

CHAPTER - ONE

INTRODUCTION

1.1 General Background of the study:-

Industrialization is an important factor for achieving the basic objectives of a country's economic and social progress. In another word, industrialization is considered essential for economic development of the country in these days. It not only provides goods and services but also creates employment opportunities. It facilitates effective mobilization of resources, both capital and skill which might remain unutilized. Industrial development thus has a multiplier effect on the economy. Nepal is one of the developing countries. In the country like Nepal, industrial development plays vital role in the economic development but the role of Nepalese manufacturing industry in the national economy is not satisfactory. Industrial development helps a country in various ways. It contributes to national income, reduces unemployment, reduces the dependency on imports and promotes exports. Industrialization helps to create capital money by means of utilization of unused resources by sifting them from unproductive sectors to productive sectors. Government of Nepal has been emphasizing the development of industries both in public and private sectors. The policy of government is to encourage industrialization in the private sector. The government to meet the purpose has provided financial facilities through financial institutions, tax concession and so many other facilities through liberalization policy. Industrialization act as backbone for the economic development of the nation. Industrial development in Nepal started with cottage and small industries making wooden craves, handicraft, woolen garments and artistic works from ancient times. These industries are too running in classical way with the ancient culture and till in infancy period of development. Nepal formulated its first industrial policy in 1992 AD. Modern industrialization started with the establishment of Biratnagar Jute Mills in 1973 AD before the enactment of policy and law.

The private companies play vital role in industrialization and economic growth of the nation. Due to the establishment of private companies, the government's investment in public sectors reduced significantly. The overall development of the country depends on the development of the manufacturing companies. Now, Nepal has adopted the policy of economic liberalization

and entered into globalization through the member of World Trade Organization (WTO). Government adopts foreign direct investment (FDI) policy to encourage foreign investors. This policy creates positive impact on private manufacturing companies in industrial development. Nepal has got the membership of WTO, so the role of manufacturing companies to develop the national economy is very important.

1.2 Introduction of inventory management and control: -

Inventory is store of goods and stocks. Inventory plays vital role on success of organization. Modern concept of inventory management can be traced to 1915-1922 AD. During which an economic lot size equation was developed which minimize sum of carrying cost and holding cost for where the demand was known and constant. Inventory makes link between demand of the goods and supply of the goods. The inventory exists in manufacturing and nonmanufacturing organization also. There are four types of inventories in manufacturing organization. First is raw material purchased and stored for future production. Second is work-in-process refers to semi-manufactured product; they represent those products that need more work before they become finished product for sale. Third is the finished goods inventories completely manufactured products and ready for sale and fourth is office and plant cleaning materials (Shop, brooms, oil, fuels, bulbs etc...). Inventory management involves planning of the optimal level of inventory and control of inventory cost. Inventory should be maintained appropriately so as to avoid the risk of both over and under stock situation. Level of inventory is a portion of current assets, which directly affect the outflow of cash. It may cause the scarcity as well as maximum liquidity level of cash in the organization. For this purpose, the inventory management is necessary; it is because the aim of optimal level of inventory is maintained for the smooth supply to the market and sales operation and to minimize the total cost of investment that will lead to optimal inventory investment for attainment the desired objectives. The control of inventories deserves special attention as over investment in inventories deprive cash for other purposes like payment of maturing liabilities, expansion of fixed assets. Similarly the consequences of under investment in inventories are loss of regular customers. This leads to defame of organization which ultimately affects in its profit. So, inventory control involves the designing of inventory decision models to determine the optimum investment in inventory. Inventory management involves the planning of the optimal level of inventories and control of inventory cost, supported by an appropriate organization structure which is staffed by trained persons and directed by top management. It involves both financial dimensions as well as physical

dimensions and these dimensions are interrelated and can not be looked in isolation. Inventory is the stock of the materials or products which frequently occurs in the manufacturing organization as well as in the trading organization. When the materials are purchased by an organization they have to be stored until they are issued to the production process. When the production process is over then the finished products have to be stored again until they are sold. Thus inventory involves high amount of cost in terms of occupying the space and blocking the capital. However inventories cannot be avoided because it may create obstacles on continuous production and ultimately on supply requirements. Inventory also may block huge capital. So, inventory should be optimum. Inventory should be maintained in appropriate quantity so as to avoid both under stock and over stock situation. For this, proper inventory management is necessary. It is because; the aim of inventory management is to avoid excessive and inadequate level of inventories and to maintain optimum level of inventory for the smooth production and sales operation. Thus, inventory management is primarily concerned with minimizing cost of investment in inventories, cost of maintain desired level of inventory and minimizing total inventory cost. Both the physical as well as financial dimensions of inventory should be effectively managed. Thus real task of top management lies in formulation and implementations of the plans and policy that lead to optimal inventory investment for attainment of desired objectives. The control of inventories deserves special attention as over investment in inventories results shortage of cash for other purposes like payment of maturing liabilities, expansion of fixed assets. Similarly, the consequences of under investment in inventories are loss of regular customers.

Therefore, management should give adequate attention to the inventory management to reduce the cost of production. Inventory should be maintained in appropriate quantity to avoid both under stock and over stock. The purpose of inventory management is maintaining optimum level of inventory for the smooth production and sales. Thus inventory management is directly concerned with minimizing cost of investment in inventory. The real task of top level management lies in formulating the plan, policy and strategy that lead to optimum inventory investment for the attainment of desired goals of the firm or organization.

1.3 Functions of the inventory management:-

- Determining the size of inventory to carried.
- Establishing time schedules procedures and lot size of new order.
- Providing proper storage facilities.

- Arranging the receipts disbursement and procurement of materials.
- Developing the firm for recording these transactions.
- Assigning responsibility for carrying out the inventory control functions.

And

- Providing the reports necessary for supervising in overall capacity.

(Adams and Ebret, 1993: 323)

1.4 Background of Him Shree Foods Pvt. Ltd:-

Him Shree Foods Pvt. Ltd. is a manufacturing organization. It was established in the year 2039 B.S. during the 6th five years plan situated in the eastern part of Pokhara valley. At the time of establishment it was named "Gandaki Noodles Private Limited". Latter it has been changed into Him Shree Foods Private Limited after the year 2056 B.S. It is situated in the Pokhara industrial estate. It started its production from the year 2039 B.S. In the previous years it produced Rara, Aaha and Fewa noodles. Nowadays it produces Rara instant noodles, Rara steam noodles and Ezee snack noodles. Among these, Ezee snack noodles are the newly branded noodle of the factory. Him Shree Foods Pvt. Ltd has 1.716 million cartons of normal capacity of each product in a year. In the early staged Him Shree Food Pvt.Ltd produced daily four to five thousand cartons of Rara, Aaha and Fewa noodles. Due to the scarcity of raw materials and external environmental affects the production units of Him Shree Foods Pvt. Ltd's has been shutting down day to day. Him Shree Foods Pvt.Ltd uses different types of raw materials. It imports its raw materials from the nation as well as outside of the nation.

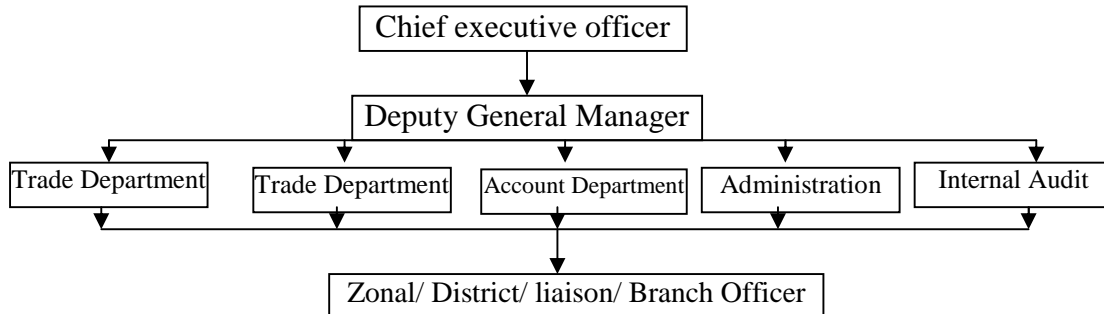
Raw materials for noodles: Wheat flour, vegetable oil, sodium & potassium salt, edible gum & permitted antioxidants etc.

Raw materials for soup powder: Chicken power, hydrolyzed vegetable protein, salt, monosodium glutamate, spices, soya sauce powder, wheat flour, garlic powder and caramel powder etc.

Among these noodles, Rara instant noodles are the most popular noodle in Nepal. Most of the people in Nepal, from school children to housewives, prefer Rara noodles. It is also the favorite food of the foreign tourists in Nepalese restaurants, bars and hotels. At the time of establishment the market area was narrow. Nowadays it sells its products at national as well as international markets. It has added one brick on the foundation of industrialization in

Nepal. It has helped to strengthen the economic condition of the nation by paying large amount of excise duty to the government.

Organizational structure of Him Shree Foods Pvt. Ltd.



(Source: Administration department of HSFPL)

1.5 Statement of the problem:-

Production-oriented enterprises should hold a large size of inventories. Management controls the inventory. But managing of inventory is not an easy task. Many sophisticated mathematical techniques are available to handle inventory management issues. Such techniques are part of production management. Although inventory management usually is not the direct operating responsibility of the financial manager, the investment of funds in inventory is an important aspect of financial management. So the financial manager should control inventories effectively to allocate capital with the view of maximizing wealth. Various techniques have been developed to manage inventory despite that most of the firms are found not handling inventories effectively. Hence, this study is more concerned with the management of inventories.

There are various problems in Him Shree Foods Pvt.Ltd, such as poor profitability, negligence of management, lack of effective managerial skill. The vital reason that lack of study on effective and efficient inventory management tools and techniques for controlling inventory. Due to lack of study of inventory management huge amount of money blocked on the inventory in Him Shree Foods Pvt.Ltd. Him Shree Foods Pvt.Ltd did not know how much money should the firm invested in inventory, how much inventory to be stocked, by how minimize the ordering and carrying cost, what is to be EOQ, how many times to be order that minimize the carrying cost. They were not maintaining desirable safety stock which the production department has been facing many interruption in the production process.

Inventory management and control is to maintain the optimal level of inventory investment and minimize the cost of inventory. Managing inventory in a proper way is a great challenge to every organization. The practices of maintaining optimal inventory policies in Him Shree Foods Pvt. Ltd. Were explored by exploring the answers of following main research questions:

- What is the present inventory position of Him Shree Foods Pvt. Ltd.?
- Whether or not Him Shree Foods Pvt. Ltd. has applied inventory management and control?
- What is the performance of Him Shree Foods Pvt. Ltd. on the basis of selling and cost price of inventory?
- How does Him Shree Foods Pvt. Ltd. manage inventory?
- What is inventory turnover ratio of Him Shree Foods Pvt. Ltd.?
- What are the major problems faced by Him Shree Foods Pvt. Ltd. in inventory management and control?

1.6 Objectives of the Study: -

The general aim of this study is to find out the inventory management and control system exercised by the company. The specific objectives of this study are as follows:

- To analyze present inventory position of Him Shree Foods Private Limited.
- To analyze the trend of inventory turnover ratio.
- To compare the cost price of noodles and sales price of the noodles in different fiscal years.
- To analyze the profit and production cost.

1.7 Importance of the Study:-

Production management deals with inventory. A firm can not achieve its goals unless inventories are controlled effectively and capital is allocated efficiently. Therefore study on inventory management is of great importance.

Most of the manufacturing units of Nepal are suffering from poor inventory management. Him Shree Foods Pvt. Ltd. is no exception form such problem. This study attempted to explore the inventory management problems faced by Him Shree Foods Pvt. Ltd.

1.8 Limitations of the Study:-

The limitations of inventory management of Him Shree Foods Pvt. Ltd are as follows:

- The study covered only five fiscal years from the fiscal years 2062/063 to 2066/067.
- This study did not focus on management issues and other financial issues.

1.9 Organization of the study:-

This thesis report was divided into the following five chapters:

Chapter I – Introduction:-

This chapter included general background of the study, introduction of inventory management and control system, functions of the inventory management, back ground of the Him Shree Food Pvt.Ltd. Statement of the problem, objectives of the study, importance of the study, limitations of the study and organization of the study.

Chapter II – Review of Literature:-

The second chapter dealt with the review of literature dealing with theoretical review of the study along with related studies like relevant books, journals, research as well as thesis, published and unpublished study and so on.

Chapter III – Research Methodology:-

This chapter contained research methodology, research design, sources of data, data collection techniques and tools used for analysis.

Chapter IV – Data Presentation and Analysis:-

This chapter covered the presentation and analysis of data using different methods. It also included the major finding of the study.

Chapter V – Summary, Conclusion and Recommendation:-

The fifth chapter included summary, conclusion and recommendations of the study.

At the end the thesis report an extensive bibliography, appendixes were also included.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Meaning of Inventory Management:-

“Inventory management involves planning of optimal level of the material and cost control of material supported by an appropriate organization structure, which is staffed by trained person and directed by the top level management. It involves both financial dimension as well as physical dimension and these dimensions are interrelated and can't be looked in isolation. Inventory in the forms of raw materials, work-in-progress and semi-finished goods are of great significance for the success of an enterprise. These can directly affect the efficiency of a business firm. It is observed that irrespective of the size of a company, the expenditure of materials is a major item of the budget in many cases. Materials consumption varies from 25% to 75% of sales turnover. The expenditure made on materials is money invested in inventories, cost of storage, transportation cost, insurance, wastage etc. Because of the magnitude of expenditures on inventory controlling inventory is essential. A great deal of attention is required towards the management operation associated with materials.” (Goel, 1985: 255)

Materials management is one of the aspects of production management. Production management is developed and handled by production engineer. Therefore, later inventory management becomes a separated and significant management for the development of industries.

“Under the inventory management there is not only essential production approach but also need marketing management. But actual inventory management is purely subject of production management”. (Chary, 1994: 387)

“The inventory management is assumed to be required to maintain an adequate supply of correct materials at the lowest total cost. The responsibility of determining the material requirement implied by the marketing forecast and liaising with the purchasing department for the acquisition, receiving and storing the material safety and in good condition for its subsequent issue and identifying surplus stock and taking action to reduce it”. (Mahlemann, Okland and Lockyer, 1996: 219)

Inventory is working capital and therefore the control of inventories is an important aspect of operation management. The basic questions in the management of inventory are:

i) How much inventory to keep? And

ii) When?

