# CONTENTS

Preface i

## CHAPTER : 1

**Introduction of Plywood Industries** 1

1.1 Geographical view of Raipur Division 2
   1.1.1 Geographical View of Raipur District 3

1.2 Development of plywood industries 9
   1.2.1 Plywood industries in Raipur Division 25
   1.2.2 Organization and Management 29
   1.2.3 Financial Sources for Plywood Industries 31

1.3 Working capital management & source 33

## CHAPTER : 2

**Manufacturing Technique and Process** 35

2.1 Type of Machineries Used 36
   2.1.1 Glue Mixer Motor 37
   2.1.2 Glue Spreading Machine 37
   2.1.3 Thermi Fluid Boiler 37
   2.1.4 Hydraulic Hot Press 38
   2.1.5 Double Diamond Saw Cutter Machine 39
   2.1.6 Sanding Machine 41
   2.1.7 5 Section 3 Deck Dryer 41
   2.1.8 Impregnation Plant for treatment of Plywood 42
   2.1.9 Wood Seasoning Kiln Plant 42

2.2 Type of Material Used 43
   2.2.1 Wood 43
   2.2.2 Selection of Veneer and Lumber 50
   2.2.3 Adhesives 53
2.3 Purchase Process and Material Management 53
2.4 Grading of Plywood 54
2.5 Production Process of Plywood 61
  2.5.1 Application of Glue in Face, Veneer & Core 62
  2.5.2 Hot Pressing 62
  2.5.3 Cold Pressing 65
  2.5.4 Conditioning and Finishing of Plywood Panels 66
  2.5.5 Trimming & Sanding 68
  2.5.6 Storage 68
2.6 Remake Process for Damage Goods 69
  2.6.1 Balanced Construction 69
  2.6.2 Warping of Plywood 70
  2.6.3 The Face Checking of Plywood 71

CHAPTER : 3

Marketing Management and Marketing Strategy 73

3.1 Size of Market 74
  3.1.1 Corporate Product Mix 76
  3.1.2 Product Policy 77
  3.1.3 Channels of Distribution 79
  3.1.4 Promotion Policy 82
3.2 Price Fixation of Plywood 83
  3.2.1 Charges Mode by Rival Producers 85
  3.2.2 Nature and Conditions of Demand 86
  3.2.3 Quality and Service 86
  3.2.4 Other Considerations 87
3.3 Comparison of Marketing Cost Total Cost of Production 88
  3.3.1 Trade Discount 88
  3.3.2 Quantity Discount 90
  3.3.3 Cash Discount 91
3.3.4 Transportation Cost for output selling
3.3.5 Burden of Marketing Cost to Total Cost

3.4 Sales Policy and Programme
3.4.1 Sales Planning
3.4.2 Sales Organization

3.5 Taxation Problem in Sales

CHAPTER: 4

Plywood Industry Labour Management

4.1 Type of Labour Power Used Industry
4.2 Selection of Labour
4.3 Method of Wage Payment and Living Standard
4.4 Training of Labour
   4.4.1 Workers Education
   4.4.2 Labour Research & Training
   4.4.3 Social Security
4.5 Minimum Wage Rate According To Industrial Regulation Act.
   4.5.1 India Labour Policy
4.6 Contribution of Labour in Management
4.7 Labour Protection and Union
   4.7.1 Labour Protection and Union
   4.7.2 Child Labour
   4.7.3 Woman Labour
   4.7.4 Occupational Safety and Health
   4.7.5 Employee State Insurance Scheme
   4.7.6 Workmen’s Compensation Scheme

CHAPTER: 5

Cost and Revenue Analysis

5.1 Introduction
5.1.1 Cost concept and different terms of cost

5.1.2 Description of production growth of plywood

5.2 Expenditure / Cost Analysis

5.2.1 Analysis on Variable Cost of Plywood

5.2.2 Analysis on Fixed Cost

5.2.3 Break Even point analysis

5.3 Income Analysis

5.4 Study of Profit Analysis

5.4.1 Analysis of Gross Profit Trend

5.4.2 Analysis of Net Profit on Sales Trend

5.4.3 Net Sale to Fixed Asset

5.4.4 Net Sales to Working Capital

5.4.5 Net Sale to Net worth Expenses

5.4.6 Net Sale to Stock / Inventory

5.4.7 Operating Expenses to Sale

5.4.8 Current Ratio analysis of the industry

5.4.9 Liquid Ratio / Quick Ratio analysis of the Industry

5.4.10 Debt Leverage Trend to Total Asset

CHAPTER : 6

Importance of Plywood Industry in Economy

6.1 Contribution In Raipur District Economy

6.2 Contribution In Foreign Market

6.3 Role of Government

6.3.1 Government Contribution in Small Scale Sector

6.3.2 Highlights of Union Budget for Agro Based 2004-05

6.4 Research & Development Centre

6.4.1 Technology Acquisition

6.4.2 Process Development

6.4.3 Research Institute for Plywood Industry
CHAPTER - 7

Conclusion, Suggestion & Prospects of Plywood Industry

7.1 Conclusion
7.2 Suggestion

7.2.1 Problem for Material and Suggestion
7.2.2 Problem of Manufacturing and Suggestion
7.2.3 Problem of Marketing and Suggestion
7.2.4 Problem for financial sources and suggestion
7.2.5 Problem on Taxation policy and suggestion
7.2.6 Suggestions for Research and Development

7.3 Prospects of Plywood Industry

Bibliography
Appendix

List of Tables
List of Graph
List of Fig. & Chart
List of Maps