



Financial analysis of fertilizers in India

D.Krupavathi, Research Scholar, Department of Commerce
Sri Venkateswara University, Tirupati, Andhra Pradesh-517502

Dr.P.Mohan Reddy, Professor, Department of Commerce
Sri Venkateswara University, Tirupati, Andhra Pradesh -517502

Abstract: *Finance is a scarce resource and it has to be managed efficiently for the successful functioning of an enterprise. Inefficient financial management has resulted in the failure of many business organizations. Irrespective of any difference in structure, ownership and size, the financial organization of the enterprise ought to be capable of ensuring that the various finance functions - planning and controlling are performed with the utmost efficiency. The profitability and stability of the business depends upon the manner in which finance functions are performed and related to other business functions. There are more than 57 large and 64 medium and define the small units also small fertilizer production units under the India fertilizer industry. The main products manufactured by the fertilizer industry in India are phosphate based fertilizers, nitrogenous fertilizers, and complex fertilizers. The fertilizer industry in India with its rapid growth is all set to make a long lasting stand in the world market. The Government of India has been constantly adopting practices advantageous to augmenting accessibility and utilization of fertilizers in India.*

Key words: *fertilizer industry, rapid growth, fertilizer industry*

Introduction

Finance is a scarce resource and it has to be managed efficiently for the successful functioning of an enterprise. Inefficient financial management has resulted in the failure of many business organizations. Irrespective of any difference in structure, ownership and size, the financial organization of the enterprise ought to be capable of ensuring that the various finance functions - planning and controlling are performed with the utmost efficiency. The profitability and stability of the business depends upon the manner in which finance functions are performed and related to other business functions. In India business finance has laid more stress on comparing financial results of public and private sector undertaking vis-

à-vis profitability. The factors in the financial market such as social, economic, political and other external considerations significantly influence internal decisions. Planning and control is a broad approach to accomplishing the management function. Its development and usefulness have significantly increased in recent years. It is especially significant in that the functional areas of management brought into focus, a broad mutual enrichment of functions between management and accounting that is a vital feature of the successful life of a progressive enterprise.

Agriculture plays a vital role in the Indian economy. Over 70 per cent of the rural households depend on agriculture for their livelihood. Agriculture, along with fisheries and



forestry, contribute one-third of the nation's GDP and is its single largest contributor. The total share of Agriculture & Allied Sectors (Including agriculture, livestock, and forestry and fishery sub sectors) in terms of percentage of GDP is 13.9 percent during 2013-14. The Government during the budget 2014-15 took a number of steps for sustainable development of Agriculture. These steps include enhanced institutional credit to farmers; promotion of scientific warehousing infrastructure including cold storages and cold chains in the country for increasing shelf life of agricultural produce; improved access to irrigation through Pradhan Mantri Krishi Sichayee Yojana; provision of Price Stabilisation Fund to mitigate price volatility in agricultural produce; mission mode scheme for Soil Health Card; setting up of Agri-tech Infrastructure fund for making farming competitive and profitable; providing institutional finance to joint farming groups of "Bhoomi Heen Kisan" through NABARD; development of indigenous cattle breeds and promoting inland fisheries and other non-farm activities to supplement the income of farmers.

Fertilizers are substances that are required for agricultural growth. Fertilizers can be both organic and inorganic. Fertilizer consists of 16 elements. Out of these sixteen, 9 elements are required in large quantities while the other seven are needed in smaller ones. The fertilizer industry in India is extremely vital as it manufactures most important raw materials required for crop production. The objective of the fertilizer industry is to ensure the inflow of both primary and secondary elements in large quantities required for crop production.

The success of the agricultural sector in India is largely dependent on the fertilizer industry. The benchmark for food industry in India is mainly due to the fertilizer producing companies. India is centre to numerous government and private fertilizer companies.

Fertilizer industry in India

In the present scenario, there are more than 57 large and 64 medium and define the small units also small fertilizer production units under the India fertilizer industry. The main products manufactured by the fertilizer industry in India are phosphate based fertilizers, nitrogenous fertilizers, and complex fertilizers. The fertilizer industry in India with its rapid growth is all set to make a long lasting stand in the world market. The Government of India has been constantly adopting practices advantageous to augmenting accessibility and utilization of fertilizers in India. Consequently, the annual utilization of fertilizers in nutrient terms (N, P & K), has grown manifold from a mere 0.7 lakh MT in 1951-52 to a whopping 264.86 lakh MT 2009-10. Utilization of fertilizers, which was earlier less than 1 Kg per hectare in 1951-52, has risen to the height of 135.27 Kg in 2009-10. These days, the country has achieved self-reliance in manufacturing urea with the result that India could easily acquire the quantum of nitrogenous fertilizers required through the home-grown industry.

