

# AN ANALYSIS ON THE PROFITABILITY OF SELECT FERTILIZER COMPANIES IN INDIA

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**Abstract:** Fertilizer industry is a major driving force behind the economic development of this country in general and agricultural development in particular. The fertilizer industry is aimed at a wide audience from specialists in the industry who need a wider background to new entrants requiring a training resource; governmental and inter-governmental agencies; agricultural administrators in developing countries and the financial community with interests in trading and investment in the industry.

**Key Terms:** Fertilizer- agricultural-finance

**INTRODUCTION:** Fertilizer industry is a major driving force behind the economic development of this country in general and agricultural development in particular. The fertilizer industry is aimed at a wide audience from specialists in the industry who need a wider background to new entrants requiring a training resource; governmental and inter-governmental agencies; agricultural administrators in developing countries and the financial community with interests in trading and investment in the industry.

**IMPORTANCE OF THE STUDY:** The demand for fertilizer has been growing steadily in India. But the Production of fertilizer is not adequate. A special feature of this industry is continuous production and seasonal consumption. Productivity in agriculture depends on social, technological and economical factors. The consumption pattern of fertilizers also varies due to local and environmental factors. Lack of credit and marketing facilities with respond to agricultural produce are also considered as factors influencing fertilizers consumption. Of all the factors, finance is the most vital one that affects the performance of fertilizer industry to a maximum extent.

Fertilizer units are also facing the problems relating to finance due to various internal and environmental factors. Many industrial units are facing the problem of inappropriate financial structure, poor utilization of assets, inefficient working capital management, absence of costing and pricing, absence of financial planning and budgeting, improper utilization or diversion of funds, liquidity problems, inadequate inventory control and credit restraints.

For the purpose of this study, ten fertilizer companies have been selected from both private and public sectors.

**REVIEW OF LITERATURE: The Union Budget 2009-10** presented that fertilizer remains a prominent sector. Government proposed to include capital investment in fertilizer production as an infrastructure sub-sector as the sector requires higher capital. Also, to ensure greater efficiency, cost effectiveness and better delivery for fertilizers, the Government proposes that it will take move towards direct transfer of cash subsidy to people living below poverty line in a phased manner. Urea is the key focus in the industry, which represents around 50% of all fertilizer products consumed in the country with an annual consumption of 27mt of a total fertilizer consumption of 55mt. During the year 2008-09, the Nutrient Based Subsidy (NBS) policy was successfully implemented for all fertilizers except urea. Thus, government proposes active consideration of the Urea under the extension of the NBS regime. This is a positive move by the government and will benefit both farmers and companies in the industry.

**Research and Markets: Agrochemicals Market Global Forecast 2010 – 2015** says that Nitrogenous fertilizers command a large market share of more than 46% but have a comparatively low growth rate. Phosphoric fertilizers have a lower market share but a higher growth rate due to the increase in production by major players.

### **OBJECTIVES OF THE STUDY**

1. To review the growth and development of fertilizer industry at national and international level in general.
2. To analyze and compare the financial performance including operational efficiency of the select fertilizer companies in India.
3. To study the management of working capital of select fertilizer companies in India.
4. To offer suggestions for improving the financial performance including operational efficiency of fertilizer companies in India.

### **METHODOLOGY**

#### **Collection of Data**

The present study is based only on secondary data. The data were collected from the published records of the select fertilizer companies, such as Annual Reports and Government Research Publications. Apart from published records, the data were obtained from books, journals, magazines, government reports, newspapers and websites.

#### **Sampling**

In order to analyse the financial performance of fertilizer companies, the details of 56 companies were selected. Based on large scale production of Nitrogen and Phosphatic fertilizers, 25 companies were shortlisted. From those, 16 NSE listed companies were identified of which the following 10 companies were selected under simple random sampling for this study:-

1. National Fertilizers Limited (NFL)
2. Fertilizers and Chemicals Travancore Limited (FACT)
3. Rashtriya Chemicals and Fertilizers Limited (RCF)
4. Madras Fertilizers Limited (MFL)
5. Gujarat State Fertilizers and Chemicals Limited (GSFC)
6. Mangalore Chemicals and Fertilizers Limited (MCFL)
7. Nagarjuna Fertilizers Fertilizers and Chemicals Limited (NFCL)
8. Chambal Fertilizers and Chemicals Limited (CFCL)
9. Tata Chemicals Limited (TCL)
10. Zuari Industries Limited (ZIL)

