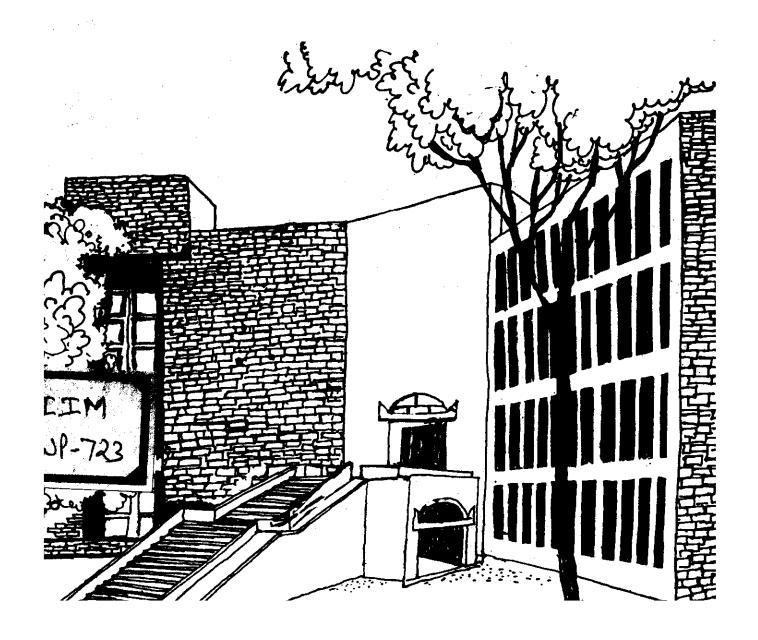




Working Paper



FINANCIAL PERFORMANCE OF PUBLIC ENTERPRISES IN INDIA: A CASE STUDY OF RASHTRIYA CHEMICALS AND FERTILIZERS LIMITED

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FINANCIAL PERFORMANCE OF PUBLIC ENTERPRISES IN INDIA:

A CASE STUDY OF RASHTRIYA CHEMICALS & FERTILIZERS LIMITED

SECTION 1: INTRODUCTION

The financial performance of public enterprises (PEs) in India has been quite disappointing, with the result that their contribution to public sector finances has been significantly below the Seventh Five Year Plan (1985/86 - 1989/90) targets. Take, for example, the Central FEs. They were expected to contribute, out of their internally-generated funds, 47% of the Centre's total Seventh Plan outlay. As against this, their contribution amounted to 29% in the first year (1985/86), 22.7% in the second year (1986/87), 22.2% in the third year (1987/88), and is budgeted at 28.9% for the fourth year (1988/89). Thus, while the contribution of Central PEs in the total resources for the Central Flan is expected to be substantial, the actual performance has lagged far behind. The performance of State FEs is worse.

The failure of PEs to generate the targeted resources is a major factor responsible for the rising public sector deficit—a problem which in turn may create the following problems: crowding out of private sector from financial markets, inflation, and balance of payments pressure. The Government is beginning to worry about the emerging scenario; a recent Planning Commission paper has scathingly attacked PEs for their failure to generate the targeted resources.

The Government urgently needs to develop a strategy to deal with the worsening public finance situation. Obviously, improvement in the financial performance of PEs will have to be a major component of this strategy. This paper looks at the financial performance of the largest PE in the fertilizer sector—Rashtriya Chemicals and Fertilizers Limited (RCFL)—with a view to understand what ails it.

SECTION 2: FINANCIAL PERFORMANCE OF RCFL

Incorporated on March 6, 1978 under the Indian Companies Act of 1956, RCFL came into being as a result of the reorganization of Fertilizer Corporation of India Limited and National Fertilizers Limited into five companies in terms of the President's Order No. 51(46)/72-Ferts. II (Pt) dated January 13, 1978. It is the single largest nitrogenous fertilizer producer in India -- it accounts for nearly one-seventh of the entire nitrogenous fertilizer output and for nearly one-third of the public sector output. In terms of capital employed, it is the top ranking PE in the fertilizer sector and the eleventh largest among all the Central FEs. Its other activities include (a) manufacture of industrial products (e.g., methanol and nitric acid), (b) service activities (which mainly comprise handling of imported materials on behalf of other parties and renting out of wagons), and (c) trading activities (which comprise marketing of bought-out fertilizers and industrial products). The Corporation, with its plants located at Thal Vaishet and Trombay in Maharashtra, had a sales turnover of Rs 9.2 billion in 1987/88 (the latest year for

which the Annual Report is available), of which fertilizer manufacturing accounted for 91%. The remainder was accounted for by industrial product manufacturing (7.1%), service activities (1.7%), and trading activities (0.2%). 1/