Similarly, sufficient home-grown capacity has been installed relating to phosphatic fertilizers to meet Indian farmers' needs. On the other hand, the unprocessed supplies and intermediates for the same are imported. The industry made a humble start in 1906, when the



first production unit of Single Super Phosphate (SSP) was installed in Ranipet near Chennai with an annual capacity of 6000 MT. The Fertilizer & Chemicals Travancore of India Ltd. (FACT) at Cochin in Kerala and the Fertilizers Corporation of India (FCI) in Sindri in Bihar (now Jharkhand) were the first big fertilizer plants installed in the fourth and fifth decade with an attempt to set

up an industrial foundation to attain self-reliance in foodgrains. Consequently, green revolution in the sixth decade gave a momentum to the development of fertilizer industry in India and in sixth and eighth decade India saw a noteworthy development in the capacity of fertilizer production. *The top 10 companies in fertilizer sector in India are shown in the table 1.*

Table 1: Fertilizer industries in India

Sl. No.	Company	Address
1.	Coromandal Fertilisers Ltd.	Coromandal House, Sardar Patel Road, Secunderabad
2.	Gujarat State Fertilizers & Chemicals Ltd.	Post : Fertilizer Nagar, Dist: Vadodara-391750
3.	Rashtriya Chemicals and Fertilizers Ltd.	'Priyadarshani', Eastern Express Highway, Sion, Mumbai-400022
4.	Chambal Fertilizers & Chemicals Ltd.	E-5/6, (2 nd Flr.) Commercial Area, Area Colony, Bhopal-462016
5.	National Fertilizers Ltd.	Central Marketing Office, A-II Sector-24, Noida-201301
6.	Fertilizers & Chemicals Travancore Cooperative Office	Kochi, Kerala.
7.	Indian Farmers Fertilizer Co-op Ltd.	34, Nehru Place, New Delhi-110019
8.	Gujarat Narmada Valley Fertilizer Co. Ltd.	P.O.Narmadanagar, Dist:Bharuch
9.	Zuari Agro Chemicals Ltd.	Jaikisan Bhavan, Zuarinagar Goa-403726
10.	Tamil Nadu Agro Industries Corporation Ltd.	"Agro House" Industrial Estate, Guindy Madras-600032

Government policy

The Twelfth Five Year Plan i.e. from 2012-17, a working committee has been set up by Planning Commission under Chairmanship of Secretary (F).

The composition and terms of reference of Working Group is mentioned in subsequent paragraphs,



Phase 1: The terms of reference of the sub groups constituted under the working committee is placed below:

- To assess the requirement of various inputs and infrastructural facilities required during the next five years to fill the gap between demand and supply as far as possible and to have a perspective plan of 15 years.
- To suggest the manner in which to meet the fertilizer demand, total and region-wise, based on a critical techno-economic analysis of buy-versus-make options or strategic reasons.
- To assess the feasibility of revival of the closed urea units of FCIL and HFCL, especially in the context of existing infrastructural facility and interest shown by certain fertilizer as well as non-fertilizer PSUs in their revival.
- To assess the health of the fertilizer industry particularly, PSEs and to suggest measures for improvement and mobilization of the required investments.

Phase 2:

- ❖ To clearly articulate the mid- and long term goals of the sector.
- ❖ To assess the region – wise/state-wise fertilizer demand-supply for the Twelfth Plan and beyond.
- ❖ To assess the feedstock / inputs limitations in general and measures to sustain the pace of growth in the domestic production of fertilizers.
- ❖ To assess the need for fertilizer prices regulatory body in the wake of opening of the MRPs of fertilizers.
- ❖ The group may also make any other recommendations that may be considered appropriate for increasing efficiency, reducing cost and import of fertilizer.