**TABLE 1**  
**PROFIT BEFORE TAX**  
**(Rs. in Crores)**

Company	Min. Val.	Max. Val.	Mean	SD	CV(%)
Madras Fertilizers	-145.17	169.86	-45.45	88.71	-195.20
National Fertilizers	18.10	448.75	184.19	118.96	64.59
FACT	-199.96	236.89	-57.44	118.70	-206.67
GSFC	-380.14	1109.29	237.02	415.93	175.48
RCF	-125.03	350.44	180.53	144.75	80.18
Zuari Industries	65.97	473.10	171.41	122.03	71.19
Tata Chemicals	65.02	1138.86	447.70	292.59	65.35
Nagarjuna Fertilizers	-176.77	196.72	40.33	92.95	230.48
Mangalore Chemicals	20.59	183.05	58.29	47.74	81.89
Chambal Fertilizers	116.53	444.91	240.54	101.05	42.01

Source: Computed from Annual Reports

The Table 1 showed that the Mean Profit Before Tax ranged from -57.44 crore in Fertilizers And Chemicals Travancore Limited (FACT) to 447.70 crore in Tata Chemicals Limited (TCL) and the coefficient of variation ranged between -206.67 to 230.48% indicating the variations in the performance during the period of study. The higher C.V in Nagarjuna Fertilizers (230.48%) revealed the inconsistent performance in the Profit Before Tax during the study period.

**TABLE 2**  
**PROFIT AFTER TAX**  
**(Rs. in Crores)**

Company	Min. Val.	Max. Val.	Mean	SD	CV(%)
Madras Fertilizers	-145.34	169.86	-50.64	90.28	-178.29
National Fertilizers	16.40	286.27	119.70	74.56	62.29
FACT	-199.93	235.66	-59.72	122.18	-204.60
GSFC	-390.84	749.37	183.51	284.59	155.09
RCF	-48.07	245.12	125.63	92.83	73.90
Zuari Industries	-24.07	393.55	81.89	114.51	139.83
Tata Chemicals	117.29	949.18	350.71	227.14	64.77
Nagarjuna Fertilizers	-127.47	117.35	35.53	62.25	175.17
Mangalore Chemicals	10.59	170.82	43.60	44.43	101.91
Chambal Fertilizers	77.19	325.18	176.24	74.39	42.21

Source: Computed from Annual Reports

The Table 2 showed that the Mean Profit After Tax ranged from Rs. -59.72 crore in Fertilizers And Chemicals Travancore Limited (FACT) to 350.71 crore in Tata Chemicals Limited (TCL) and the coefficient of variation ranged between -204.60 to 175.17% indicating the variations in the performance during the period of study. The higher C.V in Nagarjuna Fertilizers (175.17%) revealed the inconsistent performance in the Profit After Tax during the study period.

**TABLE 3**  
**EARNINGS BEFORE INTEREST AND TAX**  
**(Rs. in Crores)**

Company	Min. Val.	Max. Val.	Mean	SD	CV(%)
Madras Fertilizers	-23.65	266.12	85.90	90.64	105.52
National Fertilizers	249.50	616.65	333.97	98.48	29.49
FACT	-99.08	343.12	57.76	121.26	209.93
GSFC	-108.05	1277.44	436.33	411.75	94.37
RCF	6.03	532.36	324.57	159.39	49.11
Zuari Industries	65.97	473.10	171.41	122.03	71.19
Tata Chemicals	303.05	1328.66	719.95	291.35	40.47
Nagarjuna Fertilizers	211.81	544.35	367.07	100.36	27.34
Mangalore Chemicals	34.84	193.31	83.78	51.82	61.85
Chambal fertilizers	411.63	825.36	549.11	127.38	23.20

Source: Computed from Annual Reports

The Table 3 showed that the Mean Earnings Before Interest and Tax ranged from Rs. 57.76 crore in Fertilizers And Chemicals Travancore Limited (FACT) to 719.95 crore in Tata Chemicals Limited (TCL) and the coefficient of variation ranged between 23.20 to 209.93% indicating the variations in the performance during the period of study. The higher C.V in Fertilizers And Chemicals Travancore Limited (209.93%) revealed the inconsistent performance in the Earnings Before Interest and Tax during the study period.

