themselves, who are also vested with the authority to register dealers and appoint inspectors as designated implementing agencies of FCO 1985. Unequal access to markets does not come within our ambit.

Since the usage of inputs, including fertilisers, by different categories of farmers is available in the Input Survey Report and since the State Governments are empowered with enough powers to enforce sales of fertilisers at MRP notified by the Central Government, there may not be any need to undertake any study in this regard."

3.12 The issue of feasibility of distribution of fertilisers to small and marginal farmers also came up before the Committee for examination. The Ministry of Agriculture has stated that it conducts Annual Input Survey to review the availability of fertilisers to marginal farmers. Further, the Committee have been informed by Department of Agriculture and Cooperation that there is no need to undertake any study in this regard and have said that unequal access to market does not come under their ambit. The Committee do not subscribe to the views of the DOAC . The Committee would like to draw attention to their earlier recommendation contained in Forty First Report (April 2003) that Government should examine the issue after identifying the number of small and marginal farmers State-wise. The Committee reiterate their above recommendation in this regard.

(Recommendation No. 21)

(iv) Promoting micro nutrient requirement of soil among the farmers

3.13 The issue of lack of awareness about micro nutrient requirement of soil for different crops among the farmers was also discussed by the Committee. In this connection the Committee pointed out that large quantity of fertilisers goes waste since the farmers are not aware about the content of soils. In this connection the Committee wanted to know whether every plot of land has been tested by soil testing labs to find out the micro-nutrient requirement of soil so that proper fertiliser can be applied. The DOF in a written note informed as under :-

"Presently around 7.5% of 106 million farmers holding are being covered by soil testing facility against the minimum required capacity of about 26 million samples in a year (to cover each field after a gap of 3 years....."

3.14 About the number of soil testing laboratories, DOAC further gave the following information:-

*“.....presently there are 533 laboratories which include 415 static and 118 mobile vans with a total analyzing capacity of 8 million samples. However, the capacity utilisation is 56% as the laboratories in some States are not functioning adequately....The soil testing laboratories are mostly under State Governments and few are with Fertiliser Industry. 474 laboratories are under State Governments and 59 are with fertiliser Industry. By and large all State and Union Territories have soil testing laboratories. The State-wise position of soil testing laboratories and their capacity has been indicated in **Appendix III.**”*

3.15 The Committee find that the most important area of educating the farmers about the micro-nutrient requirement of the soils for different crops has been neglected by the Government. In this connection the Committee feel that since farmers are not aware about these requirements most of the fertilisers used by them go either waste or are not adequately utilised. The Committee note that only 7.5% of the 106 million farmers holdings are covered by soil testing laboratories . Not only this, the capacity utilisation of the 533 laboratories is only almost half and in some States they are not functioning adequately. The Committee also find that out of the 533 labs, 474 are under State Governments and rest 59 with the Fertiliser industry. With a view to disseminating micro-nutrient requirement in soils for different crops among the farmers, the Committee feel that the Department of Fertilisers should coordinate with different State Governments for strengthening these labs for their 100% capacity utilisation. The Committee also recommend that fertiliser industry should increase their laboratories considerably.

(Recommendation no. 22)

CHAPTER IV

SPURIOUS FERTILISERS

A. Magnitude of the Problem

The abundant presence of spurious fertilisers in the market has been the matter of concern for the Committee. Since the farmer cannot differentiate between spurious fertiliser and genuine one, his crop is damaged. The Committee were apprised that there are 115 SSP units operating in the country and it is alleged that production quality of large number of these is not conforming to basic quality standards. In response to the specific query of the Committee regarding number of SSP units found producing spurious fertiliser in Uttar Pradesh only, the Committee were informed that such units number about 29.

(a) Mechanism for Checking of Spurious Fertilisers

(i) Responsibility of State Govt. / DOF

4.2 Mechanism for checking of spurious fertilisers is laid down under Fertilisers Control Order (FCO) 1985 issued under Section 3 of the Essential Commodities Act, 1955. The FCO prohibits manufacture, import and sale of non-standard, spurious and adulterated fertilisers. The State Governments are responsible for implementation of FCO provision and have adequate powers to punish the offenders under Clause 31 of FCO as well as prosecution under Essential Commodities Act, 1955 (ECA).

4.3 In view of the need to curb sale of non-standard SSP to farmers and to promote use of specified grade of rock phosphates a Technical Audit Cell has been constituted by the Department of Fertilisers. The Committee during the course of evidence also wanted to know the nodal agency for curbing the spurious fertilisers. The Secretary (Fertilisers) informed as under:-

“Fertilisers Control Order which is responsible for checking adulteration, misuse and punishment is under Ministry of Agriculture.”

4.4 Later the representative of DOAC explained the position as under:-

“Since quality control is a State subject, samples from all over the country are sent to 66 laboratories. These laboratories are available in almost all States. The inspectors of State Governments take the samples and these are tested. Whichever is found non-standard action is initiated against the producers.”

4.5 In this connection the Committee wanted to know whether at Central level there is a mechanism to check the menace instead of making the State Governments responsible. The witness replied as under:-

“.....Regarding facilities available at the Central level, the Ministry of Agriculture has a Central fertiliser Quality Control Institute at Faridabad and also three regional offices at Mumbai, Chennai and Kalyani near Kolkata. The Central teams are periodically sent to the States for checking the quality of fertilisers at the manufacturing units as well as the dealers. The samples are drawn by the Central team mostly during Kharif and Rabi seasons because that is consumption period. About 30-40 per cent samples are found to be non-standard as these teams analyse the problem fertilisers, like SSP fertiliser mixture and micronutrient more. The problem regarding adulteration mostly relates to the adulteration of SSP granular material into DAP and NPK complexes or in the case of Magnesium sulphate with Zinc Sulphate because colour is the same but price differential is substantial.

The Central Institute has also developed. Quick testing kit for on-the-spot testing of adulteration in the case of DAP if it is adulterised by Super Phosphate and in the case of micronutrient Zinc, which is an important micronutrient, where Magnesium is used as an adulterant. This can be easily tested and this is being promoted.”

(ii) Progress on action against spurious fertilisers producing units

4.6 The issue of action against spurious fertilisers producing units also came up for discussion during the course of evidence of the DOF/ DOAC. The Committee wanted to know what action has been taken against those found guilty. The witness explained as under:-

“Under the provision of the Fertiliser Control Order and Essential Commodities Act number of actions State Governments take for instance during 1999-2000 out of total number of 4759 samples were found non-standard out of which action has been taken such as cancellation/ suspension of licence etc. In 287 cases prosecution was started. In 348 cases licence was cancelled. In 2282 cases other action was taken. Remaining 600 cases are pending in Courts.”

4.7 During the course of evidence, the Committee pointed out that they have reports that large number of units across the country providing SSP fertilisers are indulging in manufacturing of spurious fertilisers. The Committee wanted to know what action was contemplated these units

especially against those in Uttar Pradesh where complaints are in large numbers. The DOAC in a written note clarified as under:-

“On the basis of the inquiry reports submitted by Special Investigation Bureau (15 units) and Economic Offences Wing (14 units) of UP Government and after consulting the Government of UP, decision was taken by DOF in September 2001 to place all the 29 SSP units in three categories namely 'A', 'B' and 'C', as also the future course of action in respect of units falling under each category.”

Category 'A' (8 units)

The units which had bought rock phosphate mostly from State mines or through imports and very small quantity or no quantity from private sources.

Category 'B' (10 units)

The units which had procured considerable share of rock phosphate from private sources having false production of SSP range upto 30%.

Category 'C' (11 units)

The units which had bought rock phosphate mostly from private sources. Some units showed procurement of rock from non-existent sources and majority of SSP production was found to be either false or could not be verified by the concerned inquiring/investigating agency.”

