

Inventory Management Practices in Cement Industry (A Study on Select Units in Andhra Pradesh)

Chalam G V¹, Vijaya Lakshmi V²

¹ Professor, Department of Commerce & Business Administration, Acharaya Nagarjuna University, Andhra Pradesh, India

² Assistant Professor, GNITS, Hyderabad, Telangana, India

Abstract-The effective management of the Inventory is crucial to the performance of many organizations. Inventory is one of the key determinants of the productivity of cement Industry. The purpose of the study is to examine the Inventory Management of the selected Cement plants located a specific region of Andhra Pradesh.

Key Words: Inventory Management, Cement Industry, Liquidity and Profitability

I. INTRODUCTION

Inventory is called the “Graveyard of business” because it has been a basic cause of the failure of many organizations. Inventory Management is one of the most important and challenging aspect of the overall Working Capital Management. Inventory is a vital part of current assets mainly in manufacturing organizations. Inventory is not properly managed in India in general and cement industry management is no exception. In order to properly understand the Inventory management needs of cement industry and its management, this study has selected certain companies whose main activity is “manufacture of Cement.

II. CEMENT INDUSTRY

Cement industry, which has been signed out from investigation in the present study, is indeed the backbone of economic growth in any country. A thick relationship has been found between the level of economic growth and the quantum of cement consumption in developed as well developing countries. Cement industry, through its forward linkages provides the maximum stimulus to growth in other industry also. One employee in cement manufacturing activity supports eight to ten persons in related activities. In India, since independence, great emphasis has been laid on the development of cement industry. It is one of the key basic industries in India. It plays dominant role in the national economy. Cement industry ranks second after the Iron and steel industry. Cement is indispensable in building and construction works. The production and consumption of cement, to a large extent, indicates a country’s progress. The development of transport, infrastructure, irrigation and power projects etc. depends to a very large extent on the availability of the cement. The per capita consumption level of cement is regarded as one of the indicators of development and standard of living in a nation. Keeping in mind the above importance of

the cement industry in the economic development, it is required to do an in-depth study of the problems faced by the industry especially in the area of Inventory management.

III. REVIEW OF LITERATURE

Krishna Murthy (1964)

Study was aggregative and dealt with inventories in the private sector of Indian economy as a whole for the period 1948-61. This study used sales to represent demand for the product and suggested the importance of accelerator. Short-term rate of interest had also been found to be significant.

National Council of Applied Economic Research (NCAER)(1966)

Conducted a study in 1966 regarding working capital management of three industries namely cement, fertilizer and sugar. This study mainly devoted to ratio analysis of composition, utilization and financing of working capital for the period of 1959 to 1963. The study reveals that inventory constituted a major portion of working capital i.e. 74.06 per cent in the sugar industry followed by cement industry (63.1%) and fertilizer industry (59.58%). It was observed that inventory had not managed properly. So far as the utilization of working capital was concerned, cement and fertilizer industry had better implementation of working capital. The sugar industry had huge accumulation of stocks so there was inefficient utilization of working capital heavily.

Lambrix and Singhvi (1979)

Adopted working capital cycle approach in working capital management, also suggested that investment in working capital can be optimized and cash flows can be improved by reducing the time frame of physical flow starting from the receipt of raw material to the shipment of finished goods, i.e. inventory management, and by improving the terms and conditions on which firm sells goods as well as receipt of cash

Lal (1981)

He studied Modi Steels Limited as a case study, his study focused on inventory management. He originated a model which involve price variable in inventory management; earlier price variable in inventory was not considered in that company. The analysis recommended solid policies, which

would look after internal and external factors, ultimately it would help in bringing in efficient working capital management.

Rich Lavelly (1998)

Asserts that inventory means “Piles of Money” on the shelf and the profit for the firm. However, he notices that 30% of the inventory of most retail shops is dead. Therefore, he argues that the inventory control is facilitate the shop operations by reducing rack time and thus increases profit. He also elaborates the two types of inventory calculations that determine the inventory level required for profitability. The two calculations are “cost to order” and “cost to keep”. Finally, he proposes seven steps to inventory control.