Table 1 presents data on RCFL's financial performance, measured by pretax profits as a percentage of average net worth. 2/ There is a rationale for using this measure of profitability. The RCFL operates under the regime of Government of India's Fertilizer Retention Frice Scheme (FRPS) which provides for the determination of a retention price for each fertilizer plant, based on a capacity utilization of 80% of the ammonia plant and a combination of norms and actuals in regard to the consumption of raw materials, futilities and other inputs, maintenance and other costs, and provides for a post-tax return of 12% on net worth. In computing the return

 $[\]frac{1}{2}$ The Corporation, operating under the administrative and managerial control of the Government of India's Department of Fertilizers, has a board of directors headed until recently (July 31, 1988) by Duleep Singh. (Mr Duleep Singh, a Mechanical Engineer by profession, joined RCFL/erstwhile Fertilizer Corporation of India (FCI) in 1964. Prior to joining RCFL/FCI, he was Director (Programme), National Productivity Council, New Delhi). The board is currently headed by R. Venkatesan (who is also serving the Corporation as its Finance Director). Other board members are: J.K. Arora (Joint Secretary, Ministry of Agriculture, Government of India J.L. Bajaj (Joint Secretary, Ministry of Finance, Government of India), S.G. Kale (Secretary (Industries), Government of Maharashtra), I.S. Malhi (Joint Secretary, Department of Fertilizers, Government of India), Omita Paul (Deputy Secretary, Department of Fertilizers, Government of India), and K.R. Ranganathan (a Madras-based non-official member).

^{2/} Average of net worth at the beginning and end of a fiscal year.

to be allowed to a fertilizer producer, the officials of the Fertilizer Industry Coordination Committee (which administers the FRPS) assume that the producer pays corporation tax at the statutory rate, and then figure out a pre-tax return on net

Table 1

RCFL's Financial Performance
1978/79-1987/88

Fiscal Year	Average Net Worth (Rs ml.)	Pretax Profits (Rs.ml.)	Statu- tory Rate of Corpn. Tax (incl. sur- charge) (%)	Esti- mated Tax Liabil- ity as % of Pretax Profits	Col.3 as % of Col.2	FICC's Profit- ability Norm (pretax profits as % of net worth)
1	2	3	4	5	7.6	7
1978/79	1,433.5	81.4	57 .75	0	5.7	28.4
1979/80	1,634.8	110.4	59.125	0	6.8	29.4
1980/81	2,128.9	185.3	59.125	0	8.7	29.4
1981/82	2,749.9	212.6	56.375	0	7.7	27.5
1982/83	3,452.0	224.7	56.375	0	6.5	27.5
1983/84	4,904.1	500.6	57.75	12.0	10.2	28.4
1984/85	6,,370.8	443.5	57 . 7 5	0	7.0	28.4
1 985/86	6,893.4	322.3	52.5	0	4.7	25.3
1986/87	7,044.7	176.2	.50.0	0	2.5	24.0
1987/88	7,300.8	631.1	52.5	15 .75	8 .6	25.3

Sources: RCFL's Annual Reports for the years 1980/81 to 1987/88; and Government of India, <u>Public Enterprise Survey for 1978/79</u>, Volume 3.

^{1/} Fertilizer Industry Coordination Committee (FICC) is a
part of the Government of India's Department of Fertilizers.

worth. No consideration is given to the actual tax liability of the producer. Thus, the higher the element of net worth in a producer's capital structure and the higher the statutory rate of corporation tax, the higher will be the pre-tax return on net worth allowed to a plant. In case a producer improves upon the norms (e.g., achieves a capacity utilization rate higher than 80%), it can better the profitability provided under the FRPs by FICC. Given this and the fact that RCFL has not reported any tax liability for as many as eight out of ten years since its incorporation (see Table 1, col. 5), the criteria of pre-tax profits as a percentage of net worth can be regarded as an appropriate one for evaluating the financial performance of this PE.

poorly. Its reported pretax profits as per cent of its net worth have ranged between 2.5 and 10.2 since its incorporation. This is substantially lower than the profitability norms set up by FICC. What is more, the Corporation's reported pre-tax profits include substantial income from its service and trading activities. Take, for example, the Corporation's performance in 1987/88. The Corporation has put that year's pretax profits at Rs.631.1 million, which include an income of as much as Rs.163.2 million from its service activities; 2/

^{1/} The Indian income tax law contains numerous tax expenditure provisions which enable many companies to have very low, even zero, tax liability. (See Anand P. Gupta, "Tax Experience of Indo-American Joint Ventures", Economic and Folitical Weekly, Vol. XIX, No. 34, August 25, 1984.) RCFL happens to be one such company.

