

**INVENTORY MANAGEMENT OF BHRIKUTI
PULPS AND PAPER NEPAL LIMITED
GAINDAKOT, NAWALPARASI**

**By
PADAM PRASAD UPADHAYAY
Shanker Dev Campus
T.U. Regd. No.: 7-1-325-320-97
Campus Roll No.: 1591/061**

**A Thesis Submitted to:
Office of the Dean
Faculty of Management
Tribhuvan University**



*In partial fulfillment of the requirement for the degree of
Master of Business Studies (MBS)*
**Kathmandu, Nepal
July 2010**

RECOMMENDATION

This is to certify that the thesis

Submitted by:

PADAM PRASAD UPADHAYAY

Entitled:

**INVENTORY MANAGEMENT OF BHRIKUTI
PULPS AND PAPER NEPAL LIMITED
GAINDAKOT, NAWALPARASI**

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

.....
Asso. Prof. Achyut Raj Bhattarai
(Thesis Supervisor)

.....
Prof. Bishweshor Man Shrestha
(Head, Research Department)

.....
Prof. Dr. Kamal Deep Dhakal
(Campus Chief)

VIVA-VOCE SHEET

We have conducted the viva –voce of the thesis presented

By

PADAM PRASAD UPADHAYAY

Entitled:

**INVENTORY MANAGEMENT OF BHRIKUTI
PULPS AND PAPER NEPAL LIMITED
GAINDAKOT, NAWALPARASI**

And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the degree of

Master of Business Studies (MBS)

Viva-Voce Committee

Head, Research Department

Member (Thesis Supervisor)

Member (External Expert)

DECLARATION

I hereby declare that the work reported in this thesis entitled “**Inventory Management of Bhrikuti Pulps and Paper Nepal Limited Gaidakot, Nawalparasi**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Associate Professor Achyut Raj Bhattarai** of Shanker Dev Campus, T.U.

.....
Padam Prasad Upadhyay
T.U. Regd. No.: 7-1-325-320-97
Campus Roll No. : 1591/061

ACKNOWLEDGEMENT

It is my great opportunity to complete this thesis under the supervision of Associate Professor Achyut Raj Bhattari of Shanker Dev Campus, Putalisadak, Kathmandu for generous encouragements and undertaking of the supervision of my entire research work. This form of the report is the outcome of his continuous encouragement, helpful suggestions and comments.

I am also grateful to all staffs of Bhrikuti Pulps and Paper Limited for providing the information and necessary data sincerely and timely and other all staffs of the library and administration of Shanker Dev Campus and Central Library of Tribhuvan University.

I also extend my hearty thanks to my friends for providing me valuable suggestions. I would like to express hearty thanks to my parents and other family members.

Padam Prasad Upadhyay

TABLE OF CONTENTS

| | |
|---|--------------------------|
| Recommendation | |
| Viva- Voce Sheet | |
| Declaration | |
| Acknowledgement | |
| Table of Contents | |
| List of Tables | |
| List of Figures | |
| Abbreviations | |
| | Page No. |
| CHAPTER – I | INTRODUCTION |
| 1.1 Background of the Study | 1 |
| 1.1.1 Brief Introduction of BPPNL | 3 |
| 1.2 Statement of the Problem | 4 |
| 1.3 Objectives of the Study | 5 |
| 1.4 Focus of the Study | 5 |
| 1.5 Limitation of the Study | 6 |
| 1.6 Significance of the Study | 6 |
| 1.7 Organization of the Study | 7 |
| CHAPTER-II | LITERATURE REVIEW |
| 2.1 Conceptual Review | 8 |
| 2.1.1 Meaning of Inventory Management | 8 |
| 2.1.2 Types of Inventory | 10 |
| 2.1.3 Function of Inventory Management | 12 |
| 2.1.4 Motives of Holding Inventories | 17 |
| 2.1.5 Need and Importance of Inventory Management | 18 |
| 2.1.6 Objectives of the Inventory Management | 19 |
| 2.1.7 Cost Associated with Inventory | 20 |
| 2.1.7.1 Carrying Cost or Holding Costs | 20 |
| 2.1.7.2 Ordering Cost | 21 |
| 2.1.7.3 Purchase Price | 23 |
| 2.1.7.4 Stock out Costs | 23 |

