

Phone: 0483 - 2734841

# THE MALAPPURAM CO-OPERATIVE SPINNING MILLS LIMITED

P.B. No. 206, DOWN HILL POST, MALAPPURAM - 676 519, KERALA.
E-mail: mpmmill@gmail.com Website: malcospin.com

# CERTIFICATE

This is to certify that Mr. Vascem Hyder P, Register No.IAZ16MBA74, a student from Acharya Institute of Technology, Bangalore, has taken up a project at our Mill and collected necessary data from the Mill or various dates from 15.1.2018 to 24.03.2018 in partial fulfillment of the equirement for the award of Master of Business Administration by the Visvesvaraya Technological University.

For The Malappuram Co-Op. Spinning Mills Ltd.,

Malappuram

23-04-2018

Personnel Officer



(Affiliated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi and Accredited by NBA and NAAC)

Date: 15/05/2018

# **CERTIFICATE**

This is to certify that Mr. Vaseem Hyder P bearing USN 1AZ16MBA74 is a bonafide student of Master of Business Administration course of the Institute 2016-18 batch, affiliated to Visvesvaraya Technological University, Belgaum. Project report on "A Study on **Inventory Management in The Malappuram Co-operative Spinning Mills** Ltd" Malappuram, Kerala is prepared by him under the guidance of Dr. Virupaksha Goud G, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belgaum, Karnataka.

Signature of Internal Guide

Signature of HOD

Department of MBA

Acharya Institute of Technology

Soldevanahlli, Bangalore-560 107

Signature of Principal

PRINCIPAL

ACHARYA INSTITUTE OF TEURNOLOGY Soldevanahalli Bangalore-560 107

# DECLARATION

I, VASEEM HYDER P, hereby declare that the Project report entitled " A Study on Inventory Management" with reference to "The Malappuram Co-operative Spinning Mills Ltd, Kerala" prepared by me under the guidance of Dr. Virupaksha Goud, faculty of M.B.A Department, Acharya Institute Of Technology and external assistance by Muhammad Kutty, PO, The Malappuram Co-operative Spinning Mills Ltd. I also declare that this Project work is towards the partial fulfillment of the university Regulations for the award of degree of Master of Business Administration by Visvesvaraya Technological University, Belgaum. I have undergone a summer project for a period of Ten weeks. I further declare that this Project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University / Institution.

Place: Bangalore

Date: 21/05/2018

Signature of the student

# ACKNOWLEDGEMENT

I am truly gratefulto myexternal guide Mr. Muhammad Kutty, PO, The Malappuram Cooperative Spinning Mills Ltd., and my internal research Guide, Dr.Virupaksha Goud, for their research guidance, encouragement, and opportunities provided.

I wish to thank all the respondents from the firms who spent their valuable time in discussing with me and giving valuable data by filling up the questionnaire.

I deem it a privilege to thank our Principal, Dr. Sharanabasava Pilli, Dr. Mahesh, Dean Academics and our HOD Dr.Nijaguna for having given me the opportunity to do the project, which has been a very valuable learning experience.

My sincere and heartfelt thanks to all my teachers at the Department of MBA, Acharya Institute of Technology for their valuable support and guidance.

Last, but not least, I want to express my deep appreciation to my parents for their unstinted support.

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# **EXCECUTIVE SUMMARY**

Inventory plays most important part of current assets which is used by majority of the companies in India. The company uses various types of inventories like raw material, work in progress, finished goods, and transportation. Most of the companies, they invest more on the inventory when compare to other inputs. The proper maintenance of assets helps the firm to earn profit and maintain the liquidity and reserves.

The study on the topic inventory management helps to understand the procedures followed for maintaining the inventories at Malappuram Co-operative Spinning Mills Ltd, the study was conducted for the period of 10 weeks, to analyse inventory turnover ratios, activity ratios and inventory to capital employed which helps to evaluate or identify the efficiency and problems related to the inventory management. The objective of the study is to know the techniques and efficiency that the company utilizes to manage inventories.

After analysing the financial statement of 5 years we can draw a conclusion whether the Performance of the company is growing or declining. The study disclose that there performance is fluctuating and they have to implement various methods for maintaining the inventories.

# CHAPTER-1 INTRODUCTION

# 1.1 INTRODUCTION ABOUT THE PROJECT

A Project is on-the-job training for many professional jobs, similar to an apprenticeship more often taken up by colleges and university students during his undergraduate or master degree in their free time to supplement their formal education and expose them to world of work. It aims to provide our students the opportunity to consolidate their theoretical foundation through practical experience. A major component of this experience is the formation of a professional attitude. The students are expected to develop their personality and capacity to adapt to and handle, challenging situations in the real business world. Through the internship program, the students should be able to acquire transferable skills such as communication skills, interpersonal skills, technical skills, team work skills, management skills and problem—solving skills. Last but not least, the students can explore their interest in future career development

Employers to benefit from an Project arrangement as it gives access to interns with some skills to execute relevant tasks for the employer .Many interns end up with permanent service with the same organization in which they are interned . Their worth to the organization may be greater than before by the fact that they require modest or less training

An Project may be compensated, non compensated or some time to some extend paid. Paid project is usually the norm in fields like medical and health—science engineering, laws and politics, business, graphic design accounting ,banking and finance, information technology, media, journalism, hospitality and tourisms—here as unpaid project are common. At NGO/ Not for profit organizations and think tanks are deemed voluntary, Project—may—be—part—time or full time, In general, they are part time during the academy year and full time in summer vacations. They usually last for six weeks to two months, its tenure vary from organization to organization, It may be shortening or long based on he organization for which they intern

# **1.2 INDUSTRY PROFILE**

# **COTTON TEXTILES INDUSTRY IN INDIA**

In India cotton textiles industries which are over a quarter century old. They play an important role in the economy producing nearly 50000million meters of cloth and earning huge foreign exchange by export. unfortunately the industry faces a very high competition with their profit margin pricing of finishing product is depends on availability rate of cotton, supply and demand export obligation, Govt. registration, extent modernization and obviously the management ability and so on. The cotton textile industry is the largest industry in the organized structure of manufacturing. The textile industry in India constitute of distinct section representing broadly 3 levels of technology and organization via mill, power room and handloom. The first attempt to establish a cotton textile in India was made since 18L8, under the name of Bowcarcha cotton mills new culcuttabu English enterprise. It was Mr.Dorer, a business man with greatest enterprise vision and foresight. Who happens to be the first Indian textile industries to establish a mill in Bombay name son Bombay Spinning Mill in the year 1854? The period from 1854 was really a good period for the pioneering enterprise in the field of textile it gives employment to vast number of people get raised and opportunity for a riches and are varied life get opened. Ahmadabad is called the machetes of India. First spinningmill was established Mumbai in the year 1854. The period of 1856-1860 was nice period as for as textile industries were concerned. But during 1990"s the textile industries saw their through due to famine. Mills in Bombay produced yarn. Which had a good market in China? A number of mills in Bombay and Ahmadabad to close drown for long periods. At present textile industry in India comprise of 698 mills and out of which 409 are spinning mills and 289 as composite mills. Quite a large number of spinning mills 190 are located in Tamilnadu. While the appreciate number of composite mills 168 are located in state of Gujarat and Maharashtra. Our countries average output is about 2700kg of cotton per sectors. India's total export in the world trade is only 0.6% with us and 45billion and this is expected to raise 1% le, us 80 billion over the next 5 years. The world trade in textile and clothing around us 250 billion of which one country's share is 3.3% about us 12 billion, India's cotton textile industry occupied a unique position it accountants for about 7% of the gross domestic product, 20% of the export earnings. It contributes over Rs.5/- billion in terms of excise duty to the exchequers. After agriculture this industry is the second largest employment provides in the country as its cultivation provides 200 more days / hectare of employment. Around 50 million people earn their livelihood through its cultivation or trade and processing. A considerable it's in directed employment. At the time of independence the textile industry, the largest organized industry in the country, comprised an estimated 2.5 million handloom eaves and 356 mills, with an installed capacity of about 10.3 lakhs workers. After that, the increased in fabrics production is mainly because of the availability of major raw-materials, such as cotton and man-made fiber however the chare of cotton gradually declined from percent in the fifties to 69 percent in 1997.

# INDIAN TEXTILEINDUSTRY CONSTITUTE OF THE FOLLOWING SEGMENTS

- 1) Readymade segment
- 2) Cotton textile including handloom
- 3) Man made textiles
- 4) Silk textiles
- 5)Woolen textiles
- 6) Handicraft, coir and jute

# **STRENGTH OF INDIANTEXTILE INDUSTRY**

- ➤ India has rich resources and raw materials of the textile industry. It is one of the largest producers of cotton in the world and is also rich resources of fiber like polyester, silk, viscose etc...
- ➤ India is rich in highly trained man power. The country huge advantage due to lower wage rates because of low labour rates the manufacturing cost of textile automatically come down to very responsible rate.
- ➤ India is highly competitive in spinning section has presence in almost in all process of the value chain.

# COTTON TEXTILE INDUSTRY IN KERALA

The textile industry in Kerala is the oldest and occupies a key position on the state economy development. The Malabar spinning and wearing company at Ponnanikkara in Calicut started in 1884. The second important textile exit setup in the state was quit on spinning mills. However some of the mills became silk units and were taken by national textile corporation. The national textile corporation was incorporated in April 1986, with the main objective of ensuring continued employment to the result of closure and also for managing the over by the GOW. The Kerala state textile corporation was incorporated in 1972 with the objective or promoting textile industry and assisting mills. In Kerala there are 31 established textile and out of that in mills are owned by central and state Government, and business are private owned mills, out of that 7 mills are situated in Thrissur District. These mills are follows.

