

INVENTORY MANAGEMENT IN FOOD PRODUCTION COMPLEX OF CHAUDHARY GROUP (FUDCO)

A THESIS

Submitted by:

Deena Nath Khatiwoda

T.U. Registration No- 7-2-3-1751-2002

Exam Roll No.: 1745/064

Campus Roll No.: 122/062

Nepal Commerce Campus

Submitted to:

Office of The Dean

Faculty of Management

Tribhuvan University

in partial fulfillment of the requirements for the Degree of
Master of Business Studies (M.B.S.)

New Baneshwor, Kathmandu

June 2009

RECOMMENDATION

This is to certify that the thesis

Submitted by:

Deena Nath Khatiwoda

Entitled

**INVENTORY MANAGEMENT IN FOOD PRODUCTION COMPLEX OF
CHAUDHARY GROUP (FUDCO)**

*has been prepared as approved by this department in the prescribed format of Faculty of
Management. This thesis is forwarded for examination*

(Mr. Keshab Nath Wagle)
Thesis Supervisor

(Dr. Bihari Binod Pokhrel)
Head of Research Department

(Diwakar Pokhrel)
Campus Chief

VIVA – VOCE SHEET

We have conducted the viva – voce examination of the Thesis

Submitted by:

Deena Nath Khatiwoda

Entitled

INVENTORY MANAGEMENT IN FOOD PRODUCTION COMPLEX OF CHAUDHARY GROUP (FUDCO)

And found the Thesis to be the original work of the student written in accordance with the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for Master Degree of Business Studies (M.B.S.)

Viva – Voce Committee

Chairperson, Research Committee:

Member (Thesis Supervisor):

Member (External Expert):

Date: -

DECLARATION

I hereby declare that the work reported in this thesis entitled **INVENTORY MANAGEMENT IN FOOD PRODUCTION COMPLEX OF CHAUDHARY GROUP (FUDCO)** submitted to Nepal Commerce Campus, Faculty of Management, Tribhuwan University, is my original work done in the form of partial fulfillment of the requirement for the Master of Business Studies (MBS) under the guidance and supervision of Mr. Keshab Nath Wagle of Nepal Commerce Campus, Tribhuwan University.

Date:-

.....

Deena Nath Khatiwoda

(Researcher)

Nepal Commerce Campus

T.U. Regd. No: 7-2-3-1751-2002

Exam Roll. No.: 1745/064

Class Roll No. 122/062

ACKNOWLEDGEMENTS

This study is designed to highlight the importance of Inventory Management in planning the profit. The FUDCO has been taken for this purpose.

I am especially thankful to my respected supervisor **Mr. Keshab Nath Wagle** and Head of the Research Department **Mr. Bihari Binod Pokhrel**, Nepal Commerce Campus, for their scholarly and constructive guidance and suggestion. Their guidance and help has been a great source of encouragement and inspiration to me. Without their valuable insight and time, I would not have been able to complete it.

I would like to express my heartily thanks to management of Chaudhary Group Private Limited for providing various information for the study. I express my thanks to my friends for their credible help and co-operation.

I am very grateful to all of those who have helped me especially all the member of my family who provided regular inspiration and continuous contribution and support for my success.

The acknowledgement remains incomplete without special thanks to Mr.Ramesh Shrestha (Global Books and Stationery, Campus Road, Minbhawan) for taking a good care of the technicalities of computer typing and setting.

June, 2009

Deena Nath Khatiwoda
Nepal Commerce Campus
New Baneshwor, Kathmandu

TABLE OF CONTENTS

Page No.

Viva Voce Sheet	
Recommendation	
Declaration	
Acknowledgements	
Table of Contents	
List of Tables	
List of Figures	
Abbreviations	
CHAPTER I: INTRODUCTION	1-7
1.1 Background of the Study	1
1.2 Introduction of Chaudhary Group Industry Private Limited (FUDCO)	2
1.3 Significance of the Study	5
1.4 Objectives of the Study	5
1.5 Limitations of the Study	6
1.6 Organization of the Study	6
CHAPTER II: REVIEW OF LITERATURE	8-50
2.1 Theoretical Concept	8
2.1.1 Types of Inventories	9
2.1.2 Objective of Inventory Management	12
2.1.3 Aspect of Material Management	14
2.1.4 Need/Importance/Benefits/ of Holding Inventories	15
2.1.5 Structure of Materials Management Organization	17
2.1.6 Purchase Management	17
2.1.6.1 Importance of Purchasing	18
2.1.6.2 Objectives of Purchasing	19
2.1.6.3 Purchasing Approach	19
2.1.6.4 Purchasing Principle	21
2.1.7. Cost Basis for Inventory Valuation	22
2.2 Analytical Method	25
2.2.1. Inventory Management Techniques	25
2.2.1.1 Economic Order Quantity (EOQ)	25
2.2.1.2 Re-Order Point/ Re-Order Level	29
2.2.1.3 Goods in Transit	31
2.2.1.4 Maximum Stock Level	31
2.2.1.5 Minimum Stock Level	32
2.2.1.6 Danger Level	33
2.2.1.7 Perpetual Inventory System	33
2.2.1.8 ABC Analysis	34

