

Inventory Management in Public Sector Enterprises

(A Study of K.C.C., Jhunjhunu, Rajasthan)

***Dr. Om Prakash Sharma**

Abstract

Since more than half of the working capital of an organization is involved in inventory, its proper planning and control is of utmost importance. The materials that a company carries on hand are called Inventories. The too low inventory not only hampers the production schedule but also affects the customer relations. Similarly, carrying too high inventories are also harmful to the company because it unnecessarily blocks the company's working capital. This study covers all the aspects related with inventory control and management in Khetri Copper Complex, a significant unit of Hindustan Copper Ltd. This unit is known as "An oasis of Desert" in Jhunjhunu district of Rajasthan. All kinds of stocks including spare parts have been discussed in this study. Problems faced by the department of inventory management of KCC and their possible solutions have also been included in this out set.)

INTRODUCTION TO THE PROBLEM:

One very important element affecting the profitability of the concern is the investment on inventories. Inventories generally occupy the most strategic position in the structure of working capital of business enterprises. Maximization of income and profit mainly depends upon the turnover of working capital. The turnover of working capital, in turn, is mostly determined by the turnover of inventories. Inventories may, therefore, be recognized as the most important item of current assets of a business enterprise.

General studies on the economic impact of inventories have indicated that inventory accumulation is a major contributive factor to fluctuations in business activity. Yet there are various compelling reasons for which inventories must be necessarily maintained. Raw material must be stored to provide against seasonal fluctuations in supply. Stores and spares are usually stocked by business enterprise to provide against sporadic breakdowns. Goods in process essentially accumulate because of the uncoupling of successive process of an industrial enterprise. Finished goods are held for providing 'off shelf' delivery, building up a protective buffer catering for economic production lots and absorption of sales rate changes. Under investment in inventories as it follows from the WHY of inventories, positively retards the rate of return on investment, but unscrupulous accumulation of inventories must be cautiously avoided since inventories represent a major transitional stage in the

Inventory Management in Public Sector Enterprises

(A Study of K.C.C., Jhunjhunu, Rajasthan)

Dr. Om Prakash Sharma

flow of working capital. It is always economical for the manufacturer to keep adding to inventories, as long as the additional savings in procurement costs exceeds the additional cost of carrying the inventory.

It may be noted that while increased procurement of inventories leads to reduction in costs due to bulk buying and bulk transportation, it also results in increasing the carrying cost, and hence, a proper balance between the two must be established. It may further be noted that the stock of raw materials, generally grow and decline with manufacturing activity, but in empirical investigations, it has been held that the rates of change in purchased material lag the rates of changes in output. The accumulation of inventories results in locking up the capital, which not only will fetch any return on capital so tied up, but will also expose the capital to the risk of price fluctuations. Thus, the excessive investment in inventories deprives the enterprise of resources which can easily be delivered or used in other programs or projects. Besides, the inventory holding increase incidental costs, such as the cost of storage and handling, deterioration and obsolescence and interest charges.

Every large sized business enterprise like K C C adopts some effective methods to manage the , some of them are – Fixed order system, Periodic Re-order system, A B C Analysis, Economic Order Quantity or E O Q method, Two Bin System in – Max – Plan, Automatic Order System Plan, Perpetual inventory Sisemore – Order Point, Demand and Supply System, Electronic Data Processing (EDP), Program Evaluation & Review Techniques and Critical Path Method (PERT) and Other Statistical Methods.

OBJECTIVES OF THE STUDY:

- To examine the managerial and controlling process of material and inventories adopted in KCC and assess the validity of criticism leveled against its process as it increases the product cost.
- To explore the factors responsible for deteriorating effective inventory Management and to point out the important causes ploughing the sound inventory Management in KCC to take remedial measures where- ever possible through modern management techniques and adoption of other scientific and logical changes in the existing system.
- To enumerate the problems and difficulties being faced by the Inventory Management at KCC and their probable suggestions/ solutions.