- Rajagopal Textile Ltd.
- ➤ Vanya Textile Ltd (lock out)
- ➤ Sitaram Textile Ltd (Govt. undertaking)
- ➤ Kerala Lakshmi Textile Ltd. (Central Govt. undertaking)
- Co-operate spinning mill Ltd. (Co-operation)
- ➤ Alagappa Textile Ltd (Central Govt. undertaking)

Throughout Kerala have a number of cotton textile mills. The raw materials, cotton is not widely cultivated here. It is obtained from other states or imported from outside India. The climate conditions of Kerala frequently change .So suitable arrangements are made in factories to mint the desires atmosphere conditions for the production of Jayns. A huge number of people get direct employment. More than 2000 workers are working in the different cotton textile mills in Kerala. Textile industries in Kerala also suffer from many problems. As stated before high power cost. High raw materials cost, low technology etc. all applicable to textile mills in Kerala. Another major problem is in the form of modernization it is may be viewed from 2 aspect.

- 1. Insufficiency of fund for modernization
- 2. Modernization may involve installation of modern mechines

Machines which may bring a reduction in employment opportunities last. But not the least. The labour problems makes in Kerala then least proffered place for any industry.

# **SPINNING MILL UNDER THE TEXFED**

- Malappuram Co-operative Spinning Mill Ltd
- Malabar Co-operative textile, Kuttippuram
- Priyadharshini Co-operative Spinning mill, Kottayam
- Mala Co-operative Spinning Mill, Thrissur
- Cannanor Co-operative Spinning Mill, Kannur
- Thrissur Co-operative Spinning Mill, Thrissur
- Quilion Co-operative Spinning Mill, Kollam
- Alleppy Co-operative Spinning Mill, Kayamkulam.

# 1.3 COMPANY PROFILE

# MALAPPURAM CO-OPERATIVE SPINNING MILL LTD.

#### **HISTORY**

The Malappuram cooperative spinning mill (MCSM) was established in the year 1979 and started the commerciall production on 1980. Though the mill was started under the cooperative Act the mill is now managed by the Government of Kerala, Industries department and it comes under the TEXFED where all the cooperative spinning mill are functioning. The MCSM has got a spindle age of 25000 and on the way of modernization through NCTC/Govt. Of Kerala modernization project.

# **BACKGROUND**

The Mill produced different type of yarns and staples. Fibber yarn on required by weaves in and outside the Kerala state. The different varieties of yarn that are being produced by the company are cotton and polyester From Gujarat, Maharashtra and Andhra Pradesh.

The project was completed with total amount of RS 2.5 cr including RS 247 lakhs of financing assistance from the IDBI, IFCI and ICICI, the mill was not able to perform as envisaged and was incurring continuous cash loss which resulted in the erosion of capital from the very beginning. The mill was unable to repay the institutional due amounting RS 234.75 lakhs and interest accrued there on.

The continuous cash losses incurred the entire period resulted in the erosion of working capital and during the year 1988 mill remained in operative from 19<sup>th</sup> may 1988 to 5<sup>th</sup>july 1990 and after various discussion with government and other institutions. It was respond on 16<sup>th</sup>july 1990 as relief undertaking under Kerala State Textile Corporation.

After reopening, the mill was functioning with a capacity of utilization about 68% of the main resources due to the voltage problem during the peak hours which accounts for the loss about 17% of the commissioned capacity to augment this problem. The mill has purchased 3 generator set of 590KVA with the help of government which was resulted in improved productivity as amount of uninterrupted power supply and will enable to the mill become

financial viable survival of industry in the competitive environment depend up on the quality and productivity of the man and machine.

# **COMPANY PROFILE**

Name of the Company: The Malappuram Co-operative Spinning Mill Ltd.

(MCSM MILL)

Date of Registration: 28th October 1975

Company Started on: 1979

Production Started on: 1980

New settlement: 29th November 2005

Type of organization: A Co-operative Society registered under Kerala

Co-operative Act 1969

Industrial Category: Medium Scale Unit

Main Production: Cotton Yarn &Cotton Polyester mixed yarn

Authorized Share Capital: 15 Crores

Paid up Share Capital: 113753860

Working Hours: 1st Shift - 8.00am to 4.30pm

2nd Shift - 4.30pm to 1.00am 3rd Shift -1.00pm to 8.00am

Present Status: 306

# 1.3.1 PROMOTERS

The MCSM is a co-operative societyregistered under the co-operative society act. In the initial stage of the starting of mill as a co-operative society collected shares from public. But initial stage itself the majority shares was from Kerala Govt therefore it is a Govt Owned co-operative society under the control of the Registrar of as the Handloom and Textiles of Govt of Kerala. Now 99% of the shares are with Govt. And it is a Govt Owned Company

# **1.3.2 VISION**

The MCSM spinning mill Ltd believes that the foundation of this business if to provide excellent in its products through high quality and reliability economical and competitive price, efficient service to the satisfaction of customers.

# **1.3.2 MISSION**

The MCSM Spinning Mill Ltd. serves the global clothing industry has a supplies of high quality cost effective, time bond service in manufacturing. The MCSM Ltd will continuously committed people with skill expertise and to markets and job and expand our global market.

# **1.3.2 QUALITY POLICY**

MCSM quality policy is to give enhanced satisfaction to their customers through the manufacturing the supply of product by the use of modern manufacturing facilities. The company voluntarily meet the requirements related to the products and process. The workers at MCSM are committed continually to their performance in all spheres of their activities

# 1.3.3 PRODUCT PROFILE

# **PRODUCTS**

The MCSM Is specialised mill in producing P/C blended yarn and also a market leader for more than three decades in P/C blended yarn. The product of mill is very accepted in the upcountry market earning goodwill for the same. The mill currently producing counts from 45 to 66 P/C both in carded and combed, beside 100% polyester yarn in 62 count. The mill is now planning to switch over to completely blends in all counts to 70/30(70% polyester 30%cotton) with immediate effect as against various blends in the mail producing presently ie;65/35 and 80/20.

The mill producing all above counts in single yarn for weaving applications. The MCSM ltd having a share of 97.56% by the Govt of Kerala and is a manufacturing company of producing polyester cotton yarn.

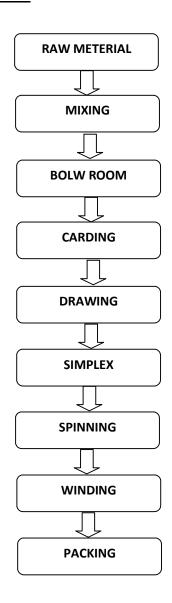
The Mill commenced its commercial operation in 1980. The mill is now working under the demonstrative control of the industry department.

The finished product from a spinning mill is either in the form of cones or hanks. Most of the spinning mill are producing CONE YAN.

# **MAIN PRODUCTS OF THE COMPANY**

- 34A Combed Cotton Cones
- 64 Combed Cotton Cones
- 2/665 Cotton Cone
- 32s pc 65/35 Blended Cone
- 45s pc 65/35 Blended Cone

# PRODUCTION PROCESS OF YARN



#### • Raw Material

Polyester and cotton is the main raw material required for the production of the yarn. The polyester and cotton mainly come from Mumbai

# Mixing

Mixing is the first stage of production process. Standardization is the main aim of mixing. It is the process of mixing polyester and cotton in the standard proportion.

#### • Blow Room

Blow machine clean the cotton generally 5 to 7%

# Carding

The lab from the blow room is spread to the feed roller of the carding machine. In this stage the material are opened. The materials are passed the right point of the flat as result of the long fiber is made and this taken in a cylinder by the action machine.

# Drawing

It is the process of converting thin silver into thinner silver after making some twister process.

# Simplex

The main activity undergone here is reducing the weight by using raving machine.

# Spinning

It is the main process in the production of yarn. It is the process of drawing out and twisting fibers to join them correctly

# Winding

In the winding process to 50-60 yarn spindles is transferred to 1.5kg

# Packing

40 cones are packed in each bag. It is done only in first shift

# **1.3.4 AREAS OF OPERATION**

The Malappuram Co-operative Spinning Mill Ltd, manufacturing company engaged in produced Yarn and sample fibbers the type of organization is a co-operative society register under the Kerala Co-operative Act in 28-OS-lg7S. MCSM a medium scale unit. Authorized capital of the company is 15 crores and paid up share capital is 113753860. MCSM mainly produced 3 type of yarn.

- > Cotton
- > Polyester stable fiber
- ➤ Viscose stable fiber

# 1.3.5 INFRASTRUCTURE FACILITIES

The Malappuram Co-operative Spinning Mills Ltd providing the following infrastructural facilities to the employess

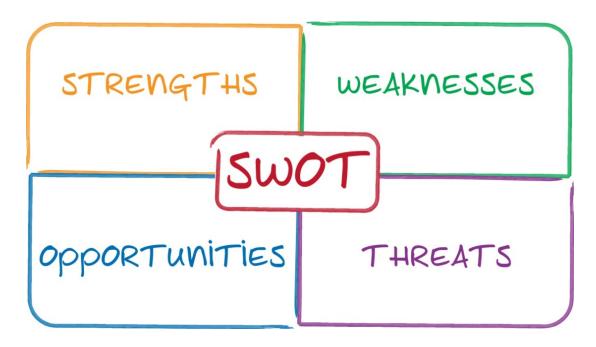
- Canteen
- Rest Room
- Wash room
- Prayer hall

•

# 1.4 COMPETITOR'S INFORMATION

- Malabar Co-operative textile, Kuttippuram
- Priyadharshini Co-operative Spinning mill, Kottayam
- Mala Co-operative Spinning Mill, Thrissur
- Cannanor Co-operative Spinning Mill, Kannur
- Thrissur Co-operative Spinning Mill, Thrissur
- Quilion Co-operative Spinning Mill, Kollam
- Alleppy Co-operative Spinning Mill, Kayamkulam.