^{2/} RCFL has also reported an interest income of Rs.34.6 million, in the face of an interest expense of Rs.541.1 million. I felt it would be more appropriate to adjust the interest expense downwards (to Rs.506.5 million) and thereby ignore the interest income.

information on income from the trading activities is not available.

SECTION 3: FACTORS RESPONSIBLE FOR REFL'S POOR PERFORMANCE

RCFL has done poorly largely because of two factors: (a) adverse market conditions; and (b) inefficiency in the use of inputs. This section looks at each of these factors, with particular focus on the second one.

3.1 ADVERSE MARKET CONDITIONS

Adverse market conditions in 1987/88 affected the Corporation's financial performance in two ways. First, the Corporation continued to hold excessive fertilizer stocks which added to interest and other costs. Second, in the wake of cut-throat competition in the fertilizer market, the Corporation had to offer discounts on sale of urea, thus effectively realizing a price lower than the consumer price fixed by the Government of India. This adversely affected the Corporation's profits 1/

3.1.1 EXCESSIVE FIRTILIZER STOCKS

Table 2 estimates the impact of holding fertilizer stocks on RCFL's 1987/88 profits: The Corporation's pretax profits would have been Rs.801.8 million higher, assuming it were able to sell all the fertilizer produced in 1987/88 and did not have to incur any costs involved in holding fertilizer stocks carried forward from 1986/87. This is a substantial sum.

^{1/} The Government of India-fixed consumer price of urea is substantially lower than the RCFL's average retention price allowed to it under the FRPS. The difference between the retention price and what the Corporation is supposed to receive from the sale of urea (Government-fixed consumer price minus Government-fixed dealer's commission) is reimbursed to it by way of fertilizer subsidy. Given this, any price discount that the Corporation may offer on sale of urea, will adversely affect its profits.

Impact of Holding Fertilizer Stocks
on RCFL's 1987/88 Profits

	Particulars	Unit	Urea	Complex Fertilizers
_	1987/88 output	Tons	1,691,300.0	622,255.0
	1987/88 sales:			
2	Quantity Value Average selling price per ton	Tons Rs.million Rs.	1,562,160.0 6,428.3 4,115.0	548,119.0 1,955.5 3,567.7
	1987/88 closing stocks:			
2	Quantity Value Average value per ton	Tons Rs.million Rs.	1,226,049.0 3,902.0 3,182.6	167,847.0 519.3 3,093.9
	Difference between average selling price and average value of closing stock (2.3 minus 3.3)	Rs.	932.4	473.8
•	Estimated interest costs involved in holding fertilizer stocks	Rs.million	458 •5	49.3
,	Estimated other costs (e.g., storage rental) involved in holding fertilizer stocks	Rs.million	125.1	13.4
•	Additional profits RCFL would have made in 1987/88, assuming it were able to sell all the fertilizer produced in that year and did not have to incur any costs involved in holding fertilizer stocks carried forward from			
	carried forward from 1986/87 $[(1-2.1) \times 4] + 5 + 6$	Rs.million	704.0	97.8

ce: Based on (a) data in RCFL, Annual Report for 1987/88, and (b) Fertilizer Association of India estimates in respect of interest (Rs. 33 per ton per month) and other costs (Rs. 9 per ton per month) involved in holding fertilizer stocks.

However, the question raised here is somewhat different:
How much of the RCFL's poor financial performance, relative to
the FICC norms, can be explained by the phenomenon of
excessive fertilizer stocks? This is an important question,
given the general tendency of many commentators to attribute
Indian fertilizer PEs', poor financial performance to the
phenomenon of excessive stocks.