| | |
|--|----|
| 2.1.8 Techniques of Inventory Management | 23 |
| 2.1.9 Inventory Valuation | 33 |
| 2.1.9.1 Specific Identification Method | 33 |
| 2.1.9.2 Weighted Average Cost of Capital Method (WACC) | 34 |
| 2.1.9.3 First-In-First-Out (FIFO) Method | 34 |
| 2.1.9.4 Last-In-First-Out (LIFO) Method | 34 |
| 2.1.9.5 Higher in First out Method (HIFO) | 34 |
| 2.1.9.6 Market Price Method | 35 |
| 2.1.10 Just-In-Time Inventory | 35 |
| 2.2 Related Studies on Inventory Management | 36 |
| 2.2.1 Review of Journals | 36 |
| 2.2.2 Review of Unpublished Thesis | 36 |

CHAPTER-III RESEARCH METHODOLOGY

| | |
|----------------------------------|----|
| 3.1 Introduction | 39 |
| 3.2 Research Design | 39 |
| 3.3 Population and Sample Size | 40 |
| 3.4 Data Gathering Procedures | 40 |
| 3.5 Nature and Sources of Data | 40 |
| 3.6 Methods of Analysis | 40 |
| 3.6.1 Description Analysis | 41 |
| 3.6.2 Inventory Management Tools | 41 |
| 3.6.3 Statistical Tools | 44 |

CHAPTER-IV PRESENTATION AND ANALYSIS OF DATA

| | |
|--|----|
| 4.1 Introduction | 47 |
| 4.2 Descriptive Analysis | 47 |
| 4.2.1 Purchasing Procedure in BPPNL | 47 |
| 4.2.1.1 Collection of Purchase Requisition | 48 |
| 4.2.1.2 Approval of Purchase Requisition | 49 |
| 4.2.1.3 Opening of Letter of Credit (LC) | 50 |
| 4.2.1.4 Purchase Procedure | 50 |
| 4.2.1.5 Incoming Inspection | 51 |
| 4.2.1.6 Goods Receiving Process | 52 |

| | |
|--|----|
| 4.2.1.7 GRN Preparation | 53 |
| 4.2.2 Store Control Device Practice | 54 |
| 4.2.2.1 Bin Cards | 54 |
| 4.2.2.2 Store Ledger | 55 |
| 4.2.2.3 ABC Analysis | 55 |
| 4.2.3 Issuing Material | 56 |
| 4.3 Inventory Management Analysis | 56 |
| 4.3.1 Annual Requirement and Annual Purchase of Raw Materials | 56 |
| 4.3.2 Relationship between Total Sales and Total Purchase of Raw Materials | 58 |
| 4.3.3 Relationship between Annual Consumption and Stock | 59 |
| 4.3.4 EOQ Purchase | 60 |
| 4.3.5 Inventory to Current Assets Ratio | 61 |
| 4.3.6 Inventory to Net Working Capital Ratio | 62 |
| 4.3.7 Inventory Turnover Ratio | 62 |
| 4.3.8 Inventory Conversion Period | 63 |
| 4.3.9 Payable Deferral Period | 64 |
| 4.3.10 Trend Analysis | 65 |
| 4.3.10.1 Trend Analysis of Inventory | 65 |
| 4.3.10.2 Trend Analysis of Sales | 66 |
| 4.3.10.3 Trend Analysis of Raw Material | 67 |
| 4.3.10.4 Trend Analysis of COGs | 68 |
| 4.3.10.5 Trend Analysis of Finished Goods | 70 |
| 4.4 Major Finding | 71 |

CHAPTER-V SUMMARY, CONCLUSION AND RECOMMENDATION

| | |
|--------------------|----|
| 5.1 Summary | 74 |
| 5.2 Conclusion | 75 |
| 5.3 Recommendation | 76 |