Before getting to a mathematical treatment of the above questions, let us understand the function of inventory management.

- i) There are inventories for normal consumption requirement rates and average lead times for procurement/ manufacture of the materials. Inventories are kept at the appropriate time.
- ii) A production process however, continues it may be bound to have some interruptions. It may also have imbalance in the consumption and production rates of the materials at different stage at the production process this interruptions and imbalance make it necessary to kept stocks of inventories between the different stages of the operation. (Chary, 1994: 389)

Every enterprise needs inventory for smooth running of its activities. It serves as link between production and distribution process. There is a time lag between the reorganization of a need and its fulfillment. The greater the time lag is the higher requirement for inventory. The unforeseen fluctuation in demand and supply of goods also necessitate the need for inventory.

It also provides a cushion for future price fluctuations. About 90% of total working capital is invested in inventories, it is necessary for every management to give proper attention to inventory management. A proper planning of purchasing, handling, storing and accusing should form a part of inventories management.

An efficient system of inventory management needs to determine:

- 1) What to purchase?
- 2) How to purchase?
- 3) From where to purchase?

4) Where to store?

(Sharma and Gupta, 1998: 22.23)

“Inventory management is one of the aspects of production management. Production management is developed and handled by production engineer procurement is handled by its specialist. Therefore, later inventory management becomes a separate and significant management for the development of industries. Under the inventory management there is not only essential production approach but also need marketing management but actually inventory management is purely subject of production management”.

(Pandey,1999:883)

“Executive in production, purchasing and marketing departments take decisions relating to inventories, primarily. Usually raw material policies are shaped by purchasing and production executive. Work in progress inventory is influenced by the decision of production executive and finished goods inventory policy is set by production and marketing executive. Yet inventory management has an important financial implication. It has the responsible to ensure that inventories are properly monitored and controlled. It has to emphasis the financial point of view and initiate programmed with the participating and involvement of other for effective management of inventory”. (Chandra, 1998: 328)

Thus, inventory management means not only branch of production management, it is integrated view of management "Companies devoted a great deal of attention to affiance of their materials and inventory management operation." A brief look at the historical evolution of material faction will give us a fuller appreciation of the current situation. Until the time F.W. Taylor, the production foreman was focal intents and purposes in complete control of production activity. He hired, fired and promoted. He purchased the necessary raw material scheduled production and handled individuals almost all of the other aspects of production. (Gareet and Silver, 1986: 236)

It consists of item that firm purchase for use in its production process it may consists of basic materials and manufactured goods. Maintaining adequate raw materials inventories provides a firm with advantage in both purchasing and production.

Materials used in factory are traditionally classified as direct materials and indirect materials. Direct material is generally defined to include all materials and parts that are integral part of

the finished product and their contribution can be directly identified. Indirect materials are generally defined as material used in manufacturing process as supporting materials.

2.1.2 Work in Process:-

Work-in process inventories are semi manufactured products and they need more work before they are ready as finished product for sale. Sometimes, it becomes very difficult to determine which materials is work-in-process and which are not because the same material may be a raw material.

2.1.3 Finished Product:-

The completely manufactured products which are ready for sale are called finished products. “Stock of raw materials and work-in-progress facilitate production while stock of finished goods is requiring for smooth marketing operations. Therefore, finished goods are completed goods and waiting for sale. In a manufacturing concern they are the final output of production process.” (Pandey, 1999: 755)

Firms carry finished goods to ensure that order can be filled when they are received. If a firm don't have finished goods inventory it would have to wait for the completion of the production process before inventory could be sold, thus, demand could not be satisfied when it is tendered. It makes a stock out situation. In such situation, the firm will be in danger position of losing the customer's to competitors permanently.

2.2 Objectives of the Inventory Management:-

Inventory is the most important to all manufacturing organization in today's industrial world. So, it is necessary to manage it properly because both situations of inventories i.e. either excessive or inadequate are not desirable to the industry. The excessive level of inventories consumes funds of the firm, which can be used for another purpose and thus it involves an opportunity cost. The carrying cost such as the cost of storage, handling, insurance, recording and inspection also increase in proportion of volume of inventory. These costs will affect the firms' profitability further.

On the other hand maintaining an inadequate level of inventory is also dangerous. Inadequate level of inventory means under investment of inventory causing inadequate raw materials and work-in process inventories resulting frequent production interruption. Similarly, if finished

goods inventories are not sufficient to meet the demand of consumer for longer period then consumers may shift to competitors, which will amount to permanent loss to the firm.

Therefore, to maintain the proper inventory or optimal level of inventory in industry is quite significant. But, it is difficult to tasks of management, because the optimal level of inventory lies always between two dangerous points of excessive and inadequate inventories. An inventory management should be:

- i) Ensure a continuous supply of raw material to facilitate uninterrupted production.
 - ii) Maintain sufficient stocks of raw materials in period of short supply and anticipated price changes.
 - iii) Maintain sufficient finished goods inventory for smooth sales operation and efficient customer service.
 - iv) Minimize the carrying cost and time, and
 - v) Control investment in inventories and keep in at optimum level.
- (Pandey, 1999: 887)

The objectives of inventory management should be to determine and maintain optimal level of inventory. The optimum level of inventory will lie between two points of excessive and inadequate inventories.

Firm should always avoid over investment or under investment in the inventories. Excessive carrying cost is risk of liquidity. Excessive carrying costs will impair the firm's profitability further. Due to over inventories, it may not be possible to sale them in time and at full value. Similarly, work in progress is far more difficult to sale. In the same way finished goods inventory should sale at lower prices due to falling the prices in market and the seasonal factors so more investment in inventories is harmful for the company. It should be cut down.

Under investment in inventories also not good for company. It carries some problems such as production hold-ups, frequent production interruptions. If finished goods are not sufficient, customer's demand cannot be fulfilled. Thus, the objective of inventory management should be neither excessive nor in adequate level of inventories but maintaining sufficient inventories level for the smooth production and sales operations. An optimum level of

inventory should be determined on the basis of the trade off between costs and benefits. The various objectives of inventory management can be summarized up as follows:

- i) Availability of all items of inventory.
- ii) No excessive investment in inventory.
- iii) Reasonable Price: when we purchase the raw materials, there should be strict on the pricing of the raw materials. It should be reasonably low price, but we don't ignore. The quantity by keeping lower prices materials. Firm should be adjusted between price of raw material and its quantity.
- iv) Minimum Wastage: There should be minimum wastage of material while storing in the warehouse by the workers. Wastage should be allowed up to a certain level known as normal level of wastage and it should not exceed that level. Storekeepers and workers should be trained to handle the material in a scientific way to avoid wastage.
- v) Risks of spoilage and obsolescence of inventory must be avoided for this purpose, a maximum quantity of each item of inventory is determined and proper method of issue the inventory is followed LIFO and FIFO method is used to issue the inventory.
- vi) Information about availability of stock should be made continuously available to the management. So the planning of production may be done. The storekeeper can supply this information because he keeps and up-to-date record of every item of stocks under a proper system of inventory control. (Goyal, 2005: 69)

2.3 Need and Importance of Inventory Management:-

Inventory in any organization is pivotal role. If the organization is not paying attention to inventory management, it will affect the efficiency and profitability of the organization. Buffa observes “Inventories serve the vital function of developing. The various operation in sequence beginning with the materials extending through all the manufacturing operations into finished goods. Storage and continuing to warehouse and retail stores” (Buffa, 1998:474)

Importance of inventory management can be written as follows:

- i) Inventory helps in smooth and efficient running of business.
- ii) Inventory provides service to the customers immediately or at short notice.
- iii) Due to absence of stock, the company may have to pay high price because of piece wise purchasing, maintaining of inventory management earn price discount because of bulk purchasing.
- iv) Inventory also acts as buffer stock when raw materials are received late and so many sales orders are likely to be rejected.
- v) Inventory also reduced product cost because there is an additional advantage of batching and long smooth running production runs.
- vi) Inventory helps in maintaining the economy by absorbing some of the fluctuations when it depends for an item fluctuates or is seasonal.
- vii) Pipeline stocks (also called process and movement inventories) are also necessary where the significant amount of time is consumed in transshipment of items from one locality to another.

(Nair, Banarjee and Agrawal, 1998: 191)

2.4 Cost Associated with Inventory:-

The role of the inventory management is to provide inventories for sustaining operation at the lowest possible cost. The first step in inventory management is to identify all the costs involved purchasing and maintaining inventories typical costs associated with the inventories are described below.

2.4.1 Carrying/ Holding Costs:-

Total carrying generally increases in direct production to the average amount of inventory carried in turn depended upon the frequency with which orders are placed. The costs associated with having inventories which includes storage cost, insurance cost of typing up fund, depreciation cost and so on. These costs generally increase in production to the average amount of inventory held. To illustrate it a firm sales S unit per years and if it places equal order N times per year then $Q=A/N$ unit will be purchased with each order. If the inventory is

used evenly over the year and if no safety stock are carried then the average inventory A will be:

$$\text{Average Inventory (A)} = \frac{\text{Quantity per order}}{2} = \frac{Q}{2}$$

Defining the annual percentage of carrying cost as C, annual total carrying cost as (TCC), as the percentage carrying costs C times, price per unit PP times the average inventory in units A.

The inventory carrying costs are further explained as;

i) Opportunity cost:-

“This consists of expenses of rising funds refers to the benefit scarified on the investment used for the acquisition of the inventory. If funds are not locked up in inventory, the benefit of return from investment needs to be sacrificed. This is opportunity cost of the funds or financial cost of components of the cost”. (Khan and Jain, 1992: 728)

Return associated with inventory may not be available if it is used for other purpose. Therefore, an opportunity cost is determined by alternative use of investment. For example, firm can earn 10% out of alternative use then the opportunity cost of the inventory is 10%.

ii) Handling Cost:-

The size of consignments and the material handling facilities to the store determine these costs up to a certain level of inventory size.

iii) Storage Cost:-

The cost associated with maintenance of inventory is storage cost. These include expenditure made on inventory staff, expenditure to provide various facilities like heating, lighting, floor space, shelter and racks, binds and containers, materials handling equipments and other provision for safe and proper storage of items. These costs generally depend upon the volume of inventory.

iv) Spoilage and Shortage Cost:-

Many products deteriorate over time in storage. The nature of deterioration varies from product to product but whatever the causes, it makes reduction in the company's assets and such in a cost of holding inventories. This is term as a spoilage cost, sometimes may cause because of shrinkage and pilferage of inventory.

v) Insurance and Taxes:-

Many of the goods in inventory require insurance and payment of taxes on store building and it should be included in inventory holding cost.

“Inventory holding cost remains also includes the cost associated with administration of the inventory system in use covering information gathering costs, supervision costs, physical stock checking costs and record keeping equipment cost. It is difficult to determine whether these expenses will be high or low except by making a comparison of actual inventory system”. (Handley and Whitin, 1999: 17)

2.4.2. Ordering Cost:-

It is assumed that carrying costs are entirely variable and increase in direct proportion to the average size of inventory. Unlike that ordering cost usually are fixed regardless of average size of inventory. For example the cost of placing order generally inter office memos, using fax transmission or long distance telephone calls and taking delivery essentially are fixed regardless of average size of an inventory.

In practices the cost per order generally contains both fixed and variable components. Ordering cost differs in the ratio of inventories ordered. In case of raw materials ordering cost involves the clerical cost in placing an order as well as certain cost of receiving and checking the goods till they arrive for finished goods. Ordering cost involves scheduling a production run and for work in progress ordering costs likely to involves nothing more than record keeping furthermore, ordering costs are the cost involved in placing and receiving an order or purchased items. The expenses involved in this cost are:

- a) Cost of placing an order.
- b) Requisition cost.

- c) Receiving, inspecting and storing cost.
- d) Sales tax, customs etc.
- e) Clearing and forwarding cost.
- f) Insurance of raw materials.
- g) Stationery cost.
- h) Bank commission/ LC chargers.
- i) Telephone/ Fax/ Postage/ Expenses.
- j) Cost incurred when raw materials in transit.
- k) Transportation/ Shipping cost.

Ordering cost increases with the number of order, thus more frequency in inventory acquired makes higher the firm's ordering cost. On the other hands if the firm maintains large inventories level there will be few orders placed and ordering cost will be relatively small. Thus, ordering costs decrease with the increasing size of inventory ordered. The fixed costs associated with ordering inventories as symbolized by O and N for order per year.

The total ordering cost is calculated by using the following formula.

$$\text{Total ordering cost (TOC)} = O \times N = O \times \frac{S}{Q}$$

Where, TOC= Total ordering cost.

O= Fixed cost per order.

N= No. of order placed per year.

Q= Inventory quantity for each other.

2.4.3 Stock out Costs:-

Stock out cost is associated with demand, the depletion in stock results in loss in sales or back order costs. When the sales are lost due to stock out, the firm losses both the profit margin caused by sales decline and the firm's goodwill. If the customer uses other products future profit margin may also be lost and back order cost is needed to convince customers to use again after inventories have been replenished. Back order cost includes loss of goodwill, money paid to re-order goods and notification to customers when goods arrived (Adams and Ebert, 1993: 325)

Stock out cost computed from the following formula.

Stock out cost = Inventory cycles per year- Output units x probability of possible stock out X unit stock out cost.

$$\text{Inventory cycles per year} = \frac{\text{Annual uses}}{\text{Quantity order size}}$$

2.5 Inventory Control:-

Inventory control is a system which ensures the provision of the required quantity at the required time with the minimum amount of capital investment. The function of inventory control is to obtain the maximum inventory turnover with sufficient stock to meet all requirements.

There are basically two approaches to inventory control.

- a) Unit control.
- b) Value control.