Assuming that the FICC's profitability norm holds good for RCFL's entire average net worth employed in 1987/88 and that RCFL benefited fully from larger contribution per ton available under the FRPS when capacity utilization exceeds 80%, it should have earned a pretax profit of Rs.2,200.1 million, 1/ as can be seen from details furnished in Table 3. As against this, RCFL's actual pretax profit in 1987/88 amounted to a mere Rs.656.2 million, even without making any adjustment for the substantial income reported for that year from service and trading activities. This means that while the phenomenon

^{1/} Indeed, this figure would be still higher if account is taken of the inverse relationship between fertilizer production costs and capacity use. Unfortunately, precise information on improvement in profits attributable to this point is not available.

^{2/} Given that the reported pretax profits (Rs.631.1 m.) have bee arrived at by debiting Rs.25.1 million on account of adjustments relating to prior years, the actual pretax profits for 1987/88 may be put at Rs.656.2 million.

Table 3

Estimate of RCFL's Potential 1987/88 Pretax Profits

	Particulars	Potential 1987/88 Pretax Profits (Rs. million)
1.	25.3% of average 1987/88 net worth (Rs.7,300.8 million)	1,847.1
2.	Additional contribution to pretax profits: Trombay I Urea Plant (installed capacity: 99,000 ton Output: 100,700 tons; retention price (late 1986): Rs.4,288 per ton; variable costs (late 1986): Rs.3,008 per ton)	•
	Trombay V Urea plant (installed capacity: 330,000 tons; 1987/88 Output: 262,900 tons; retention price (late 1986): Rs.3,822 per ton; variable costs (late 1986) Rs.2,146 per ton)	,
	Thal Urea plants (installed capacity:1,485,000 tons; 1987/88 Output: 1,327,700 tons; retention price (late 1986): Rs.3,644 per ton; variable costs (late 1986) Rs.1,301 per ton)	on .
		327.3 ¹ / Fotal 2,200.1 ² /

^{1/} Arrived at by multiplying output in excess of 80% of installed capacity by the difference between retention price and variable costs.

Source: RCFL, Annual Report for 1987/88; and The World Bank.

^{2/} This figure would be still higher if additional contribution to pretax profits on account of higher capacity utilization of complex fertilizer plant (Suphala (15:15:15) plant operated at 111.3% in 1987/88), were also included. Unfortunately, all the data required to figure this out are not available.

of excessive fertilizer stocks does explain over one-half (51.9%) of the RCFL's profitability shortfall, there still remains a substantial shoftfall that needs to be explained.

3.1.2 DISCOUNTS ON SALE OF UREA

Fertilizer producers have been offering discounts on the sale of urea in recent years. In 1986/87, RCFL, for example, sold urea at prices ranging between Rs.1,800 and Rs.2,140 per ton against the Government-fixed price of Rs.2,350 per ton. The Government of India issued instructions asking fertilizer producers not to offer any price discounts beginning July 1987. Discussions with knowledgeable people, however, suggest that despite these instructions some producers continued to offer discounts, though in concealed forms, during the rest of 1987/88. Unfortunately, information on the amounts involved for RCFL is not available.

Incidentally, one may ask: Given the adverse market conditions for fertilizers, why didn't the RCFL management act on the alternative of curtailing output? The answer to this interesting question is that given the RCFL's cost structure and given the magnitude of fertilizer subsidy it receives from the Government of India, it pays the Corporation to produce as much fertilizer as possible even under very adverse market conditions! Take, for example, the case of Thal urea for which RCFL got, in late 1986, a retention price of Rs.3,644 per ton (which allowed it to claim a subsidy of Rs.1,434 per ten regardless of whether

the urea produced was sold or stored), againgst its variable costs of Rs. 1,301 per ton. The incentive to produce even in the face of adverse market conditions is obvious.

3.2 INEFFICIENCY IN THE USE OF INPUTS

RCFL operates under the FICC-administered regime of retention prices. The retention price data and the corresponding actual cost data need to be carefully looked at to decompose the differences between the two sets of data into (a) gains/losses in efficiency, (b) effects of changes in input prices relative to those reflected in the retention prices, and (c) capacity utilization effects. Unfortunately, such data for RCFL's fertilizer plants for 1987/88 are not available. However, some useful data on RCFL's urea plants, relating to late 1986, have recently become available. Table 4 summarizes these data.

