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### **Financial Performance of Co – Operative Fertilizer Industry In India**

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#### **ABSTRACT**

India is an agricultural country. The agricultural output contributes 17.9 percent to the country's GDP. Contribution of Agriculture sector in Indian economy is much higher than world's average of 6.1 percent. India is ranked as second worldwide in agricultural output. Fertilizer is generally defined as "any material, organic or inorganic, natural or synthetic, which supplies one or more of the chemical elements required for the plant growth". The fertilizer industry presents one of the most energetic sector within the Indian economy. The Various types of profitability ratios, short term and long term solvency ratios are used and lending suggestions to improve the financial position of the company. The Indian fertilizer industry will have a good future but more efforts are required by the industry to meet out financial obligations. Generally the co-operative fertiliser sector is much better than public sector. In this study IFFCO is better than KRIBHCO in operating efficiency but high debt burden than KRIBHCO.

**KEYWORDS:** Fertilizer, Agriculture, Bio Fertilizer and Chemical Fertilizer.

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## **INTRODUCTION**

India is an agricultural country. The agricultural output contributes 17.9 percent to the country's GDP. Contribution of Agriculture sector in Indian economy is much higher than world's average of 6.1 percent. India is ranked as second worldwide in agricultural output. The world population is estimated to increase 9-10 billion by 2050. Due to increasing of population, India is in the situation of increasing agricultural products also. In olden days manure was the major input for agriculture to increase agricultural output. But at present there is in sufficiency of manure, reduction in rearing of live stocks the farmers are using fertilizer to increase output as well as to meet out the demand of increasing population. The chemical fertilizers being one of the related parts of the agriculture, there is tremendous growth for chemical fertilizer industry in India. Over 60 per cent of the Indian populations are depending on agriculture. The contribution of the population to agriculture and farm land also reducing day by day at the same time demand for agriculture produce also increasing.

Fertilizer is generally defined as "any material, organic or inorganic, natural or synthetic, which supplies one or more of the chemical elements required for the plant growth".

Fertilizer industry is grouped into small scale, large scale owned by public, private and co-operative sectors. There are 52 private sector companies, 9 public sector companies and two cooperative sectors large scale companies are playing. India has appeared as the third largest producer of nitrogenous fertilizers. The large scale use of chemical fertilizers has been instrumental in bringing about the green revolution in India. The fertilizer industry in India began its journey way back in 1906.

## **CO-OPERATIVE FERTILIZERS EVOLUTION**

Indian farmers fertilizer cooperative limited, multi state cooperative society involved in the manufacturing and marketing of fertilizer in India. IFFCO is largest co-operative in the world turnover on GDP. IFFCO have the market share of Urea around 15% and complex fertilizers for 29%.The Head quarters located at New Delhi started in the year 1967. At present IFFCO is running with five units with 11 subsidiaries which are producing Ammonia, urea NPK, phosphoric acid and sulphuric acid. IFFCO always educating farmers for the use of balanced fertilizers depends on the nature of soil by soil test, to reduce the over use of urea for sustainable development introduced organic and bio fertilizer. Marketing of its products through a network of greater than 35,000 cooperative societies, cooperative federations, farmers' service centre among 30 states. IFFCO is rated by CRISIL and CARE with the rate of A1+ for short term and long term AA regarding timely payment.

Krishak Bharati Cooperative Limited (KRIBHCO) is also another one cooperative society manufacturing Ammonia and urea. KRIBHCO was established in 1980 as multi state co operative society registered at NewDelhi. Presently KRIBHCO have two urea plants and three bio fertilizer plants with six subsidiaries. The channels of marketing include cooperative apex federations, institutional agencies and primary agricultural cooperative societies. The marketing of products range cover major inputs like hybrid seeds, liquid bio fertilizer, imported fertilizer like single super phosphate, di-ammomiam phosphate and murriate of potash apart from this the society marketing neem coated urea has placed prime in the minds of farmers. The society is rating by ICRA by awarding A1+ regarding short term borrowings and letter of credit for timely payment. On the long term borrowings ICRA rated as AA which means highly safe.