4.8 DOAC has further informed that U.P. Government has been asked to conduct investigation against the above units.

4.9 Giving latest category-wise status, the DOAC in a written note has further supplemented as under:-

“The latest category-wise status made available by the State Government as on 12.6.02 is as follows:

Category 'A': The State Govt. has directed Director (Agriculture) to be extra cautious while certifying sales of the units. For filing of FIR, the 8 units covered under this category were issued notices to furnish explanation. The representation received from the companies is currently under examination by the State Govt.

Category 'B': SIB has been directed by the State Govt. to conduct an inquiry against all the units covered under this category. SIB has so far submitted its report in respect of only two units.

Category 'C': FIR has been lodged against all the units under this category. Inquiry for a period of 5 years prior to 1998 is also being conducted against all the units under this category. Future course of action would depend on outcome of inquiry.

Apart from the decision taken by DOF in respect of SSP units located in UP, the State Govt. has also issued directions to take appropriate action, after filing of FIR against 7 officials of State Agriculture Directorate, who were prima facie found guilty by SIB and EOW.

Department of Fertilizers after taking into account the factual report/comments of UP Government on representations received from one 'C' category and one 'B' category units has recently decided to recategorise both these units under Category-A.”

4.10 The Committee felt that there was no standardization of NPK fertilisers. The Minister for Chemicals & Fertilisers clarified this position in Lok Sabha in response to Starred Question No. 461 dated 22.04.2003:-

“...In July 2002, the Department of Agriculture & Cooperation issued guidelines regarding mixtures of NPK fertilizers to State Governments. Through these guidelines, the States have, inter-alia, been advised to notify only such grades of NPK fertilizer mixtures which contain minimum 35 units of nutrients in case of the mixtures having all the three nutrients, i.e. nitrogen, phosphate and potash and in case the fertilizer mixture is having only two of three nutrients, then it should contain minimum 25 units of nutrients. Also, the fertilizer mixtures to be notified should not be identical or almost similar to the grades of complex fertilizers already notified in Schedule I, Part-A of FCO. The State Governments were advised to de-notify existing grades of mixtures that do not meet the above requirements within a period of one year from the issue of these guidelines. The State Governments have further been advised to discourage physical mixtures of NPK fertilizer and to notify minimum standards/ facilities for establishment of granular mixing units and the existing such units may be given two years' time to switch over to granular mixtures. These steps have been taken in the interest of farmers to avoid confusion between complex fertilizers, which are produced through chemical process and the fertilizer mixtures, and also that farmers are not made to pay higher per unit cost of nutrients for low grades of mixtures.”

4.11 The Committee note with dissatisfaction that large scale sale of spurious fertilisers has been reported. The Committee rather feel that in reality the presence of spurious fertilisers in the market is more than reported formally. This issue has been engaging the attention of the Committee in the past also. The Committee in their Forty-First Report (April 2003) has already recommended tough action against the manufacturers of these spurious fertilisers. The Committee are pained to note that out of 115 Single Super Phosphates (SSP) producing units, as many as 29 SSP units located in Uttar Pradesh only were found producing spurious fertilisers although similar complaints have been received with regard to other units in other parts of the country. There is already a mechanism available for checking these spurious fertilisers under Fertiliser Control Order (FCO) 1985. Despite this during 1999-2000 as many as 4759 samples were found sub-standard. The Committee find that there is multiplicity of enforcing agencies without a proper system of accountability to executive authorities. The Committee recommend that a Study Group be constituted to look into this problem and suggest

measures including reviews and amendment of existing Act so that miscreants are dealt with sternly.

(Recommendation No. 23)

(ii) Feasibility of Colouring of SSP fertilisers

4.12 Another area which invited Committee's attention was the feasibility of colouring of SSP fertilisers in order to check their misuse. In this connection the Committee during the course of evidence of DOF/ DOAC drew attention on the reported adulteration of SSP fertilisers in the bags of DAP and MOP. In order to check this menace the Committee wanted to know whether colouring of SSP should be done to differentiate it from DAP and MOP. The representatives of DOAC agreeing to the suggestion submitted as under:-

“.....This is an important suggestion to identify adulteration.”

4.13 However, the DOAC in a subsequent written note did not agree to this line and submitted as under:-

“To examine the possibility of specifying colour for granulated SSP, a meeting was convened by the Department of Fertilizers (DOF) with the representatives of Phosphatic and Potassic fertilizer specially SSP and DAP manufacturing industry. The meeting was also attended by representatives of the Department of Agriculture and Co-operation (DAC), which the administering authority for Fertilizer (Control) Order, 1985 (FCO). The representative of DAC informed the participants that the issue of allowing sale of coloured granulated SSP only as a measure to allay fear of possible use as an adulterant to DAP and Complex fertilizer had been examined in the early nineties. During the course, the SSP industry had attempted giving colour to granulated SSP and reported that lasting colour using chemical dyes was not possible due to presence of free acid in SSP and high temperature at the granulation stage. The coating using ochre (geru) generally resulted in powdering of the coating during handling (stacking, transit, etc.). In the above background, the representatives of the industry expressed the view that it was not feasible to specify any colour on sustainable basis for granulated SSP. Besides, allowing sale of powdered SSP instead of granular SSP would result in depriving the farmer community from use of granulated SSP which has better efficient use. The representatives of the industry also expressed that specifying of any colour for DAP or NPK mixture was also not feasible keeping in view the natural colour in the final product on account of raw material source as also the difficulty that faced in respect of the imported fertilizer. In view of the above, it may not technically be feasible for the SSP industry to colour granulated SSP to avoid adulteration with other decontrolled fertilizers. “

4.14 The Committee are not convinced with views of DOAC that colouring of SSP fertilisers was not feasible/practicable. The Committee are of the opinion that this issue needs to be examined in all seriousness. They, therefore, recommend that an independent group comprised of agricultural scientists including those from ICAR be constituted to look into the matter and report on the feasibility of colouring of SSP fertilisers.

(Recommendation No. 24)

**NEW DELHI;
7 May, 2003
17 Vaisakha, 1925 (Saka)**

**MULAYAM SINGH YADAV
Chairman
Standing Committee on
Petroleum & Chemicals**

APPENDIX-I

STATEMENT OF RECOMMENDATIONS/OBSERVATIONS OF THE COMMITTEE CONTAINED IN THE REPORT

Sl. No.	Page No.	Ref. to Para No. in the Report	Observations/Recommendations
1	8 to 10	1.18 & 1.19	<p>Fertilisers have played a crucial role in accelerating the production of foodgrains from 52 million tonnes in 1950-51 to the level of 206 million tonnes during 1999-2000 indicating a four fold increase. The Committee feel that this crucial role of fertiliser has to be maintained. In this connection, the Committee find that for maintaining assured supply of fertilisers the role of two Ministries of Government comes into play viz Ministry of Agriculture and Ministry of Chemicals and Fertilisers. The former assesses the demand of fertilisers in the country whereas the latter ensure their availability and distribution. There are mainly three kinds of fertilisers for agriculture viz. Nitrogen, Phosphate and Potash. Urea is controlled fertiliser and is under price and distribution control whereas DAP and MOP are decontrolled fertilisers. Therefore, availability and system of distribution of urea is different from DAP and MOP. For urea official machinery is available right from its sourcing from manufacturing units in all the three sectors viz. public, private and cooperative to making it available to consumer centres through allocations made under Essential Commodities Act, 1955. No such apparatus is available for DAP and MOP fertilisers after these were decontrolled in August 2002. The Government have introduced New Pricing Policy for urea, units which has come into operation from 1st April 2003 under which the distribution of urea has been deregulated in phases. Since the demand of fertilisers is assessed at the beginning of the crop seasons viz. Kharif (April- Sept.) and Rabi (March- Oct.) every year, the Government under new policy has restricted allocations under ECA for kharif 2003 upto 75% and for Rabi 2003-04 upto 50% for a period of one year 01.04.2003 to 31.3.2003 (Stage I). For next two years (1.4.03 to 31.3.06) based on experience of stage I, the Government would be deregulating the entire distribution of urea.</p> <p>As regards demand assessment of fertilisers the Committee find that it is done by the Department of Agriculture and Cooperation before the commencement of every crop season viz. kharif (April to Sept.) and Rabi (Oct. to March) at Zonal Conferences based on consultations with the State Governments, urea manufacturers Department of Fertilisers etc. The DOF is satisfied with the present system of demand assessment. The Committee however, find that since in the current system huge inventories are already available in opening stock of urea for next seasons, the present system should be reviewed and assessment of demand should be made on more realistic basis to reduce the inventory cost on stocks by urea manufacturers in the light of concern expressed by Secretary (Fertilisers) in this regard.</p>
2	10	1.20	<p>As regards decontrolled fertilisers viz. DAP and MOP the Committee find that since these are decontrolled fertilisers and therefore costlier as compared to urea, the Government in order to cushion the impact of their prices started under Department of Agriculture & Cooperation a Scheme in 1992-93 for concessions to manufacturers on these fertilisers and it has continued to the present day. After 27.9.2000 it has been transferred to DOF. The supply of DAP/ MOP, DSP and other complex fertilisers is generally administered under this scheme based on certification of sales from different State Governments. Besides, in order to maintain supply, DOF is responsible to maintain Buffer stocks of DAP and MOP at national level. The Committee feel that a study be conducted to assess the demand of DAP and MOP in a scientific manner based on real requirement of per hectare of land under cultivation in different States.</p>
3	10	1.21	<p>The Committee note that objective of decontrol on Phosphatic and Potassic fertilisers in 1992 was to reduce subsidies. Later, the Government introduced Concessional Scheme to lower the prices of Potassic fertilisers to make it affordable for the farmers. In the year 1992-93, the amount disbursed under the Concessional Scheme was</p>