Pradeep Singh (2008)

In his study made an attempt to examine the inventory and working capital management of Indian Farmers Fertilizer Cooperative Limited (IFFCO) and National Fertilizer Limited (NFL). He concluded that the overall position of the working capital of IFFCO and NFL is satisfactory. But there is a need for improvement in inventory in case of IFFCO. However inventory was not properly utilized and maintained by IFFCO during study period. The management of NFL must try to properly utilize the inventory and try to maintain the inventory as per the requirements. So that liquidity will not interrupt

Gaur and Bhattacharya (2011)

Attempted to study the linkage between the performance of the components of inventory such as raw material, work in progress and finished goods and financial performance of Indian manufacturing firms. The study revealed that finished goods inventory as inversely associated with business performance while raw material inventory and work in progress did not have much effect on same. They emphasised that instead of focusing on total inventory, an attempt should be made to concentrate on individual components of inventory so as to adequately manage the same. They concluded that managers not paying heed to inventory performance may become weak in combating competitors.

Panigrahi (2013)

Undertook an in-depth study of inventory management practices followed by Indian cement companies and its affect on working capital efficiency. The study also investigated the relationship between profitability and inventory conversion days. The study, using a sample of the top five cement companies of India over a period of 10 years from 2001 to 2010, concluded that a considerable inverse linear relationship existed between inventory conversion period and profitability.

Srinivas Rao Kasisomayajula(2014)

An analytical study was conducted on “Inventory Management in Commercial Vehicle Industry In India”. A sample of five companies’ was selected for study. The study

concluded that all the units in the commercial vehicle industry have significant relationship between Inventory and Sales. Proper management of inventory is important to maintain and improve the health of an organization. Efficient management of inventories will improve the profitability of the organization

Edwin Sitienei and Florence Memba (2015)

Conducted a study on Effect of Inventory Management on profitability of Cement Manufacturing Companies in Kenya. The study concluded that Gross profit margin is negatively correlated with the inventory conversion period, Increase in sales, which denotes the firm size enriches the firm’s inventory levels, which pushes profits upwards due to optimal inventory levels. It is also noted that firms inventory systems must maintain an appropriate inventory levels to enhance profitability and reduce the inventory costs associated with holding excessive stock in warehouses.

IV. NEED FOR STUDY

Working and fixed capital are necessary financial requirement to run any industrial or service enterprise through their relative share and importance varies according to the nature of the industry. In heavy capital intensive industries like cement fixed capital requirement is much more than working or floating funds. But over the years with inflation in the prices of inputs, the share of working capital in total assets has gone up and gradually problem of resources is becoming more serious than ever before. Inventory is not properly managed in India in general and cement industry management is no exception. The economies of scale in inventory have not been achieved with enlargement of capacities. In certain areas there is cluster of factories, which provides opportunity for reduction in inventory through joint efforts. A number of factories belong to a limited number of business groups but no effort has been to take its advantage to reduce inventories. The two major limitations of the study have been multifarious activities of many big cement units belonging to large companies. In order to properly understand the Inventory Management needs of cement industry and its management, this study has selected certain companies whose main activity is “manufacture of cement”

V. OBJECTIVES OF THE STUDY

The present study has been undertaken to achieve the following objectives, with regard to inventory management in Cement Industry of Andhra Pradesh:

1. To present the growth and working of the selected Cement plants in Andhra Pradesh.
2. To analyze the composition of To present the growth and working of the selected Cement plants in Andhra Pradesh. Various constituents of inventory in cement production.
3. To study the various inventory management practices followed by the selected units of study.

4. To examine the techniques used in stores management of the selected cement units.
5. To suggest the measures for the effective management of inventory in cement industry in general and in particular with respect to the selected units of the study.

VI. SCOPE OF THE STUDY

1. The study confined to the cement plants located in Andhra Pradesh, more specifically established on the Krishna River Course.
2. The main objective of the study is to examine the inventory management practices of the select cement plants and therefore all other issues relating to the management of current assets and current liabilities are not the part of the study.

VI. SELECTION OF SAMPLE UNITS

To study the selected objectives of the proposed study all the cement units which are established by 2003-04, i.e., nine units are selected purposively located in Nalgonda and Guntur Districts of Andhra Pradesh.

VII. SOURCES OF DATA

To achieve the above said objectives of the study the information will be collected both from the primary and secondary sources, viz, annual reports of select sample units, cement industry reports, AP Economic survey etc.

