

# **ESTIMATES COMMITTEE (1972-73)**

**(FIFTH LOK SABHA)**

## **FORTIETH REPORT**

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

### **FERTILISERS**



**LOK SABHA SECRETARIAT  
NEW DELHI**

*April, 1973/Vaisakha, 1895 (Saka)*

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(1972-73)

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## INTRODUCTION

I, the Chairman, Estimates Committee, having been authorised by the Committee to submit Report on their behalf, present this Fortieth Report on the Ministry of Petroleum and Chemicals (Department of Chemicals)—Fertilizers.

2. The Committee took evidence of the representatives of the Ministries of Petroleum and Chemicals (Department of Chemicals), Agriculture (Department of Agriculture), Finance (Departments of Expenditure, Economic Affairs and Banking), Irrigation and Power, Railways, Steel and Mines (Department of Mines), Department of Supply, Planning Commission, Fertilizer Corporation of India and Minerals and Metals Trading Corporation on the 23rd to 25th November and 5th December, 1972. The Committee wish to express their thanks to the Officers of these Ministries etc. for placing before them the material and information which they desired in connection with the examination of the subject and for giving evidence before the Committee.

3. The Committee also wish to express their thanks to Sarvashri F. J. Heredia, Satya Nand and Paul Pothen, of the Fertilizer Corporation of India for furnishing memorandum to the Committee and also for giving evidence and making valuable suggestions.

4. The Committee also wish to express their thanks to all the Associations and Bodies of Trade and Industry and Individuals who furnished memoranda to the Committee.

5. The Report was considered and adopted by the Committee on the 16th April, 1973.

6. A statement showing the analysis of recommendations/conclusions contained in the Report is also appended to the Report (Appendix II).

NEW DELHI-1;

April 23, 1973.

Vaisakha 3, 1895 (Saka).

KAMAL NATH TEWARI,

*Chairman,*

*Estimates Committee.*

## CHAPTER I

### TARGETS AND ACHIEVEMENTS

#### A. Introductory

##### *Definition and Importance*

Fertilizer is any substance that is added to the soil to supply those elements required in the nutrition of plants which are lacking in the natural state. A judicious application of the proper types of fertilisers to the soil can step up agricultural production manifold. This is particularly important where the individual land holdings are small and mechanised cultivation is not possible, as in India. Fertilisers can be divided broadly into organic and inorganic. The organic fertilisers are those which are derived from organic origin such as farmyard manure, green manure, compost, sewage etc. The plant nutrients contained in organic fertilisers normally form a small proportion of its total weight. The organic manures, therefore, cannot effectively and economically meet the nutrient requirements of modern agriculture. Besides, availability of farmyard manure and compost is limited. These have, however, a place of their own because of their special qualities particularly in the matter of providing humus required in the soil and as a soil-conditioner. Inorganic fertilisers, also called chemical fertilisers, are of more recent origin and generally contain plant nutrients in a more concentrated form. These are synthesised in large modern factories and are virtually tailor-made to suit the requirements of different soils and different crops. In view of the limitations of the organic fertilisers, the only way by which the manure requirements of agriculture could be met effectively would lie in the application of inorganic/chemical fertilisers.

The inorganic fertilisers are of the following types:

*Nitrogenous Fertilisers*—Usually denoted as “N”.

- Urea (46% N)
- Ammonium Sulphate (20·6% N)
- Calcium Ammonium Nitrate (25% N)
- Ammonium Chloride (25% N)
- Ammonium Sulphate Nitrate (26% N)

*Potassic Fertilisers*—Usually denoted as “K”

- Muriate of Potash (60% K)
- Potassium Sulphate (50% K)

**Phosphatic Fertilisers**—Usually denoted as “P”

Superphosphate (16% P)  
 Triple Superphosphate (46% P)  
 Basic Slag Indigenous (1.507% P—Average)

*Complex/Compound Fertilisers*

Diamonium Phosphate (18% N, 46% P)  
 Nitrophosphate (different grades with or without Potash)  
 NPK (different compositions and grades)  
 Ammonium Phosphate Sulphate (16% N, 20% P)  
 Urea Ammonium Phosphate (28% N, 28% P)

### *Consumption in India and abroad*

1.2. The consumption of fertilisers in India and some of the advanced countries of the world during the 1969-70 was as follows:

(In 1000 Metric tonnes)

Sl. No.	Country	Consumption		
		N	P	K
1. Australia	· · · · ·	172	830	95
2. Austria	· · · · ·	121	119	152
3. Canada	· · · · ·	245	320	190
4. Denmark	· · · · ·	270	127	184
5. Federal Republic of Germany	· · · · ·	1085	857	1120
6. France	· · · · ·	1243	1681	1279
7. India	· · · · ·	1357	416	210
8. Japan	· · · · ·	897	689	690
9. Nationalist China (Taiwan)	· · · · ·	165	41	62
10. Netherlands	· · · · ·	385	108	123
11. Sweden	· · · · ·	205	139	129
12. U. K.	· · · · ·	650	460	462
13. U. S. A.	· · · · ·	6679	4177	3625
14. U.S.S.R.	· · · · ·	3798	1916	2319
15. Yugoslavia	· · · · ·	284	183	180

One of the reasons for this difference between the level of consumption in India and other countries, it is stated, is the fact that fertiliser usage started late in this country as compared to other developed countries. Besides, the following major factors are also cited for the low level of consumption in the country:

- (a) Constraints in the availability of credit for fertilisers;
- (b) Inadequacy in fertiliser distribution arrangements;

(c) Lack of extensive promotional programme; and

(d) Natural causes like drought, floods, etc.

The Committee have discussed in subsequent Chapters the availability of fertiliser credit distribution arrangements and promotional programmes.

### B. Fourth Plan Targets and Achievements

#### *Consumption Targets and Achievements*

1.3. It is noticed that the Fourth Five Year Plan did not indicate the year-wise targets for consumption of fertilisers. The reason for the absence of these targets in the plan document were indicated by the representative of the Planning Commission during evidence as follows:—

“We have not indicated in the Plan document the annual figures of consumption for fertilisers. We did not have the full picture about the step up of the capacity and the production likely to take place; but subsequent to the finalisation of the Plan, in consultation with the Ministry, we had attempted to work out for our own internal purposes, the expected levels of capacity and production. This was, of course, not included in the Plan, because the plan had been published; but we had this as an internal document.”

1.4. The consumption targets laid down for the Fourth Plan period and the consumption achieved has been indicated year-wise as follows:

(In lakhs Tonnes of Nutrients.)

	Target consumption				Consumption achieved			
	N	P	K	Total	N	P	K	Total
1969-70	17	6	3	26	13.56	4.16	2.10	19.82
1970-71	20	7.5	4.2	31.7	14.79	5.41	2.36	22.56
1971-72	20	8	4	32.0	17.98	5.58	3.00	26.56
1972-73 Orgl. Est.	27.8	11.5	7.3	46.6	..	..	..	..
Revised Est.	22	8	4.5	34.5	..	..	..	..
1973-74 Orgl. Est.	32	14	9	55	..	..	..	..
Revised Est.	26	8.1	5.2	39.3	..	..	..	..

1.5. It would be seen from the above figures that during the first 3 years of the Fourth Plan, though the annual increase in consumption of fertilisers was 13 per cent, 14 per cent, and 18 per cent, the actual consumption was much below the consumption targets laid down in the Fourth Plan. The shortfall during 1969-70, 1970-71 and 1971-72 was as much as 24 per cent, 29 per cent and 17 per cent respectively. For the last two years of the Plan, Government have themselves revised the consumption targets. The consumption target for 1972-73 has been scaled down from 46.6 lakh tonnes to 34.5 lakh tonnes. The indications given of the estimated shortfall in imports for 1972-73 suggest that the actual consumption during 1972-73 would be only 27.51 lakh tonnes and that also only if the envisaged production of 14.20 lakh tonnes actually materialises. For the year 1973-74, the original target for consumption has been reduced from 55 lakh tonnes to 39.3 lakh tonnes.

1.6. The Committee regret that inspite of the acknowledged role of fertilisers in augmenting agricultural production under the Indian conditions, the annual consumption achieved during the first three years of the Fourth Plan was consistently less than the plan targets. They are further disappointed to note that for the last two years of the plan, Government have themselves revised the consumption targets. The consumption target for 1972-73 has been scaled down from 4.66 million tonnes to 3.45 million tonnes while the indications given of the estimated shortfall in imports suggest that the actual consumption during 1972-73 would be only 2.75 million tonnes and that too only if the envisaged indigenous production of 1.42 million tonnes actually materialises during that year. For the year 1973-74, the original target for consumption has been reduced from 5.50 million tonnes to 3.93 million tonnes.

1.7. The Committee have a feeling that Government have not paid as much attention to the use of fertilisers for agricultural production as it deserves in the context of the persisting food problem in the country. They recommend that Government should make every effort to achieve atleast the revised targets of consumption during 1973-74 in order to create conditions for a faster rate of growth in the field of agriculture.

#### *Capacity Targets and Achievements*

1.8. The licensed capacity for the production of fertilisers existing at the commencement of the Fourth Plan, i.e. on 1.4.1969, was 25.63 lakh tonnes (18.49 "N"+7.14 "P"). No targets were set down in the Fourth Plan for the capacity to be licensed during the plan period. The capacity actually licensed upto 1st March, 1973 was, however, 45.61 lakh tonnes (34.61 "N"+11.00 "P"). This indicates an increase in the licensed capacity during the current plan period till the 1st March, 1973, of 19.98 lakh tonnes.

1.9. The installed capacity at the commencement of the Fourth Plan, i.e. on 1.4.1969, was 14.45 lakh tonnes (10.24 "N"+4.21 "P"). The Fourth Plan set down the targets of 42.00 lakh tonnes (30 "N"+12 "P") of capacity to be installed by the end of the plan period i.e. 1973-74. This target was scaled down as a result of the Mid-Term Appraisal of the Plan to 29.57 lakh tonnes (23.91 "N"+5.66 "P"). As against even the scaled down target, the capacity actually installed during the plan period upto 1st March, 1973 totalled 19.64 lakh tonnes (14.64 "N"+5.00 "P") only. The net increase in installed capacity during the Fourth Plan period upto 1st March, 1973 was therefore only 5.19 lakh tonnes (4.40 "N"+0.79 "P").

1.10. In a written note furnished to the Committee, the Ministry of Petroleum & Chemicals have explained the reasons for scaling down the Fourth Plan targets of installed capacity and production in the Mid Term Appraisal of the Plan as follows:

"As a part of the mid-term appraisal of the Fourth Plan, a review was made of the progress made on the various projects and proposals under consideration. This review showed that some of the projects/proposals for which credit had been taken in arriving at the aforesaid figure were getting delayed or had failed to materialise. As a result, it was considered in the mid-term appraisal that the capacity and production targets, as originally fixed, may not be achieved. Hence a revision of the targets (from 3 million tonnes) to 2.39 million tonnes of nitrogen in respect of capacity and (from 2.5 million tonnes to) 1.8 million tonnes in respect of production became necessary."

As to the achievement of this reduced target for installed capacity by the end of the Fourth Plan period, the note states:

"The capacity presently installed is of the order of 1.464 million tonnes of nitrogen. According to the latest available indications, six more projects with a total capacity of 0.82 million tonnes of nitrogen are expected to go into production before the end of the Fourth Plan:—

Durgapur	.	.	.	.	.	.	.	• 0.152 million tonnes.
Cochin	.	.	.	.	.	.	.	• 0.152 million tonnes.]
Barauni	.	.	.	.	.	.	.	• 0.152 million tonnes.
Namrup (Exp.)	.	.	.	.	.	.	.	• 0.152 million tonnes.
Goa	.	.	.	.	.	.	.	• 0.170 million tonnes.]
Kota (Exp.)	.	.	.	.	.	.	.	• 0.042 million tonnes.
<b>TOTAL</b>								<b>• 0.820* million tonnes.</b>

\*In addition the following capacity for the production of phosphatic fertilisers is likely to materialise during the remaining period of the Fourth Plan:

Goa	0.042 MTS.
FACT Alwaye	0.010 MTS.
Mah. St. Agr. Ind. Corp.	0.008 MTS.
Total	<u>0.060</u> MTS.

With the commissioning of these projects, the total installed capacity by the end of the Fourth Plan period would be 2.284 million tonnes of nitrogen. This would mean that the achievement of capacity would be marginally less than the target as arrived at in the mid-term appraisal."

1.11 During evidence, the representative of the Ministry of Petroleum and Chemicals explained that this shortfall in the installed capacity was due to the fact that the policy of Government announced in 1966 did not fetch "positive proposals for investment in this field" and the response of the "private sector was found to be halting." "At the same time", according to him, "the public sector has also faced a number of difficulties primarily of foreign exchange financing, clearance of projects and their implementation (basically due to) our efforts at indigenisation." He conceded that it is taking "inordinately long" to sanction the projects and to tie-up the requirements of foreign exchange, but held that the delay in commissioning is also due to the fact that the fertiliser projects are "long gestation" projects having a very low rate of return on investment.

1.12 In reply to another question, he stated:

"this shortfall is largely attributable to the fact that has already been noticed, that at the beginning of the Fourth Plan we did not identify the projects. Therefore, the early part of the Fourth Five Year Plan was taken in identifying and clearing projects in sufficient number. The second thing was that the private sector did not respond as expected. Today the position is that while we have 15 operating units in the country producing fertiliser or mixed fertiliser, we have 17 plants under erection. That means there has been a delay. Therefore, if you have a cut off point at the end of the Fourth Plan, there will certainly be a shortage. But as you go on, the gap between the requirement and availability will narrow down. I do not say that it will be met completely. Thereafter, if we make no further effort, the gap will widen again. Therefore, we have to make a continuing effort."

1.13. As regards keeping of a close watch on the progress of the projects and taking timely action to remove the causes leading to the shortfalls in the achievement of targets, he said:

"This aspect has been gone into continuously by a high level Committee of Secretaries which has been authorised by the Government to take all the necessary decisions including

**Investment decision.** Because of the working of this Committee, it has been possible to identify the various aspects which deserve attention. There are four items on which we think action is required. (1) To make the optimum use of capacity in the existing plants; (2) speedy implementation of projects from the stage of sanction till they are commissioned and avoidance of delays at all stages; (3) early clearance of new projects to facilitate rapid capacity build up; and (4) to take necessary measures to facilitate flow of funds from the private sector into this area of production. These are the four aspects that are being attended to. We have taken up very detailed planning two years in advance. We are hopeful that the shortcomings you are referring to, will not occur or will be prevented to the maximum extent possible."

1.14. One of the reasons given for the delay in the commissioning of the fertiliser projects is the attempt at indigenisation of the plants. Asked as to how could the stress on indigenisation be justified when it had lead to an increased outlay of foreign exchange on import of fertilisers by delaying the commissioning of the projects, the representative of the Ministry stated:

"It is a matter of national philosophy whether in this sphere we will try and attain maximum indigenisation. . . . In fact, we have had occasions when we had to resist suggestions from abroad that (if) we allow more or less turn key projects, they would be willing to finance it."

In this connection, the Managing Director of the Fertiliser Corporation of India stated that the main object of indigenisation was not to stop the outgo of foreign exchange as much as "to develop our own know-how to arrive at self reliance in our own country" and that "the country which has to be self-reliant in such technology has to pay heavily."

1.15. Dealing with the delays in tying up foreign exchange credits for the projects leading to shortfalls in the achievements of capacity targets during the Fourth Plan period, the representative of the Ministry of Finance stated:—

"The aid giving countries have a system of appraisal of projects. But, this is nothing new. In the planning of Projects they (the Ministry of Petroleum and Chemicals) should have provided adequate time. It is not as if the appraisal procedure has suddenly sprung upon the Fertiliser Corporation of India or the Ministry of Petroleum and Chemicals. In the Pro-some time. It is also a fact that in drawing up the earlier

had not been provided for the fact that appraisal will take some time. It is also a fact that in drawing up the earlier estimates for the Fourth Five Year Plan, a defect was noticed and this is being corrected. In drawing up the estimates for the Fourth Five Year Plan, it had been assumed that all the plants will have 100 per cent utilisation. That is how the capacity of the new plants had been determined. Due to various reasons, both old and new plants encountered commissioning and maintenance difficulties."

### *Production Targets and Achievements*

1.16. The Fertiliser production in the country at the commencement of the Fourth Plan (i.e. in 1968-69) was 7.55 lakh tonnes (5.45 "N" plus 2.10 "P"). The Fourth Plan document did not indicate year-wise targets for the plan period but set down the production target for 1973-74, the last year of the plan, as 34 lakh tonnes (25 "N" Plus 9 "P"). This target was scaled down as a result of the Mid-Term Appraisal to 22.58 lakh tonnes (18.00 "N" plus 4.58 "P"). The Ministry had, however, independently set down the production targets for each year of the Fourth Plan. The Ministry's production target for 1973-74 is between 19.50 and 21.30 lakh tonnes. (15.00-16.40 for "N" and 4.50-4.90 for "P"), which means a further scaling down of the production target for the final year of the Fourth Plan at the level of the Ministry of Petroleum and Chemicals.

1.17. The year-wise targets set down by the Ministry of Petroleum and Chemicals for the Fourth Plan period, the actual production during first three year of the Plan, and the production estimates for the last two years of the Plan period are as follows:

	Production Target			Actual Production		
	N	P	Total	N	P	Total
1969-70	8.50	3.10	11.60	7.16	2.22	9.38
1970-71	10.50	3.30	13.80	8.30	2.29	10.59
1971-72	13.20	3.30	16.50	9.52	2.78	12.30
1972-73	12.00	3.77	15.77	..	..	..
	13.00	4.09	17.09	11.00*	3.20*	14.20*
1973-74	15.00	4.50	19.50	..	..	..
	16.40	4.90	21.30	13.00	4.00	17.00

\*Estimated Production.

Thus, as against the fertiliser production target for 1973-74 of 34 lakh tonnes set down in the Fourth Plan document, which was scaled down to 22.58 lakh tonnes in the Mid Term Appraisal and further scaled down by the Ministry of Petroleum and Chemicals to 19.50 lakh tonnes, the production estimate for that year is only 17 lakh tonnes. The net increase in annual production of fertilisers during the Fourth Plan period is estimated to be 9.45 lakh tonnes, while the actual increase in annual production has been from 7.55 lakh tonnes at the commencement of the plan to 12.30 lakh tonnes during 1971-72, the third year of the Plan.

1.18. The reasons for the low production of Nitrogenous fertilisers estimated at 13.00 lakhs tonnes in the last year of the Plan as against even the lowest production target of 15 lakh tonnes of Nitrogenous fertilisers fixed by the Ministry of Petroleum and Chemicals themselves, have been indicated by the Ministry of Petroleum and Chemicals in a written note to the Committee as follows:

"It is a hard fact that almost all the new projects referred to above have faced considerable delays in implementation and would be commissioned only towards the end of the Fourth Plan period. As a result, their contribution to production even during the last year of the Fourth Plan may not be substantial. In addition, some of the projects on which construction has been completed have been facing serious problems due to equipment failures during their commissioning. This is also expected to affect the build-up of production from these plants during the initial years of their operation. In addition both the operating units and the projects under implementation, have had to grapple with serious difficulties on account of inadequacy of power supply and power cuts which had to be, or are being, imposed by the various power systems. The instability in the supply of power arising from voltage fluctuations and frequency dips is yet another complicating factor. How the power problem has been plaguing this industry can be gauged from the fact that during the years 1970-71 and 1971-72, a total production of about 80,000 tonnes of nitrogen was lost. In monetary terms, the loss suffered is of the order of Rs. 16 crores. The power problem has particularly been difficult this year as a result of widespread drought conditions; it is feared that if the present power shortage were to continue, the production in 1972-73 and in subsequent years may be very seriously affected. It is because of these constraints that the level of production likely to be achieved by the end of the Fourth Plan may only be 1.3 million tonnes of nitrogen, even though the total capacity in operation would be about 2.284 million tonnes."

### *Financial Targets and Achievements*

1.19. The financial targets as originally laid down for the Fourth Plan and in the mid-term appraisal of the Plan are as follows:—

(Rs. in crores).

	Plan Provision	As indicated in Mid-term Appraisal
Continuing Schemes . . . . .	231·73	224·80
New Schemes . . . . .	262·00	189·10
TOTAL . . . . .	493·73	413·90

The total expenditure during the first three years of the Plan was Rs. 197.64 crores only.

1.20. The representative of the Ministry stated during evidence that the Plan provision for new schemes was only "a lump-sum provision" based on the "assumption" of certain new schemes. He said that the financial target for new schemes had to be reduced by about Rs. 73 crores in the mid-term appraisal on account of the delay in the finalisation of some of the new projects, particularly the coal-based plant at Korba and the plants at Nangal (Exp), Cochin (Phase II) and Haldia. He, however, assured the Committee that "it is likely that the over-all mid-term allocation of Rs. 413.9 crores can be spent during the Plan period." Subsequently, in reply to another question, he said that it was hoped that it would be possible to utilise as much as Rs. 486 crores.

1.21. The representative of the Planning Commission was, during evidence, asked to state the reasons for lump sum provision being made for the new schemes in the Fourth Plan document on an *ad hoc* basis. He said:

"The projects had not, at the time of the formulation of the Plan, been fully indentified and investment decisions taken. In the absence of identified projects, we provided a lump sum provision, on the basis of an assessment of what is likely to be spent, and what projects are likely to be taken up. At the time when the plan was being finalised, studies were in progress with respect to the three coal-based fertiliser projects, viz. Talcher, Ramagundam and Korba. There were also proposals for Nangal expansion, Haldia and Cochin Phase-II; but these had not been fully worked out and, therefore, we did not want to include them by name, because investment decisions were yet to be taken; but we had particularly in mind

**these projects when we provided Rs. 262 crores in the IV Plan document.....”**

“The Fourth plan was prepared under rather un-usual conditions. We had earlier three annual Plans and therefore the kind of very detailed preparation which normally precedes a Plan, was not really put in and this was one of the reasons why we did not have a large number of identified projects..... The Mid-term appraisal does not include any amount of lump sum provision. All the projects have been identified and specific allocations have been made. Now, we have learnt a lesson from this and in relation to the Fifth Plan, preparatory work was initiated nearly a year ago, so that all the projects are identified, projects are prepared well in time and some choices could be exercised in terms of relative importance and priorities. So this work has already been initiated and the Ministries are preparing the reports on various projects. In fact there is a task force on fertiliser which has been set up and working on this.....something like five million tonnes of capacity has been identified so far and we have still to meet two million tonnes of fertilisers for the identification of which work is currently in progress.

We have got another 15 months and before finalisation of the Fifth Plan proposal it would be possible for us to firm up the reports of the various projects. We are considering to have something like 7 million tonnes of capacity.”

**1.22. The Committee are constrained to note that the net addition of installed capacity for the production of fertilisers in the country during the Fourth Plan period is likely to be only 13.99 lakh tonnes as against the original Plan target of 27.55 lakh tonnes. According to revised estimates the annual production of fertilisers is likely to increase during the Plan period by 9.45 lakh tonnes only (from 7.55 lakh tonnes in 1968-69 to 17 lakhs tonnes in 1973-74) as against the original Plan target of an increase by 26.45 lakh tonnes. Thus, with reference to the original plan targets, the achievements in the case of installed capacity and production are likely to be only 51 per cent and 36 per cent respectively. Sizeable shortfalls have similarly been noticed in the achievement of financial targets covering expenditure on public sector projects. The Committee also note that to cover up the sizeable shortfall in achievements, Fourth Plan targets have been scaled down from time to time and the achievements are indicated against the revised targets.**

**1.23. The Committee are averse to the ad hoc manner in which the fertiliser capacity and production targets were fixed for the Fourth Plan**

period by the Planning Commission and the Ministry of Petroleum and Chemicals. They are also surprised at the leisurely manner in which the public sector projects were identified and finalised even though the Fourth Plan envisaged their implementation within the Plan period. They also feel that the capital intensive, long gestation and low profitable nature of the fertiliser industry was a sufficient warning for the Government that the private sector may not have an impressive role to play in this field; yet, Government had not taken up in advance preparation for a maximum effort in the public sector to achieve the targetted capacity.

**1.24.** The Committee hope that the poor achievements in the past would provide a spur to the authorities concerned to urgently rationalise the procedures for clearance of projects, streamline the implementation machinery and achieve maximum production in shortest time so that pressure on foreign exchange needed for import of fertilisers may be relieved and the country attains a degree of self-sufficiency in this field.

#### (C) Targets for the Fifth Plan

##### *Fifth Plan Targets*

**1.25.** The following targets of consumption, installed capacity, production and imports have been indicated for the Fifth Plan period. The estimates of consumption during the Fifth Plan period have been assessed by an Expert Committee headed by the Deputy Director General of the Indian Council of Agriculture Research on the basis of the response ratios of fertilisers for the different crops so that the estimates of requirements are a little more scientific and realistic. The import figures are dependent upon the production figures. The targets of installed capacity and production are, it is stated, for operating units, projects under implementation/firmed up and for schemes proposed in Fifth Plan period which are yet to be approved and included in the Fifth Plan.

*Statement showing the targets for consumption, installed capacity, production and imports for the Fifth Plan period (1974-79)*

Quantity in lakh tonnes/value in Rs. crores.

Year.	Consumption				Installed Capacity				
	N	P	K	Total	N	P	K	Total	
1974-75	•	29.6	9.8	5.2	44.6	29.68	9.33	..	39.01
1975-76	•	34.0	12.0	6.3	52.3	36.16	11.73	..	47.89
1976-77	•	39.1	14.7	7.7	61.5	48.09	14.73	..	62.82
1977-78	•	45.0	18.1	9.4	72.5	61.77	22.73	..	84.50
1978-79	•	52.0	22.2	11.5	85.7	70.89	28.73	..	99.62

Year	Production				Imports				
	N	P	K	Total	N	P	K	Total	Total@ Value.
1974-75	17.35	5.50	..	22.85	12.5	4.3	5.2	22.0	217.10
1975-76	23.30	7.70	..	31.00	10.7	4.3	6.3	21.3	207.80
1976-77	29.85	9.75	..	39.60	9.25	4.95	7.7	21.9	210.12
1977-78	41.20	14.15	..	55.35	3.80	3.95	9.4	17.15	150.49
1978-79	52.00	19.60	..	71.60	—	2.60	11.5	14.1	105.71

@Value calculated on the basis of weighted prices of Rs. 1038 per tonne for "N", Rs. 1350 per tonne for "P" and Rs. 614 per tonne for "K". :—

1.26. It would be seen from the above statement that during 1978-79, the last year of the Fifth Plan period, fertiliser consumption of 85.7 lakh tonnes (52 'N" plus 22.2 "P" plus 11.5 'K') is envisaged. For achieving this scale of consumption, it is planned to have by 1978-79 an installed capacity of 99.62 lakh tonnes (70.89 'N" + 28.73 'P"). This would enable the country to achieve self-sufficiency in nitrogenous fertilisers by the end of the Fifth Plan period. But, about 12 per cent of the consumption of phosphatic fertilisers (2.60 lakh tonnes) and the entire requirement of potassic fertilisers (11.5 lakh tonnes) would still have to be met from imports.

1.27. As to the prospects of achieving an installed capacity of 70.89 lakh tonnes of Nitrogenous fertilisers by the end of the Fifth Plan period, it is stated that the following projects are under implementation or are to be taken up for implementation shortly and would be commissioned during the Fifth Plan period:

Projects	Capacity (in million tonnes)	Likely date of com- mencement of pro- duction
<i>Under implementation</i>		
IFFCO	0.215	October, 1974
Talcher	0.228	October, 1975
Ramagundam	0.228	October, 1975
Haldia	0.152	January, 1976
Gorakhpur (Exp.)	0.051	October, 1974
Cochin (Phase II)	0.040	October, 1974
Mangalore	0.160	January, 1975
Tuticorin	0.258	December, 1975
<b>TOTAL</b>	<b>1.332</b>	

*To be taken up for implementation shortly*

Korba . . . . .	0.228	January, 1977
Nangal Exp. . . . .	0.152	April. 1976
Sindhri . . . . . Modernisation.	0.129	October, 1976
	0.509	
GRAND TOTAL . . . . .	1.841	

With the implementation of these projects, the total capacity on which planning has been finalised and appropriate clearances given, would amount to 4.125 million tonnes of nitrogen.

1.28. It is further stated that to bridge the gap between the capacity which has already been cleared for implementation and the capacity required, action has already been initiated towards planning an additional capacity of about 2.4 million to 2.9 million tonnes. For building up this additional capacity, at least 10 to 12 large sized projects will have to be set up, the locations of which would, have to be settled taking into full account the techno-economic considerations, availability of infra-structure facilities, of feedstock etc. A panel of the Task Force on Fertilisers constituted by Government has already examined possible locations where additional capacity could be considered during the Fifth Plan period. Steps have also been taken to have feasibility studies carried out for several of these locations. The implementation of the additional capacity envisaged above, including the corresponding phosphatic capacity, would, it is stated, require a total investment of the order of about Rs. 1500 crores, including a foreign exchange component of about Rs. 650 crores.

1.29. In formulating the above plan, considerable emphasis is being laid on the standardisation of capacity to minimise the effort involved in design and engineering so that the completion of projects is expedited. It is expected that such standardisation could also contribute towards reducing the delivery schedules at which indigenous supplies can be made available to the new projects. In view of the very large programme involved and the known limitations of resources, the possibility of implementing a part of the programme on a 'crash' basis has also been considered. Under this plan, the major responsibility for implementing some of the projects would be entrusted to experienced foreign contractors who could implement the projects with maximum utilisation of engineering and other facilities and supplies available from within India consistent with the time schedule envisaged in the 'crash' programme.

1.30. In reply to a question during evidence, the representative of the Ministry of Petroleum and Chemicals stated:

"If all the clearances have been given (and) foreign exchange tied up, it should take 30 to 33 months for an efficient plant to be commissioned. Normally 42 to 48 months should be considered necessary for the purpose. Although on a crash basis the statement has been made, that a plant can be commissioned in 30 months but that would require tying up various things in advance and that may not be possible to do; especially when we insist, according to our policy, indigenising of detailed design and fabrication of the equipment to the maximum possible extent. When the fertiliser plant is commissioned, in the first year of its production, it is usual to expect performance to the extent of 50 per cent or so. In the second year, it may go upto 65 or 70 per cent and in the third year it may go to 85 or 90 per cent. The plant really takes three years to develop its total production capacity."

1.31. With reference to this statement and the fact that the net achievement of capacity during the Fourth Plan period was likely to be only 13.99 lakh tonnes, he was asked as to how he expected to achieve during the Fifth Plan period an increase in capacity which was five times the performance during the Forth Plan. He said:

"This matter has been considered in great detail and analysed in the Ministry and in the Government as well, in consultation with related Ministries like the Planning Commission, the Ministry of Finance, the Department of Economic Affairs and so on, and Government have decided upon a number of measures not only to speed up construction but also to speed up investment, if possible, in new fertiliser projects. Because of the sudden change in the fertiliser position in the world, at the beginning of 72, it has been decided that it would be preferable to have a crash programme for the construction of fertiliser plants. With the improvements in procedure, streamlining and some variations in earlier policy with regard to equipment and so on, it is expected hopefully that we should be able to speed up sanction and completion of projects, in the years to come."

"You are quite right in saying that it will take between four and five years from the time the project is passed to the time it is commissioned. That means formalities will take about a year and the construction and commissioning will take about four years. For the purposes of the Fifth Plan we have tried to

speed up the process of sanction and tying up of foreign exchange by preparing a shelf of projects for which very special efforts are being made to tie up foreign exchange. Very much will depend on the credits available. This was commenced some one year ago when the Fifth plan was still two years away and we are now nearing a stage where four or five new projects are on the anvil and we hope that some progress will be made in securing credits for the implementation of these projects on a crash basis. Therefore the work that we have done in these two years in locating new project possibilities, and preparing the proposals, will I think stand us in good stead and if these projects are cleared in the next few months, we will have gained one year."

He further stated:

"Crash Programme that is being suggested now to Government and which Government are considering and are inclined to support, is that these Crash Programme projects should be on a somewhat different basis. While maximum indigenisation of plant and equipment will still be attempted, this will be within a certain time schedule. For example, if we say that a plant must go into production in 36 months, it means the delivery schedule of each item will be worked out; if a particular item is to be delivered in 24 months and even if it can be fabricated in India but cannot be delivered in 24 months, then we would go ahead and sanction its import."