			<p>Rs. 339.73 crore only which is likely to reach Rs. 4456.00 crore in the current financial year. The Committee feel that time has come to evaluate whether the objective of decontrolling Phosphatic and Potassic fertilisers has been achieved and whether subsidies on this have really gone down as expected. The Committee also feel that Concessional Scheme is not working well as it entails various procedure such as certification of sales by various agencies. The Committee recommend that Concessional Scheme should be reviewed and for this purpose an expert group with representatives from dealers, farmers and State Governments be constituted.</p>
4	13 & 14	1.27 & 1.28	<p>The Committee find that there is requirement of three main nutrients viz. Nitrogen (N), Phosphate (P) and Potash (K) in the country. Since indigenous raw material is available only for Nitrogen, the country is self-sufficient in Nitrogen. For Phosphate (P) and Potash (K) since raw material is not available within the country, the country has to depend on imported raw materials viz rock phosphates and sulphur and imported intermediates like ammonia and phosphoric acid. With this the country has achieved near self-sufficiency in DAP production. The present installed capacity is 70 lakh tonne of DAP in the country. The Committee also note that three Joint Ventures engaged in production of phosphoric acid and finished products in Senegal, Jordan and Morocco are meeting our requirements.</p> <p>The Committee are glad to note that the country is self-sufficient in the production of Nitrogen and has attained near self-sufficiency in production of phosphate at present. The Committee however feel that there is an urgent need to maintain this level of self-sufficiency to match the future demand of both these fertilisers specially phosphates. The Committee feel that there is need to add to phosphate capacity in the country. This can be done either by importing raw material and adding capacity in manufacturing units or by setting up Joint Ventures abroad on the pattern as are already operating. The Committee have taken note of the statement of the concerned Minister in Parliament that one task force under Secretary (Fertilisers) was set up by the Government to finalise a long term policy for setting up joint ventures in fertiliser sector abroad. The draft Report of the task force has been circulated for finalisation. In view of the foregoing the Committee recommend expeditious finalisation of the above draft report so that clear policy emerges on the subject for setting up such ventures early.</p>
5	18 & 19	1.39 & 1.40	<p>The Committee after having examined the demand of fertilisers during 10th Plan (2002-07) and 11th Plan (2008-2012) period. The Committee find that as against the demand during the first year of 10th Plan i.e. 2002-2003 of 123 lakh tonnes of nitrogen and 55.05 lakh tonnes of phosphates, the supply position is 120.05 lakh tonnes and 52.31 lakh tonnes respectively which means there is a gap of 2.42 lakh tonnes of Nitrogen and 2.74 lakh tonnes of phosphate during the first year of the current Plan. The total gap comes to 5.16 lakh tonnes. Similarly the Committee find this gap may further rise to 25.32 lakh tonnes by the end of the Plan i.e. by 2006-07. Out of this 25.32 lakh tonnes the gap for Nitrogen would be of the order of 9.18 lakh tonnes and for Phosphates it would be 16.14 lakh tonnes. For bridging the gap between demand and supply of Nitrogen the DOF has informed that additional supply from Namrup Revamp Project by 2003-04 and from Indo-Oman Fertiliser Project by 2006-07 at 100% capacity is expected. Similarly for Phosphate, supply from Gujarat State Fertiliser Corporation Limited (GSFC)'s DAP project is expected by 2003-04. The Committee have been informed that supply from no other project is expected till 2006-07. The actual demand during 2002-03 is stated to be 25% lower than the projected demand thereby reducing demand-supply gap further mainly due to drought conditions in many parts of the country. Similarly for phosphate sector the Committee has been informed that the demand of DAP may also not materialise due to various reasons like poor monsoon and general economic scenario in agricultural sector.</p> <p>The Committee do not find the Government serious in making plans for meeting the fertiliser requirements ten years hence. The demand and supply projections for 11th Plan (2007-2012) indicate that the gap between demand and supply is expected to be around 75 lakh tonnes. The Government do not have exact figures regarding availability of fertilisers at the end of 11th Plan. This Committee had in their earlier reports recommended that Government should accord final investment approval in respect of those mega plants for which in principle approval has been given. The Committee note the Minister's statement in Lok Sabha made on 8th April, 2003 that at present there was no proposal for setting up new gas based fertiliser plants in Public Sector. As against this, the Department has informed the Committee that there was proposal to revive pending grassroot urea plants namely, Nellore and Thal. From these two statements, the Committee infer that Government are taking this issue casually. The Committee, therefore, observe that</p>

			Government should announce their final decision on the future of pending mega projects. This will help to end uncertainty.
6	19	1.41	<p>The Committee had also observed that Department of Fertilisers should facilitate setting up urea plant in Tripura since there is availability of gas in that area. The Committee are glad that the Department has responded positively to the Committee's observations viewing the impending gap between demand and supply of Urea, the Committee's observation assumes more importance. The Committee, therefore, desire that Department of Fertilisers should extend all necessary help in setting up gas based fertiliser plant in Tripura.</p> <p>The Committee note that with increased capacity utilisation of the existing plants in the country, the production can increase further by 10 to 20%. the Committee are aware of the feedstock problem. They learn that if permitted by the Government, Urea can be exported at remunerative price. It is hoped that by next year, there will be sufficient availability of LNG in the country and obviously for fertiliser sector also. The Committee desire that Government should explore the possibility of exporting Urea if not now after 5 to 7 years when the country starts getting urea from Oman Project and our internal feedstock position improves.</p>
7	22	2.5	<p>The per hectare consumption figures of fertilisers in India vis-à-vis those in some other countries have made the Committee to note with concern that ground situation of fertiliser consumption in India is not satisfactory. As against consumption level in Egypt and U.K. of around 385 kg. and 285 kg. per hectare and that in neighbouring China of 254 kg., the per hectare consumption of fertilisers in India is as low as 90 kg which is even lower than the level of 135 kg and 128 kg in Pakistan and Sri Lanka respectively. The Committee, therefore, feel that there is greater scope of increased consumption of fertilisers in India but it depends on various factors such as irrigation facilities, farmers education etc. The Committee are aware that various official and non-official organisations are engaged in educating the farmers but it needs to be broadened. The Committee would like the Department of Fertilisers to expand the farmers education programmes by involving Agricultural Universities.</p>
8	22	2.6	<p>The Committee regret to note that barring some States like Andhra Pradesh, Tamil Nadu and Uttar Pradesh, the per hectare consumption of fertilisers is far from satisfactory. For instance, in large States of Maharashtra, Rajasthan, Madhya Pradesh it is as low as 76, 37 and 40 kilograms respectively. The Committee feel that this position needs to be improved. Although State Governments are already doing their best in this regard but the Committee recommend that an integrated plan be drawn to identify the hurdles in the way of increased consumption of fertilisers. The Committee wish that Department of Fertilisers should perform the role of facilitator in this task.</p>
9	29	2.25 & 2.26	<p><i>The Committee are anguished to note that as against the assessed requirement of urea during 1998-99 to 2001-02 of around 213.06 lakh tonnes to 215 lakh tonnes, the consumption during the corresponding period has not matched as it is hovering around 199 lakh tonnes to 204 lakh tonnes. Coming to season-wise (Rabi and Kharif seasons) figures of assessed requirement vis-à-vis consumption, the Committee find that during the last five years the level of consumption has not matched assessed demand at all. Thus, the Committee find that there is stagnation in the consumption of Urea in the country during 1998-99 to 2001-2002. Similarly with regard to DAP the consumption stagnated at around 58 lakh tonnes to 61 lakh tonnes except for 1999-2000 when it increased to 69 lakh tonnes during the same period. Like-wise for MOP the consumption remained at around 16 lakh tonnes to 20 lakh tonnes during this period.</i></p> <p>As regards reasons for the above stagnation in fertiliser consumption the Committee agree with the findings of a study conducted</p>