2.3 Different Cost Concepts	38
2.3.1 Carrying/Holding Cost	38
2.3.1.1 Capital/ Opportunity Cost	39
2.3.1.2 Handling Cost	39
2.3.1.3 Storage Cost	40
2.3.1.4 Depreciation Cost	40
2.3.1.5 Spoilage and Shortage Cost	40
2.3.1.6 Insurance and Taxes	41
2.3.1.7 System Cost	41
2.3.2 Ordering Cost	41
2.3.3 Stock out Costs	43
2.4 Inventory Model	44
2.4.1 Periodic Review System	44
2.4.2 Replenishment Model	44
2.4.3 Inventory Models with Uncertainty	46
2.5 Review of Previous Studies	46
2.6 Research Gap	50

CHAPTER III: RESEARCH METHODOLOGY **51-61**

3.1 Introduction	51
3.2 Research Design	52
3.3 Nature and Sources of Data	53
3.4 Population and Samples	54
3.5 Data Collection Procedure	54
3.6 Analytical Tools Applied	54
3.6.1 Accounting/Financial Tools	54
3.6.2 Statistical Tools	58

CHAPTER – IV: DATA PRESENTATION AND ANALYSIS **62-90**

4.1 Analysis of Inventory Management of FUDCO	62
4.2 Trend Analysis	63
4.2.1 Trend of Purchase of Materials Including Packing Materials	63
4.2.2 Trend of Inventory (Raw Material, Packing Materials and Finished Goods)	64
4.2.3 Trend of Production Cost	66
4.2.4 Trend of Sales in Terms of Value	67
4.2.5 Trend of Net Profit in Terms of Value	68
4.3 Correlation	69
4.3.1 Correlation between the Purchase and Inventory	70
4.3.2 Correlation between Sales and Inventory	71
4.3.3 Correlation Coefficient between Purchase and Sales	71
4.3.4 Correlation Coefficient between Net Profit and Inventory	72

4.4 Regression Analysis	72
4.4.1 Simple Regression Analysis of Inventory on Purchase	73
4.4.2 Simple Regression Analysis of Inventory on Sales Regression Equation	73
4.4.3 Simple Regression Analysis of Profit on Inventory	74
4.5 Test of Hypothesis	75
4.5.1 Test of Hypothesis between Purchase and Inventory	75
4.5.2 Test of Hypothesis between Sales and Inventory	76
4.5.3 Test of Hypothesis between Inventory and Profit	77
4.6 Ratios Relating to Inventory Management	78
4.6.1 Inventory Turnover Ratio	78
4.6.2 Inventory to Current Assets Ratio	80
4.6.3 Inventory to Total Assets Ratio	81
4.6.4 Net Profit Margin	82
4.6.5 Return on Assets	83
4.7 Analysis of Primary Information Collected Through Questionnaire	84
4.8 Major Findings of the Study	85
CHAPTER-V: SUMMARY, CONCLUSION & RECOMMENDATIONS	91-95
5.1 Summary	91
5.2 Conclusion	92
5.3 Recommendations	93
Bibliography	
Appendix	

LIST OF TABLES

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
2.1	Calculation of EOQ by Using Tabular Method	27
2.2	Showing the items on the basis of 'Always Better Control'	36
4.1	Trend of Purchasing Materials Including Packing Materials	63
4.2	Trend of Inventory	64
4.3	Trend of Production Cost (Rs. in Lakh)	66
4.4	Trend of Annual Sales (Rs. in Lakh)	67
4.5	Trend of Annual Net Profit (in Rs. Lakh)	68
4.6	Simple Regression Analysis of Inventory on Purchase	73
4.7	Simple Regression Analysis of Inventory on Sales	73
4.8	Simple Regression Analysis of Profit on Inventory	74
4.9	t-test of Purchase and Inventory	75
4.10	t - test of Sales and Inventory	76
4.11	t-test of Inventory and Profit	77
4.12	Inventory Turnover Ratio in Term of Value (Rs in Lakhs)	79
4.13	Inventory to Current Assets Ratio (Rs. in Lakh)	80
4.14	Inventory to Total Assets in Terms of Value (Rs. in Lakh)	81
4.15	Net Profit Margin (Rs. in Lakh)	82
4.16	Return on Assets (Rs. in Lakh)	83

LIST OF FIGURES

<i>Figure No.</i>	<i>Title</i>	<i>Page No.</i>
2.1	Showing Order size & Costs through Graphic Approach	29
2.2	Showing Re-Order Point when Lead Time is Certain	30
2.3	Graphic Presentation of ABC Analysis	35
4.1	Trend of Purchase of Materials Including Packing Materials	63
4.2	Trend of Inventory	65
4.3	Trend of Production Cost (Rs. in Lakh)	66
4.4	Trend of Annual Sales	67
4.5	Trend of Annual Net Profit	69

LIST OF ABBREVIATIONS

A.D.	–	Anno Domini
A.M.	–	Arithmetic Mean
A/C	–	Account
AS	–	Actual Sales
B.S.	–	Bikram Sambat
CG	-	Chaudhary Group
FC	–	Fixed Cost
FUDCO	-	Food Production Complex of Chaudhary Group
FY	–	Fiscal Year
GDP	–	Gross Domestic Product
GPMR	–	Gross Profit Margin Ratio
Ltd.	–	Limited
MBS	–	Master of Business Studies
NCC	–	Nepal Commerce Campus
NPMR	–	Net Profit Margin Ratio
NRB	–	Nepal Rastra Bank
P.E.	–	Probable Error
P/L	–	Profit (Loss)
PE's	–	Public Enterprises
S.D.	–	Standard Deviation
SPPU	–	Selling Price Per Unit
T.U.	-	Tribhuvan University
VC	–	Variable Cost
VCPU	–	Variable Cost Per Unit
V/V Ratio	–	Variable Volume Ratio
X	–	Times