**Dr. MK Jain et al., (2017)** they concluded that As a result of the Green Revolution, there was a strong demand for fertilizers in India. To gain opportunities in this area, a new IFFCO cooperative was created specifically to meet the needs of farmers. But in order to be a leader in the fertilizer industry and to continue this success, the company should focus on proper operations and the coordination among all the units and would continue with strategic joint ventures and further diversification.

**Vineet Sukla (2018)** summarized as the country's economic growth is projected to be 7.6 per cent for the current fiscal year 2017-18 due to better prospects for the agriculture sector on account of normal monsoon being expected during current year. Recent estimates show that food grain production in 2016-17 has touched a new record of 273.4 million tonnes or 8.7 per cent higher as compared to last year. Further, waiver of loans of farmers and technological interventions like e-trading of agriculture produce by various state governments are likely to make favourable impact in the growth of agriculture economy.

## **STATEMENT OF THE PROBLEM**

The main aim of the study is to know the performance trend of the fertilizer industry. In India co-operative sector contributes more to the agriculture. The main problem of the study is the public fertilizer company is not commercially profitable. India is an agricultural country and a lot of things depend on agriculture, the farmers are producing different crops by utilizing different fertilizers. Financial resources and operational efficiency are the foundation for success of every business. To know about the capital structure, turnover efficiency and profitability of IFFCO and KRIBHCO this study has been undertaken.

## **OBJECTIVES OF THE STUDY**

- To study growth and development of Fertilizer Industry in India.

- To analyze the financial performance of cooperative fertilizer limited.

## **METHODOLOGY AND SAMPLING DESIGN**

The research approach is analytical nature. The universe of the study is fertilizer industry in India. In this study the researcher selected only cooperative fertilizers limited in India. There are two cooperative limited companies, IFFCO and KRIBHCO in India. The two cooperative companies are taken for the study. So this study follows census method.

## **COLLECTION OF DATA**

The study is mainly based on secondary data. The secondary data is taken from published annual reports of the Fertilizer Company. In addition to that, financial literature and published articles on the related aspects are also considered. Other information related to the company are collected from the Economic Times and websites.

## **TOOLS USED**

Ratio analysis is used to analyze financial performance of company and correlation, trend analysis are employed in this study.

## **PERIOD OF STUDY**

The study covers the period starting from 1<sup>st</sup> April 2013 to 31<sup>st</sup> March 2018.

## **LIMITATIONS OF THE STUDY**

- The analysis is based on the company annual report it is subjected to limitations of secondary data.
- This study reveals the financial performance of cooperative sector only not applicable to whole industry.
- This study covers only five years from 1<sup>st</sup> April 2013- 31<sup>st</sup> March 2018.

## **ANALYSIS AND DISCUSSION**

The net profit ratio expresses the relationship between net profit after-taxes and sales. This ratio arrived at after taking operating and non- operating expenses and incomes. The highest percentage of ratio indicates higher the efficiency of firms.

**Table 1: Net profit ratio**

Year	IFFCO (%)	KRIBHCO (%)
2013-14	1.52	2.40
2014-15	2.58	0.42
2015-16	2.38	2.56
2016-17	3.09	1.84
2017-18	4.51	1.60
Mean	2.82	1.76
S.D	1.10	0.85
CV	39.18	48.08

Source: annual report

From the table the net profit ratio of IFFCO is increasing trend and KRIBHCO is fluctuating trend over the study period. In the year 2017-18 IFFCO earned higher net profit ratio and in the year 2013-14 the net profit ratio was low. The mean value of net profit ratio is 2.82. In the year 2016-17 KRIBHCO achieved highest net profit ratio and in the year 2014-15 the company earned lowest ratio. The mean value is 1.76 and also found that the co-efficient of variation 48.08. The standard deviations of both the companies are nearly similar results but KRIBHCO has more variation in its mean.

**Table 2: Return on capital employed ratio**

Year	IFFCO (%)	KRIBHCO (%)
2013-14	2.41	5.43
2014-15	6.04	3.53
2015-16	5.08	6.48
2016-17	4.79	5.32
2017-18	5.36	4.61
Mean	4.74	5.07
S.D	1.38	1.09
CV	29.15	21.51

Source: Annual Report

From the above table conferred that the value of all assets employed in a business position was fluctuating in both the companies. The effective utilization of fund was in the year 2014-15 in IFFCO. The mean value of capital employed was 5.07 over the study period and highest utilization of fund in KRIBHCO was 2015-16. The highest ROCE indicates a successful growth of company.