Unit control involves the control over inventories in terms of units while value control entails the control over inventories in terms of value. These two approaches seem to be conflicting in control of inventories unit control ensures status for continuity production and sales and obviously requiring the greatest insurance in maintaining huge supplies of everything being stored. It will increase the cost of handling the inventory and investment. If values control is imposed there is always a risk of running short of materials. Thus, an optimum control is achieved when the required materials can be obtained at a minimum cost through proper

planning, formulation of policies and procedure in order to maintain the inventory is to decide after taking into consideration the availability of finance. The quantity discount allows the cost of storage and storage accommodation, order placing and receiving costs risk of loss due to falling prices, deterioration, evaporation, obsolescence theft etc. Thus, in the words of John L. Burbidge, "Inventory control is, then, concerned with the control of the quantities and loss monetary values of these items at predetermined level of within safe limits". Thus, the inventory control management includes the following aspects:

- i) Size of inventory determining maximum and minimum levels establishing time schedules, procedures and lot of size for new orders, ascertaining minimum safety levels coordinating sales, production and inventory policies.
- ii) Providing proper storage facilities arranging the receipts disbursement and procurement of materials, developing the forms of recording these transitions.
- iii) Assigning responsibilities for carrying out inventory control functions.
- iv) Providing for the reports necessary for supervising the overall activity.

It is, therefore, necessary that process co-ordination must be there in the activities and policies of purchase, production and sales department to affect the better inventory control.

2.6 Techniques of Inventory Control:-

Adequate inventories facilitate smooth production activities and help to provide off shelf delivery to customers. On the other hand excessive inventory is idle resource of the firm and can prove costly because it ties up working capital unnecessarily which could have been better used. It has been utilized for some other purpose. According to Alton N. Smith "Inventory is money on which a company pays interest rather than collect interest. It is money always in danger of deviation. Non controlled inventory is an industrial danger." The major problem of inventory management, therefore, should be to arrive at an optimum balance between too much inventory and too little inventory. So that there may be no stock out problem and cost of inventory should be minimum.

The following are the inventory control techniques.

2.6.1 Economic Order Quantity (EOQ):-

This technique attempts to establish the more economic balance between the acquisition cost and carrying cost by determining quantity to be ordered. The most economic order quantity is ascertained at this point.

In 1915 F.W. developed the famous economic order quantity (EOQ) formula. Later, through the consultant named Wilson, this formula gained wide use in industrial area. Later on this formula was developed by Harris. The EOQ is still widely used in inventory for independent demand. The EOQ model is an inventory management technique used to find the optimal order quantity that minimizes the total cost which includes ordering and carrying cost.

John J. Hampton defines economic order quantity as "the order size that will result in the lowest total of ordering and carrying costs for an item of inventory. Furthermore, he states the importance of economic order quantity as if a firm places unnecessary order it will insure unneeded order costs if it places too few orders, it must maintain large stock of goods and will have excessive carrying costs. By calculating an economic order quantity, the firm identifies the number of units to order that results in the lowest total of these costs". (Hampton, 1996: 233)

It refers to the order size that will result in the lowest total cost (total ordering cost + total carrying cost) for an item of inventory. If a firm places many orders it will incur unneeded ordering costs. If it places too few orders, it will have excessive carrying cost. By EOQ model the number of units to order that results in the lowest total costs can be identified. EOQ seeks the units of inventory that should be purchased at an order, which minimizes the total cost. When we are going to calculate EOQ one thing should be kept in mind. To calculate the cost involves in the carrying and ordering.

EOQ can be computed with the help of forecasting usage; ordering and carrying costs.

$$EOQ = \sqrt{\frac{2AO}{C}}$$

Where,

A= Annual demand.

O= ordering cost per order.

C= carrying cost per unit.

Assumptions of Economic order quantity:-

The concept of EOQ is based on the following assumptions.

- i) The demand rate is constant recurring and known. For example demand (or usage) is 100 units for a day with no random variation, and demand is assumed to continue into the indefinite future.
- ii) The lead time is constant and known. The lead time for order placement to order delivery is therefore always a fixed number of days, no stock outs are allowed. Since demand and lead time and constant one can determine exactly when to order material to avoid stock out.
- iii) Material is orders or produced in a lot or batch and lot is placed into inventory all at one time.
- iv) A specific cost structure is used. Unit cost is constant and no discounts are given for large purchase. The carrying costs depend linearly on the average inventory level there is a fixed ordering or set up costs of each lot which is independent of the number of items in the lots.
- v) The item is a single product there is no interaction with other products.

(Martin and Miller, 1956: 49-66)

Approach to Set EOQ:-

The EOQ model can be ascertained by (a) mathematical (short-cut) formula method (b) the tabulation method or trial and error approach (c) graphical approach, they are explained below:

i) Mathematical (short-cut)/ formula method:-

Mathematical models are available to calculate economic order quantity. There are numbers models exist, as the field of inventory management and control can be studied in college programs such as operation research and production management. Even many mathematical model exists the main objective of these model is to reduce the inventory cost/ Total costs.

Without getting into highly refined decision models EOQ can be calculated on the basis of mathematical model. EOQ can be calculated by using the following formula:

$$EOQ = \sqrt{\frac{2AO}{C}}$$

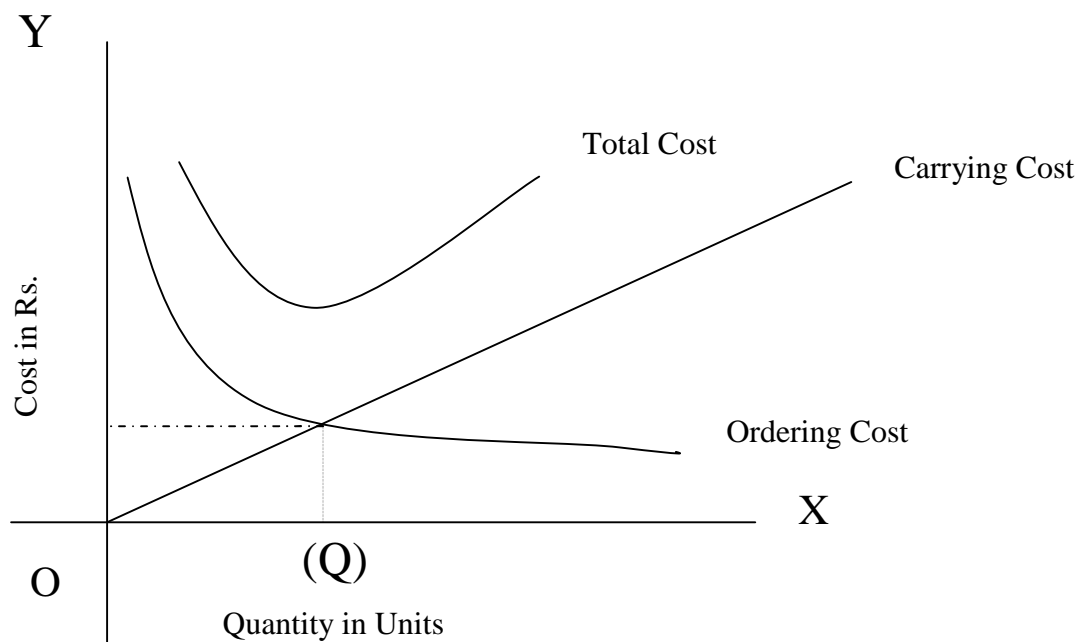
ii) Trial and Error approach:-

This is another approach to calculate economic order quantity. A firm has different alternative purchase policy of its inventory. It can purchase its entire requirement in one single lot. Alternatively, the firm can purchase its inventory in small lots periodically say weekly, monthly, six monthly and so on. It means more than one time the firm can place an order to purchase inventory. The smaller the lot sizes the lower average inventory and vice-versa. Low inventory holding are associated with high ordering cost and low carrying cost. This approach for the determination of EOQ uses different permutations and combination of total costs.

In the other words, according to this approach the carrying cost and ordering cost for a different sizes of order are computed and the order size with the lowest total cost consisting of ordering plus carrying of inventory is the economic order quantity.

iii) The graphic approach:-

The economic order quantity can also be found graphically as illustrated below:



In the above figure, carrying, ordering and total costs are plotted on vertical horizontal axis, horizontal axis used to represent the order sizes. The carrying cost increases as the order size increase. Because on an average a large inventory level will be maintained and ordering cost declines with increase in order size. The total cost line is the sum of two types of costs that behave differently with order size. The total cost decline in the first stage but they start rising when decrease in average ordering cost is more than offset by the increase in carrying cost. The economic order quantity occurs at the point Q with the total cost is minimum. Thus, the firm's total cost is minimum at Q level of inventory.

iv) Quantity Discount:-

Quantity discount helps the firm to increase its order size more than the EOQ level. It will reduce number of orders and increase the average inventory holding. When the firm accepts quantity discount it saves ordering costs, but increases carrying costs. The net return is the differences between the result of saving and additional carrying costs. If the net return is positive, the firm's order size should equal the quantity necessary to avail the discount instead of initial EOQ level.

2.6.2 ABC Analysis:-

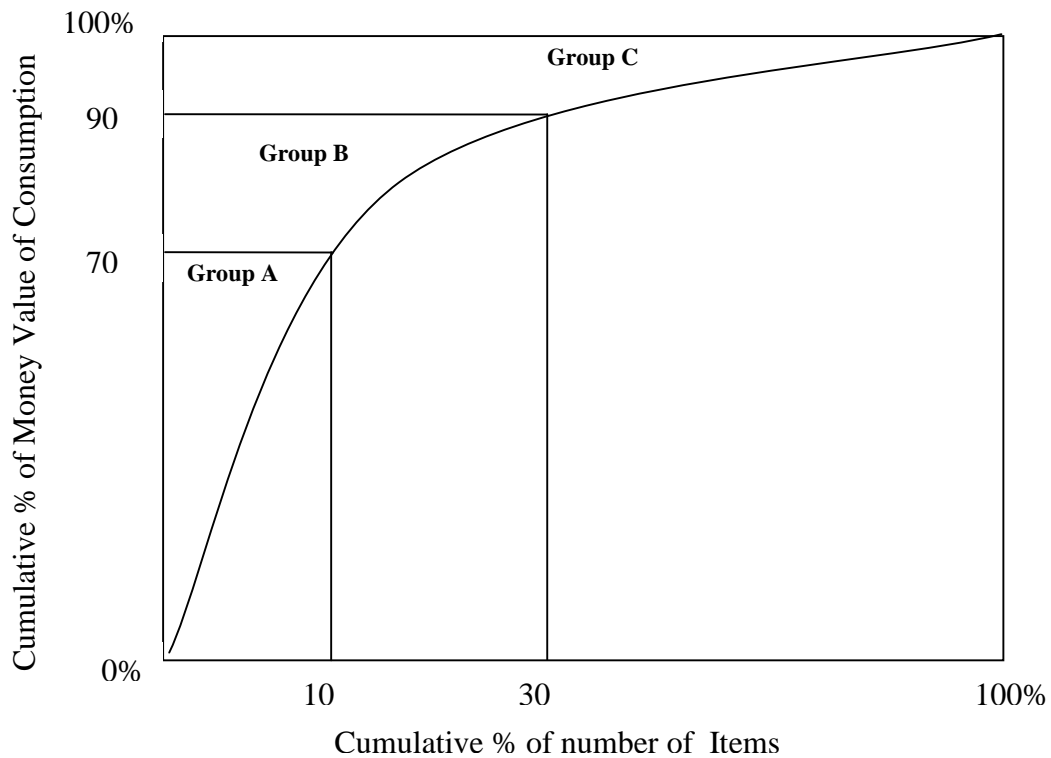
Manufacturing organization finds it useful to divided material into three categories for the purpose of exercising selective control on materials. An analysis of the materials costs will show that a smaller percentage of items of materials in the store may contribute to a large percent of the value of consumption and on the other hand a large percentage of items may represent a smaller percentage of the value of items consumed. The high value inventories with less quantity are treated as 'A' items, second category as 'B' items and items of the third category are taken as 'C' items. Such an analysis of material is known as ABC analysis. This technique of stock control is also known as stock control according to the value method or always better control method or proportional value analysis method. Thus, under this technique of material controls, materials are listed in 'A', 'B' and 'C' categories in descending order based on money value of consumption. ABC analysis measures the cost significant of each item of material. It concentrates on important items, so it also known as "Control by importance and exception" (CIE).

The report of Indian productivity team on report of stores and inventory control in USA, Japan and West Germany gives the following examples of ABC analysis.

Group	Percentage of items	Percentage of costs
A	8%	75%
B	25%	20%
C	67%	5%

The significance of this analysis is that a very close control is exercised over the items of 'A' category inventory which accounts for a high percent of costs while less control is adequate for 'B' category inventory and very little control would sufficient for 'C' category inventory. The graphical representation of ABC analysis is as given below.

Figure - I



Graphical presentation of ABC analysis

Procedure:

The steps for computing of ABC are as

- a. First annual usage is determined, multiplying the quantity (number of the units) of the item consumed in one year by its unit price.
- b. Arrange all inventory items, first item with maximum annual usage in rupees, and the second item with the second maximum. The third items, the third maximum and so on. The sum of total of annual usage in rupees is obtained.
- c. Inventory items are categorized on the basis of annual usage and their price. The items of inventory with value are categorized as 'A' item. The lesser value items than are categorized as 'B' and so on.

2.6.3 System of Ordering: When to order?

The problem, how much to be ordered is solved by determining the economic order quantity (EOQ). The second problem is when to be order? This question is solved by determining the reorder point. It is also known as order point or optimal re-order point or recording level of ordering level. It is the point at which if stock of material falls down the stock keeper initiates the purchase requisition up to time and fresh supply of the materials received (Henderson and Tennephol, 1984: 343)

The reorder point is the level of inventory at which the firm places an order equal to the economic order quantity. If the firm places the order than the inventory reaches the re-order point, the new goods will arise before the firm runs out of goods to sell. As long as delivery is not instantaneous an order must be placed so that inventory is not depleted till new shipment arrives. This required inventory level is termed 'transit stock' and represents the amount of inventory that would be used (or sold) between the times, order is placed and time delivered. Transit stock is determined by using the following formula.

Transit stock= Stock used per time period x transit time.

To confirm the validity of this formula, the following example has been quoted.

Major motors uses 400 tires per day (based on 250 working days in a year 100,000/250) and those five days are required for delivery of new orders. The order point reaches when inventory is reduced to the transit stock level of 2000 tires.

Transit stock = 400 tires per day × 5 days. = 2000 tires.

Uncertainly in demand can be accommodated by adding safety stock for the transit stock level. Safety stock refers to extra inventory held as a hedge or protection against the possibility of a stock-out. Safety stock reduces or eliminates the costs incurred by a stock-out, but it adds to carrying costs.

The reorder point then is determined by adding transit stock to the safety stock level.