One thing emerges very clearly: In late 1986 RCFL produced urea at costs substantially (24.1 to 25.3%) higher than the FICC's norms, with the production cost at the Corporation's Trombay I plant even exceeding the retention price by as much as 16.6%, despite its operating at over 80% capacity utilization level. RCFL's cost of producing urea was high largely because it used larger quantities of feedstock and utilities, incurred higher coversion and marketing costs, and carried a heavier burden of interest and depreciation. For example: To produce one ton of urea, its plant at Thal used 0.730 KNcm of gas against the FICC norm of 0.573 KNcm; the

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<u>Iable 4</u>

<u>etention Price and Financial Cost Data for RCFL's</u>

<u>Irosbay I. Trombay V and Thai Urea Plants, Late 1986</u>

Rs/Ton

Particulars		Trambay L		Te	ombay V	That	
		Retention Price Data	Financial Cost	Retention Price Data	_ Financial _ Cost		Cost
1.	Variable costs, of which:				2,405	1,301	1,605
	Feedstock Utilities	909 1,963	1.154 2.571			1,092 30	1,391 36
2.	Conversion costs	63 3	827	372	370	323	410
3.	Depreciation	170	135	340	496	635	806
4.	Interest	193	124	98	293	473	601
5.	Harketing costs	21	24	21	130	/ ·51	65
۵.	Total Costs (1 to 5)	4,025	4,999	2,997	3,894	2,783	3,487
7.	Retention price	4,288	4,288	3,822	3,822	3,644	3,844
	Return on net worth (7 minus 6)	263	-711	B45	128	861	157

Source: Industry Department, The World Bank.

Trombay I plant used 1.815 Mwh of power against 1.165 Mwh; and Trombay V's depreciation and interest costs were 80.1% higher, despite its operating at well above the FICC's capacity utilization norm of $80\%.\frac{1}{}$

Incidentally, one may ask: Are FICC norms achievable?

They certainly are. Indeed, one can even improve upon them, as can be seen, for example, from the data on Zuari Agro Chemicals

Limited (ZACL) presented in Table 5.

How much of the RCFL's underperformance can be attributed to its having to pay higher input prices than those reflected in its retention prices? FRPS allows retention price revisions to reflect changes in prices of major inputs/(e.g., feedstock and power) as and when the changes take place; for changes in the prices of relatively minor inputs (e.g., chemicals), the revisions are allowed once in three years. Obviously, the time-lag involved in retention price revisions for changes in the prices of minor inputs, results in a loss to fertilizer producers. Data on the loss suffered by RCFL on this account are not available, but there is reason to believe that it did not add up to much in late 1986.

As recards the capacity utilization effects, operation of the Thal plant at about 70% capacity utilization in late

^{1/} This can happen when the actual cost of the plant installed and the actual level of capital employed (including working capital), exceed those allowable under the FRPS. Details are not available.

Table 5

Retention Price and Financial Cost Data for ZACL's Urea Plant, Late 1986

Rs/Ton

	Particulars	Retention Price Data	Financial Cost Data	
	Variable costs, of which:	1,998	1,986	
	Feedstock	1,382	1,308	
	Utilities	461	485	
	Conversion costs	331	367	
	Depreciation	144	58	
	Interest	131	100	
	Marketing costs	37	.105	
	Total costs (1 to 5)	2,641	2,616 f	
	Return on net worth	196	221	
,	Retention price	2,837	2,837	

Source: Industry Department, The World Bank.

1986, against the FICC norm of 80%, had the effect of raising the plant's per ton depreciation and interest costs. However, this was largely offset by relatively high capacity utilization (about 101%) at both Trombay I and V plants.

The upshot of the foregoing analysis is that RCFL was inefficient in the use of various inputs in late 1986. More recent information along the required lines is not available, but there is reason to believe that RCFL continues to be inefficient in the use of various inputs. Indeed, discussions with knowledgeable people clearly suggest that inefficiency in the use of various inputs was a major factor responsible for RCFL's poor performance in 1987/88.

SECTION 4: CONCLUDING REMARKS

This paper provides a perspective on the financial performance of RCFL. It stresses that the Corporation has done poorly. Its reported pretax profits as per cent of average not worth have ranged between 2.5 and 10.2 since its incorporation in 1978. This is substantially lower than the profitability norms set up by FICC, a Government of India agency.

The paper asserts that a major factor responsible for RCFL's poor financial performance is its inefficiency in the use of various inputs (e.g., feedstock, power). Why is RCFL not being able to achieve FICC's input consumption norms, especially when these norms are not only achievable but can also be improved upon? This needs to be urgently investigated.

Has RCFL become more inefficient in the use of various inputs in recent years? This is another important question that needs to be looked into.

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