			by an independent Association that uncertain policy environment and hike in price of fertilisers during Post Reform Period 1992-2001 were the basic causes for this. In the light of these findings, the Committee recommend that at least uncertainty in policy matters be removed.										
10	49	2.66	The issue of granting subsidy for agricultural sector has been attracting the attention of common man. Whereas one section of the society feels that it is wasteful and avoidable expenditure the other section feels that for agricultural security, subsidy is must. The Committee are of the firm opinion that subsidy should not be taken as donation but society's contribution, towards a cause which is, ensuring food security. The Committee in their earlier recommendations have emphasized that the mind set relating to concept of subsidy needs to be changed. The Committee are aware that the Expenditure Reforms Commission have also recommended phased removal of subsidy in agricultural sector. The Committee do not agree with this recommendation and strongly recommend that fertiliser subsidy should continue.										
11	49 & 50	2.67	The Committee have reviewed the installed capacity vis-à-vis production of Nitrogen and Phosphates at the end of 8 th Plan (1996-97) and 9 th Plan (2001-02) and the beginning of 10 th Plan (2002-2003). In this connection, the Committee find that production of Nitrogen and Phosphates has not reached the installed capacity under the period under review. For instance in Nitrogen, by the end of 8 th Plan, 9 th Plan and beginning of 10 th Plan against the installed capacity of 97.77 lakh tonnes, 120.58 lakh tonnes and 121.10 lakh tonnes the production was as low as 85.99 lakh tonne, 107.68 lakh tonnes and 105.54 lakh tonnes. Similarly, for Phosphates as against the 29.05 lakh tonnes, 52.31 lakh tonnes and 53.60 lakh tonnes the production level was as low as 25.56 lakh tonnes, 38.60 lakh tonnes and 38.85 lakh tonnes (estimated). The Committee find that main reason for lower production for Nitrogenous fertilisers has been gas shortage whereas shortage of raw materials is main reason for lower production of Phosphate in the country. In this connection, the Committee have examined the sector-wise share in installed capacity and found that role of private sector in the industry is predominant being around 47% in Nitrogen and 77% in Phosphates. About gas shortage the Secretary (Fertilisers) has explained in detail the uncertain scenario before the Fertiliser industry. The Committee find that Naphtha as feedstock is not economically viable in view of its increased cost of production. The Committee have been informed that in view of gas shortage, Urea Units have been asked to search for alternative suppliers of gas in place of existing supplier. The Committee, therefore, feel that a clear policy in this regard is of paramount important. The Committee would recall that in their previous reports they had advised fertiliser units to explore the possibility of importing gas on exclusive basis. However, the fertiliser industry did not pay heed to this advice. The Committee reiterate their earlier recommendation that Public Sector fertiliser units and cooperative societies should in combination form a separate body to import gas.										
12	50	2.68	The Committee find that in the absence of feedstock policy the present scenario still fluid since the feedstock policy is not yet finalised and as such status quo like situation prevailing in fertiliser sector. The Committee find that mater of finalisation of feedstock policy has been recommended by the Committee quite often and also in their latest Forty-First Report. The Committee reiterate their recommendation and urge the Government to finalise the feed stock policy quickly.										
13	50 & 51	2.69	<p>As regards production constraints for Phosphates production, the Committee find that it is mainly due to the following reasons mentioned against each unit:-</p> <table><thead><tr><th>Unit</th><th>Reasons</th></tr></thead><tbody><tr><td>(i) IFFCO, Kandla</td><td>- Non-stabilization of DAP production and earthquake in Gujarat.</td></tr><tr><td>(ii) Paradeep Plant of Oswal Chemicals & Fertilisers Ltd. (OCFL)</td><td>- Non-stabilization of DAP production</td></tr><tr><td>(iii) Dahej Plant of Indo-Gulf Corporation Ltd.</td><td>-do-</td></tr><tr><td>(iv) Paradeep Plant of</td><td>- Shortage of Phosphoric acid and labour problem</td></tr></tbody></table>	Unit	Reasons	(i) IFFCO, Kandla	- Non-stabilization of DAP production and earthquake in Gujarat.	(ii) Paradeep Plant of Oswal Chemicals & Fertilisers Ltd. (OCFL)	- Non-stabilization of DAP production	(iii) Dahej Plant of Indo-Gulf Corporation Ltd.	-do-	(iv) Paradeep Plant of	- Shortage of Phosphoric acid and labour problem
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(iii) Dahej Plant of Indo-Gulf Corporation Ltd.	-do-												
(iv) Paradeep Plant of	- Shortage of Phosphoric acid and labour problem												

			<p>Paradeep Phosphate Ltd. (PPL)</p> <p>The Committee find that these constraints have to be resolved by DOF and the private units. The Committee, therefore, hope that Government would soon be tiding over these difficulties.</p>
14	51	2.70	<p>The Committee visualise that LNG shall start reaching India early next year. Fertiliser industry is expected to be the bulk consumer of this gas. But the basic problem is of providing infrastructure to transport it from port to the sites. The Committee learn that this issue has not been settled so far as GAIL and IOCL are reluctant to make huge investments to provide transportation facilities. The Committee feel that this issue should have been resolved by now. However, the Committee recommend that GAIL be directed to finalise a scheme for transportation of LNG from ports to consuming sites. Further, Secretaries in the Ministries of Petroleum and Natural Gas and Department of Fertilisers should hold joint meetings to ensure that issue of providing infrastructure for transportation of gas to fertiliser units is resolved during this calendar year.</p>
15	51 & 52	2.71	<p>As regards impact of closure of various units of Hindustan Fertiliser Corporation Ltd. (HFC), Fertiliser Corporation of India (FCI) and Pyrites and Phosphates Chemicals Ltd. (PPCL) on the overall availability of fertilisers, the Committee find that although the Secretary (Fertilisers) has assured the Committee that such closure will not affect the availability scenario, yet the Committee feel that closure has various implications. The closure has deprived the eastern sector of the country of any fertiliser unit. Eastern India is backward in industrialisation and the closure of fertiliser units has further aggravated this position. Thousands of employees working in these units have been rendered jobless. This closure has also added to the unemployment. With the closure, the overall freight charges would also go up. The Committee feel that now that these units have been closed, the least the Government should do is to utilise the plants sites for industrialisation. The Committee had earlier recommended that Government should set up power generating units at the sites where fertiliser plants were located. The Committee reiterate their earlier recommendation.</p>
16	52 & 53	2.72	<p>The Committee note that role of bio-fertilisers in supplying Nitrogen and Phosphate to the soil is very important since they supply 15-40 kg. of Nitrogen per hectare and 25 kg. of phosphate per hectare if applied properly. Main Bio-fertilisers are Rhizobium for pulses, Azotobacter for cereals, Azospirium for millets and Blue Green Algae for rice besides phosphates soluble organism for all crops. The Committee find that for their promotion a Central sector scheme, National Project on Development and use of biofertilisers had been in operation. The Committee also find that these fertilisers can be used in major crops and their potential is quite large at around 65 thousand tonnes if 25% of cropped area is put under their use. As regards, production of these fertilisers, the Committee find with dissatisfaction that as against the capacity of 18275 tonnes in 2001-02 their present production is only 10300 tonnes under 83 production units. The Committee find that in view of the importance of biofertilisers their both installed capacity as also production need to be substantially enhanced. In this connection the constraints like short shelf life, lack of quality control and poor storage facilities have been highlighted before the Committee. The Committee feel that these are small problems and DOAC is capable of addressing these. The Committee hope that the Department would initiate necessary action in this regard. The Committee feel that Chemical fertiliser is being replaced by bio-fertilisers but find that Government are not proactive to the desired extent to popularise the use of this fertiliser extensively. The Committee learn that the Government have withdrawn Central Sector Scheme which was launched for production and distribution of bio-fertilisers. The Committee recommend that Government should prepare a new scheme on the pattern of earlier scheme and provide all financial assistance to make it successful.</p>
17	55	2.77	<p>The Committee note with concern that projected supply of fertilisers during the XIth Plan Period (2007-12) is not available with the</p>