Optimal Reorder point= Transit stock + safety stock.

If Major Motors decides that safety stock of 800 tires is optimal, it will place a new order for the EOQ of 6000 tires when inventory falls 2800 units.

Optimal Reorder Point = $2000+800 = 2800$ units.

Thus, basically these items of information are needed as inputs design the reorder point.

The safety stock involves two types of cost (i) stock out cost and (ii) carrying cost. Safety stock is necessary under the condition of uncertainty, in such situation the demand and supply of goods may fluctuate day by day. If the actual usage or sales increases and delivery from the supplies are delayed then the firm will face the stock out problem. The firm would therefore, be advised to keep a sufficient safety margin by having additional inventory to guard against stock out situation. Such stocks are called safety stock.

2.6.4 Stock Level Subsystem:-

Carrying of too much and too little of inventories is determinant to the firms. If the inventory is too little, the firm will face frequent stock-outs involving high reordering cost and if the inventory level is too high, it will be necessaries of capital. Therefore, an efficient inventory management requires that a firm should maintain the optimum level of inventory where inventory costs are the minimum and at the same time there is no stock out which may result in loss of sale or stoppage of production. (Nair, Banarjee and Agrawal, 1998: 220)

a. Minimum Level:-

It represents the minimum quantity of inventory, which must be maintained in hand at any time. This quantity is fixed so that production or sales may not be held up due to shortage of inventory. In this level the following factors are taken into consideration.

- i. Lead-time i.e. time lag between ordering and receiving of the inventory.
- ii. Rate of consumption of the inventory during the lead time.
- iii. Nature of inventory, minimum level is not requires in case of special inventory, which is required against customer specific orders. (Nair, Banarjee and Agrawal,1998:225)

The formula for the calculation of minimum level=Re-ordering level- (Normal consumption× normal re-order period).

b. Maximum Level:-

Maximum level represents the maximum quantity of an item of inventory that can be hold in stock any time that stock should not exceed this quantity. The quantity is fixed so that there may be no over stocking. The maximum stock level is fixed by taking into account the following factors.

- i. Amount of capital available for maintaining stores.
- ii. Available of god wan space available.
- iii. Maximum requirement of the stores for production purpose at any point of time.
- iv. Rate of consumption of the material during the lead time.
- v. The time lag between ordering and receiving of the inventory.
- vi. Possibility of loss in stores by deteriorations, evaporation etc.
- vii. Fluctuation in price.
- viii. The seasonal nature of supply of inventory some items of inventory goods are available only during specific periods of the year, so these have to be stocked heavily during these periods.
- ix. Restriction imposed by Government of local authority in required to material in which there are inherent risks, e.g. fire and explosion.
- x. Possibility of change in fashion and habit, which will necessitate change in requirements of materials. (Nair, Banarjee and Agrawal,1998:228)

The formula of maximum stock level=Re-order level +Reordering quantity- (Minimum consumption× Minimum re-ordering period)

c) Re-ordering Level:-

An important question is inventory management system is "when an order for the purchase of an item should be placed, so that the concern does not run out of goods". The re-order level provides the answer to this question.

It is the point at which if stock of material in store approaches to certain level then the stock keeper should initiate the purchase requisition for fresh supply of material. This level is fixed somewhere between the maximum and minimum level in such a way that the different of quantity of the materials between the re-ordering level and the maximum level will be sufficient to meet the requirement of production up to the time the fresh supply to the material received. "Re-order point sub system answers the important question in any organization's inventory management. The question is "when an order should be placed so that the firm does not run out of stock."

"The re-order point is the level of inventory at which the firm places an order in the amount of the economic order quantity. If the firm places the order when the inventory reaches the re-order point, the new goods will arrive before the firm runs out of goods to sell. So, that determined the re-order point under a certainty. There are three informative assumptions connected with ascertainment of re-order level.

i) Usage Rate:-

This is the rate per day at which the item is consumed in production. It is expressed in units.

ii) Lead Time:-

It refers to the time normally between placing an order and receiving the delivery of inventory. Lead time covers the time span from the point when a decision to place an order for the procurement of inventory made to the actual receipt of the inventory by the firm. It is also called procurement time of inventory. It is expressed in days, weeks, and months.

iii) Safety Stock Level:-

The minimum level of inventory may be expressed in day. This level can be computed by multiplying the usage rate times and the number of days that the firms want to hold as a protection against shortage.

Reorder level = Maximum consumption × Maximum re-order point.

iv. Average Stock Level:-

Average stock is calculated as:

Average stock level = Minimum stock level + $\frac{1}{2}$ of re-order quantity.

v. Danger Level:-

This is a level of inventory needed to be maintained if normal issue of the material are stopped and issues of materials are made only on specific instructions. The firms will make special arrangement to get the material which reach at their danger levels so that the production may not stop due to shortage of materials.

Danger level = Average consumption \times Maximum reorder period.

2.7 Inventory System:-

There are two types of inventory systems. One is termed the "fixed order size system", a fixed quantity of goods is order wherever inventory declines below to predetermined level. The time between orders varies with the demand rates, but the size of the order remains constant. In practice, fixed order size system is generally called perpetual inventory system. This posing operation may be done manually an inventory record can or as increasingly the case, through remote input terminals to a computer file. In general only class 'A' and 'B' inventory are maintained in this fashion. (Handely and Whitin, 1999: 21)

The 'two bin-system' of the fixed order size approach is one of the oldest inventory system in use for illustration let imagine that all material or given type is placed in two large bins. When the first gets empty, the second is put into use and a place order for fixed amount is disnated immediately when the new materials received are placed in the empty bin and the process continues.

In the second basic system, periodic review of inventories are made, at which time they are restored to some predetermined optimum level, no running records of daily inventory activities are kept. The statement of inventory is known only at the time of the review, which may take place weekly, monthly, quarterly, or yearly. Because of this inventory system, this type is commonly caused "Periodic inventory system. Such system is generally used for class 'B' or 'C' inventories or instances. Where, the large number of items include the updating each inventory transaction.

2.7.1 Comparison of the Periodic and Perpetual Inventory System:-

The systems are both designed to control inventories to face uncertainty, whether one is employed in a particular instance depends upon the nature of the items stocked; the type of control is needed to the nature of the sources of supply.

The fixed order- size system is well suited for managing inventories of low value items, since it permits lesser control. Items of this sort are usually bought in large quantities relative to their use and can be readily obtained from the supplier at any time. They can be controlled by a simple two bin process without a large investment in record keeping. Perpetual inventories also lend themselves to the stocking of high-cost items that can be purchased at anytime. These items are controlled by continuous posting to inventory records. In this way, the status of the high cost items can closely watched. This is costly; however for inventories with a large number of items, since the critical costs are high yet, with the use of computer, such cost can be reduced. The broader application of perpetual inventory records made feasible by computer in turn result involves control of inventories.

The fixed order interval system lads itself to inventories that consist of large number of products because the clerical cost of periodic evaluation is substantially below the required for perpetual recording. This system is also well suited for items whose availability may be limited because of the suppliers demand for period order so that they can plan their production runs economically. In order to use the fixed - order interval system, however, higher safety stock must be maintained. (Hadley and Whitin, 1999: 22)

2.8 Review of articles and the previous thesis:-

Inventory management is wide subject. Many modern techniques to control inventory management have been developed. Still many problems, difficulties were faced by the manufacturing company. In Nepal there are many public enterprises and private limited companies were established. Few researches were made on the inventory management of manufacturing company.

From the various studies of thesis, dissertations business reports and other sources, it was found that some company applied modern methods or techniques to manage as per the requirement.

Some studies were made about inventory management and control which are presented below:

Dhurba Raj Pokharel,(1992) conducted a research on ‘A study on Inventory management in Janakpur Cigarette Factory’, an unpublished Master level thesis submitted to kirtipur campus, Faculty of management, T.U.

The specific objectives of that study were as:

-) To identify the present practice of collection of raw materials.
-) To present the present situation of material consumption of Janakpur Cigarette Factory.
-) To compare the profit and production cost of cigarette.
-) To compare the raw material cost and sales of the cigarette.
-) To analyze the present inventory position of Janakpur Cigarette factory.
-) To provide suggestions and recommendations.

The study had dealt with the factory only. The population was only Janakpur cigarette factory. In the study, both primary and secondary data were used. The data were collected through the accounting and financial records of the factory and personal contact with the concerned authorities.

The major findings of that study were:

- a. Selling and cost prices of the cigarette are increasing from year to year.
- b. The factory uses two methods of collection of its raw materials.
- c. There is not proper target for material purchase in the factory.
- d. Janakpur cigarette factory is highly dependent upon India for its raw materials.

- e. The consumption of materials and production of cigarette show the fluctuations.

Puspa Raj Baral, (1994) had conducted a research on “Inventory Management System” A case study of Gandaki noodles Pvt. Ltd. as unpublished master level thesis submitted to Kirtipur Campus, Faculty of Management, T.U.

The basic objective of the study was to analysis inventory management system exercised by the by the factory. The specific objectives are as follow:

-) To assess the maintained inventories and their consequence on cost and profit.
-) To find out the applied techniques used to manage the inventories in the factory.
-) To present and analyze the inventory management system of Gandaki noodles Pvt. Ltd.
-) To analyze the profit and production cost.
-) To compare the cost of raw materials and sales of the noodles in different fiscal years.
-) To analyze present inventory position of Gandki noodles Pvt. Ltd.

Both primary and secondary data were used in the study. The primary data were collected through personal observations and interviews with the officials in that study. And the secondary data were used with the help of financial statements, balance sheet, and other documents of the company.

Major findings of that study were:

- a. The selling and cost price of noodle was increasing from year to year with different rate. There is a highest degree of correlation between selling and cost price.
- b. The factory uses direct method for raw materials purchasing. Total purchased amount was increasing at different rates.
- c. The annual change percent of actually used raw material was fluctuating. So, the material management was not sound.

- d. Some materials were imported from Japan and Singapore and others were available in Nepal.
- e. Production of instant noodles in the fiscal year 2048/049 was reduced in comparison to the previous years.
- f. The rate of increase of raw materials consumed and production of noodle was not same. It shows the weak inventory control in the production department.
- g. The average material cost and average cost price of the noodles were fluctuating at different rates.
- h. The material cost and sales are increasing from year to year at discriminating rates. The relationship between material cost and sales is significant.
- i. Gandaki noodles Pvt. Ltd. Was running under profit. But the profit was fluctuating. In the fiscal year 2047/048 production was highest but profit was lowest.
- j. No purchasing agent was appointed by the factory for material collection.
- k. The economic order quantity model was not following the purchasing decision.
- l. The inventories were not managed by ABC analysis.
- m. The inventory turnover ratio of the factory was satisfactory.
- n. Closing stocks were valued at cost price.

Rama Devi Bhandari(2002), conducted a research on “ Inventory management system” a case study of Multi Food Industry Pvt.Ltd as unpublished master level thesis submitted to kirtipur campus, Faculty of management, T.U.

The main objective of this study is to find out the inventory management system exercised by the factory. To achieve this objective the following sub objectives have been defined by her.

- a. To access the maintained inventories and other consequence on cost and profit.
- b. To find out the applied techniques used to manage the inventories in the factory.
- c. To analysis the present inventory position of MFI.
- d. TO suggest proper inventory models of based on the analysis.

From the above analysis following findings have drawn about the inventory management of MFI.

- a. Required different types of raw materials are imported from Singapore, Malaysia, India as well as local market.
- b. The company has not determined the re-order level, maximum level and minimum level.
- c. The company has not followed scientific inventory techniques i.e. EOQ models, ABC analysis.
- d. Sometime the company has to suffer the shortage of inventory which is imported from third country.
- e. The company has not categorized its inventory for the purpose of control pain equal attention for all inventory held in equal attention for all inventory hold in store.
- f. Inventory turnover ratio was not satisfactory.

Pitambar Khanal(2005), conducted a research on “Inventory management system of Gorkhaparta Corporation” as unpublished master level thesis submitted to Shankar Dev Campus, Faculty of management, T.U. The main objectives of this study identify the problem are as follows;

- a. To examine the existing inventory system of applied by GPO.
- b. To determine optimal inventory level of major raw materials.
- c. To analysis there relationship between inventory materials cost and profit.

The major findings of his study are:

- a. GPO not has followed any scientific tools and techniques of inventory management system.
- b. Raw materials are imported from various countries.
- c. Unnecessary cost involved in ordering cost and carrying cost.

Govindra Prashad Dhakal (2006), conducted a research on “A study on inventory management and control of Royal Drug Ltd” as unpublished master level thesis submitted to Shankar Dev Campus, Faculty of management, T.U.

The main objectives of this study were as follows:

- a. To access the type of inventory maintained on the royal drugs ltd.
- b. To examine the techniques employed to manage inventory in royal drugs ltd.
- c. To suggest proper inventory model to royal drugs ltd based on analysis.

Major findings of that study were:

- a. Chemical materials are over stocking.
- b. The packing materials were not managed efficiently.
- c. Inadequate level of finished goods.
- d. Stock items were not classified properly.
- e. They have not recognized the minimum stock and re-order level.

Bina Limbu (2007), conducted a research on “Inventory management system” a case study of Salt Trading Organization submitted to Kirtipur campus, Faculty of management,T.U.

Objectives:

- a. To examine the practice of inventory management functions.
- b. To analyze the position of inventory levels and its trend.
- c. To analyze relationship of inventory with net sales, net profit, purchase and interest expenses.

Major Findings:

- a. Inventory to assets ratio are not consistent over the study period.
- b. The inventories to net sales ratio of the last two years have been increased because of decreases in net sales.
- c. The inventories to current assets ratio of last two years have been increased because of decreases in net sales.
- d. The ratio between inventories and net profit are fluctuating trend but the ratio is more increases in last two years.

Bimal Prasad Gupta(2008), conducted a research on “Inventory management system” a case study Nepalese newspaper companies as unpublished master level thesis submitted to Shankar Dev Campus, Faculty of management, T.U. The main objectives of this study identify the problem are as follows;

- a. To identify present inventory position of NNPC.
- b. To examine the technique of purchase cycle of raw materials of NNPC.
- c. To analyze the inventory management and control system.
- d. To compare the annual demand of raw material and EOQ of NNPC.
- e. To identify the inventory trend of NNPC.
- f. To suggest over the better practice of inventory management.

