



## A STUDY ON FINANCIAL RATIO ANALYSIS OF NATIONAL FERTILIZER LIMITED

**Rakesh Kumar Maurya Dr. Shashi Kant Tripathi**

*\*Research Scholar, Department of Commerce, University of Lucknow.*

*\*\*Professor, Department of Commerce, Vidyant Hindu PG Collage, Lucknow.*

### **Abstract**

The aim of the study is to know about the **National Fertilizer Limited (NFL)**, to study the growth, profitability and trend of National Fertilizer Limited. The data required for the paper has been taken from "NFL Annual report" and other sources from **2015-16 to 2020-21**. In the next phase, financial ratios, growth for year-wise, Mean, Standard Deviation, coefficient of correlation for the data of company has been calculated. The fertilizer industry presents one of the most energy intensive sectors within the Indian agriculture economy and is therefore of particular interest in the context of globally delibration. The study conducted is based on the ratio analysis, ANOVA test and trend analysis which assisted to analysis the financial performance of companies in National fertilizer Limited (NFL).

**Keywords: Profitability, Trend Analysis, Growth, Ratio Analysis.**

### **Introduction**

Ratio analysis is the **comparison of line items** in the financial statements of a business. Interpreting the financial statements and other financial data is essential for all stakeholders of an entity. Ratio Analysis hence becomes a vital tool for financial analysis and financial management. Which can be used to measure the solvency, the profitability, efficiency and the overall financial strength of a business, by analysing its financial accounts specifically the balance sheet and the profit and loss account? Accounting ratios are very easy to calculate and they enable a business to highlight which areas of its finances are weak and therefore required immediate action.

#### **1. There are five main categories of accounting ratio:-**

- 1. Liquidity ratios-** these measure the solvency of the business and its ability to meet **short-term debts**.
- 2. Profitability (performance) ratios-** these analyse the **profit** made over the last year.
- 3. Financial efficiency (activity) ratios-**these analyse the **efficiency of the business** in terms of the use of its resources in generating sales.
- 4. Gearing ratio-**this measures the proportion of the capital of the business which has come from external sources, and must be repaid with interest.
- 5. Shareholders' ratios-** these measure the **strength of the company**, its share price and its dividends.

• **The performance of competitors:** it may be the case that the industry is in decline, in which case all the rival businesses are likely to be experiencing deteriorating ratios.

• **Comparison year by year:** The ratios for the business from the current year must be compared to the ratios from previous years, in order to see any marked improvement or deterioration in the financial performance.

• **External factors:** The financial ratios do not take into consideration any effects on the local community or the environment (they ignore the effects of pollution, job losses). Therefore, in order to measure the performance of a business, factors other than mere financial ratios need to be considered.



**The current study is on the Financial Ratio Analysis of NFL.  
NATIONAL FERTILIZER LIMITED**

NFL is a Mini Ratna company, established in 1974. Its authorized capital is Rs.1000 cr. And paid up capital is Rs.490.58 cr. Out of which government of India's share is 74.71%. NFL has five gas based Ammonia- urea plants Nangal & Bathinda plants in Punjab, Panipat plant in Haryana and two plants at Vijapur in Guna MP. The Panipat, Bathinda and Nangal plants were revamped for feed stock conversion from fuel oil to Natural gas, an eco-friendly fuel during 2012-13/2013-14 Vijapur plants of the company were also revamped for energy savings and capacity enhancement during 2012-13, thus increasing its total annual capacity from 20.66 LMT from 17.29 LMT, an increase of 20%. The company currently has a total annual installed & is the **2<sup>nd</sup> largest producer of Urea** in the with a share of about **16% of total Urea production** in the country.

**Table-1 Performance at a Glance**

Particulars	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16
<u>Production</u> Urea in LMT	37.99	37.27	38.59	38.10	38.10	37.99
<u>Capacity</u> Utilisation %	117.6	115.4	119.4	117.9	117.9	106.47
<u>Sales</u> in LMT	39.65	36.08	38.98	39.16	37.58	36.41
<u>Turnover</u> (Inc. Subsidy)	11516	12782	12214	8928	7643	7766

**(Source: National Fertilizer Annual Report)**

From table 1 it appears that there is consistency in Urea fertilizer production of NFL in last 6 years, and NFL is 2<sup>nd</sup> largest company in Urea production.

The NFL has optimally utilized its production capacity.

Table1 shows that despite covid-19, its turnover has been much better.

**Literature of Review**

**1- Mehul Shah (2015)-** Reported to the A Financial Ratio Analysis of Gujarat Narmada Valley Fertilizer and Chemicals Ltd. That used of technique study to traditional and poor financial performance appraisal techniques.

**2- Yogesh Saxena (2017)-** Study to the Performance Analysis of Indian Farmers Fertilizer Cooperative Limited (IFFCO). Through technology management is to used ANNOVA and ratio analysis but these techniques are not suitable in this study.

**3- Ekta Panday (2019)-** Is to study on the Financial Performance Analysis of Fertilizers Industry in Gujarat. To used analysis tools like- turnover, consumption of raw materials, financial cast of fertilizers companies in Gujarat, and that examine only financial ratio and these not used a statistical tools and test like-t test, ANNOVA and not make a mature hypothesis.

**Objectives of the Study**

The broader objective of this study is to know the financial performance of fertilizer industry, this objective is sub-divided into:

- To know **profitability and growth** of the National Fertilizer Limited.
- To know **financial position** through trend analysis.