# • <u>1.5 SWOT ANALYSIS</u>



# **SWOT ANALYSIS WITH REFERENCE TO MCSM**

# **STRENGTHS**

- Mill has a good infrastructure facility.
- Perfect and pre planned time schedule to workers in the organization.
- Good quality products.
- Spindle capacity;

There is enough space for increasing plant capacity and spindle capacity.

- On time delivery.
- Good and established brand image.
- Decade of experience in trading cotton and yarn before venturing in to this line activity.
- The cost of switching between suppliers is low.
- Study the demand in market.

# **WEAKNESS**

- Slow technology up gradation.
- Old machineries.
- The operation expenses are on the higher scale.
- Presents of more than two trade union in the organisation.
- Transportation problem.
- No workers involvement in managerial decision.
- Under utilization of production unit.
- Company website has only little information regarding various functional areas.
- Raw material price are on increase.
- Tenders process will take enough time to new plans.

# **OPPORTUNITIES**

- Increasing demand of cotton yarn in the society.
- Approach of government authority.
- Widening of market distribution network.
- Improvement in technology is possible.
- Expand the business by opening new branches.
- A developing market such as cotton yarn.
- A better future in the Indian market.
- MCSM can market directly, to avoid commission of agents.
- Increase of the production may introduce new vacancies.

# **THREATS**

- Labour cost is increasing.
- Raw material price is increasing.
- Global market competition affects domestic market by low price for yarn.
- Unavailability of skilled labours.
- Unexpected accidents occur during production process.
- Promotional programs for other blends.
- Globalization;

Due to globalization and reduction in import duty, foreign textile companies have started importing their goods.

# **1.6 FUTURE GROWTH**

The authorities are aiming to change the mill as a most modern textile mill with advanced machines.

A proposal for the fully modernisation of mill is submitted to the Kerala Govt now.

Future the mill will be modernised with all advanced technological machines

# **1.7 FINANCIAL STATEMENT**

# BALANCE SHEET AS ON 31-03-2013

PARTICULARS		AMOUNT
SOURCES OF FUNDS		
SHARE HOLDERS FUND		
SHARE CAPITAL(AUTHORISED)		
2500000 EQUITY SHARES@100 EACH		250000000.00
SHARE CAPITAL(SUBSCRIBED)		171362860.00
1012551 SHARES OF RS 100 EACH		
SHARE CAPITAL (ISSUED&PAID UP)		171362760.00
SHARE SUSPENSE		5000.00
RESERVE		12277902.58
LOAN FUNDS		
SECURED AND UNSECURED LOANS		143010869.92
TOTAL		326656532.50
APPLICATION OF FUNDS		
FIXED ASSET		
GROSS BLOCK	196115522.5	
LESS DEPRECIATION	119413188.17	
NET BLOCK		76702334.36
CAPITAL WORK IN PROGRESS		7372983.25
INVESTMENT-SHARES OF MDC BANK		52000.00
INVESTMENT-SHARES OF TEXFEDV		5000.00
CURRENT ASSETS, DEPOSITS & ADVANC E	50514030.13	
LESS CURRENT LIABILITIES AND PROVISIONS	112313002.26	
NET CURRENT ASSETS		(61798972.13)
PROFIT AND LOSS ACCOUNT		304323187.02
TOTAL		326656532.50

PARTICULARS		AMOUNT
SOURCES OF FUNDS		
SHARE HOLDERS FUND		
SHARE CAPITAL(AUTHORISED)		
2500000 EQUITY SHARES@100 EACH		250000000.00
SHARE CAPITAL(SUBSCRIBED)		113753860.00
1012551 SHARES OF RS 100 EACH		
SHARE CAPITAL (ISSUED&PAID UP)		113753760.00
ADVANCE FOR SHARE CAPITAL		57609000.00
SHARE SUSPENSE		5000.00
RESERVE		11315550.42
LOAN FUNDS		
SECURED AND UNSECURED LOANS		143010869.92
TOTAL		426836432.34
APPLICATION OF FUNDS		
FIXED ASSET		
GROSS BLOCK	203346415.8	
LESS DEPRECIATION	126955322.64	
NET BLOCK		76391093.13
CAPITAL WORK IN PROGRESS		33467569.40
INVESTMENT-SHARES OF MDC BANK		52000.00
INVESTMENT-SHARES OF TEXFED		5000.00
CURRENT ASSETS, DEPOSITS & ADVANCE	65479502.11	
LESS CURRENT LIABILITIES AND PROVISIONS	100549952.15	
NET CURRENT ASSETS		(35070450.04)
PROFIT AND LOSS ACCOUNT		351991219.85
TOTAL		426836432.34

PARTICULARS		AMOUNT
SOURCES OF FUNDS		
SHARE HOLDERS FUND		
SHARE CAPITAL(AUTHORISED)		
2500000 EQUITY SHARES@100 EACH		250000000.00
SHARE CAPITAL(SUBSCRIBED)		113753860.00
1012551 SHARES OF RS 100 EACH		
		110=10=60
SHARE CAPITAL (ISSUED&PAID UP)		113753760.00
ADVANCE FOR SHARE CAPITAL		57609000.00
SHARE SUSPENSE		5000.00
RESERVE		23676433.50
LOAN FUNDS		
SECURED AND UNSECURED LOANS		332692617.92
TOTAL		527736811.42
APPLICATION OF FUNDS		
FIXED ASSET		
GROSS BLOCK	231375055.7	
LESS DEPRECIATION	128529069.78	
NET BLOCK		102845985.95
CAPITAL WORK IN PROGRESS		42955895.29
INVESTMENT-SHARES OF MDC BANK		55000.00
INVESTMENT-SHARES OF TEXFED		5000.00
CURRENT ASSETS, DEPOSITS & ADVANCE	55494686.64	
LESS CURRENT LIABILITIES AND PROVISIONS	90007092.34	
NET CURRENT ASSETS		(34512405.70)
PROFIT AND LOSS ACCOUNTS		41 (207225 00
PROFIT AND LOSS ACCOUNT		416387335.89
TOTAL		527736811.42

PARTICULARS		AMOUNT
SOURCES OF FUNDS		
SHARE HOLDERS FUND		
SHARE CAPITAL(AUTHORISED)		
2500000 EQUITY SHARES@100 EACH		250000000.00
SHARE CAPITAL(SUBSCRIBED)		113752860.00
1012551 SHARES OF RS 100 EACH		
SHARE CAPITAL (ISSUED&PAID UP)		113752760.00
ADVANCE FOR SHARE CAPITAL		57609000.00
SHARE SUSPENSE		5000.00
RESERVE		22896928.27
LOAN FUNDS		
SECURED AND UNSECURED LOANS		418565983.72
TOTAL		612829671.99
APPLICATION OF FUNDS		
FIXED ASSET		
GROSS BLOCK	271354772.21	
LESS DEPRECIATION	133835664.25	
NET BLOCK		137519107.96
CAPITAL WORK IN PROGRESS		2362678.90
INVESTMENT-SHARES OF MDC BANK		55000.00
INVESTMENT-SHARES OF TEXFED		5000.00
CURRENT ASSETS, DEPOSITS & ADVANCE	56717887.40	
LESS CURRENT LIABILITIES AND PROVISIONS	82687696.85	
NET CURRENT ASSETS		(25969809.45)
PROFIT AND LOSS ACCOUNT		498857694.58
TOTAL		612829671.99

PARTICULARS		AMOUNT
SOURCES OF FUNDS		
SHARE HOLDERS FUND		
SHARE CAPITAL(AUTHORISED)		
2500000 EQUITY SHARES@100 EACH		250000000.00
SHARE CAPITAL(SUBSCRIBED)		113752860.00
1012551 SHARES OF RS 100 EACH		
SHARE CAPITAL (ISSUED&PAID UP)		113752760.00
ADVANCE FOR SHARE CAPITAL		57609000.00
SHARE SUSPENSE		5000.00
RESERVE		22195373.57
LOAN FUNDS		
SECURED AND UNSECURED LOANS		516157976.72
TOTAL		709720110.29
APPLICATION OF FUNDS		
FIXED ASSET		
GROSS BLOCK	273879015.20	
LESS DEPRECIATION	145906980.40	
NET BLOCK		127972034.80
CAPITAL WORK IN PROGRESS		50902059.70
INVESTMENT-SHARES OF MDC BANK		55000.00
INVESTMENT-SHARES OF TEXFED		5000.00
CURRENT ASSETS, DEPOSITS & ADVANCE	32711793.69	
LESS CURRENT LIABILITIES AND PROVISIONS	96405797.37	
NET CURRENT ASSETS		(63694003.68)
PROFIT AND LOSS ACCOUNT		594480019.47
TOTAL		709720110.29

# CHAPTER-2 CONCEPTUAL BACKGROUND AND LITERATURE RECIEW

# **2.1 THEORETICAL BACKGROUND**

# INVENTORY MANAGEMENT

Inventory management is a discipline primarily about specifying theshape and placement of stocked goods. It is required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials.