Major findings:

- a. The inventory managed by classifying them according to ABC analysis in all NNPC.
- b. The NNPC is not followed the method of inventory management techniques.
- c. The NNPC need to procedure necessary raw materials 2-4 times in a year instead of one time in a year.
- d. Inventory expenses have increased due to indiscriminate storing and carelessness is the storing of inventory.

Deepak Rawal (2009), conducted a research on “Inventory management system of Dairy Development Corporation and Sitaram Gokul Milk Pvt.Ltd” as unpublished master level thesis submitted to Shankar Dev Campus, Faculty of management, T.U. The main objectives of this study were as follows;

- a. To carry out a comparative analysis of the present inventory management position of DDC and SGML.
- b. To identify and analyze the problem faced by the companies at the time of inventory management and control system.
- c. To examine the inventory management practice and to analyze its impact in profitability of the sampled two companies.

- d. To access the status of companies towards utilizing inventory resources.
- e. To identify the optimum level of inventory to reduce inventory cost.
- f. To recommend some suggestions based on major findings and conclusion.

Major findings:

- a. There is not proper and timely improvement in inventory management in DDC and SGML.
- b. DDC and SGML have lack of study on effective and efficient inventory management system.
- c. Both companies have not categorized its inventory for the purpose of control and pain equal attention for all the inventories held in the time store.
- d. The EOQ model is not followed in the purchasing decision by both of the companies.
- e. DDC and SGML have made re-order after stock is finished.
- f. The inventory turnover ratio of the companies was not satisfactory.
- g. There is no significant relationship between inventory and profit of the companies.

Subash Chandra Chaudhary(2010), conducted a research on “Effectiveness of inventory management of Dabur Nepal Pvt.Ltd” as unpublished master level thesis submitted to Shankar Dev Campus, Faculty of management, T.U.

Objectives:

- a. To identify present inventory position of Dabur Nepal Pvt.Ltd.
- b. To know the relationship of purchase and inventories.
- c. To know the relationship of inventories and sales.
- d. To identify the problem faced by the Dabur Nepal Pvt.Ltd. in the management of inventory.
- e. To assess the inventories and their consequences on profitability of Dabur Nepal Pvt.Ltd.

Major findings:

- a. The inventory management and controlled tools followed by DNL are ABC analysis, perpetual inventory management system.
- b. There is no systematic and scientific system to determine ordering cost and carrying cost.
- c. Purchasing is the first step of inventory management of manufacturing companies.
- d. The company has not been adopting appropriate inventory policy.
- e. Demand and sales of company is fluctuating. The main reason for such fluctuation is the lack of appropriate inventory policy and ineffective demand forecast.
- f. There is not available any record regarding with spare parts inventory.

Durga Prasad Kattel (2010), conducted a research on “Relationship between inventory and profitability” a case study of Unilever Nepal Limited as unpublished master level thesis submitted to Shankar Dev Campus, Faculty of management, T.U.

Objectives:

- a. To see the position of inventories on Unilever Nepal Limited.
- b. To explore relationship between profit and inventories level.
- c. To see the practices of purchasing adopted by Unilever Nepal Limited.
- d. To see the system of inventory issue adopted by Unilever Nepal Limited.
- e. To see the inventory turnover cycle.

Major findings:

- a. Bin card and store ledger techniques have applied to control inventory.
- b. There is no systematic and scientific way to determine ordering and carrying cost.
- c. Inventory turnover ratio of UNL is satisfactory level.
- d. Net profit margin of UNL is in satisfactory level except during emergency period.
- e. The coefficient of sales is positively correlated with sales. It determines that increase in inventory will cause increase in sales.

- f. The correlation between sales and net profit has positive correlation for UNL.

2.9 Research Gap:-

From the above study it can be concluded that inventory management is one of the key success for manufacturing company. Inventory management is the life blood of the organization that enables company to achieve profit maximization and minimization of the cost. The previous research studies reviewed are related to inventory management of Janakpur Cigarette Factory, Gandaki noodles Pvt. Ltd, Nepalese newspaper companies, Dabur Nepal Pvt.Ltd , DDC etc.. Which make clear that no studies have been conducted specifically on inventory management and control of Him Shree Foods Pvt.Ltd. Nobody had perform study on the same topic and same organization. The research made on related field in 1994 of Gandaki noodles pvt.ltd. Here there exists a research gap between the present and past research. This research is conducted to fill up this research gap. Latest data are used in this study. Nobody had shown the relationship between inventory and different component as sales, purchase, raw materials, profit etc. In sprite of above, multiple gaps among the researcher's view as well as there is time gap regarding the study of inventory management.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design:-

This study used descriptive, analytical, true experimental and field study to obtain the necessary information, data and opinion. For this purpose five fiscal years' data of Him Shree Foods Pvt. Ltd were collected and analyzed using various statistical tools. Data were presented in the table depending upon their nature.

3.2 Nature and Sources of Data:-

Both primary and secondary data were used for this study. Some important sources of primary data were opinion survey through questionnaire, interview and field visit. Mainly secondary data of Him Shree Foods Pvt. Ltd were collected from the following sources:

1. Annual reports and financial statements of the company.
2. Unpublished official records.
3. Unpublished related thesis and other related documents.
4. Newspapers and articles.

3.3 Population and Sample:-

For the study the population is only Him Shree Foods Pvt. Ltd. Personal interviews were taken from various officials according to the requirement of the study.

The data were gathered by conducting a survey of structured opinion questionnaires responses. A set of 20 different questions were dispatched to 24 different officials. The opinion questionnaire and list of respondents included in total sample are given in appendix.

3.4 Data Collection Techniques:-

Primary data were collected through observation and interview. Secondary data were collected through annual reports and financial statements.

3.5 Tools Applied:-

Mainly financial tools were applied for the purpose of this study. Appropriate statistical tools were also used. Among them correlation analysis, percentage were used for this research.

A. Financial Tools:-

Inventory turnover ratio and some other major ratios were used in this study. It shows efficiently of organization regarding sales. Inventory ratio indicates how effectively the inventory is utilized.

1. Price index:-

The price index shows the relationship between cost price and selling price. It shows the difference between cost and selling price and their impacts on selling.

2. Inventory turn over Ratio:-

Inventory turnover ratio indicates the relationship between sales and closing inventory (stock).

$$\text{Inventory turnover ratio} \times \frac{\text{sales}}{\text{Closing Stock}}$$

3. Tabulation:-

The raw data and the findings were shown in tabulated form to show the clear view and to make the comparison easier.

4. The probable error:-

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error it is possible to determine the reliability of the value of the coefficient. It depends on the conditions of the coefficient of correlation is obtained as follows:

$$p = r \times 0.6745 \frac{1}{\sqrt{N}}$$

Here,

r= correlation coefficient. N=Number of pairs of observations.

If the value of r is less than the probable error, then the 'r' is not significant. If the value of 'r' is more than probable error, then 'r' is significant.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.1 Comparison of Selling and Cost Price of Noodles:-

This study of the trend of selling price and cost price of product is helpful to know the overall conditions of the factory. So the attempt was made to know the actual condition of the factory. The company depends upon its profit the selling price and cost price of the particular product. The selling price, cost price and profit of the noodle are presented in table 4.1 to know the relationship between each other at the Him Shree Foods Pvt. Ltd.

Table 4.1

Comparison of Selling and Cost Price of Noodles.

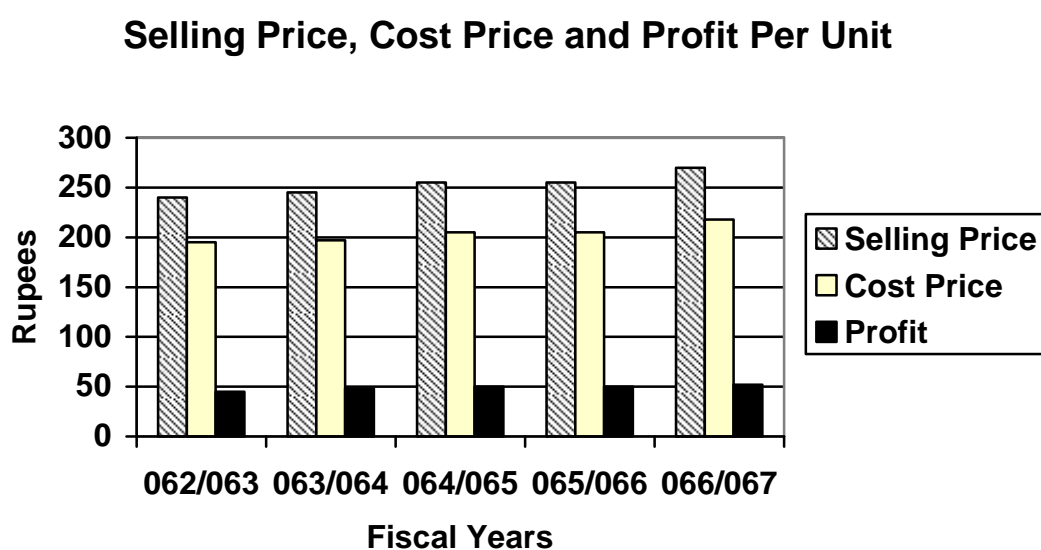
(In Rs)

Selling price (Rs)				Cost price(Rs)				Percentage of Cost on Selling Price (%)
Fiscal Years	Selling price per carton (Rs)	Selling price annual change (%)	Index	Cost price per carton (Rs)	Cost price annual change (%)	Index	Differences or profit per carton (In Rs)	
2062-063	240	-	100	195	-	100	45	81.25
2063-064	245	+2.1	102	197	+1.03	101	48	80.40
2064-065	255	+4.1	106	205	+4.1	105	50	80.40
2065-066	255	0	106	205	0	105	50	80.40
2066-067	270	+5.9	112	218	+6.34	111	52	80.74
Average	253			204			49	80.638

Source: Production and marketing department (Unpublished official record) 2067

Note: One carton = 30 pieces of noodles.

Showing the relationship between selling price, cost price and profit in each fiscal years at a following bar diagram.



Bar Diagram -1.

The selling and cost price of the noodle for the fiscal years 2062/063 to 2066/067 is depicted in table 4.1. The selling and cost price of the noodle is measured in one carton, equivalent to 30 packets. The table shows, in the fiscal year 2062/063, that the selling price of noodle per carton is Rs.240 whereas the corresponding cost price is Rs.195; there is a difference of Rs.45 between the selling and cost price. Here the difference amount denotes profit per unit. In the fiscal year 2063/064, the selling price of noodle per carton is Rs.245. It is increased by 2.1% in comparison to the fiscal year 2062/063. The corresponding cost price is Rs.197. It has increased by 1.03% in comparison to the fiscal year 2062/063. In the fiscal year 2064/065, the selling price of noodle has increased by 4.1% and the cost price by 4.1%. The selling and cost price per carton were respectively Rs.255 and Rs.205, whereas the difference between

selling and cost price was Rs.50. In the fiscal years 2065/066, the selling price and cost price remained unchanged. It means that in the fiscal years 2064/065 and 2065/066, the selling and cost price remained constant. In the fiscal year 2066/067, the selling and cost price of noodles has increased by 5.9 and 6.34 percent respectively. In that year, the selling price per carton was Rs.210 and the difference in selling and cost price was Rs.52.

Karl Pearson's coefficient of correlation was used to measure the degree of association between selling and cost price of the noodle, which is shown in appendix- A. The coefficient of correlation (r) between selling and cost price of the noodle of Him Shree Foods Pvt. Ltd. is 0.9995. This indicates the highest degree of correlation between them. This fact reflects the good situation of the factory. Hence, it proves that there is a significant relationship between selling and cost price of the noodle of Him Shree Foods Pvt. Ltd.

4.2 Cost Sheet of Him Shree Foods Pvt. Ltd:-

The study of cost sheets of Him Shree Foods Private Limited over the five fiscal years is helpful to know the overall cost trend of the company. So the attempted was made to find out the actual cost condition of the company. The cost sheets of Him Shree Foods Pvt.Ltd from fiscal year 2062/063 to 2066/067 are presented in table 4.2.

Table 4.2
Cost Sheet Of Him Shree Foods Pvt. Ltd.

Fiscal Years →	2062/063			2063/064			2064/065			2065/066			2066/067		
	Amount (Rs.)	Unit	per Unit	Amount (Rs.)	Unit	per Unit	Amount (Rs.)	Unit	per Unit	Amount (Rs.)	Unit	per Unit	Amount (Rs.)	Unit	per Unit
Particulars															
Raw Material Opening	9,235,000.00			8,725,000.00			9,750,000.00			16,257,000.00			15,375,000.00		
Purchase	113,812,000.00			122,930,000.00			145,970,000.00			153,601,000.00			164,357,000.00		
Less: Closing Stock	8,725,000.00			9,750,000.00			16,257,000.00			15,375,000.00			17,215,000.00		
Value of Material Consumed	114,322,000.00			121,905,000.00			139,463,000.00			154,483,000.00			162,517,000.00		
Add: Direct Labour and other Direct Expenses	10,855,875.00			11,574,281.00			12,095,699.00			12,492,504.00			13,505,264.00		
Prime Cost	125,177,875.00			133,479,281.00			151,558,699.00			166,975,504.00			176,022,264.00		
Add: Factory and production Overhead	5,122,938.00			5,927,894.00			6,762,068.00			6,464,855.00			7,460,310.00		
Opening WIP	12,512,080.00			11,477,800.00			12,045,590.00			10,557,870.00			13,145,590.00		
Closing WIP	11,477,800.00			12,045,590.00			10,557,870.00			13,145,590.00			17,065,850.00		
Factory cost of production	131,335,093.00	917,850	143.09	138,839,385.00	921,680	150.64	159,808,487.00	1,003,260	159.29	170,852,639.00	1,060,090	161.17	179,562,314.00	1,033,990	173.66
Add: office and administration Overhead	13,842,205.00			14,228,828.00			14,831,542.00			14,915,717.00			15,160,310.00		
Cost of Production	145,177,298.00	917,850	158.17	153,068,213.00	921,680	166.08	174,640,029.00	1,003,260	174.07	185,768,356.00	1,060,090	175.24	194,722,624.00	1,033,990	188.32
Add: Opening Stock of finished goods (156580 Units)	24,766,422.97	156,580	158.17	28,396,448.56	179,530	158.17	35,189,679.34	211,890	166.08	43,046,401.50	247,290	174.07	49,890,340.40	284,700	175.24
Less: Closing Stock of finished goods (179530 Units)	28,396,448.56	179,530	158.17	35,189,679.34	211,890	166.08	43,046,401.50	247,290	174.07	49,890,340.40	284,700	175.24	59,673,080.42	316,868	188.32
Cost of goods sold	141,547,272.41	894,900	158.17	146,274,982.22	889,320	164.48	166,783,306.84	967,860	172.32	178,924,417.10	1,022,680	174.96	184,939,883.98	1,001,822	184.60
Add: Selling and Distribution	11,538,535.00			12,405,632.00			12,970,689.00			13,322,714.00			13,722,057.00		

Overhead															
Cost of Sales	153,085,807.41	894,900	171.06	158,680,614.22	889,320	178.43	179,753,995.84	967,860	185.72	192,247,131.10	1,022,680	187.98	198,661,940.98	1,001,822	198.30
Profit	61,690,192.59	894,900	68.94	59,202,785.78	889,320	66.57	67,050,304.16	967,860	69.28	68,536,268.90	1,022,680	67.02	71,829,999.02	1,001,822	71.70
Sales	214,776,000.00	894,900	240.00	217,883,400.00	889,320	245.00	246,804,300.00	967,860	255.00	260,783,400.00	1,022,680	255.00	270,491,940.00	1,001,822	270.00

The above table is the cost sheet of Him Shree Foods Pvt. Ltd over the study period. Its shows comparative product cost of different fiscal year. The cost of production per unit was Rs.158.17 in fiscal year 2062/063. In the fiscal year 2063/064 it was Rs. 166.08. Similarly, it was Rs. 174.07, Rs. 175.24 and Rs 188.32 in the following fiscal year 2064/065, 2065/066 and 2066/067 respectively. The cost of production per unit is fluctuating over five years. It is because of the non-proportional change in selling price and different cost. Another reason is the absorption rate of fixed cost.