1.32. As to the association of the private sector with the programme for the production of fertilisers during the Fifth Plan period, he started:

"In the Fifth Plan, we still hope that the private sector will respond. For that purpose, an exercise is being made to see what action needs to be taken to ensure reasonable profitability of a venture of this kind which is of a highly capital intensive nature.... a detailed cost benefit analysis is being attempted .... (and) the rate of return is being analysed for them. We are trying to see what should be done. One step has already been taken.....it has been decided that future plants will, as far as possible, be on fuel oil as the feedstock. The cost of the fuel oil based plant will be at least 10 per cent more than the cost of the Naphtha based plant. Therefore, the rate of return is low. Government have already decided that excise duty on fuel oil will be completely exempted when it is used

for the manufacture of fertilisers. Then the other measures are to see that Fuel Oil and Naphtha Plants are on the same economic basis. These are being examined in detail and the decision will be announced. We have this experience that what.....Government considers as reasonable profit may not be reasonable profit to the private sector investor. If that happens then the decision will have to be taken by the Government whether the entire fertilisers requirement should be manufactured in the public sector rather than entrusting some of it to the private sector."

1.33. Regarding the prospects of allocation of foreign exchange for financing the "Cash Programme" during the Fifth Plan, the representative of the Ministry of Petroleum and Chemicals said that for the new projects to be taken up during the Fifth Plan period "We have not been able to fix up financing arrangement yet; the problem has been posed to some of the countries and their reaction is awaited."

1.34. Dealing with the question of foreign exchange financing for the fertiliser programme during Fifth Plan, the representative of the Ministry of Finance said:

"In the present situation, after the economic aid from the United States has been suspended, it is not possible for us to say from the Department of Economic Affairs that for all the projects free currency would be given. This would be given only to the extent possible, and therefore quite a number of projects will have to be financed either by credits from countries or from the World Bank.....I do not think we have a detailed plan as to how much foreign exchange will be available in the Fifth Five Year Plan. As far as fertiliser is concerned, this would receive high priority.....not only because of the importance (of fertilisers) in relation to the food problem but in relation to the question of saving in foreign exchange. For a plant with a capacity for the production of 300,000 tonnes of nitrogenous fertilisers, roughly, the investment is Rs. 80 to 90 crores, and the foreign exchange required is 30 crores. This is when the plant works at 90 per cent capacity. For the capital investment of Rs. 30 crores, saving in foreign exchange each year is Rs. 30 crores. The proposition is therefore self-evident. If we do not release the foreign exchange, three years later we may have to release an equivalent amount for import of fertiliser year after year. The Ministry of Petroleum and Chemicals will have to (see) what organisational arrangements can

be made, and to the extent organisational arrangements are made, we will try to back it up with the foreign exchange release."

Pressed to indicate more clearly the prospects of release of foreign exchange for the programme, he said that he "would make a categorical statement that Rs. 650 crores will be found" provided the Ministry of Petroleum and Chemicals can make "organisational arrangements" to appropriate it.

**1.35.** The Committee find that the targets of capacity and production projected for inclusion in the Fifth Plan are too ambitious as they envisage a five fold increase in the achievements made in the Fourth Plan. They feel that such a massive programme is impossible of attainment except on the basis of a "Crash Programme" to be earnestly implemented. Apart from the massive resources to the extent of Rs. 1500 crores including the foreign exchange component of Rs. 650 crores which will have to be committed to implement the programme, the norms and procedure for clearance of projects and the principles on which import of technical know-how and equipment is allowed, will have to be reoriented and the implementation machinery properly organised and geared up to work on a "Crash" basis to achieve the task assigned. All this, the Committee feel, need a very careful planning on the part of the Ministry of Petroleum and Chemicals.

**1.36.** The Committee hope that if the "Crash programme" is ultimately approved, it would be sincerely implemented so that the country attains, as the programme envisages, self-sufficiency in the field of at least nitrogenous fertilisers. To begin with, the Government should expedite their decision as to the location of the fertiliser plants which would be set up under the "Crash programme" during the Fifth Plan period.

## **CHAPTER II**

### **POLICY AND PROGRAMMES**

#### **A. Policy**

##### *Private capital in Fertiliser Industry*

2.1. Fertilisers are included in Schedule 'B' of the Industrial Policy Resolution and as such participation of private sector in the industry is envisaged. Further, according to the new licensing policy, fertiliser industry is included in the 'core' sector, and the larger industrial houses are also permitted to contribute and participate in the building up of capacity in the fertiliser industry.

2.2. Government had at the close of year 1965 enunciated a policy for the fertiliser industry. In a statement released to the Press on 17th December, 1965, the Minister for Petroleum and Chemicals said:

"Our foreign collaborators in both the private and the public sectors are naturally keen on ensuring that they get proper return on their investment. Government fully appreciate their feelings and have been considering how best to offer them the necessary encouragement by meeting their point of view as far as feasible. In our discussions with foreign parties we have been told that the most effective form of encouragement would be to assure them freedom of action in regard to prices, distribution arrangements and allied matters. In order to step up indigenous production of fertiliser, Government have, therefore, decided that all fertiliser plants licensed upto the 31st March 1967 will have, for a period of seven years from the start of commercial production, the freedom to fix prices for their products and organise their own distribution thereof subject to one condition that Government would have the option of buy upto 30 per cent of their products at a negotiated prices.

Government hope that with the grant of freedom to fix prices of their products and arrange for distribution and marketing facilities as required, the factories concerned will be able to achieve production upto their rated capacity as quickly as

possible, and at any rate not later than two years from the date of commencement of commercial production. In this connection, Government will assist them in carrying out a periodical review with a view to removing the difficulties they might experience in reaching the required production within the target date.

Government have also felt the necessity of cutting down the procedural delays now experienced in conducting negotiations with collaborating parties. It has been decided to constitute a small committee of three Secretaries of the departments of Economic Affairs, Chemicals and Agriculture, which will have all the powers to process the negotiations and take decisions.

It is hoped that these decisions will give foreign parties the necessary confidence and sense of security in respect of their investment and encourage new parties to enter the field. I am confident that the fertiliser industry in India is a safe and profitable field for investment with almost unlimited capacity for expansion and that investors from abroad as well as indigenous investors will take full advantage of the opportunity offered by the new policy decisions of the Government."

2.3. It is stated that inspite of these facilities offered, the private sector has not been evincing adequate interest in the establishment of fertiliser projects. In several cases, the projects for which letters of intent were granted, did not materialise. This is, it is held, mostly due to the fact that fertiliser industry, apart from being capital intensive with long gestation periods, is one of low profitability in this country as compared to other industries.

2.4. A non-official organisation representing the fertiliser industry has in a Memorandum submitted to the Committee, made the following submissions:

"Unfortunately, the flow of fresh investment into the fertiliser industry appears to have slowed down. A number of proposals mooted in the past few years have died a gradual death. No new proposal appears to have emerged in the last three or four years. The present position bodies ill for the future and it is necessary to critically examine the issue so that corrective action can be taken in good time. May be, an exercise similar to that of 1965 needs to be repeated to set the climate for attracting fresh investment in the fertiliser field.

In this context it would be relevant to mention that as an integral part of its 1965 policy on fertiliser, Government gave certain assurance with regard to freedom of marketing. For various reasons, Government have not honoured this commitment. This is rather unfortunate. While Government may have had good reasons for imposing a statutory price control on some of the fertilisers and regulation on their movement, this does not satisfy the investors. This is particularly so of a foreign investor who is guided more by the past record of the Government rather than its pronouncements.

One of the arguments used by some spokesmen of the Government for not fulfilling its commitment is that the additional investment in fertiliser in the country was not upto Government's expectation and, therefore, they saw no justification for continuing to honour the commitment. This is, in our view, a fallacious argument. Acceptance of this line of argument means that those who decided to invest capital in the fertiliser industry in India are to be penalised because more people did not fall for the bait. Additionally, we are creating the impression that those who did not invest capital in fertiliser industry in India were probably wiser than those who took the Government's promises seriously.

We, therefore, feel that if fresh investment is to be encouraged in the fertiliser industry, which according to our reckoning is absolutely vital, Government should not only honour its commitments but because of the emerging pattern in the industry, seriously consider offering fresh inducements and incentives to attract fresh investment in the industry.

The alternative would be reliance on heavy imports resulting in uncertainty of supplies and a very large outflow of foreign exchange on imports."

2.5. The above submission to the Committee was brought to the notice of the representative of the Ministry of Petroleum and Chemicals during evidence. Asked to offer his comments, he admitted that Government "are aware that the flow of fresh investment from the private sector has slowed down." Stating the reasons for this trend, he stated:

"The response of the private sector in numbers may have been sizeable, but, most of the proposals have been unable to tie up various matters satisfactorily....".

"With regard to the good proposals we had received in the past, which we thought were acceptable, the reason appears to be

the adverse economics of the fuel oil heavy stock route for the manufacture of fertilisers. There is also a hesitation on the part of the private sector investors on account of the fact that nitrogenous fertiliser prices are statutorily controlled and Government have quite rightly refused to increase those prices. The investors seem to feel that these prices will be unremunerative and they will not get a proper return on their investment."

2.6. Pointing out that the private sector expectations of profit were higher than those of the public sector, he said:

"The private sector would seem to desire a return on the total capital employed in the region of 20 to 25 per cent. Some of them have come and said to us that for an investment of this nature, they must have a return on the capital employed of the nature of 20 to 25 per cent. Then only, can they get a marginal rate of return around 15 to 16 per cent. When they get a marginal rate of return of 15 to 16 per cent, they get a dividend of 12 per cent after taxes. To declare a dividend 12 per cent after taxes, the total dividend to be declared will be in the region of 15 per cent. Then alone, will a private sector investor consider this as a good proposition. The Tariff Commission itself has fixed a return of around 15 to 16 per cent on the total capital employed. If we adopt that yard-stick, then private sector investors should come forward. It will be a matter of judgement. On the other hand, in the case of the public sector, if we get a return of around 9 per cent, we would consider ourselves reasonably satisfied. So, even in that, I feel that certain amendments will be necessary in the various elements that go into the cost of production."

Later on he admitted that for a 9 per cent return on capital employed, the gross profit by the public sector undertaking would have to be around 17 to 18 per cent. He, however, added:—

"There are other ways of giving relief that might be thought of. To one way of thinking, increase in the price of fertilisers to the consumer must be the last resort and it must not be allowed to occur as far as practicable."

2.7. Replying to the question whether there were any other reasons for the slowing down of private investment in the field of fertilisers, the representative of the Ministry of Petroleum and Chemicals stated:—

"The other difficulties are also there, because they are not keen to fit into the pattern suggested by the Government. Now, these

**difficulties can be of three kinds.** One is of feed-stock. Virtually, every private entrepreneur would like to use the best available feed-stock, which is naphtha, which is in short supply not only in India, but all over the world. The price is also higher, as compared to fuel oil. In our own refinery production, we get light ends to the extent of 16 per cent to 17 per cent, while we get heavier ends from 36 to 42 per cent. Therefore, we prefer the latter. In the interest of integration with our refinery programme, the heavier fractions should be used for producing fertiliser, rather than that we should be importing naphtha in larger quantities to produce fertiliser. The world trend is also that naphtha is becoming increasingly costlier. Because a lot of countries are worried about pollution, they are resorting to lighter fractions which reduce pollution. We found recently that the price of naphtha shot up from around \$15 to \$30-33. I think, in the light of this experience, the decision of the Government of India, taken some years ago, not to allow new plants to be put up on naphtha, was perfectly valid. This is one consideration.

The other is that several of them want to import intermediaries like ammonia and phosphoric acid, rather than invest their capital in the country itself. Because of the very easy way of importing intermediates rather than producing them, they preferred it.

They did not want to fit into the pattern of the various types of fertilisers that Government would like them to produce to meet the demand of the cultivators. They would like to stick to the most profitable product-mix that they can think of. So, we have to drive them towards an acceptable pattern of production and prevent them from putting up schemes which involve import of costly intermediates.”

2.8. Asked to state whether Government had in mind any incentives to attract private capital in the field of fertilisers, he said:

“A decision has been taken recently that fuel oil or heavy stock when used as raw material for the production of fertiliser, will be exempt from excise duty. This is a very substantial concession. Further, we are going into a detailed study of the economics of fertiliser production from fuel oil and heavy stock and further action will be considered on the basis of the results

of this study. The objective is to ensure that when fuel oil or heavy stock is used, the economics of the project should be roughly at par with fertiliser plants based on Naphtha."

Amplifying his above statements, he said:

"We have gone into this question in a limited way and exempted fuel oil from excise duty. We are taking up certain other measures. But these measures will also have to take into account the policy determined by Government as to the feed stock and as to the product pattern and the relative reluctance of Government to allow import of intermediates like Ammonia and phosphoric acid. The group is going into this question and Government proposes to seriously consider this matter in the near future but this announcement of withdrawal of Excise Duty on Fuel Oil does go a long way to meet their point. This has been announced only recently. We do not know how many Private Sector companies will come forth but some of them have started saying that this does not go far enough and they will not be interested. It has been said by responsible groups and if Government decides that further duty sacrifices should not be made and that we must not increase the price of fertiliser, then the only obvious alternative before the Government becomes that the fertiliser production should grow only in the Public Sector irrespective of what the Private Sector does. But I do not think it will come to that. I am hopeful that private investment will also be attracted to this very heavy investment industry so that it can be harnessed to produce vital need of agriculture."

2.9. It was pointed out to the witness that the number of applications received from private parties after the announcement of Government policy in 1965 showed that the response from the private sector had not been lacking. To this he replied:—

"The applications were made. I am not saying that it is wrong or it is contradictory. The applications are received. They either usually break the policy constraints put upon them by the Government or they are not able to firm up their projects to the satisfaction of the Government. Government have been most anxious to see that private sector also takes a hand in the production of fertilisers."

2.10. In this connection, the representative of the Planning Commission also stated:

"I would like to remove an apparent misunderstanding that private sector is not allowed any role in the fertiliser programme and no provision for this is made in the Plan. The Fourth Plan recognises the fact that 8 projects involving a capacity of 1.31 million tonnes have been approved in the private sector. In other words the Plan had taken into account that a certain amount of capacity would come in the private sector. Today there are six projects already in operation in the private sector and a few are under construction. Unfortunately, these private sector projects have not come up to the extent that was envisaged in the Plan. So there is no bar to private sector projects coming into the fertiliser programme. In fact we are keen that as many projects as possible be taken up in the private sector."

2.11. Government are in the process of formulating a massive crash programme for the production of fertilisers in the country during the Fifth Plan period involving an outlay of about Rs. 1500 crores. In the larger national interest of achieving self reliance at the earliest, Government would like both the public and private sector to play their part in setting up additional production capacity.

2.12. It is admitted by Government that the fertiliser industry is a capital intensive industry with a long gestation period and consequently it has low profitability. It is also admitted that the flow of fresh private investment in the fertiliser industry has slowed down due to various reasons, the chief among which is the disinclination on the part of the Government to consider proposals based on imported intermediates like ammonia, phosphoric acid etc., and the new policy of the Government regarding feed-stock for the fertiliser industry which would, as Government have themselves admitted, make the cost of production substantially higher.

2.13. The Committee have, in a subsequent section dealing with the feedstock requirements, commented upon the feedstock policy of the Government. The Committee would like Government to study in depth problems and difficulties which are impeding progress and take concerted measures to resolve them. In this context, Government may consider setting up an expert body consisting of representatives of fertiliser industry both in public and private sectors and the Ministries of Petroleum and Chemicals and Agriculture and all others concerned to examine various matters that inhibit growth and recommend appropriate solutions therefor.

### B. Feedstock

#### *Feedstock for Nitrogenous Fertilisers*

2.14. The installed capacity for the production of Nitrogenous fertilisers (as on 1st March 1973) is about 1.464 million tonnes per annum and the capacity is expected to increase to about 2.284 million tonnes by the end of the Fourth Five Year Plan. The break-up of these capacities based on various feedstocks is as under:—

(‘ooo’ tonnes of Nitrogen)

Feedstock	Capacity existing as on 1-3-1973	Capacity expected during 1973-74
1. Lignite . . . . .	70	70
2. Electric Power. . . . .	85	85
3. Coke Oven Gas . . . . .	90	90
4. Ammonia recovered from Coke Oven Gas. . . . .	20	20
5. Coke . . . . .	70	70
6. Natural Gas . . . . .	90	242
7. Naphtha . . . . .	1039	1707
	<hr/> 1464	<hr/> 2284

Until now the entire feedstock requirements of the fertiliser industry was met from within the local sources. Besides fertilisers, naphtha is also used by the petrochemical industry for which it is the only useable feedstock.

#### *Recommendations of Feedstock Committee*

2.15. The Feedstock Committee, appointed by Government in September, 1969, in its report submitted in November, 1970 considered the relative economics of manufacture of fertilisers making use of imported naphtha, imported fuel oil, coal, imported liquified natural gas, imported ammonia and electricity. Its study has shown that use of coal and electricity involves the minimum out-flow of foreign exchange. According to the Committee, in the case of electricity, the currently available technology makes the fertiliser plant more capital intensive than that based on any other feedstock and therefore unattractive for fertiliser production, even when power could be supplied at cost price. Hence, significant expansion of the fertiliser capacity within the time horizon of the Fifth Plan based on electricity may not be feasible. However, the Committee felt that certain developments,

in experimental stage, if proved successful for commercial use in fertiliser production may be of interest for adoption.

2.16. The Feedstock Committee had also examined the domestic availability of natural and coke oven gas and concluded that the scope in this direction would also be limited.

2.17. As regards imported ammonia, the Committee expressed the view that its import would be expensive in terms of foreign exchange outgo compared to the import of the basic feedstocks like naphtha/fuel oil for its local production and also it would set certain limitations on the product pattern when straight nitrogenous fertilisers are required to be produced. Hence, having regard to these considerations, it was felt that the import of ammonia can be thought of only to a limited extent in special circumstances where it could be converted into complex fertilisers at port locations.

2.18. The Committee also looked into the possibility of import of liquified natural gas (LNG) as feedstock for fertiliser production. Any economic use of imported LNG, would require processing and transportation of the gas in very large quantities much beyond the requirements of one or two fertiliser units. Because of these and other considerations, the Committee found that its use as feedstock in the immediate future may not be practicable.

2.19. Between the use of heavy crude, fuel oil and naphtha, the Committee excluded the use of crude for practical considerations as feedstock for fertiliser production at inland locations, leaving naphtha and fuel oil as the major alternatives available in the choice of the feedstock. Between the two, the use of fuel oil/heavy petroleum fractions has been recommended as the major feedstock for the fertiliser capacity to be developed in the Fifth Plan for the following reasons:—

- (a) Naphtha would be in short supply even to meet the committed requirements of the fertiliser and petrochemical projects and would continue to be so in the foreseeable future.
- (b) Though the initial investment on a fuel oil based plant and its foreign exchange component would be somewhat high compared to that of naphtha based plant, the recurring foreign exchange expenditure in case of the former is much lower.
- (c) While the recurring foreign exchange requirement favours the use of fuel oil as feedstock even when both naphtha and fuel oil are to be imported, it is possible to make available the feedstock requirements of fuel oil for the fertiliser industry

from out of local production within a relatively shorter time with development of more refining capacity. The feedstock Committee has found that, while economic considerations favour the use of fuel oil as feedstock, its commercial profitability does not match the use of naphtha as feedstock. According to its studies, in order to attain comparable profitability, the price of fuel oil has to be cheaper by about Rs. 108/- per tonne compared to that of naphtha at a given location. In this context, the Committee has stressed the need for adjustment in the pricing of fertiliser feedstocks and waiver of all duties on fuel oil, when used as feedstock for fertiliser production.

#### *Review Committee*

2.20. The recommendations made by the Feedstock Committee were examined by a Review Committee. The studies of this Committee reported in July, 1971 confirmed the earlier findings in favour of fuel oil. The Review Committee has recommended the following measures:

- (i) Exemption of fuel oil/heavy stock from excise duty when used as feedstock for fertiliser production;
- (ii) Extension of the period of admissibility of development rebate of fertiliser projects based on fuel oil/heavy stock; and
- (iii) Exemptions or reduction of incidental charges such as freight surcharge, AFRA adjustment, ATF adjustment, marketing charges, etc. from the price of fuel oil supplied for fertiliser production as the supplies would be in bulk involving no marketing charges. Since the submission of the report of the Review Committee, the position both as regards international supply and the price of naphtha have further hardened.

#### *Feedstock Policy of Government*

2.21. Government were asked to state their policy in regard to feedstock for future fertiliser plants. They have, in a written note to the Committee, stated that as in other advanced countries, besides the fertilisers, the demand for naphtha for the petrochemical industry which would have to be provided priority over fertilisers, is increasing in India also. The consumption of naphtha by the fertiliser and petrochemical industry which currently stands at about 1.8 million tonnes is expected to increase to a level of over 4 million tonnes in the terminal year of the Fifth Plan. In order to meet the growing requirements, the need for import of naphtha has arisen even during the current year (1972-73) and it may continue

for sometime to come. While the extent of deficit in the naphtha supplies in the coming years would depend on the growth of the petroleum refining capacity, it is expected that the full naphtha requirements of the fertiliser and petrochemical industry could be met by 1978/79 only if the refining capacity is raised to a level of 43 million tonnes by that time.

2.22. It is further stated that besides the use of naphtha for fertiliser and petrochemical production, with stringent pollution measures being introduced in many of the advanced countries, there is a switch over from fuel oil to naphtha for energy purposes in the industry. Naphtha is a cleaner fuel with low sulphur and would be more economical if the additional cost of anti-pollution measures necessary with fuel oil, is also considered. Consequently, the world supply position of naphtha is already hardening and against a price of Rs. 135 to 150 per tonne CIF prevailing earlier, the price now being quoted is anywhere upto Rs. 200 per tonne CIF. Besides the increase in the price of naphtha, there is also the uncertainty of its availability in the international market.

2.23. As regards fuel oil, while there is currently a shortage in the country and part of the requirements are met by imports, with an increase in the refinery capacity to 43 million tonnes, it is stated that it would be possible to meet not only the full industrial requirements of fuel oil but also make available about 2 million tonnes as feedstock for additional fertiliser production in the Fifth Plan, which should, either be adequate or may fall short of the requirements only marginally. Some of the salient points in favour of the use of fuel oil as feedstock are given as under:—

- (i) Enough fuel oil, as feedstock, would be available to meet the requirements of the Fifth Plan, if the refining capacity is increased to 43 million tonnes by 1978-79.
- (ii) Even if there is a marginal shortage of fuel oil, the foreign exchange outgo on the import of fuel oil would be much less than that involved in the import of naphtha, the current CIF price of fuel oil being about 50 per cent of that of naphtha.
- (iii) All fuel oil based plants making use of partial oxidation process would have the flexibility to use heavy crude or heavy fractions of petroleum as feedstock and thus, if required, the import of the most favourable feedstock with minimum foreign exchange outflow could be considered.
- (iv) The use of fuel oil/heavy stock for fertiliser production is in the national interest.

- (v) The availability of heavier petroleum fractions for import if required is likely to be more reliable.

Considering all the relevant aspects, Government have decided to develop the additional fertiliser capacity for the Fifth Plan based mainly on fuel oil/heavy fractions of petroleum as feedstock.

2.24. Asked to state the steps taken or proposed to be taken by Government to attract private entrepreneurs to set up fertiliser projects in accordance with the policy of the Government, it is stated that in order to attract private entrepreneurs to set up fertiliser plants based on fuel oil as feedstock, the Government have accepted the conclusions and recommendations of the Feedstock Committee and the Review Committee and, as one of the steps towards bringing the economics of production of fuel oil comparable with that of naphtha, it has already been decided to exempt fuel oil from excise duty when used as feedstock for fertiliser production. Further, it has also been decided to exclude items that are built into the price of fuel oil/such as ATF, C&F account and freight surcharge pool adjustments when it is used as feedstock for fertiliser production. Government maintain that in view of the wider implications involved, it has not been possible for them to accept the recommendations of the Review Committee on the extension of development rebate beyond May, 1974 to the fertiliser projects based on fuel oil/heavy stock as feedstock. The Government are, however, examining the measures that would have to be initiated to make the fuel oil based fertiliser plants viable and a decision in this regard is expected to be taken by them within the next 3-4 months time.

2.25. During evidence, the representative of the Ministry of Petroleum and Chemicals was asked to state as to what, in his opinion, was the most suitable feedstock for fertiliser industry from the point of view of economy, general availability and self-reliance. He said:

“Naphtha is the most economic feedstock. The general availability of Naphtha in the country is likely to be very restricted because of our refinery programmes. It is uneconomic to modify the refinery programme mainly to produce Naphtha. It is the other products which are of higher value and which govern the refinery programme. On grounds of general availability and self-reliance, it has been decided that future plants should be based on fuel oil and heavy stock”

He however, admitted that the country “will not be self reliant in the matter of crude oil”. “In the matter of crude oil we are producing only 1/3rd (of our requirements) and the gap will widen unless we find a bonanza” he said. He was thereupon asked as to how he maintained that the use

of fuel oil as feedstock for fertiliser plants would lead to self-reliance. To this he replied:

"It (problem of self-reliance) is solved to this extent that we will import crude oil and produce from it light ends and middle distillates, and the residue that remains will be nearly sufficient (for fertiliser production)."

*Uniform application of policy to public/private sectors*

2.26. A non-official organisation has, in a memorandum submitted to the Committee, stated:

"Phosphoric acid is already imported for use in one of the public sector units. One private and a cooperative unit under construction have also been permitted to use imported phosphoric acid. Government, have, however, decided that in future no private sector unit will be allowed to operate on imported phosphoric acid. It would appear that this restriction will not apply to the public sector. Similarly, barring one private sector project, imported ammonia will be allowed only for public sector units. This discriminatory policy of the Government makes no economic sense. If the use of imported phosphoric acid or ammonia is justified in a public sector plant it would equally well be justified in a private sector unit also. Government's insistence on private sector using only fuel oil has led to a few proposals not being seriously pursued. A uniform policy regarding feedstock is needed and it must apply equally to all the sectors."

2.27. Replying to the question asked during evidence as to why the public sector fertiliser plants at Trombay and Cochin were being based on imported Ammonia as feedstock, the representative of the Ministry of Petroleum and Chemicals said: "We have made two exceptions....for a limited period so that we can have availability of fertilisers and in the meanwhile these plants will also develop their own Ammonia facility." "In the public sector all new units will either use coal or fuel oil. No new unit based on Naphtha is contemplated" he said.

*Import of Naphtha*

2.28. The representative of the Ministry of Petroleum and Chemicals during evidence before the Committee informed that during 1973, a deficit of 3 lakh tonnes of Naphtha was anticipated. Indian Oil Corporation had already tied up the import of about 1.20 lakh tonnes and it was hoped that the remaining quantity would also be tied up for import in time for meeting the requirement.

*Price of Naphtha*

2.29. The duty free selling prices of Naphtha ex-Bombay (ex-refinery) during the last five years were as follows:—

Date as on	Rs. per metric tonne
I-1-1966	80.76
I-1-1967	80.22
I-1-1968	107.85
I-1-1969	105.47
I-1-1970	89.23
I-6-1970	114.15
28-5-1971	144.13

The prices as on 28-5-1971 are stated to be still current.

2.30. As to the basis of fixing the prices, it is stated that a formula for fixing the prices of naphtha was notified to the Oil Companies in July, 1964 and the same continued upto 31-5-1970. The prices with effect from 1-6-1970 were fixed on the basis of O.P.C. recommendation and the ex-Bombay price was fixed at Rs. 114.15 MT. This was increased with effect from 28-5-1971 to 144.13 M.T. The break-up of both these prices is as under:—

	(Rupees per M.T.)	
	1-6-1970	28-5-1971
Landed cost	94.68	101.03
Inst/Ad./Dist. and Profit @ 10 % of landed cost	9.47	10.10
FSP Surcharge	10.00	15.00
G & F Surcharge	..	18.00
	114.15	144.13

2.31. Regarding the increase in the international prices of Naphtha it is stated that since no imports of naphtha were made till 1972, precise information about the international market prices of naphtha for the years 1968 to 1971 is not available with Government. However, generally, the prices in this period were in the region of \$ 18 to \$ 20 per tonne. In the first half of 1972, the prices dropped to an all time low level of about \$ 16 per tonne. The market has hardened up subsequently and current prices are in the region of \$ 28 per tonne.

2.32. During evidence, it was pointed out to the representative of the Ministry of Petroleum and Chemicals that the price (duty free, ex-Bombay refinery) of Naphtha within the country increased from Rs. 80.76 per M.T. as on 1-1-1966 to Rs. 144.13 per M.T. currently prevailing, even when it was under the control of Government and that such a large increase in the price of raw materials affected the viability of a plant materially. He replied:

"I would agree with the principle that Naphtha price or the price of any raw material for a viable industry should remain stable over a period of time. This price of Naphtha which had gone up by Rs. 58 over the course of years started going up on account of two reasons—one was devaluation and the other was the steady increase in the cost of crude."

#### *Coal as Feedstock*

2.33. As mentioned earlier, coal along with fuel oil was the feedstock preferred by the Feedstock Committee in their report submitted in 1970. Dealing with the use of coal as a feedstock during evidence the representative of the Ministry of Petroleum and Chemicals stated:

"Coal is an integral part of the fertiliser strategy and it is for that reason that there were three plants of large size based on coal. It is particularly anticipated that in areas close to the coal availability in the country, future development should be oriented towards coal-based fertiliser plants. But, we would like to get some experience on large-sized plants at Talcher, Ramagundam and Korba, before expanding the coal-based plants on any sizeable scale, or putting up new plants on any sizeable scale."

#### *Power as Feedstock*

2.34. Power is one of the feedstock for the production of fertilisers. Nangal fertiliser plant is based on power as feedstock supplied by the Bhakra Nangal Hydel Project. As to the possibility of using hydel power as feedstock for the production of fertilisers, the representative of the Ministry of Petroleum and Chemicals stated during evidence:

"Hydel power is a very good source. But, considering the power shortage and the power picture that is being projected to us by the authorities in the country, it would appear that the social costs of using very large quantities of power for electrolysis is not advisable. I think power used in industries—small industries—and electrification for agriculture will confer greater benefit than using power in bulk for the production of fertiliser direct, with power as the feedstock."

Replying to the question as whether there had been any exercise in any of the Ministries of Government on the question of multiple utility of harnessing our river waters for irrigation, generation of power for industrial and other purposes and also for use as feedstock for fertilisers, besides as a flood control measure, he said:

"This aspect has certainly been studied and considered. The general power situation in the country, the possibility of development of a national grid to carry power even from remote regions and the use of power for industry and agriculture, would seem to rule out the possibility of using power as a feedstock for fertiliser..... In the foreseeable future it does not seem a feasible proposition, although a time may come when if power could not be utilised in any other form, it may be decided to set up a fertiliser factory. But I must confess that to me it appears a very remote possibility."

As to the economics of using power as a feedstock for fertiliser industry, he said:

"Even when power is available at 2.5 paise per unit, it is not considered economic to use it for producing fertilisers. The product pattern in a power based fertiliser plant is also limited. You cannot produce a wide range of fertilisers. Gestation period of a power based fertiliser plant is longer. Therefore, while in principle I would agree with your suggestion that in remote areas where the utilisation of power is not feasible for a length of time (and that length of time should not be less than 20 years), it may be possible to establish a fertiliser project. But these remoter areas are likely to be connected with facilities like roads and rail. Therefore, quite frankly I must submit that development of fertiliser production on power does not seem a feasible or practical proposition in the foreseeable future in India."

2.35. The representative of the Planning Commission was also asked to give his opinion on the desirability of such a study being made *de novo*. He said:

"Basically, our demand for power is high. Since it is going to increase substantially in the Fifth Plan, we will have to use both hydel power and thermal power. Hydel power potential will be developed more in the context of the Sixth Five Year Plan, because, it takes a long time to develop hydel power potential. On the other hand since our needs is the Fifth Five Year Plan are more immediate, we will have to have a number of thermal power projects. The second part of the question is

the role of power for the production of fertiliser. The position is....that this power can be utilised only if it is going to be economical. Now, the studies so far done indicate that power will have to be available at something like 2 paise or less if it is to compete with alternative methods of production or alternative feed stock for production of fertiliser. We have no hydel power station which may be able to generate power at this rate."