A component of supply chain management, inventory management supervises the flow of goods from manufactures to warehouse and from these facilities to point of sale. A key function of inventory management is to keep a detailed record of each new or returned product as it enters or leaves a warehouse or point of sale.

# Types or forms of inventory

# Raw materials inventory:

These are material inputs of production process. These are used to manufacture the final product.

# Work in progress inventory:

These aresemifinished products. These are the products that need more work before they become finished products.

# Finished goods inventory:

These are finished or final products which are ready for sale. In the case of trading concern, the unsold finished product is called finished goodsinventory.

# Objectives of inventory management

- To ensure that adequate inventories are available for smooth operation.
- To minimize investment of funds in the inventories.
- To minimize the costs of ordering and carrying inventories.
- To maximize the wealth of the shareholders.
- To avoid cash crisis.
- To avoid both over-stocking and under-stocking of inventories.
- To minimize losses on account of obsolescence and wastage etc.
- To ensure right quality products at reasonable prices.

# **Motives for holding inventory**

Every firm, big or small, trading or manufacturing, has to maintain some minimal level of inventories. There are different motives for maintaining inventories. These motives are more or less the same as the motives for holding cash. The motives for holding inventories are:

# • Transaction motive:

Every firm has to maintain some level of inventory to meet the day to day requirements of sale, production process, customer demand etc.

#### • Production motive:

A firm shouldkeep some inventory for unforeseen circumstances also. For example, there may be a strike in the factory and the production process may halt.

# • Speculative motive:

The firm may keep some inventory inorder to capitalize an opportunity of making profit.

#### **Benefits of inventories**

#### **Uninterrupted production:**

Every manufacturing firm must have sufficient stock of raw material for the regular and continues production.if there is stock-out of raw material at any stage of production process, the production will be interrupted. Goods can't be delivered in time. This may result in customer dissatisfaction. If sufficient stock is maintained, production can be carried on even if there is shortage of inventories in the market.

# **Efficient purchase:**

The purchase of materials in the bulk will help to get discounts and relaxation in credit periods. A firm will also be able to purchase goods in advance of production to allow time for raw materials to reach the destination in time .this will help a firm to put its materials to reach the destination in time. This will help a firm to put its material into production whenever the process begins.

# **Independent sales:**

In most of the cases good cannot be produced just after receiving orders. Therefore, very manufacturing concernmaintains a minimum level of finished goods in order to deliver the goods as soon as the order is received. Thus the stock related to the gap between demand and supply of goods is avoided.

#### **Goodwill with customers:**

Meeting the demand of customers in time creates goodwill and customer loyalty.

# Types of material

# **Polyester material**

Polyester is a synthetic fibre derived from coal, air, water and petroleum. Developed in a 20<sup>th</sup> century laboratory, polyester fibres are formed from a chemical reaction between an acid and alcohol. In this reaction, two or more molecules combine to make a large molecule whose structure repeats throughout its length. Polyester fibres can from varying molecules that are very stable and strong.

Polyester clothing can be preshrink in the finishing process and there after the fabric resist shrinking and will not stretch out of shape. The fabric is easily dyed able, and not damaged by mildew. Textured polyester fibres are an effective, non allergenic insulator, so the material is used for filling pillows, quilting, outerwear and sleeping bags.

#### **Cotton material**

Cotton is soft, fluffy stable fibre that grows in ball, or protective case, round the seeds of the cotton plants of the genus Gossypiumin the familymalvaceae. The fibre isalmost pure cellulose. Under natural condition, the cotton balls will tend to increase the dispersal of the seeds.

# Reasons to hold inventory

- To meet unexpected demand
- Smooth seasonal / cyclical demand
- Meet variations in cost demand
- Take advantage of price discounts
- Hedge against price increases
- Quality discounts

# **Purpose of inventory**

- To maintain independence of operation
- To meet variation in product demand
- To allow flexibility in production scheduling
- To provide safeguard variation in raw material delivery time
- To take advantage of economic purchase order size

# Types of inventory

- 1. Raw materials
- 2. Work in progress
- 3. Consumables
- 4. Finished goods
- 5. Packing material
- 6. Spares

# **Inventory cost**

# Holding(or carrying)costs:

This broad category include the costs for storage facilities, handling, insurance, pilferage, breakage, obsolescence, depreciation, taxes and the opportunity cost of capital. Obviously, high holding costs tend to favour low inventory levels and frequent replenishment

# • Setup (or production change) costs:

To makeeach different products involves obtaining the necessary materials, arranging specific equipments setups, filling out the required papers, appropriately charging time and materials and moving out the previous stock of material. If there were no costs or loss of time in changing from one product to another, many small loads would be produced. This would reduce inventory levels, with a resulting savings in cost. One challenge today is to try to reduce these setup costs to permit smaller lot sizes. (this is the a goal of a JIT system)

# • Finished goods inventory:

These are finished or final products which are ready for sale. In the case of trading concern, the unsold finished product is called finished goods inventory.

# • Ordering costs:

These costs referred to the managerial and the clerical costs to prepare the purchase or production order. Ordering costs including all g the details, such as counting items and calculating order quantities. The costs associated with maintaining the system needed to track orders are also included in ordering costs.

# • Shortage costs:

When the stock of an item is depleted, an order for that item must either wait until the stock is replenished or be cancelled. When the demand is not met and the order is cancelled, this is referred to as a stock out. A backorder is when the order is held and filled at a later date when the inventory for the item is replenished. There is a trade-off between carrying stock to satisfy demand and the costs resulting from stock outs and backorders. This balance is sometimes difficult to obtain because it may not be possible to estimate lost profits, the effects of lost customers, or lateness penalties. Frequently, the assumed shortage cost is little more than a guess, although it is usually possible to specify a range of such costs.

**Techniques of inventory management** 

**Economic order quantity (EOQ)** 

The EOQ enables the firm to determine the optimum level of inventory economic order

quantity can be defined as the capacity which is most economical to order a time. In other

words, it is the ordering quantity which minimise the total cost of inventory. The total cost of

inventory companies ordering cost and carrying cost.

Ordering cost are those costs which are relating to acquisition of materials. These include

the cost of placing a purchase order. Examples are transportation cost, salaries of staff

engaged in placing order, salaries of staff engaged in receiving and inspection, cost of

stationery, telephone, etc.

Carrying costs refer to cost of holding or carrying the stock in storage (i.e., storage cost).

These include rent and insurance of store, clerical costs, interest on capital locked up in store,

store staff salaries, obsolescence and wastage of materials etc.

If the order quantity is larger, the ordering cost will be low; because orders placed are few

but the carrying or storage cost will be high. If the ordering quantity is less, the ordering cost

will be high, this is because more number of orders has to be placed. But carrying will be

less.

$$EOQ = \sqrt{2CO}$$

T

Where, C= Annual consumption or usage of material

O= Cost of placing an order

I=Annual carrying or storage cost per unit.

30

#### STOCK LEVELS

Carrying too much or too less of inventories is harmful for an enterprise. In order to avoid overstocking and under stocking of materials or to minimise the total cost of inventory, management may fix certain stock levels like maximum level, minimum level, orderlevel, average level and danger level.

# Maximum level:

Maximum stock is the upper level of inventory it is the maximum quantity of an item of material that can be held in stock at any time. This is the level above which stock should not be maintained. The main purpose of this level is to avoid over stocking of material and unnecessary blocking of capital in inventories

Maximum level = recorder level + recorder quantity - (minimum consumption  $\times$  minimum reorder period)

## Minimum level:

Minimum stock levelis the minimum quantity of stock that should be held at all times. It is that level below which stock should not normally be allowed to fall the main purpose of this level is to ensure that production is not stopped due to non-availability of materials minimum stock level is computed by the following formula:

# Minimum level = reorder level – (normal consumption $\times$ normal reorder period)

Normal consumption means average consumption of material normal or average reorder period computed as follows

Minimum reorder period + Maximum reorder period

2

# **Reorder level (ordering level):**

This is the level at which order is placed for further supply of materials. Reorder level is fixed somewhere between minimum level and maximum level.

# Reorder level = maximum consumption × maximum reorder period

# Average stock level:

This is the average stock held by a concern.

Average stocklevel = minimum level + maximum level

2

# Reorder period:

It is the time gap required between placing an order and the actual receipt of the materials. Sometimes reorder period is called lead time or delivery period.

# **Inventory Turnover Ratio**

Material turnover ratio is the ratio of cost of material consumed during a given period to the average stock during the period. It indicates the speed with which the raw material have been consumed in production it gives the number of times in a year stock is used up and replenished. Inventory turnover ratio is also called stock velocity.

Stock turnover ratio (times) = Cost of material consumed
Average stock
Cost of material consumed = Opening stock + Purchase – Closing stock
Average stock = Opening stock + Closing stock
2
Material turnover ratio (days) = 365
Material turnover ratio in times

# **2.2 LITERATURE REVIEW**

Ahmad Kamilah&Shafie Mohamed Zabri (2016) the inventory management acts as afactor in identifying how company controls its inventory flow. In micro enterprises they maintain inventory both systematically and unsystematically. The main activity of micro enterprise is to buy and store the inventory, the knowledge and skill of the manager plays a major role in proper control of the inventory.