Cost of sales in total was Rs. 15,30,85,807.41 in fiscal year 2062/063. In the others fiscal years it was Rs. 15,86,80,614.22, Rs. 17,97,53,995.84 , Rs. 19,22,47,131.10 and Rs. 19,86,61,940.98 corresponding fiscal year 2063/064, 2064/065, 2065/066 and 2066/067 respectively. Likewise costing profit in these fiscal years was Rs.6,16,90,192.59 , Rs. 5,92,02,785.78, Rs. 6,70,50,304.16, Rs. 6,85,36,268.90 and 7,18,29,999.02 with these fiscal years respectively. The costing profit excludes some cost like interest, Bad debts and direct tax unlike financial profit & loss account.

4.3 Trend of Profit and Production of Him Shree Foods Pvt. Ltd:-

Generally the difference between revenue and cost is known as profit, it may be positive or negative. The production and profit of the factory is analyzed in the following table 4.3.

Table 4.3

Profit and production of Him Shree Foods Pvt. Ltd.**Profit maintained in rupees and Production maintained in cartons.**

Fiscal Years	Profit (In Rs.)	Annual Change %	Production quantity. (In cartons)	Annual Change %
2062-063	4,02,70,500	-	9,17,850 units	-
2063-064	4,26,87,470	+6.00	9,21,680 units	+0.41
2064-065	4,83,92,940	+13.365	10,03,260 units	+8.85
2065-066	5,11,34,117	+5.66	10,60,090 units	+5.66
2066-067	5,20,94,744	+1.878	10,33,990 units	-2.46
Average	4,69,15,954.2		9,87,374 units	

Source: Marketing and production department, (Unpublished official record) 2067

The above table shows the profit and production of Him Shree Food Pvt. Ltd. for the period of five fiscal years. Profit is presented in Rs. and production in cartons. In the fiscal year 2062/063, the factory earned a profit of Rs.4,02,70,500. The production for the same year was 9,17,850 cartons. During the fiscal year 2063/064 the factory earned a profit of Rs.4,26,87,470 and produced 9,21,680 cartons. The profit, in that year has increased by 6% and production by 0.41% in comparison to the fiscal year 2062/063.

Similarly, in the fiscal year 2064/65, the profit and production were Rs.4,83,92,940 and 10,03,260 cartons respectively. The profit has increased by 13.365% and production by 8.85%. In the fiscal year 2065/066, the profit was Rs.5,11,34,117 and production was 10,60,090 cartons. The profit has increased by 5.6% and production by same percentage i.e. 5.6%. In the fiscal year 2066/067 the profit was Rs.5,20,94,744 and production was 10,33,990 cartons. In this fiscal year, profit has increased by 1.878% and production has decreased by 2.46% in comparison to the previous fiscal year. It means in the fiscal year 2066/067 stock of finished goods of the fiscal year 2065/066 was sold by the company.

The above table shows that the Him Shree Food Pvt. Ltd. is running at profit during the five fiscal periods. But the profit of the factory is varying from year to year. The rate of percentage change in profit is not the same during the five fiscal years.

4.4 Inventory Position of Him Shree Food Pvt. Ltd:-

Inventory plays vital role in productive organization. Without inventory an organization may be like a fish without water. But proper care should be taken to manage inventory. The inventory position of Him Shree Foods Pvt. Ltd. is analyzed below:

4.4.1 Stock of Raw Materials in Values:-

The closing stock of raw materials in values is shown in table no.4.4 below.

Table No. 4.4

Closing Stock of Raw Materials in Values (In Rs).

Fiscal years	Values (Rs)	Annual change %	Index
2062-063	87,25,000	-	100
2063-064	97,50,000	+11.75	112
2064-065	1,62,57,000	+66.73	179
2065-066	1,53,75,000	-5.43	174
2066-067	1,72,15,000	+11.97	186

Source: Production and marketing department (Unpublished official record) 2067

The above table shows the inventory position of raw materials for the fiscal years 2062/063 to 2066/067. In the fiscal year 2062/063, the factory had the raw materials of a value of Rs.87,25,000. In the following fiscal year, went to Rs.97,50,000. The raw material's value of the fiscal year 2063/064 has increased by 11.75 in comparison to the fiscal year, 2062/063. In the fiscal year 2064/065, the closing stock of raw materials was of Rs.1,62,57,000. It has increased by 66.74% in comparison to the fiscal year, 2063/064. Similarly in the fiscal year

2065/066, the value of closing stock of raw materials was Rs.1,53,75,000. It has decreased by 5.43% in comparison to the fiscal year 2064/065. In the fiscal year 2066/067, the value of closing stock of raw materials was Rs. 1,72,15,000. It has increased by 11.97% in comparison to the fiscal year 2064/065.

From the above table, it can be analyzed that the value of closing stock of raw materials has been increasing from year to year except in the fiscal year 2065/066 .But the annual increase rates were different from year to year.

4.4.2 Closing Stock of Finished Goods:-

The stock of finished goods in term of cost values for the period of five years is presented in table no. 4.5 below.

Table No. 4.5

Closing Stock of Finished Goods. Units in Carton & Value in rupees.

Fiscal years	Closing stock in cartons	Closing stock value (Rs)	Annual change %	Index	<i>Source: Production and marketing department</i>
2062-063	1,79,530 units	2,83,96,447	-	100	
2063-064	2,11,890 units	3,51,89,679	+23.92	124	
2064-065	2,47,290 units	4,30,46,402	+22.32	146	
2065-066	2,84,700 units	4,98,90,340	+15.89	162	
2066-067	3,16,868 units	5,96,73,080	+19.60	182	

t (Unpublished official record) 2067

In the fiscal year 2062/063, the closing stock of finished goods i.e. Noodle was 1,79,530 cartons with worth Rs.2,83,96,447. In the following fiscal year 2063/064 it was Rs.3,51,89,679 and 2,11,890 cartons and it has increased by 23.92% in comparison to the previous fiscal year. Similarly in the fiscal year 2064/065 the closing stock value of noodle is Rs.4,30,46,402 and it has increased by 22.32% in comparison to the previous fiscal year 2063/064. In the fiscal year 2065/066 the stock value was of Rs.4,98,90,341 and it has increased by 15.89%. In the fiscal year 2066/067 the closing stock of noodle was of

Rs.5,96,73,080 and it has increased by 19.60% in comparison to the previous fiscal year 2065/066.

The above table shows that the closing stock values of noodle was increasing from the fiscal years 2062/063 to 2066/067 but the increased rates of percentage are different. The calculation of stock of finished goods is shown in appendix- B.

4.5 Closing Stock of finished goods and cost of goods sold:-

The study gave us knowledge about the relationship between closing stock of finished goods and cost of goods sold in the manufacturing company. The proportions of closing stock of finished goods on cost of goods sold are presented in table 4.6.

Table 4.6

Statement of Closing Stock of Finished Goods and Cost of Goods Sold.
(In Rs.)

Fiscal Years	Closing Stock (Rs.)	Cost of Goods Sold (Rs.)	% of Closing Stock on Cost of Goods Sold
2062/063	28,396,448.56	141,547,272.41	20.06 %
2063/064	35,189,679.34	146,274,982.22	24.06 %
2064/065	43,046,401.50	166,783,306.84	25.81 %
2065/066	49,890,340.40	178,924,417.10	27.88 %
2066/067	59,673,080.42	184,939,883.98	32.27 %
Average	4,32,39,190	16,36,93,972.5	26.41 %

In the above table 4.6, the value of closing stock is significantly increasing along the study period. In the fiscal year 2062/063 the percentage value of closing stock on cost of goods sold was only 20.06%. But it was 24.06%, 25.81%, 27.88 %, and 32.27 % in fiscal year 2063/064, 2064/065, 2065/066 and 2066/067 respectively. The company seems to be unable to maintain consistency in investing in stock. Significantly increasing investment in stock can not be considered good for company's financial health. So company should look and find out the root causes of this and should immediately take corrective action. Otherwise it will be investing a huge amount of its working capital in unproductive assets.

4.6 Procurement of Raw Materials:-

Without input, no output is possible. Raw materials are the vital inputs in any productive organization. The quality and quantity of finished goods depend upon the quality and quantity

of raw materials used. Raw materials essential for producing noodles can be grouped in to two namely flour and auxiliaries.

Auxiliaries purchased by the factory are further grouped under two headings; they are, Nepalese and overseas. Flour is available in Nepal. So, there is no complication in the purchase of it. The auxiliaries which, are used in the factory are: ghee, oil, sup powder, chemicals, plastic wrapper gum tape, card board paper, salt, plastic, diesel, etc. Sup powder is imported from Japan, palm oil, wrapper and chemicals are imported from Singapore and the rest of the things are purchased in Nepal. All the things are purchased directly and no purchasing agent is used.

4.6.1 Procurement of Raw Materials by Him Shree Food Pvt. Ltd.:-

The raw materials procured by Him Shree Foods Pvt. Ltd. are presented below in table no. 4.5 followed by its analysis.

Table 4.7

Raw Materials in Values (Rs in million)

Fiscal Years	Raw Materials	Fuel	Wrapped and cardboard	Total	Annual change %	Index
2062-063	75.753	5.32	32.739	113.812	-	100
2063-064	81.214	6.2	35.516	122.93	+8.01	108
2064-065	90.145	7.5	48.325	145.97	+18.74	127
2065-066	95.321	7.97	50.31	153.601	+5.23	132
2066-067	102.175	8.75	53.45	164.357	+7	139

Source: Production and marketing department (Unpublished official record) 2067

Note: Raw Materials include flour, ghee, oil, sup powder and chemical.

Though, all the materials presented in table no 4.7 come under raw materials, they are written under different headings in the different columns. Under the heading of raw materials, flour, ghee, oil, sup powder and chemicals and plastic are included. The above table shows the purchasing of materials in the five fiscal years. According to the table, the total amount of raw materials purchased in the fiscal year 2062/063 was Rs113.812 million. In the fiscal year 2063/064, it was Rs122.93 million and it has increased by 8.01% in comparison to the previous year. In the fiscal year 2064/065, it was Rs.145.97 million and it has increased by

18.74% in comparison to the previous year. In the fiscal year 2065/066, total raw materials purchased went up to Rs153.60 million and it has increased by 5.23% in comparison to the previous year. Similarly, in the fiscal year 2066/067, the total purchased amount was Rs.164.357 million and it has increased by 7% in comparison to the previous year.

From the above analysis; it is found that the raw materials purchase is the highest and that under fuel is the lowest. Similarly, in the fiscal year 2064/065, the total purchased amount has increased by the highest percentage, i.e. 18.74% in comparison to other fiscal years. And in the fiscal year 2065/066, the total increased purchase amount is the lowest, i.e. only by 5.23%. It shows that the total purchased amount is fluctuating from year to year.

4.6.2 Actual Quantity Used in Values:-

The actual purchased amount is shown in table no.4.8. Not all the purchased amount is used. So, the actual used is shown in table No.4.8

Table 4.8

Actual Raw Material used in values (Rs in million).

Fiscal Years	Opening Stocks	Purchased	Total =(Opening Stock +purchased)	Closing Stocks	Raw material used=(Total -Closing stocks)	Annual change (%)	Index
2062-063	9.235	113.812	123.047	8.725	114.322	-	100
2063-064	8.725	122.93	131.655	9.75	121.905	+6.633	107
2064-065	9.75	145.97	155.72	16.257	139.463	+14.40	121
2065-066	16.257	153.601	169.858	15.375	154.483	+10.77	132
2066-067	15.375	164.357	179.732	17.215	162.517	+5.20	137

Source: Production department (Unpublished official record) 2067

In the fiscal year 2062/063 the total quantity used in values was Rs.114.322 million. In the fiscal year 2063/064, the quantity used was Rs.121.905 million and it has increased by 6.633% in comparison to the previous year. In the fiscal year the quantity used was

Rs.139.463 million; it has increased by 14.40% in comparison to the previous year. In the fiscal year 2065/066, the quantity used was Rs154.483 million; it has increased by 10.77% in comparison to the previous year. Similarly, in the fiscal year 2066/067, the quantity used was Rs.162.517 million; it has increased by 5.20 in comparison to the previous year.

A table no. 4.8 show that the quantity used was increasing from year to year. But the increasing ratio is disordered. Similarly the closing stock has increased from year to year discontinuously except the fiscal year 2065/066. So it can be said that the material management of the factory is not sound.

