

## MANAGEMENT OF WORKING CAPITAL IN FERTILIZER INDUSTRY (IFFCO)

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Sonika\*

### ABSTRACT

*As a result of development there was a strong demand for fertilizer in India. The Indian fertilizer market is growing steadily by increasing demand for staple food crops like wheat, soybeans, rice and other grains. Due to continuous rise in population and more demand for food grains are boost the growth of the fertilizers market. For fulfilling the needs of farmer a new IFFCO cooperative was created. IFFCO is a leading fertilizer company in India that has been empowering farmers for over 57 years. The company was founded with the goal of providing high quality fertilizers to farmer at the right time and sufficient quantities to increase crop productivity. The objective of this paper is to analysis the management of working capital of Indian farmer's fertilizers corporative limited (IFFCO). Working Capital management is very important in any industry as it ensure a company has sufficient liquidity to meet short-term financial obligation, take advantage of business opportunities and manage cash flow efficiently. The requirement of the study is to analysis the financial performance of IFFCO at also identify the factors which contribute for success of IFFCO. The study has found that the IFFCO fertilizer industry has been managing its working capital very effectively during the study period.*

**KEYWORDS:** *Financial Performance, Working Capital Management, Ratio Analysis, Current Ratio, Liquid Ratio, Net Profit Ratio, Cash Flow Analysis.*

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### Introduction

India is the largest poplar country in the world. India's population is near about to 17.78% of the total world population. The population density in India is 438.58 people per square kilometer. In India the population growth after independence exceeded the agriculture growth in order to maintain a balance between food and population it become very necessary to growth healthy crops which are full of nutrients.

Farmer needs to ensure that they have healthy soil. Plants required number of nutrients which they get from the soil through their roots. Ever harvest reduce the soil Productivity without fertilizers nature struggle to replenishment the nutrient in the soil. Fertilizers are the most important chemical substance that farmers use to improve the growth and productivity of crops. It provides valuable nutrients that plants need to grow. Agriculture is a very important sector and fertilizer is an essential component of it.

The fertilizer industry is the backbone of the Indian economy cannot do without. This industry in India is extremely vital as it manufactures some of the most important raw material which is required for the production of crops. Fertilizers supply to plants three necessary nutrients they need to grow: Nitrogen (N), Phosphorus (P), Potassium (K) as well other micro nutrients. In this context IFFCO is performing well in fertilizer Industry.

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\* Department of Commerce, VMLG College, UP, India.

### Literature Review

In the mid 1960's the cooperative sector in India was responsible for the distribution of 70% of the fertilizers consumed in the country. This sector has sufficient infrastructure to distribute this sector has sufficient infrastructure to distribute fertilizer but had no production facilities and therefore depends on public/private sector for supplies. To sought out form the short coming and fill the gap in domestic demand a new cooperative society IFFCO was created to meet the demand of farmers. It was a unique enterprise in which the country's farmers through their own cooperative societies created this organization to safeguard their interest. IFFCO, is a multi-state cooperative society, wholly on by cooperatives. Established on November, 3<sup>rd</sup> 1965 as a cooperative society with the primary objective of providing high quality fertilizers to farmer at reasonable price. The cooperative began with a modest share capital of 55 lakhs and 57 member societies.

It has undergone remarkable expansion. Presently, it serves an extensive network of 35,617 member societies and has augmented its share capital to 630.13 Crore.

Today, IFFCO has been ranked as the No. 1 cooperative in the world in the line-up of 300 top cooperatives of the world in the 2023 edition of the Annual World Cooperative Monitor (WCM) report based on the ratio of turnover over GDP per capita income, designed by International Cooperative Alliance (ICA),

IFFCO, being an agricultural cooperative, has its membership open to all agricultural cooperative societies from the primary/village level to state and national level cooperatives in India, of which 80% are primary level societies. The main business of the member societies is to sell IFFCO's Quality Fertilizers to farmers.

During its inception, IFFCO was the first fertilizer cooperative in India to have its own Production Units and at present, IFFCO has five state-of-the art plants located in Kalol, Kandia, Phulpur, Aonla & Paradeep. All its production units are certified with Energy Management System (EnSM) Integrated Management System (IMS), with NABL accredited Nano Biotechnology Research Center (NBRC). Further, in order to meet the demand-supply gap of Indian Fertilizer Industry, IFFCO has entered into Joint Venture Projects outside India in Oman, Jordan & Senegal IFFCO also has a wholly owned subsidiary in Dubai which acts as an International trading arm of IFFCO and primarily helps to handle imports, exports and logistics support. With time, IFFCO has diversified into different areas such as Insurance, Agrochemicals, E-Commerce, Rural Finance, Special Economic Zone, etc. for the benefit of farmers.