"We have to distinguish use of power for fertiliser production of two categories. One is power used as a feed stock in replacement of coal or fuel oil or Naphtha. The other is the power that is being used to run a machinery. Now, to generate power for the purpose of running a machinery, that kind of power in a captive manner may be economical in many cases. But to generate power in a captive fashion, for use as a feed stock, is quite uneconomical at the current costs and prices."

2.36. It was pointed out that though hydel power may be a costlier feedstock for fertiliser industry, if viewed in the context of its multiple benefits in controlling floods, irrigation and generation of power for industrial and other uses, it might in the ultimate analysis power to be an economically feasible proposition. To this the representative of the Planning Commission replied:

"The overall economics in specific cases would certainly need to be considered in the context of the various other benefits that would flow to the development of the economy. This would certainly be considered."

"I would like to add that considerable amount of research work is currently going on for improving the efficiency of electrolysis for production of Hydrogen. If this proves successful there is some possibility that electricity may prove to be a fairly economic proposition for production of fertiliser."

#### *Natural Gas as Feedstock*

2.37. It was pointed out during evidence that in the process of petroleum refining a lot of natural gas was flared up. The representative of the Ministry of Petroleum and Chemicals was asked whether any research had been made as to the use of natural gas as feedstock for fertilisers. He said:—

"This is a constant endeavour. As you know GSFC in Gujarat is based on natural gas. Namrup expansion which is underway is going through on the basis of natural gas which is at present being flared off. IFFCO at Kalol is also based on natural gas. It will depend on the economics of natural gas resources

available in the country, their location, the infra-structural facilities and on that basis the possible utilisation of gas will be attempted."

2.38. As to the possibility of the use of liquified natural gas as feedstock, he stated:—

"Liquified gas requires heavy investment—for liquification plant and also for re-conversion of liquified gas into gas by further processing. The general impression is that this will be feasible and economical if it is done on a very large scale. At present we do not see locations in India where such large-scale import of liquified natural gas would be feasible. However, we have commissioned a detailed technical study which will take several months to complete and on the basis of that study, we will proceed. Another point I would like to make is that when we talk of importing liquified natural gas into the country to produce fertilisers, we may also be able to consider the possibility of using gas for the setting up of joint fertiliser projects in countries like Kuwait, Iraq and so on. One or two such propositions are already under consideration; the product of the joint plant could then be entirely ear-marked for supply to India. But the total economics of this will have to be considered."

#### *Feedstock for Phosphatic Fertilisers*

2.39. The present installed capacity of 500,000 tonnes of phosphatic fertilisers is expected to increase to 560,000 tonnes by the end of the Fourth Five Year Plan. The break-up of this capacity based on different raw materials is as under:—

Raw Material	Capacity existing as on 1-3-1973	Capacity expected during 1973-74
Imported Sulphur . . .	363	373
Imported Phosphoric acid	85	127
By-product sulphuric acid	12	12
Waste sulphuric acid . . .	4	12
Nitric acid/imported D.P.	36	36
TOTAL . . .	500	560

### *Other Feedstocks*

2.40. Besides the feedstocks required in the manufacture of nitrogenous fertilisers, some of the other primary raw materials used in the manufacture of nitrogenous and phosphatic fertiliser in the country are gypsum, rock phosphate, phosphoric acid, sulphur and by-product sulphuric acid obtained from the smelter gases of the non-ferrous metal plants and pyrites. The position in regard to each of these is as follows:

**Gypsum:** A major part of ammonium sulphate production in the country is based on gypsum. While the ammonium sulphate produced at Sindri is based on the natural gypsum available from Rajasthan area, that produced at GSFC (Baroda) EID-Parry (Ennore) and part of the production at FACT (Alwaye) is based on by-product gypsum obtained in the manufacture of phosphoric acid. Out of the total production of 720,000 tonnes of ammonium sulphate during 1971-72, nearly 59 per cent of the production was based on gypsum (34 per cent based on natural gypsum and 25 per cent based on by-product gypsum) while the balance 41 per cent was produced by making use of sulphuric acid manufactured from sulphur.

**Phosphoric Acid:** With the commencement of production at Madras Fertilisers in November, 1971, India has started using imported phosphoric acid as raw material in the manufacture of phosphates. During the Fourth Plan, besides Madras Fertilisers, the Goa fertiliser unit is also expected to make use of imported phosphoric acid as raw material.

**Sulphur:** Presently, sulphur is used as a raw material both in the manufacture of phosphatic fertilisers as also for ammonium sulphate. The sulphur requirements of the fertiliser industry are presently about 400,000 tonnes in the coming year (1973-74). The entire sulphur required is imported. Some production of sulphuric acid also goes into fertiliser manufacture, based on the smelter gases obtained from the two non-ferrous metal plants located at Udaipur and Alwaye and on Pyrites at Sindri. The acid produced during 1971-72 from these materials amounted to about 25,000 tonnes in terms of sulphur.

### *Rock Phosphate as Feedstock*

2.41. The present requirements of rock phosphate used in the manufacture of Phosphatic fertilisers are placed at about 1.4 million tonnes which are expected to increase to about 1.6 million tonnes in the coming year, i.e. the last year of the Fourth Five Year Plan. With the discovery

of local resources of rock phosphate, a beginning was made in 1969 for the exploitation of rock phosphate deposits from Rajasthan. The production of rock phosphate during the last three years from this source was of the following order:

1969-70 .	96,896 tonnes
1970-71 .	194,735 tonnes
1971-72 .	223,078 tonnes

It is expected that during 1972-73 and 1973-74, a quantity of about 200,000 tonnes to 250,000 tonnes of rock phosphate would be available from this source while the balance will have to be imported to meet the requirements.

#### 2.42. The import of rock phosphates has been of the following order:

	Quantity (Lakhs/Tonnes)	Value (Rs./Crores)
1969-70 .	6·46	8·32
1970-71 .	7·56	11·66
*1971-72 .	8·42	10·25
*1972-73 . .	9·00	13·00
*1973-74 . .	10·00	14·00

\*Estimated Figures.

2.43. In a written note, asked for by the Committee, on the development of the Rock phosphate Deposits in Rajasthan, Government have stated that, of all the known deposits of rock-phosphate in the country, Jhamarkotra Rock-Phosphate Deposit is the most promising in respect of reserves and grades. The development of this deposit was undertaken by the Department of Geology, Government of Rajasthan. An allocation of Rs. 63.12 lakhs was made in the State Plan for 1971-72, but the anticipated expenditure is only Rs. 50.12 lakhs. Similarly, Rs. 56.3 lakhs

was allocated for 1972-73 and the total allocation for the Fourth Plan was Rs. 201.08 lakhs. The State Government initiated work in Block D, which contains the best grade of ore. Experimental mining was started in March, 1969 and the Government of Rajasthan are at present mining about 800 tons of rock phosphate per day from Block D and have also prepared plans for increasing this production to 2000 tons per day from this Block. The production from the Block D being of the best quality, is directly useable for the manufacture of super phosphate/complex fertilisers.

2.44. The Central Government in consultation with the Government of Rajasthan have obtained World Bank's assistance for getting a Feasibility Report prepared for the exploitation of this deposit. An interim Report has been received from the World Bank in February, 1972 and the final report was due by March-April, 1973. In view of the likely size of the investment as well as the importance of the Project in the context of a fertiliser complex that can be set up based on the Jhamarkotra Rock Phosphate and Saladiipura Pyrites, the Central Government has been of the opinion that the Jhamarkotra Rock Phosphate Project should be with the Central Government. A separate corporation can be set up to handle it, in which the Government of Rajasthan, can come in as a minority participant. The matter has been under discussions for the last 2 years. On 4th, July 1972, the Planning Minister held a meeting on the subject which was attended by Minister for Steel and Mines, Minister for Petroleum and Chemicals and Chief Minister of Rajasthan. As decided in this meeting, comprehensive note was prepared in the Department and copies sent to the Chief Minister, Rajasthan so that he could place the matter before his cabinet colleagues for a final decision in the matter. So far nothing has been heard from the State Government of Rajasthan.

2.45. It is further stated that the biggest impediment to the raising of the present level of production is inadequacy of rail transport. Certain decisions were taken in consultation with the Railways in January, 1972 which included the conducting of surveys. Government of Rajasthan have deposited a sum of Rs. 50,000 towards the actual cost of the survey which had not been completed by the Railways till December, 1972.

2.46. The Committee note that Government have accepted the recommendations of the Feedstock Committee and Review Committee that in future the fertiliser plants would be based on fuel oil and that, to set off the higher cost of production of fertilisers involved in the process, the excise duty and certain other charges built into the price of fuel oil, when used as feedstock for the manufacture of fertilisers, have recently been waived. The Committee urge that other measures to bring the economy of fuel oil

based plants at par with those based on Naphtha, which are under examination of Government, should be decided upon and announced soon so that a complete picture is available to the general public for taking investment decision.

2.47. The Committee are distressed to note that whereas the world trend is to switch over from fuel oil to Naphtha as feedstock for the manufacture of fertilisers because the latter is a cleaner fuel creating lesser pollution problems, in India all future fertiliser plants would, as a matter of policy, be based on fuel oil. They hope that Government have taken into consideration fully the pollution problem likely to be created by the use of fuel oil as feedstock for production of fertilisers and recommend that the economic feasibility of such a plant should take into account the cost of adequate anti-pollution measures and that these measures should form an integral part of the project report for each such plant.

2.48. As coal is abundantly available in the country, fertiliser plants based on coal as feedstock would appear to be the most suitable feedstock from the point of view of self reliance. The Committee note that three of the plants under construction are already based on coal and further expansion of these plants as also setting up new plants based on coal as feedstock would depend upon the success of these plants. The Committee recommend that while planning for additional capacity for the production of fertilisers during the Fifth Plan period, Government should place greater reliance on coal as feedstock subject, of course, to the existing experiment being successful.

2.49. There is considerable untapped hydro-electric potential in the country. As electricity as feedstock for the production of fertiliser would, along with coal, involve the minimum outflow of foreign exchange, the Committee recommend that Government should examine the feasibility and economies of harnessing the river waters for preventing floods, irrigation and production of electricity for various purposes including its use as a feedstock for the production of fertilisers.

2.50. The Committee regret that between 1969, when the exploitation of the rock phosphate mines in Rajasthan began, and 1972 not much progress has been made in developing the mines. Consequently the local production of the material has been low and sizeable imports are continuing. As it would not be possible for the State Government to provide all the resources for the development of these mines out of its meagre funds, the Committee recommend that Government should, in consultation with the State Government, devise a suitable scheme which may facilitate the speedy development of the mines.

### C. Licensing Delays

#### *Licences Applications Received and their Disposal*

2.51. The Ministry of Petroleum and Chemicals have furnished to the Committee the following data in regard to the applications for the issue of industrial licences for setting up capacity for the production of fertilisers received between 1-1-1967 and 30-11-1972:

Number of applications for industrial licence received	57
Number of applications disposed of . . . . .	<sup>52</sup> (including 4 received prior to 1-1-1967)

#### *Break-up according to time taken in disposal :*

More than 24 months . . . . .	13
24—18 months . . . . .	7
18—12 months . . . . .	11
12—6 months . . . . .	10
6—3 months . . . . .	6
3—1 1/2 months . . . . .	5
Number of cases disposed of favourably	26

#### *Break-up*

Letters of intent issued . . . . .	6
Industrial Licences issued . . . . .	20
Number of cases rejected . . . . .	26
Number of cases pending . . . . .	9

#### *Break-up*

For over 12 months	7
For 12—6 months	1
For 6—3 months	1

#### *Application Rejected*

2.52. Between 1-1-1967 and 30-11-1972, as many as 26 licence applications for setting up fertiliser industry were rejected by Government.

The data furnished by Government in respect of the rejected proposals reveals that the applications were rejected on the following grounds :

(a) Proposal based on elemental sulphur while the policy is to allow the manufacture of superphosphate on by-product/waste sulphuric acid . . . . .	5:
(b) Proposal based on by-product sulphuric acid. But acceptance would have denied FACT the raw material that the plant was supplying . . . . .	I
(c) Information inadequate . . . . .	7
(d) Party could not arrange finance/foreign collaboration . . . . .	3:
(e) Party had not implemented earlier licence . . . . .	I
(f) Licence surrendered . . . . .	I
(g) Certain conditions for import of raw materials at initial stage were not acceptable to Government . . . . .	I
(h) Proposal immature as it was based on Rajasthan Pyrites . . . . .	3-
(i) Party did not agree to an integrated scheme for expansion of capacity based on LSHS as feedstock . . . . .	I
(j) Party not agreeable to modification suggested . . . . .	I
(k) Case closed on account of liberalised policy announced by Government in January, 1972 . . . . .	2

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#### *Licensing Procedure :*

2.53. The Licensing proposals in respect of phosphatic and mixed fertilisers are processed and decided upon according to the normal industrial licensing procedures. In regard to proposals for the production of major fertilisers, a special machinery was set up in 1966 which is continuing, namely, the Special Committee of Secretaries which serves as a focal point to clear all matters relating to their execution. The meetings of the Special Committee of Secretaries are chaired by Secretary, Ministry of Petroleum and Chemicals and Secretaries of concerned Ministries viz. Industrial Development, Agriculture, Finance and Planning Commission etc. are its Members. This Committee serves both as Licensing Committee and the Foreign Investment Board as far as the fertiliser projects are concerned. As soon as a proposal is received by the Ministry, it is circulated to all the concerned Ministries/Departments for their comments and after they are received, the case is put up before the Special Committee of Secretaries with the comments of the Ministry of Petroleum and Chemicals for decision.

#### *Licensing Delays :*

2.54. A non-official organisation has represented to the Committee :

"One of the primary difficulties experienced by the industry is the delay in granting licences because of our time-consuming licensing system. There are known instances when it has taken

five years for an entrepreneur to get a licence. Reasons could be many, but one of the most obvious one is that the information asked for by the Government is piece-meal and supplementary information is asked for after each set of information has been submitted."

2.55. The complaint regarding delay in disposal of licence applications is also corroborated by the data furnished by the Ministry of Petroleum and Chemicals, according to which, out of the 52 applications disposed of between 1-1-1967 and 30-11-1972, as many as 31 took more than 12 months for disposal including 13 taking as much as more than 24 months. Of the 9 pending cases as on 30-11-1972, as many as 7 were more than 12 months old.

2.56. In a written reply furnished to the Committee it is stated that any delay in consideration of the applications, letters of intents or industrial licences "cannot be attributed to any procedural weaknesses but experience has shown that these delays are invariably caused because certain very important policy matters like choice of feedstock, use of imported intermediates like ammonia, phosphoric acid, arrangement of foreign collaboration etc. are involved."

2.57. In regard to the complaint regarding collection of relevant information in piece-meal resulting in delay, it is stated that the form of the application for an industrial licence is quite comprehensive and contains, by and large, all the information that is required for consideration of the proposal. Besides, it is stated, there are only a very few entrepreneurs who can come into this field, which is one of very high investment, and they are already aware of the information which they have to furnish alongwith the applications for grant of licences. Government maintain that "so far as can be seen, there have been very few cases where back references have to be made to these parties for clarifications or other details. In fact, intensive discussions are held with the prospective entrepreneurs to avoid unnecessary delays and they are also advised as to how they should frame their proposals."

2.58. The representative of the Ministry of Petroleum and Chemicals was during evidence asked as to why it was taking so much time even when there was a Committee of Secretaries to take expeditious decision. Reiterating the position, he stated :

"Now, the licence application form is sufficiently detailed. The policy about feedstock and product pattern is also known and the Ministry of Petroleum and Chemicals encourages the entrepreneur to come forward for discussion even before submitting the licence applications so that the entrepreneur can

be guided on the line of information that is needed. When he submits his licence application and if it is found that it is wanting in certain respects, the effort is always to get him round the table and get the information from him, or see that he furnishes sufficient information so that the matter can be progressed quickly. I would say that this is working very satisfactorily up to the stage of the letter of intent."

However, for watching the progress of cases after the issue of letter of intent, he agreed with a suggestion made during evidence for the creation of a special task force. He said that the suggestion of a task force or any other agency in the Ministry to keep track of these applications after the letter of intent is issued "will be kept in view for future guidance" and added: "I think the idea is very good and some arrangements have to be made. We do get periodical reports from the entrepreneur to show how he is implementing the project, but its analysis, study and corrective action could be institutionalised and taken up on a regular basis."

**2.59.** Asked to state as to how much time it normally took between the stage of issue of letter of intent and the stage of issue of industrial licence, he said:

"It varies from project to project. If he is an efficient entrepreneur, it can be as short as one year; but there are projects where people have gone on asking for extension of the letters of intent and they have been firmed up even as late as four years after the letter of intent was granted."

He was further asked as to whether the Secretaries' Committee also reviewed the progress of cases from time to time. He replied :

"Yes, Sir, they do. We have a special technical cell which is called the Project Cell in the Ministry....That cell keeps track of the implementation of the projects."

**2.60.** The Committee regret that considerable delays continue to occur in taking decisions on applications for the issue of industrial licences for setting up fertiliser units even under the existing procedures which are stated to have been streamlined. The Committee recommend that a selective case study should be undertaken to find out the time taken at the various stages in the consideration of applications. Thereafter, an attempt should be made to cut out all non-essential stages as also limit the time taken in processing at each stage.

**2.61.** In one case the Committee have observed that the main cause for the delay in taking a final decision on the proposal to set up a fertiliser unit has been the repeated shifts in the policy of the Government in regard

to import of intermediates and feedstock for the Plant. The Committee recommend that after a letter of intent has been issued to a party, Government should avoid, as far as possible, changes in the basic features of the Plant approved by them as it involves reappraisals of the economic viability of the Plant leading to further delays.

2.62. In an earlier section of this Report, the Committee have stressed the need for evolving a long term and stable feed-stock policy for manufacture of fertilisers. The Committee recommend that this policy should be widely publicised so as to remove all ambiguities and uncertainties in this regard.

2.63. The Committee also recommend that the Ministry of Petroleum and Chemicals should set up a standing Task force to watch the progress of a case from the stage of the issue of a letter of intent to the stage of the issue of the industrial licence the need for which has already been admitted by Government during evidence before the Committee.

#### D. Implementation of Licensed Capacities

##### *Projects under Implementation:*

2.64. According to the material furnished to the Committee the following projects have been licensed and are under implementation.

##### *Public Sector :*

1. Durgapur
2. Cochin—I
3. Barauni
4. Namrup Exp.
5. Maharashtra State Agro-Industries Corporation
6. Sindri Rationalisation
7. Cochin Phase II
8. Talcher
9. Ramagundam
- \*10. Trombay Expansion
11. Haldia
12. Gorakhpur (Exp.)
13. IFFCO (Co-operative Sector)
14. Khetri
15. FACT Expansion—IV
16. Nangal. Exp.

##### *Private Sector :*

1. Tuticorin
2. Mangalore
3. Kota (Expansion)
4. Goa

\*Ammonia terminal taken up for implementation. Foreign Exchange for the main project is yet to be finalised.

*Delay in implementation of Fertiliser Corporation of India's Projects:*

2.65. The Ministry of Petroleum and Chemicals have furnished to the Committee the details in regard to the projects under implementation. The delays in the commissioning of the following projects of the Fertiliser Corporation of India have been admitted by the Government themselves as follows:

Durgapur	. . . . .	3 1/2 years
Barauni	. . . . .	2 1/4 years
Namrup Expansion	. . . . .	2 1/4 years
Sindri Rationalisation	. . . . .	2 1/4 years
Ramagundam/Talcher	. . . . .	6 months.

*Escalation of cost due to delay*

2.66. Delay in execution of the project has resulted in increase in departmental charges, financial charges, insurance charges and daily allowance payable to the foreign technicians as a result of extended stay. Project-wise increases are indicated as follows:

	Rs. crores
Durgapur	10.1
Barauni	6.8
Namrup Expansion	6.8

The foreign exchange increases in the case of these projects attributable to delay in the commissioning, involving mainly the payment to foreign technicians towards their daily allowances, have been identified as follows:

	Rs. lakhs
Durgapur	27
Barauni	36
Namrup Expansion	36

2.67. It was pointed out to the representative of the Ministry of Petroleum and Chemicals during evidence that there was considerable escalation in the cost of the public sector projects under implementation. He was asked to state as to what part of it was due to delay in the completion of the projects. He said :

"it is difficult to attribute escalation to delay alone, but on a rough calculation it comes to about Rs. 33 crores extra for the five projects. This is related to the investment of Rs. 220 crores; so it is an escalation of about 15 per cent."

According to him, some part of the escalation could also be "because some parts have not been provided for in the original sanction." Replying to the question as to why project estimates were not prepared more realistically at the initial stage, he said:

"When the Feasibility Report is prepared and an investment decision is obtained, the tenders and quotations have not been secured. These things are done subsequent to the investment decision given by Government. Secondly, these estimates are framed assuming the availability of free foreign exchange or untied credit. The experience is when credits are tied, we cannot afford to grant free foreign exchange."

Agreeing to a suggestion made during evidence that the original feasibility report should cover all the details and that the time schedules originally laid down should be strictly adhered to so that there was no escalation of cost at a later stage on account of unforeseen items or delay in commissioning, he said:

"I would certainly agree with this approach and we are attempting to perfect the feasibility report stage to such an extent that the investment decision is taken in the light of these factors and subject to things in the nature of force majeure, no other obstacle should come in the implementation of a project. That is our endeavour and we would like to perfect the procedures in that direction."

He further suggested that all the infrastructural and supply sources etc. should be tied up in advance and an assurance obtained from the various agencies in charge of providing these infrastructure and supplies that they would flow on schedule. That assurance must be obtained before the projects were taken up.

#### *Reasons for the Delay*

2.68. The Fertiliser Corporation of India have in a note furnished to the Committee indicated the general reasons for the delay in the completion of their projects as follows:

"(i) *Delay in supply of indigenous equipment:*

Considerable delays have occurred in the deliveries of indigenous equipment for Durgapur, Barauni and Namrup Expansion Projects and the delays in case of Barauni and Namrup are

still continuing to occur. In Namrup Expansion case especially, there was also the problem of transport of equipment by the Railways. There have been delays ranging from 12 to 32 months in the delivery of major critical items of equipment. A case study committee appointed by the Government for Durgapur and Cochin Projects has also gone into the details of the delay in supply of indigenous equipment, identified the reasons thereof and suggested remedial measures. At Durgapur, the delays in delivery of the indigenous equipment ranged from 12 to 32 months....Similar delays have also occurred in Barauni and Namrup Expansion....

*(ii) Supply of steel and other critical raw materials:*

*(a) Indigenous:*

The requirements of steel raw materials required are procured both from indigenous sources as well as from import. Due to acute scarcity of steel there have been delays in its procurement. At the time of execution of the Durgapur project, the carbon steel plate materials and structures were not allowed to be imported and considerable delay occurred in obtaining the necessary quantum of steel from the indigenous producers. The delays in obtaining supplies from indigenous steel products were anything from 24 to 36 months and these have effected the fabrication of indigenous equipment as well as critical structures like prilling towers, pipe supports etc. For Barauni and Namrup Projects, although carbon steel plates were allowed to be imported, the import of structural items were not allowed with the result that there were considerable delays (24 to 30 months) in the completion of prilling towers, plant structures, yard piping, coal handling and product handling plants.

*(b) Imported:*

Considerable delay occurred in procurement of imported raw materials due to delays in obtaining HSL/DGTD clearance, foreign exchange, import licence etc. Thus for example the stainless steel materials, included in the Montecatini suppliers credit contract for our Barauni and Namrup Projects, were held up for about 8 to 10 months for want of clearance from the alloy steel plant of H.S.L. Ultimately, a major part of the same was cleared, after a delay of 8 months. For the balance materials, HSL regretted to supply the same after 12 to 18 months with the result that these had to be imported leading to considerable delays in obtaining raw materials required for indigenous fabrication.

*(iii) Defaults on the part of construction contractors:*

Considerable delays have occurred due to default on the part of construction contractors. The supply and erection of prilling tower and reformer structure at Durgapur are typical examples.

Similarly in Barauni and Namrup Expansion Projects, the supply and erection contractors for the prilling towers and the other structural items, yard piping, coal handling, product handling etc., have defaulted and upset the project schedule.

*(iv) Failure of Critical Items of equipment:*

Failure of critical items of requirement have caused considerable delays in commissioning of the plants. At Durgapur Project, one major item of imported equipment which was seriously delayed was the second boiler feed water heater supplied by SII of Italy.... During commissioning of the project, failures were experienced on many critical items such as boiler feed water pumps, boiler feed water circulation pump, CO compressor and refrigeration compressor. The reformed gas boiler and the flue gas boiler failed repeatedly and required extensive modifications.

*(v) Labour unrest:*

The labour unrest has considerably affected the completion of Durgapur, Barauni and Namrup Expansion projects. Apart from the labour trouble at the above project sites which has affected the construction schedules, the labour unrest in the various fabricators shops, port, transport contractors, etc. have materially affected the delivery of equipment at site. The man days lost due to labour unrest at Durgapur site is about 27,000.

*(vi) Difficulties experienced in fabrication of some sophisticated equipment indigenised for the first time:*

Considerable delays have occurred due to the above. The Fertiliser Corporation of India were the pioneers in the fertiliser field in maximising indigenisation both in design, engineering, fabrication, development of indigenous know how etc. In our first major projects namely Durgapur and Cochin we encountered considerable difficulties in getting some of the sophisticated equipment fabricated in the country for the first time....

At our subsequent projects like Barauni and Namrup Expansion we have further indigenised some more of the sophisticated equipment and delays have occurred especially in the completion of first separators....and the boiler feed water heaters..."

*Projects being implemented by FACT*

2.69. Delays have also been admitted in the implementation of the Cochin Phase I and Udyogmandal Fourth Stage Expansion of the Fertilisers and Chemicals Travancore Limited. These have been explained to the Committee as under:—

*"Cochin Phase-I:*

According to the original schedule, the construction of the plant was to be completed in October, 1969. But the erection of the plant could be completed only by June, 1971. The delay was because of the delay in the supply of indigenous equipments which were completed in March, 1971. During the pre-commissioning test started in July, 1971, major erection defects in R. G. Mains were observed and the rectification of the same could be completed only by the 14th December, 1971. This work was delayed because of labour strike which lasted from 23rd October, 1971 to 2nd December, 1971. The commissioning of the plant was started immediately thereafter but major defects were found in commissioning the reformer and C.O. conversion and purification sections because of faulty design and construction of equipment purchased from firms abroad.

The necessary repairs have been carried out by FACT Cochin Division/FEDO in consultation and collaboration with the equipment suppliers who have also borne the cost of the materials required for modification and rectification. A total of 309 days have been lost in getting over these difficulties since commissioning started.

The plant was last started on the 7th January, 1973. This limited run so far shows that the modifications made in the sections are successful and we could start commissioning of the ammonia synthesis and the urea plant. The plant had to be shut down on the 28th January because of some minor problems normally found in commissioning of such plants. The major equipment to be tested and commissioned are ammonia synthesis compressors and the ammonia reactor in the ammonia synthesis section and CO compressors, ammonia injectors and carbamate pumps in the urea plant. The position with regard to these equipments is expected to be known very shortly.

The project report submitted in November 1965, envisaged an outlay of Rs. 2677 lakhs. Taking into account the devaluation the estimates were revised in August, 1966 showing an outlay of Rs. 3972 lakhs. The estimates as revised in September 1972 provide for an outlay of Rs. 6300 lakhs including the foreign exchange outlay of Rs. 91.29 lakhs for erection/commissioning supervision.

#### *Udyogmandal Fourth Stage Expansion*

Fourth Stage Expansion project of FACT consists of—

1. Ammonia Plant
2. Ammonium phosphate plant, and
3. Modification to ammonium phosphate plants including POs concentration plant.

For item-I, original completion date was August, 1969. Commercial production was started on 1st October, 1971. Main reasons for revision are: delay in procurement and supply of indigenous equipment and re-works necessitated during commissioning stage.

For item-2, completion date was August, 1969. Revised schedule is 1st March, 1973. Main reasons for revision are delays in procurement and supply of imported items and stand taken by labour unions in allocation of personnel.

For item-3, for modifications of existing plants original completion schedule was August, 1969. Modification for 100 TPD plant was completed in September, 1969. Considering production loss involved in shutting down 300 TPD plant for interconnections it is scheduled to start modification works after commencement of commercial production of 150 TPD ammonium phosphate plant. It is expected to complete this during second quarter of 1973. For P O concentration plant original schedule was 1st July, 1972. Revised schedule is 1st October, 1973. Revision mainly due to delay in supply of evaporators ordered locally.

Escalation in cost due to delays in commencement of commercial production is Rupees 88.11 lakhs in Indian rupees. Escalation in foreign exchange is "nil."

#### *Watch on Implementation*

2.70. Government was asked to state the procedure of keeping a watch on the implementation of public sector projects. The Ministry of Petroleum and Chemicals have in a written note furnished to the Committee

stated that the Ministry of Petroleum and Chemicals is receiving monthly and quarterly progress reports on the various projects which are analysed in the project Cell of the Ministry. Wherever possible corrective steps are taken in consultation with the concerned Ministries/Departments. There are also regular performance review meetings held in the Ministry when the progress of implementation of the various projects in the public sector is critically reviewed. These progress review meetings are attended by the representatives of the concerned public sector undertakings, Ministry of Finance (Department of Expenditure and Department of Economic - Affairs), Bureau of Public Enterprises, etc. In the case of Cochin and Durgapur projects there is a regular Coordination Committee which holds meetings at regular intervals. For the future, it is stated that it has been decided to have similar Coordination Committee meetings for the other projects under public sector. It has also been decided to review critically the progress of implementation of the various public sector projects in a detailed way at regular intervals. Only one project will be taken up at a time for this critical review. With this arrangement, Government hope, the problems could be identified and remedial actions could be initiated at the earliest opportunity. The Planning Commission is also, it is stated, seized of the problems of implementation of public sector projects. A Monitoring Group has been set up for selected projects and an integrated proforma will be evolved to monitor the progress of the various public sector projects.

2.71. The representative of the Ministry of Petroleum and Chemicals was during evidence asked to state as to why, inspite of the procedures described above, delays have been persisting in the execution of projects. He said:

"In a number of projects, there was a delay in final tie up of various matters including the availability of foreign exchange credits. That is one of the principal reasons..... In Trombay, the World Bank aid has not been tied up till today and even though we expected that we would go ahead, we could not because the aid has not been tied up. There was a difficulty in tying up the supply of ammonia with the result that the project got delayed on that account. In the case of Nangal expansion, the World Bank has taken a long time to finalise it. The difficulty arises from the fact that the credits have to be tied up with various aid giving countries and aid giving authorities. They insist on appraisal of the project. Not only that, but if it is an aid giving country, then the requirement is that most of the imported equipments of that project should be from that country. There are very few countries who give untied credit. That has to be gone into very carefully because it may prove to be at very high cost. It is our experi-

ence that when credit is tied, the cost is high. One has to make a detailed analysis. The (donor) country itself makes a detailed analysis.....About the World Bank, in the case of Trombay, we had to change our approach to the construction of the Fertiliser Plant. The World Bank was not willing to go along with our approach to the problem. There was a detailed discussion with them and it has taken us an inordinately long time to convince them of the way we wanted to proceed. We hope that it will be commissioned reasonably soon because the World Bank has arrived at an arrangement which is acceptable to us.”