4.7 Production of Noodles in Quantity:-

No output can be produced without input. It means inputs are necessary for getting output. Raw materials are the inputs and noodles are the output of Him Shree Foods Pvt. Ltd. The consumption of raw materials and production of noodles is therefore analyzed here in table 4.7.

Table 4.9

Production of Noodles in Quantity (Cartons) Units.

Fiscal Years	Noodles		
	Production	Annual change %	Index
2062-063	9,17,850 units	-	100
2063-064	9,21,680 units	+0.41	100
2064-065	10,03,260 units	+8.85	109
2065-066	10,60,090 units	+5.66	115
2066-067	10,33,990 units	-2.46	112

Source: Production department (Unpublished official record) 2067

In the fiscal year 2062/063- 9,17,850 cartons of noodles were produced. In the following fiscal year 2063/064, the production has increased by 0.41% and the quantity is 9,21,680 cartons. Similarly, in the fiscal year 2064/065, the production of noodles was 10,03,260 cartons and it has increased by 8.85% in comparison to the previous fiscal year. In the following fiscal year, the quantity produced was increased by 5.66% and the production was 10,60,090 cartons. In the fiscal year 2066/067 the production was decreased by 2.46% and it was only 10,33,990 cartons. The presented table shows that the production of noodles in the five fiscal year range is fluctuated.

The presentation shows that the production of noodle fluctuated highly. It shows that either the factory could not spray the good image about the product to the customers and the demand fell or that it could not produce the sufficient quantity due to mismanagement of raw materials or inefficiency of machine.

4.7.1 Consumption of Raw Materials and Production of Noodle in Values:-

The consumed raw materials and production of noodle in values is shown below in table no. 4.10. It should be noted that the production of noodle in Rs. denotes the production cost only. This is because only after including the excise duty, selling tax and production cost, the selling cost is determined. Under the value of raw materials, the aggregate value of raw materials includes:

Table 4.10

Consumption of Raw Materials and Production Cost of Noodles

(Rs. in million)

Fiscal Years	Consumed raw materials (Rs)	Annual change %	Index	Production of noodles (Rs)	Annual change %	Index
2062-063	114.322	-	100	145.177	-	100
2063-064	121.905	+6.633	107	153.068	+5.43	105
2064-065	139.463	+14.40	121	174.640	+14.09	119
2065-066	154.483	+10.77	132	185.768	+6.37	125
2066-067	162.517	+5.20	137	196.562	+5.81	131

Source: Unpublished official record (Production department) 2067

In the fiscal year 2062/063 raw materials of Rs.114.322 million was used and the production of noodle was of Rs.145.177 million. In the fiscal year 2063/064, raw materials were increased by 6.633% and amount was Rs121.9 million. In the same year, production has increased by 5.43% and the total amount was Rs.153.068 million. In the fiscal year 2064/065, consumption of raw materials has increased by 14.40% and amount was Rs139.463 million,

while in the same year; production has increased by 14.09% and amount was Rs174.640 million. In the fiscal year 2065/066, consumption of raw materials has increased by 10.77% and amount was Rs.154.483 million, while in the same year; production has increased by 6.37% and amount was Rs.185.768 million.

In the fiscal year 2066/067, consumption of raw materials has increased by 5.20% and amount was Rs.162.517 million. Meanwhile, production has increased by 5.81% and amount was Rs.196.562 million.

The table shows that raw materials are increasing from year to year. Similarly; production is increasing from year to year. But they are not increasing in the same ratio. It means that neither the increasing ratio of raw material consumption and production of noodle are same nor the increasing ratio of raw materials consumed and the production of noodle itself in the different years are the same.

4.8 Trend of Average Material Cost and Average Cost Price of the Noodle:-

Attempt has been made for analyzing the relationship between the cost of raw material and the cost of noodles. The average cost of raw materials to produce a carton noodle per year for the five fiscal years is presented below in table no. 4.9. For simplicity, the cost of only one carton is taken. Here, average refers to the average raw materials required and average production.

Table No. 4.11

Average Materials Cost and Average Cost Price of Noodle Production in carton, Values in Rs.

Fiscal Years	Material cost(Rs)			Total cost(Rs)			
	Value per carton(Rs)	Annual change %	Index	Value per Carton(Rs)	Annual change %	Index	Differences (Rs)
2062-063	120	-	100	195	-	100	75
2063-064	125	+4.16	104	197	+1.03	101	72
2064-065	132	+5.6	110	205	+4.1	105	73

2065-066	127	-3.78	106	205	0	105	78
2066-067	143	+12.59	119	218	+6.34	111	75

Source: Unpublished official record (Production department) 2067

In the fiscal year 2062/063, the material cost per carton was Rs.120 and the total cost of the same fiscal year was Rs.185. There was a difference of Rs.75 between material cost and total cost of the noodle. In the fiscal year 2063/064, the material cost and total cost per carton were respectively Rs.125 and Rs.197. The difference was Rs.72. in this year; the material cost and total cost has increased by 4.16% and 1.03% respectively in compare to the previous fiscal year. In the fiscal year 2065/066 the material cost per carton was Rs.132 and total cost per carton was Rs 205. They were increased by 5.6% and 4.1% respectively in compare to previous fiscal year. In fiscal year 2065/066 the material cost per carton has decreased by 3.78%, but the total cost per carton was remaining same with previous fiscal year.

In the fiscal year 2066/067 the material cost per carton was Rs.143 and the total cost per carton was Rs.218. The difference between material cost per carton and total cost per carton was Rs.75. In the fiscal year 2066/067, total cost has increased by 6.34% and material cost has increased by 12.59% in comparison to the previous fiscal year.

Karl Pearson's co-efficient of correlation (r) between the material cost and cost price of the noodle of Him Shree Food Pvt. Ltd. has been computed to measure the degree of relationship between them. The computation is presented in appendix-C. The co-efficient of correlation (r) between the material cost and total cost of the noodle of Him Shree Foods Pvt. Ltd. is 0.967, which shows the higher degree of correlation between two. It means the relationship between them is highly significant.

4.9 Trend of Material Cost and Sales of Noodle:-

A comparative study between the actually costs of materials used and sales of Him Shree Foods Pvt. Ltd for the five fiscal years period is analyzed below at table 4.12.

Table 4.12

Cost of Actually Used Raw Material and Sales of Noodle**(Rs in million)**

Fiscal years	Raw Material cost (Rs)			Sales(Rs)		
	Cost(Rs)	Annual change %	Index	Sales(Rs)	Annual change %	Index
2062-063	114.322	-	100	214.776	-	100
2063-064	121.905	+6.633	107	217.884	+1.447	101
2064-065	139.463	+14.40	121	246.804	+13.27	114
2065-066	154.483	+10.77	132	260.784	+5.66	120
2066-067	162.517	+5.20	137	270.492	+3.72	123

Source: Unpublished official record (Production department) 2067

The above table shows the raw material cost and sales of noodle of Him Shree Foods Pvt. Ltd. for the five fiscal years from 2062/063 to 2066/067. In the fiscal year 2062/063, the raw material cost of noodle was Rs.114.322 million and the sale was Rs.214.776 million. In the fiscal year 2063/064, the material cost and sales cost were Rs.121.905 and 217.884 million, respectively. In this fiscal year, raw materials and sales has increased by 6.633% and 1.447% respectively in comparison to the fiscal year 2062/063. In the fiscal year 2064/065 the raw material cost was Rs.139.463 million and sales was Rs.246.804 million. These were increased by 14.40% and 13.27% respectively in comparison to the fiscal year 2063/064. In the fiscal year 2065/066, raw material cost was Rs.154.483 million and sale was Rs.260.784 million. The increasing ratio was 10.77% and 5.66% respectively in comparison to the fiscal year 2064/065. In the fiscal year 2066/067, the material cost was Rs.162.517 millions and sale was Rs.270.492 million. This fiscal year material cost has increased by 5.20% and sale has increased by 3.72% with comparisons to the fiscal year 2065/066.

The above analysis shows that, the raw material cost and sales of noodle of Him Shree Foods Pvt. Ltd. are increasing in all fiscal years. But the increasing ratio is not same. The amount of sales is always higher than the amount of material cost.

4.10 Order Placement for Raw Materials:-

Palm oil, wrapper, sup powder and chemicals were imported from foreign countries, especially from Japan and Singapore. The rest of the raw materials were purchased within the nation. When the amount of raw materials becomes less in production department, production department informs to the storekeeper. The storekeeper, after the permission of management, purchases the raw materials. Generally, there were stocks of raw materials for one month. The factory was not following the economic order quantity. When there were more orders of noodle from the customers, the factory starts its production in night shift, too. In such a time, production stops due to the raw materials being out of stock. In this factory, there was no provision of maximum, minimum and re-order levels.

From studying the factory, it is concluded that no purchasing agent is appointed by the factory. Sometimes, the factory becomes highly stocked and some times it becomes stockless. So it is advised to maintain the raw materials at the optimum level.

4.11 Purchasing Practices:-

The period of purchasing time is the most important aspect of material management. Him Shree Foods Pvt. Ltd., purchases its raw materials directly. The factory purchases locally available materials in the local area. If the materials were not available, then it purchased them from outside. Most of the local raw materials were purchased when they were required.

Since there was no provision of economic order quantity, there was no provision for exact lead time, too. There was no specific purchasing time.

4.12 Ratio analysis of Him Shree Foods Pvt. Ltd.:-

The financial strengths and weaknesses of the factory can be measured by using ratio analysis tools. The inventory turnover ratio indicates the efficiency of the factory in selling its product.

The inventory turnover ratio of Him Shree Foods private limited is shown in table no. 4.13 below.

$$\text{Inventory Turnover Ratio} = \frac{\text{Sales}}{\text{Closing Inventory}}$$

Table No. 4.13

Inventory Turnover Ratio Analysis of Him Shree Foods Pvt. Ltd. (Value in Rs).

Fiscal years	Sales (Rs)	Closing inventory (Rs)	Inventory Turnover Ratio (Times)	Annual Change %
2062-063	21,47,76,000	2,83,96,447	7.563	-
2063-064	21,78,83,400	3,51,89,679	6.191	-18.14
2064-065	24,68,04,300	4,30,46,402	5.733	-7.40
2065-066	26,07,83,400	4,98,90,341	5.227	-8.82
2066-067	27,04,91,940	5,96,73,080	4.532	-13.29

Source: Marketing department (Unpublished official record) 2067

The above table shows the calculation of inventory turnover ratio of the factory for the five fiscal years. In the fiscal year 2062/063, the inventory turnover ratio was 7.563 times. In the fiscal year 2063/064, the inventory turnover ratio was 6.191 times. It has decreased by 18.14% in comparison to the fiscal year 2062/063. During the fiscal year 2064/065, the inventory turnover ratio was 5.733 times. It has decreased by 7.40% in comparison to the fiscal year 2063/064. In the fiscal year 2065/066, the inventory turnover ratio was 5.227 times. It has decreased by 8.82% in comparison to the fiscal year 2064/065. Similarly in the fiscal year 2066/067, the inventory turnover ratio was 4.532 times. It has decreased by 13.29% in comparison to the fiscal year 2065/2066.

The above table shows that the inventory turnover ratio was decreasing in the five fiscal years. The highest inventory turnover ratio was in the fiscal year 2062/063. From the above table, it can be concluded that the inventory turnover ratio of the factory is not satisfactory.

4.13 Major Findings:-

The following major findings about the inventory management and control of Him Shree Pvt. Ltd. can be drawn based on the above analysis.

- i. The selling and cost price of noodles are increasing from year to year. There is a highest degree of correlation between selling price and cost price. There is positive correlation between them. Where, $r = 0.995$.
- ii. The relationship between profit and production quantity is positive.
- iii. Him Shree Foods Pvt. Ltd. is running at profit. But the rate of increase in profit is fluctuating.
- iv. The annual change percent of actual raw materials use is fluctuating. So the material management is not sound.
- v. The factory uses direct method for raw material purchasing. Total purchased amount is increasing at different rates.
- vi. The rate of increase of raw materials consumed and production of noodle is not same.
- vii. The average material cost and average cost price of the noodles are fluctuating at different rates.
- viii. The material cost and sales are increasing from year to year. The relationship between material cost and sales is significant. There are positive correlation between cost of material and sales. Where, $r = 0.967$.
- ix. The inventory turnover ratio of the factory is not satisfactory.
- x. The economic order quantity model is not used by the company.
- xi. No purchasing agent is appointed by the factory for material.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary:-

Him Shree Foods Pvt. Ltd. beings a productive factory invests a large amount of capital in the form of inventory. The researcher has studied about the maintaining of inventory and their consequences on cost and profit. To achieve the objective, the researcher conducted interviews with officials and observed the inventory system personally. The data were collected from the unpublished official records, balance sheets, profit and loss accounts, reports, etc.

All the facts and data were analyzed by using tools like percentage, index, correlation coefficient, ratio analysis, etc. though mathematical techniques like economic order quantity have been developed, and the researcher could not find such techniques being used in the factory.

Inventory management refers to the proper handling of inventory to achieve a carefully choose goal. From the study, it is found that the inventory management of Him Shree Foods Pvt. Ltd. is not worse even though it requires some improvements.

5.2 Conclusions:-

The study is based on the data as provided by the factory and personal observation of the researcher. After studying the factory, the researcher has derived the conclusions.

The study focus the need for a good inventory management system to maintain a suitable level of inventory and also control the cost of Him Shree Foods Pvt.Ltd. Him Shree Foods Pvt.Ltd running at profit. The company's cost price and selling price was not changing in the same ratio. Him Shree Foods Pvt.Ltd collection raw materials directly by the company no any mediators recruit by the firm. The firm gets most of the raw materials in nation but some unfounded raw materials are imported from Japan and Singapore too. According to the above study, we can easily learn that the

factory was following neither economic order quantity model (EOQ model) in its purchasing decision nor other methods in inventory management system. The company did not follow economic purchase order so total cost of carrying and ordering inventory is higher. The ratio analysis seems not satisfactory level of the company so that there is lots of work still to be done. The company has no real or fixed purchasing budget for inventory.

It is concluded that the political disorder, economic condition of the company and foreign trade relation etc are found major threats of the company. It should maintain economic order size which helps to minimize the inventory cost and to increase the profit of the company.