- To assess the **operational efficiency** of fertilizer industry.
- To make suggestions for improvement of financial soundness.

### Limitations of the study

The following study suffers from certain limitations:

- Study exclusively depends on the published annual financial report, so it is subject to all limitations that are constitutional in the dependent on published financial statements.
- The study based on secondary sources, **six previously years** for each industries from **2015-16 to 2020-21**.

### Research Hypothesis

**Null Hypothesis:** There is no any significant difference in financial performance in between years.

**Alternative Hypothesis:** There is significant difference in financial performance in between years.

### Data Interpretation

**Table-2 (What if Analysis)**

YEAR	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Current Ratio	1.28	1.33	1.26	1.14	1.06	1.15
Quick Ratio	.98	1.01	.99	.94	.83	.89
Fixed Asset Turnover Ratio	5.23	4.64	5.74	4.08	6.76	4.04
Working Capital Turnover Ratio	2.12	3.21	1.34	4.75	3.56	2.0
Debt-Equity Ratio	3.62	2.26	1.54	2.91	4.22	.87
Operating Profit	7466.56	8734.32	8954.36	12245.24	987.53	1123.54
PBT	288.42	324.88	334.83	463.37	-252.71	343.46
PAT	198.62	208.16	212.77	298.45	-171	250
Return on Capital Employed	4.12	3.54	2.56	4.34	1.53	3.54
PBT to Net Worth	16.34	14.03	13.32	16.87	6.94	13.25
PAT to Net Worth	12.32	9.43	8.56	11.75	3.43	7.86

About the quick ratio and current ratio of NFL, which is below an ideal ratio, so it should be taken care of so that the daily operations can be done in a planned manner, and reduce the overinvestment in assets.

According to table2 debt-equity ratio is changing a lot, so the company needs a better investment policy. There is a lot of change in the capital employed by NFL but there have been improvements as compared to last years.

**Table 3**

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Mean	2679.4	2523.8	2667	3469	3562	3579
SD	3256.40	3144.71	3037.18	3597.04	4971.57	4980.98
CV%	121.53	124.60	113.80	103.69	139.57	139.17



It appears from the coefficient of variation (CV) that the company had stability in the past years but is facing inconsistency in the present scenario, Which need improvement.

**Table-4**

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
PBT(cr.)	283.49	287.83	368.64	405.47	444.10	486.19
Tax (cr.)	86.40	97.83	125.30	137.82	150.95	165.26
Tax rate%	30.48	33.49	33.99	33.99	33.99	33.99
PAT(cr.)	197.09	190.00	243.34	267.65	293.15	320.94

(Source: Annual report of National Fertilizer Limited)

### 6 Years Financial ratios analysis of NFL-

NFL Financial Performance Report, there is a yearly financial report given from the NFL website from 2015-16 to 2020-21. There are turnover, Profit before tax, Profit after tax, share capital, net worth given in (Rupee Crore). In the interpretation of the graph of the yearly financial report, the total turnover in the year 2020-21 is higher than the previous years, while Profit before tax and Profit after tax both are a little bit higher than past years in 2020-21. The share capital was highest in 2015-16 after that; it seems continuously decreasing from 2015-16 to 2020-21. The net worth was continuously increasing from the year 2015-16 to 2020-21.

**Table-5 ANOVA Test of NFL Financial Performance Report**

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F-crit
Between years	2545376	6	6123454.87	0.041346542	.0976542	.4563613
Within year	2.46+06	25	13587542.74			
Total	2.42+06	31				

**Null Hypothesis:** There is no any significant difference in **financial performance** in between years.

### Alternative Hypothesis

There is significant difference in **financial performance** in between years

**In Table Number 5-** The calculated 'F value' (0.05) is lower than the table value 'F Critical' (2.46) at 0.05% level of significance. Hence it is proved that there is no significant difference in the Yearly NFL Financial Performance Report between years. Therefore, the test is Non- significant, and the null hypothesis is accepted, and the alternative hypothesis is rejected.

### Conclusion & Suggestions

From the ratio analysis of Financial Statements of NFL for the 6 years, it can be concluded that liquidity position of the company was not very good as compared to the ideal situation because in the year 2015-16 Liquidity Ratio is high form their standard ratio. Debt Equity Ratio of the company is satisfactory. The company is dependent more on Long Term debts than Shareholder's Funds, which is the cheap source of capital than share capital due to which shareholder does can get a higher share in earnings. In the year 2014-15, the long term funds supplied by the creditors are used efficiently. But in the year 2015-16, Return on Capital Employed goes down because there is decrease in Profit before Interest and Tax. There is an increase in Profit before Depreciation Interest and Tax in the year 2015-16 than previous year. But in spite of its increase, Profit after Tax goes down due to finance cost and



depreciation. The increase in finance cost is mainly due to increase in borrowings of the company. So, the company should try to maintain low finance cost so that profit can be increased. As far as dividend is concerned, the company is following Stable Dividend Policy and dividend is almost constant level over the study period which is a good source of regular income for the shareholders. Thus, it can be concluded from the study of 5 financial periods of NFL that the maximum Financial Indicators of NFL are not at a very good position. From the analysis of main Financial Indicators it is clear that Operating Profit to Turnover Ratio, Fixed Assets Turnover Ratio, Debt Equity Ratio, Current Ratio, Liquidity Ratio, etc. are at a desired position. However, company's Return on Capital Employed, Profit before tax to Turnover, etc. were undesirable as compared to Previous Years.

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