2.72. The Managing Director of the Fertiliser Corporation of India, in this connection, stated:

“There are two phases in the execution of the public sector projects. The first phase is the feasibility report and its passage through the Government and Government’s approval. The second phase is the implementation of the project at site, its construction, erection, of course after designing, engineering etc. Now, regarding the feasibility studies of the various projects, the procedure is to submit the report to the Government and it has to be scrutinized by the various Departments and then approval is given for implementation. Here, experience has shown that delay occurs in the scrutiny of the report, when various querries are made and also when time is taken to enable the public sector to answer all those querries. Secondly there is the non-availability of the free foreign/exchange; and even if foreign exchange is available, then, in most of the cases, it is not a single agency, but they are multi-national ones....If the projects have to be approved on the basis of credits from different countries, except the first few projects, our experience has been that in order to implement those projects, the public sector had to go through numerous credit-giving countries, that is, numerous sources of credit. So, all this creates difficulties in completing the designing, engineering etc. I would also add this.....Most of the major public sector projects are being executed through their own know-how, design and engineering and only marginally supplemented by the acquired kow-how from other countries. In a project there are three or four know-how that are incorporated. Now in order to expeditiously execute these projects the credits or the foreign exchange available and the sanction and approval of the know-how, they have to be simultaneous. If they are staggered, then obviously the designs and engineering will have

also to be staggered and it cannot be with the consignment of the credit. So delays occur in that respect also. The experience has shown that the delay during the second phase mainly occurs (because of ) non-availability of construction material—particularly for the last two years for want of steel. There are many other procedures also for our getting import licence, then the clearance through DGTD and final clearance for the import—all these also take time..... Then the delay by indigenous suppliers. Since 1965 we have been giving emphasis on indigenisation of machinery and equipment and fabrication of the equipment and machinery as per our design and engineering. So serious attempt has been made to persuade the Indian manufacturers to make as large a number of machinery as possible..... Then delays in erection of civil works also are there. Those contractors have difficulties in getting cement, iron etc. But during three or four years one of the most important aspect, apart from these difficulties, we have found is the labour situation. In almost all our projects there has been almost a crisis from time to time due to various labour troubles. Unless this is also solved and there is some tranquility one cannot be sure about the time required for implementation of the projects..... The other difficulties are occasional; for example, during the last four months before the last war with Pakistan there was no availability of railways and transportation of machinery and equipment to these factories almost stopped and..... consequently the erection and construction of the factory got delayed. The wagon bottleneck during that period was very critical.”

He added:

“We should also appreciate that when in a national endeavour attempts and efforts are seriously made to achieve self-reliance, there is bound to be some pain in the initial years and we have to pay for it. Although none is happy about these delays and difficulties that we have been facing but one cannot also forget that achievement of self-reliance should not be such a sweet and easy process. It must be accompanied by the difficulties and we have to get over those difficulties with vigorous efforts.”

2.73. Spelling out the measures taken to streamline the procedures, the representative of the Ministry of Petroleum and Chemicals stated:

“....Learning from experience, we have tried to streamline procedures. Further, efforts are being made in the same direc-

tion. The clearance of investment decisions, for example, is being speeded up and recently Government have set up a Public Investment Board, the procedures of which have been streamlined. All the work will be done in one cell of the Finance Ministry rather than the file undergoing round from department to department. In the engineering every effort is being made to standardise the plants so that engineering in plant design and equipment does not become a handicap. Therefore, standardisation we hope, is going to help us a great deal. About the source of credit, Department of Economic Affairs has agreed that the source of credit for public sector projects will be reduced to the minimum possible, not more than two ordinarily. Over and above that if requirement still remains, it will be made available in free foreign exchange. Then we are anxious that the standardisation does not upset the project schedule. We are suggesting and I think this will be accepted by Government that imports will be considered particularly for the crash programme which has become inevitable for the Fifth Plan requirements. In respect of scarce raw materials like steel and alloys, Government have decided to set up Steel Bank which will maintain contingency stocks for the special requirements of fertilizer plants so that in emergencies, and to begin a programme for which major supply has not come, a small allocation can be made and the project does not get held up. Finally, Sir, a revolving fund has been created with the Ministry of Petroleum and Chemicals to provide quickly the funds required for emergency imports. Sometimes emergency occurs and the procedure for that has been streamlined and the Ministry has been given a revolving fund from which emergency fund can be authorised.

The labour situation is proving a very difficult problem and this is mainly in the hands of the State Government. But it is a problem which we will have to contend with now and in the immediate future."

**2.74.** It was pointed out during evidence that the public sector had more resources at its command and the backing of the entire Government machinery; yet the implementation of the public sector projects was considerably behind schedule. The private sector, on the other hand, even after overcoming more difficulties, was able to implement the projects much earlier. In reply, the representative of the Ministry of Petroleum and Chemicals said:

"The difficulties faced by the private sector are certainly there but they are somewhat less than the difficulties faced by the public-

sector. It has to be so necessarily. Public investment being investment of public funds has to pass through very rigorous scrutiny of the various agencies of Government—the Ministry of Finance, the Planning Commission and the Ministry of Petroleum and Chemicals, the Bureau of Public Enterprises and so on. The private sector proposition is the entrepreneur's own proposition and provided the broad parameters are all right. Government will not interfere with that except to the extent of checking the contents and the cost, the import requirement, the product pattern, the collaboration agreement, licence fee, royalty, etc., that has to be paid. So, it is the quantum of foreign exchange outgo which worries Government more than the entrepreneur's own investment in the project. Therefore, once the private entrepreneur is clear about all these things and is allowed a certain collaborator who will provide credit, or is allowed to pose the project as a whole to one particular finance source, he goes through with it because the whole thing is approved. In the public sector project so far the difficulty has been that not only do we take time to study, analyse and evaluate the feasibility report, we appraise the profitability of the project, we decide upon the location and we also have to tie it up to credits as and when they become available. Now, as I said the Department of Economic Affairs have agreed that projects will be tied generally to not more than two credits and whatever remains will be made available in free foreign exchange. This will improve the condition of the Public Sector implementation but even then it does not match the single source financing which most of the private sector projects have enjoyed. Perhaps you may consider that these are only marginal questions but they do become valid in the speed of implementation of projects."

**2.75.** The Committee are unhappy that considerable delays ranging from six months to three and a half years have taken place in the commissioning of the fertiliser projects in the public sector leading inter alia to a sizeable escalation of cost of putting up the projects. While some part of the delay might have been due to reasons beyond the control of the project authorities, the Committee feel that atleast some part of it could have been avoided by a more effective coordination as between different agencies of the Government. Government have set up Coordination Committees for the Cochin and Durgapur Projects to review critically the progress of implementation of these projects at regular intervals. The Committee suggest that such Coordination Committees should be set up for each of the other projects under implementation.

**2.76.** The Committee also note that the procedure for economic appraisal of the projects and the release of foreign exchange therefor is being streamlined. They also note that the engineering and equipment for the fertiliser projects is being standardised so as to facilitate setting up of identical plants speedily. The Committee regret that Government have thought of these measures only now when the fertiliser programme during the Fourth Five Year Plan has gone away. The Committee trust that the new measures taken by Government would lead to speedy implementation of the projects so that the targetted capacities for the Fifth Plan are achieved in time.

### E. Utilisation of Capacity

#### *Utilisation of Capacity during 1971-72 and 1972-73*

2.77. Unit-wise percentage utilisation of capacity during 1970-71 and 1971-72 is indicated in the following statement:

#### *Utilisation of installed capacity of Nitrogen and Phosphate during 1970-71 and 1971-72*

('000 tonnes)

Units	Installed capacity		Actual Production		% Utilisation			
	1970-71	1971-72	1970-71	1971-72	1970-71	1971-72		
<b>NITROGEN</b>								
<b>A. PUBLIC SECTOR</b>								
Sindri	•	•	90	90	75	63	83.3	70.0
Nangal	•	•	80	80	54	56	67.5	70.0
Trombay	•	•	81	81	54	61	66.7	75.3
Gorakhpur			80	80	68	75	85.0	95.0
Namrup	•	•	45	45	28	30	62.2	66.7
FACT	•		82	82	33	40	40.2	48.7
Rourkela	•	•	120	120	24	47	20.0	39.2
Neyveli	•		70	70	32	20	45.7	28.5
By-product	•		12	12	11	9	91.6	75.0
<b>TOTAL A.</b>	•		660	660	379	402	57.4	60.9

Units	Installed Capacity		Actual Production		% Utilisation	
	1970-71	1971-72	1970-71	1971-72	1970-71	1971-72
<b>B. PRIVATE SECTOR</b>						
Varanasi	.	10	10	6	5	60·0
Ennore	.	16	16	9	11	56·2
Gujarat	.	216	216	149	185	69·0
Vizag		80	80	61	65	76·2
Kota	.	110	110	113	108	102·7
Kanpur	.	200	200	107	128	53·5
Hy-products	.	8	8	6	6	75·0
<b>TOTAL B</b>	.	<b>640</b>	<b>640</b>	<b>451</b>	<b>508</b>	<b>70·5</b>
<b>TOTAL (N)</b>	.	<b>1300</b>	<b>1300</b>	<b>830</b>	<b>910</b>	<b>63·8</b>
						<b>70·0</b>

**PHOSPHATE**(i) *Complex & Triple Superphosphate***A. PUBLIC SECTOR**

Trombay	.	36	36	24	33	66·7	91·7
FACT	.	27	27	12	12	44·4	44·4
<b>TOTAL A</b>	.	<b>63</b>	<b>63</b>	<b>36</b>	<b>45</b>	<b>57·1</b>	<b>71·4</b>

**B. PRIVATE SECTOR**

Ennore	.	10	10	6	9	60·0	90·0
Gujarat	.	50	50	26	23	52·0	46·0
Vizag	.	73	73	58	63	79·5	86·3
DMCC	.	11	11	3	4	27·3	36·4
<b>TOTAL B</b>	.	<b>144</b>	<b>144</b>	<b>93</b>	<b>99</b>	<b>64·6</b>	<b>68·8</b>
<b>GRAND TOTAL</b>	.	<b>207</b>	<b>207</b>	<b>129</b>	<b>144</b>	<b>62·3</b>	<b>69·6</b>

(ii) *Single Superphosphate*

Public Sector	.	36	36	14	13	38·9	36·1
Private Sector	.	172	172	86	107	50·0	63·2
<b>TOTAL</b>	.	<b>208</b>	<b>208</b>	<b>100</b>	<b>120</b>	<b>48·1</b>	<b>57·7</b>
		<b>415</b>	<b>415</b>	<b>229</b>	<b>264</b>	<b>55·2</b>	<b>63·6</b>

2.78. The performance of individual units is explained by Government as under:—

**"FACT, Always:** Certain sections of this unit are very old and are not able to give efficient service as in new plants. Besides, certain mechanical and other deficiencies have been identified in certain sections of the plant. A debottlenecking programme like modifications in the oxygen plant, installations of a new phosphoric acid digester, renovation of certain sections of the sulphuric acid plants, creation of facilities for additional concentration of phosphoric acid, modifications in the stock and effluent sections of the complex plants for better efficiency, Supplementing griding facilities for rock phosphate, installation of additional centrifuge for ammonium chloride, etc., is under implementation. A major part of the work has been completed or is in an advanced stage of completion, but the entire work on debottlenecking is expected to be completed only by about the end of the Fourth Plan when the plant would be able to give better service.

**Rourkela:** While the plant was designed for the manufacture of 120,000 tonnes of nitrogen based on coke oven gas, the best production during any one year based on coke oven gas was only 40 per cent. (i.e. in 1968/69), while it touched a figure of as low as 20 per cent, during 1970/71.

During late 1960s, the inadequacy of the availability of gas was recognised and a decision was taken to supplement the gas supply with a naphtha reformer unit covering 40 per cent of the requirements. It was then anticipated that the balance 60 per cent would be contributed by the coke oven gas with increase in the production of steel in the Rourkela plant. However, there has been no improvement in the gas supply to the fertiliser plant. Rourkela fertiliser plant has, therefore, taken up modifications in the reformer unit for using naphtha as reformer fuel and releasing more gas for fertilizer production. Certain other measures for diverting more coke oven gas to the fertilizer plant by using fuel oil in the steel plant, construction of a new half coke oven battery, etc., are also under way. It may take another 12—15 months for the fertiliser plant to complete these facilities for increasing the production.

**Neyveli:** Besides the design and mechanical deficiencies the unit had also faced a lot of maintenance problems in the last one or two years. A series of measures are either implemented or have been taken up for implementation in a phased manner like the creation of additional facilities for removal of benzene from the raw synthesis gas, repair and retubing the waste heat

boilers, replacement of carbonate pumps, modification in the Vetrocoker solution regeneration system etc. The possibility of getting the services of a foreign expert for a study of the problems is also under examination. Some of the modifications can be carried out only in a phased manner and are expected to be completed by the end of the Fourth Plan and the unit may be able to improve in its operations from early Fifth Plan.

**Namak:** While this unit is capable of achieving 100 per cent production, actual performance is dictated by the availability of power; it had lost about 30 per cent production in each of the past two years. As against a requirement of 164 MW, the supply was not restored even during 1972-73 and was less than 100 MW for most of the period. It was further reduced to 60 MW during February, 1973 and is still continuing at this rate.

**Trombay:** The unit had some basic design and engineering deficiencies in the ammonia and nitrophosphate plants. Some remedial measures were already completed while the installation of supplementary gasification facility and few other jobs are under way. When these are completed by the end of the Fourth Plan, the utilization of capacity is expected to increase to optimum levels.

**Namrup:** The plant had various teething troubles like ammonia condenser leakages, bottlenecks in refrigeration and synthesis sections of the ammonia plant, problems in the Co-shift conversion catalyst section, frequent chocking and corrosion of the lines in the urea plant and severe corrosion in the sulphuric acid lines. Remedial measures are in an advanced stage of implementation and the unit is expected to optimise production from the coming year.

**Sindri:** This is one of the oldest plants operating over a period of 20 years. The equipment is old and worn out resulting in lower performance. Further, the poor quality of coal and gypsum available has further added to the operational problems of the unit. The plant is thus handicapped both in its technology as well as in the availability of raw materials. While remedial measures are constantly being attended to in the plant to keep it going, any significant improvement in the operations of this unit can be expected only after the following steps are taken:

- (i) Renovation of certain sections of the plant which may have to operate over long periods of time from now;

- (ii) Implementation of a Modernisation scheme which would not only replace the use of coke with fuel oil but also provide additional capacity for nitrogen; and
- (iii) Completion of the rationalisation scheme which would enable Sindri to dispense with the dependence on the natural gypsum from Rajasthan by using the by-product gypsum obtained from the phosphoric acid plant.

Of the above, the Modernisation Scheme being the last would materialise only by about 1976-77.

**Private Sector units:** But for the small units which are operating at Varanasi and Ennore over a period of time, the rest of the plants in the private sector are comparably new. If the utilisation of capacity in some of these private sector units was low in the past, it was mainly arising out of the teething troubles experienced by the units in the initial operation of the plants. As would be seen from the information furnished, the utilisation of capacity in the private sector was of the order of 80 per cent in 1971-72 as against only 70 per cent in 1970-71.

**Complex fertiliser units:** The production of P 205 in the complex form in the units at Anwaye, Ennore and Baroda was low because of operational problems involved in phosphoric acid plants which are very corrosive in nature. All these units are carrying out modifications to optimise their production.

**Superphosphate unit:** The production in general in superphosphate industry is low mainly arising out of low off take for this single and low nutrient fertilizer in preference to complex fertilizers containing N&P/N, P&K.

**Other problems:** While the individual units are implementing the modifications that are called for to improve production in their units, the other reasons having an adverse effect on production on which the units have no control are problems of sustained power supply, harmonious labour relations etc. During the last two years, a production of nearly 90,000 tonnes of nitrogen was lost arising out of power cuts/power failures/dips. The situation during 1972-73 was further aggravated and if the present trend continues and the fertiliser industry is not given a special status by exempting it from power cuts, the loss of production during this year due to power cut/fluctuations may even be more. Similarly on the labour front, the industry had lost about 26,000 tonnes of nitrogen due to labour problems in 1971-72.

In conclusion, it may be mentioned that the average performance of the operating units during 1971-72 was 70 per cent. However, if the units located at Neyveli, Rourkela, Sindri and Alwaye which have special problems are not taken into consideration, the overall utilisation of capacity during 1971-72 would be close to 80 per cent.

### *Capacity Utilisation during 1972-73*

2.79. The following statement indicates the utilisation of installed capacity for the production of fertilisers during 1972-73 (upto December, 1972):

('000 tonnes)

	NITROGEN			PHOSPHATE		
	Installed capacity	Actual production	% Utilisation* during April-Dec., 1972	Installed capacity	Actual production	% Utilisation* during April-Dec., 1972
<b>A. Public Sector</b>						
Single						
Superphosphate	..	..	..	36	10	37·0
Sindri	90	38	56·7	..	..	..
Nangal	80	43	71·7	..	..	..
Trombay	81	47	77·0	36	27	100·0
Gorakhpur	80	54	90·0	..	..	..
Namrup	45	21	61·8	..	..	..
FACT	82	21	51·2	37	7	25·0
Rourkela	120	37	41·0	..	..	..
Neyveli	70	17	30·2	..	..	..
Madras	164	74	60·2	85	37	57·8
By-Product	12	8	88·9	..	..	..
<b>TOTAL A</b>	<b>824</b>	<b>359</b>	<b>58·0</b>	<b>194</b>	<b>81</b>	<b>55·9</b>
<b>B. Private Sector</b>						
Single						
Superphosphate	..	..	..	172	80	62·0
Triple	..	..	..	..	..	..
Superphosphate	..	..	..	11	2	25·0
Varanasi	10	4	5·3	..	..	..
Ennore	16	9	75·0	10	6	75·0
Gujarat	216	144	88·9	50	21	55·3
Vizag	80	53	88·3	73	53	96·3
Kota	110	95	115·9	..	..	..
Kanpur	200	125	83·3	..	..	..
By-product	8	4	66·6	..	..	..
<b>TOTAL B</b>	<b>640</b>	<b>434</b>	<b>90·4</b>	<b>316</b>	<b>162</b>	<b>68·3</b>
<b>GRAND TOTAL A+B</b>	<b>1464</b>	<b>793</b>	<b>72·2</b>	<b>510</b>	<b>243</b>	<b>61·2</b>

\*On pro rata basis.

2.80. The utilisation during 1972-73 (upto December, 1972) has been explained as under:

"The operating fertilizer units normally take up their annual turn round for maintenance of the plants in the first half of the year. Further, in the summer months the weather conditions are also not favourable for optimum utilization of the capacity. It has, therefore, been the experience of the industry that the production of nitrogen is normally more in the second half of the year as compared to the first half of the year. For example, during the year 1971-72, the capacity utilisation was 31.4 per cent. in the first half of the year, while that in the second half was 38.6 per cent. making the total 70 per cent. As to the break-up of production, while the contribution in the first half was about 45 per cent, that in the second was 55 per cent. The utilisation of the installed capacity in the first half of the year 1972-73 was about 34.2 per cent as against 31.4 per cent for the same period in the previous year. In the normal course, it should have been possible for the operating units to contribute a production of about 11.25 lakhs tonnes of nitrogen during 1972-73 with an overall utilisation capacity of about 77 per cent. However, the year 1972-73 faced unusual power cuts in most of the States in addition to labour problems. Besides, Nangal which has been under power cut for the last 3 years, power cut has been imposed upto 25—40 per cent on the plants in U.P. which according to the present indications may continue upto the middle of 1973. Similarly, power problem/cut is faced from 5 per cent to 25 per cent by the units of GSFC, Baroda, Madras Fertilizers, EID-Parry, Ennore, Coromandel Fertilizers, Vizag, etc. Likewise the new fertilizer unit under commissioning at Goa faced problems of stable power supply resulting in a delay in the commissioning of the plant.

Labour problems have also been experienced in the units of Gorakhpur, Alwaye, Namrup, Madras, Neyveli and Kanpur resulting in loss of production.

With the problems being faced by the industry, the overall utilisation of the capacity during 1972-73 may be only about 72 per cent (as against 70 per cent in 1971-72) while it should have been possible to achieve about 77-78 per cent average utilisation if the labour and power problems are not faced.

The actual utilisation of nitrogen capacity in the first nine months of the year was about 90 per cent in the private sector and about 58 per cent for the public sector and about 72 per cent on an average. This would increase to 86 per cent if the sick

units like Rourkela, Neyveli, Sindri, Alwaye and the new unit at Madras are excluded.

In conclusion, it may be said that if the operating fertilizer units are not able to further improve their efficiency in the current year, it would be mainly for reasons beyond their control."

#### *Low Utilisation of Capacity of Public Sector Plants*

2.81. In the preliminary material furnished to the Committee, the comparative capacity utilisation in public/private sectors during 1970-71 and 1971-72 has been indicated as follows:

(In Thousand Tonnes)

	Installed capacity	Production	Percentage of utilisation
<hr/>			
<b>1970-71</b>			
Public Sector . . . . .	789	429	54%
Private Sector . . . . .	976	630	65%
<hr/>			
<b>1971-72</b>			
Public Sector . . . . .	1008	514	51%
Private Sector . . . . .	956	716	75%

2.82. During the evidence, the representative of the Ministry admitted that the rate of production in the public sector plants as a whole was less than in the private sector plants. But he maintained that it was due to the fact that the public sector was burdened with a number of old and outdated plants while the private sector plants, except those at Varanasi and Ennore, were comparatively new. Besides, he said, the public sector plants also had difficulties of power cut, labour unrest and shortages of raw material. Some of the private sector plants, however, had captive power plants and as such were not affected by the general power cuts. He also pointed out that some of the efficient plants which were classified in private sector like G.S.F.C., were largely public owned.

2.83. In reply to the question whether the under-utilisation in public sector plants should be considered as a regular feature or a substantial improvement was possible, he said:

"There is considerable margin for improvement—not only for various improvements in the plants themselves, but, largely for

improving two things. One is the power situation, where serious cuts have been imposed by the State Electricity Boards on the fertiliser plants and the other is by improving the labour situation. This is partly in the hands of the management and partly in the hands of the State Governments and partly in the hands of the labour themselves."

In reply to another question, he said that modernisation programmes were already under way at Sindri, Neyveli, Rourkela and Alwaye.

#### *Impact of under-utilisation on cost*

2.84 Government was asked to state whether any study had been made as to the impact of under-utilisation of capacity on the cost of production of fertilisers, in the public sector units. They have in a written reply to the Committee stated that no specific studies have been made on extent of the impact of under-utilisation of capacity on the cost of production of fertilizers in the Public Sector Units. However, the percentage utilisation of capacity in all units, more especially in the Public Sector Units, is being reviewed by Government from time to time and appropriate remedial measures have been taken or are being taken to achieve optimum utilisation of capacity.

2.85 The Committee observe that besides the power shortage and industrial relations which have generally affected the utilisation of all fertiliser plants, the Alwaye, Neyveli, Trombay and Sindri plants have been suffering from design, engineering and maintenance problems. In the case of Rourkela, the shortage of Coke Oven Gas has impaired production while in the case of Nangal, the production is low mainly because of short supply of power which is its basic feed stock.

2.86 The Committee consider that it is nothing short of tragic that at a time when the country requires more and more fertilizers in order to step up agricultural production to meet the requirements, the fertilizer plants in the public sector should not be able to produce as per their installed capacity. In the case of single superphosphate, the production was 39 per cent in 1970-71 and 36 per cent in 1971-72. In the case of phosphatic fertilizers, the production rose from 57 per cent in 1970-71 to 71 per cent in 1971-72, while in the case of nitrogenous fertilizers, it rose from 57 per cent to 61 per cent. During 1972-73, a slight improvement has been claimed during the first half of the year, but the final position is unlikely to be much different particularly in view of the power cuts and industrial relations. The Committee see no reason why Government and the project authorities could not accelerate the pace of development. They would like Government to analyse, in detail, the reasons for which each of the plants in the public sector has not been able to achieve production according to its full

rated capacity and to take concerted measures to achieve it by a date to be specified in this behalf. The Committee need hardly stress that in carrying out the analysis and the follow-up action, the best technical talent in the country should be utilised. The Committee would also suggest that the performance of each of these plants should be reviewed at a high level in the Government at least once in every quarter so that on-course remedial measures, as necessary, can be taken to achieve maximum production at the earliest.

2.87 The Committee are surprised to learn that a number of plants in the public sector need modernization. Since there is a well laid out scheme for providing depreciation funds every year in each of the projects, the Committee cannot understand why the need for modernization or replacement of the plants was not anticipated well in advance and timely action taken to see that the plants were modernized, rationalised or replaced in the best interest of production at economic prices.

## CHAPTER III

### IMPORTS, DISTRIBUTION AND PRICING

#### A. Imports

##### *Actual/Estimated Imports during IV and V Plans*

3.1. The actual/estimated imports and indigenous production of fertilisers during the Fourth Plan and Fifth Plan periods has been indicated as follows:

Quantity : In lakhs tonnes of Nutrients  
Value: Rs./Crores.

	Indigenous Production	Import	@Value of Import
<i>4th Plan I 1969-70</i>			
N .	7·16	6·67	
P .	2·22	0·94	116·77
K .	..	1·20	
<i>1970-71</i>			
N .	8·30	4·77	
P .	2·30	0·32	76·78
K .	..	1·20	
<i>1971-72</i>			
N .	9·52	4·81	
P .	2·78	2·48	89·71
K .	..	2·68	
<i>*1972-73</i>			
N .	11·00	11·00	
		**7·80	206·00
P .	3·20	4·80	
		**2·33	
K .	..	4·50	146·00
		**3·18	

\*Estimates

\*\*As per estimates revised in February 1973.

@Value calculated on the basis of weighted prices of N=Rs. 11038/- per tonnes, P=Rs. 1350/- per tonne and K=Rs. 614/- per tonne.

Quantity : In lakhs tonnes of Nutrients  
 Value : Rs./Crores

Indigenous Import @Value  
 Production of  
 Import

\*1973-74

N .	.	13.00	13.00	} 222.22
P .	.	4.00	4.10	
K .	.	5.20		

5th Plan

\*1974-75

N .	.	17.35	12.50	} 217.10
P .	.	5.50	4.30	
K .	.	5.20		

\*1975-76

N .	.	23.30	10.70	} 207.80
P .	.	7.70	4.30	
K .	.	..	6.30	

\*1976-77

N .	.	29.85	9.25	} 210.42
P .	.	9.75	4.95	
K .	.	..	7.70	

\*1977-78

N .	.	41.20	3.80	} 150.49
P .	.	14.15	3.95	
K .	.	..	9.40	

\*1978-79

N .	.	52.00	..	} 105.71
P .	.	19.60	2.60	
K .	.	11.50		

\*Estimates

\*\*As per estimates revised in February 1973.

@Value calculated on the basis of weighted prices of N=Rs. 1038/- per tonnes, P=Rs. 1350/- per tonne and K=Rs. 614/- per tonne;

3.2. It would be seen from the above figures that of the actual consumption of nitrogenous fertilisers the percentage which was met by imports was of the order of 48 per cent in 1969-70, 37 per cent in 1970-71 and 34 per cent in 1971-72. In the case of phosphatic fertilisers, the imports were to the extent of 30 per cent of the actual consumption in 1969-70, 12 per cent of the consumption in 1970-71 and 47 per cent of the consumption in 1971-72. The entire consumption of the potassic fertilisers was met out of imports. During the remaining two years of the Fourth Plan, the original estimate envisaged 50 per cent of the consumption being met out of imports. But the import figures revised in February, 1973 indicate a much lower scale of import both for nitrogenous and phosphatic fertilisers during 1972-73. The actual consumption of the different kinds of fertilisers is far short of the targetted consumption during 1969-1972. For the years 1972-73 and 1973-74 the targets of consumption has been drastically scaled down from a total of 46.6 lakh tonnes and 55 lakh tonnes respectively to 34.5 lakh tonnes and 39.3 lakh tonnes respectively. In case the targetted consumption were to be achieved, with reference to indigenous production, a much larger import would have been necessitated during the period 1969-1972. Similarly for the years 1972-73 and 1973-74 a considerably larger import of fertiliser would be needed than proposed, if the original targetted consumption was to be achieved.

3.3. Explaining the basis of the estimates imports for 1970-71 and 1973-74 and for all the years of the 5th Plan period, the representative of the Ministry of Agriculture stated during evidence that the estimates of import were only rough and tentative and that actual imports would depend upon the level of indigenous production that could be achieved.

#### *Agencies for Import*

3.4. The representative of the Ministry of Agriculture informed the Committee during evidence that the Department of Supply was arranging import of fertiliser on behalf of the Ministry of Agriculture from countries other than East European countries and the actual agency for import is the Indian Potash for potassic fertilisers and the Department of Supply in the case of other fertilisers. The import of fertilisers of all varieties from East European countries was, however, handled by the Minerals and Metals Trading Corporation—a public sector undertaking under the Ministry of Commerce.

3.5. The need for a single agency to handle import of all fertilisers was pointed out during evidence. In this connection, the representative of the Ministry of Finance stated:

"With a view to achieve a certain amount of coordination Government have set up a Fertiliser Purchase Committee of which the Secretary, Supply is the Chairman and representatives of the Departments of Agriculture and Economic Affairs and the

MMTC sit in the Committee. This Committee ensures broadly that there is coordination of the price and if for any reason a higher price has to be paid for, the Committee considers the question..... Apart from theoretical considerations, I think one might think that it would be advantageous to have only one agency. The organisation constituted for the purpose of procurement is the Department of Supply and, therefore, normally the Department of Supply should have dealt with the procurement of fertilisers from all sources. The reasons in favour of MMTC are that the purchase of materials from East European countries has a pattern and it is necessary to co-ordinate the purchase of fertilisers with the export of commodities. MMTC have a detailed picture with them. The MMTC working under the Ministry of Foreign Trade (now Commerce) know how the trade plan works. These are the reasons for the entrustment of the procurement from East European countries to the MMTC. The Committee is working reasonably well."

#### *Imports by Negotiation/Tender*

3.6. The volume of imports of various kinds of fertilisers by the Department of Supply from sources other than East European countries based on tender and by negotiations has been indicated as follows:

							<i>In lakh Tonnes</i>		
							<i>By Tender</i>	<i>By negotiations</i>	<i>Total</i>
1970	.	.	.	.	.	.	2.60	6.06	8.66
1971	.	.	.	.	.	.	10.71	5.13	15.84
1972	.	.	.	.	.	.	4.82	15.57	20.39

#### *Import Prices*

3.7. The prices of different kinds of fertilizers paid by the Government of India against contracts entered into with East European countries and others during the current year (1972-73) are indicated below:—

<i>Price per Tonne in US\$</i>						
				<i>East Europe</i>	<i>West Europe</i>	<i>Others</i>
Urea	.	.	.	66.65 (C&F)	67.00 (C&F)	65.00 (C&F)
Mur. of Potash	.	.	.	45.00 "	44.37 "	30.00 (FOB)
Amm. Sulphate	.	.	.	30.91 "	"	"
C.A.N.	.	.	.	59.00 "	50.25 "	"

3.8. The representative of the Department of Supply was during evidence asked as to how was it ensured that the fertilisers were purchased from abroad at the most competitive price. To this he replied: "at the time of deciding the purchase, we always take into account the prices prevailing in the world market."

#### *Transport by Foreign Flag Vessels*

3.9. The position regarding the use of vessels during 1971-72 for the import of fertilisers is as follows:—

F.O.B. Contracts . . . . .	Foreign Flag . . . . .	4,78,000 M/T
	Indian Flag	2,01,500 M/T
C&F Contracts . . . . .	Foreign Flag . . . . .	12,65,955 M/T
	Indian Flag	77,853 M/T
TOTAL . . . . .	Foreign Flag . . . . .	17,43,955 M/T
	Indian Flag . . . . .	2,79,353 M/T

It is stated that in the case of F.O.B. Contracts shipping arrangements are made by the Chief Controller of Chartering, Ministry of Shipping & Transport, who ensures that tonnage to the maximum extent possible is carried in Indian Flag Vessels within the delivery schedules of contracts. In the case of C&F Contracts, shipping arrangement are the responsibility of the suppliers.

#### *Bulk Purchases*

3.10. It has been submitted to the Committee by a non-official organisation that for a stable price, better credit terms and economic shipping, there should be long term arrangements for import of fertilisers for periods varying from 3 to 5 years rather than floating tenders for small quantities of 30 to 50 thousand tonnes every few weeks. Asked to state his views in this regard, the representative of the Department of Supply stated that as far as supply of large quantity on long term basis was concerned, it could be arranged; but so far as price was concerned, neither the suppliers would be ready to make a commitment on long term basis, nor would it be in the interest of the country to commit itself to a price which might hold good for 2 or 3 years at a stretch. Asked to state as to how, in the absence of a stable price for any given period, the budget for import of fertilisers was being prepared and amount allocated. He said:

"The requirement is given by the Ministry of Agriculture. We try to import that much requirement and if the funds are not adequate, then, we go back to the Ministry of Finance and ask for more funds."