5.3 Recommendations:-

On the basis of the analysis, the recommendations can be made.

- i. Some raw materials were found to be imported from Japan and Singapore. The company needs to follow EOQ model and ROI due to the geographically distance and national's political disorder a firm suffer unbalance in its production.
- ii. The company should make the production plan in order to purchase required of raw materials.
- iii. The raw material purchasing planning is not used by the factory. So it is advised to follow the economic order quantity model.
- iv. Inventories of finished goods should not be very low and very high so that the problem of under stocking and overstocking of finished goods may not arise.
- v. The company can get benefit by applying the master plan, so use of master plan is suggested.

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APPENDIX –A

Coefficient of Correlation Between Selling price and Cost Price of Noodles

Values in Rs.

Selling price 'X'	$x=(X - \bar{X})$	X^2	cost price Y	$y=(Y - \bar{Y})$	y^2	xy
240	-13	169	195	-9	81	117
245	-8	64	197	-7	49	56
255	2	4	205	1	1	2
255	2	4	205	1	1	2
270	17	289	218	14	196	238
$\sum X = 1265$	$\sum x = 0$	$\sum x^2 = 530$	$\sum Y = 1020$	$\sum y = 0$	$\sum y^2 = 328$	$\sum xy = 415$

$$\bar{X} = \frac{\sum X}{n} = \frac{1265}{5} = 253, \bar{Y} = \frac{\sum Y}{n} = \frac{1020}{5} = 204$$

$$r = \frac{n\sum xy - \sum x \cdot \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 415 - 0 \times 0}{\sqrt{5 \times 530 - 0^2} \sqrt{5 \times 328 - 0^2}} = \frac{2075}{2084.706214} = 0.995$$

Computation of probable error

$$P.E = 0.6745 \frac{1 - r^2}{n}$$

$$= 0.6745 \frac{1 - (0.995)^2}{5}$$

$$= 0.6745 \times 0.001995$$

$$= 0.00134$$

APPENDIX –B

Calculation of closing stock of finished goods.

Quantity in carton (unit)

Fiscal years	Opening stock	Production	Total Available	Sales	Closing stock
2062/063	1,56,580	9,17,850	10,74,430	8,94,900	1,79,530
2063/064	1,79,530	9,21,680	11,01,210	8,89,320	2,11,890
2064/065	2,11,890	10,03,260	12,15,150	9,67,860	2,47,290
2065/066	2,47,290	10,60,090	13,07,380	10,22,680	2,84,700
2066/067	2,84,700	10,33,990	13,18,690	10,01,822	3,16,868
Total	1,56,580	49,36,870	50,93,450	47,76,582	3,16,868

APPENDIX –C

Coefficient of Correlation Between material cost and cost price of noodles (In Rs)

Material cost 'X'	$x=(X - \bar{X})$	x^2	Cost price 'Y'	$Y=(Y - \bar{Y})$	y^2	xy
120	-9.4	88.36	195	-9	81	84.6
125	-4.4	19.36	197	-7	49	30.8
132	2.6	6.76	205	1	1	2.6
127	-2.4	5.76	205	1	1	-2.4
143	13.6	184.96	218	14	196	190.4
$\sum X = 647$	$\sum x = 0$	$\sum x^2 = 305.2$	$\sum Y = 1020$	$\sum y = 0$	$\sum y^2 = 328$	$\sum xy = 306$

$$\bar{X} = \frac{\sum X}{n} = \frac{647}{5} = 129.4 \quad \bar{Y} = \frac{\sum Y}{n} = \frac{1020}{5} = 204$$

$$r = \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 306 - 0 \times 0}{\sqrt{5 \times 305.2 - 0^2} \sqrt{5 \times 328 - 0^2}} = \frac{1530}{1581.81} = 0.967$$

Computation of probable error

$$P.E = 0.6745 \frac{1-r^2}{n}$$

$$= 0.6745 \frac{1-(0.967)^2}{5}$$

$$= 0.6745 \times 0.01298$$

$$= 0.00875$$

Appendix-D

Profit and Loss account

Dr. of Him Shree Foods Pvt. Ltd for the fiscal year 2062/2063.

Cr.

Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Opening Stock of Raw Material	92,35,000	By Sales	21,47,76,000
To Opening Stock of WIP	1,25,12,080	By Closing Stock of Raw Material	87,25,000
To Opening Stock of Finished Goods	2,47,66,423	By Closing of WIP	1,14,77,800
To Purchase	11,38,12,000	By Closing Stock of Finished Goods	2,83,96,447
To Wages	1,08,55,875		-
To Factory Overhead	51,22,938		-
To Gross Profit c/d	8,70,70,933		-
	<u>26,33,75,249</u>		<u>26,33,75,249</u>
To Office and Administration Expenses	1,38,42,205	By Gross Profit b/d	8,70,70,933
To Selling and Distribution Expenses	1,15,38,535		-
To Bad Debts	6,11,709		-
To Interest	73,84,484		-
To Provision for Tax	1,34,23,500		-
To Net Profit	4,02,70,500		-
Total	<u>8,70,70,933</u>	Total	<u>8,70,70,933</u>

Balance Sheet

of Him Shree Foods Pvt. Ltd at the end of fiscal year 2062/2063.

Assets		Amount (Rs)	Liabilities		Amount (Rs)
1.	Fixed Assets	8,80,58,160	1.	Paid up Share Capital	5,00,00,000
2.	Sundry Debtors	1,78,98,000	2.	Reserve and Surplus	5,80,26,236
3.	Other Current Assets	1,00,22,880	3.	Long Term Loan	82,42,230
4.	Closing Stock of Raw Material	87,25,000	4.	Sundry Creditors	3,89,67,067
5.	Closing Stock of WIP	1,14,77,800	5.	Provision for Tax	1,34,23,500
6.	Closing Stock of Finished Goods	2,83,96,449			-
7.	Cash at Bank	40,80,744			-
Total amount		<u>16,86,59,033</u>	Total amount		<u>16,86,59,033</u>

(Source: Unaudited financial record of HSFPL 2067.)

Appendix-E

Profit and Loss account of Him Shree Foods Pvt. Ltd for the fiscal year 2063/2064.

Dr.		Cr.	
Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Opening Stock of Raw Material	87,25,000	By Sales	21,78,83,400
To Opening Stock of WIP	1,14,77,800	By Closing Stock of Raw Material	97,50,000
To Opening Stock of Finished Goods	2,83,96,449	By Closing of WIP	1,20,45,590
To Purchase	12,29,30,000	By Closing Stock of Finished Goods	3,51,89,679
To Wages	1,15,74,281		-
To Factory Overhead	59,27,894		-
To Gross Profit c/d	8,58,37,245		-
	<u>27,48,68,669</u>		<u>27,48,68,669</u>
To Office and Administration Expenses	1,42,28,828	By Gross Profit b/d	8,58,37,245
To Selling and Distribution Expenses	1,24,05,632		-
To Bad Debts	1,74,891		-
To Interest	21,11,268		-
To Provision for Tax	1,42,29,156		-
To Net Profit	4,26,87,470		-
Total	<u>8,58,37,245</u>	Total	<u>8,58,37,245</u>

Balance Sheet of Him Shree Foods Pvt. Ltd at the end of fiscal year 2063/2064.

Assets		Amount (Rs)	Liabilities		Amount (Rs)
1.	Fixed Assets	8,68,48,323	1.	Paid up Share Capital	5,00,00,000
2.	Sundry Debtors	1,86,70,386	2.	Reserve and Surplus	5,34,00,019
3.	Other Current Assets	1,01,54,822	3.	Long Term Loan	1,44,60,739
4.	Closing Stock of Raw Material	97,50,000	4.	Sundry Creditors	4,36,19,254
5.	Closing Stock of WIP	1,20,45,590	5.	Provision for Tax	1,42,29,156
6.	Closing Stock of Finished Goods	3,51,89,679			-
7.	Cash at Bank	30,50,368			-
Total amount		<u>17,57,09,168</u>	Total amount		<u>175709168</u>

(Source: Unaudited financial record of HSFPL 2067.)

Appendix-F

Profit and Loss account of Him Shree Foods Pvt. Ltd for the fiscal year 2064/2065.

Dr.	Amount (Rs)	Cr.	Amount (Rs)
Particulars		Particulars	
To Opening Stock of Raw Material	97,50,000	By Sales	24,68,04,300
To Opening Stock of WIP	1,20,45,590	By Closing Stock of Raw Material	1,62,57,000
To Opening Stock of Finished Goods	3,51,89,680	By Closing of WIP	1,05,57,870
To Purchase	14,59,70,000	By Closing Stock of Finished Goods	4,30,46,402
To Wages	1,20,95,699		-
To Factory Overhead	67,62,068		-
To Gross Profit c/d	9,48,52,535		-
	<u>31,66,65,572</u>		<u>31,66,65,572</u>
To Office and Administration Expenses	1,48,31,542	By Gross Profit b/d	9,48,52,535
To Selling and Distribution Expenses	1,29,70,689		-
To Bad Debts	1,93,268		-
To Interest	23,33,116		-
To Provision for Tax	1,61,30,980		-
To Net Profit	4,83,92,940		-
Total	<u>9,48,52,535</u>	Total	<u>9,48,52,535</u>

Balance Sheet of Him Shree Foods Pvt. Ltd at the end of fiscal year 2064/2065.

Assets		Amount (Rs)	Liabilities		Amount (Rs)
1.	Fixed Assets	10,00,54,463	1.	Paid up Share Capital	5,00,00,000
2.	Sundry Debtors	2,22,14,608	2.	Reserve and Surplus	7,34,78,012
3.	Other Current Assets	1,17,44,864	3.	Long Term Loan	1,52,49,123
4.	Closing Stock of Raw Material	1,62,57,000	4.	Sundry Creditors	5,26,20,435
5.	Closing Stock of WIP	1,05,57,870	5.	Provision for Tax	1,61,30,980
6.	Closing Stock of Finished Goods	4,30,46,402			-
7.	Cash at Bank	36,03,343			-
Total amount		<u>20,74,78,550</u>	Total amount		<u>20,74,78,550</u>

(Source: Unaudited financial record of HSFPL 2067.)

Appendix- G

Profit and Loss account of Him Shree Foods Pvt. Ltd for the fiscal year 2065/2066.

Dr.

Cr.

Particulars	Amount (Rs)	Particulars	Amount (Rs)
To Opening Stock of Raw Material	1,62,57,000	By Sales	26,07,83,400
To Opening Stock of WIP	1,05,57,870	By Closing Stock of Raw Material	1,53,75,000
To Opening Stock of Finished Goods	4,30,46,402	By Closing of WIP	1,31,45,590
To Purchase	15,36,01,000	By Closing Stock of Finished Goods	4,98,90,341
To Wages	1,24,92,504		-
To Factory Overhead	64,64,855		-
To Gross Profit c/d	9,67,74,700		-
	<u>33,91,94,331</u>		<u>33,91,94,331</u>
To Office and Administration Expenses	1,49,15,717	By Gross Profit b/d	9,67,74,700
To Selling and Distribution Expenses	1,33,22,713		-
To Bad Debts	27,345		-
To Interest	3,30,102		-
To Provision for Tax	1,70,44,706		-
To Net Profit	5,11,34,117		-
Total	<u>9,67,74,700</u>	Total	<u>9,67,74,700</u>

Balance Sheet of Him Shree Foods Pvt. Ltd at the end of fiscal year 2065/2066.

Assets		Amount (Rs)	Liabilities		Amount (Rs)
1.	Fixed Assets	9,80,54,559	1.	Pain up Share Capital	5,00,00,000
2.	Sundry Debtors	2,15,52,347	2.	Reserve and Surplus	8,71,84,117
3.	Other Current Assets	1,25,86,571	3.	Long Term Loan	21,47,701
4.	Closing Stock of Raw Material	1,53,75,000	4.	Sundry Creditors	5,96,13,061
5.	Closing Stock of WIP	1,31,45,590	5.	Provision for Tax	1,70,44,705
6.	Closing Stock of Finished Goods	4,98,90,340			-
7.	Cash at Bank	53,85,177			-
Total amount		<u>21,59,89,584</u>	Total amount		<u>21,59,89,584</u>

(Source: Unaudited financial record of HSFPL 2067.)

Appendix- H

Profit and Loss account of Him Shree Foods Pvt. Ltd for the fiscal year 2066/2067.

Dr.

Cr.

Particulars	Amount(Rs)	Particulars	Amount (Rs)
To Opening Stock of Raw Material	1,53,75,000	By Sales	27,04,91,940
To Opening Stock of WIP	1,31,45,590	By Closing Stock of Raw Material	1,72,15,000
To Opening Stock of Finished Goods	4,98,90,340	By Closing of WIP	1,70,65,850
To Purchase	16,43,57,000	By Closing Stock of Finished Goods	5,96,73,080
To Wages	1,35,05,264		-
To Factory Overhead	74,60,310		-
To Gross Profit c/d	10,07,12,336		-
	<u>36,44,45,870</u>		<u>36,44,45,870</u>
To Office and Administration Expenses	1,51,60,310	By Gross Profit b/d	10,07,12,336
To Selling and Distribution Expenses	1,37,22,057		-
To Bad Debts	1,81,331		-
To Interest	21,89,009		-
To Provision for Tax	1,73,64,915		-
To Net Profit	5,20,94,744		-
Total	<u>10,07,12,336</u>	Total	<u>10,07,12,336</u>

Balance Sheet of Him Shree Foods Pvt. Ltd at the end of fiscal year 2066/2067.

Assets		Amount (Rs)	Liabilities		Amount (Rs)
1.	Fixed Assets	9,84,59,066	1.	Paid up Share Capital	5,00,00,000
2.	Sundry Debtors	21,13,218	2.	Reserve and Surplus	7,79,55,664
3.	Other Current Assets	11,70,723	3.	Long Term Loan	66,04,603
4.	Closing Stock of Raw Material	1,53,75,000	4.	Sundry Creditors	4,54,41,284
5.	Closing Stock of WIP	1,70,65,850	5.	Provision for Tax	1,73,64,915
6.	Closing Stock of Finished Goods	6,02,36,952			-
7.	Cash at Bank	29,45,657			-
Total amount		<u>19,73,66,466</u>	Total amount		<u>19,73,66,466</u>

(Source: Unaudited financial record of HSFPL 2067.)