Phase 3:

- To quantify' fund requirement of R&D and means to source them
- To suggest measures for improving the industry-institutional linkage for R&D. Efficient and balanced usage of fertilizers.
- Agronomical importance of low analysis fertilizers, specially SSP as well as that of city compost, organic and bio-fertilizers.
- Deficiencies of secondary and micro nutrients in the soil (other than NPK).
- Production and use of bio-fertilizers.
- Production of slow –release fertilizers.
- Declining response ratio of the soil to the fertilizer application.
- Importance of soil mapping for site specific nutrient management.
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Planning of capacity, production and investment

In the context of rapidly increasing food-grain production in the country, availability of around 340 LMT/PA of urea is to be planned for. It is expected that over and above the present installed capacity of 238.52 LMT/PA of urea (222 LMT from domestic units plus 16.52 LMT from OMIFCO), additional capacity is expected to be created come in the next Plan period as follows:

- 19.96 LMT capacity addition in the existing units such as KRIBHCO, RCF, NFL & Revival of Duncan Industries Ltd., Kanpur plant.
- 38.12LMT from 3 brown field expansion projects and 12.71 LMT from one green field project.



➤ 12.71 LMT from revival of one urea unit of HFC/FCI.

➤ Gap of approx. 30 LMT to be met from JV projects abroad based on low price gas/ LNG and imports. A few JV projects are expected to come up in the countries which have abundant reserves of gas with a buy back arrangement for urea produced by these projects.

The fertilizer sector attracted huge investment during 70's and 90's. However, there has been hardly any investment during the 10th & 11th Plan. The total investment in the fertilizer sector by the end of 2010-11 was Rs.27,247 crore.

Subsidy on fertilizers

Chemical fertilizers play a significant role in the development of agriculture sector and successful management of food security concerns in the country. Fertilizer subsidy has been one of the important features of the fertilizer policy of Government of India. The objective of fertilizer subsidy has been to provide adequate fertilizers to farmers at affordable prices so as to induce consumption. The subsidy has been transferred to the farmers in the form of subsidized Maximum Retail Prices (MRPs) of a basket of fertilizer products. The Department of Fertilizers (DOF) provides subsidy to fertilizer manufacturers/importers equivalent to the gap between the normative delivered costs of subsidized fertilizers and the notified selling prices (MRPs) at the farm gate level. The subsidy on urea was paid on the basis of retention price cum subsidy scheme from 1977 onwards till March, 2003. Under the retention price, the normative cost of production of urea inclusive of a post-tax return of 12% on equity was 170 determined separately for

each unit based on its project cost and efficiencies of production. From April 2003 onwards, a group based New Pricing Scheme (NPS) was introduced with an aim to encourage efficiency and reduce subsidy. Currently, Stage-III of NPS is under implementation with effect from 1st October, 2006.

Under NPS III, the existing urea units are divided into six groups based on vintage and feedstock. The units within a group are allowed the group average concession price updated up till March 2003, or their own concession price, whichever is lower. The energy efficiency is allowed as per the pre-set energy norms which are based on best achieved energy levels up till March 2003. The cost of fuel / feedstock is completely passed - through under the subsidy regime. The fixed costs, which include conversion costs, market & distribution costs etc. remain fixed for the whole pricing period for each Unit. Phosphatic and Potassic Fertilizers were also part of the retention price cum subsidy scheme from November, 1977 till 24th August, 1992. The price and movement control over these fertilizers was completely withdrawn with effect from 25th August, 1992, based on the recommendations of a Joint Parliamentary Committee. As a result, the farm gate price of these fertilizers increased sharply leading to perceptible decline in its consumption. Keeping in view the need for balanced application of all nutrients (N, P & K), an ad-hoc concession scheme was introduced with effect from October, 1992.

Health assessment of fertilizer industry

The Indian fertilizer industry has remained under controlled regime for a long period. The Retention Pricing



Scheme (RPS) introduced in 1977 for nitrogenous fertilizers remained in force till 31st March, 2003. Thereafter, New Pricing Scheme (NPS) for urea units was introduced w.e.f. 1st April, 2003. NPS was implemented in three stages, the last stage being NPS-III which was valid till 31st March, 2010. Since formulation of new policy for a period beyond 31st March, 2010 is yet to be formulated, NPS-III policy has been extended till further order. The RPS for Phosphatic and complex fertilizers introduced in 1979 continued till 1992. Thereafter, P & K fertilizers were decontrolled. However, the Government control and the subsidy had to be re-introduced in various forms like ad hoc concession and indicated MRPs to make these fertilizers available to the farmers at prices much below the cost of production and import. This was to encourage increased fertilizer use for higher agricultural production and productivity to ensure India's food security.