**3.11.** In this connection, the representative of the Ministry of Finance stated:

"This problem has been under consideration for quite some time and it is being attempted to be solved in two ways. Earlier, for each season, ahead of it, we used to consult the Ministry of Agriculture, and arrive at an assessment of their requirements and give an allocation in relation to each season. We felt, over a period of time, that this is somewhat too short sighted and this had two disadvantages. The disadvantage in this system is that if you do not get fertiliser in time, because of the time factor, you are compelled to purchase at a higher price. Therefore, the system has been somewhat changed and we are now freely giving allocations for the whole year, approximately 6 to 9 months ahead. For instance, in September this year, the Department of Economic Affairs had given to the Department of Supply, after consulting the Ministry of Agriculture, allocation, which on the present judgment, would be adequate to meet the total requirements for the year 1973-74. They have now done the contracts for the Kharif 73 and they are now in the process of doing contracts for the Rabi 73. This gives a facility. When people get together and there is combination then you can cancel the tender and go out and explore the market. The Department of Supply have been at our instance and with our agreement, having negotiations on long-term contracts. We have indicated our agreement in this regard to the MMTC and the Ministry of Foreign Trade (now Commerce), who are concerned with the procurement of fertiliser from the East European countries. For the next three years, we have indicated the quantity of fertiliser we are likely to take. This is being incorporated in the Trade Plans. For the quantities of fertilisers included in the Trade Plan, there would be an agreement on the price each year. Even in relation to West Europe or North-American countries this system could be tried. Recently, there was a discussion with Kuwait. We are moving in the direction of first making sure of the availability which, I think is more important. In regard to price, it will not be fair either for us or for them to agree on a price in advance because fertiliser prices are fluctuating both up and down. If the price goes up in the future we would gain. If the price comes down, we will lose. Some investigation is being made and the parties are willing that in each year, while they agree in advance on the quantity, there would be negotiations each year in regard to price and the general principle has been agreed that it will

be at the international price. More discussions are required on how to determine the international price. It is really a question as to how to determine the international price."

### *Import from East European Countries*

3.12. In response to the desire of the Committee expressed during evidence, Government have, in a note furnished to the Committee, stated that the Government have entered into agreements with East European countries for supply of the following types of fertilizers against rupee payment:—

Urea.

Muriate of Potash.

Calcium Ammonium Nitrate.

Ammonium Sulphate.

During the year 1972-73, it was estimated that a quantity of 7.5 lakh tonnes of urea would be available from East European countries. However in the month of March, 1972, MMTC informed Government that only a quantity of 4.5 lakh tonnes of urea might be available from East European countries. Against the above, the following contracts were entered into by MMTC with East European countries:—

U.S.S.R.	Urea	73,200 tonnes
	MOP	28,000 tonnes
	Ammsul	15,000 tonnes
Poland . . .	Urea . . .	1,20,000 tonnes
Bulgaria . . .	Urea . . .	30,000 tonnes
Rumania . . .	Urea . . .	20,000 tonnes
	CAN . . .	60,000 tonnes
G.D.R. . .	MOP . . .	1,20,000 tonnes

The shortfall between the estimated imports and the quantity actually contracted for with East European countries was, it is stated, on account of the reported early spring in East European countries (as a result of which the fertilizer season commenced two months ahead of the usual time) and closure of some plants in these countries.

3.13. The supply position of fertilizers against the above contracts is indicated as below:—

*Figures in '000 tonnes*

Scheduled arrivals in India from April, 1972 to Dec., 1972	Actual arrivals upto December, 1972	Shortfall
<b>UREA</b>		
U.S.S.R. . . . .	45	45 ..
Poland . . . . .	90	60 30
Bulgaria . . . . .	30	12 18
Rumania . . . . .	20	.. 20
<i>Muriate of Potash</i>		
U.S.S.R. . . . .	28	28 ..
G.D.R. . . . .	120	108 12
<i>Ammonium Sulphate</i>		
U.S.S.R. . . . .	15	8 7
<i>Calcium Ammonium Nitrate</i>		
Rumania . . . . .	60	30 30

The main reasons for delay in delivery have been stated to be difficulty in getting ships in the rising freight market and technical problems in some of the plants in East Europe.

3.14. The procedure for import of fertilisers from the East European countries was spelled out by the representative of the Minerals and Metals Trading Corporation during the evidence as follows:

"MMTC is importing fertilisers from East European countries. The quantity to be imported from each country is laid down in the trade plan. The trade plans are calender plans and are negotiated sometimes within the period of September to December. A delegation of the Government of India goes abroad for negotiating what the commodities would be, how much is to be imported and how much is to be exported. After the trade plan is finalised, it is the duty of the MMTC to negotiate with the trading agencies of those countries about price. So far as delivery schedule is concerned, it is drawn up with the concurrence of the Department of Agriculture. As far as price is

concerned, it is approved by the Fertiliser Purchase Committee to whom negotiations with each European country are reported and their approval is sought. After the agreements are concluded, we keep a watch on the shipments from those countries. We keep in touch with them to see whether they have already fixed the ship for, say, January schedule. Now, time generally taken from East European countries to India is between six weeks to eight weeks depending upon the port, loading, etc. We keep a watch over this."

#### *Fertiliser Shortage*

3.15. It was pointed out during evidence that there was considerable shortage of fertilisers and the farmers were not able to get adequate supplies with the result that the agricultural production was suffering. The representative of the Ministry of Agriculture stated that there was no problem in the previous year (1971-72). But during the current year 1972-73) the planned availability had not materialised partly because of shortfall in indigenous production and partly due to dislocation of imports from East European countries. These shortfalls came to the notice of the Ministry of Agriculture only about April-May, 1972 by which time the world market of fertilisers had become so difficult that despite further release of foreign exchange, it was not possible to procure the necessary quantities in time. But she assured that the shortage was "not alarming" and that Government was "making every effort to see that whatever we have, reaches the farmer in time for the (Rabi) season." She estimated the shortfall in availability as against demand during 1972-73 of about 3 lakh tonnes of nitrogen.

3.16. In reply to another question during evidence, the representative of the Minerals and Metals Trading Corporation stated that he expected that during 1973, the total availability of urea from USSR will be only 55 per cent of our expectations. The representative of the Ministry of Agriculture was thereupon asked as to whether her Ministry had worked out the total shortfall in availability likely to be in 1973-74. She replied:

"It will be a little too early to estimate because our teams are still going abroad and trying to get as much of the imported fertilisers as possible. So it depends on how much they will be able to procure and how much of production will be expected within the country. So we will be able to work out the extent of shortfall for the next year only after we have firm figures of indigenous production and firm figures of import."

3.17. In the context of shortages appearing during 1972-73 in the availability of fertilisers, the representative of the Ministry of Agriculture was

asked as to what steps were taken by her Ministry to harmonise the import programme with the requirement of the farmers from season to season. She stated:

"Generally the whole purpose in our planning in the Agriculture Ministry in combination with the Finance is to see that we estimate our requirements season-wise and year-wise and then the Finance Ministry gives the allocation in advance. For 1973, both for the rabi and kharif, the requirements for fertilizer season-wise have been worked out. The Finance Ministry as early as September this year have released the foreign exchange necessary for making the purchases for 1973. The Supply Ministry have been given the foreign exchange and also we have indicated not only the season requirements but also within the season what are the kinds of products that we require, *i.e.* how much Urea, etc..... In fixing the agreements or contracts with the suppliers, the time element is taken into account. The schedules are so worked out that the arrival of the fertiliser will be in time."

3.18. The representative of the Ministry of Petroleum and Chemicals added that in his Ministry production was estimated from time to time and the revised estimates "corrected every few months on the basis of performance and expectation" were communicated to the Ministry of Agriculture who, on the basis of the likely availability from indigenous production, sent their demands to the Department of Economic Affairs and the Ministry of Supply to effect the import contracts. According to him, the coordination in this regard was being done by the Ministry of Agriculture through periodical meetings.

3.19. Asked to state the steps contemplated to overcome the problems arising out of the prospects of a further shortfall in the supplies from the East European countries, during 1973-74, Government have in a note furnished to the Committee, stated:

"For the year 1973-74, the Ministry of Finance have allocated foreign exchange of the value of Rs. 341 millions for import of fertilisers from East European countries. M.M.T.C. was informed in the month of September, 1972 that as the international supply position of fertilizer was expected to be very difficult during 1973, they were to get in touch with the East European countries and to finalise contracts immediately. MMTC have been basing their estimates of availability for 1973-74 on a realistic appraisal of the production and export trends in the supplying countries. Against the allocations made for 1973, contracts have already been concluded with a number of sources and negotiations are in progress with others. In order that short notice purchases at high prices will not be made

from other sources to cover the deficit in supply from East European countries, the Ministry of Finance have taken into account only the minimum quantities indicated by MMTC as available from East European sources and have indicated alternative sources of allocation for the balance of requirements."

**3.20.** The Committee are extremely unhappy to note that in spite of the existence of a high level Fertiliser Purchase Committee, on which the various Departments and agencies of the Government concerned with imports of fertilisers are represented, which is expected to coordinate imports of fertilisers to meet the domestic demand, the plea advanced by the Ministry of Agriculture for the shortage of fertilisers during 1972 is that information of a likely shortfall in imports from East European countries was received by them too late. The Committee desire that the Fertiliser Purchase Committee should have a firmer grip on the import programme and with this object in view it should meet more often, preferably every month, to assess the progress of the imports programme so that remedial action could be taken in time in case of a likely shortfall in the scheduled imports from any country. This also points to the need for improving the system of timely collection of market intelligence as to the international prices and production trends so as to regulate imports in the best interest of the country.

**3.21.** The Committee note that the Department of Economic Affairs have revised their procedure for allocation of foreign exchange for import of fertilisers and that now the foreign exchange is released on annual basis instead of on seasonal basis as hitherto. Regretting that the change in the procedure could be thought of only when a crisis developed during 1972, the Committee hope that from now on the Ministry of Agriculture will have more elbow room to plan and negotiate imports on a long term basis and a repetition of the crisis of 1972 will not occur.

**3.22.** The Committee need hardly point out that the present system by which tenders for the import of fertilizers are floated repeatedly after every few weeks has not led to import either on assured basis or on most economic prices. The Committee would, therefore, like Government to review the present system to see what improvements could be made in the system so as to get imports at internationally competitive prices and on assured basis for meeting the country's requirements adequately and in time.

## B. Distribution

### *Distribution of Imported Fertilisers*

**3.23.** The fertiliser supplies come from two sources: Imports and Domestic Production. Different modes of distribution are in vogue in respect of imported and indigenous stuff. The Central Fertiliser Pool is the

agency which handles the distribution of the imported fertilisers through the State Governments, Union Territories and Commodity Boards.

### *Central Fertiliser Pool*

3.24. The Ministry of Agriculture operates a State Trading Scheme for the purchase and distribution of fertilisers through a Central Fertiliser Pool established in 1944. The objects of the Pool are:—

- (i) to popularise and push up the consumption of fertilisers in the country;
- (ii) to make them available to cultivators at economic prices/rates; and
- (iii) to ensure equitable distribution of available supplies in order to maximise agricultural production.

The Central Pool mainly handles Ammonium Sulphate, Urea, Calcium Ammonium Nitrate and Ammonium Sulphate Nitrate procured from abroad and also from indigenous sources. In addition, it also handles Ammonium Phosphate DAP, Ammonium Chloride, MOP, Sulphate of Potash, etc., procured from abroad.

3.25. Potassic fertilisers are entirely imported and distributed through a public limited company, known as Indian Potash Ltd., who have been given the task of distributing imported potassic fertilisers and promoting the use of potash generally.

3.26. The following is the comparative situation of budget provision for the years 1970-71 and 1971-72 and estimates for 1972-73 for the procurement and distribution of fertilizers:

(in Rs.Crores)

	1970-71	1971-72	1972-73
Imports	Rs. 60·33	Rs. 88·71	Rs. 154·45
Misc. liability	1·50	1·50	2·00
Establishment	0·16	0·13	0·14
	61·99	90·34	156·59

Supplementary Grants for Rs. 25.00 crores and Rs. 45.47 crores were taken for the year 1970-71 and 1971-72 respectively. Thus the final grant for 1970-71 was Rs. 87.00 crores and Rs. 135.81 crores for 1971-72.

3.27. It is stated that the Central Fertilizer Pool ensures that there are sufficient quantities of fertilisers in the country by planning imports sufficiently in advance. The position of availability of fertilizers *vis-a-vis* the requirements during 1971-72 was as follows:—

	(In lakh tonnes)		
	N	P	K
1 Total requirements: 1971-72	18.12	5.90	3.49
2 Stock build up as on 1-4-1971	6.69	2.08	1.05
3 Production of fertilisers	9.52	2.78	nil
4 Imports available	4.81	2.48	2.68
5 Total availability	21.02	7.34	3.73

#### *Distribution of Domestic Production*

3.28. To speed up investment in the fertiliser industry and achieve the production target for the Fourth Plan, Government decided in December, 1965 that the indigenous production units should have freedom of action in regard to fixation of prices of fertilisers and their distribution. Accordingly, all fertilizer projects licensed on or before 31st March, 1967 (this was subsequently extended up to 31st December, 1967) were given the freedom to fix prices of their products and to organise their own distribution for a period of 7 years from the commencement of commercial production, subject to the condition that they sell to the Government at the latter's option upto 30 per cent of their production at a price to be settled between them and the Government. In pursuance of this policy, control on distribution of nitrogenous fertilisers indigenously produced was liberalised to enable the producers to establish their own markets. From 1st October, 1966, factories whose production was being taken over into the Pool, were allowed to market freely 30 per cent of their production. The direct marketing quota was increased to 50 per cent from 1st December, 1967 and to 70 per cent from 1st December, 1968. From 1st January, 1969, the indigenous factories were allowed free sale subject to the option of the Government to take over not more than 30 per cent of their production for distribution through its own arrangements. This free sale continued till 30th June, 1972. The Pool, however, took over 30 per cent of indigenous production of Ammonium Sulphate with effect from July 1, 1972 "to meet the priority requirements of States, like Andhra Pradesh, Maharashtra,

etc.. who are charged with the responsibility of promoting high-yielding varieties of cereals and also exports-oriented crops.”

#### *Coordination in Distribution of Supplies*

3.29. It is stated that Fertilisers are manufactured by a few units, whereas the consumption is spread all over the country. The number of consumers runs into millions. Besides, plants have to operate throughout the year whereas consumption in most areas is during specific seasons. These factors together necessitate an elaborate, extensive and efficient distribution system to ensure availability of fertilisers to the consumers at the right time. In order to ensure that there is complete coordination of supplies from the imports as well as from their domestic sources of supply, the Government of India in the Department of Agriculture plays a key role by following a system of consultation with the manufacturers and the State Governments who are the consumers of fertilisers. Every six months' Conferences are held with the various State Governments and the manufacturers and other interests, such as Commodity Boards, in order to ascertain the requirements of fertilisers for the succeeding seasons, arrive at estimates of domestic production and decide on the quantum of imports required to meet the gap between the requirements and domestic production. At these Conferences, detailed plans are formulated for supply from each individual factory to the various States falling within the marketing area of that factory.

#### *Application of Essential Commodities Act*

3.30. Since 1972, Government have started issuing Notifications under the Essential Commodities Act, 1955 requiring indigenous manufacturing units to sell their products in the States specified in the Notification. The fertiliser industry is unhappy at this action of the Government and their organisation has represented to the Committee:

“The concept of freedom of marketing encompasses ability to choose the area for marketing of products. Admittedly in a situation where there is shortage of material in the country and inadequacy of rail transport, certain amount of regulation and rationalisation become necessary. This was being done through discussions at the biannual zonal conferences. The arrangement was by and large working well. The industry is, therefore, very dismayed that government should have had to invoke the provisions of the Essential Commodities Act, to force manufacturers to distribute specific quantities in specified States. We feel that this is totally unwarranted and urge the Government to rescind the order. The previous arrangement should continue. Surely the Government can exert necessary influence without resorting to the provisions of the Essential Commodities Act, on any individual producer who does not play ball.”

3.31 The issue was raised during evidence and the representative of the Ministry of Agriculture was asked to offer her comments. She said:—

"It was only in April 1972, when there was a little difficulty in availability of fertiliser, that State Governments started complaining that manufacturers are not keeping to their commitments as agreed to by them at the Zonal Conferences and it was affecting the supply position of State Governments, and which in turn, was affecting the agricultural production programme. For Rabi this year, we have taken up a very ambitious additional programme in order to cover the losses which are expected in Khariff. So, we could not really take a chance to allow the States to suffer from want of fertilisers. Agricultural production programmes cannot be left to chance. All that we have done is that, under the statute, we have issued orders asking the manufacturers to supply to particular States the quantities that they themselves had agreed to supply at the Zonal Conferences.... It is merely trying to make it statutorily obligatory for them to meet their commitments which they had agreed to at the Zonal Conferences. To say that these orders were arbitrary and have imposed some additional or new burdens on them is totally unjustified."

"Our orders have not gone against them. It has helped them, because where a manufacturer was previously having to sell in 12 States, thereby incurring a lot of expenditure on long movement by rail or road, we are now enabling him to sell within a much smaller marketing zone, or a much more economic marketing zone."

Another point that she made was that the orders under the Essential Commodities Act also helped in securing priority classification by the Railways for a planned movement of fertilisers only to the extent it was necessary. Pointing out that "except in one or two cases, no State Government have had any opportunity to take action under the Essential Commodities Act, because, all the manufacturers have more or less been supplying according to the commitments made by them," she said that by this procedure "the State Governments feel psychologically satisfied that (Central) Government has not left them to the mercy of the manufacturers." Asked as to what consequences she foresaw in case the orders under the Essential Commodities Act were withdrawn, she stated: "We cannot say what would be the position if we had not got this safeguard."

3.32. In reply to the point as to what would be the position in case the State to whom a share of production was allocated, did not lift the

quantity, she said that in such a case "we have given freedom to the manufacturer to sell it in any way he likes."

#### *Distribution through Cooperatives*

3.33. It has also been represented to the Committee by a non-official organisation:

"The industry is using two parallel channels of distribution, i.e., private trade and the institutional channels. Hitherto, the industry has been allowed to choose a channel and allocate quantities to each of the channels on the basis of (certain) factors (e.g., intensity of consumption, forces of competition, share of trade desired, terms of trading, relative effectiveness of channels, long term trading interests). Recently, as a result of shortages of products with the Pool total availability to the States has been inadequate due to various reasons—the main one being the disruption in imports due to the Indo-Pak war and suspension of U.S. Aid. Cooperatives have not, therefore, been able to get enough fertilisers from the Pool. Pressure is, therefore, being put on the producers by the State Governments through the Central Government to give preferential treatment to institutional channels in the distribution of their products at the cost of the private trade. We would like to submit that apart from contravening the assurance of freedom of marketing, this is not conducive to efficiency in marketing. Each manufacturer must be allowed to chose a channel of distribution based on its commercial assessment and the relative efficiency of alternatives."

3.34. Dealing with this complaint during evidence, the representative of the Ministry of Agriculture stated:

"We are exerting no kind of pressure on this account.... Government policy has been mentioned a number of times to have more and more of the fertiliser distribution to be done through public agencies in order to minimise the possibilities of abuse during times of short supply. Government have set up a Committee under the Chairmanship of Mr. Quraishi to go into this question. On this Committee, there are a number of representatives of manufacturers, so that even if this Committee comes to a decision that indigenous manufacturers should give a certain percentage of their supply to cooperatives, or to public agencies, it will be a Committee in which they will have their full say. Only after their views are taken into account, will this Committee come to a conclusion. Just at the moment,

we are not bringing any pressure on them to distribute through particular agencies, whether public or private."

3.35. The representative of the Ministry of Agriculture was thereupon asked as to what was the attitude of the Government in regard to the agency for the distribution of fertilisers-both imported as well as indigenously produced. In reply she said :—

"As far as the Government is concerned, we have repeatedly been urging that the distribution of fertilisers should be largely through public channels, particularly through cooperatives, because credit is also mainly channelled through cooperatives. So far as imported fertilisers are concerned, which in the present context represents about 50 per cent of our total fertiliser distribution, we give this to the State Governments and in most of the States where the cooperative structure is strong enough to take over the entire distribution of imported fertilisers, it is channelled through cooperatives. So far as the private sector and public sector units are concerned, there is currently a Committee which has been appointed under the Chairmanship of Shri Qureshi to try and persuade the indigenous manufacturers also to distribute all their production through cooperative channels as far as possible. This Committee has not yet finalised its recommendations but this has been our attitude—that is, to channelise the distribution of fertilisers as much as possible through the cooperative sector."

#### *Movement by Rail*

3.36. It was represented by the fertiliser industry that Railways were not able to meet the requirements of the fertiliser industry because of inadequate haulage capacity, frequent booking restrictions etc. Government was asked to state whether the difficulty pointed out by the industry was genuine and if so, what measures were taken, or were proposed to be taken, to remove the cause for complaint ?

3.37. The loading particulars of fertilisers during the years 1970-71, 1971-72 and 1972-73 (upto September, 1972) have been indicated as follows. The particulars of demand, however, are not readily available.

(In wagon loads)

Year		Total	Covereds	Opens
		1	2	3
(Broad Gauge)				
1970-71	.	1,34,403	1,26,562	7,841
1971-72	.	1,52,378	1,36,434	15,944
1972-73 (upto Sept.)	.	79,486	74,018	5,468

	1	2	3	4
	(Metre Gauge)			
1970-71	.	63,014	62,978	36
1971-72	.	62,145	61,378	767
1972-73 (upto Sept)		28,839	28,358	481

3.38. The following table indicates the percentage of loading to indents of imported fertilisers from the various ports and indigenous fertilisers from important fertiliser factories during the period July to November, 1972:

	(Broad Gauge)	Percentage of loading to indent in respect of Imported fertilisers	Percentage of loading to indent in respect of Indigenous fertilisers
July .	63	91	
August .	71	91	
September	81	98	
October	89	87	
November	70	93	
	(Metre Gauge)		
July .	81	80	
August .	85	89	
September	83	97	
October	100	96	
November . . .	79	95	

It is stated that the loading during the period referred to above would have been still better but for the following adverse factors:

- (i) Breaches on the East-Coast section in July 1972.
- (ii) Plant over-hauling at Sindri and Kota in July, 1972.
- (iii) Mechanical failure at Namrup and breakdown of plant at Gorakhpur in July, 1972.
- (iv) Labour strike at Rourkela in July, at Gorakhpur and Kanpur in July, August and September, at Madras Fertiliser Factory in October 1972, at Kumhari factory in August and September and at Alwaye in October, 1972.
- (v) Breaches on the Gangapur-Mathura Section of Western Railway in August and cyclone in the East coast in September, 1972.
- (vi) Loco staff strike on Southern Railway in September and 'work-to-rule' campaign of CPC staff in the same month.

- (vii) Machinery break-down in Trombay in September and October and power cut at Nangal in September and at Trombay in October.
- (viii) Labour strike in Madras Harbour in November, 1972 and also heavy rains.
- (ix) Mulki Rules agitation in November, 1972.
- (x) Detentions and rejection of wagons by the FCI at Bombay Port.
- (xi) Working to reduced capacity of Kumhari factory in October 1972.

3.39. As regards anticipated movement for 1973-74, no precise figures are available, but it may be anticipated that movement would be more less to the same extent as in the year 1972-73.

3.40. In regard to movement of fertilisers for each year of the 5th Plan period, a working group comprising of representatives of the Railways alongwith the concerned Ministries has been constituted to make an assessment of the transport requirements of fertilisers and their report has not yet been finalised. The tentative target fixed for movement of fertilisers at the end of the 5th Plan is 10 million tonnes.

3.41. The representative of the Ministry of Railways admitted during evidence and the movement of fertilisers has not been 100 per cent last year (1971-72) or the year before that (1970-71). The reason given by him was that during monsoon the fertilisers could be moved only in covered wagons while the covered wagon supply was restricted on account of damage by pilferers, particularly in the Eastern Zone. The problem was met, he said, partly by rehabilitating damaged wagons and adding new wagons to the stock and partly by, in practice, giving highest priority to the movement of fertilisers and moving them according to a plan, drawn up in consultation with the Ministry of Agriculture and others concerned, which eliminated unnecessary movements. According to him, the Railways had been able to evolve a new pattern "which is working very satisfactorily." He assured the Committee:

"At the present moment, we can say that as far as fertiliser movement is concerned, we are meeting the traffic in full and I see no difficulty even in future for its movement. In order to get over this problem we were requesting very often in the past the Ministry of Agriculture and also the producers to do fertiliser loading in open wagons; but now we are confident that we would lift fertilisers entirely in covered wagons."

3.42. The representative of the Ministry of Agriculture stated that a Review Committee headed by the Cabinet Secretary with representatives from the Railways and other concerned Ministries was meeting every month to review the priority movement of essential commodities and as a result the Railways had, since the last three months, increased the availability of covered wagons. According to her, now the position had "improved" so far as rail movement of fertilisers was concerned, though she could not say that there were no complaints.

#### *Priority for Movement*

3.43. At present the movement by rail of fertilisers sponsored by the Central Fertilisers Pool enjoys priority B while the fertilisers despatched by private producers move by rail under category C. It was represented to the Committee that there should be no disparity in regard to the priority for movement of fertilisers as between trade and Government. It was also suggested to the Committee that fertilisers should enjoy the same priority as foodgrains which was B. During evidence, the Joint Commissioner for Fertilisers in the Ministry of Agriculture explained the reasons for the disparity in priority categorization as between Pool sponsored fertilisers and those despatched by private industry thus:

"The Committee will appreciate that the movements under a central regulatory distribution system have to be given somewhat higher priority than individual movements on trade account, because a central regulatory system, like the Central Foodgrain Pool or the Central Fertiliser Pool has to meet certain special needs. It has to reach fertilisers to difficult areas. It has a certain stabilising effect on prices etc. It has to rush fertilisers in time of need. That is why this type of movement has been given a higher priority than the other movements."

As regards the upgrading of priority from C to B, he said that the existing priority was 'quite reasonable in the relative scheme of things.' However, according to him:

"Apart from this question of permanent classification there are individual situations, in which the two Ministries sit together and decide the priorities and overall logistics. Where there is some scarcity of foodgrains, it has to be moved fast. When there is the sowing season, fertiliser becomes more important. That means that without changing the classification as such they ensure that fertiliser reaches at our request where it is urgently required."

The representative of the Ministry of Railways also stated that the priority categories were for the guidance of the Station Masters but when bulk movement of fertilisers was involved, the entire programme was drawn up in advance and its movement was watched at the highest level.

#### *Movement in open wagons*

3.44. It was represented to the Committee that within the limited availability of wagons, Railways were not able to provide enough covered wagons and the industry had to use open wagons and either suffer the risk of damage and theft or provide their own tarpaulins to cover the wagons and their own escort for safe transit of goods. It was suggested to the Committee that until Railways were able to provide closed wagons for all fertiliser movement, they should charge a concessional freight on its movement by open wagons.

3.45. In this connection, the representative of the Ministry of Railways gave an assurance during evidence that hereafter the Railways would be able to transport fertilisers in covered wagons. He, however, disagreed with the suggestion for a concessional tariff for open wagons saying that the tariff for movement of all essential commodities including fertilisers was already "very very low" and if it was further reduced the Railways would incur "a great loss".

#### *Rail Freight Concession*

3.46. Fertilisers enjoy a concessional rail freight if the State authorities at the destination station certify that the material will be used for agricultural purposes. During evidence, the representative of the Ministry of Railways was asked to state as to why this certificate was being insisted upon when most fertilisers were in any case used exclusively for manurial purposes. He explained:

"For fertilisers these conditions are applicable only in respect of 6 chemical manufactures ..... Recently in consultation with the Ministry of Agriculture, we have simplified the procedure in respect of Urea. I am given to understand that 50 to 60 per cent of the fertilisers that move by rail is Urea. So, Sir, we are left only with 5 other fertilisers for which these restrictions apply. The fertilisers enjoy very low concessional rates. Some of these commodities can be used for other than fertilisers. That is why we are putting a lot of safeguards to see that these chemicals which enjoy concession, go for use of fertilisers. This is the procedure. We are now considering in consultation with the Ministry of Agriculture to what extent these existing procedures can be made easy and to what extent these can be relaxed."

4.47. In a subsequent note furnished to the Committee, the Ministry of Agriculture have stated:

"Railway Board have already exempted the production of end-use certificates in respect of urea, which accounts for about 40 per cent of fertilisers transported. They however would like to have "end-use" certificates in respect of five fertilisers (Ammonium Sulphate, Ammonium Chloride, Muriate of Potash, Diamonium Phosphate & Calcium Phosphate) unless it was established to their satisfaction that these fertilisers were not used for purposes other than manurial purposes.

Since Calcium Phosphate is hardly imported or produced in the country for manurial purposes, it is not proposed to pursue the matter regarding it. Ammonium Chloride has significant industrial uses and so it is not proposed to press for exemption regarding this too. Regarding the other three fertilisers, details of non-agricultural use are being collected in order to convince the Railway Board that their substantial manurial use merits exemption from the production of end-use certificate."

3.48. It was also represented to the Committee that the concessional freight was given only on the movement of fertilisers from the plant to the company's storage but no such concession was given on the secondary movement from company storage to the consumption point. It was suggested that this lacuna needed rectification. In this connection, the representative of the Ministry of Railways assured during evidence that his Ministry would consider, in consultation with the Ministry of Agriculture, to what extent this procedure could be made easy. In a subsequent note, the Ministry of Agriculture have stated:

"This matter had been taken up by the Ministry of Agriculture with the Railway Board. Subsequently, this was also recommended, by the National Commission on Agriculture in their Interim Report on Fertilisers Distribution (Nov. 1971). In the meeting held with the Railway Board on 24-1-1972, this recommendation of the Commission was accepted by the Railway Board. However, the implementation of this is linked up with the modification to be made in the procedure for grant of concessional freight for movement of fertilisers in pursuance of Recommendation of the National Commission on Agriculture."

#### *Subsidy for Transport by Road*

3.49. The National Commission on Agriculture have recommended that certain points in districts not served by Railways should be treated as rail heads for the purpose of transport subsidy and the extra cost of road

subsidy should be met by Agriculture Ministry. It is stated that States like Jammu and Kashmir, Assam and Meghalaya have already been given the benefit of transport subsidy to reach fertilisers to certain centres which are not connected by rail. Regarding other States, it is proposed to include a scheme under the Fifth Plan.

3.50. It is further stated that States like Himachal Pradesh subsidised to the cooperatives the cost of road transport in respect of domestically manufactured fertilisers since these manufacturers were not willing to bear the additional transport costs. Moreover, the Small Farmers Development Agency/Marginal Farmers Scheme are empowered to subsidise road transport costs in respect of those areas where road transport costs are higher than Rs. 10 per tonne provided in the distribution margin, e.g., Darjeeling district in West Bengal.

#### *Different Rates of State Sales Tax*

3.51. The Sales Tax charged by different States on Chemical fertilisers varies from 1 per cent to 5 per cent. One of the non-official organisation has represented to the Committee:

“This imposition of sales tax affects the industry in two ways. It raises the price to the farmer by the extent of the State Sales Tax for fertilisers produced in the State. For supply received from a plant in another State the incidence of the Central Sales Tax raises the price further.

In any State more than one manufacturers may be marketing products. A producer from a State where there is sales tax will be at a disadvantage compared to the product from another State where no sales tax is levied. Since there cannot be two consumer prices in a State the manufacturers in the former State will be out of pocket for amounts which could be as high as Rs. 25 per tonne for urea. This affects not only the smooth distribution and flow of fertilisers but also the profitability.”

The remedy suggested is that this commodity may be exempted from State Sales Tax (like textiles, cigarettes, sugar) and a suitable Excise Duty may be centrally levied which can then be equitably distributed among the States. The Ministry of Agriculture have, in a note furnished to the Committee in this connection, stated:—

“Agriculture Ministry have no objection to this suggestion. In fact, this was suggested informally to some States in the Southern Council on Sales Tax matters, but the suggestion was not favourably received by the State Governments. Ministry of Finance

have advised us that the States have been generally unwilling to agree to such measures."

#### *Registration of Dealers*

3.52. At present, no licence is required for commencing business in fertilisers. The Fertiliser (Control) Order, as now in force, only provides for compulsory registration of all fertiliser dealers and manufacturers of fertilisers mixtures with the State authority. It is stated that it helps the authorities in obtaining data about the off-take of fertilizers and in enforcing the quality control measures. In another note submitted to the Committee the purpose of registration is indicated as: 'To encourage' a large number of dealers to set up fertiliser depots and to deny discretion to State Governments to refuse registration (except where the bar is provided in the Order itself)".