**Table 3: Debt Equity Ratio**

Year	IFFCO (times)	KRIBHCO (times)
2013-14	1.46	0.71
2014-15	1.56	0.77
2015-16	1.90	1.00
2016-17	1.43	0.99
2017-18	0.69	0.90
Mean	1.41	0.87
S.D	0.44	0.13
CV	31.44	14.89

Source: Annual Report

It is concluded that in the year 2017 -18 debt equity ratio was 0.69 and the debt equity ratio of IFFCO was gradually decreasing. The debt equity ratio of KRIBHCO was slight increase over the study period and the lowest ratio was in the year 2013-14. However the mean of the each company is within the ideal ratio of 2. But the debt burden of KRIBHCO is less than IFFCO. Lower the ratio is the sign of lower risk of loan default and financial burden.

**Table 4: Fixed assets turnover Ratio**

Year	IFFCO (Times)	KRIBHCO (Times)
2013-14	4.23	1.53
2014-15	5.25	1.75
2015-16	6.04	2.25
2016-17	3.78	1.94
2017-18	3.06	2.05
Mean	4.47	1.90
S.D	1.18	0.28
CV	26.45	14.52

Source: Annual Report

The fixed assets turnover ratio is used to measure operating performance. Highest the ratio indicates effective utilization of assets. It was noticed that the year 2015-16 the IFFCO utilized the fixed assets at 6.04 times and KRIBHCO 2.25 times in the same year. The mean value of IFFCO is more than KRIBHCO. Standard deviations are 1.18 and 0.28 respectively.

**Table 5: Working Capital Turnover Ratio**

Year	IFFCO (Times)	KRIBHCO (Times)
2013-14	2.21	2.31
2014-15	2.57	2.18
2015-16	2.46	2.04
2016-17	1.78	1.83
2017-18	1.91	1.89
Mean	2.19	2.05
S.D	0.34	0.20
CV	15.58	9.71
correlation	0.27	-0.75

Source: Annual Report

A high turnover ratio shows that company is efficiently using its short term assets and liabilities. From the Table it is conferred that the ratio was decreased during the last two years in both the companies. In the year 2014-15 highest ratio of 2.57 in IFFCO and 2013-14 was highest in KRIBHCO. The correlation between working capital turnover and current ratio are positively correlated in IFFCO and negatively correlated in KRIBHCO.

**Table 6: Interest coverage ratio**

Year	IFFCO	KRIBHCO
2013-14	1.47	2.13
2014-15	2.35	1.29
2015-16	2.12	2.25
2016-17	2.18	1.85
2017-18	2.65	1.83
Mean	2.15	1.87
S.D	0.43	0.37
CV	20.16	19.84

Source: Annual Report

From the table noticed that the interest coverage ratio both the company has been fluctuated year by year during the study period. The lowest coverage ratio is preferable. The year 2013-13 was good in IFFCO and 2014-15 has 1.29 highest interest charges ratio. The mean value of interest coverage ratio was 2.15 and 1.87. The co-efficient of variations of both the companies are 20.16 and 19.84 respectively.

**Table 7: Fixed assets to shareholders' funds ratio**

Year	IFFCO	KRIBHCO
2013-14	2.83	1.03
2014-15	2.99	1.03
2015-16	3.33	1.01
2016-17	2.53	1.03
2017-18	1.98	0.98
Mean	2.73	1.02
S.D	0.51	0.02
CV	18.66	2.16

Source: Annual Report

The ideal ratio for fixed assets to shareholders' funds ratio is 1. In IFFCO it is more than one over the study period this indicates share holders funds are less than the fixed assets and in KRIBHCO in the year 2017-18 the debt burden has decreased. The mean values of the ratio are 2.73 and 1.02. The debt burden of KRIBHCO is less than IFFCO.