Co-operative sector fertilizers limited in India

Indian Farmers Fertilizer Co-operative Ltd

Indian Farmers Fertiliser Co-operative Limited (IFFCO) was registered on November 3, 1967 as a Multi-unit Co-operative Society. On the enactment of the Multistate Co-operative Societies act 1984 & 2002, the Society is deemed to be registered as a Multistate Co-operative Society. The Society is primarily engaged in production and distribution of fertilisers. The byelaws of the Society provide a broad frame work for the activities of IFFCO. IFFCO commissioned an ammonia - urea complex at Kalol and the NPK/DAP plant at Kandla, both in the state of Gujarat, in 1975. Ammonia

- urea complex was set up at Phulpur in the state of Uttar Pradesh in 1981. The ammonia - urea unit at Aonla was commissioned 1988.

In 1993, IFFCO had drawn up a major expansion programme of all the four plants under overall aegis of IFFCO VISION 2000. The expansion projects at Aonla, Kalol, Phulpur and Kandla were completed on schedule. All the projects conceived as part of VISION 2000 had been realised without time or cost overruns. All the production units of IFFCO have established a reputation for excellence and quality. Another growth path was chalked out to realise newer dreams and greater heights through Vision 2010. As part of this vision, IFFCO has acquired fertiliser unit at Paradeep in Orissa in September 2005.

As a result of these expansion projects and acquisition, IFFCO's annual capacity has been increased to 3.69 million tonnes of Urea and NPK/DAP equivalent to 1.71 million tonnes. In pursuit of its growth and development, IFFCO had embarked upon and successfully implemented its Corporate Plans, 'Mission 2005' and 'Vision 2010'. These plans have resulted in IFFCO becoming one of the largest producers and marketers of Chemical fertilisers by the expansion of its existing Units, setting up Joint Venture Companies.

IFFCO has made strategic investments in several joint ventures. Indian Potash Ltd (IPL) in India, Industries Chimiques du Senegal (ICS) in Senegal, Oman India Fertiliser Company (OMIFCO) in Oman and Jordan India Fertiliser Company (JIFCO) are important fertiliser joint ventures. As part of strategic diversification, IFFCO has entered into several key sectors. IFFCO-Tokio



General Insurance Ltd (ITGI) is a foray into general insurance sector. Through ITGI, IFFCO has formulated new services of benefit to farmers. 'Sankat Haran Bima Yojana' provides free insurance cover to farmers along with each bag of IFFCO fertiliser purchased. To take the benefits of emerging concepts like agricultural commodity trading, IFFCO has taken equity in National Commodity and Derivatives Exchange (NCDEX) and National Collateral Management Services Ltd (NCMSL). IFFCO Chattisgarh Power Ltd (ICPL) which is under implementation is yet another foray to move into core area of power. IFFCO is also behind several other companies with the sole intention of benefitting farmers.

The distribution of IFFCO's fertiliser is undertaken through over 39824 Co-operative Societies. The entire activities of Distribution, Sales and Promotion are co-ordinated by Marketing Central Office (MKCO) at New Delhi assisted by the Marketing offices in the field. In addition, essential agro-inputs for crop production are made available to the farmers through a chain of 158 Farmers Service Centres (FSC).

IFFCO has promoted several institutions and organisations to work for the welfare of farmers, strengthening cooperative movement and improving Indian agriculture. Indian Farm Forestry Development Cooperative Ltd (IFFDC), Cooperative Rural Development Trust (CORDET), IFFCO Foundation, Kisan Sewa Trust belong to this category. An ambitious project 'ICT Initiatives for Farmers and Cooperatives' is launched to promote e-culture in rural India. At IFFCO, the thirst for ever improving the services to farmers and member co-operatives is insatiable, commitment to

quality is a way of life and harnessing of mother earths' bounty to drive hunger away from India in an ecologically sustainable manner is the prime mission.