3.53. The problem of equitable distribution of fertilisers assumes great importance as it is well known that the supply is far from being regular and that the ordinary cultivator has great difficulty in getting the fertiliser of the requisite quality at the regulated price. The Committee understand that the Government have, under the circumstances, taken recourse to the Essential Commodities Act in order to regulate the distribution of fertilisers. It has however been represented to the Committee particularly by the fertiliser industry in the private sector that the Government intervention has, to some extent, upset normal channel of distribution which they had built up over the years. The Committee would like Government to examine the difficulties being experienced by the fertiliser industry so as to resolve the genuine ones and elicit their whole-hearted cooperation and support in the matter of fair and equitable distribution of fertilisers so that these are made available in adequate quantities and in time to the peasant in the field.

3.54. The Committee trust that the body recently appointed to go into the question of routing the distribution of fertilisers through cooperatives to a larger extent than hitherto, would take into consideration fully the existing capacity of the institutional channels to reach the consumers in the remotest parts of the country. It should also be ensured that the cooperatives do not become merely an intermediate agency distributing fertilisers through private traders who now receive their supply from the manufacturers directly. The Committee would like that the emphasis should be on rendering service to the peasant so that he is able to come by the fertiliser at the time he requires it and that financial accommodation is also shown to him as to encourage him to produce more.

3.55. The Committee are glad at the assurance given to them by the Ministry of Railways that they have taken adequate measures to end the shortage of covered wagons for the fertiliser industry and that at present

they are meeting the fertiliser traffic in full. They are also glad to note that although the movement of fertilisers not sponsored by the Central Fertiliser Pool is classified under category 'C', these are being moved on a higher priority basis and that the movement is being watched at the highest level.

3.56. Since during the Fifth Plan period, the movement of fertilisers would be on a much larger scale than during the Fourth Plan period, the Committee desire that the Ministry of Railways should, in consultation with the Ministry of Petroleum and Chemicals and Agriculture, work out realistically the transportation requirements for fertilisers during each year of the Fifth Plan period and from now on plan for their orderly movement so that there are no bottlenecks and the fertilisers reach the farmers as per plan.

3.57. The Committee would also like to stress that the new fertiliser plants should be so located as to limit the transport of both raw materials and the end product to the minimum necessary. This would ensure not only development of industry on a decentralised basis but also avoid unnecessary burden being cast on the Railways for carriage of raw materials and fertilisers.

3.58. The Committee recommend that the Ministry of Railways should, in consultation with the Ministry of Agriculture, take an early decision on the question of relaxation in the existing procedure whereby for enjoying a concessional rail freight the State authorities at the destination station have to certify that the chemical will be used as fertiliser for agricultural purposes, and extension of the concessional freight to cover also the movement of fertiliser from the storage point to the consumption point.

3.59. The Committee note that the rates of sales tax on chemical fertiliser levied by different States vary from 1 per cent to 5 per cent with inequitable repercussions on fertiliser industry and trade. The Committee recommend that Government may reconsider the question of exemption of fertilisers from State Sales Tax and imposition of a suitable Central Excise Duty which can then be equitably distributed among the States.

### C. Fertiliser Credit

#### Loans to States

3.60. In the preliminary material furnished by the Ministry of Petroleum and Chemicals, the low consumption of fertilisers in India is attributed *inter alia* to: Constraints in the availability of credit for fertilisers. As

already stated, the Central Fertilisers Pool distributes the Pool fertilisers through the State Governments. Government have a scheme whereby a budgetary provision is made in the Central Budget for grant of short term loans to the States for the purpose of stocking and distribution of fertilisers and other agricultural inputs. A sum of Rs. 75 crores was provided for this purpose during 1971-72 out of which Rs. 22.97 crores were actually loaned to the States for fertiliser marketing. During 1972-73, against a budgetary provision of Rs. 100 crores, a sum Rs. 89.47 crores had been disbursed to the States upto 25th January, 1973, *inter alia* for the stocking and distribution of fertilisers.

3.61. During evidence, the representative of the Ministry of Agriculture stated that until 1969, the States were being issued short term loans for this purpose at the rate of 50 per cent of their liftings for marketing. But after 1969 *i.e.*, after the nationalisation of Banks, in view of the part expected to be played by the Nationalised Banks in extending credit for the purpose and in accordance with the recommendations of the Finance Commission, lesser amounts were being provided in the central budget for the purpose. She added that the feeling in the Agriculture Ministry was that the present scale of loans disbursements to states for fertiliser purchase "is adequate, considering the fact that the commercial (Nationalised) banks have stepped into the field." She, however, pointed out that in emergencies the provision was stepped up as had been done during 1972-73.

#### *Loans to Retailers*

3.62 A non-official organisation has in its memorandum to the Committee stated:

"Considering the number of retailers in the country, their locations and the net work of branches of commercial banks in the rural areas, financing retailers is a hopeless task. It has, therefore, been generally agreed that for fertilisers distribution credit to be really effective, it must be beamed at the wholesalers."

The point was raised during evidence and in this connection the representative of the Department of Banking stated:

"The hang-over of the old traditional concepts of banking are still there. Even today, our bankers are more inclined to finance bigger borrowers and not smaller borrowers. In order to induce our public sector banks to have more consideration for these smaller borrowers, certain measures have been taken. So far as the wholesale dealers of fertilisers are concerned, we find

absolutely no difficulty in financing them. But, we have adopted certain measures in order to induce the public sector banks, especially their branches in the rural areas, to go to the help of the smaller dealers. With this end in view, a Credit Guarantee Corporation was set up in April, 1971, with the specific objective of inducing the public sector commercial banks to go to the help of the smaller borrowers. In the case of fertiliser dealers, the annual turnover of Rs. 2 lakhs of business was assessed as the range of operation of a smaller dealer. Later on, at the instance of the Ministry of Agriculture, and at the instance of the Fertiliser Corporation of India, who both pointed out that even a small dealer can go up to a range of business of Rs. 5 lakhs or so, the guarantee cover has been increased from Rs. 2 lakhs to Rs. 5 lakhs. So far as the wholesale dealers are concerned, there is no difficulty. But, if the suggestion is that the banks should finance only wholesale dealers and nobody else, I am afraid we are not in a position to accept this because we are trying to help the smaller dealers also."

#### *Volume of Credit Required*

3.63. Government was asked as to whether any study had been made of the estimated requirement of credit for the fertiliser trade and consumption. They have stated that a Fertiliser Credit Committee headed by Shri B. Venkatappiah, former Deputy Governor of the Reserve Bank of India, studied in 1968 the demand and supply of fertiliser, distribution arrangements and the Cooperative and Commercial Bank Credit structure in various States of India and came to the conclusion that the proportion of credit sales to total sales would be about 70 per cent and also that the dependence on credit facilities for fertilisers varied from 50 to 90 per cent. On the basis of these findings, the Government have projected the credit needs for 1978-79, since the degree of dependence on credit of the farmers was not expected to change radically. However, regarding fertiliser dealers, a more conservative estimate has been made, in that the distribution credit needs have been assessed at 50 per cent of the fertilisers to be sold. In 1978-79, the total value of fertilisers that are planned to be sold are estimated to be of the order of Rs. 1,600 crores. Production credit needs of the farmers would be Rs. 1,120 crores and of the fertiliser distribution system Rs. 800 crores.

#### *Credit from Nationalised Banks and SBI Group*

3.64. It is stated that in the wake of nationalisation, the public sector banks have been endeavouring to cover the hitherto neglected priority sectors including agriculture to an increased measure. The comparative position of direct and indirect agricultural advances as at the end of June, 1969

(when the banks were nationalised) and June, 1972 for the State Bank of India Group and 14 nationalised banks is indicated as below:

(Rs. Crores)

	No of Accounts	Amount Outstanding
<i>Direct Advances</i>		
June, 1969	171880	38.02
June, 1972	924743	223.43
<i>Indirect Advances</i>		
June, 1969	1878	83.72
June, 1972	5882	62.03

3.65. The perusal of the direct agricultural advances, which are used by farmers also for consumption of fertilisers reveals that there has been an overall increase of 487.6 per cent in the advances made by the public sector banks in relation to advances as on the eve of nationalisation. However, in the case of indirect agricultural advances, a bulk of which is for fertiliser distribution, although there is sizeable increase in the number of accounts, the amount outstanding shows that there has been decline in the utilisation. To find out the causes for this decline, it is stated, the Bank of Baroda devised a questionnaire which was circulated amongst all the fertiliser distributors who were granted loan by different branches of the bank. From the replies received, the reasons reported to have broadly contributed to inadequate utilisation are (i) irregular supplies from the suppliers of the fertilisers (ii) highly competitive business with low margins as their retail prices are high, (iii) business being of seasonal nature, rebuilt limitations in utilising the limits throughout the year, (iv) availability of taccavi loans from Government, (v) direct supply to consumers, (vi) preference of the farmers for organic manure to fertiliser in view of uncertainty of rain fall, (vii) manufacturers of certain fertilisers banking with specified banks insisting upon the distributors to avail the facilities of banking from the same bank.

3.66. During evidence, the representative of the Department of Banking stated that as regards direct advances to farmers, they were given both by the Banks and by the cooperative societies. The loans by cooperative societies were much higher than those given by the Banks, he said.

#### *Rates of Interest*

3.67. It was pointed out to the Committee that according to Venkata-ppiah Committee Report, the bank margins for pledging and hypothecation of stock in the case of fertilisers should be limited to 5 per cent and 10 per cent respectively whereas the existing margins range between 25 and 40 per cent. The rates of interest were also considered very high. One

the point being raised during evidence, the Secretary, Department of Banking stated that after a careful consideration of the recommendation of the Venkatappiah Committee, Government had decided that distinction should continue to be made as between parties depending upon their solvency and their range of operations and whether the party was big or small. According to him "these days the margin does not exceed 30 per cent. But, in case of smaller dealers it has been reduced even to 10 per cent." He thought that it was not a serious constraint in the expansion of fertiliser business. As regards the rate of interest, he said it was 10-11 per cent which is the normal rate charged by the banks except in the case of agriculture where, depending on the holdings of the farmers, differential rates were laid down.

#### *Credit Guarantee Corporation*

3.68. The Reserve Bank of India have set up a Credit Guarantee Corporation in April 1971, in order to underwrite risks of the commercial banks in lending *inter-alia* to small farmers and to fertiliser dealers. Thus, if a commercial bank lends to farmers, 75 per cent of the bad debts upto Rs. 2,500 per farmer will be borne by the Corporation; likewise, bad debts upto Rs. 75,000 or 75 per cent of the loan whichever is lower will be borne by the corporation in respect of loans given by banks to fertiliser dealers with turnover of Rs. 5 lakhs or less. It is stated that the above guarantee protection is expected to induce the banks to lend liberally to farmers and fertilisers dealers in the interest of maximising fertiliser use for maximising agricultural production.

3.69. Suggestions have been made to the Committee that the limit of a turnover of Rs. 5 lakhs for underwriting bad debts in respect of fertiliser dealers should be raised to Rs. 15 lakhs and that separate Credit Guarantee Corporation should be set up exclusively for the fertiliser industry. Asked to state his views on these suggestions the representative of the Ministry of Finance, (Department of Banking) stated during evidence that the limit had been recently raised from Rs. 2 lakhs to Rs. 5 lakhs and a further enhancement would cover those parties who did not deserve the protection of the Corporation and in whose case the banks did not need any inducement. As regards setting up of a separate corporation for fertiliser industry, he said that it was not necessary to set up a credit guarantee corporation for one sector of economy. Moreover, according to him, the existing corporation was set up for the sake of smaller borrowers only.

3.70. The Committee attach highest importance to the fertiliser being used by the common peasant in the interest of increasing agricultural production and also improving his own lot. In this context, the Committee would like to point out that the chief constraint at present felt by the ordinary peasant is lack of ready money to buy the fertiliser. The Committee

recommend that co-operative agencies should be so developed as not only to make available the fertiliser of the requisite quality and in time to the peasant in the field but also afford him necessary financial accommodation so as to encourage him in the use of modern inputs in the larger national interest. Besides, the nationalised Banks and the State Banks Group can play a notable role in this field. The Committee desire that Government should take appropriate measures in this behalf and review the Credit System from time to time so as to realise the objective of helping the ordinary peasant to get the modern inputs in time at fair prices in the interest of larger agricultural production and strengthening of the weaker sections of society.

3.71. The Committee note that the production credit needs of the farmers and the credit needs of fertiliser distribution system in 1978-79, i.e. last year of the Fifth Plan, have been assessed as Rs. 1120 crores and Rs. 800 crores respectively. Since a major part of this credit would have to be met by the State Bank Group and the Nationalised Banks, the Committee hope that these Banks would build up adequate organisation in time to undertake the task envisaged for them during the Fifth Plan period.

3.72. The Committee find that there has been a decline in the utilisation of indirect agricultural advances, a bulk of which is for fertiliser distribution. The Committee would like the Department of Banking to go into the causes for this decline and try to remove, as far as possible, such features of the existing system of indirect agricultural advances as have been hampering its fuller utilisation.

#### D. Prices

##### *Prices in different countries*

3.73. A comparative study of the cultivators prices in other countries and India shows the following position:

##### *Prices paid by farmers per 100 Kgs. of Plant nutrient in U.S. Dollars.*

	Ammo-nium Sul-phate	Ammo-nium Nitrate	Urea	S S P (below 25%)	M O P (Over 45%)	Remarks
France 69/70 . .	26	23·3	..	22·3	8·7	Price at retail store. No subsidy M.O.P. 60%.
West Germany 69/70	28·7	28·5	27·0	25·9	8·9	Price at nearest rail station for minimum lots of 20 tons includ- ing value-added tax. M.O.P. 50%

	Ammo-nium Sul-phate	Ammo-nium Nitrate	Urea	S S P (below 25%)	M O P (Over 45%)	Remarks
U K 69/70 . .	15·6	14·5				Prices are compiled from subsidy claim statistics. Different subsidy for different fertilizer
Switzerland 69/70 . .	25	24·7	19·4	24·9		Prices at nearest rail station for 5—15 cart-loads—No subsidy M O P 40%
Canada 68/69	29·1	22·1	20·9	23·6	8	Prices F O B on Plant —No subsidy
U S A 69/70 . .	27·5	19·7	19·9	25	9·4	Prices at various points of delivery. There is cost-sharing arrangement with farmers which is not considered subsidy
Burma 69/70 . .	24·2		25·1		9·5	Prices at nearest sale points in Government organised non-profit scale
Ceylon 68 . .	21·1		15·8		7·5	Prices at Government retail Stores—Subsidised sales
Taiwan 69/70	38·0	37·7	28·3	23·6	12·3	Prices at nearest railway station. No subsidy
India 69/70 . .	34·3	29·4	27·3	26·7	11·6	
Japan 69/70 . .	25·8		21·9	24·4	9·7	No subsidy
Pakistan 68/69 . .	21·7	22·4	23·7	22·2	13·4	Subsidy varies from fertiliser to fertiliser
UAR 68/69 . .	29·9	30·1	30·4	17·7	11	No subsidy
Australia 69/70	24·2	30·9	18·9	9·7	10·6	Subsidy paid to fertiliser manufacturers

Source : FAO Production Book, 1970

It would be seen from the above statement that the cultivators prices for fertilisers in India are about the highest in the world.

### *Prices Charged by Central Fertiliser Pool*

3.74. The fertilisers imported by the Central Fertiliser Pool are issued at uniform prices fixed for various interests throughout the country. These uniform prices are known as Pool issue prices and are fixed per metric tonne F.O.R. port/despatching stations. The freight upto the rail head destination is prepaid by the Central Fertiliser Pool. 'No-profit-no-loss' is stated to be the normal guiding factor for fixing the Pool price. However, the following factors are also kept in view:

- (a) Possibility that these costs may undergo changes due to price trends and other unforeseen reasons;
- (b) Relative popularity of different types of fertilisers; and
- (c) Need to provide incentive for promoting the sale of certain varieties as fertilisers.

Besides, it is stated the Pool prices take into account the following factors:

- (a) (i) The cost of purchase of the material from various sources.  
 (ii) Customs duty and insurance charges.  
 (iii) Ocean freight in respect of imported fertilisers and handling charges at the ports.  
 (iv) Indirect charges incurred by the Ministry namely, Interest on capital and salary of staff employed at the Centre and ports for running the Central Fertiliser Pool.  
 (v) Departmental charges levied by the purchasing organisation.  
 (vi) Internal transport charges.  
 (vii) Incidental charges.
- (b) Need to promote the use of a particular fertiliser.
- (c) Plant nutrient content.
- (d) The selling prices of similar products marketed outside the Pool.
- (e) Possible level of prices of similar products in the new factories under construction.
- (f) The cost of domestic production of the fertiliser concerned.

3.75. Besides, the Pool issue prices, certain other items of expenditure are incurred by the allottees on handling and distribution before the fertiliser reach consumers. These are on account of (a) administrative costs;

(b) internal transport cost from rail-head destination; (c) loading and unloading costs; (d) shortage costs etc. For this purpose, distributors' margins varying from Rs. 30 to Rs. 110 per M.T. are allowed to be added to the Pool prices, before the fertilisers are sold to the consumers. It equalises the transport cost to the nearest railhead destinations so that farmers in distantly located areas do not have to pay more.

3.76. For the purpose of fixation of Pool Issue price, the consumers are divided into three categories: States and Union Territories are in the first category, Plantations are placed in the second category while the private (registered) parties are in the third category. Different Pool Issue prices are fixed for each of these categories. Government have also fixed the Retail Prices of different varieties of fertilisers for plantations and cultivators.

3.77 A study of the cost analysis furnished by the Government in respect of pool prices for different varieties of fertilisers, reveals the following position :—

(In Rs. per MT)

	Latest C & F Price	Pool Price	Over- heads
Ammonium Sulphate (Coloured-Bagged)	225	405	180
Urea (46 %) .	524.09	879	344.91
MPO (Bulk)	349.39	493	143.61
C.A.N. (Bagged)	429.46	534	104.4
D.A.P. (Bulk)	756.73	1151	394.27

3.78. It is also noted that the overhead charges which are added to the C&F price of the imported fertiliser consist of the following elements:—

1. Departmental Charges.
2. Landing (Stevedoring Charges).
3. Regulatory Duty @2½ per cent.
4. Countervailing Duty @15 per cent.
5. Voyage Interest @4.76 per cent +D.C. for 2 months.
6. Inward Handling Charges.
7. Inland Freight.

8. F.C.I. Establishment charges.
9. Storage charges @ Rs. 2.40 per tonne per month for 4 months.
10. Interest on capital for 4 months for storage period @4.76.
11. Transport charges from Godown to final destination.
12. Handling at Godown.
13. Voyage storage @1 per cent + D.C.
14. Interest on deferred payment @11 per cent for 60 days.
15. Cost of Bags (where material is imported in bulk but is supplied in bags).

3.79. The representative of the Ministry of Agriculture was, during evidence asked to elucidate the reference made in the notes submitted to the Committee about the Central Fertiliser Pool that it was being operated on "No-profit-No-loss" basis. She said: "It would not be correct to say that this would be so in respect of each fertiliser or in each year." According to her, the concept "has been applied to all the fertilisers which have been imported, taken together and over a period of time." She, however, admitted that upto June, 1966, the Pool had accumulated a surplus of about Rs. 44 crores which was wiped away consequent on the devaluation of the dollar in June, 1966.

#### *Cultivators Prices in India*

3.80. The cultivators prices for different varieties of fertilisers during the last 3 years have been indicated as follows:—

	(In Rupees per M.T.)			
	1970	1971	1972	Current
			From 4-3-71	From 17-3-72
1. Urea 46 per cent	943	923	959	959
2. Ammonium Sulphate : (100 kg. Pack)				
(i) White Chrys.	529	529	549	549
(ii) Common Sulph.				449
		(From 16-3-70)		

(In Rupees per M.T.)

	1970	1971	1972	Cu r rent
<b>Ammonium Sulphate:</b> (50 Kg. Pack)				
(i) White Chrys.	540	540	560	560
(ii) Coloured/Powdery	440 (From 16-3-70)	440	460	460
4. C.A.N. (26 % N Imported)	575	575	594	594
5. C.A.N. (25 % N)	545	545	565	565
6. M.O.P. (100 Kg. Pack)	523	523	543	543
7. D.A.P.	1217	1217	1246	1246
<b>8. N.P.K.</b>				
(i) 14 : 14 : 14	830	830	859	859
(ii) 15 : 15 : 15	912	912	942	942
(iii) 14 : 28 : 14	1137	1137	1170	1170
(iv) 10 : 26 : 26: (From 3-10-70)	1126	1126	1161	1161
(v) 12 : 32 : 16 (From 3-10-70)	1148	1148	1177	1177
(vi) 14 : 36 : 12 (From 3-10-70)	1245	1245	1271	1271
<b>9. Ammonium Nitro-Phosphate (20 : 20)</b>	880	880	909	909

3.81. It is stated that business operations of the Pool are constantly reviewed and attempts are made to pass on to the farmers the economies affected in the import costs of fertilisers in the shape of reduction in the prices of fertilisers and other benefits. As a result of such review, the price of Ammonium Sulphate (coloured and powdered variety) was reduced by Rs. 100/- per tonne during 1969-70. Again the price of Urea was reduced by Rs. 20 per tonne with effect from 4-3-1970.

3.82. It is further stated that the National Development Council has laid down that the agricultural inputs including fertilisers should not be subsidised and that incentive price of the produce should be maintained to act as an encouragement to the farmers. It has been held by a Panel of Economists appointed by the Ministry of Agriculture that at the present

level of produce prices, fertiliser application on scientific basis is lucrative particularly in irrigated areas despite the increase in prices of fertilisers due to excise levy. It was found that during the period 1961-62 to 1968-69, wheat prices rose by 103 per cent rice prices by 97 per cent foodgrains prices by 101 per cent and prices of all agricultural commodities including commercial crops by 76 per cent. On the other hand, the price of Ammonium Sulphate rose only by 47 per cent and Urea by 29 per cent during the same period. The Government have no schemes for subsidised sale of fertilisers, except in areas covered by Small Farmers development Agencies.

3.83. The point regarding the high prices of fertilisers in India was raised during evidence. While admitting it is a fact, the representative of the Ministry of Agriculture spelled out the various measures taken by her Ministry to keep the prices in check as follows :

"As far as the main three fertilisers are concerned, Nitrogenous fertilisers, Government of India have statutory price control, that is, farmers' prices are controlled.... As far as the prices of non-controlled commodities are concerned, as you are aware, we are importing fertilisers which more or less come to about 50 per cent of the total fertiliser distributed in the country.... We try to influence the prices of the indigenously produced fertilisers also. We have some kind of control over these prices also. But, unless the cost of production of the indigenous fertiliser can be brought down, there is no other way in which we can bring down the price of fertilisers, unless again, we resort to direct subsidy for fertiliser. Government's policy generally has been not to give direct subsidy on inputs."

3.84. In a note furnished to the Committee, it is stated that the cost of production is comparatively higher in India than elsewhere due to factors like high cost of machinery both imported and indigenous, raw materials and acquisition of latest process know-how from abroad. The cost of the imported machinery becomes high because of customs duty and ocean freight and other charges. The cost of indigenous machinery is often very high compared even to the landed cost of the imported machinery. The longer time taken for setting up fertiliser plants in India due to various reasons adds to the investment on the plant and therefore to the burden of interest and depreciation charges which get reflected in the price of fertilisers. The note says that continuous efforts are being made to bring down the fertiliser prices through (a) maximum utilisation of installed capacities; (b) establishing production in large-sized units dictated by economics of scale; and (c) adoption of the latest production techniques which in turn would ensure high levels of production efficiency.

3.85. During evidence, the representative of the Ministry of Petroleum and Chemical was asked to state the measures taken by his Ministry to bring down the cost of production of fertilisers in India. He said:

"We are taking two steps to ensure the economic production of fertilisers in India. One is to go in for larger plants so that we can achieve economy of scale. The second is the study of various fiscal and other measures that can be taken to improve the economics of fertiliser production. I do not know what the result of this exercise will be; whether the price of fertiliser to the farmer will be brought down or whether it will be pegged and not increased. The result will come out after these studies are completed."

3.86. In a subsequent written note furnished to the Committee, Government have dealt with the problem as follows:—

"In order to bring about economies in the cost of production of fertilisers and to meet the increasing requirements in the country, in keeping with the trends in the fertiliser technology elsewhere in the world, steps are taken to see that fertiliser plants of larger capacity are set up in the country making use of latest technology. As against plants of 80,000 tonnes of nitrogen per annum or less planned and installed earlier, plants which have been recently installed or taken up for installation have capacities of 150,000 tonnes of N or more. Besides, the improvements in technology leading to economies in production are also being incorporated in the plants being set up from time to time. As against these developments, there have been constant **escalations in the prices of equipment and machinery required in the initial setting up of fertiliser plants increasing the initial capital investment.** The import duty on equipment procured from abroad has gone up and for a variety of reasons, the cost of the local equipment is often higher than that imported by about 50 per cent or more. Besides, the cost of raw materials, wages, utilities etc. have also been constantly going up. In addition, the tax concessions etc. have also caused increases in the cost of production. Thus, the economies derived by way of installation of larger capacities and adoption of improved technologies in the production of fertilisers are more than offset by the escalations in the costs as referred to earlier.

Inspite of the various escalations in the costs, the prices of the major fertilisers had been maintained stationery during the last

two-three years, except for the increase due to excise duty. While this by itself is a noteworthy feature in the present context of increasing costs, the consequent erosion in the profitability especially in case of new fertiliser plants to be set up has caused concern to entrepreneurs considering investment in the fertiliser industry. Against the above background, the Government would continue its policy of maintaining fertiliser prices at the minimum possible level taking into account at the same time the need to ensure a reasonable return to the private investor so that adequate flow of the capital into the industry can be ensured."

#### *Statutory Price Control on Certain fertilisers*

3.87. To speed up investment in the fertiliser industry and achieve the production target for the Fourth Plan, Government decided in December, 1965 that the indigenous production units should have freedom of action in regard to fixation of prices of fertilisers and their distribution. Accordingly, all fertiliser projects licensed on or before 31st March, 1967 (this was subsequently extended upto 31st December, 1967) were given the freedom to fix prices of their products and to organise their own distribution for a period of 7 years from the commencement of commercial production, subject to the condition that they sell to the Government at the latter's option upto 30 per cent of their production at a price to be settled between them and the Government.

3.88. At present, the maximum retail prices of three major nitrogenous fertilisers, e.g. ammonium sulphate urea and CAN are statutorily controlled under the fertiliser (Control) Order 1957 issued under the Essential Commodities Act and sale to any farmer by any manufacturer or dealer in excess of that price is an offence under the Essential Commodities Act.

3.89. A non-official organisation has represented to the Committee:

"We wish to mention that contrary to its declared policy, Government have chosen it fit to statutorily control ceiling selling prices of three materials. The industry very strongly urges the Government to consider its decision and to honour its commitment. Let the marketing forces of supply and demand, cost of production and profitability of each manufacturer determine the price. In any case the Government have a powerful tool in the Central Fertiliser Pool through which to regulate prices if the situation at any time warrants. But we have no doubt that the need for this would not arise as the producers are enlightened enough to appreciate the political and

economic constraints in the country under which they have to operate."

3.90. During evidence, the representative of the Ministry of Petroleum and Chemicals was asked to state as to why Government found it necessary to impose statutory price control on these fertilisers contrary to the commitment made by them to the industry in 1965. He said:

"A certain assurance was given against the background then, prevailing and among other things it was expected that the liberalised policy that was then announced would attract substantial flow of private capital and also help to build up fertiliser capacity. The expectation, unfortunately, was not realised and the fertiliser availability remained in a shortage state. Imports gradually have been becoming difficult and even uncertain in the international markets. In such an evolving situation the previous decisions had to be reviewed taking into account the vital interests of a very important sector of the economy. If the fertiliser prices were allowed to float they would inevitably go up and there will also be a tendency for profiteering."

3.91. In a subsequent note furnished to the Committee, it is stated:

"It could be argued that the operation of these present system of control over selling prices of the main nitrogenous fertilisers viz., urea, ammonium sulphate and calcium ammonium nitrate, has a restrictive effect on the freedom of marketing given to the manufacturers according to the decision of December 1965. It was not possible to withdraw the price control due to the following reasons:

- (1) The original expectation was that the incentive of freedom of marketing would attract a larger number of entrepreneurs and that the substantial additional production would increase supplies and bring down prices. The expectation unfortunately did not materialise.
- (2) Since the country continued to import a major part of the fertiliser requirements and the availability of foreign exchange and also of fertilisers against the available foreign exchange in the international market were not assured, it was not considered appropriate to lift price control.
- (3) Even the ceiling prices under the law were at a comparatively high level in relation to such prices in other

countries. Removal of price control would have led to further increase in prices."

3.92. In reply to the question as to what would be the likely increase in the prices of these fertilisers if price control was lifted, it is stated:

"It is a matter of guess and the forces of demand and supply. In the present context of shortages, a 25 per cent increase in prices upon price de-control cannot be ruled out."

3.93. It has also been represented to the Committee by the industry that while fixing the maximum retail prices of these fertilisers, "Government need to give more consideration to the actual cost of manufacture of these fertilisers in the country to ensure adequate profitability." On the point being raised during evidence, the representative of the Ministry of Agriculture stated that while fixing the statutory price "we take the cost of production of those units and the cost of imports of the similar material and arrive at, what we feel is, a reasonable price, taking into account also what the cultivator can bear. This is broadly the maximum by which we fix the price and this price is also fixed in consultation with Ministry of Petroleum and Chemicals so that they would also have their say as far as indigenous cost is concerned." In this connection the representative of the Ministry of Petroleum and Chemicals, however, said:—

"I would concede the need for an economic appraisal of fertiliser production costs and fertiliser prices, because the claims are conflicting. The agriculturists want the price to be cut down to the average imported levels. The producers of fertilisers say that their raw material costs have risen steeply and they have to pay various kinds of duties. Their labour costs have gone up and their economic size is small and therefore, their cost of production has risen very steeply and they must be given higher price. So these are the conflicting claims and a study by Economists and experts would certainly give us the guidelines for future price fixation."

#### *Prices of Sulphur and Rock Phosphate*

3.94. It has been represented to the Committee that the margin of the Minerals and Metals Trading Corporation on imported rock phosphate and sulphur is very high, being 23 and 46 per cent respectively. Government was asked to explain the reasons therefor. They have in a note furnished to the Committee stated that the sale prices of the raw materials are fixed by the Minerals and Metals Trading Corporation every quarter under the

guidance and general control of the Government of India. The main objectives in fixing the prices are stated to be as follows:—

- (a) To supply raw materials to the export oriented industries at the lowest international prices in order to enable the exporting units to compete successfully in the export market.
- (b) To supply raw materials to all other actual users both in the small and large scale sectors at uniform and reasonable prices and in adequate quantities, with a view not only to maintain steady production and industrial growth but also to bring down the prices of industrial raw materials in the open market to a level so as to serve as a dis-incentive for diversion of surplus raw materials for unauthorised use.
- (c) In the case of items of speculative nature where there is no relation between the MMTC's selling prices and the prices of end products, the sale prices of MMTC are designed to mop up the high profits which otherwise would accrue to the manufacturers without the benefit being passed on to the final consumers.

With the fulfilment of the above three-fold objectives, it is stated, the interests of the industry and the exporting units are served in the best possible way, apart from the social gain of stabilising prices in the open market.

3.95. In regard to Sulphur and Rock phosphate, the position is explained as follows:

“Sulphur: The selling prices of sulphur with effect from 1st October, 1971 has been fixed at Rs. 300 per M/T for high seas deliveries by the Pricing Committee of the Ministry of Foreign Trade, headed by the Chief Controller of Imports and Exports. This price has been fixed in accordance with the provisions in the Import Trade Control Policy which runs as under:—

“Selling prices for distribution of goods to actual users will be determined by the public sector agency concerned subject to the guidance and general control of the Ministry of Foreign Trade.”