Schmelzer. P (1976) the banking sector maintain various inventories to satisfy their customer. The various cost involved in maintaining the inventories are: cost involved in maintaining, and the cost involved in allocation of such inventories to different departments. The bank usually will not inquire about the inventory turnover. The most accurate way to measure inventory in bank is to find the ratios of inventory to assets so that it is easy to identify the trends involved in supply costs. The inventory manager in bank has to analyse the profit same like they do in the industry.

**Besta. P, Janovska. K &Lampa. M (2012)** the crises of the economy have impact on theindustries, therefore they are forced to save in all areas. The industry have to make a proper purchase planning and utilise the inventory so that they earn profit. They have to maintain inventory in such a way that they are not over-stocked or under-stocked. The firm should be able to meet the demand of the customers.

Capkun, Vedran& Lawrence (2009) the study was to find the relationship between the total inventory and its separate components, and its impact on the financial performance. The interrelation between the components of the inventory and the financial performance slightly vary based on the type of inventory used in their manufacturing process.

**Shin & Seungiae** (2015) the study which was conducted in the manufacturing organisation revels the relationship between the financial profitability and inventory management. In many manufacturing firms if they concentrate on the inventory management there is a decline in the financial standard of the organisation. The small organisation take advantage from the inventory when compared to the medium and large firms.

Worthington & Paula. R (1998) the study states that business cycle does not reveals thebehaviour of the inventory. The rapid changes in the inventory management has reduced

in the manufacturing firm. The changes in the inventory investments varies according to the sectors.

**Kontus&Eleonora** (2014) the primary study was conducted to analyse how the organisationbalance its inventory and secondly, to know the dependency between inventory and profitability. The inventory should be managed taking into consideration both the profitability and the carrying cost involved in maintaining such inventory. The inventory level in the organisation has to be changed so as to improve the profit.

**Biggart& Timothy.** B (2002) just in time has changed the concept of the inventorymanagement. This study focuses on the impact of Just in Time on inventory to sales ratio. It reveals that inventory to sales ratio reduce after implementing JIT; but there is no change in work in progress to finished goods and sales ratio.

**Sha& Ping BA (2014)** the study reveals that demand forecasting acts as a basis for inventorymanagement. A proper maintenance of inventory helps the firm to withstand the competitiveness of the firm. The firm has to first understand the demand for the product and analyse the inventory required for the meeting the demand and it is easy for the firm to reduce the cost involved in the inventory.

**Denton. D & Keith (1994)** the syntex agribusiness reduced their inventory by assigning theresponsibility to the purchasing department to evaluate the vendors and eliminate. The proper flow of the inventory from the suppliers helps the firms to reduce the cost of inventory. The proper planning by the top management helped to reduce the inventory cost.

**Reynolds & Dennis (1999)** the study was conducted in a food industry which has diversemenus which frequently changes. Therefore the author suggest that the inventory has to be periodically analysed to know the inventory turnover through which the operator can maximize the inventory investment and they can measure the process of inventory management so that they identify the problems and overcoming such problems and improving the practices of the inventory management.

**Lambert & Douglas. M** (1982) the study define the degree to which the firm can use inventory carrying cost and calculating the carrying cost with the data available. These carrying cost of the inventory plays a major role in decision making. The management they feels that the major position of the financing is for inventory. Therefore the distribution managers has to decide on the inventory carrying cost.

AijuanZou (2012) this study reveals that the proper inventory management helps in theimprovement of the economy and helps in the growth of the project by minimising the stock in the normal situation. The management has to look into the order cycle, lead time, and minimum stocks during the project construction.

**Millstein, Mitchell A & Haitao** (2014) the earlier method of managing inventory is byclassifying the items into various classes. This approach is called as ABC analysis, where they are classified based on the importance to the organisation. Due to the drawbacks of the ABC analysis the author has introduced the optimization model in this the inventory is grouped based on the quality. This model can be implemented in the real work environment.

**Bennett &Solon.** A (1985) this study was conducted in the rural electric cooperation toimprove their inventory management. This includes all the activity related to the inventory such as purchasing, storing, distributing the products. If the material is under-stocked it indicates that the firms inventory planning is poor. The modern technology has helped the manager in maintaining the inventory level through computerised method which helps in monitoring the functions of the inventory.

Van Bodegraven, Arthur & John (1987) this study tells us about the inventory maintained in the warehouse. There are various problems involved in maintaining the inventory in the warehouse like shortage, leakage, damage etc. this problems may be due to the improper inventory management or lack of proper classification of inventory based on the feature of the items. This problems can be solved by assigning responsibility to the personnel, set the target, identify the surplus inventory, and taking proper decision on inventory by senior management.

Goonatilake&Lalith (1990) in developed countries the policies are adopted by taking inventory into consideration. The proper planning of the inventory helps the organisation to grow. The industries has to adopt proper techniques for the inventory control. The industries in the developed countries has to focus on the efficiency of the inventory management rather than its cost.

Roekchamnong, Pongsa&Anant (2014) this study was conducted to know the relationshipbetween the uncertainty in price and inventory management, sales ratio to inventory. The uncertainty in the price of the petroleum products have impact on the inventory management.

Anonymous (1992) the data of inventory is necessary for the firm to analyse its profit and ithelps to understand the working of the business. The inventory includes the items required by the firm to produce a finished product eg: raw material, semi-finished goods, and finished goods. The modern technology helps the firm to keep a track on the inventory which are moving in and out of the organisation

**Dubelaar& Chris (2001)** the proper maintenance of the inventory helps the retail industry. The survey says that the sales is double the inventory. The author tells that there is a relationship between the inventory and sales.

Anonymous (2001) the study was conducted more on the typical retailer because most of themedia they focus on the large scale retailer. These typical retailer they does not adopt the new technology to maintain the inventory and suppliers. Therefore they have to adopt the technology with caution as they are into new technology.

**Hsieh & Brian. H** (1992) the study states if the firm maintain proper inventory they can satisfythe customer through their services and better utilisation of material and labour. JIT andmaterial requirement planning helps in improving the planning of inventory and accepting the changes in the market quickly and even it improves the quality of the product.

**Hadley & Scott. W** (2004) this study states that the business has to maintain the safety stocksinorder to protect themselves from the uncertainty. There are many reason for the inventory uncertainty the major three reasons are inventory accuracy, supply, and demand. Demand is the important reason because the actual demand and the forecasted demand differs as they may be deviation. Sometimes supply deviations occur due to delay in the delivery, quality and the quantity of the product.

**Fiora, Christopher R &Pitzer (1986)** this study was conducted by the author in the steelmanufacturing industry to analyse how they control the inventory in the organisation. There major inventory are in the process of production. They believe that there inputs are equal to that of the output.

**Phull, Seema& Lawton (2016)** the study states that every inventory does not have equaladvantages in the business. It is difficult for the company to know various inventories and their cost that affect the success of the firm. The firm has to comprehend the product and location in which form the inventory is required.

Cox & James. F (1986) the author has studied inventory in the pharmaceutical, because thepharmacy is the major component in hospital environment. It is necessary for the hospital to maintain their inventory, they have to ensure that all the drugs are available in adequate quantity. The inventory has to be managed properly because the proper management helps to reduce the cost involved in handling the inventory.

**Natarajan. R** (1991) this study states that the firm has realised that they is a need for thechange in the method of managing the inventory. Inventory Management is not a narrow concept for the study it has to be widened. The flow of the inventory has to be analysed to

because it helps to understand the loopholes of the inventory management. They have to implement the simple tools for managing the inventory.

**Rodney. J, Simmons & Cheng (2013)** in this study it states that the aerospace producer hasto decrease the inventory turnover and give importance to the fault tree analysis. The company used to plan their inventory using the capacity of the material, by following the earlier method they found that the inventory cost and turnover is high. Therefore the use of FTA the manufacturer can solve the problem of the inventory.

**Ballou& Ronald. H** (2000) Managing the inventory is the main concern of the senior manager. Therefore they developed formula to practice a proper inventory management. This formula is used for managing or controlling of the inventory and analysing the impact of changing the procedure or how it affects the new plan for inventory.

Waller & Matthew. A (2006) This study states the issues that retail outlet face due to theinventory levels, customer demand, and variation in the approaches. The proper maintain of the inventory level helps to meet the demand of the customer.

# CHAPTER-3 RESEARCH DESIGN

# 3.1 Statement of the problem

The project is investigated problems and practices associated with inventory management of Malappuram Co-operative Spinning Mill Ltd. In this organisation more over studies are going on as so many years, but till not anyone studied about the inventory and material management practices of this company. Hence I'm tried to fill this gap of study beyond of my best level.

The main problem of the company is non-availability of materials also affected the inventory management. If they are not using the effective inventory techniques it will also lead to over stocking and under stocking.

# 3.2 Need for the study

Inventory it is intermediate between the production and sale, it is critical angle in the manufacturing firm. It constitutes the most critical viewpoint that attempts the majority of current assets or working capital. Therefore it is necessary for the management to provide the inventory when they are required. Due to the changes in the production and demand for the products, acquiring economies of scale and to reseat carriage cost and time.

# 3.3 Objectives of the Study

# **Primary Objectives**

To study the inventory management of Malappuram Co-operative Spinning Mill

# **Secondary Objectives**

- To understand the inventory position.
- To evaluate the inventory management practices.
- To analysis investment in inventory.
- To examine the overall strength and weakness.