In order to promote sustainable as well as environment-friendly agriculture, IFFCO has launched Nanotechnology based products i.e. Nano Urea and Nano DAP. IFFCO has contributed immensely towards Green Revolution in India. It has been contributing continuously for development of Nation by participating and promoting all initiatives launched by the Govt. of India.

The cooperative started with the small fertilizer plant in Kalol, Gujrat. Over the years it expended its production capacity by setting up new plants in Phulpur (Uttar Pradesh) and Paradeep (Odisha). The cooperative diversified its product portfolio by introducing others fertilizers, such as DAP and MOP. Today IFFCO is one of the largest cooperative fertilizer company in the world with turnover of over 25000 crores.

### Working Capital Management

Liquidity and profitability are the two important aspect in a business. liquidity depends on the profitability of business activities and profitability cannot be achieve without sufficient liquid resource. Both the aspect Liquidity and profitability are closely interrelated.

Working Capital Management is a crucial aspect of any business and IFFCO is no exception. Effect Working Capital Management enables companies to optimize their liquidity, cash management, inventory management, reduce cost and increase profitability.

### Objectives

The Objective of the research paper is to analysis the management of working capital of Indian Farmer fertilizer Cooperative Limited. The objective is sub divided into:

- To examine the financial position of fertilizer company.
- To examine liquidity position of fertilizer company.
- To evaluate the impact of working Capital Management on IFFCO's liquidity, profitability and overall financial performance.
- To identify the key challenges faced by IFFCO in managing its working capital.
- To make suggestion for betterment of financial soundness of company.

### Methodology

The study based on analysis and interpretation of the published account of selected units in the fertilizer industry. The data source required for the study has been taken from the published consolidated annual report of the company. The data collected for the five-year period from the annual report of the company have been suitably rearranged, classified and tabulated as per requirement.

Comparative financial analysis particular the ratio analysis, fund flow and trend analysis have been made.

### Ratio Analysis

Ratio Analysis is a financial tool used to evaluate a company's performance through financial ratio related to profitability, liquidity, solvency and efficiency by the management as well as the extend interested parties before taking a decision.

This paper concerns with a critical evaluation and analytical interpretation of financial performance of IFFCO Ltd.

### Current Ratio

Current Ratio is used to measure the general liquidity and short-term financial position of a firm. It is defined as the relationship between current assets and current liabilities and is also known as working capital ratio. It is calculated by taking current assets and current liabilities. Current Assets as numerator and current Liability as denominator. current assets include cash, cash at bank, short term investment, marketable Securities, sundry debtor, bill receivable, inventories, work in progress and prepared expenses.

Current Liabilities are those obligations are payable within a short period of one year, it includes outstanding expenses, bill payable, sundry creditors, accrued expenses, short term advantages, income tax payable, dividend payable, etc., Generally 2:1 is considered as ideal ratio for a concern. Current Liabilities should be half of Current Assets.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

### Quick or Acid Test Ratio

Quick Ratio is called as Acid Test or Liquid Ratio is a more rigorous test of liquidity than the current ratio. Liquid ratio shows the relationship between quick assets and current or liquid liabilities. Within a short period and without loss of value an Asset is said to be liquid if it can be converted into cash. Liquid Assets include cash in hand, cash at bank, Bill Receivable, Sundry Debtors, Marketable Securities, Temporary investments current Liabilities include outstanding Expenses.

When the firm is liquid and has the ability to meet its current or liquid liabilities in time.

It shows that the firm financial position is good and on the other hand low liquid ratio represent that the firm liquidity position is not good. Normally, this ratio should be 1:1 if it is less than 1 it means that the company's current finance position is not sound.

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

$$\text{Liquid Assets} = \text{Current Assets} - \text{All stocks} - \text{prepaid Expenses}$$

### Working Capital Turnover Ratio

The Working Capital Turnover Ratio (WCTR) is a financial metric that measures a company's efficiency in utilizing its working capital to generate sales. It assesses how effectively a company manages its working capital to produce revenue.

$$\text{Working Capital Turnover Ratio} = \frac{\text{Cost of Sales or Sales}}{\text{Working Capital}}$$

### Operating Profit Ratio

The Operating Profit Ratio, also known as the Operating Margin Ratio, is a financial metric that measures a company's operating profitability. It calculates the proportion of operating profit earned from sales revenue.