			<p>Deptt. of Fertilisers. The Committee find that the demand of fertilisers would be around 143 lakh tonnes for nitrogen and around 74 lakh tonnes for phosphates at the commencement of the plan. It may go further to around 162 lakh tonnes and around 93 lakh tonnes by the end of the Plan. The Committee have been informed that the Department of Fertilisers have not firmed up its policy to meet the projected demand of nitrogen as industry is witnessing dynamic changes. The Committee were earlier informed that the future of pending mega projects was uncertain as their economic viability was under review. However, now the Government have again revived two out of four projects in view of new discoveries. The Committee are happy to note this. The Committee hope that Government will take early decisions on these projects and with their implementation, there will be enhanced availability of urea.</p>
18	58	3.3	<p><i>The Committee note that the mechanism for distribution of controlled fertilisers viz. urea and decontrolled fertilisers viz. DAP, MOP and SSP fertilisers is not uniform. For instance urea being under price and distribution control, its distribution has been under Retention Price Scheme which includes two Schemes for distribution one 'Equated Freight Scheme' for the whole country and the other 'Special Freight Reimbursement Scheme' for remote and hilly areas. Distribution of urea to different States from various plants throughout the country is done under Essential Commodities Act 1955 by making specific allocations for States. As against this, distribution of decontrolled fertilisers is administered under the Concession Scheme. Under this scheme concessions are paid to the manufacturers after certification of sales from different State Governments. The Committee find that for urea the Government have brought out a new scheme de-regulating distribution control in phases. For instance ECA allocation for Kharif 2003 has been restricted upto 75% and for Rabi 2003-04 upto 50% under the New Policy for a period of one year (Stage I) and rest of allocation has been deregulated. Based on the review of this stage the entire distribution control is proposed to be decontrolled during the coming two years 2004 to 2006 (Stage II). The Committee apprehend that decontrol in distribution of urea would adversely affect its availability by and large. The Committee have already recommended in their Forty First Report (April 2003) that a regular system should be established through which availability of urea and other fertilisers can be assured across the country at affordable prices. Thus, the Committee had recommended review of the de-regulation of urea. The Committee reiterate their recommendation.</i></p>
19	60	3.7	<p><i>Another aspect regarding distribution of urea pertains to review of freight rates during the Stage I (2003-04) of the new Pricing Policy. The Committee find that the present freight rate is Rs. 467 per tonne of urea. This rate is to be revised based upon the experience during the last years i.e. 2000-01, 2001-02 and 2002-03 on normative lead and rail-road mix of each unit. The Committee find that during the last five years the percentage of distribution of urea by rail has been in the range of around 74% against 26% by road. The Committee note with satisfaction that percentage of transportation by road is gradually being reduced which presumably is in economic</i></p>

			<i>interest. The Committee would like the fertiliser industry to make transportation more cost-efficient.</i>
20	60 & 61	3.8	<i>The Committee are glad to note that under the new policy no change has been made in Special Freight Reimbursement Scheme for hilly States. The Committee are also pleased to note that in the event of any shortage of urea in difficult and remote areas special movement orders have been envisaged. Needless to say that these areas must get unhindered supply of urea even in decontrolled scenario. Thus, the Committee would like to be assured on this count.</i>
21	62 & 63	3.12	<i>The issue of feasibility of distribution of fertilisers to small and marginal farmers also came up before the Committee for examination. The Ministry of Agriculture has stated that it conducts Annual Input Survey to review the availability of fertilisers to marginal farmers. Further, the Committee have been informed by Department of Agriculture and Cooperation that there is no need to undertake any study in this regard and have said that unequal access to market does not come under their ambit. The Committee do not subscribe to the views of the DOAC. The Committee would like to draw attention to their earlier recommendation contained in Forty First Report (April 2003) that Government should examine the issue after identifying the number of small and marginal farmers State-wise. The Committee reiterate their above recommendation in this regard.</i>
22	64	3.15	<i>The Committee find that the most important area of educating the farmers about the micro-nutrient requirement of the soils for different crops has been neglected by the Government. In this connection the Committee feel that since farmers are not aware about these requirements most of the fertilisers used by them go either waste or are not adequately utilised. The Committee note that only 7.5% of the 106 million farmers holdings are covered by soil testing laboratories. Not only this, the capacity utilisation of the 533 laboratories is only almost half and in some States they are not functioning adequately. The Committee also find that out of the 533 labs, 474 are under State Governments and rest 59 with the Fertiliser industry. With a view to disseminating micro-nutrient requirement in soils for different crops among the farmers, the Committee feel that the Department of Fertilisers should coordinate with different State Governments for strengthening these labs for their 100% capacity utilisation. The Committee also recommend that fertiliser industry should increase their laboratories considerably.</i>
23	69 & 70	4.11	The Committee note with dissatisfaction that large scale sale of spurious fertilisers has been reported. The Committee rather feel that in reality the presence of spurious fertilisers in the market is more than reported formally. This issue has been engaging the attention of the Committee in the past also. The Committee in their Forty-First Report (April 2003) has already recommended tough action against the manufacturers of these spurious fertilisers. The Committee are pained

			<p>to note that out of 115 Single Super Phosphates (SSP) producing units, as many as 29 SSP units located in Uttar Pradesh only were found producing spurious fertilisers although similar complaints have been received with regard to other units in other parts of the country. There is already a mechanism available for checking these spurious fertilisers under Fertiliser Control Order (FCO) 1985. Despite this during 1999-2000 as many as 4759 samples were found sub-standard. The Committee find that there is multiplicity of enforcing agencies without a proper system of accountability to executive authorities. The Committee recommend that a Study Group be constituted to look into this problem and suggest measures including reviews and amendment of existing Act so that miscreants are dealt with sternly.</p>
24	71	4.14	<p>The Committee are not convinced with views of DOAC that colouring of SSP fertilisers was not feasible/practicable. The Committee are of the opinion that this issue needs to be examined in all seriousness. They, therefore, recommend that an independent group comprised of agricultural scientists including those from ICAR be constituted to look into the matter and report on the feasibility of colouring of SSP fertilisers.</p>

APPENDIX-II

MINUTES

SUB-COMMITTEE ON FERTILISERS
A SUB-COMMITTEE OF THE
STANDING COMMITTEE ON PETROLEUM AND CHEMICALS
(2002)

FIRST SITTING

13.02.2002

The Sub-Committee sat from 1100 hrs. to 1300 hrs.