# 3.4 Scope of the Study

The scope of the study is restricted just to Inventory Management at Malappuram Co-operative Spinning Mill Ltd and identified with data in regards to inventories. It covers the distinctive proportions relating to Inventory and its related turnover proportions which incorporates information gathered from different sources like yearly reports, income statement and so on. This review incorporates the stock control procedure utilizing the statically apparatuses of Economic Order Quantity (EOQ) for chose items like; ratio analysis. This is an endeavour to comprehend the execution of the organisation utilizing the stock information.

# 3.5 Research Methodology

Research methodology is a way to find out the result of given problem on a specific matter or problem that is also referred as research problem it is the simple way of performing an operation that implies precise deliverable at the end of each stage it is way to solve problem systematically.

Various methods used for data collection and techniques used for interpretation and inference are as follows:

### Research Design

The research design of the study is analytical in nature. In analytical research the available information or data are analysed and critical evaluations are made to solve the problem. From analytical research, a person finds out critical details to add new ideas to the material management.

# **Sampling Design**

In this study uses purposive sampling technique. Purposive sample is a non probability sample that is based on characteristics of a population and the objective of the study. Purposive sampling is also known as judgemental selective, or subjective sampling.

In this study uses the 5 years (2011 - 2016) financial statement reports of Malappuram Cooperative Spinning Mill Ltd. The period below 2010 is affected material shortage and financial problems. So i decided to choose this periods

# 3.6 Limitations of the Study

- The study is limited five years reports given by the company.
- There is no comparison with other companies
- The information's given by the Malappuram Co-operative Spinning Mill is annual reports only.
- The study was only related to the inventory management

# 3.7 Chapter Scheme

Chapter 1 Includes Introduction, Industry Profile, Company Profile, Competitors Information, SWOT Analysis, Future Growth and Prospectus and Financial statement.

Chapter 2 Includes Theoretical Background of the study and Literature Review with Research Gap.

Chapter 3 Includes Statement of the problem, Need for the study, Objectives, Scope of the study, Research Methodology, Limitation and Chapter Scheme.

Chapter 4 Includes Data analysis and interpretation.

Chapter 5 Includes Summary of findings, conclusion and Suggestions.

# CHAPTER-4 ANALYSIS

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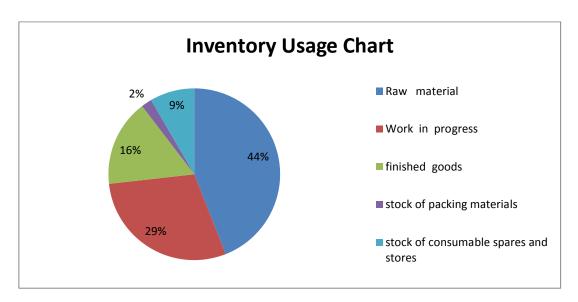
**INTERPRETATION** 

Table 4.1

Inventory Usage Percentage Chart (2012-13)

Components	In lakhs	Percentage
Raw material	103.75	44
Work in progress	69.62	29.2
Finished goods	39.07	16.4
Stock of packing materials	4.23	2
Stock of consumable spares	20.25	8.4
and stores		
Total	238.26	100

Chart 4.1



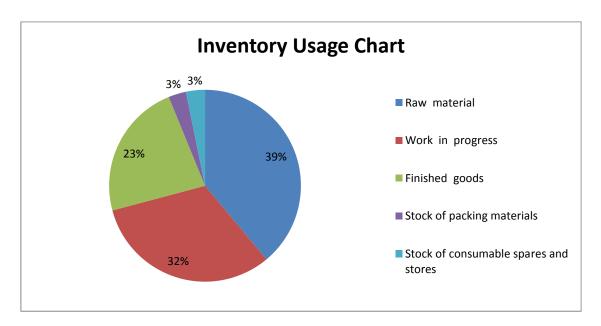
The major share of total inventory of manufacturing company comprises of Raw materials and work in progress. From this table it is clear that raw materials from the largest proportion of total inventory (44%) and (29%) of work in progress, finished goods are (16.4%), packing materials and consumable spares are very essential for promoting smooth operation. In 2012-13 table shows that five major components of inventories are balancing their production.

Table 4.2

Inventory Usage Percentage Chart (2013-14)

Components	In lakhs	Percentage
Raw material	79.06	39
Work in progress	64.19	32
Finished goods	46.22	23
Stock of packing materials	6.08	3
Stock of consumable spares	6.67	3.2
and stores		
Total	202.22	100

Chart 4.2



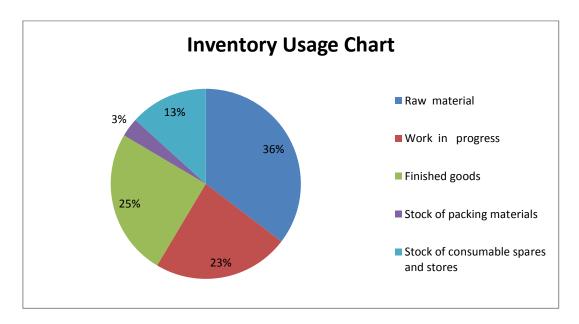
The major share of total inventory of manufacturing company comprises of raw materials and work in progress. From this table it is clear that raw materials from the largest proportion of total inventory (39%), and (32%) of work in progress, finished goods are (23%), packing materials and consumable spares are very essential for promoting smooth operation. In 2013-14 table shows that five major components of inventories are balancing their production.

Table 4.3

Inventory Usage Percentage Chart (2014-15)

Components	In lakhs	Percentage
Raw material	73.90	35.4
Work in progress	48.45	23.2
Finished goods	51.66	25
Stock of packing materials	6.67	3.2
Stock of consumable spares	27.73	13.3
and stores		
Total	208.41	100

Chart 4.3



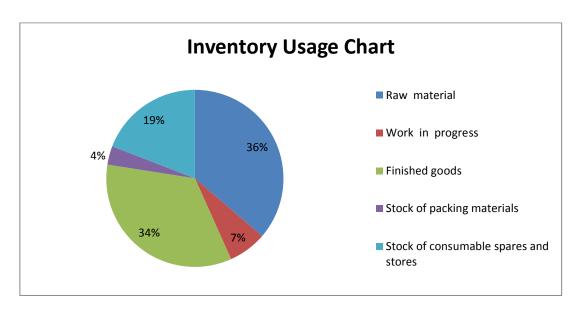
The major share of total inventory of manufacturing company comprises of raw materials and work in progress. From this table it is clear that raw materials from the largest proportion of total inventory (35.4%), and (23.2%) of work in progress, finished goods are (25%), packing materials and consumable spares are very essential for promoting smooth operation. In 2014-15 table shows that five major components of inventories are balancing their production.

Table 4.4

Inventory Usage Percentage Chart (2015-16)

Components	In lakhs	Percentage
Raw material	52.63	36.3
Work in progress	9.60	7
Finished goods	49.49	34.2
Stock of packing materials	4.91	3.4
Stock of consumable spares	27.65	19.12
and stores		
Total	144.28	100

Chart 4.4



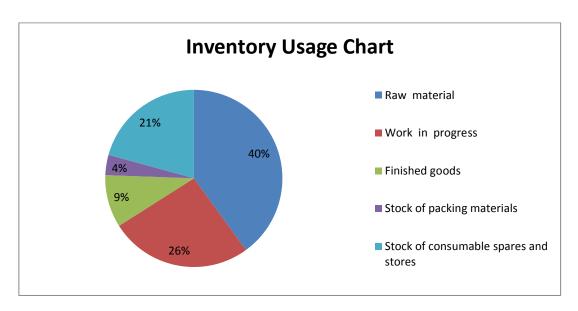
The major share of total inventory of manufacturing company comprises of raw materials and work in progress. From this table it is clear that raw materials from the largest proportion of total inventory (36.3%), and (7%) of work in progress, finished goods are (34.2%), packing materials and consumable spares are very essential for promoting smooth operation. In 2015-16 table shows that five major components of inventories are balancing their production.

Table 4.5

Inventory Usage Percentage Chart (2016-17)

Components	In lakhs	Percentage
Raw material	57.61	40
Work in progress	37.03	26
Finished goods	13.84	9.6
Stock of packing materials	5.33	3.7
Stock of consumable spares	29.84	20.7
and stores		
Total	143.65	100

Chart 4.5



The major share of total inventory of manufacturing company comprises of raw materials and work in progress. From this table it is clear that raw materials from the largest proportion of total inventory (40%), and (26%) of work in progress, finished goods are (9.6%), packing materials and consumable spares are very essential for promoting smooth operation. In 2016-17 table shows that five major components of inventories are balancing their production.

# **ECONOMIC ORDER QUANTITY**

The quantity of material to be ordered at one time is known as Economic Order Quantity. This quantity is fixed by considering a total acquisition cost, carrying cost and ordering cost.