#### Null Hypothesis:

- There is no significant difference in the Mean Amount of PBT between lower PAT companies and higher PAT companies.

**TABLE 4**  
**t'- TESTS OF SIGNIFICANCE**  
**PROFIT BEFORE TAX**

Variations	Lower PAT	Higher PAT
Mean	33.43	257.99
SD	92.44	109.75
Mean Difference	- 224.568	
Standard Error	64.173	
t – value	-3.499**	
DF	8	
P	.008	

\*- Significant at 1 % level

The 't' test proved that there is significant difference in the Mean Amount of PBT between lower PAT companies and higher PAT companies during the study period. So the Null Hypothesis is rejected.

**TABLE 5**  
**t'- TESTS OF SIGNIFICANCE**  
**EARNINGS BEFORE INTEREST AND TAX**

Variations	Lower PAT	Higher PAT
Mean	153.184	472.786
SD	127.012	165.441
Mean Difference	-319.602	
Standard Error	93.276	
t – value	- 3.426**	
DF	8	
P	.010	

\*- Significant at 5 % level

The 't' test proved that there is significant difference in the Mean Amount of Earnings Before Interest and Tax between lower PAT companies and higher PAT companies during the study period. So the Null Hypothesis is rejected.

It is observed from the tests of significance of select financial variables that there was significant difference between lower PAT companies and higher PAT companies in terms of: i) Net Sales, ii) Operating profit, iii) Gross Profit, iv) Profit before tax and v) Earnings Before Interest and Tax and no significant difference between lower PAT and higher PAT companies in terms of Interest and Earnings per Share.

#### **FINDINGS:**

- The Mean Profit Before Tax ranged from -57.44 crore in Fertilizers And Chemicals Travancore Limited (FACT) to 447.70 crore in Tata Chemicals Limited (TCL) and the coefficient of variation ranged between -206.67 to 230.48% indicating the variations in the performance during the period of study. The higher C.V in Nagarjuna Fertilizers (230.48%) revealed the inconsistent performance in the profit before tax during the study period.
- The Mean Profit After Tax ranged from Rs. -59.72 crore in Fertilizers And Chemicals Travancore Limited (FACT) to 350.71crore in Tata Chemicals Limited (TCL) and the coefficient of variation ranged between -204.60 to 175.17% indicating the variations in the performance during the period of study. The higher C.V in Nagarjuna Fertilizers (175.17%) revealed the inconsistent performance in the profit after tax during the study period.
- The Mean Earnings Before Interest and Tax ranged from Rs. 57.76 crore in Fertilizers And Chemicals Travancore Limited (FACT) to 719.95 crore in Tata Chemicals Limited (TCL) and the coefficient of variation ranged between 23.20 to 209.93% indicating the variations in the performance during the period of study. The higher C.V in Fertilizers And Chemicals Travancore Limited (209.93%) revealed the inconsistent performance in the earnings before interest and tax during the study period.

## SUGGESTIONS

- □ Among the select fertilizer companies for the study, the financial position of Zuari Industries Limited (ZIL) is found to be better than other companies. Its share capital position is strong. As the company is able to generate more gross income, it could earn more reserves and surplus. Similarly its current financial position is sound which adds more strength to financial position of the company. As the control on operating expenses and other items helped to maintain the financial position of the company, the existing position can be improved by concentrating more on the same.
- □ The Tata Chemicals Limited (TCL), another company included in this study shows somewhat better performance. However, the share capital, reserves and surplus and current assets require improvement. In other words, the financial position can be strengthened by reducing the employment of borrowed capital, which would ultimately reduce the interest burden. Moreover, effective utilization of fixed assets may ensure the generation of more income.
- □ Shareholders funds may be increased by issuing new shares, additional shares etc.

## CONCLUSION

- In India, a free economy is not workable in fertilizers with varying investments, varying technology, diverse vintage, different patterns of financing, differing feed stock and input prices, location of manufacturers, consuming areas, freight factors and impossibilities of avoiding exploitation of the farmers. The fertilizer companies would have to adopt themselves to recent developments such as advanced computer technology which not only facilitates convenience of operation but also greatly helps in terms of production efficiency, quality control, safety and environmental standards.

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