PRESENT

Dr. Debendra Pradhan - Convenor

MEMBERS

LOK SABHA

2. Shri Anand Mohan Biswas
2. Shri Jagannath Mallick
3. Shri Punnulal Mohale
4. Dr. Chhatrapal Singh

RAJYA SABHA

5. Shri Balkavi Baragi
6. Ms. Mabel Rebello
7. Shri Rajnath Singh 'Surya'
8. Shri P. Soundararajan

SECRETARIAT

1. Shri P.K. Grover - Director
2. Shri J.N. Oberoi - Under Secretary

Representatives of Fertiliser Association of India (FAI)

1. Shri R.J. Masilamani - Director-General
2. Shri R.C. Gupta - Dy. Director-General
3. Dr. Uttam Gupta - Addl. Director (Economics)
4. Dr. S. Nand - Addl. Director (Technical)

At the outset Hon'ble Convenor of the Sub-Committee on Fertilisers welcomed the Members to the first sitting of the Sub-Committee. Later, he welcomed the representatives

of the Fertiliser Association of India (FAI) and thanked them for making arrangements for briefing the Sub-Committee on the subject 'Demand, availability and distribution of fertilisers. After the introduction, Director General – FAI explained the objectives of the Association and stated that the Association was a non-profit making Organisation formed by the Members of the Fertiliser Industry belonging to private, public sector and also cooperative societies. The Association had a large membership consisting of over one thousand members spread over the entire country. The Association was also affiliated to several international organisations including the fertiliser advisory development information network for Asia-Pacific and also Fertiliser Industry Association, which is a world body. The association also held a seminar each year where the matters and problems relating to the industry were discussed at length and accordingly suggestions made to the Government of India.

2. The representatives of Fertiliser Association of India made an audio-visual presentation to the Sub-Committee. The broad issues *inter-alia* included fertilisers being a strategical industry, their role in self-sufficiency in foodgrains production, retention price mechanism and its objectives, the mechanism to achieve these objectives, the scheme being unit specific fertiliser consumption of fertilisers and foodgrains since in 1977, need for maintaining self-sufficiency in fertilisers, impact of import by China and India on international prices of urea, strategy for meeting urea demand, strategy for meeting the requirement of phosphate, increase in fertiliser subsidy, increase in cost of production of urea between 1991 and 1999-2000, retail price of urea in selected countries, distribution network of fertilisers in the country, share of the public, private and cooperative sector in distribution, mode of transportation of the fertilisers, farm subsidies in selected foreign countries and the need to subsidise the fertiliser industry. The Sub-Committee sought clarifications on various issues relating to this subject during the presentation which *inter-alia* included the role of FAI in research and development of the fertiliser industry, problems arising out of excessive use of chemical fertilisers, the projected demand of various types of fertilisers during the next few years, the extent to which the small marginal farmer is being benefited by the subsidy structure on the fertiliser industry, etc. etc.

3. The verbatim record of the proceedings has been kept.

The Sub-Committee then adjourned.

APPENDIX-III

MINUTES

SUB-COMMITTEE ON FERTILISERS

**(A SUB-COMMITTEE OF STANDING COMMITTEE ON PETROLEUM AND CHEMICALS)
(2002)**

THIRD SITTING

11.09.2002

The Sub-Committee sat from 1100 hrs. to 1350 hrs.

Present

Shri Shyam Lal - In the Chair

Members

Lok Sabha

2. Shri Ram Chander Baidia
3. Shri Ananda Mohan Biswas
4. Shri Padam Sen Choudhry
5. Shri Jagannath Mallick
6. Shri Punmulal Mohale
7. Dr. Chhatrapal Singh

Rajya Sabha

8. Ms. Mabel Rebello

Secretariat

1. Shri K.V. Rao - *Joint Secretary*
2. Shri P.K. Grover - *Director*
3. Shri J.N. Oberoi - *Under Secretary*

Representatives of Ministry of Chemicals & Fertilisers (Department of Fertilisers)

1. Shri Nripendra Mishra, Secretary
2. Shri Sudhir Krishna, Joint Secretary (F)
3. Shri Balvinder Kumar, Joint Secretary (A&M)
4. Smt. S.K. Sekhon, Executive Director (FICC)

***Representatives of Ministry of Agriculture
(Department of Agriculture & Cooperation)***

1. Dr. N. K. Tripathi, Additional Commissioner (INM)

In the absence of the Convenor, the Sub-Committee chose Shri Shyam Lal to Chair the sitting under Rule 258 (3) of the Rules of Procedure and Conduct of Business in Lok Sabha.

At the outset, Hon'ble Convenor, welcomed the Members and officials of Ministry of Chemicals & Fertilisers (Department of Fertilisers) and Ministry of Agriculture (Department of Agriculture & Cooperation).

2. The Sub-Committee took oral evidence of representatives of Ministry of Chemicals & Fertilisers, Department of Fertilisers in connection with '*Demand, Availability and Distribution of Fertilisers*'.

3. During the course of evidence the main issues that came up for discussions included, demand availability of all types of fertilisers in the country, shortage of phosphatic fertilisers particularly NPK fertilisers, need for transparency in giving subsidy to urea manufacturers by way of reflecting cost of production and Maximum Retail Price Urea on each bag of urea and a Central level monitoring agency to look into complaints of misuse of subsidy and difficulty in getting certification of sales of decontrolled fertilisers particularly from States of Bihar, UP and Punjab.

4. Other issues that were also discussed were need of soil testing all over the country to enable the farmers to know proper fertiliser nutrient requirements of soil, need for conducting a study on distribution mechanism of fertilisers, promoting the use of bio-fertiliser, effect of withdrawal of vintage allowance to old fertiliser units on their network and status of closed units of HFC and FCI particularly in Eastern India and consequent imbalance in fertilisers production in the eastern part of the country.

The Sub-Committee then adjourned.

APPENDIX-IV

MINUTES

SUB-COMMITTEE ON FERTILISERS

A SUB-COMMITTEE OF

STANDING COMMITTEE ON PETROLEUM & CHEMICALS (2003)

FIRST SITTING (06.05.2003)

The Committee sat from 1500 hrs. to 1530 hrs.

PRESENT

Shri Ram Nath Kovind - Convenor

MEMBERS

LOK SABHA

2. Shri Jagannath Mallick
3. Dr. Ramesh Chand Tomar
4. Shri Harpal Singh Sathi
5. Shri Mohan Rawale

RAJYA SABHA

6. Shri Balkavi Bairagi
7. Ms. Mabel Rebello

SECRETARIAT

1. Shri P.K. Grover, Director
2. Shri R.K. Saxena, Under Secretary
3. Shri J.N. Oberoi, Officer on Special Duty
4. Shri A.K. Shah, Assistant Director

At the outset, Hon'ble Convenor welcomed the Members of the Sub-Committee to the sitting. Thereafter, he explained the main recommendations contained in the Draft Report on Demand, Availability and Distribution of Fertilisers. Thereafter he invited the Members to give suggestions if any, Hon'ble

Convenor requested the Members to give suggestions in writing if they so desire later but not later than 7th May, 2003.

2. Thereafter, the Sub-Committee considered and adopted the Draft Report.

3. The Sub-Committee authorised the Convenor to finalise the Draft Report and submit the same to Chairman for consideration by Standing Committee on Petroleum and Chemicals after incorporation of suggestions if any to be given by Members of Sub-Committee.

The Sub-Committee then adjourned.

APPENDIX-V
MINUTES

STANDING COMMITTEE ON PETROLEUM & CHEMICALS
(2003)

SIXTH SITTING
(06.05.2003)

The Committee sat from 1530 hrs. to 1600 hrs.