**Table 8: Trend percentages of sales and net profit**

Year	IFFCO		Rs. In Cr	
	Sales(Rs)	Trend (%)	NP(Rs)	Trend(%)
2013-14	20845.53	100.00	318.81	100.00
2014-15	25047.51	120.16	646.81	202.88
2015-16	29684.98	142.40	705.5	221.29
2016-17	22130.23	106.16	684.7	214.76
2017-18	20787.55	99.72	937.17	293.96

Source: Annual Report

It is noticed from the trend percentage table the sales and net profit trend fluctuating trend. In 2013-14 is taken as base year and 2014-15 has highest trend percentage and 2017-18 has highest net profit trend in IFFCO. The sales and net profit are positively correlated (.12).

**Table 9: Trend percentages of sales and net profit**

Year	KRIBHCO		Rs. In Cr	
	Sales (Rs)	Trend (%)	NP(Rs)	Trend (%)
2013-14	5059.19	100.00	121.93	100.00
2014-15	5677.55	112.22	23.88	19.59
2015-16	7361.45	145.51	188.35	154.47
2016-17	6599.73	130.45	121.48	99.63
2017-18	6825.97	134.92	109.31	89.64

Source: Annual Report

It is conferred from the trend percentage table the sales and net profit trend fluctuating trend. In 2015-16 has highest trend percentage of sales and 2015-16 has highest net profit trend in KRIBHCO. The sales and net profit are positively correlated (.58).

**Table 10: Current ratio**

Year	IFFCO	KRIBHCO
2013-14	5.39	3.57
2014-15	5.01	5.32
2015-16	5.77	5.71
2016-17	5.63	5.52
2017-18	3.88	5.47
Mean	5.14	5.12
S.D	0.76	0.88
CV	14.78	17.13

Source: Annual Report

The ideal ratio for industrial sector is 1.5:1. In this table shows current ratio of IFFCO and KRIBHCO was not satisfactory. It does not even near the ideal ratio over the study period. It indicates that the company has difficult to face their current obligations. The mean value of current ratio is much higher than ideal ratio.

**Table 11: Liquid ratio**

Year	IFFCO	KRIBHCO
2013-14	4.14	3.16
2014-15	4.07	4.87
2015-16	4.97	5.17
2016-17	4.78	4.57
2017-18	3.30	4.50
Mean	4.25	4.45
S.D	0.66	0.77
CV	15.54	17.30

Source: Annual Report

Liquid ratio of both the companies was not satisfactory. The ideal ratio of a company is 1:1. But from the above table no year to near the ratio 1. During the study period 2017 -18 were the most liquid year in IFFCO and 2013-14 in KRIBHCO.

## RESULTS

- The net profit ratio of IFFCO is better than KRIBHCO.



- The effective utilization of capital is KRIBHCO than IFFCO that is the mean value of return on capital employed is higher than IFFCO.
- The debt equity and interest coverage ratio of KRIBHCO is less than IFFCO.
- Fixed assets turnover and working capital turnover ratio of IFFCO is higher than KRIBHCO
- The sales and net profit trend are fluctuating trend. The sales and net profit are positively correlated in both the companies.
- The current ratio and liquid ratio of IFFCO and KRIBHCO are not satisfactory.

## **SUGGESTIONS**

- ❖ The companies take an effort to reduce debt burden by way of increasing owned fund. It is automatically reduce financial charges.
- ❖ The companies allot more funds for short term obligations to maintain its liquidity position.
- ❖ The IFFCO pay more attention in capital budgeting because they made investment in fixed assets than equity.
- ❖ Both the companies mat made an attempt to increase sales and profit.
- ❖ The companies encourage the farmers to buy the fertilizers through co- operative societies only.

## **CONCLUSION**

The financial performance analysis shows the strength and weakness of each concern. This study is carried out to analyze the financial performance of co-operative fertilizer companies in India. The fertilizer industry presents one of the most energetic sector within the Indian economy. The Various types of profitability ratios, short term and long term solvency ratios are used and lending suggestions to improve the financial position of the company. The Indian fertilizer industry will have a good future but more efforts are required by the industry to meet out financial obligations. Generally the co-operative fertilizer sector is much better than public sector. In this study IFFCO is better than KRIBHCO in operating efficiency but high debt burden than KRIBHCO.

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