VIII. DATA COLLECTION

The secondary data will be collected from the various annual reports of cement industry, annual reports of the sample units selected for the study, government reports on cement industry, various bulletins, etc. Besides the secondary sources, the primary data will also be collected through designed questionnaire/schedule aimed to the executives viz, purchase managers, material procurement officers, stores managers, Distribution etc., for knowing the inventory management practices they have been followed, while handling the inventory.

IX. PERIOD OF STUDY

In order to analyze the performance of any industry it requires at least a five year period has to be chosen to know the trend but in my present study a ten year period is chosen to observe the inventory management practices of the sample units of the study. Since the two states Andhra Pradesh and Telengana were separated from 2014-15 onwards. My period of study is set before the division of the states i.e., 2013-14 before ten year period, i.e., 2004-05 to 2013-14. Since many of the cement plants located on the two sides of the upper stream of Krishna river. As per the statistics available in Andhra Pradesh economic survey there are about 9 units established in

the selected region of the study by 2003-04. Therefore I have selected all the established units for my study.

X. STATISTICAL TECHNIQUES

In order to draw the inferences and also to know the trends the statistical techniques namely percentages, variance, regressions, tests of significance etc.,

XI. DATA ANALYSIS AND INTERPRETATION

The collected information both from the primary and secondary sources will be arranged in the respective tables and also graphs and charts

XI. LIMITATIONS OF STUDY

1. The major limitation of the study is that the scope of the study becoming confined to the selected units located a specific region of Andhra Pradesh.
2. The primary data is collected through survey from the selected executives, whose perceptions, opinions may differ from one to one as well as time to time which may not be generalized.

XII. PLAN OF THE STUDY

Chapter-I

A Theoretical discussion on Inventory Management in general, and with respect to cement industry in particular.

Chapter-II

Growth and Working of Cement Industry in Andhra Pradesh.

Chapter-III

Review of Literature and Methodology of study.

Chapter-IV

Structure and Composition of inventory-An analysis.

Chapter-V

Inventory management practices in the selected units.

Chapter-VI

Summary, Conclusion and Suggestions of the study.

REFERENCES

- [1]. Edwin Sitienei, Florence Memba(2015-16) “ The Effect of Inventory Management on Profitability of Cement Manufacturing Companies in Kenya: A Case Study of Listed Cement Manufacturing Companies in Kenya” International Journal of Management and Commerce Innovations Vol. 3, Iss. 2, pp. 111-119.
- [2]. Gaur, V., Fisher, M. & Raman, A. (2005).” An econometric analysis of inventory turnover performance in retail services”. *Management Science, vol.5,iss.2*, pp.181–194.
- [3]. Krishnamurty K., “Private Investment Behaviour in India: A Macro Time Series Study”, Arthaniti, January 1964.
- [4]. Lal, A.B (1981), “Inventory Models and Problems of Price Fluctuation”, Shree Publishing House, New Delhi, 1981. |

- [5]. Lambrix, R.J and Singhvi, S.S (1979), “Managing the Working Capital Cycle”, Financial Executive, June 1979, pp. 32-41.
- [6]. NCAER, Structure of Working Capital, New Delhi, 1966.
- [7]. Panigrahi, Ashok K. (2013). Relationship between inventory management and profitability: An empirical analysis of Indian cement companies. Asia Pacific Journal of Marketing & Management Review, vol.2,iss.7, pp.107–120.
- [8]. Paithosh Verms(2010) “Inventory Management of Selected Shipyard Companies In India”, Saurashtra University.
- [9]. Pradeep Singh(2008),” Inventory and Working Capital Management- An Empirical Analysis”, The ICFAI Journal of Accounting and Research, Vol.VII, NO.2, pp.53-73.
- [10]. Srinivasa Rao Kasisomayajula(2014) “An Analytical Study on Inventory Management in Commercial Vehicle Industry in India”, International Journal of Engineering Research, Vol.3, Iss.6, pp.378-383.
- [11]. Suraj Narian Mathur(2010) “Working Capital Management of Cement Industry in India”, Saurashtra university.
- [12]. W.C.Singh,Elangbam Bindoni Devi(2014) “Liquidity Management- A Review of Relevant Literature”, Paripex Indian Journal of Reseach,vol.3,iss.8,pp.90-92.

RSIS