Selling price of sulphur has been fixed at this level on the following consideration:

- (i) retail price of sulphur which has gone upto Rs. 660 to Rs. 700 per M/T in 1967, was progressively reduced to Rs. 255 per M/T. However, the manufacturers of Sulphuric Acid, Basic

Chemicals and Synthetics did not reflect the effect of such reduction in sulphur prices in the prices of their end products to the consumers. It was apparent that although MMTC is making raw materials available to the manufacturers at low prices, the bulk of the extra profit so generated was being absorbed by them. It was, therefore, felt that a part of the extra profit being generated on account of lower prices of sulphur, should be mopped up and taken advantage of for the Exchequer rather than to let the manufacturers make excessive profits. The sale price was accordingly fixed at a level where the consumers will not be unduly effected and a part of extra profit is mopped up by the Corporation.

The present sulphur price had come to a level which was generally considered and believed as uneconomical. There have been repeated efforts on the part of producers to form a cartel and fix floor prices for sulphur. On account of even supply position in sulphur, these efforts have not so far been successful. There is already upward trend visible now (January, 1973) after the prices had reached rock bottom. The freight market is also going up. In order to have some stability in the selling price of sulphur, it was considered desirable to have a cushion in the selling price for such eventuality.

The selling price of sulphur on ex-jetty basis had been fixed on the basis of full ship-load price after adding handling charges and other related expenses.

The Corporation is maintaining buffer stocks of sulphur at Bombay, Madras and Vizag. The selling price for sales from such buffer stocks has been fixed at a level which is only marginally higher than the selling price for ex-jetty sales although the cost of maintaining buffer stocks is much higher. This was done to ensure that the small buyers for whose requirements buffer stocks are maintained are not adversely effected.

There are uniform selling prices for supplies from all ports in India although the handling charges differ from port to port and are very much higher in case of Calcutta. This has been done by pooling the handling charges with a view to ensure that all the actual users in India get their supplies at the same price.

In order to encourage export efforts and to maximise exports at internationally competitive prices, sulphur is supplied to exporting units at a very nominal margin over the cost. The special

prices fixed for sulphur for supplies to exporting units are as under:

	Normal selling Price	Selling price for export units
(i) Sales on full shipload basis . . .	Rs. 300 per M/T	Rs. 211 per M/T
(ii) Sales on ex-jetty basis	Rs. 340 per M/T	Rs. 250 per M/T

*Rock Phosphate:* In the case of rock phosphate, supplies are made by Corporation on high seas basis as well as on ex-jetty basis. Sales on high seas basis are made to those consumers whose requirements at a time are less than a shipload.

In regard to selling prices, MMTC is following the procedure of fixing pooled prices on a periodical basis (usually a quarter) so that the prices to different consumers over a period are the same and there is no discrimination between one consumer and the other. This will arise if no pooling of prices is done because freight rates vary from vessel to vessel. Thus, for fixing the selling prices the C&F price is arrived at on the basis of FOB purchase value as per contracts concluded and the freight likely to rule during the next period on the basis of indications available from TRANSCHART or actual freight booked. To the C&F price so arrived at, the following elements are added:—

- (i) Insurance 2.35 per cent of C&F value to cover all risk including shortage and contamination (for bulk cargo such a cover is not usually available);
- (ii) Bank charges including letter of credit charges, negotiation charges, cable charges and other miscellaneous charges wherever applicable;
- (iii) Voyage interest at the ruling rate of interest for period ranging from 15 days to 2 months depending upon the sources of supply, wherever applicable;
- (iv) Superintendence and inspection charges at the port of loading; and
- (v) Service charges at 4 per cent.

In the case of ex-jetty deliveries in addition to the above elements following further elements are added to the price:—

- (i) Average discharging expenses including port charges, stevedoring charges, handling charges, weighment charges, loading charges, etc. Taking into account these charges

at different ports average works out to about Rs. 32 per M/T;

- (ii) Customs duty as may be applicable from time to time (presently it is 17½ per cent on landed cost; and
- (iii) A slightly higher service charge to accommodate sales in small lots."

#### *Pricing of Superphosphate*

3.96. Upto May, 1966, the Department of Agriculture had been, after informal consultations with the industry, fixing maximum ex-factory prices to be charged by the superphosphate factories for single superphosphate. The formula for fixing price took into account the weighted average prices of the principal raw materials, namely, rock-phosphate and sulphur required for the manufacture of superphosphate. As the prices of sulphur were then fluctuating widely and the industry faced difficulties in securing adequate supplies of sulphur at steady prices, the Department of Agriculture, with a view to encouraging increased production of fertilisers in the country, discontinued fixing of maximum ex-factory prices of single superphosphate. Instead, the Fertiliser Association of India in consultation with whom ex-factory price of superphosphate was being informally fixed till May, 1966, would review the prices to be charged by each unit adopting the same principles as were being followed by the Department of Agriculture. This practice is being continued till todate. The fixation of prices by Fertiliser Association of India, is, however, being checked up from time to time by the Department of Agriculture.

#### *Pricing of Potassic Fertilisers*

3.97. The import of potassic fertilisers is entirely dependent on price levels obtaining in the international markets. This price is also arrived at on the pooling pattern by dividing the total of import costs plus handling and administrative charges and profit margin allowed to M/s. Indian Potash Ltd., in respect of their promotional programme, etc.

#### *Watch on Fertilisers Prices*

3.98. Government were asked as to whether they were keeping a watch on the prices of non-controlled varieties of fertilisers ruling in various regions and, if so, how was the watch kept. They have stated that no separate organisation has been set up to keep a watch on the prices of fertilisers at the field level. Reliance is placed on the State Governments to report whether there is any black marketing in respect of controlled fertilisers. Pool fertilisers both of controlled and non-controlled variety, are channelised only through cooperatives, who again are expected to observe the price discipline.

3.99. In respect of non-controlled fertilisers of domestic origin, it is stated that watch is kept on superphosphates. A formula for fixing ex-factory

price of superphosphate at various sites by the Fertilisers Association of India has been in vogue providing for changes with ups and downs in the prices of raw materials. This informal control by Fertiliser Association of India every quarter is watched by the Ministry of Agriculture closely. It has been found by them on a recent examination that the prices of superphosphate have been reduced whenever the price of raw materials have gone down.

3.100. In respect of Potash, it is stated, the retail price is prescribed by the Ministry of Agriculture which imports all potash and, according to Government, no report has been heard of sale at unauthorised price. There is also no shortage of potash, the Government say.

3.101. In regard to the prices of other fertilisers produced indegenously, it was stated: "It is expected that domestic producers would follow the lead set by the Pool in respect of the issue price, the distributors' margin and the final consumers price." Government was asked to state whether the expectation of the Government had been realised in actual practice. In reply, it is stated:

"The predominant role played by the Pool in the supply of non-controlled fertilisers, particularly NPK and DAP, has made the manufacturers charge reasonable prices more or less on Pool lines. It is observed that the price of complex fertilisers manufactured by Coromandols are within 5 per cent of the price of IFFCO's. NPK complex is imported for them. Regarding potash, Pool is the only source. However, no special machinery other than the State Agriculture Departments is available to check up the prices in the above manner."

3.102. The prices of three of the nitrogenous fertilisers are directly controlled by Government. The issue prices fixed for fertilisers imported by the Central Fertiliser Pool, which constitute about 50 per cent of the total consumption of fertilisers in the country, influence prices of other types of domestically produced fertilisers. Thus Government is directly or indirectly controlling the prices of fertilisers in this country. Yet, the cultivators prices of fertilisers in this country are about the highest in the world. Even these prices are not considered by the fertiliser industry to be reasonable and attractive enough for new investment. Government attribute the higher prices of fertilisers in India to higher cost of production in our country due to various reasons. Remedial measures taken by them are setting up of larger sized plants with latest technology to achieve economies of scale and a study of the various fiscal and other measures that can be taken to improve the economics of fertilisers plants. But even then the economies secured are stated to have been offset by a constant rise in the prices.

of inputs and wages etc. In this context, the Committee welcome the assurance given to them by Government that they would continue their policy of maintaining the fertiliser prices at the minimum possible level taking into account at the same time the need to ensure a reasonable return on the capital invested so that it makes for adequate flow of capital into the industry.

3.103. It is the responsibility of the State Government to check blackmarketing in the three nitrogenous fertilisers the prices of which have been fixed under the Fertiliser (Control) Order issued under the Essential Commodities Act. The Committee hope that State Governments are alive to the problem and have an effective machinery to check the menace and punish the guilty. In this context, the Committee would suggest that the Government should consider the question of printing prominently the cultivators prices on the bags containing the fertilisers.

3.104. At present, the Central Government have no separate organisation or procedure to keep watch on the prices at which fertilisers are actually available to the farmers at the field level. Reliance is placed on the State Governments to report the existence of blackmarketing in respect of fertilisers the prices of which are controlled. Besides, according to Government, the cooperatives through which the pool fertilisers are channalised are expected to observe the price discipline. The Committee feel that there is need for the collection of price data at regular intervals either independently or through the machinery of the State Government so that the Government are aware as to whether the controlled prices are actually being charged from the farmers, and also of the trend in the prices of non-controlled varieties of fertilisers. The Committee, therefore, recommend that Government should devise suitable machinery and/or procedure for the purpose of collection of price data for taking such remedial action as may be necessary.

3.105. It is admitted that the margin between the import price and the issue price of sulphur and rock phosphate imported by MMTC is sizeable and it is at present being absorbed by the MMTC. It is stated that the issue price of items of "speculative nature" are designed to mop up the high profits "for the exchequer" which otherwise would accrue to the manufacturers if the material was made available to them at cheaper rate without the corresponding benefit being passed on to the consumer. The Committee object to this consideration being applied in the determination of the price of imported commodities by a commercial undertaking the transactions of which are of a monopoly character. The Committee consider that if the idea is that the extra benefit should be mopped up for the public exchequer, the more appropriate course should be to levy a higher import duty on the commodity than to allow a commercial undertaking to charge a higher price quite unrelated to cost of imports.

## CHAPTER IV

### MISCELLANEOUS

#### A. Quality Control

##### *Fertiliser (Control) Order*

4.1. Extensive use of fertilisers is a recent phenomenon in India. The faith of farmer in the utility and importance of fertilisers can only be established if good quality fertilisers are supplied to them. They would be able to judge profitability of fertilisers only by getting higher yields. In order to prove a legal basis for punishments for blackmarketing and adulteration in fertilisers, this commodity has been declared as an "Essential Commodity" under the Essential Commodities Act, 1955. The Fertiliser (Control) Order, 1957 issued under the Essential Commodities Act, 1955, provides for standards and enforcement thereof so that both the quality and plant nutrient contents of fertiliser distributed to farmers are of the highest order. Detailed specification as to moisture content, plant nutrient content, size etc. of different types and grades of fertilisers are prescribed and provision is made regarding packing and marking the manner in which substandard fertilisers may be sold. The order makes it obligatory that name of fertilisers, percentage of N, P and K, gross and net weight of contents etc. should be manifested on fertiliser bags. The bags containing sub-standard fertiliser are also required to be superscribed with the words "non-standard" and a sign "X" in red ink so as to serve as a caution to the farmers about the quality of fertiliser contained in the bags. The sale of any fertiliser which does not conform to specifications prescribed in the said Order is a penal offence unless special permission is obtained from the State Registering Authority for the sale of non-standard fertiliser at a price fixed on the basis of its nutrient content by the State Registering Authority.

4.2. Penalties for breach of the provisions of the Fertiliser (Control) Order, 1957 are prescribed under the Essential Commodities Act, 1955. The penalties prescribed are deterrent and may extend to imprisonment for 5 years or fine or both. In order to avoid delay in criminal prosecutions instituted for violation of the provisions of the Fertiliser (Control) Order 1957, the proposal to declare the Order as a Special Order for the purposes of summary trials is now under consideration by Agriculture Ministry in consultation with the Ministry of Law. In a summary trial,

maximum sentence of imprisonment would not exceed one year. There is no appeal against conviction in a summary trial where a sentence of imprisonment not exceeding one month or a fine not exceeding Rs. 1000 or both is awarded.

*Machinery to check black marketing etc.*

4.3. Adequate powers have been vested in the State Governments under the Fertiliser (Control) Order, 1957 to check black-marketing and adulteration fertilisers. In order to maintain check on the quality of fertiliser supplies to farmers, the State Governments appoint inspectors to take frequent representative samples of fertilisers sold in his area for determination of their nutrient content through State Control Laboratories. The inspectors are empowered under the Order to take samples of fertilisers, on a reasonable suspicion enter upon and search the premises where fertilisers are manufactured, stocked or exhibited for sale and seize or detain fertilisers which he has reason to believe to be sub-standard etc. The order also contains procedure for drawal and analysis of fertiliser samples to ensure that uniform methods of drawing and analysis of fertiliser samples are adopted by all the State Government etc. The procedure contains methods for determination of plant nutrient, re-agents to be used, apparatus required and method of calculation.

4.4. Generally, the State Governments follow the standardised procedures for drawal and analysis of fertilisers specified in the Fertiliser (Control) Order. Methods of quick tests of fertilisers which will stand the requirements of legal proof regarding adulteration are, however, still not available. Therefore, an urgent need is felt to develop a quicker and more foolproof analytical procedure. It is considered necessary to develop methods for spot detection of adulteration of fertilisers so as to facilitate prosecution of unscrupulous dealers who indulge in adulteration of fertilisers. It is stated that the State Governments have been requested to suggest methods for spot detection of fertilisers. Since Agricultural Universities also could play an important role to develop method of analysis of fertilisers which are comparatively simple and quick, the Indian Council of Agricultural Research has also been requested by Government to undertake research on this aspect.

*Complaints of Black Marketing*

4.5. It has been stated that State Governments have reported that the complaints regarding quality of fertilisers and adulteration mainly relate to retail stage of distribution of fertilisers rather than at the wholesale stage. The deterioration in quality is also mainly attributed by the State Governments to long storage under adverse conditions, particularly in respect of

fertilisers which are hygroscopic and contain free acids. Normally a period of three to six months in advance of the season is considered reasonable period of storage from the point of view of the quality depending upon the type of fertiliser held in stocks. The fertilisers are required to be stocked in dry and leakproof godowns on proper dunnage for protection against dampness. The Indian Standards Institution has finalised the code and framed standards for storage of packed fertilisers. The State Governments have, it is stated, been requested to adopt Indian Standards Institution specifications while constructing godowns for storage of fertilisers.

#### *Quality Control Laboratories*

4.6. It is further stated that the fertiliser factories mainly in the public sector have quality control cells for maintaining quality control on fertilisers produced by them. In order that all the factories maintain quality control on fertilisers, it is considered necessary that the maintenance of quality control laboratory/cell may be made a pre-condition for licensing fertiliser factories. The Ministry of Petroleum and Chemicals have been requested to consider the proposal. Meanwhile, Government propose to establish shortly an Apex Central Control Laboratory to act as a referee laboratory and to impart training to the State Government officers and staff on quality control measures.

4.7. Government maintain that owing to progressive increase in the use of agricultural in-puts, increased responsibility devolves on State Governments to ensure that in-puts such as seeds, fertilisers, pesticides, etc. of required standards are made available. The State Government have accordingly been requested to create an In-puts Cell under an officer of the rank of Joint Director of Agriculture for ensuring quality of all in-puts in addition to the organisation of smooth and equitable distribution of inputs. Publicity media would also be used to educate the farmers with regard to facilities available for testing the fertiliser and distinguishing the standard materials from the spurious ones.

4.8. During evidence before the Committee, the representative of the Ministry of Agriculture informed:

"Except a few States like Assam, Meghalaya, Tripura, Andaman and Nicobar Islands, Delhi and Chandigarh, all the other States have at least one fertiliser quality control laboratory. We have issued instructions to all the State Governments to see that they take adequate number of samples, at least one sample from every 250 tonnes of fertiliser distributed within

the State. They draw the samples.....The Central Government is watching whether the number of samples taken are adequate and also whether prompt action is taken against the defaulters and whether the report is received from the Government. When we feel that adequate number of samples are not taken and no action is being taken, we ask them to be vigilant.....I may add that the Fertiliser Association of India has been extremely cooperative. They said, if you cannot establish it in the court of law about the default, you tell us we will cancel his registration."

She also stated that State Governments who did not have such a laboratory, particularly the Assam Government, had been requested to set up a laboratory and they had agreed and were in the process of setting it up. Regarding the malpractice of under-weighment, she said: "This happens because of a variety of reasons. From the pool imported fertilisers we send fertilisers to the State Governments in standardised bags on which weight is written. There are 14 hook points in the bag which are made of poly-propylene. The fertilisers run out of those holes. There is shortage of gunny bags. We do not know whether under-weighment is always done. But we are aware of it."

**4.9. The Committee would like Government to evolve in consultation with the industry and the Indian Standards Institution the detailed specifications for quality control and ensure that the plants set up are properly equipped with quality control laboratories and cells to enforce these measures.**

**4.10. The Committee have in the Section on prices already dealt with the problem of black-marketing in controlled varieties of fertilisers. Adulteration of fertilisers and short weighment are equally serious offences. The Committee would like Government to utilise its powers under the Essential Commodities Act to see that all those who indulge in either dilution of quality or adulteration of fertilisers or in short weighment are proceeded against promptly so as to act as a deterrent to others.**

#### B. Fertiliser Promotion

##### *Demonstration Programme*

**4.11. Government have admitted that one of the major factors accounting for the low level of consumption in this country is lack of extensive promotional programme. Spelling out the measures taken in this regard it is stated that national demonstrations are being conducted in a**

large number of districts and farmers training programme is being intensified to educate farmers in all areas to increase fertiliser use. The Government of India have also set up a Fertiliser Promotion Cell in the Ministry of Agriculture to mount a massive and effective 10-point programme for stepping up balanced use of fertilisers in 70 selected districts during the remaining two years of the Fourth Plan period.

4.12. The following 25 districts have been selected for rabi 1972-73 for the implementation of fertiliser promotion programme. These districts have been selected on the basis of imbalanced use of P&K in proportion to the use of N and also with high potential for fertiliser use:

1. Andhra Pradesh . . . . .	1. Nalgonda
	2. Kurnool
2. Assam . . . . .	3. Darrang
3. Bihar . . . . .	4. Saharsa ]
	5. Purnea ]
4. Gujarat . . . . .	6. Mehsana
5. Haryana . . . . .	7. Gurgaon
6. Himachal Pradesh . . . . .	8. Kangra
7. Jammu and Kashmir . . . . .	9. Jammu
8. Kerala . . . . .	10. Trivandrum
9. Madhya Pradesh . . . . .	11. Morena
	12. Chhatarpur
10. Maharashtra . . . . .	13. Jalgaon
	14. Parbani ]
11. Meghalaya . . . . .	15. Garo Hills
12. Mysore . . . . .	16. Bellary
	17. Raichur
13. Orissa . . . . .	18. Balasur
14. Punjab . . . . .	19. Sangrur
	20. Faridkot
15. Rajasthan . . . . .	21. Sriganganagar
16. Tamil Nadu . . . . .	22. North Arcot ]
	23. South Arcot ]
17. Uttar Pradesh . . . . .	24. Hardoi
	25. Varanasi

4.13. During 1973-74 the following additional 45 districts have been selected for the implementation of the fertiliser promotion programme. These districts have been selected on the basis of high potential for fertiliser use in these districts:

1. Andhra Pradesh . . . . .	. 1. Karimnagar
	2. Guntur
2. Assam . . . . .	. 3. Goalp

3. Bihar	.	.	.	.	.	4. Chhapra
						5. Siwan
						6. Champaran
4. Gujarat	.	.	.	.	.	7. Kaira
						8. Junagarh
5. Haryauana	.	.	.	.	.	9. Mahendragarh
						10. Hjind
6. Himachal Pradesh	.	.	.	.	.	11. Solan
7. Jammu and Kashmir	.	.	.	.	.	12. Anantnag
8. Kerala	.	.	.	.	.	13. Trichur
						14. Calicut
9. Tamil Nadu	.	.	.	.	.	15. Madurai
						16. Tiruchairapalli
10. Mysore	.	.	.	.	.	17. Dharwar
						18. Shimoga
11. Maharashtra	.	.	.	.	.	19. Yeotmal
						20. Buldhana
						21. Sholapur
12. Mahdya Pradesh.	.	.	.	.	.	22. Balaghat
						23. Tikamgarh
13. Manipur	.	.	.	.	.	24. Manipur
14. Meghalaya	.	.	.	.	.	25. Khasi Hills
15. Orissa	.	.	.	.	.	26. Koraput
						27. Kalahandi
16. Punjab	.	.	.	.	.	28. Bhatinda
						29. Patiala
17. Rajasthan	.	.	.	.	.	30. Jaipur
						31. Alwar
18. Uttar Pradesh	.	.	.	.	.	32. Etah
						33. Agra
						34. Jhansi
						35. Unnao
						36. Hamirpur
19. West Bengal	.	.	.	.	.	37. Malda
						38. Coochbehar
20. Tripura	.	.	.	.	.	39. Tripura
21. Delhi	.	.	.	.	.	40. Delhi
22. Pondicherry	.	.	.	.	.	41. Pondicherry
23. Nagaland	.	.	.	.	.	42. Kohima

N.B. Selection of three more districts has yet to be finalised.

4.14. It is stated that the fertiliser promotion programme will be implemented through the State Governments and will undertake the following promotional activities:

1. Massive demonstration programme in selected districts on a package approach in collaboration with the other demonstration programmes in respect of specific commodities like cotton, oilseeds, jute etc.
2. Training of VLWs, Coop Salesmen, Extension Officers and other officers in proper fertiliser use and management, so that they can assist the farmers on the efficient use of fertilisers.
3. Training of farmers including farmer women in proper use and management of fertilisers in selected potential districts.
4. Dissemination of information material on the use of fertilisers through personal contact, group discussion and mass media such as film, radio and television.
5. Organisation of fertiliser festivals in the potential districts.
6. Strengthening of the existing soil testing laboratories in the districts, setting up of new ones and provision of mobile soil testing Laboratories and also strengthening the quality control measures at the Centre and in the States.
7. Increased cooperative credit facilities to farmers for fertiliser use.
8. Credit to be given in kind as fertilisers, as far as possible.
9. More selling points to be opened in each block.
10. Linking of Commercial Bank Credit Programme with fertiliser use on an area basis.

4.15. In reply to the question as to what expenditure has been incurred on this programme during the Fourth Plan period, it is stated that so far no expenditure has been incurred but during 1972-73 it is envisaged to spend Rs. 20 lakhs and in 1973-74 it is envisaged to spend Rs. 150 lakhs. The total expenditure for the remaining period of Fourth Five Year Plan will be about Rs. 1.70 crores.

#### *Soil Testing Arrangement*

4.16. The Government of India has sanctioned Fertiliser Promotion Scheme during the remaining two years of the Fourth Five Year Plan at the cost of Rs. 2.19 crores. Soil Testing has been given priority in this programme. Under this programme, it is proposed to strengthen 70

standard soil testing laboratories with mobility and equipments so that they can raise their capacity from 10,000 to 30,000 each during the remaining Fourth Plan period. This will give an additional capacity of 1.5 million samples by the end of the Fourth Plan Period. It is stated that the Ministry of Agriculture has a scheme to provide 34 mobile soil testing laboratories to be attached to the State laboratories in the country. Already 31 mobile soil testing vans have been supplied; remaining 3 will be supplied soon.

**4.17.** During evidence before the Committee, the Commissioner for Fertiliser Promotion in the Ministry of Agriculture admitted that the State Laboratories "do not have a full set of equipments" and "There is no mobility". He said that the Centre was trying to "strengthen them" and "give them a jeep and trawler."

**4.18.** The Committee feel that the most important task is to spread correct and proper knowledge of application of fertilisers in the field to the ordinary peasant. Apart from making available facilities for soil testing which are a pre-requisite condition for determining the type and quantity of fertiliser to be applied, the Committee consider that the fertiliser plants and marketing agencies should evolve balanced fertilisers or nutrients which would be largely suited to the crops grown in that area and the type of soil in the area. The Committee would also suggest that directions for correct application of the fertiliser should be either embossed prominently on the package or enclosed therewith preferably in the regional languages so that the peasant is able to apply the fertiliser in the correct manner necessary to get the best results. The Committee would like close liaison to be maintained between the marketing organisation of the fertiliser industry and the various extension agencies functioning under government/local authority so that the peasant is rendered an integrated pack<sup>age</sup> of service.

### C. Superphosphate Industry

#### *Problems of the Superphosphate Industry*

**4.19.** It has been represented to the Committee on behalf of the Superphosphate industry as follows:—

"Superphosphate capacity at 0.2 million tonnes of P<sub>2</sub>O<sub>5</sub> accounts for 40 per cent of the installed capacity of phosphatic fertilisers as at 1st April, 1972. Superphosphate was the pioneer in developing the use of fertilisers in the country. It has played a vital role in meeting the P<sub>2</sub>O<sub>5</sub> requirements in the country. More so, because it also supplies the secondary nutrient sulphur to the soil. Benefits of having indigenous capacity are many as

was shown up during the recent crisis when every tonne of material from any source was welcome and increased indigenous production of superphosphate helped in bridging the gap.

For indigenous capacity to flourish, however, a continuity of governmental policy is necessary. During the last 4 or 5 years, superphosphate industry has had a rough time. Because of certain inherent characteristics and its higher cost per tonne of nutrient, superphosphate cannot compete with imported diamonium phosphate or indigenous complex fertiliser. There, has, therefore, been a considerable decline in the domestic production of superphosphate and capacity utilisation dropped to 49 per cent in 1968-69. In order to optimise domestic production, and to get the maximum benefit from existing investment in plants, equipment, man power and the distribution channels developed by the superphosphate industry. Government decided in 1970 to have a closer look at the industry. It came to the conclusion that superphosphate industry could best be rehabilitated by encouraging it to produce balanced granulated fertilisers. The Fertiliser Association of India, who were asked to prepare a techno-economic study, concurred with the Government's conclusions and recommended that to make the units viable, imported ingredients like DAP, Urea and Muriate of Potash, imported by the Pool would have to be supplied to the superphosphate manufacturers putting up granulation units at a no profit no loss basis. The decision of the Government is still awaited which needs to be expedited."

4.20. The problems of the superphosphate industry were posed before the representative of the Government during evidence. The representative of the Ministry of Petroleum and Chemicals stated:—

"Superphosphate contains only 16 per cent water soluble  $P_2O_5$ . The industry was the main source of supply of  $P_2O_5$  till about 1965. With the introduction of complex fertilisers and greater acceptability of fertilisers containing nitrogen, it was found that superphosphate was not readily acceptable to the cultivators. Part of the difficulty also arose because of inefficient management of some of the units. Even so, to extend assistance to the Superphosphate industry, an inter-departmental consultation was held early this year and the Ministry of Agriculture has stressed on the State Governments the need for making maximum use of local superphosphate production. Then it has been made clear to the States that full supplies of fertilisers would be made only to meet the balance requirements of their phosphate and

they should also make use of superphosphate. Now with all the steps that have been taken, the utilisation of capacity went up from 40 per cent in 1970-71 to 58 per cent in 1971-72 and in the first six months of 1972-73 it has been 65 to 66 per cent. In addition some entrepreneurs and also the National Cooperative Development Corporation have set up granulation units for mixed fertilisers. In this form it is hoped that superphosphate will become more acceptable."

**4.21. The Committee recommend that Government should pay greater attention to the problems of the super-phosphate industry which has now become uneconomic in competition with complex fertilisers and see that the industrial capacity is put to productive use, if necessary, by diversification of production.**

## **CHAPTER V**

### **CONCLUSION**

5.1. Government have not paid as much attention to the use of fertilisers for agricultural production as it deserves in the context of the persisting food problem in the country. The annual consumption achieved during the first three years of the Fourth Plan was consistently less than the plan targets. For the last two years of the plan, Government have themselves revised the consumption targets. Government should make every effort to achieve atleast the revised targets of consumption during 1973-74 in order to create conditions for a faster rate of growth in the field of agriculture.

5.2. The net addition of installed capacity for the production of fertilisers in the country during the Fourth Plan period is likely to be only 13.99 lakh tonnes as against the original Plan target of 27.55 lakh tonnes. The annual production of fertilisers is likely to increase during the Plan period by 9.45 lakh tonnes only as against the original Plan target of an increase by 26.45 lakh tonnes. Thus, with reference to the original plan targets, the achievements in the case of installed capacity and production are likely to be only 51 per cent and 36 per cent respectively. Sizeable shortfalls have similarly been noticed in the achievement of financial targets covering expenditure on public sector projects. It is hoped that the poor achievements in the past would provide a spur to the authorities concerned to urgently rationalise the procedures for clearance of projects, streamline the implementation machinery and achieve maximum production in shortest time so that pressure on foreign exchange needed for import of fertilisers may be relieved and the country attains a degree of self-sufficiency in this field.

5.3. The targets of capacity and production projected for inclusion in the Fifth Plan are too ambitious as they envisage a five fold increase in the achievements made in the Fourth Plan period. Such a massive programme is impossible of attainment except on the basis of a "Crash Programme". Apart from the massive resources to the extent of Rs. 1500 crores including the foreign exchange component of Rs. 650 crores which will have to be committed to implement the programme, the norms and procedure for clearance of projects and the principles on which import of technical know-how and equipment is allowed, will have to be reoriented and the implementation machinery properly organised and geared up to work on a "Crash" basis to achieve the task assigned. All this needs a very careful planning and sincere

implementation on the part of the Ministry of Petroleum and Chemicals so that the country attains, as the programme envisages, self-sufficiency in the field of at least nitrogenous fertilisers. To begin with, the Government should expedite their decision as to the location of the fertiliser plants which would be set up under the "Crash Programme" during the Fifth Plan period.

5.4. Government are in the process of formulating a massive crash programme for the production of fertilisers in the country during the Fifth Plan period. In the larger national interest of achieving self reliance at the earliest, Government would like both the public and private sectors to play their part in setting up additional production capacity. Government admit that the fertiliser industry is a capital intensive industry with a long gestation period and consequently it has low profitability. Besides, the flow of fresh private investment in the fertiliser industry has slowed down due to various reasons, the chief among which is the disinclination on the part of the Government to consider proposals based on imported intermediates like ammonia, phosphoric acid etc. and the new policy of the Government regarding feedstock for the fertiliser industry which would make the cost of production substantially higher. Government should study in depth problems and difficulties which are impeding progress and take concerted measures to resolve them. In this context, Government may also consider setting up an expert body consisting of representatives of fertiliser industry both in public and private sectors and the Ministries of Petroleum and Chemicals and Agriculture and all other concerned to examine various matters that inhibit growth and recommend appropriate solutions therefor.

5.5. Government have decided that in future the fertiliser plants would be based on fuel oil. To set off the higher cost of production of fertilisers involved in the process, the excise duty and certain other charges built into the price of fuel oil, when used as feedstock for the manufacture of fertilisers, have recently been waived. Government should expeditiously decide and announce other measures to bring the economy of fuel oil based plants at par with those based on Naphtha so that a complete picture is available to the general public for taking investment decision.

5.6. Whereas the world trend is to switch over from fuel oil to Naphtha as feedstock for the manufacture of fertilisers because the latter is a cleaner fuel creating lesser pollution problems, in India all future fertiliser plants would, as a matter of policy, be based on fuel oil. It is hoped that Government have taken into consideration fully the pollution problem likely to be created by the use of fuel oil as feedstock for production of fertilisers. The economic feasibility of such a plant should take into account the cost of adequate anti-pollution measures and these measures should form an integral part of the project report for each such plant.

5.7. As coal is abundantly available in the country, fertiliser plants based on coal as feedstock would appear to be the most suitable feedstock from the point of view of self-reliance. Therefore while planning for additional capacity for the production of fertilisers during the Fifth Plan period, Government should place greater reliance on coal as feedstock subject, of course, to the existing experiment being successful. Besides, there is considerable untapped hydro-electric potential in the country. As electricity as feedstock for the production of fertiliser would, along with coal, involve the minimum outflow of foreign exchange, Government should also examine the feasibility and economics of harnessing the river waters for preventing floods, irrigation and production of electricity, for various purposes including its use as a feedstock for the production of fertilisers.

5.8. The exploitation of the rock phosphate mines in Rajasthan has not made much progress. Consequently sizeable imports are continuing. As it would not be possible for the State Government to provide all the resources for the development of these mines out of its meagre funds, Government should, in consultation with the Rajasthan Government, devise a suitable scheme which may facilitate the speedy development of the mines.