Issues and challenges in fertilizer industry

The progress route of the Indian fertilizer industry has been obstructed considerably by the prevailing challenges. Growth and development of agriculture in India derives a significant motivation from the fertilizer industry. Agricultural situation in India could be jeopardized by the worries in the fertilizer industry. The Government is facing a serious situation, 22 which requires a balance between the requirements of the farmers and the fertilizer companies. With the rapid increase in population and continuous decline in land availability for cultivation, the need for food grains is rising quickly and continuously. The challenges of the Indian fertilizer industry that lie ahead are linked intricately to the inadequate supply of fertilizers. There has been a rush for the requirement of fertilizers in the past few years. Excellent monsoon rains have led to growth in agriculture, escalating the utilization of fertilizers inadvertently.

On the other hand, the strong increase in use propensity has not been met with the necessary rush in fertilizer manufacturing. This has widened the space between the requirement and availability of fertilizers, which has led to increased reliance on imports. This also depicts the lack of realizing of the domestic capacity exploitation of the reserves in India. One more significant aspect that has led to the undersized development of the fertilizer industry is the increase in prices of the raw materials. The fertilizer industry is



dependant on gas for the manufacturing of urea and phosphoric acid for the manufacturing of phosphatic fertilizers and DAP.

India imports its raw material from foreign countries which understand the quandary of the Indian fertilizer industry and have started exploiting the scarcity through exorbitant pricing. In current years, some of the private companies, manufacturing fertilizers have effectively taken stakes in the foreign sources of raw materials. Though this has helped the industry, it has yet not been able to decrease the Government's load of subsidizing the rates. The Government has introduced policies to decontrol the prices but has delayed the execution of the constraints that do not augur well for the industry. Consequently the fertilizer subsidies keep on rising.

Immediate challenge that the industry faces today is that of being exposed to global struggle in the more open WTO system. Due to the WTO obligations, quantitative limitations have been detached. Cheaper imports could make threats to the indigenous industry particularly the plants which do not make use of gas as input. Due to such inane inefficiencies and cost drawback, non-gas-based plants manufacturing over 30 per cent of the indigenous fertilizer would not be capable of competing in an internationally cut throat competitive environment. Yet the gas-based units would have to work out considerable monetary control to be able to participate. Phosphatic fertilizer manufacturers would also face parallel threats as the prices at which the industry procures inputs almost match the prices of imported fertilizers. In the short run, indigenous companies may have the benefit of the shield of

differential subsidy in some form or the other. But, in the long run, they will have to struggle on a stand-alone basis.

One of the biggest challenges to the fertilizer industry is expected to come from chemical fertilizers themselves. Continual use of chemical fertilizers without using methods of organic farming can damage productiveness of the land. Some research in this field points out that the organic substances of the land have been registering a continuous decrease. Too much utilization of chemical fertilizers also decreases the water and nutrient preservation capability of the land. This could affect increase in insoluble nutrients in the land, creating pollution and contamination of ground water. Farmers need to be well-informed on supplementing the use of chemical fertilizers with conventional manures such as countryside or city compost and green manure. Use of bio- fertilizers has also been promoted to make supply insoluble nutrients available to the plants. Promoting incorporated nutrient administration method, therefore, should turn out to be an essential part of company's marketing efforts.

This is also a challenge for the policy makers to increase the productivity of soil at a time when soil health is fast deteriorating due to imbalance in fertilizer use. In order to increase the productivity of land, holistic approach is needed to address areas of concern like bringing more land under irrigation, educating farmers to shift to more efficient methods, like drip irrigation/fertigation etc. The fertilizer industry is faced with other challenges like infrastructural bottlenecks and the uncertainties in government policies.



The hold up in judgment making and non clarity in setting parameters are among some of the major drawbacks of the Government policies directed towards the industry. To rescue the wellbeing and development of the fertilizer industry, the Government of India is in need of long term reasonable policies that would facilitate the industry to overcome the challenges and stay relevant in the present deadlock. The coming times will be tough for the industry. Future outlook will be decided mainly upon how well it is capable of becoming accustomed to rapidly changing atmosphere. A vibrant fertilizer industry is the basic requirement to achieve food security of India. The whole fertilizer sector, as well as the Government, industry and the owners, must do their bit to see that the industry measures up to these challenges.

Conclusion

I conclude that the liquidity performance of IFFCO unit was satisfactory during the earlier years of study. In the rest of the years, the liquidity performance was not up to the mark as the current ratio was less than the standard norm of 2:1. Moreover the liquidity position had deteriorated over the study period.

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