Economic order quantity is the level of inventory that minimises the total inventory holding cost and ordering cost.

$$EOQ = \sqrt{2CO}$$

C = Annual consumption

O = Ordering cost

I = Annual Carrying cost or storage cost per unit

# **ECONOMIC ORDER QUANTITY 2012-13**

Table 4.6

Raw materials	Annual	Cost of placing	Storage cost (per	EOQ
	consumption	an order(per	uni)	
	(unit)	unit)		
Cotton	1152	64	2.5	243
Polyester	1848	41	2.5	246

# **ECONOMIC ORDER QUANTITY 2013-14**

**Table 4.7** 

Raw materials	Annual	Cost of placing	Storage cost (per	EOQ
	consumption	an order(per	uni)	
	(unit)	unit)		
Cotton	1320	65	3	239
Polyester	2364	45	3.1	264

# **ECONOMIC ORDER QUANTITY 2014-15**

Table 4.8

Raw materials	Annual	Cost of placing	Storage cost(per	EOQ
	consumption	an order(per	uni)	
	(unit)	unit)		
Cotton	1362	66	4	212
Polyester	2736	50	3.6	276

# **ECONOMIC ORDER QUANTITY 2015-16**

Table 4.9

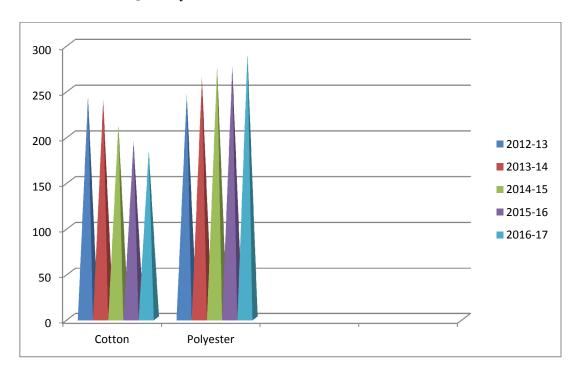
Raw materials	Annual	Cost of placing	Storage cost (per	EOQ
	consumption	an order(per	uni)	
	(unit)	unit)		
Cotton	1420	66	5	194
Polyester	2850	52	3.9	276

# **ECONOMIC ORDER QUANTITY 2016-17**

**Table 4.10** 

Raw materials	Annual	Cost of placing	Storage cost (per	EOQ
	consumption	an order(per	uni)	
	(unit)	unit)		
Cotton	1500	68	6	184
Polyester	3000	56	4	290

Chart 4.6
Economic Order Quantity



During 2012-13 the ordering quantity of cotton is 243 larger than 2016-17 that is 184,the ordering cost is low in 2012-13 than 2016-17,184. Because order placed few.

In the case of polyester, the ordering quantity of 2012-13 is 246 it is lesser than 2016-17, 290. The ordering cost will lesser in 2016-17 because order placed few.

# **Period Order Quantity(COTTON)**

Number of orders per year = Annual Requirement

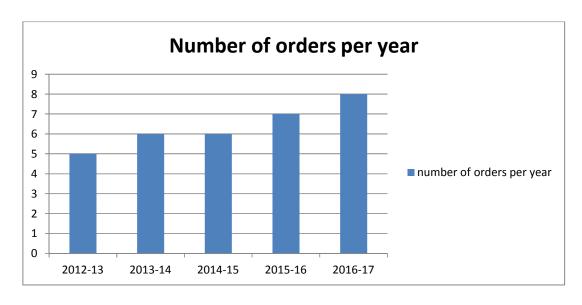
**EOQ** 

# Number of ordersper year

**Table 4.11** 

Year	Annual	EOQ	Number of Orders
	Consumption(cotton)		per Year
2012-13	1152	243	5
2013-14	1320	239	6
2014-15	1362	212	6
2015-16	1420	194	7
2016-17	1500	184	8

**Chart 4.7** 



# **Interpretation:**

In these five years (2012-13 to 2016-17) the highest number of orders of total cotton yarn is 2016-17 the lowest number of cotton is in 2012-13, the number of orders of cotton yarn is increasing trend.

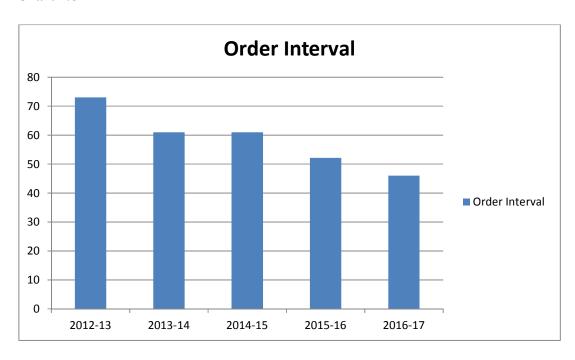
# **Order Interval (Cotton)**

# No of Orders per Year

**Table 4.12** 

Year	Annual	EOQ	No of Orders	Order
	Consumption(cotton)		per Year	Interval
2012-13	1152	243	5	73
2013-14	1320	239	6	61
2014-15	1362	212	6	61
2015-16	1420	194	7	52.14
2016-17	1500	184	8	46

Chart 4.8



# **Interpretation:**

The order interval of cotton in the year 2012-13 is 73. It is higher than the other four years. The lowest interval is 46 in 2016-17, the order interval is in increasing trend.

# **Period Order Quantity (Polyester)**

# Number of Orders per year = Annual Requirement

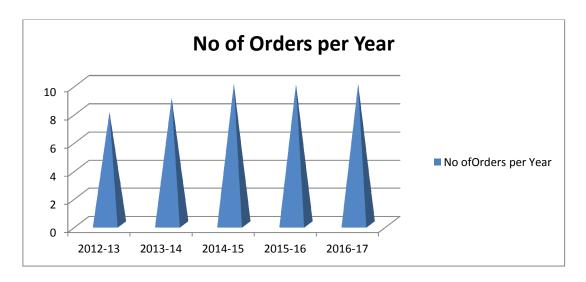
**EOQ** 

Table 4.13

Number of Orders per Year

Year	Annual	EOQ	No of Orders per
	Consumption		Year
	(Polyester)		
2012-13	1848	246	8
2013-14	2364	262	9
2014-15	2736	276	10
2015-16	2850	276	10
2016-17	3000	290	10

Chart 4.9



# **Interpretation:**

When comparing these five years (2012-13 to 2016-17) the number of orders of polyester per year are same and highest in the last 3 years, 10 (2014-15 to 2016-17). The minimum number of orders is 8 in 2012-13.

# **Order Interval (Polyester)**

Order Interval = 12 or 365

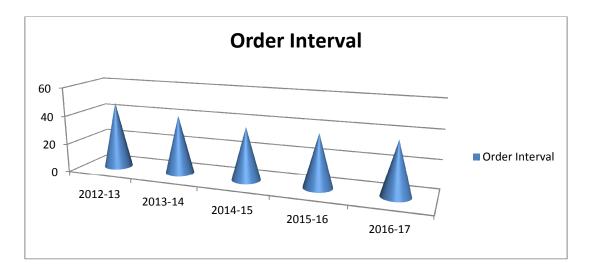
No of Orders per Year

**Table 4.14** 

# **Order Interval**

Years	Annual	EOQ	No of Orders	Order Interval
	Consumption		per Year	
	(Polyester)			
2012-13	1848	246	8	47
2013-14	2364	262	9	41
2014-15	2736	276	10	37
2015-16	2850	276	10	37
2016-17	3000	290	10	37

**Chart 4.10** 



# **Interpretation:**

When comparing these five years (2012-13 to 2016-17) the order interval of polyester per year are same lowest in the last 3 years, 37 (2014-15 to 2016-17). The maximum number of orders is 47 in 2012-13

# **Inventory Turn Over Ratio**

Cost of Goods Sold = Opening Stock + Purchase - Closing Stock

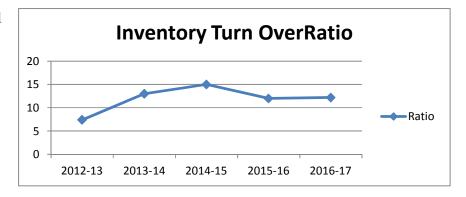
2

Table 4.15

Inventory Turnover Ratio in Lakhs

Year	Cost of Goods Sold	Average Stock	Ratio
2012-13	188.1670089	1392.786106	7.4
2013-14	111.9184782	1403.307659	13
2014-15	10.5660083	1573.103225	15
2015-16	108.5047831	1292.724321	12
2016-17	83.9250767	1026.966277	12.2

**Chart 4.11** 



# **Interpretation:**

In this five years period the inventory turnover ratio is 15 higher in 2014-15, it indicate that the materials are fast moving, lower obsolescence and material losses etc. In this period (2012-16) the lower inventory turnover ratio is 7.4 in 2012-13. It indicates that materials are slow moving, & highest obsolescence.

# **Inventory Conversion Period**

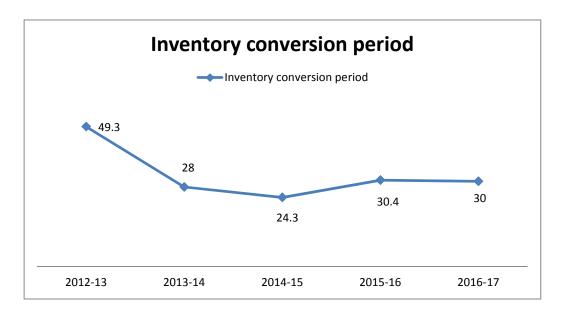
Inventory Conversion Period = Number of days in a year

# **Inventory turnover ratio**

**Table 4.16** 

Year	Inventory turnover ratio	Inventory conversion
		period
2012-13	7.4	49.3
2013-14	13	28
2014-15	15	24.3
2015-16	12	30.4
2016-17	12.2	30

**Chart 4.12** 



# **Interpretation:**

In the year 2012-13, inventory conversion period 49.3 is higher than 2015-16, 30. Because the higher inventory turnover ratio is reduces the inventory conversion period and the lower inventory turnover ratio increase the inventory conversion period.