METHODOLOGY:

The universe for the present study is the Inventory Management of Khetri Copper Complex. The sample consists of various user departments of KCC. The sample has been chosen based on stratified random sampling method. Special care has been taken in choosing the sample so that the sample represents the features of the universe. Physical verification of various items in the Stores yards has also been conducted on random sampling basis.

To assess the factual position of the inventory management of KCC, significant tools and techniques like – questionnaires, schedules, personal interviews, opinion polls etc., have been used for collection of data and various information.

Inventory Management in Public Sector Enterprises

(A Study of K.C.C, Jhunjhunu, Rajasthan)

Dr. Om Prakash Sharma

ROLE OF INVENTORY DEPARTMENT AT KCC :

The Inventory Department of KCC is headed by Chief Manager (Inventory). The total number of staff and officers working in this Department is 152, dealing with more than 4000 vendors located all over India as well as abroad. On an average more than 2600 orders are placed annually involving about one lack items of different nomenclature. These figures would indicate the important role of Inventory Management Department at Khetri Copper Complex. The basic functions of Chief Manager (Inventory) are – to administer, supervise and coordinate the activities of the Materials Management Department.

EXISTING POSITION OF INVENTORY AT KCC

Years	Amount in Rs.
2009-10	20,98,46,345.32
2010-11	21,23,99,489.57
2011-12	21,51,39,273.84
2012-13	22,46,30,190.80
2013-14	23,58,79,550.94

MJOR PROBLEMS BEFORE INVENTORY DEPARTMENT:

There are several numerous problems, big and small, faced by the Department of Inventory Management at KCC – a few of them are -

#STOCK – OUTS

SHORTAGE OF TRAINED PEOPLE

INCREASED LEAD TIME

IMBALANCED ORGANIZATIONAL STRUCTURE

INCOMPLETE VENDERS' DIRECTORY

SURPLUS INVENTORIES

ACCUMULATED CLAIMS

RUSH PURCHASES / EMERGENCY PURCHASES

EXCESSIVE INVENTORIES

TRANSPORTATION PROBLEMS

Inventory Management in Public Sector Enterprises

(A Study of K.C.C, Jhunjhunu, Rajasthan)

Dr. Om Prakash Sharma

- # LACK OF STANDARDIZATION
- # NEED OF COVERED SHEDS
- # CODIFICATION PROBLEMS
- # IMPORT PROBLEMS
- # DELEGATION OF AUTHORITIES AND POWERS
- # SHORTAGE OF MAN-POWER
- # OTHER MISCELLANEOUS PROBLEMS.

The main areas of deficiencies could be enumerated as follows:

- i. **Demurrage and Wharf age** – A huge amount is paid to the carriers towards demurrage and wharf age charges. It is mainly due to the delay in retirement of documents by the finance department. This is due to shortage of funds and financial stringency. Still the Inventory department has been making its best efforts to get the demurrage and wharf age charges waived off from Railways and other transporters.
- ii. **Codification** - Although the work of codification has been completed at KCC still there are so many problems in this area. There are number of items having duplicate code numbers. They have been codified under different code numbers with different names. For example, at one place one steel section viz: joist of a particular size has been codified with the name as joist and the same item has again been codified with the name of beam. Similarly, some spare parts have also been codified along with their main equipment. A part may be used in different equipment but the same has been codified with each equipment separately. Thus there exists duplication in codes which needs to be rectified.
- iii. **Increased Lead Time** - Being a Public sector, a number of formalities have to be completed before placement of an order which unnecessarily increase the Lead Time. The Complex being situated at an isolated place also is one of the reasons for increased lead time because normally it takes one week's time to reach a communication to this place even from Delhi or Jaipur. However, efforts are being made to over-come most of these problems and it is hoped that shortly there will be reduction in the Lead Time, if the measures as suggested in earlier chapters are religiously adopted.
- iv. **Excessive Inventories - Inventory** Management is a crucial area. There is always a struggle in between too much and too less. The Inventory Management Cell at KCC is handicapped due to lack of a well-trained person in this Cell. The Complex has been changing one after another person in this department. This department is also short staffed. Managing inventory of about one lacks items is really difficult task. As on date there are several obsolete items. Once the Complex gets rid of such obsolete inventory, it will help in getting the inventory reduced substantially.