PRESENT

Shri Mulayam Singh Yadav - Chairman

MEMBERS

LOK SABHA

2. Smt. Sheela Gautam
3. Shri Paban Singh Ghatowar
4. Shri Bijoy Handique
5. Shri Shriprakash Jaiswal
6. Shri Jagannath Mallick
7. Shri Punnulal Mohale
8. Shri P. Mohan
9. Shri Mohan Rawale
10. Shri Ram Sajivan
11. Dr.(Smt.) V. Saroja
12. Shri Harpal Singh Sathi
13. Dr. Ram Lakhan Singh

14. Dr. Ramesh Chand Tomar
15. Shri Ratilal Kalidas Varma
16. Shri A.K.S. Vijayan
17. Dr. Girija Vyas

RAJYA SABHA

18. Shri Balkavi Bairagi
19. Shri Ram Nath Kovind
20. Shri Moolchand Meena

SECRETARIAT

1. Shri P.K. Grover - Director
2. Shri R.K. Saxena - Under Secretary
3. Shri J.N. Oberoi - Officer on Special Duty
4. Shri Ram Raj Rai - Assistant Director
5. Shri A.K. Shah - Assistant Director

2. At the outset, Hon'ble Chairman welcomed the Members to the sitting and explained the purpose of the day's meeting.

3. Thereafter, he invited the Members to give their suggestions, if any, on the following draft Reports being considered for adoption:-

- (i) ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
- (ii) ** ** ** ** ** ** ** ** ** **
- (iii) Demand, Availability and Distribution of Fertilisers

-90-

4. The Committee, thereafter, authorised the Chairman to finalise the Reports after factual verification from the concerned Ministries/ Departments and present them to the Parliament.

5. The Committee placed on record their appreciation of the work done by the Sub-Committees on Petroleum and Fertilisers of the Standing Committee on Petroleum and Chemicals.

6. The Committee also placed on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

7. ** ** ** ** ** ** ** ** ** ** **

The Committee then adjourned.

**** *Matter not related to this Report***

APPENDIX-VI

Major Producers of Nitrogen and Phosphates

		Qty. in lakh tonnes (during 2002-03) estimated
A.	Nitrogen	
(a)	Public	
(i)	NFL	14.90
(ii)	RCF	7.89
(iii)	FACT	2.56
(iv)	HFC	0.99
(v)	Others	
	Total	29.85
(b)	Cooperative	
(i)	IFFCO	19.82
(ii)	KRIBHCO	7.43
	Total	27.25
(c)	Private	
(i)	Oswal Chemicals Fertilisers Ltd.	5.82
(ii)	Nagarjuna Fertilisers Chemicals Ltd.	5.49
(iii)	Indo, Gulf Chemicals Ltd.	4.62
(iv)	Gujarat Narmada Fertilisers Ltd.	3.61
(v)	Duncan Industries Ltd.	N.A.
(vi)	Zuary Industries Ltd.	3.78
(vii)	Others	2.85
	Total	51.64
B.	Phosphate	
(a)	Public	
(i)	FACT	1.59
(ii)	RCF	1.03
(iii)	MFL	1.23
(iv)	Others	-
	Total	3.09
(b)	Cooperatives	
(i)	IFFCO	7.84
	Total	7.84
(c)	Private	
(i)	Oswal Chemicals	5.40
(ii)	HLL Haldia	3.13
(iii)	GSFC	3.78
(iv)	GFCL	2.99
(v)	SPIC	2.25
(vi)	ZIL	1.71
(vii)	CFL	1.69
(viii)	IGCL	1.65
(ix)	Others	-
	SSP units	4.12
	Total	31.81

State-wise demand, availability and sales of Urea, DAP & MOP during 2001-02

(000 tonnes)

Sl. No.	STATE	KHARIF 2001			RABI 2001-02			KHARIF 2001			DAP			RABI 2001-02			KHARIF 2001			MOP		
		Assessed Demand	Availability	Sales	Assessed Demand	Availability	Sales	Assessed Demand	Availability	Sales	Assessed Demand	Availability	Sales	Assessed Demand	Availability	Sales	Assessed Demand	Availability	Sales	Assessed Demand	Availability	Sales
1	ANDHRA PRADESH	1050.00	922.83	741.38	1056.00	1217.24	1024.91	450.00	314.51	288.10	325.00	304.15	270.86	125.00	139.40	119.79	120.00	156.81	143.36	120.00	156.81	143.36
2	KARNATAKA	680.00	593.91	558.59	330.00	382.10	364.36	300.00	265.17	208.89	155.00	195.38	171.84	180.00	156.63	135.53	90.00	104.03	96.55	90.00	104.03	96.55
3	KERALA	65.00	62.89	49.07	80.00	54.52	46.97	6.00	8.14	4.82	5.00	6.17	5.19	80.00	62.63	53.66	60.00	53.23	45.69	60.00	53.23	45.69
4	TAMILNADU	370.00	374.68	283.80	550.00	601.50	487.80	120.00	116.29	100.77	160.00	139.54	132.14	130.00	159.03	131.08	215.00	193.49	182.31	215.00	193.49	182.31
5	GUJARAT	510.00	533.61	484.55	625.00	566.89	506.50	225.00	261.17	224.84	225.00	191.08	175.29	40.00	73.91	43.50	60.00	74.56	63.31	60.00	74.56	63.31
6	MADHYA PRADESH	380.00	457.52	333.62	600.00	461.15	366.56	225.00	324.70	263.82	343.00	246.54	135.33	20.00	32.13	15.34	22.00	20.18	12.16	22.00	20.18	12.16
7	CHHATTIS GARH	250.00	327.16	272.28	75.00	126.99	93.87	68.00	87.94	70.44	18.00	40.97	23.11	25.00	29.51	24.13	10.00	17.78	7.45	10.00	17.78	7.45
8	MAHARASHTRA	1180.00	1149.20	994.85	700.00	717.90	615.97	350.00	256.42	231.05	225.00	245.82	189.11	150.00	149.33	114.65	125.00	145.59	117.51	125.00	145.59	117.51
9	RAJASTHAN	450.00	557.05	428.03	600.00	717.66	678.12	250.00	252.45	208.75	250.00	201.14	149.50	2.00	6.56	4.92	6.00	5.48	4.81	6.00	5.48	4.81
10	GOA	1.50	2.00	1.94	2.20	1.27	1.22	0.20	0.43	0.34	0.15	0.30	0.29	0.50	0.45	0.43	0.30	0.26	0.25	0.30	0.26	0.25
11	HARYANA	580.00	721.60	529.86	900.00	1004.46	915.49	160.00	275.70	149.33	310.00	330.87	310.72	10.00	12.18	4.34	8.00	14.32	10.18	8.00	14.32	10.18
12	HIMACHAL PRADESH	30.00	27.54	25.89	25.00	19.27	18.95	0.30	0.30	0.30	0.50	0.20	0.20	0.30	0.30	0.30	3.00	3.83	3.83	3.00	3.83	3.83
13	JAMMU & KASHMIR	64.00	47.23	34.47	48.00	48.31	47.36	33.81	12.01	11.67	29.23	27.44	22.81	7.30	1.00	0.51	7.10	2.10	1.94	7.10	2.10	1.94
14	PUNJAB	1000.00	1036.25	890.58	1100.00	1161.76	1091.81	225.00	470.40	344.80	430.00	373.80	356.78	25.00	41.99	30.24	15.00	21.34	12.74	15.00	21.34	12.74
15	UTTAR PRADESH	2150.00	2753.00	2283.22	2300.00	2725.13	2490.34	450.00	573.09	430.54	975.00	1039.29	909.23	65.00	83.65	38.38	90.00	67.24	49.45	90.00	67.24	49.45
16	UTTRANCHAL	107.00	124.61	92.12	72.00	87.50	70.74	16.00	7.57	4.36	26.09	14.22	14.18	12.50	1.88	1.22	6.13	3.05	1.84	6.13	3.05	1.84
17	DELHI	5.00	6.91	1.89	20.00	4.32	2.89	2.00	1.06	1.06	5.00	0.87	0.87	0.50	0.50	0.50	1.00	0.00	0.00	1.00	0.00	0.00
18	BIHAR	650.00	721.07	598.48	680.00	679.39	616.11	160.00	110.58	91.77	200.00	108.16	96.02	35.00	37.70	21.52	70.00	62.57	54.19	70.00	62.57	54.19
19	JHARKHAND	80.00	114.18	94.46	40.00	62.27	40.83	30.00	68.14	59.29	15.00	47.49	45.65	50.00	1.35	0.95	13.00	1.20	1.19	13.00	1.20	1.19
20	ORISSA	360.00	400.86	314.99	160.00	139.32	83.24	90.00	64.96	56.70	50.00	44.69	26.63	60.00	68.02	54.76	43.00	32.82	28.01	43.00	32.82	28.01
21	WEST BENGAL	470.00	443.74	366.11	680.00	679.02	591.76	180.00	133.16	111.05	320.00	295.70	259.19	100.00	171.58	109.22	225.00	215.15	193.10	225.00	215.15	193.10
22	ASSAM	73.00	84.36	66.10	84.55	77.65	57.92	30.00	22.55	16.87	36.00	11.86	5.67	30.00	41.16	27.01	35.45	24.43	24.43	35.45	24.43	24.43
23	MANIPUR	31.00	31.79	31.00	9.30	9.20	7.86	4.00	0.00	0.00	1.50	0.00	0.00	2.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
24	MEGHALYA	3.00	2.93	2.93	2.50	3.00	2.78	1.00	1.32	1.32	0.80	0.44	0.44	0.21	0.04	0.04	0.25	0.06	0.06	0.25	0.06	0.06
25	NAGALAND	0.50	0.88	0.06	0.13	0.40	0.00	0.35	0.00	0.00	0.18	0.00	0.00	0.05	0.05	0.00	0.15	0.00	0.00	0.15	0.00	0.00
26	SIKKIM	0.50	0.80	0.80	0.50	0.60	0.20	0.35	0.00	0.00	0.45	0.00	0.00	0.05	0.05	0.00	0.15	0.00	0.00	0.15	0.00	0.00
27	TRIPURA	9.70	11.65	8.39	12.00	10.41	7.11	2.30	0.18	0.18	0.10	0.10	0.10	4.36	0.85	0.85	4.08	0.39	0.39	4.08	0.39	0.39
28	ARUNACHAL PRADESH	0.60	0.94	0.02	0.43	0.65	0.03	0.06	0.00	0.00	0.24	0.00	0.00	0.02	0.02	0.00	0.12	0.00	0.00	0.12	0.00	0.00
29	MIZORAM	0.30	0.73	0.22	0.40	0.55	0.00	0.60	0.00	0.00	0.60	0.00	0.00	0.45	0.45	0.00	0.40	0.02	0.02	0.40	0.02	0.02
	ALL INDIA	10661.56	11523.43	9501.12	10744.15	11575.64	10744.42	3383.65	3630.94	2863.08	4110.94	3871.20	3305.87	1538.48	1658.00	1282.23	1535.91	1716.05	1502.67	1535.91	1716.05	1502.67