# **Stock Level**

Carrying too much or too less of inventories is harmful for an enterprise in order to avoid overstocking and under stocking of materials or to minimise the total cost of inventory, management may fix certain stock level like maximum level, minimum level, reorder level, average level.

**Table 4.17** 

Year	Normal Usage	Minimum	Maximum	Reorder
		Usage	Usage	Quantity
2012-13	576	500	1152	243
2013-14	840	700	1680	239
2014-15	720	650	1440	212
2015-16	1073	950	2145	194
2016-17	1020	975	2040	184

Maximum level = Reorder quantity – (minimum consumption × minimum reorder period)

Minimum level = Reorder level - (normalconsumption × maximum reorder period

Reorder level = Maximum consumption × maximum reorder period

Average stock level = minimum level +  $\frac{1}{2}$  reorder quantity

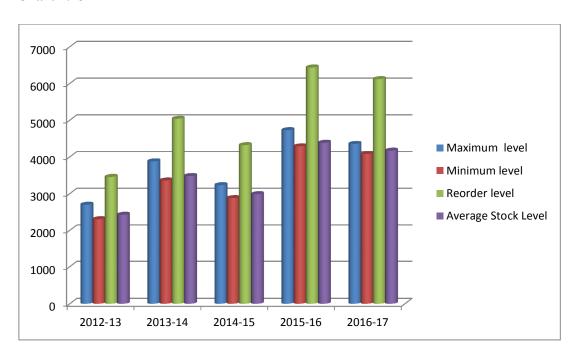
Lead time to supply 2 or 3 month

# **Stock levels (Cotton)**

**Table 4.18** 

Year	Maximum level	Minimum level	Reorder level	Average stock
				level
2012-13	2699	2304	3456	2426
2013-14	3879	3360	5040	3480
2014-15	3232	2880	4320	2986
2015-16	4729	4289	6435	4386
2016-17	4354	4080	6120	4172

**Chart 4.13** 



# **Interpretation:**

When comparing the stock level of cotton in 2012-13 and 2013-14 the maximum level of cottons is 3879 in 2013-14, it is higher than 2699 in 2012-13. When comparing the stock level of cotton in 2015-16 and 2016-17, the maximum level of cotton is 4729 in 2015-16. It is higher than 4354 in 2016-17.

The minimum level of cotton is 2304 in 2012-13 is lower than 4289 in 2015-16. The reorder level of stock level (cotton) is 6435. It is the highest level of the comparing in these 5 years.

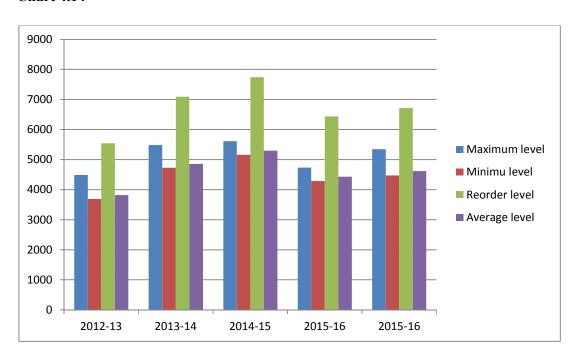
When comparing the average stock level in this 5 years the maximum average stock level is 4386 in 2015-16. The minimum average stock level is 2426 in 2012-13.

# **Stock level (Polyester)**

**Table 4.19** 

Year	Maximum level	Minimum level	Reorder level	Average level
2012-13	4490	3696	5544	3819
2013-14	5484	4728	7092	4859
2014-15	5616	5160	7740	5298
2015-16	4737	4289	6435	4427
2016-17	5344	4476	6714	4621

**Chart 4.14** 



When comparing the stock level of Polyester in 2012-13 and 2013-14, the ,maximum level of polyester is 5484 in 2013-14. It is higher than 4490 in 2012-13. When comparing the stock level polyester in 2015-16 and 2016-17, the maximum level of polyester is 5344 in 2016-17. It is higher than 4737 in 2015-16.

The minimum level of polyester is 3696 in 2012-13 is lower than 5160 in 2014-15. The reorder level of stock level (polyester) is 7740. It is the highest level in comparing with the last 5 years.

When comparing the average stock level in this 5 years the maximum average stock level is 5298 in 2014-15. The minimum average stock level is 3819 in 2012-13.

# CHAPTER-5 FINDINGS, SUGGESTIONS AND CONCLUSION

# 5.1 Findings

The following findings are derived from the Malappuram co-operative spinning mill ltd.

- ❖ From the above analysis of inventory management it is found that the company follows a systematic and well planned purchasing procedure for each material.
- ❖ The component of inventory includes raw material, working progress, finished goods, packing material and consumable spares and stores.
- ❖ The major share of total inventory of manufacturing company comprise of raw material and working progress. In 2012-13 the percentage of raw material was 44%. It is decreasing trend in each year, it indicates that there is raw material shortage than the previous year.
- ❖ Economic order quantity shows a decreasing trend in case of cotton in 2012-13 economic order quantity was 243 then it fails into 239 in 2013-14.
- ❖ In case of polyester in 2012-13 economic order quantity was 246 then it raise in to 290 in 2016-17. So it shows an increasing trend through the five years.
- ❖ Inventory turnover raio 7.4 in 2011-12, then it increase 13 in 2013-14. The highest ratio of inventory turnover ratio is 15 in 2014-15. In 2016-17 it reaches 12.2%.
- ❖ The maximum stock level of cotton material in 2015-16 is 4729, it is the largest material usage in these 5 years. The highest reorder level of material is 2015-16 is 635.
- ❖ The maximum stock level of polyester materials in 2014-15 is 5616. It is the largest material usage in these 5 years. The highest reorder level of material is 2014-15 is 7740.

# **5.2 Conclusion**

Inventory is the important part in the manufacturing firm. In India on an average 60% of the current assets of the manufacturing industry is from the inventory. Therefore the firm has to maintain the inventory in such a way that it reduces the cost involved in the inventory and increases the productivity of the firm.

The malappuram co-operative spinning mill ltd is a social welfare organisation and their main aim is to provide job to the people and also given some special benefit to them i.e.; promotion, bonus, etc. The objective were successfully achieved in average level but the financial position of the company is unsatisfactory. The smart and talent administrative forces are the advantage of the company but the weak working capital and poor technical facilities are the main barriers of the company because of non-usage of the modern machineries. It will reduce cost of human resources.

This study was conducted in Malappuram Co-operative Spinning Mill Ltd. To know the inventory management system of the company, the company inventory management system is based on tradition method it is not much effective to the company. Their inventory controlling systems are manual and traditional as a big organization they can't track inventories properly. If the organization creates a good inventory management system, it will help to increase the profitability of the organization through reducing the unnecessary costs.

# **5.3 Suggestions**

The project entitled "A study on inventory management with special reference to Malappuram Co-operative spinning mill ltd. Has derived the following suggestions:

- ❖ Efficient coordination among purchase, production and finance departments willhelp in achieving efficiency in inventory management.
- ❖ As far as possible the company should carry out the production process depending up on the sales information received from the sales department. This will help the firm in investing in raw materials adequate level.
- ❖ By adequate investment in raw material, the company can speed up the production cycle which I turn leads to efficient inventory management.
- Periodic appraisal about the function of inventory management will help in the firm to trace the problems of inventory over investment and under investment.
- Company can introduce JIT system in order to improve the efficiency of inventory management.
- ❖ Proper training should be given to the concerned personal associated with inventory management before implementing any new programs in inventory management.
- ❖ The company should exploit the available resources by utilizing them more efficiently.
- ❖ The inventory turnover ratio is not so satisfactory there for the company should improve this ratio by increasing sales.
- ❖ The company should maintain reasonable level of inventory to meet its short term demand.

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# ACHARYA INSTITUTE OF TECHNOLOGY DEPARTMENT OF MBA

# PROJECT WEEKLY REPORT (16MBAPR407)

Name of the Student: Vaseem Hyder P

Internal Guide: Dr. Virupakhsa Goud

USN NO: 1AZ16MBA74

Specialization: Finance & Marketing

Title of the Project: A study on Inventory Management

Company Name: Malappuram Co-operative Spinning Mill Ltd

week	Work Undertaken	External Guide Signature	Internal Guide signature
15-01-18 to 21-01-18	Introduction about MCSM & its Operation	Char	4 rds
22-01-18 to 28-01-18	Learning about the different operation and products by MCSM	Gobel	of also
29-01-18 to 04-02-18	Orientation and gathering information about the growth of the Company	Spher	y relie
05-02-18 to 11-02-18	Analysis of market Position of the company	Chang	J. Ny
12-02-18 to 18-02-18	Research problem identification	John	J. Me.
19-02-18 to 25-02-18	Preparation of the research instrument for data collection	Chal	green
26-02-18 to 04-03-18	Theoretical background of the study	Maha	y. Ne
05-03-18 to 11-03-18	Data collection and data analysis	Johans	of sle
12-03-18 to 18-03-18	Interpretation of the data gathered during the survey	Ghar	ly. ne
19-03-18 to 24-03-18	Final report preparation and submission	Gohan	lj. ale.





Head of the Department
Department of MBA
Acharya Institute of Technology
Sudevanabili, Bangalore-590