Inventory Management in Public Sector Enterprises

(A Study of K.C.C, Jhunjhunu, Rajasthan)

Dr. Om Prakash Sharma

At present due to world-wide winds of globalization and privatization, the business and industries are undergoing a tough competition and it is only the inventory management which can help organizations not only to survive but also to compete with other organizations. The computers also play a vital role in managing the inventory. The use of computer makes the job easier, faster and reliable. Thus, computerization helps in saving the valuable time, forecasting demands, analyzing inventory data, providing effective control and thus computer helps in all the four corners of Inventory Management viz; planning, forecasting, procurement and controlling the inventory.

The increasing trend of inventory at KCC proves that there is no proper Inventory Management. Every day the non-moving inventory is also increasing. Therefore, there is dire need of scientific management of inventory at Khetri Copper Complex.

Although there are several management techniques but their scientific application leads to the path of success. If the methods adopted are incorrect, the results can never be in the right directions. Adoption of scientific and rational management techniques is the only way that can help an organization in achieving its targets.

MANAGEMENT OF PROBLEMS:

To manage the Inventory Management Department on scientific basis, the following suggestions are put forth:

- Monthly review meeting should be held with all the user departments;
- Quarterly meetings should be organized at corporate level where the senior executives of Materials Departments of all the Projects of the company should participate to explain their problems;
- Any increasing in the inventory holding of any item should immediately be reported to the Head of the Complex with reasons of occurrence;
- From time to time the lists of nonmoving, slow moving and absolute items should be prepared and circulated among the user departments to explore any alternative use of such items;
- There should be a wise use of Computer in respect of following areas:
 - a) Vendors Directory;
 - b) List of Enquiries floated;
 - c) Purchase Order Directory;
 - d) List of items with their stock-control levels.
- Monthly reports should be sent to head office regarding stock-holding.
- There should be a better management of scrapes and rejected materials lying idle in the stores. Disposal of such items can fetch a good amount for the Company in addition to reduction in inventory holdings.
- Hectic efforts should be made to maximize the import substitution;

Inventory Management in Public Sector Enterprises

(A Study of K.C.C, Jhunjhunu, Rajasthan)

Dr. Om Prakash Sharma

- Inventory Management should also work in close coordination with Finance and other user departments; and
- There should be centralized purchases for all the units of the Company.

CONCLUSION:

The study has revealed that there are various lacunae in the working of Inventory Management Department at Khetri Copper Complex and it has been facing several problems as discussed in earlier paragraphs. To overcome all such problems and to increase the working efficiency of the department, various suggestions stated above should be considered and must be given due importance. If all the suggestions made in this study are implemented at Khetri Copper Complex, it is hoped that the Inventory Management Department would be able to get the rid of most of the problems up to a great extent. It would also go a long way in reducing the cost of finished product. It is hoped that the above suggestions will also be adopted by the other sister units of Khetri Copper Complex, to over-comes similar problems being faced by them.

***Lecturer**
Department of Bus. Admn
Govt. College
Sumerpur, Pali (Raj.)

REFERENCES:

- Ammer, D. S. : Materials Management, Bombay, D. B. Tara Pore Wala Sons & Co. Pvt. Ltd., 1997.
Broom, H. N. : Production Management, Bombay, D.B. Taraporevala Sons & Co. Pvt. Ltd. 1990
Wolf, T.R. : Better Management of Maintenance, Stores & Inventories, London, 2001
Khetri Copper Complex: An Introduction
K C C: Mining Magazine
Performance & Projects – H C L
Inventory Reports: H C L
Annual Reports – Hindustan Copper Limited (2009-10 to 2013-14)
The Economic Times
The Hindustan Times
The Rajasthan Patrika and Nav Bharat Times, etc.

Inventory Management in Public Sector Enterprises

(A Study of K.C.C, Jhunjhunu, Rajasthan)

Dr. Om Prakash Sharma