Appendix VIII

SOIL TESTING LABORATORIES IN THE COUNTRY **(2000-2001)**

SL.N O		Name of the State		No. of Soil Testing Laboratories							Annual analyzing capacity (In '000)	Samples analyzed (In '000)
				State Govt		Fertilizer industry		Total				
				Static	Mobile	Static	Mobile	Static	Mobile	Total		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
	<u>SOUTH ZONE</u>											
	1.Andhra Pradesh	23	4	4	-	27	4	31	544	367.13		
	2.Karnataka	21	3	3	1	24	4	28	602.4	334.05		
	3.Kerala	13	7	2	-	15	7	22	357	186.40*		
	4.Tamil Nadu	19	16	2	2	21	18	39	952	693.53		
	5.Pondicherry	2	-	-	-	2	-	2	20	20.01		
	6.A&N Islands	1	-	-	-	1	-	1	12	7.10		
	7.Daman & Diu	-	-	-	-	-	-	-	-	-		
	8.Lakshadweep	-	-	-	-	-	-	-	-	-		
	<u>TOTAL</u>	79	30	11	3	90	33	123	2487.4	1608.22		
	<u>WEST ZONE</u>											
	9.Gujarat	16	5	4	3	20	8	28	346	216.20		
	10.Madhya Pradesh	20	5	2	2	22	7	29	365	118.17		
	11.Maharashtra	29	-	9	5	38	5	43	392.45	211.91		
	12.Rajasthan	8	12	1	1	9	13	22	348	318.26		
	13.Goa	1	1	-	-	1	1	2	23	21.47		
	14.Dadra&Nagar Haveli	1	-	-	-	1	-	1	1	0.84		
	<u>TOTAL</u>	75	23	16	11	91	34	125	1475.45	886.85		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
III.	<u>NORTH ZONE</u>									
	15.Haryana	25	-	-	1	25	1	26	356	254.76
	16.Punjab	48	13	1	2	49	15	64	810	
	17.Himachal Pradesh	11	-	-	-	11	-	11	130	453.12
	18.Uttar Pradesh	56	15	-	2	56	17	73	1305.1	85.36
	19.Jammu&Kashmir	3	3	-	-	3	3	6	56	
	20.Delhi	1	-	-	-	1	-	1	6	884.55
	21.Chandigarh	-	-	-	-	-	-	-	-	25.56
	<u>TOTAL</u>	144	31	1	5	145	36	181	2663.1	17110.13
IV.	<u>EAST ZONE</u>									
	22.Bihar	30	2	3	1	33	3	36	411.5	29.51*
	23.Orissa	11	-	2	-	13	-	13	294	92.96
	24.West Bengal	13	4	3	-	16	4	20	218	51.53
	<u>TOTAL</u>	54	6	8	1	62	7	69	923.5	174.00

V.	<u>NORTH-EAST ZONE</u>									
	25.Assam	7	4	2	-	9	4	13	180	
	26.Tripura	5	1	-	-	5	1	6	70	26.13
	27.Manipur	3	1	-	-	3	1	4	55	7.16
	28.Nagaland	3	-	-	-	3	-	3	50	
	29.Arunachal Pra	1	-	-	-	1	-	1	10	2.12*
	30.Meghalaya	3	1	-	-	3	1	4	50	15.00
	31.Sikkim	1	1	-	-	1	1	2	23	
	32.Mizoram	1	-	1	-	2	-	2	18.5	1.51
										7.57*
										4.93
										7.50
	TOTAL	24	8	3	-	27	8	35	456.5	71.92
	Grand Total	376	98	39	20	415	118	533	8005.95	4451.12

Note: Number of farm holdings for individual UTs are not available, however, grand total include number of farm holdings of all UTs put together.

** Tentative figures.*

NAME OF STATE/ STATE/			PERCENT SAMPLES DEFICIENT (PSD)					
UNION TERRITORIES			Zn	Cu	Fe	Mn	B	Mo
Andhra Pradesh			49	<1	3	1		
Assam			34	<1	2	20		
Bihar			54	3	6	2	38	
Delhi			20					
Gujarat			24	4	8	4	2	10
Haryana			60	2	20	4	0	28
Him. Pradesh			42	0	27	5		
J & Kashmir			12					
Karnataka			73	5	35	17	32	
Kerala			34	3	<1	0		
Madhya Pradesh			44	<1	7	1	22	18
Maharashtra			86	0	24	0		
Meghalaya			57	2	0	23		
Orissa			54		0	0		
Pondicherry			8	4	2	3		
Punjab			48	1	14	2	13	
Rajasthan			21					
Tamil Nadu			58	6	17	6	21	
Uttar Pradesh			46	1	6	3	24	
West Bengal			36	0	0	3	68	
All India			48	3	12	5	33	13
Source : Progress Report 1998-2000 on Micro and Secondary Nutrients and								
Pollutant Elements Research in India, Indian Institute of Soil Science (ICAR), Bhopal								