5.9. Considerable delays continue to occur in taking decisions on applications for the issue of industrial licences for setting up fertiliser units even under the existing procedures which are stated to have been streamlined. A selective case study should be undertaken to find out the time taken at the various stages in the consideration of applications. Thereafter, an attempt should be made to cut out all non-essential stages as also limit the time taken in processing it at each stage. The Ministry of Petroleum and Chemicals should set up a standing Task Force to watch the progress of a case from the stage of the issue of a letter of intent to the stage of the issue of the licence. Government should also avoid, as far as possible, changes in the basic features of the Plant after a letter of intent is issued, as it involves reappraisals of the economic viability of the Plant by the entrepreneur leading to further delays. The feedstock policy for manufacture of fertilisers should be widely publicised so as to remove all ambiguities and uncertainties in this regard.

5.10. Considerable delays ranging from six months to three and a half years have been observed in the commissioning of the fertiliser projects in the public sector leading *inter alia* to a sizeable escalation in cost of putting up the projects. Government should set up Coordination Committees for each of the projects under implementation to review critically the progress of implementation of these projects at regular intervals.

5.11. The procedure for economic appraisal of the projects and the release of foreign exchange therefor is now being streamline and the engineering and equipment for the fertiliser projects is also being standardised so as

to facilitate setting up of identical plants speedily. Government should have thought of these measures earlier. It is hoped that the new measures would lead to speedy implementation of the projects so that the capacities targeted for the Fifth Plan are achieved.

5.12. Besides the power shortage and industrial relations which have generally affected the utilisation of all fertiliser plants, the Alwaye, Neyveli, Trombay and Sindri plants have been suffering from design, engineering and maintenance problems. In the case of Rourkela, the shortage of Coke Oven Gas has impaired production while in the case of Nangal, the production is low mainly because of short supply of power which is its basic feedstock. It is nothing short of tragic that at a time when the country requires more and more fertilizers in order to step up agricultural production to meet the requirements, the fertilizer in the public sector should not be able to produce as per their installed capacity. Government should analyse, in detail, the reasons for which each of the plants in the public sector have not been able to achieve production according to its full rated capacity and to take concerted measures to achieve it by a date to be specified in this behalf. In carrying out the analysis and the follow-up action, the best technical talent in the country should be utilised. The performance of each of these plants should also be reviewed at a high level in the Government at least once in every quarter so that on-course remedial measures, as necessary, can be taken to achieve maximum production at the earliest.

5.13. It is surprising that a number of plants in the public sector need modernization. Since there is well laid out scheme for providing depreciation funds every year in each of the projects, the need for modernization or replacement of the plants should have been anticipated well in advance and timely action taken to see that the plants were modernized, rationalised or replaced in the best interest of production at economic prices.

5.14. It is distressing that in spite of the existence of a high level Fertiliser Purchase Committee, on which the various Departments and agencies of the Government concerned with imports of fertilisers are represented, the plea advanced by the Ministry of Agriculture for the shortage of fertilisers during 1972 is that information of a likely shortfall in imports from East European countries was received by them too late. The Fertiliser Purchase Committee should have a firmer grip on the import programme and should meet more often, preferably every month, to assess the progress of the imports programme so that remedial action could be taken in time in case of a likely shortfall in the scheduled imports from any country. Besides, there is the need for improving the system of timely collection of market intelligence so as to regulate imports in the best interest of the country.

5.15. The present system by which tenders for the import of fertilisers are floated repeatedly after every few weeks has not led to import either on assured basis or on most economic prices. Government should review the system to see what improvements could be made therein.

5.16. The problem of equitable distribution of fertilisers assumes great importance as it is well known that the supply is far from being regular and that the ordinary cultivator has great difficulty in getting the fertiliser of the requisite quality at the regulated price. Government have, under the circumstances, taken recourse to the Essential Commodities Act in order to regulate the distribution of fertilisers. Government should examine the difficulties being experienced by the fertiliser industry in this regard so as to resolve the genuine ones and elicit their whole-hearted cooperation and support in the matter of fair and equitable distribution of fertilisers. The body recently appointed to go into the questions of routing the distribution of fertilisers through cooperatives to a larger extent than hitherto, should take into consideration fully the existing capacity of the institutional channels to reach the consumers in the remotest parts of the country. It should also be ensured that the cooperatives do not become merely an intermediate agency distributing fertilisers through private traders who now receive their supply from the manufacturers directly.

5.17. Ministry of Railways have assured that they have taken adequate measures to end the shortage of covered wagons for the fertiliser industry and that at present they are meeting the fertiliser traffic in full, that these are being moved on a higher priority basis and that the movement is being watched at the highest level. Railways should, in consultation with the Ministries of Petroleum and Chemicals and Agriculture, work out the transportation requirements for fertilisers during each year of the Fifth Plan period and from now on plan for their orderly movement so that there are no bottlenecks.

5.18. The new fertilisers plants should be so located as to limit the transport of both raw materials and the end product to the minimum necessary.

5.19. The Ministry of Railways should, in consultation with the Ministry of Agriculture, take an early decision on the question of relaxation in the existing procedure whereby for enjoying a concessional rail freight the State authorities at the destination station have to certify that the the State authorities at the destination station have to certify that the of the concessional freight to cover also the movement of fertiliser from the storage point to the consumption point.

5.20. The rates of sales tax on chemical fertiliser levied by different States vary from 1 per cent to 5 per cent with inequitable repercussions on fertiliser industry and trade. Government may reconsider the question of exemption of fertilisers from State Sales Tax and imposition of a suitable Central Excise Duty which can then be equitably distributed among the States.

5.21. The chief constraint in the use of fertilisers at present felt by the ordinary peasant is lack of ready money to buy the fertilisers. Government should review the Credit System from time to time so as to help the ordinary peasant to get the modern inputs in time in the interest of larger agricultural production and strengthening of the weaker sections of society. Cooperative agencies should be so developed as not only to make available the fertiliser of the requisite quality and in time to the peasant in the field but also afford him necessary financial accommodation. Since a major part of the credit needs of the farmers and of fertiliser distribution system during the Fifth Plan, would have to be met by the State Bank Group and the Nationalised Banks, these Banks should build up adequate organisation in time to undertake the task envisaged for them during the Fifth Plan period. There has been a decline in the utilisation of indirect agricultural advances by the nationalised banks including the State Bank of India Group, a bulk of which is for fertiliser distribution. The Department of Banking should go into the causes for this decline and try to remove, as far as possible, such features of the existing system of indirect agricultural advances as have been hampering its fuller utilisation.

5.22. The Government is directly or indirectly through the Central Fertiliser Pool, controlling the prices of fertilisers in this country. Yet, the cultivators prices of fertilisers in this country are about the highest in the world. Even these prices are not considered by the fertiliser industry to be reasonable and attractive enough for new investment. In this context, the assurance given by Government that they would continue their policy of maintaining the fertiliser prices at the minimum possible level taking into account at the same time the need to ensure a reasonable return on the capital invested so that it makes for adequate flow of capital into the industry, is welcome.

5.23. It is the responsibility of the State Government to check black-marketing in the three nitrogenous fertilisers the prices of which have been fixed under the Fertiliser (Control) Order issued under the Essential Commodities Act. State Governments should be alive to the problem and should have an effective machinery to check the menace and punish the guilty. In this context, Government should consider the question of

printing prominently the cultivators prices on the bags containing the fertilisers.

5.24. At present, the Central Government have no separate organisation or procedure to keep watch on the prices at which fertilisers are actually available to the farmers is the field level. Reliance is placed on the State Governments to report the existence of blackmarketing in respect of fertilisers the prices of which are controlled. Besides, according to Government, the cooperatives through which the pool fertilisers are channalised are expected to observe the price discipline. This is not enough. There is need for the collection of price data at regular intervals either independently or through the machinery of the State Governments so that the Government are aware as to whether the controlled prices are actually being charged from the farmers, and also of the trend in the prices of non-controlled varieties of fertilisers. for taking such remedial action as may be necessary.

5.25. The margin between the import price and the issue price of sulphur and rock phosphate imported by MMTC is sizeable. If the idea is that the extra benefit to the indigenous manufacturer should be mopped up for the public exchequer, the more appropriate course should be to levy a higher import duty on the commodity than to allow a commercial undertaking to charge a higher price quite unrelated to cost of imports.

5.26. Government should, in consultation with the industry and the Indian Standards Institution, evolve the detailed specifications for quality control and ensure that the plants set up are properly equipped with quality control laboratories and cells to enforce these measures. Adulteration of fertilisers and short weightment are serious offences. Government should utilise their powers under the Essential Commodities Act to see that all those who indulge in either dilution of quality or adulteration of fertilisers or in short weightment are proceeded against promptly so as to act as a deterrent to others.

5.27. The most important task is to spread correct and proper knowledge of application of fertilisers in the field to the ordinary peasant. Apart from making available facilities for soil testing which are a pre-requisite condition for determining the type and quantity of fertiliser to be applied, the fertiliser plants and marketing agencies should evolve balanced fertilisers or nutrients which would be largely suited to the crops grown in various areas and the type of soil in the area. Directions for correct application of the fertiliser should be either embossed prominently on the package or enclosed therewith preferably in the regional languages so that the peasant is able to apply the fertiliser in the correct manner necessary to get the best results. Close liaison

should be maintained between the marketing organisation of the fertiliser industry and the various extension agencies functioning under government/local authority so that the peasant is rendered an integrated package of service.

5.28. Government should pay greater attention to the problems of the super-phosphate industry which has now become uneconomic in competition with complex fertilisers and see that the industrial capacity is put to productive use, if necessary, by diversification of production.

NEW DELHI;

KAMAL NATH TEWARI,

*April 23, 1973.*

*Chairman,*

Vaisakha 3, 1895 (Saka)

*Estimates Committee.*

## APPENDIX I

### *Statement showing Summary of Recommendations/Conclusions contained in the Report*

S. No.	Reference to Para No. in The Report	Summary of Recommendations/ Conclusions
1	2	3
1	1.6	<p>The Committee regret that inspite of the acknowledged role of fertilisers in augmenting agricultural production under the Indian conditions, the annual consumption achieved during the first three years of the Fourth Plan was consistently less than the plan targets. They are further disappointed to note that for the last two years of the plan, Government have themselves revised the consumption targets. The consumption target for 1972-73 has been scaled down from 4.66 million tonnes to 3.45 million tonnes while the indications given of the estimated shortfall in imports suggest that the actual consumption during 1972-73 would be only 2.75 million tonnes and that too only if the envisaged indigenous production of 1.42 million tonnes actually materialises during that year. For the year 1973-74, the orginal target for consumption has been reduced from 5.50 million tonnes to 3.93 million tonnes.</p>
2	1.7	<p>The Committee have a feeling that Government have not paid as much attention to the use of fertilisers for agricultural production as it deserves in the context of the persisting food problem in the country. They recommend that Government should make every effort to achieve atleast the revised targets of consumption during 1973-74 in order to create conditions for a faster rate of growth in the field of agriculture.</p>

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3      1.22      The Committee are constrained to note that the net addition of installed capacity for the production of fertilisers in the country during the Fourth Plan period is likely to be only 13.99 lakh tonnes as against the original Plan target of 27.55 lakh tonnes. According to revised estimates the annual production of fertilisers is likely to increase during the Plan period by 9.45 lakh tonnes only (from 7.55 lakh tonnes in 1968-69 to 17 lakh tonnes in 1973-74) as against the original Plan target of an increase by 26.45 lakh tonnes. Thus, with reference to the original plan targets, the achievements in the case of installed capacity and production are likely to be only 51 per cent and 36 per cent respectively. Sizeable shortfalls have similarly been noticed in the achievement of financial targets covering expenditure on public sector projects. The Committee also note that to cover up the sizeable shortfall in achievements, Fourth Plan target has been scaled down from time to time and the achievements are indicated against the revised targets.

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The Committee are averse to the *ad hoc* manner in which the fertiliser capacity and production targets were fixed for the Fourth Plan period by the Planning Commission and the Ministry of Petroleum and Chemicals. They are also surprised at the leisurely manner in which the public sector projects were identified and finalised even though the Fourth Plan envisaged their implementation within the Plan period. They also feel that the capital intensive, long gestation and low profitable nature of the fertiliser industry was a sufficient warning for the Government that the private sector may not have an impressive role to play in this field; yet, Government had not taken up in advance preparation for a maximum effort in the public sector to achieve the targetted capacity.

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- 5      1.24      The Committee hope that the poor achievements in the past would provide a spur to the authorities concerned to urgently rationalise the procedures for clearance of projects, streamline the implementation machinery and achieve maximum production in shortest time so that pressure on foreign exchange needed for import of fertilisers may be relieved and the country attains a degree of self-sufficiency in this field.
- 6      1.35      The Committee find that the targets of capacity and production projected for inclusion in the Fifth Plan are too ambitious as they envisage a five fold increase in the achievements made in the Fourth Plan. They feel that such a massive programme is impossible of attainment except on the basis of a "Crash Programme" to be earnestly implemented. Apart from the massive resources to the extent of Rs. 1500 crores including the foreign exchange component of Rs. 650 crores which will have to be committed to implement the programme, the norms and procedure for clearance of projects and the principles on which import of technical know-how and equipment is allowed, will have to be reoriented and the implementation machinery properly organised and geared up to work on a "Crash" basis to achieve the task assigned. All this, the Committee feel, need a very careful planning on the part of the Ministry of Petroleum and Chemicals.
- 7      1.36      The Committee hope that if the "Crash programme" is ultimately approved, it would be sincerely implemented so that the country attains, as the programme envisages, self-sufficiency in the field of at least nitrogenous fertilisers. To begin with, the Government should expedite their decision as to the location of the fertiliser plants which would be set up under the "Crash programme" during the Fifth Plan period.
- 8      2.11      Government are in the process of formulating a massive crash programme for the production of fertilisers in the country during the Fifth Plan period involving and outlay of about Rs. 1500 crores. In the larger

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national interest of achieving self-reliance at the earliest, Government would like both the public and private sector to play their part in setting up additional production capacity.

- 9      2.12      It is admitted by Government that the fertiliser industry is a capital intensive industry with a long gestation period and consequently it has low profitability. It is also admitted that the flow of fresh private investment in the fertiliser industry has slowed down due to various reasons, the chief among which is the disinclination on the part of the Government to consider proposals based on imported intermediates like ammonia, phosphoric acid etc., and the new policy of the Government regarding feedstock for the fertiliser industry which would, as Government have themselves admitted, make the cost of production substantially higher.
- 10     2.13      The Committee have, in a subsequent section dealing with the feedstock requirements, commented upon the feedstock policy of the Government. The Committee would like Government to study in depth problems and difficulties which are impeding progress and take concerted measures to resolve them. In this context, Government may consider setting up an expert body consisting of representatives of fertiliser industry both in public and private sectors and the Ministries of Petroleum and Chemicals and Agriculture and all others concerned to examine various matters that inhibit growth and recommend appropriate solutions therefor.
- 11     2.46      The Committee note that Government have accepted the recommendations of the Feedstock Committee and Review Committee that in future the fertiliser plants would be based on fuel oil and that, to set off the higher cost of production of fertilisers involved in the process, the excise duty and certain other charges built into the price of fuel oil, when used as feedstock for the manufacture of fertilisers, have

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recently been waived. The Committee urge that other measures to bring the economy of fuel oil based plants at par with those based on Naphtha, which are under examination of Government, should be decided upon and announced soon so that a complete picture is available to the general public for taking investment decision.

- 12      2.47      The Committee are distressed to note that whereas the world trend is to switch over from fuel oil to Naphtha as feedstock for the manufacture of fertilisers because the latter is a cleaner fuel creating lesser pollution problems, in India all future fertiliser plants would, as a matter of policy be based on fuel oil. They hope that Government have taken into consideration fully the pollution problem likely to be created by the use of fuel oil as feedstock for production of fertilisers and recommend that the economic feasibility of such a plant should take into account the cost of adequate anti-pollution measures and that these measures should form an integral part of the project report for each such plant.
- 13      2.48      As coal is abundantly available in the country, fertiliser plants based on coal as feedstock, would appear to be the most suitable feedstock from the point of view of self-reliance. The Committee note that three of the plants under construction are already based on coal and further expansion of these plants as also setting up new plants based on coal as feedstock would depend upon the success of these plants. The Committee recommend that while planning for additional capacity for the production of fertilisers during the Fifth Plan period, Government should place greater reliance on coal as feedstock subject, of course, to the existing experiment being successful.
- 14      2.49      There is considerable untapped hydro-electric potential in the country. As electricity as feedstock for the production of fertiliser would, along with coal,

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- involve the minimum outflow of foreign exchange, the Committee recommend that Government should examine the feasibility and economics of harnessing the river waters for preventing floods, irrigation and production of electricity for various purposes including its use as a feedstock for the production of fertilisers.
- 15      2.50      The Committee regret that between 1969, when the exploitation of the rock phosphate mines in Rajasthan began, and 1972 not much progress has been made in developing the mines. Consequently the local production of the material has been low and sizeable imports are continuing. As it would not be possible for the State Government to provide all the resources for the development of these mines out of its meagre funds, the Committee recommend that Government should, in consultation with the State Government, devise a suitable scheme which may facilitate the speedy development of the mines.
- 16      2.60      The Committee regret that considerable delays continue to occur in taking decisions on applications for the issue of industrial licences for setting up fertiliser units even under the existing procedures which are stated to have been streamlined. The Committee recommend that a selective case study should be undertaken to find out the time taken at the various stages in the consideration of applications. Thereafter, an attempt should be made to cut out all non-essential stages as also limit the time taken in processing at each stage.
- 17      2.61      In one case the Committee have observed that the main cause for the delay in taking a final decision on the proposal to set up a fertiliser unit has been the repeated shifts in the policy of the Government in regard to import of intermediates and feedstock for the Plant. The Committee recommend that after a letter of intent has been issued to a party, Government should avoid, as far as possible, changes in the basic features of the Plant approved by them as it involves reappraisals of the economic viability of the Plant leading to further delays.

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| 18 | 2.62 | In an earlier section of this Report, the Committee have stressed the need for evolving a long term and stable feed-stock policy for manufacture of fertilisers. The Committee recommend that this policy should be widely publicised so as to remove all ambiguities and uncertainties in this regard.   |
| 19 | 2.63 | The Committee also recommend that the Ministry of Petroleum and Chemicals should set up a standing Task Force to watch the progress of a case from the stage of the issue of a letter of intent to the stage of the issue of the industrial licence the need for which has already been admitted by Government during evidence before the Committee.  |
| 20 | 2.75 | The Committee are unhappy that considerable delays ranging from six months to three and a half years have taken place in the commissioning of the fertilisers projects in the public sector leading <i>inter alia</i> to a sizeable escalation of cost of putting up the projects. While some part of the delay might have been due to reasons beyond the control of the project authorities, the Committee feel that atleast some part of it could have been avoided by a more effective coordination as between different agencies of the Government. Government have set up Coordination Committees for the Cochin and Durgapur Projects to review critically the progress of implementation of these projects at regular intervals. The Committee suggest that such Coordination Committees should be set up for each of the other projects under implementation. |
| 21 | 2.76 | The Committee also note that the procedure for economic appraisal of the projects and the release of foreign exchange therefor is being streamlined. They also note that the engineering and equipment for the fertiliser projects is being standardised so as to facilitate setting up of identical plants speedily. The Committee regret that Government have thought of these measures only now when the fertiliser programme during the Fourth Five Year Plan has gone away.  |

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The Committee trust that the new measures taken by Government would lead to speedy implementation of the projects so that the targetted capacities for the Fifth Plan are achieved in time.

- 22      2.85      The Committee observe that besides the power shortage and industrial relations which have generally affected the utilisation of all fertiliser plants, the Alwave, Neyveli, Trombay and Sindri plants have been suffering from design, engineering and maintenance problems. In the case of Rourkela, the shortage of Coke Oven Gas has impaired production while in the case of Nangal, the production is low mainly because of short supply of power which is its basic feed stock.
- 23      2.86      The Committee consider that it is nothing short of tragic that at a time when the country requires more and more fertilisers in order to step up agricultural production to meet the requirements, the fertilizer plants in the public sector should not be able to produce as per their installed capacity. In the case of single superphosphate, the production was 39 per cent in 1970-71 and 36 per cent in 1971-72. In the case of phosphatic fertilizers, the production rose from 57 per cent in 1970-71 to 71 per cent in 1971-72, while in the case of nitrogenous fertilizers, it rose from 57 per cent to 61 per cent. During 1972-73, a slight improvement has been claimed during the first half of the year, but the final position is unlikely to be much different particularly in view of the power cuts and industrial relations. The Committee see no reason why Government and the project authorities could not accelerate the pace of development. They would like Government to analyse, in detail, the reasons for which each of the plants in the public sector has not been able to achieve production according to its full rated capacity and to take concerted measures to achieve it by a date to be specified in this behalf. The Committee need hardly stress that in carrying out

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the analysis and the follow-up action, the best technical talent in the country should be utilised. The Committee would also suggest that the performance of each of these plants should be reviewed at a high level in the Government at least once in every quarter so that on-course remedial measures, as necessary can be taken to achieve maximum production at the earliest.

- 24      2.87      The Committee are surprised to learn that a number of plants in the public sector need modernization. Since there is a well laid out scheme for providing depreciation funds every year in each of the projects, the Committee cannot understand why the need for modernization or replacement of the plants was not anticipated well in advance and timely action taken to see that the plants were modernized, rationalised or replaced in the best interest of production at economic prices.
- 25      3.20      The Committee are extremely unhappy to note that in spite of the existence of a high level Fertiliser Purchase Committee, on which the various Departments and agencies of the Government concerned with imports of fertilisers are represented, which is expected to coordinate imports of fertilisers to meet the domestic demand the plea advanced by the Ministry of Agriculture for the shortage of fertilisers during 1972 is that information of a likely shortfall in imports from East European countries was received by them too late. The Committee desire that the Fertiliser Purchase Committee should have a firmer grip on the import programme and with this object in view it should meet more often, preferably every month to assess the progress of the imports programme so that remedial action could be taken in time in case of a likely shortfall in the scheduled imports from any country. This also points to the need for improving the system of timely collection of market intelligence as to the international prices and production trends so as to regulate imports in the best interest of the country.

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- 26      3.21      The Committee note that the Department of Economic Affairs have revised their procedure for allocation of foreign exchange for import of fertilisers and that now the foreign exchange is released on annual basis instead of on seasonal basis as hitherto. Regretting that the change in the procedure could be thought of only when a crisis developed during 1972, the Committee hope that from now on the Ministry of Agriculture will have more elbow room to plan and negotiate imports on a long term basis and a repetition of the crisis of 1972 will not occur.
- 27      3.22      The Committee need hardly point out that the present system by which tenders for the import of fertilizers are floated repeatedly after every few weeks has not led to import either on assured basis or on most economic prices. The Committee would, therefore, like Government to review the present system to see what improvements could be made in the system so as to get imports at internationally competitive prices and on assured basis for meeting the country's requirements adequately and in time.
- 28      3.53      The problem of equitable distribution of fertilisers assumes great importance as it is well known that the supply is far from being regular and that the ordinary cultivator has great difficulty in getting the fertiliser of the requisite quality at the regulated price. The Committee understand that the Government have, under the circumstances, taken recourse to the Essential Commodities Act in order to regulate the distribution of fertilisers. It has however been represented to the Committee particularly by the fertiliser industry in the private sector that the Government intervention has, to some extent, upset normal trade channel of distribution which they had built up over the years. The Committee would like Government to examine the difficulties being experienced by the fertiliser industry so as to resolve the genuine ones and elicit their whole-hearted cooperation and support in the

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matter of fair and equitable distribution of fertilisers so that these are made available in adequate quantities and in time to the peasant in the field.

- 29      3.54      The Committee trust that the body recently appointed to go into the question of routing the distribution of fertilisers through cooperatives to a larger extent than hitherto, would take into consideration fully the existing capacity of the institutional channels to reach the consumers in the remotest parts of the country. It should also be ensured that the cooperatives do not become merely an intermediate agency distributing fertilisers through private traders who now receive their supply from the manufacturers directly. The Committee would like that the emphasis should be on rendering service to the peasant so that he is able to come by the fertiliser at the time he requires it and that financial accommodation is also shown to him so as to encourage him to produce more.
- 30      3.55      The Committee are glad at the assurance given to them by the Ministry of Railways that they have taken adequate measures to end the shortage of covered wagons for the fertiliser industry and that at present they are meeting the fertiliser traffic in full. They are also glad to note that although the movement of fertilisers not sponsored by the Central Fertiliser Pool is classified under category 'C', these are being moved on a higher priority basis and that the movement is being watched at the highest level.
- 31      3.56      Since during the Fifth Plan period, the movement of fertilisers would be on a much larger scale than during the Fourth Plan period, the Committee desire that the Ministry of Railways should, in consultation with the Ministries of Petroleum and Chemicals and Agriculture, work out realistically the transportation requirements for fertilisers during each year of the Fifth Plan period and from now on plan for their orderly movement so that there are no bottlenecks and the fertilisers reach the farmers as per plan.

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- 32      3.57      The Committee would also like to stress that the new fertiliser plans should be so located as to limit the transport of both raw materials and the end product to the minimum necessary. This would ensure not only development of industry on a decentralised basis but also avoid unnecessary burden being cast on the Railways for carriage of raw materials and fertilisers.
- 33      3.58      The Committee recommend that the Ministry of Railways should, in consultation with the Ministry of Agriculture, take an early decision on the question of relaxation in the existing procedure whereby for enjoying a concessional rail freight the State authorities at the destination station have to certify that the chemical will be used as fertiliser for agricultural purposes, and extension of the concessional freight to cover also the movement of fertilizer from the storage point to the consumption point.
- 34      3.59      The Committee note that the rates of sales tax on chemical fertiliser levied by different States vary from 1 per cent to 5 per cent with inequitable repercussions on fertiliser industry and trade. The Committee recommend that Government may reconsider the question of exemption of fertilisers from State Sales Tax and imposition of a suitable Central Excise Duty which can then be equitably distributed among the States.
- 35      3.70      The Committee attach highest importance to the fertiliser being used by the common peasant in the interest of increasing agricultural production and also improving his own lot. In this context, the Committee would like to point out that the chief constraint at present felt by the ordinary peasant is lack of ready money to buy the fertiliser. The Committee recommend that co-operative agencies should be so developed as not only to make available the fertiliser of the requisite quality and in time to the peasant in the

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- field but also afford him necessary financial accommodation so as to encourage him in the use of modern inputs in the larger national interest. Besides, the nationalised Banks and the State Banks Group can play a notable role in this field. The Committee desire that Government should take appropriate measures in this behalf and review the Credit System from time to time so as to realise the objective of helping the ordinary peasant to get the modern inputs in time at fair prices in the interest of larger agricultural production and strengthening of the weaker sections of society.
- 36      3.71      The Committee note that the production credit needs of the farmers and the credit needs of fertiliser distribution system in 1978-79 i.e., last year of the Fifth Plan, have been assessed as Rs. 1120 crores and Rs. 800 crores respectively. Since a major part of this credit would have to be met by the State Bank Group and the Nationalised Banks, the Committee hope that these Banks would build up adequate organisation in time to undertake the task envisaged for them during the Fifth Plan period.
- 37      3.72      The Committee find that there has been a decline in the utilisation of indirect agricultural advances, a bulk of which is for fertiliser distribution. The Committee would like the Department of Banking to go into the causes for this decline and try to remove, as far as possible, such features of the existing system of indirect agricultural advances as have been hampering its fuller utilisation.
- 38      3.102      The prices of three of the nitrogenous fertilisers are directly controlled by Government. The issue prices fixed for fertilisers imported by the Central Fertiliser Pool, which constitute about 50 per cent of the total consumption of fertilisers in the country, influence prices of other types of domestically produced fertilisers. Thus Government is directly or indirectly controlling the prices of fertilisers in this country. Yet, the cultivators prices of fertilisers in

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this country are about the highest in the world. Even these prices are not considered by the fertiliser industry to be reasonable and attractive enough for new investment. Government attribute the higher prices of fertilisers in India to higher cost of production in our country due to various reasons. Remedial measures taken by them are setting up of larger sized plants with latest technology to achieve economies of scale and a study of the various fiscal and other measures that can be taken to improve the economics of fertilisers plants. But even then the economies secured are stated to have been offset by a constant rise in the prices of inputs and wages etc. In this context, the Committee welcome the assurance given to them by Government that they would continue their policy of maintaining the fertiliser prices at the minimum possible level taking into account at the same time the need to ensure a reasonable return on the capital invested so that it makes for adequate flow of capital into the industry.

- 39      3.103      It is the responsibility of the State Government to check blackmarketing in the three nitrogenous fertilisers the prices of which have been fixed under the Fertiliser (Control) Order issued under the Essential Commodities Act. The Committee hope that State Governments are alive to the problem and have an effective machinery to check the menace and punish the guilty. In this context, the Committee would suggest that the Government should consider the question of printing prominently the cultivators prices on the bags containing the fertilisers.
- 40      3.104      At present, the Central Government have no separate organisation or procedure to keep watch on the prices at which fertilisers are actually available to the farmers at the field level. Reliance is placed on the State Governments to report the existence of blackmarketing in respect of fertilisers the prices of which are controlled. Besides, according Govern-

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ment, the cooperatives through which the pool fertilisers are channalised are expected to observe the price discipline. The Committee feel that there is need for the collection of price data at regular intervals either independently or through the machinery of the State Governments so that the Government are aware as to whether the controlled prices are actually being charged from the farmers, and also of the trend in the prices of non-controlled varieties of fertilisers. The Committee, therefore, recommend that Government should devise suitable machinery and/or procedure for the purpose of collection of price data for taking such remedial action as may be necessary.

- 41      3.105      It is admitted that the margin between the import price and the issue price of sulphur and rock phosphate imported by MMTC is sizeable and it is at present being absorbed by the MMTC. It is stated that the issue price of items of "speculative nature" are designed to mop up the high profits "for the exchequer" which otherwise would accrue to the manufacturers if the material was made available to them at chapter rate without the corresponding benefit being passed on to the consumer. The Committee object to this consideration being applied in the determination of the price of imported commodities by a commercial undertaking the transactions of which are of a monopoly character. The Committee consider that if the idea is that the extra benefit should be mopped up for the public exchequer, the more appropriate course should be to levy a higher import duty on the commodity than to allow a commercial undertaking to charge a higher price quite unrelated to cost of imports.
- 42      4.9      The Committee would like Government to evolve in consultation with the industry and the Indian Standards Institution the detailed specifications for quality control and ensure that the plants set up are properly equipped with quality control laboratories and cells to enforce these measures.

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- 43      4.10      The Committee have in the Section on prices already dealt with the problem of blackmarketing in controlled varieties of fertilisers. Adulteration of fertilisers and short weightment are equally serious offences. The Committee would like Government to utilise its powers under the Essential Commodities Act to see that all those who indulge in either dilution of quality or adulteration of fertilisers or in short weightment are proceeded against promptly so as to act as a deterrent to others.
- 44      4.18      The Committee feel that the most important task is to spread correct and proper knowledge of application of fertilisers in the field to the ordinary peasant. Apart from making available facilities for soil testing which are a pre-requisite condition for determining the type and quantity of fertiliser to be applied, the Committee consider that the fertiliser plants and marketing agencies should evolve balanced fertilisers or nutrients which would be largely suited to the crops grown in that area and the type of soil in the area. The Committee would also suggest that directions for correct application of the fertiliser should be either embossed prominently on the package or enclosed therewith preferably in the regional languages so that the peasant is able to apply the fertiliser in the correct manner necessary to get the best results. The Committee would like close liaison to be maintained between the marketing organisation of the fertiliser industry and the various extension agencies functioning under government/local authority so that the present rendered an integrated package of service.
- 45      4.21      The Committee recommend that Government should pay greater attention to the problems of the super-phosphate industry which has now become uneconomic in competition with complex fertilisers and see that the industrial capacity is put to productive use, if necessary, by diversification of production.

## **APPENDIX II**

*Vide Introduction*

*Analysis of Recommendation/Conclusion contained in the report*

### **Classification of Recommendations**

- A. Recommendations effecting economy:** Nil
- B. Recommendations for improving organisation and working:**  
**Sr. Nos. 1—45.**
- C. Miscellaneous Recommendations:** Nil.