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Net Sale}} \times 100$$

### Gross Profit Ratio

Gross Profit Ratio indicates about the extent of efficiency. This is the indication of higher or lower profitability of the concerned. It is the relationship between gross profit and net sale. Gross profit measures the profit earning capacity available on sale. No ideal is standard is fixed for this ratio.

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sale}} \times 100$$

### Net Profit Ratio

It is measure of all the over-all profitability of a business concern. Net profit ratio indicates the relationship between the net profit earned by the concern and net sales. Net Profit is a surplus of revenue over expenses in a particular accounting period.

Net profit includes operating profit as well as non-operating profit. It is calculated to check the total efficacy and performance of business concern.

High ratio shows better efficiency and performance of business concern, where low ratio indicates less profitability and poor performance of business concern.

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sale}} \times 100$$

**Table 1: Important Financial Analysis of Working Capital Management of IFFCO**

Ratios	2019–20	2020–21	2021–22	2022–23	2023–24
Current Ratio (CR)	4.99	4.44	3.60	4.01	3.97
Quick Ratio QR	4.18	3.66	2.54	2.98	3.07
Working Capital Turnover (times)	1.95	2.13	3.42	4.28	2.74
Operating Profit to Turnover (%)	6.92	9.04	3.62	4.24	4.79
Profit Before Tax to Turnover (%)	4.35	8.51	6.23	6.81	8.22
Profit Before Tax to Net worth (%)	7.46	12.61	12.17	17.51	12.55
Profit After Tax to Net worth (%)	5.85	9.33	9.16	13.02	9.48

### Finding

Form the above table it is clear that current ratio and liquid ratio of all five years above the standard ratio i.e., 2:1 and 1:1. It indicates the sound financial position of the company but it fluctuated over the past five years. Both the ratio in 2019-2020 show strong liquid position. But in 2020-2021 and 2021-2022 they decrease. In 2022-2023 both are improving. In 2023-2024 current ratio decreases slightly while quick ratio gradually improves.

Working Capital Turnover Ratio shows how effectively a company manages the working capital to produce revenue. Table shows that company is continuously growing as its working capital is improving year by year till 2022-2023. A higher working capital Turnover Ratio indicates efficient working capital management and effective use of resources to generate sales. But it shows that there is a decline in working capital in 2023- 2024. Which indicate inefficient working capital management, time up too much capital in inventory, accounts receivable, or other current assets. So the company should try to maintain the proper level of working capital Turnover Ratio.

Any company's financial performance can be assessed by analyzing its gross profit, operating profit and net profit. IFFCO's all three profit increase efficiently in 2020-2021 as compared to 2019-2020. There is a decline in all three ratios in 2021-2022, it may be attributed to pandemic related challenges. In 2022-2023 and 2023-2024 there is a recovery in operating profit, gross profit and there is a strong recovery in net profit in the year 2022-2023. But table shows that there is a downfall in 2023-2024 in the Net Profit Ratio.

### Limitation

- The study is based on secondary data.
- The analysis is based on secondary data.

- A sample of one fertilizer industry is taken.
- Five-year data has been analyzed but the result may not be proper for long run.
- The study is based ON consolidated financial statement of the company which may leave some ground of errors.

### Suggestion

Following points can be suggested:

- Effective management of working capital is crucial for the financial health and profitability of Indian Farmers Fertilizer Cooperative Ltd (IFFCO). To achieve this, IFFCO can implement efficient cash management strategies, such as cash flow forecasting, cash pooling, and short-term investments.
- Optimizing inventory management through just-in-time systems, supply chain streamlining, and regular inventory monitoring can help reduce storage costs and improve inventory turnover.
- It can improve its accounts receivable and payable management by establishing a clear credit policy, considering accounts receivable financing options, and negotiating favorable payment terms with suppliers.
- Regularly monitoring working capital metrics, such as the working capital turnover ratio, cash conversion cycle, and debtors and creditors days, can also help identify areas for improvement.
- Technology and automation can also play a significant role in enhancing working capital management at IFFCO.

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