Bibliography

Appendices

LIST OF TABLES

| Table No. | Title | Page No. |
|------------------|--|-----------------|
| 4.1 | Annual Requirement and Annual Purchase of Raw Material | 57 |
| 4.2 | Total Sales and Total Purchase of Raw Materials | 58 |
| 4.3 | Relationship between Annual Consumption and Stock | 59 |
| 4.4 | EOQ of Chemic | 60 |
| 4.5 | Inventory to Current Assets Ratio | 61 |
| 4.6 | Inventory to Working Capital Ratio | 62 |
| 4.7 | Inventory Turnover Ratio in Terms of Value in million | 63 |
| 4.8 | Inventory Conversion Period of BPPNL | 64 |
| 4.9 | Payable Deferral Period of BPPNL | 64 |
| 4.10 | Trend Analysis of Inventory | 67 |
| 4.11 | Trend Analysis of Sales | 66 |
| 4.12 | Trend Analysis of Raw material | 67 |
| 4.13 | Trend Analysis of Cost of Goods Sold (COGs) | 68 |
| 4.14 | Trend Analysis of Work-in-Progress | 69 |
| 4.15 | Trend Analysis of Finished Goods | 70 |

LIST OF FIGURES

| Figure .No. | Title | Page No. |
|--------------------|---|-----------------|
| 2.1 | Economic Order Quantity | 26 |
| 2.2 | Graphical Presentation of EOQ | 28 |
| 2.3 | The Typical Breakdown is shown below | 29 |
| 4.1 | Purchasing Procedure of Essentials in BPPNL | 48 |
| 4.2 | Approval of Purchase Requisition of BPPNL | 49 |
| 4.3 | Opening of Letter of Credit (LC) of BPPNL | 50 |
| 4.4 | Purchase Procedure of BPPNL | 51 |
| 4.5 | Incoming Inspection of BPPNL | 52 |
| 4.6 | Goods Receiving Process of BPPNL | 53 |
| 4.7 | GRN Preparation on BPPNL | 54 |
| 4.8 | Issuing material from Store in BPPNL | 56 |
| 4.9 | Trend Analysis of Inventory | 66 |
| 4.10 | Trend Analysis of Sales | 67 |
| 4.11 | Trend Analysis of Raw Materials | 68 |
| 4.12 | Trend Analysis of Cost of Goods Sold (COGs) | 69 |
| 4.13 | Trend Analysis of Work-in-Progress | 70 |
| 4.14 | Trend Analysis of Finished Goods | 71 |

ABBREVIATIONS

| | | |
|-----------------|---|--|
| & | : | And |
| ABC | : | Active Based Costing |
| AD | : | Anno Domini |
| AIC | : | Agricultural Input Corporation |
| AP | : | Annual Purchase |
| AR | : | Annual Requirement |
| BPPNL | : | Bhrikuti Pulps and Paper Nepal Limited |
| C.V. | : | Co-efficient of Variation |
| e.g. | : | Example |
| EOQ | : | Economic Order Quantity |
| etc. | : | Etcetera |
| FIFO | : | First in First Out |
| FY | : | Fiscal Year |
| G.M | : | General Manager |
| GRN | : | Goods Receiving Note |
| HCCL | : | Himal Cement Company Limited |
| HCIL | : | Hetauda Cement Industry Limited |
| HPPC Company | : | Herbs Production and Processing Company |
| ITR | : | Inventory Turnover Ratio |
| LC | : | Letter of Credit |
| LIFO | : | Last in First Out |
| Ltd. | : | Limited |
| MRN | : | Material Receiving Note |
| P.E. | : | Probable Error |
| Qty. | : | Quantity |
| Rs | : | Rupees |
| r_{xy} | : | Correlation Co-efficient |
| S.D. | : | Standard Deviation |
| S.N. | : | Symbol Number |
| T.U. | : | Tribhuvan University |

